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# 2021 Mountain State Assessment of Trends in Community Health (MATCH)

## Findings Report

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# Executive Summary

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## Introduction

The Mountain State Assessment of Trends in Community Health (MATCH), a newly developed public health surveillance system, was established in West Virginia (WV) through a partnership between the WV Department of Health and Human Resources (DHHR) and West Virginia University Health Affairs Institute (Health Affairs). MATCH is a biennial, multi-mode (i.e., internet, paper, and telephone), cross-sectional, population-based health survey that collects information on WV adult residents aged 18 years or older who were noninstitutionalized and not living in group housing. The survey was designed to provide substate, population-level health data to address data gaps within WV.

MATCH's inaugural year was 2021. The survey was administered to WV adult residents between August 2021 and February 2022 in all 55 counties. Survey questions focused on general health, healthcare access, mental health, lifestyle, demographics, coronavirus disease 2019 (COVID-19), substance use, and other topics (e.g., physical activity).

This report provides state- and regional-level prevalence estimates from the 2021 MATCH. Highlights of the findings are reported below.

## Highlights of Findings

### Health Status

#### *General Health*

- The prevalence of fair or poor general health was 24.2%.
- The prevalence of fair or poor general health was significantly lower among adults with an associate's or more education (15.5%) than among adults with any other educational attainment levels.
- The prevalence of fair or poor general health was significantly lower among adults with an annual family income of \$85,001 or more (7.5%) than among adults with any other annual family income levels.

#### *Mental Health*

- Over one-fifth (21.9%) of adults rated their mental health as fair or poor.
- The prevalence of being extremely satisfied or satisfied with life (41.7%) was significantly higher among adults aged 65 years or older (53.4%) than among any other adult age groups.
- The prevalence of serious psychological distress in the past two weeks was 14.1% and was significantly higher among adults aged 18-34 (21.8%) and 35-49 (18.2%) than among any other adult age groups.
- Over one-fifth (22.7%) of adults had functional impairment with social life in the past 12 months, whereas the prevalence of functional impairment with household chores, friends and

family relationships, and school or work performance was 19.7%, 19.1%, and 15.7%, respectively.

- The prevalence of depression, anxiety, or post-traumatic stress disorder (PTSD) in the past 12 months was 24.3% and was significantly higher among adults who were female (30.0%) than among adults who were male (18.2%).
- Almost one-tenth (9.9%) of adults were ever told by a doctor, nurse, or other healthcare provider that they had Attention-Deficit/Hyperactivity Disorder (ADHD).

#### *Physical Health Conditions*

- Over one-tenth (10.7%) of adults were ever told by a doctor, nurse, or other healthcare provider that they had Chronic Obstructive Pulmonary Disease (COPD), and the prevalence was significantly higher among adults with less than high school education (25.9%) than among adults with any other educational attainment levels.
- The prevalence of hypertension (43.2%) was significantly higher among adults who were Black (51.5%) than among adults who were White (43.4%) or multi-racial or “other” (32.8%).
- The prevalence of Hashimoto’s disease was 2.0%.
- The prevalence of kidney disease or damage (6.6%) was significantly higher among adults with less than a high school education (12.6%) than among adults with any other educational attainment levels.
- The prevalence of liver disease was 3.4%.
- Over one-fourth (26.1%) of adults were ever told by a doctor, nurse, or other healthcare provider that they had chronic pain, and the prevalence was significantly higher among adults who were widowed, divorced, or separated (39.1%) than among adults with any other marital statuses.

#### *Poor Health Limitations*

- Of the 20.4% of adults with serious difficulty performing daily activities, more than half (57.1%) reported it as “mostly because of physical health”, whereas “mostly because of mental health” and “because of physical and mental health equally” was 15.7% and 27.1%, respectively.

## **Health Behavior**

#### *Substance Use*

- Almost three-fourths (74.1%) of adults reported no substance use in the past 12 months.
- The prevalence of benzodiazepine use in the past 12 months (6.5%) was significantly higher among adults who were female (8.0%) than among adults who were male (5.0%).
- The prevalence of over-the-counter stimulant use in the past 12 months was 3.7%.
- The prevalence of stimulant use in the past 12 months (2.2%) was significantly higher among adults aged 18-34 years (4.6%) and 35-49 years (2.8%) than among any other adult age groups.

- The prevalence of cocaine, methamphetamine, heroin, or 3,4-Methylenedioxymethamphetamin (MDMA) use in the past 12 months was 2.5% and was significantly higher among adults aged 18-34 (4.0%) and 35-49 (4.2%) than among any other adult age groups.
- Of the 8.3% of adults who used prescription opioids/pills in the past 12 months, almost one-tenth (9.3%) did not use them as prescribed.

#### *Overdoses*

- The prevalence of ever overdosed was 3.2%.
- The prevalence of ever overdosed was significantly higher among adults with less than high school education (6.1%) or high school or Graduate Equivalency Diploma (GED) education (3.7%) than among adults with an associate's or more education (1.9%).
- The prevalence of having an immediate family member in WV experience an overdose in the past 12 months was 4.6%.
- The prevalence of having an immediate family member in WV experience an overdose in the past 12 months (4.6%) was significantly higher among adults with an annual family income of \$15,000 or less (8.7%) than among adults with any other annual family income levels.

#### *Suicide*

- The prevalence of suicide risk (27.5%) was significantly higher among adults aged 18-34 years (40.2%) than among any other adult age groups.
- The prevalence of suicide risk was significantly higher among adults who were multi-racial or "other" (40.3%) than among adults who were White (27.1%) and Black (24.5%).

#### *Sleep*

- Over one-third (34.0%) of adults reported always or usually having difficulty sleeping in the past two weeks, whereas the prevalence of "sometimes or rarely" or "never" having difficulty sleeping in the past two weeks was 56.0% and 10.0%, respectively.

#### *Nutrition*

- When shopping for food, almost half (49.4%) of adults reported always or most of the time purchasing fresh fruits or vegetables, whereas the prevalence of "about half the time or sometimes" and "never" purchasing fresh fruits or vegetables was 47.2% and 3.5%, respectively.

#### *Physical Activity*

- Over one-third (34.3%) of adults were physically inactive in the past 30 days.
- The prevalence of physical inactivity in the past 30 days was significantly higher among adults with less than high school education (53.4%) than among adults with any other educational attainment levels.

## Social Determinants of Health

### *Healthcare Access and Quality*

- Over one-third (35.5%) of adults had a telehealth visit in the past 12 months with a prevalence significantly lower among adults who were male (31.8%) than among adults who were female (39.0%).
- The prevalence of two or more emergency room (ER) visits in the past 12 months was 11.4% and was significantly higher among adults with less than high school education (20.2%) than among adults with any other educational attainment levels.
- About one-tenth (9.7%) of adults reported being treated unfairly by a healthcare provider in the past 12 months with a prevalence significantly higher among adults who were multi-racial or “other” (20.5%) than among adults who were White (9.3%) and Black (8.9%).
- About two-thirds (65.7%) of adults were ever asked about mental health by a healthcare provider with a prevalence significantly lower among adults who were male (59.1%) than among adults who were female (71.8%).
- Among the 31.2% of adults who reported a need for mental health care in the past 12 months, over one-half (56.7%) received it.
- Among the 2.8% of adults who needed to see a healthcare provider because of alcohol or drug use in the past 12 months, almost two-thirds (65.1%) saw a healthcare provider for it.

### *Economic Stability*

- Over one-third (36.4%) of adults who had debt reported that paying off debt got harder in the past 12 months with a prevalence significantly higher among adults who were multi-racial or “other” (50.1%) than among adults who were White (35.6%).
- Over one-fourth (28.6%) of adults who paid rent or a mortgage reported that paying for housing got harder in the past 12 months with a prevalence significantly higher among adults aged 18-34 years (40.3%) than among any other adult age groups.
- Almost one-fourth (23.1%) of adults who paid rent or a mortgage reported they were very worried that getting sick or having an accident may prevent them from paying for housing with a prevalence significantly lower among adults aged 65 years or older (7.1%) than among any other adult age groups.
- Almost one-third (30.3%) of adults reported that buying food for the household got harder in the past 12 months.
- The prevalence of a household cutting the size of meals or skipping meals in the past 30 days was 14.0%.
- The prevalence of the household receiving free groceries or meals from food banks or pantries in the past 30 days was 8.0%.

### *Neighborhood and Built Environment*

- Almost three-fourths (72.5%) of adults lived in a house, with a prevalence significantly lower among adults who were Black (55.7%) and multi-racial or “other” (59.3%) than among adults who were White (73.5%).
- Over one-tenth (12.9%) of adults lived in a mobile home or trailer with a, and the prevalence significantly higher among adults who were widowed, divorced, or separated (16.3%) than among adults of any other marital status.
- The prevalence of access to a public gym was 27.5% and access to a private gym or personal trainer was 7.9%.
- Over one-fourth (29.2%) of adults had access to gym equipment at home with a, and the prevalence significantly lower among adults with less than high school education (10.6%) than among adults with any other educational attainment levels.
- The prevalence of access to an exercise buddy or group was 11.2% and was significantly lower among adults who were White (11.0%) and Black (9.3%) than among adults who were multi-racial or “other” (19.2%).

### *Social and Community Context*

- Over one-half (58.6%) of adults reported always or usually receiving the emotional support they needed, whereas the prevalence of “sometimes or rarely” or “never” receiving emotional support was 21.0% and 20.4%, respectively.
- The prevalence of never receiving the emotional support needed was significantly higher among adults who were male (22.8%) than among adults who were female (18.1%).
- The prevalence of always or usually receiving the emotional support needed was significantly lower among adults with an annual family income of \$15,000 or less (45.6%) than among adults with any other annual family income levels.
- The prevalence of always or usually receiving the emotional support needed was significantly higher among adults who were married or living with a partner (64.1%) than among adults with any other marital status.

## COVID-19

### *COVID-19 Impact*

- The prevalence of the COVID-19 impact on household employment (e.g., “Taken unpaid time off,” “Been fired from a job,” “Been unable to pay a bill,” “Received unemployment benefits;” see [15.1 COVID-19 Impact on Household Employment](#) for more details) was 41.2%.
- The prevalence of household financial action in response to COVID-19 (e.g., “Use up all or most of your savings,” “Cut back your spending on food,” “Pawned or sold possessions,” “Received unemployment benefits;” see [15.2 Household Financial Action to COVID-19](#) for more details) was 54.8% and was significantly higher among adults who were Black (69.4%) and multi-racial or “other” (70.6%) than among adults who were White (53.8%).

- Over one-fifth (21.0%) of adults who had COVID-19 reported long-term emotional or mental health effects related to this disease with a prevalence significantly higher among adults with an annual family income of \$15,000 or less (29.2%) and \$15,001-\$35,000 (24.5%) than among adults with an annual family income of \$85,001 or more (13.6%).
- Almost one-fifth (19.7%) of adults who had a family member or friend who had COVID-19 reported long-term emotional or mental health effects related to a family member or friend having COVID-19, and the prevalence was significantly higher among adults who were multi-racial or “other” (29.6%) than among adults who were White (19.2%).

It is important to note that 95% confidence intervals (CIs) were used to determine “significance.” Because this approach is conservative, significance testing must be done for a true statement of statistical significance.



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# Acronyms

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The following acronyms are used throughout this report:

Acronym	Definition
AAPOR	American Association for Public Opinion Research
ABS	Address-based Sampling
ADHD	Attention-Deficit/Hyperactivity Disorder
AIDS	Acquired Immunodeficiency Syndrome
BBH	Bureau for Behavioral Health
BMS	Bureau for Medical Services
BRFSS	Behavioral Risk Factor Surveillance System
CBG	Census Block Group
CDC	United States Centers for Disease Control and Prevention
CI	Confidence Interval
COPD	Chronic Obstructive Pulmonary Disease
COVID-19	Coronavirus Disease 2019
DHHR	West Virginia Department of Health and Human Resources
ER	Emergency Room
GED	Graduate Equivalency Diploma
Health Affairs	West Virginia University Health Affairs Institute
HIV	Human Immunodeficiency Virus
LIEAP	Low Income Energy Assistance Program
MATCH	Mountain State Assessment of Trends in Community Health
MDMA	3,4-Methylenedioxymethamphetamine
PEIA	Public Employees Insurance Agency
PTSD	Post-Traumatic Stress Disorder
RBF	Ryan Brown Fund
RR2	AAPOR Response Rate definition #2
RSE	Relative Standard Error
SES	Socioeconomic Status
SDOH	Social Determinants of Health



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Acronym	Definition
SNAP	Supplemental Nutrition Assistance Program
SWLS	Satisfaction with Life Scale
TANF	Temporary Assistance for Needy Families
WIC	Special Supplemental Nutrition Program for Women, Infants, and Children
WV	West Virginia
WVU	West Virginia University

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# Key Term Definitions

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## Common Statistical Terms

### Confidence Intervals (CIs)

CIs reflect the uncertainty present in the calculated prevalence estimates. CIs reflect a range of values, between an upper and lower boundary value, in which it is reasonable to expect the actual prevalence to lie with 95% confidence. This report uses two-sided 95% CIs.

### Prevalence

Prevalence measures how common a condition, characteristic, or health-related behavior is in a population. Prevalence is calculated as the proportion of the population affected by the health-related indicators and can be expressed as a percentage, rate, or frequency. This report presents the prevalence estimates for the selected health-related indicators from the Mountain State Assessment of Trends in Community Health (MATCH).

### Relative Standard Error (RSE)

RSE is one measure of the reliability of a calculated prevalence estimate used to determine if the estimate was stable in this report.

### Significance

Significance is a statement on whether the difference between two prevalence estimates is unlikely to be due to chance. In this report, a difference between two prevalence estimates was deemed statistically “significant” if their 95% confidence intervals did not overlap. In most cases, a comparison of prevalence estimates was made within a demographic category (e.g., sex, age, education, family income, race, or marital status) or between geographic areas. It is important to note that using 95% CIs to determine statistical significance is a conservative approach and that significance testing must be done for a true statement of statistical significance.

### Stability

Stability refers to the reliability of the prevalence estimates, meaning that stable estimates would be expected to be consistent if the survey was repeated. Unstable estimates, on the other hand, may not reflect the true prevalence of particular health-related indicators. For this reason, unstable estimates were noted but not included in this report.

### Stratification

Stratification is a method used to observe differences in prevalence estimates between different “subgroups.” This report stratifies estimates by relevant population characteristics (e.g., sex, age, and education) and geographic areas (regions).

## Other Key Terms

### Coronavirus Disease 2019 (COVID-19) Impact

The MATCH data collection period occurred between August 2021 and February 2022, overlapping with the ongoing global COVID-19 pandemic. Implications of COVID-19 on health-related indicators are referred to as the COVID-19 impact.

### Population Health

Population health can be defined as the distribution of health statuses and outcomes among specified groups of individuals. The findings in this report are representative health-related indicators for the adult population of West Virginia (WV).

### Regional Groupings

MATCH was designed to achieve state- and substate-level estimates. Three regional groupings were identified by the West Virginia Department of Health and Human Resources (DHHR) as geographical areas of interest. More information related to the regional groupings can be found in the “Methods and Demographics” section.

### Social Determinants of Health (SDOH)

SDOH are the social and economic conditions that contribute to an individual’s health status. SDOH are influential indicators for population health and have been identified as risk factors for numerous health statuses and outcomes. More information and indicators related to SDOH can be found in the corresponding section of this report.

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# 1. Introduction

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The West Virginia Department of Health and Human Resources (DHHR) and West Virginia University Health Affairs Institute (Health Affairs) partnered to design, develop, and implement the Mountain State Assessment of Trends in Community Health (MATCH), a new public health surveillance system that collects information from West Virginia adult residents 18 years of age or older who are noninstitutionalized and not living in group housing (e.g., nursing homes, residential living facilities). The goal of MATCH is to improve the health of West Virginians through data-driven decision-making.

MATCH is a biennial, multi-mode (i.e., internet, paper, and telephone), cross-sectional, population-based health survey that collects health-related information. The 2021 MATCH was administered in all 55 WV counties between August 2021 and February 2022. Information was collected on priority data gaps within the state.

This document reports findings for the 2021 MATCH and is intended to provide a high-level summary regarding the MATCH methodology and findings. Findings can be used by DHHR staff, researchers, academicians, legislators, policymakers, healthcare providers, insurance providers, and the general public to better understand the health of West Virginians and match community health needs with resources specifically designed to meet those needs.

State- and regional-level prevalence estimates are described in this report. These findings are organized by section (“Health Status,” “Health Behavior,” “Social Determinants of Health [SDOH],” and “Coronavirus Disease 2019 [COVID-19]”), with topics in the survey provided in Table 1. Each finding is accompanied by:

- an overview page that summarizes the survey item, total prevalence, and prevalence estimate(s) stratified by sex, age, education, family income, race, marital status, and region;
- a table that covers total prevalence (number and percentage) and prevalence estimate(s) stratified by sex, age, education, family income, race, and marital status; and
- regional maps that show the differences in region prevalence compared to the WV prevalence for all “statistically significant” differences. If regional prevalence estimates were not found to be significantly different than WV state prevalence estimates for a health-related indicator, then that map was excluded from the report.

Prevalence estimates associated with each of the three regional groupings are presented in tables in the Appendix. Only stable prevalence estimates are reported. Of note, stability refers to the reliability of the prevalence estimates, meaning that stable estimates would be expected to be consistent if the survey were to be repeated. Unstable estimates may not reflect the true prevalence of a particular health-related indicator.

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Table 1: Topics in the Survey: MATCH, 2021

Topic	2021
General Health	Page <a href="#">13</a>
Mental Health	Page <a href="#">17</a>
Physical Health Conditions	Page <a href="#">43</a>
Poor Health Limitations	Page <a href="#">88</a>
Substance Use	Page <a href="#">97</a>
Overdoses	Page <a href="#">137</a>
Suicide	Page <a href="#">145</a>
Sleep	Page <a href="#">148</a>
Nutrition	Page <a href="#">154</a>
Physical Activity	Page <a href="#">160</a>
Healthcare Access and Quality	Page <a href="#">165</a>
Economic Stability	Page <a href="#">221</a>
Neighborhood and Built Environment	Page <a href="#">284</a>
Social and Community Context	Page <a href="#">305</a>
Coronavirus Disease 2019 (COVID-19) Impact	Page <a href="#">312</a>

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## 2. Methods and Demographics

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The 2021 Mountain State Assessment of Trends in Community Health (MATCH) survey instrument was tested in cognitive interviews and in a pilot administration. The final survey questions consisted of eight sections that cover general health, healthcare access, mental health, lifestyle, demographics, coronavirus disease 2019 (COVID-19), substance use, and other topics (e.g., physical activity).

### 2.1 Sample Selection and Data Collection

The MATCH target population was West Virginia (WV) adult residents aged 18 years or older who were not noninstitutionalized and not living in group housing. WV adult residents were selected at random to participate in the survey. A total of 88,004 WV adult residents were mailed invitations to participate in the survey between August 2021 and February 2022. Respondents could complete the survey via the internet, a paper instrument, or telephone.

The general sample design was a stratified random sample of persons residing in WV to help achieve state- and substate-level estimates. Two sampling frames were used to select survey respondents, including an addressed-based sampling (ABS) frame and a Medicaid Administrative sampling frame built from the WV Medicaid Administrative database. To understand the health of all West Virginians, the sampling design included oversampling of subgroups that make up a smaller proportion of the overall state population. In the ABS sampling frame, counties with smaller populations were oversampled. Additionally, within select counties, geographical areas with a higher density of low socioeconomic status (SES) households and/or African American residents were oversampled. In the Medicaid Administrative sampling frame, within select counties, non-White (including Hispanic) Medicaid enrollees were oversampled.

A total of 88,004 WV adults were selected to participate in the 2021 MATCH survey. Of these, 70,400 were selected from the ABS frame and 17,604 from the Medicaid Administrative frame. Respondents were invited to complete the survey through a two-phase, “push to web” design between August 2021 and February 2022. Phase one began on August 31, 2021, and phase two began on November 4, 2021. Respondents were able to submit completed surveys until February 28, 2022. Each of the two phases included 44,002 respondents.

The “push to web” design utilized four mailings per phase to contact respondents for response to the MATCH survey. First, respondents were invited to complete the survey by internet in an initial invitation letter. This letter contained an explanation of the MATCH program, a hyperlink to a landing page, and a unique personal identification number code. The first reminder, a postcard, also invited respondents to complete the survey by internet. Respondents who did not respond to the first two contacts were then sent a paper survey packet in the third mailing. If they had not responded to the previous three attempts, they were sent a fourth and final mailing with a second paper survey packet.

Because this was a household-level sample, mailing materials for the respondents selected from the ABS frame contained instructions requesting that an adult (aged 18 years or older) member of the household with the most recent birthday complete the survey. Mailing materials for the respondents who were selected from the Medicaid Administrative frame were addressed by name. Respondents could complete the survey in three ways: via the internet, using a computer, tablet, or smartphone; via a

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paper instrument that could be returned in a self-addressed, postage-paid envelope; or they could call a toll-free number and complete the survey by telephone. If respondents wished to complete the survey but were physically or mentally unable to do so on their own, proxy respondents could complete the survey on their behalf.

In phase one, there were three incentive groups: (1) a \$2 bill pre-incentive; (2) a \$10 post-incentive gift card; or (3) a \$2 bill pre- and a \$10 post-incentive gift card. After conducting an experiment in phase one of data collection to determine which incentive structure yielded the highest response rate, MATCH respondents were offered the \$2 bill pre- and a \$10 post-incentive gift card for completing the survey.

## 2.2 Response Rate

Using the response rate formula #2 (RR2<sup>1</sup>) of the American Association of Public Opinion Research (AAPOR), the MATCH response rate was calculated as follows: the number of completed and partially completed (completed through Section 5-Demographics) surveys divided by the number of completed and partially completed surveys plus the number of eligible (i.e., people who refused to take the survey, people who did not complete the survey, and people who did not respond) residents. For MATCH, 81,073 of the 88,004 sampled WV adult residents met the eligibility requirements. MATCH obtained 16,185 survey responses. This number included 16,081 fully completed surveys and 104 partially completed surveys that were considered acceptable to include in the analytic dataset. The overall unit response rate for MATCH was 20.0% (16,185/81,073) (AAPOR RR2).

## 2.3 Estimations, Confidence Intervals, Stability, and Significance

Unless stated otherwise, estimates and confidence intervals (CIs) in this report were weighted and were calculated using appropriate methods for the complexity of the MATCH program design.

All CIs were two-sided 95% CIs and were computed with a missing completely at-random assumption.

A prevalence estimate was considered unstable if either:

1. There were fewer than 50 respondents (i.e., denominator) in the subgroup, or
2. The estimate's relative standard error (RSE) was 30.0% or higher (RSEs were calculated by dividing the standard error of the estimate by the estimate itself).

Otherwise, the estimate was considered stable.

Due to the large number of prevalence estimate comparisons included in this report, a conservative approach was taken to determine statistical "significance." The comparison of two stable prevalence estimates, whether between two subgroups or between a subgroup and the population was done via their respective 95% CIs. If the two 95% CIs overlapped, the estimates were considered "not significantly different" ("ns") from each other. Otherwise, the first estimate was considered:

1. "significantly higher" ("H"), if its 95% CI was higher than the 95% CI of the second estimate and
2. "significantly lower" ("L"), if its 95% CI was lower than the 95% CI of the second estimate.

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<sup>1</sup>The American Association for Public Opinion Research. 2016. Standard Definitions: *Final Dispositions of Case Codes and Outcome Rates for Surveys. 9th edition.* AAPOR.

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It is important to note that formal statistical testing was not done. This must be done for a true statement of statistical significance.

## 2.4 Weighting

To provide representative and reliable estimates, weights were constructed to correct for MATCH program design (multiple frames and oversampling), participant-level non-response, and calibrated to known totals for individual and geographic area characteristics (e.g., the prevalence of unoccupied buildings nearby, prevalence of internet availability nearby). Individual characteristics were calibrated at the:

1. state-level for age by birth sex and Medicaid participation,
2. regional level for all three regional groupings: education, binary race, and
3. county-level for age and birth sex separately.

The geographic area characteristics were calibrated at either the state or regional levels.

## 2.5 Regional-Level Data

The MATCH survey produced state- and substate-level estimates. The three regional groups used in this report are the WV Department of Health and Human Resources (DHHR), Bureau for Medical Services (BMS) regions; the DHHR, Bureau for Behavioral Health (BBH) regions; and the DHHR, BBH, Ryan Brown Fund (RBF) regions. Each regional group is illustrated below in Figures 2.5.1, 2.5.2, and 2.5.3.



Figure 2.5.1: West Virginia Department of Health and Human Resources, Bureau for Medical Services Regions



Figure 2.5.2: West Virginia Department of Health and Human Resources, Bureau for Behavioral Health Regions

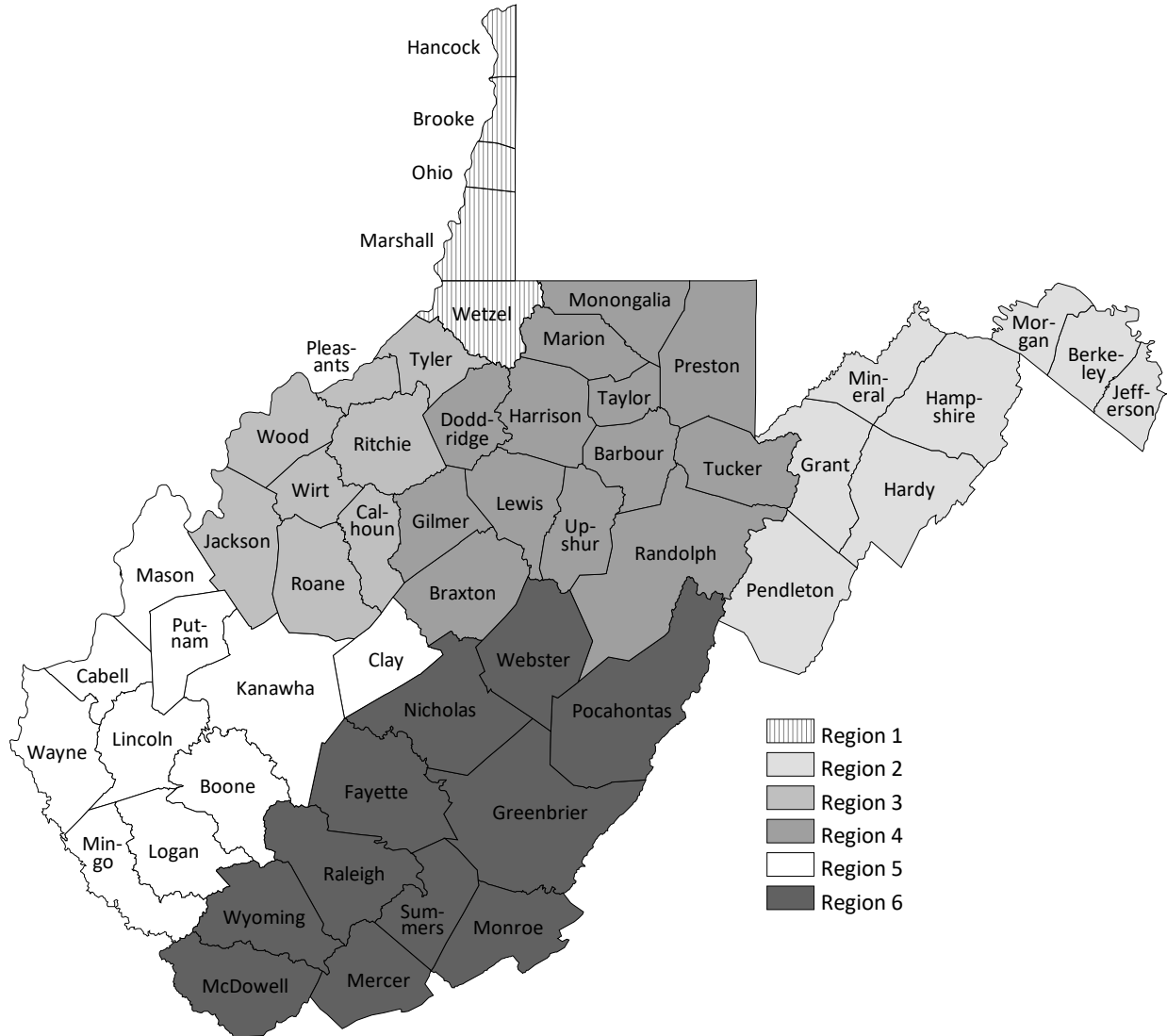
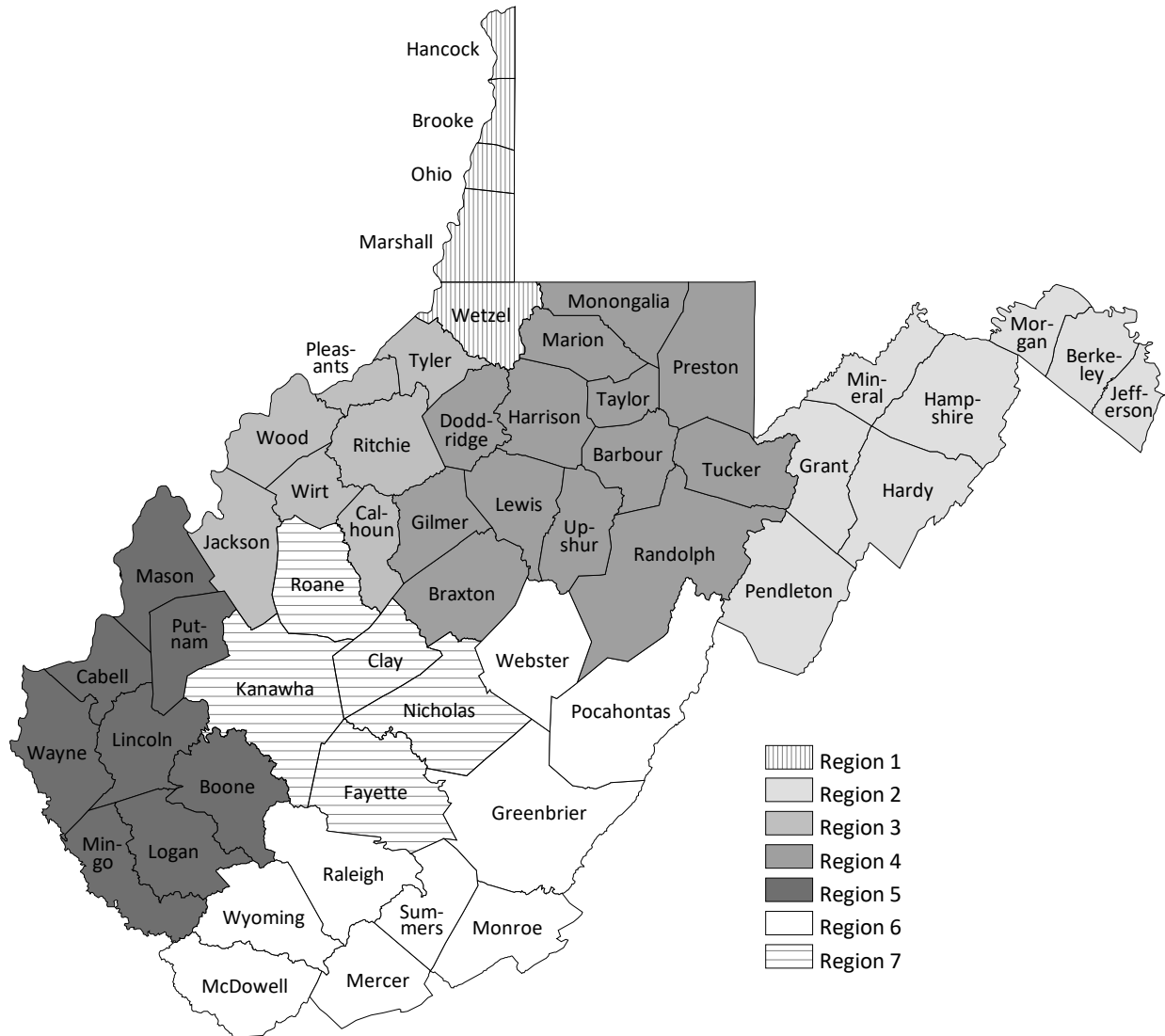


Figure 2.5.3: West Virginia Department of Health and Human Resources, Bureau for Behavioral Health, Ryan Brown Fund Regions



Stable regional estimates were ranked in ascending order of the estimate values. In each chapter of this report, the regional-level maps present stable estimates that were significantly higher or lower than the total WV estimate. Regional estimates help DHHR staff, researchers, academicians, legislators, policymakers, healthcare providers, insurance providers, and the general public to better understand the geographic distribution of the health needs of WV adult residents.

## 2.6 Demographic Characteristics of the MATCH Respondents

The demographic characteristics for MATCH respondents are summarized in Table 2. Table 2 contains unweighted number of respondents, and unweighted and weighted sample percentages for each of the demographic characteristics of MATCH respondents.

Table 2: Demographic Summary: MATCH, 2021<sup>a</sup>

Demographic Characteristic	Number of Respondents	Percent of Unweighted Sample	Percent of Weighted Sample
<b>TOTAL</b>	<b>16,185</b>	<b>100.0</b>	<b>100.0</b>
<b>SEX</b>			
Male	6,105	37.7	48.6
Female	10,080	62.3	51.4
<b>GENDER</b>			
Male	6,018	37.4	48.1
Female	9,958	61.8	50.8
Transgender	U	U	U
Other	99	0.6	0.8
<b>LESBIAN, GAY, BISEXUAL, OR TRANSGENDER</b>			
Yes	1,040	6.7	7.4
No	14,523	93.3	92.6
<b>AGE</b>			
18-34	2,655	16.5	25.1
35-49	2,918	18.2	22.2
50-64	4,520	28.2	27.8
65+	5,957	37.1	24.9
<b>EDUCATION</b>			
Less than HS	1,686	10.5	12.4
HS/GED	7,855	48.9	43.5
Associate's or more	6,515	40.6	44.1
<b>ANNUAL FAMILY INCOME</b>			
\$15,000 or less	3,960	25.8	21.6
\$15,001-\$35,000	4,497	29.3	26.2
\$35,001-\$50,000	2,081	13.6	13.8
\$50,001-\$85,000	2,564	16.7	19.0
\$85,001+	2,240	14.6	19.4
<b>RACE</b>			
White	14,648	90.9	93.7
Black	807	5.0	2.5
Multi-racial or "Other"	655	4.1	3.7

Demographic Characteristic	Number of Respondents	Percent of Unweighted Sample	Percent of Weighted Sample
<b>MARITAL STATUS</b>			
Married/Living with a partner	8,234	51.2	54.2
Widowed/Divorced/Separated	5,117	31.8	23.8
Never married	2,727	17.0	22.0
<b>EMPLOYMENT STATUS</b>			
Employed by self/Someone else	6,233	39.0	48.8
Homemaker	1,829	11.4	9.2
Retired	6,243	39.0	28.6
Unemployed	2,854	17.8	19.0
<b>VETERAN</b>			
Yes	1,501	9.5	9.6
No	14,278	90.5	90.4
<b>LIVING ARRANGEMENT</b>			
Self	4,763	29.7	21.2
Spouse/Partner	8,375	52.2	56.1
Own children/Step-children/Grandchildren	3,964	24.7	27.1
Mother/Stepmother/Stepfather	947	5.9	10.5
Grandmother/Grandfather	112	0.7	1.4
Siblings/Step-siblings	416	2.6	4.1
Aunt/Uncle/Other relatives	142	0.9	1.6
People not related	578	3.6	5.0

*Note.* HS = high school; GED = Graduate Equivalency Diploma; U = unstable prevalence estimate.

<sup>a</sup>Due to missing item-level responses, the number of respondents within all demographic categories may not add up to the total number of respondents. Within a demographic category, the denominator for the percent of the unweighted sample includes only non-missing responses.

## 2.7 Limitations

There are some standard limitations of a voluntary survey with a targeted population that should be considered when interpreting the 2021 MATCH findings.

- Only WV adult residents who are 18 years of age or older and do not live in group housing were invited to participate in MATCH. Individuals living in institutions, on military bases covered by dedicated central office codes, or in other group quarters such as nursing homes, dormitories, barracks, convents, or boarding houses (with 10 or more unrelated residents) were not included in MATCH. Individuals were also excluded if they had a language barrier or a physical or mental impairment that prevented them from completing the survey and a proxy respondent was unavailable to complete the survey on that individual's behalf. The prevalence estimates included in this report do not represent these excluded groups.

- 
- All data collected for MATCH were self-reported, which may be subject to recall and social desirability biases due to the personal and sensitive nature of sharing private health information. Respondents possibly had difficulties remembering events, overreported socially desirable behaviors, and underreported behaviors they perceived to be less acceptable.
  - Although results were weighted to improve representation across demographic and geographic populations presented throughout the report, when a respondent did not respond to specific questions (i.e., item non-response), it reduced the direct interpretability of weighted counts as population totals.
  - Data were analyzed in smaller population subgroups, which decreased the sample size and limited statistical power for identifying differences between subgroups. Unstable estimates were identified in these cases and prevented comparisons with stable estimates across subpopulations.

## 2.8 Presentation of Findings

The following sections of this report present the prevalence estimates of health-related indicators of WV adult residents stratified by demographic variables and regional groupings. Prevalence estimates represent the percentages of respondents within a given demographic or geographic group who reported information about a health-related indicator. Regarding the prevalence estimates, it is important to note the following:

- Unstable prevalence estimates are not reported and are replaced by the letter “U” in this report.
- For some questions in the MATCH survey, respondents provided information about their household. In these cases, the question framing is important for interpreting the results by demographic categories. Thus, the item is identified in the text using the language of “household” and in the appendix tables using a footnote to identify when the response referred to the household.
- Regional-level maps highlight regions in which the prevalence estimates of health-related indicators were significantly higher or lower than WV state-level prevalence estimates. Unstable estimates were identified by cross-hatching on their respective map. If regional prevalence estimates were not found to be significantly different from WV state-level prevalence estimates for a health-related indicator, then that map was excluded from the report. Stable prevalence estimates for the maps are found in the Appendix.
- The Appendix presents regional prevalence estimates, rankings, and statistical comparisons to WV state-level prevalence estimates.
- Due to its frequent use in creating subgroups (e.g., sex by age group), missing data on sex were imputed via random hot deck to improve estimates. Data on the other subgroups were not imputed.

For more information on the MATCH methods, please visit [www.wvmatchsurvey.org](http://www.wvmatchsurvey.org).

Section 1

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HEALTH STATUS

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# Chapter 1: General Health

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## 1.1 General Health Status

### Item

Responding “Fair” or “Poor” to the question, “In general, how would you describe your health?”

### Prevalence

**West Virginia:** 24.2% (95% CI: 23.3-25.2)

### Sex

**Male:** 25.3% (95% CI: 23.8-26.9)

**Female:** 23.2% (95% CI: 22.0-24.4)

There was no significant difference in the prevalence of fair or poor general health between the sexes.

### Age

The prevalence of fair or poor general health was significantly higher among adults aged 50-64 (30.0%) and 65 or older (31.2%) than among any other adult age groups. The prevalence was significantly lower among adults aged 18-34 (12.8%) than among any other adult age groups.

### Education

The prevalence of fair or poor general health was significantly higher among adults with less than high school education (47.1%) than among adults with any other educational attainment levels. The prevalence was significantly lower among adults with an associate’s or more education (15.5%) than among adults with any other educational attainment levels.

### Family Income

The prevalence of fair or poor general health was significantly higher among adults with an annual family income of \$15,000 or less (43.4%) than among adults with any other annual family income levels. The prevalence was significantly lower among adults with an annual family income of \$85,001 or more (7.5%) than among adults with any other annual family income levels.

### Race

The prevalence of fair or poor general health was significantly higher among adults who were Black (30.5%) than among adults who were White (24.1%).

### Marital Status

The prevalence of fair or poor general health was significantly higher among adults who were widowed, divorced, or separated (37.7%) than among adults with any other marital statuses.



## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There was one DHHR, Bureau for Medical Services (BMS) region with a significantly higher prevalence of fair or poor general health compared to the state estimate (24.2%); region four (29.2%). There were two DHHR, BMS regions with a significantly lower prevalence compared to the state estimate; regions one (21.0%) and three (21.4%).

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There were two DHHR, Bureau for Behavioral Health (BBH) regions with a significantly higher prevalence of fair or poor general health compared to the state estimate (24.2%); regions five (27.5%) and six (28.8%). There were three DHHR, BBH regions with a significantly lower prevalence compared to the state estimate; regions one (18.6%), two (19.9%), and four (21.0%).

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There were two DHHR, BBH, Ryan Brown Fund (RBF) regions with a significantly higher prevalence of fair or poor general health compared to the state estimate (24.2%); regions five (28.0%) and six (29.5%). There were three DHHR, BBH, RBF regions with a significantly lower prevalence compared to the state estimate; regions one (18.6%), two (19.9%), and four (21.0%).

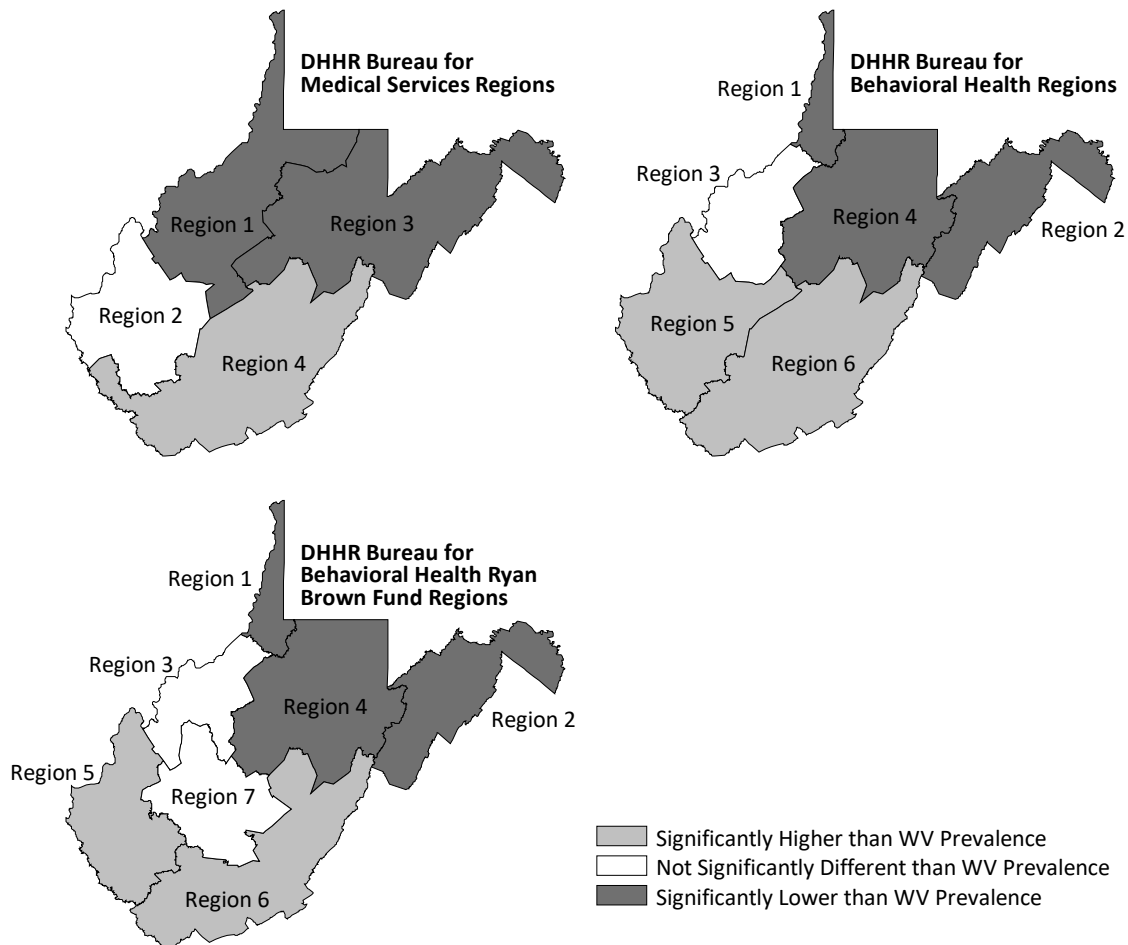
*Table 1.1.1: Weighted Prevalence of Fair or Poor General Health by Demographic Characteristics: MATCH, 2021<sup>a</sup>*

Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>171,646</b>	<b>25.3</b>	<b>23.8-26.9</b>	<b>165,795</b>	<b>23.2</b>	<b>22.0-24.4</b>	<b>337,441</b>	<b>24.2</b>	<b>23.3-25.2</b>
<b>Age</b>									
18-34	22,555	12.8	9.9-15.7	21,893	12.8	10.7-14.9	44,448	12.8	11.0-14.6
35-49	34,648	22.9	19.5-26.3	32,963	21.2	18.7-23.6	67,611	22.0	20.0-24.1
50-64	59,934	32.0	28.9-35.0	55,437	28.2	25.8-30.7	115,371	30.0	28.1-32.0
65+	52,812	33.6	30.6-36.6	54,397	29.2	26.7-31.6	107,209	31.2	29.3-33.1
<b>Education</b>									
Less than HS	43,296	46.3	41.2-51.4	37,194	48.2	43.7-52.6	80,490	47.1	43.7-50.6
HS/GED	84,336	27.7	25.3-30.1	74,352	25.0	23.3-26.7	158,688	26.4	24.9-27.8
Associate's or more	41,945	15.2	13.2-17.3	52,665	15.7	14.0-17.3	94,610	15.5	14.2-16.7
<b>Annual Family Income</b>									
\$15,000 or less	59,399	44.5	40.6-48.3	65,650	42.5	39.6-45.4	125,049	43.4	41.0-45.8
\$15,001-\$35,000	51,168	32.4	28.8-36.0	52,400	27.4	24.9-29.8	103,569	29.7	27.5-31.8
\$35,001-\$50,000	18,971	20.7	16.8-24.5	14,587	15.7	12.9-18.5	33,558	18.2	15.8-20.5
\$50,001-\$85,000	22,011	17.6	14.1-21.0	15,471	12.0	9.7-14.3	37,482	14.7	12.6-16.8
\$85,001+	11,113	7.7	5.7-9.7	8,278	7.1	4.9-9.3	19,391	7.5	6.0-9.0
<b>Race</b>									
White	160,214	25.5	23.9-27.2	154,053	22.8	21.6-24.1	314,267	24.1	23.1-25.1
Black	5,168	29.1	21.3-36.9	5,596	31.9	25.2-38.5	10,764	30.5	25.3-35.6
Multi-racial or "Other"	6,067	20.0	12.6-27.4	5,761	27.4	20.2-34.7	11,828	23.0	17.8-28.3
<b>Marital Status</b>									
Married/Living with a partner	81,778	22.3	20.3-24.3	64,797	16.9	15.5-18.3	146,575	19.5	18.3-20.7
Widowed/Divorced/Separated	51,551	39.8	36.0-43.6	72,826	36.4	33.9-38.9	124,377	37.7	35.6-39.8
Never married	37,127	20.9	17.9-24.0	27,062	21.3	18.4-24.3	64,189	21.1	18.9-23.3

*Note.* CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

Figure 1.1.1: Weighted Prevalence of Fair or Poor General Health by Region: MATCH, 2021<sup>a,b</sup>



Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

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# Chapter 2: Mental Health

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## 2.1 Mental Health Status

### Item

Responding “Fair” or “Poor” to the question, “In general, how would you rate your overall mental health?”

### Prevalence

**West Virginia:** 21.9% (95% CI: 20.9-22.9)

### Sex

**Male:** 20.7% (95% CI: 19.2-22.2)

**Female:** 23.0% (95% CI: 21.8-24.3)

There was no significant difference in the prevalence of fair or poor mental health between the sexes.

### Age

The prevalence of fair or poor mental health was significantly higher among adults aged 18-34 (31.7%) than among any other adult age groups. The prevalence was significantly lower among adults aged 65 or older (11.1%) than among any other adult age groups.

### Education

The prevalence of fair or poor mental health was significantly higher among adults with less than high school education (36.8%) than among adults with any other educational attainment levels. The prevalence was significantly lower among adults with an associate’s or more education (15.3%) than among adults with any other educational attainment levels.

### Family Income

The prevalence of fair or poor mental health was significantly higher among adults with an annual family income of \$15,000 or less (40.8%) than among adults with any other annual family income levels. The prevalence was significantly lower among adults with an annual family income of \$85,001 or more (9.5%) than among adults with any other annual family income levels.

### Race

The prevalence of fair or poor mental health was significantly higher among adults who were multi-racial or “other” (30.0%) than among adults who were White (21.5%).

## Marital Status

The prevalence of fair or poor mental health was significantly higher among adults who were never married (31.1%) than among adults with any other marital statuses. The prevalence was significantly lower among adults who were married or living with a partner (17.1%) than among adults with any other marital status.

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There were no DHHR, Bureau for Medical Services (BMS) regions with a significantly higher prevalence of fair or poor mental health compared to the state estimate. There was one DHHR, BMS region with a significantly lower prevalence compared to the state estimate (21.9%); region three (18.7%).

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There were no DHHR, Bureau for Behavioral Health (BBH) regions with a significantly higher prevalence of fair or poor mental health compared to the state estimate. There was one DHHR, BBH region with a significantly lower prevalence compared to the state estimate (21.9%); region two (18.2%).

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There was one DHHR, BBH, Ryan Brown Fund (RBF) region with a significantly higher prevalence of fair or poor mental health compared to the state estimate (21.9%); region five (25.9%). There was one DHHR, BBH, RBF region with a significantly lower prevalence compared to the state estimate; region two (18.2%).

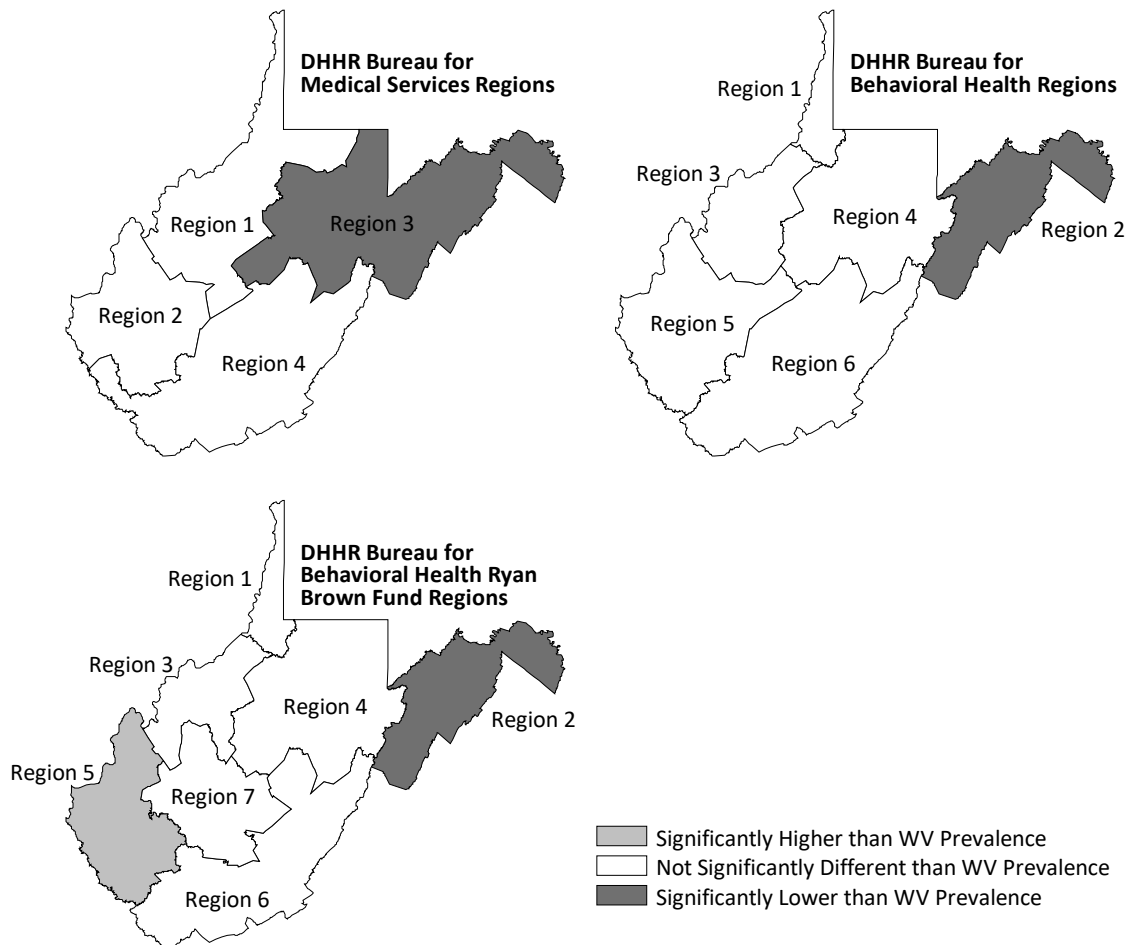
Table 2.1.1: Weighted Prevalence of Fair or Poor Mental Health by Demographic Characteristics: MATCH, 2021<sup>a</sup>

Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>140,264</b>	<b>20.7</b>	<b>19.2-22.2</b>	<b>164,819</b>	<b>23.0</b>	<b>21.8-24.3</b>	<b>305,083</b>	<b>21.9</b>	<b>20.9-22.9</b>
<b>Age</b>									
18-34	48,080	27.2	23.4-31.1	61,973	36.2	33.1-39.4	110,053	31.7	29.2-34.2
35-49	39,416	26.1	22.5-29.8	42,332	27.2	24.4-30.0	81,748	26.7	24.4-29.0
50-64	34,910	18.5	16.1-21.0	38,250	19.4	17.2-21.6	73,161	19.0	17.3-20.6
65+	17,147	10.9	9.0-12.8	21,252	11.3	9.7-13.0	38,399	11.1	9.9-12.4
<b>Education</b>									
Less than HS	32,527	34.9	29.9-39.9	30,312	39.1	34.7-43.4	62,839	36.8	33.4-40.2
HS/GED	70,548	23.1	20.7-25.4	76,042	25.6	23.7-27.4	146,590	24.3	22.8-25.8
Associate's or more	35,831	13.0	11.0-15.0	57,785	17.1	15.4-18.9	93,616	15.3	14.0-16.6
<b>Annual Family Income</b>									
\$15,000 or less	52,731	39.3	35.5-43.1	65,007	42.1	39.1-45.0	117,738	40.8	38.4-43.2
\$15,001-\$35,000	40,598	25.7	22.1-29.3	48,674	25.4	23.0-27.8	89,273	25.5	23.4-27.6
\$35,001-\$50,000	13,311	14.5	11.0-18.1	14,440	15.6	12.6-18.5	27,752	15.1	12.8-17.4
\$50,001-\$85,000	17,831	14.2	11.1-17.4	17,707	13.6	11.0-16.3	35,538	13.9	11.9-16.0
\$85,001+	11,095	7.7	5.0-10.3	13,731	11.8	9.0-14.7	24,826	9.5	7.6-11.5
<b>Race</b>									
White	126,905	20.2	18.6-21.8	152,714	22.6	21.3-23.9	279,619	21.5	20.5-22.5
Black	5,609	31.4	22.1-40.7	4,063	23.1	17.6-28.6	9,672	27.3	21.8-32.8
Multi-racial or "Other"	7,630	25.3	17.0-33.7	7,767	36.5	28.6-44.4	15,397	30.0	24.0-35.9
<b>Marital Status</b>									
Married/Living with a partner	56,667	15.4	13.6-17.3	71,756	18.7	17.1-20.3	128,423	17.1	15.9-18.3
Widowed/Divorced/Separated	32,309	24.9	21.5-28.2	47,617	23.8	21.6-25.9	79,927	24.2	22.4-26.0
Never married	50,470	28.4	24.8-32.0	44,464	35.0	31.4-38.6	94,934	31.1	28.6-33.7

Note. CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

Figure 2.1.1: Weighted Prevalence of Fair or Poor Mental Health by Region: MATCH, 2021<sup>a,b</sup>



Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

## 2.2 Life Satisfaction

### Item

Responding to the five-item Satisfaction with Life Scale (SWLS),<sup>2</sup> which is used to assess a respondent's judgment of their life satisfaction. In the survey, respondents were presented with a series of five items. The items were presented with the opening prompt of "How much do you disagree or agree with the following statements?".

- "In most ways my life is close to ideal."
- "The conditions of my life are excellent."
- "I am satisfied with my life."
- "So far, I have gotten the important things I want in life."
- "If I could live my life again, I would change almost nothing."

They could answer each of those five items with one of the following responses:

- "Strongly disagree"
- "Somewhat disagree"
- "Neither agree nor disagree"
- "Somewhat agree"
- "Strongly agree"

Each item was scored on a scale from one to five with "1" assigned to "Strongly disagree," "2" assigned to "Somewhat disagree," "3" assigned to "Neither agree nor disagree," "4" assigned to "Somewhat agree," and "5" assigned to "Strongly agree." The scores from each of the items were summed for each respondent. Respondents with sums of 20 or higher were considered extremely satisfied or satisfied with life.

### Prevalence

**West Virginia:** 41.7% (95% CI: 40.5-42.9)

### Sex

**Male:** 40.8% (95% CI: 38.9-42.7)

**Female:** 42.5% (95% CI: 41.0-44.0)

There was no significant difference in the prevalence of being extremely satisfied or satisfied with life between the sexes.

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<sup>2</sup>Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction with Life Scale. *Journal of Personality Assessment*, 49, 71–75.



## Age

The prevalence of being extremely satisfied or satisfied with life was significantly lower among any other adult age groups than among adults aged 65 or older (53.4%).

## Education

The prevalence of being extremely satisfied or satisfied with life was significantly lower among adults with less than high school education (33.2%) than among adults with any other educational attainment levels. The prevalence was significantly higher among adults with an associate's or more education (47.0%) than among other educational attainment levels.

## Family Income

The prevalence of being extremely satisfied or satisfied with life was significantly lower among adults with an annual family income of \$15,000 or less (23.4%) than among adults with any other annual family income levels. The prevalence was significantly higher among adults with an annual family income of \$85,001 or more (62.1%) than among adults with any other annual family income levels.

## Race

The prevalence of being extremely satisfied or satisfied with life was significantly lower among adults who were Black (30.1%) and multi-racial or "other" (28.6%) than among adults who were White (42.5%).

## Marital Status

The prevalence of being extremely satisfied or satisfied with life was significantly lower among adults who were widowed, divorced, or separated (32.3%) and never married (29.1%) than among adults who were married or living with a partner (50.8%).

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There were no DHHR, Bureau for Medical Services (BMS) regions with a significantly lower prevalence of being extremely satisfied or satisfied with life compared to the state estimate. There was one DHHR, BMS region with a significantly higher prevalence compared to the state estimate (41.7%); region three (45.3%).

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There was no significant difference in the prevalence of being extremely satisfied or satisfied with life among DHHR, Bureau for Behavioral Health (BBH) regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There was one DHHR, BBH, Ryan Brown Fund (RBF) region with a significantly lower prevalence of being extremely satisfied or satisfied with life compared to the state estimate (41.7%); region five (37.0%). There were no DHHR, BBH, RBF regions with a significantly higher prevalence compared to the state estimate.

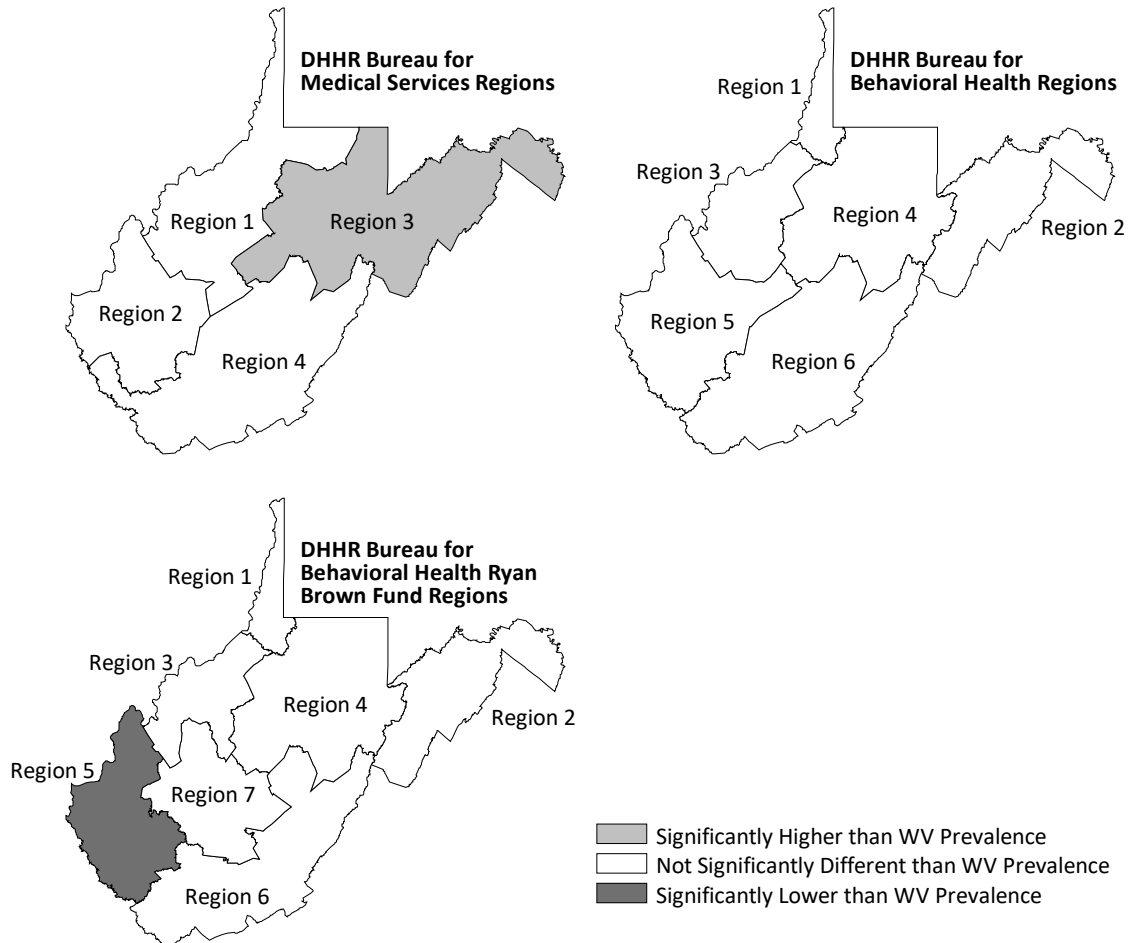
Table 2.2.2: Weighted Prevalence of Being Extremely Satisfied or Satisfied with Life by Demographic Characteristics: MATCH, 2021<sup>a</sup>

Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>269,365</b>	<b>40.8</b>	<b>38.9-42.7</b>	<b>294,360</b>	<b>42.5</b>	<b>41.0-44.0</b>	<b>563,724</b>	<b>41.7</b>	<b>40.5-42.9</b>
<b>Age</b>									
18-34	63,750	36.4	32.1-40.7	69,069	41.0	37.8-44.3	132,819	38.7	36.0-41.4
35-49	54,481	36.4	32.2-40.7	55,509	36.1	33.0-39.3	109,990	36.3	33.7-38.9
50-64	70,267	38.4	35.0-41.7	75,457	39.0	36.2-41.8	145,724	38.7	36.5-40.9
65+	79,707	53.1	50.0-56.3	92,900	53.7	50.9-56.4	172,607	53.4	51.3-55.5
<b>Education</b>									
Less than HS	28,437	32.2	27.3-37.1	23,922	34.5	30.0-38.9	52,358	33.2	29.8-36.6
HS/GED	115,229	38.6	35.8-41.5	111,204	38.5	36.3-40.6	226,433	38.6	36.8-40.3
Associate's or more	125,133	46.0	43.0-49.1	158,015	47.8	45.5-50.1	283,148	47.0	45.1-48.9
<b>Annual Family Income</b>									
\$15,000 or less	28,601	22.1	18.8-25.4	36,802	24.6	22.0-27.2	65,403	23.4	21.3-25.5
\$15,001-\$35,000	50,580	32.8	29.2-36.4	62,824	33.7	31.1-36.3	113,404	33.3	31.1-35.5
\$35,001-\$50,000	31,797	35.0	30.3-39.8	41,295	45.7	41.5-49.9	73,092	40.4	37.1-43.6
\$50,001-\$85,000	60,568	48.6	44.1-53.1	66,404	51.7	48.0-55.5	126,972	50.2	47.3-53.1
\$85,001+	87,961	61.2	56.8-65.6	73,049	63.3	59.2-67.3	161,010	62.1	59.1-65.2
<b>Race</b>									
White	254,832	41.6	39.6-43.6	283,454	43.3	41.8-44.9	538,286	42.5	41.3-43.8
Black	4,963	28.5	20.4-36.7	5,225	31.7	24.9-38.5	10,187	30.1	24.7-35.4
Multi-racial or "Other"	9,178	30.5	21.6-39.3	5,327	25.8	18.2-33.3	14,505	28.6	22.5-34.6
<b>Marital Status</b>									
Married/Living with a partner	181,160	50.3	47.7-52.9	192,545	51.2	49.1-53.3	373,705	50.8	49.1-52.5
Widowed/Divorced/Separated	37,208	30.0	26.3-33.7	63,732	33.7	31.2-36.3	100,940	32.3	30.1-34.4
Never married	50,202	28.7	25.0-32.5	36,970	29.7	26.2-33.1	87,172	29.1	26.5-31.7

Note. CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

Figure 2.2.2: Weighted Prevalence of Being Extremely Satisfied or Satisfied with Life by Region: MATCH, 2021<sup>a,b</sup>



Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

## 2.3 Psychological Distress

### Item

Responding to the six-item Kessler Psychological Distress Scale,<sup>3</sup> which is used in identifying respondents as having serious psychological distress. In the survey, respondents were presented with a series of six items. The items were presented with the opening prompt of “In the past 2 weeks, how often have you felt...”:

- “Nervous?”
- “Hopeless?”
- “Restless or fidgety?”
- “So depressed that nothing could cheer you up?”
- “Worthless?”
- “Isolated from others?”

The respondents could answer each of those six items with one of the following responses:

- “All of the time”
- “Most of the time”
- “Some of the time”
- “A little of the time”
- “None of the time”

Each item was scored on a scale from zero to four with “0” assigned to “None of the time,” “1” assigned to “A little of the time,” “2” assigned to “Some of the time,” “3” assigned to “Most of the time,” and “4” assigned to “All of the time.” The scores from each of the items were summed for each respondent. Respondents with sums of 13 or higher were considered in serious psychological distress.

### Prevalence

**West Virginia:** 14.1% (95% CI: 13.2-14.9)

### Sex

**Male:** 13.7% (95% CI: 12.3-15.0)

**Female:** 14.4% (95% CI: 13.4-15.5)

There was no significant difference in the prevalence of serious psychological distress in the past two weeks between the sexes.

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<sup>3</sup>Kessler RC, Andrews G, Colpe LJ, Hiripi E, Mroczek DK, Normand SL, Walters EE, Zaslavsky AM. Short screening scales to monitor population prevalences and trends in non-specific psychological distress. *Psychol Med*. 2002 Aug;32(6):959–76. doi: 10.1017/s0033291702006074. PMID: 12214795.

## Age

The prevalence of serious psychological distress in the past two weeks was significantly higher among adults aged 18–34 (21.8%) and 35–49 (18.2%) than among any other adult age groups. The prevalence was significantly lower among adults aged 65 or older (3.7%) than among any other adult age groups.

## Education

The prevalence of serious psychological distress in the past two weeks was significantly higher among adults with less than high school education (23.9%) than among adults with any other educational attainment levels. The prevalence was significantly lower among adults with an associate’s or more education (8.9%) than among adults with any other educational attainment levels.

## Family Income

The prevalence of serious psychological distress in the past two weeks was significantly higher among adults with an annual family income of \$15,000 or less (28.6%) than among adults with any other annual family income levels.

## Race

The prevalence of serious psychological distress in the past two weeks was significantly higher among adults who were multi-racial or “other” (24.0%) than among adults who were White (13.6%).

## Marital Status

The prevalence of serious psychological distress in the past two weeks was significantly higher among adults who were never married (21.0%) than among adults with any other marital statuses. The prevalence was significantly lower among adults who were married or living with a partner (10.5%) than among adults with any other marital status.

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There was no significant difference in the prevalence of serious psychological distress in the past two weeks among DHHR, Bureau for Medical Services (BMS) regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There were no DHHR, Bureau for Behavioral Health (BBH) regions with a significantly higher prevalence of serious psychological distress in the past two weeks compared to the state estimate. There was one DHHR, BBH region with a significantly lower prevalence compared to the state estimate (14.1%); region two (10.7%).

*DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There was one DHHR, BBH, Ryan Brown Fund (RBF) region with a significantly higher prevalence of serious psychological distress in the past two weeks compared to the state estimate (14.1%); region five (17.9%). There was one DHHR, BBH, RBF region with a significantly lower prevalence compared to the state estimate; region two (10.7%).

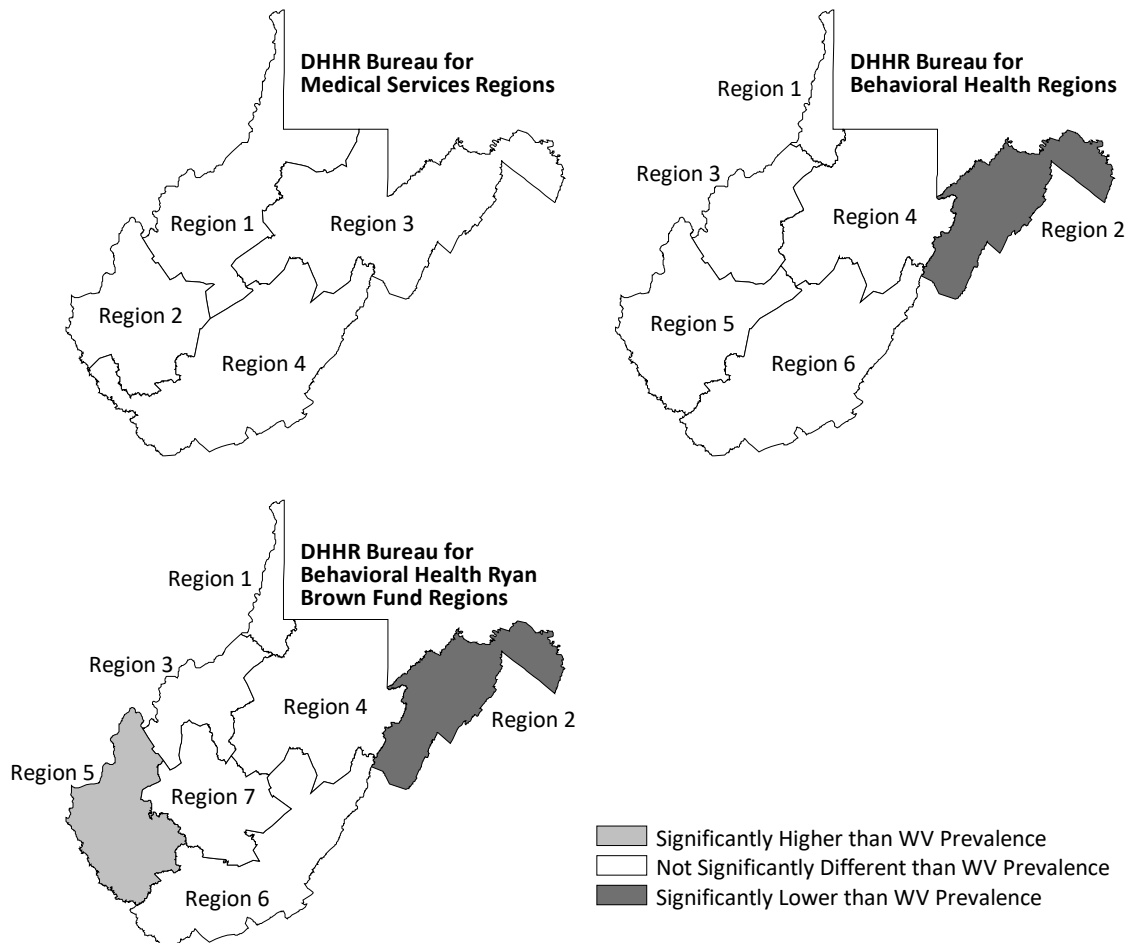
*Table 2.3.3: Weighted Prevalence of Serious Psychological Distress in the Past Two Weeks by Demographic Characteristics: MATCH, 2021<sup>a</sup>*

Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>90,895</b>	<b>13.7</b>	<b>12.3-15.0</b>	<b>100,825</b>	<b>14.4</b>	<b>13.4-15.5</b>	<b>191,720</b>	<b>14.1</b>	<b>13.2-14.9</b>
<b>Age</b>									
18-34	35,899	20.4	16.9-23.9	39,549	23.2	20.6-25.8	75,449	21.8	19.6-24.0
35-49	26,932	17.9	14.9-20.9	28,459	18.4	16.0-20.8	55,391	18.2	16.3-20.1
50-64	23,034	12.5	10.2-14.8	24,757	12.8	11.0-14.7	47,791	12.7	11.2-14.2
65+	4,649	3.1	2.1-4.1	7,584	4.3	3.3-5.3	12,233	3.7	3.0-4.5
<b>Education</b>									
Less than HS	21,007	23.5	18.6-28.3	17,496	24.4	20.4-28.4	38,503	23.9	20.7-27.1
HS/GED	47,056	15.7	13.6-17.8	50,806	17.5	15.9-19.2	97,862	16.6	15.3-17.9
Associate's or more	22,140	8.1	6.4-9.8	32,024	9.6	8.3-10.9	54,164	8.9	7.9-10.0
<b>Annual Family Income</b>									
\$15,000 or less	36,853	28.3	24.7-32.0	43,500	28.9	26.2-31.6	80,353	28.6	26.4-30.9
\$15,001-\$35,000	29,128	18.7	15.4-22.1	32,459	17.4	15.4-19.5	61,586	18.0	16.1-19.9
\$35,001-\$50,000	7,854	8.7	5.8-11.5	9,023	9.9	7.3-12.5	16,877	9.3	7.4-11.2
\$50,001-\$85,000	7,826	6.3	4.3-8.3	9,402	7.3	5.3-9.4	17,229	6.8	5.4-8.2
\$85,001+	7,660	5.3	2.9-7.8	4,597	4.0	2.6-5.4	12,257	4.7	3.2-6.2
<b>Race</b>									
White	81,021	13.1	11.8-14.5	92,262	14.0	13.0-15.0	173,283	13.6	12.7-14.4
Black	3,456	19.6	12.1-27.1	2,481	14.8	10.1-19.6	5,937	17.3	12.8-21.8
Multi-racial or "Other"	6,304	20.8	12.5-29.1	5,844	28.8	21.3-36.2	12,149	24.0	18.3-29.8
<b>Marital Status</b>									
Married/Living with a partner	33,519	9.3	7.7-10.8	44,118	11.7	10.4-12.9	77,637	10.5	9.5-11.5
Widowed/Divorced/Separated	20,235	16.0	13.0-19.0	29,548	15.4	13.5-17.4	49,783	15.7	14.0-17.3
Never married	36,688	20.9	17.6-24.3	26,529	21.2	18.3-24.1	63,217	21.0	18.7-23.3

*Note.* CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

Figure 2.3.3: Weighted Prevalence of Serious Psychological Distress in the Past Two Weeks by Region: MATCH, 2021<sup>a,b</sup>



Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

## 2.4 Functional Impairment

### Item

Responding to a four-item series, which is used to assess a respondent's judgment of how their emotional state is perceived as causing functional impairment. Functional impairment is defined as a condition in which the respondent perceived that their emotional state interfered with other aspects of their life. In the survey, respondents were presented with a series of four items. The items were presented with the opening prompt of "In the past 12 months, thinking about when you were at your worst emotionally, how much did your emotions interfere with...".

- "Your household chores?"
- "Your social life?"
- "Your relationships with friends and family?"
- "Your performance at work or school?"

The respondents could respond to each of those four items with one of the following choices:

- "A lot"
- "Some"
- "Not at all"
- "Does not apply"

Results for the series are presented as the prevalence of the response "a lot" (see above) to each of the four items.

### Prevalence

**Household Chores:** 19.7% (95% CI: 18.7-20.7)

**Social Life:** 22.7% (95% CI: 21.6-23.8)

**Friends and Family Relationships:** 19.1% (95% CI: 18.0-20.1)

**School or Work Performance:** 15.7% (95% CI: 14.5-16.8)

### Sex

**Household Chores:** The prevalence of functional impairment with household chores in the past 12 months was significantly higher among adults who were female (23.4%) than among adults who were male (15.6%).

**Social Life:** The prevalence of functional impairment with social life in the past 12 months was significantly higher among adults who were female (25.2%) than among adults who were male (20.1%).

**Friends and Family Relationships:** The prevalence of functional impairment with relationships with friends and family in the past 12 months was significantly higher among adults who were female (20.6%) than among adults who were male (17.4%).



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**School or Work Performance:** There was no significant difference in the prevalence of functional impairment with school or work performance in the past 12 months between the sexes.

## Age

**Household Chores:** The prevalence of functional impairment with household chores in the past 12 months was significantly higher among adults aged 18–34 (29.0%) and 35–49 (25.1%) than among any other adult age groups. The prevalence was significantly lower among adults aged 65 or older (7.5%) than among any other adult age groups.

**Social Life:** The prevalence of functional impairment with social life in the past 12 months was significantly higher among adults aged 18–34 (31.5%) and 35–49 (30.1%) than among any other adult age groups. The prevalence was significantly lower among adults aged 65 or older (8.1%) than among any other adult age groups.

**Friends and Family Relationships:** The prevalence of functional impairment with relationships with friends and family in the past 12 months was significantly higher among adults aged 18–34 (27.9%) and 35–49 (25.5%) than among any other adult age groups. The prevalence was significantly lower among adults aged 65 or older (5.4%) than among any other adult age groups.

**School or Work Performance:** The prevalence of functional impairment with school or work performance in the past 12 months was significantly higher among adults aged 18–34 (23.6%) and 35–49 (19.2%) than among any other adult age groups. The prevalence was significantly lower among adults aged 65 or older (3.3%) than among any other adult age groups.

## Education

**Household Chores:** The prevalence of functional impairment with household chores in the past 12 months was significantly higher among adults with less than high school education (27.0%) than among adults with any other educational attainment levels.

**Social Life:** The prevalence of functional impairment with social life in the past 12 months was significantly higher among adults with less than high school education (29.8%) and high school or Graduate Equivalency Diploma (GED) education (25.0%) than among adults with an associate's or more education (18.6%).

**Friends and Family Relationships:** The prevalence of functional impairment with relationships with friends and family in the past 12 months was significantly higher among adults with less than high school education (26.3%) than among adults with any other educational attainment levels. The prevalence was significantly lower among adults with an associate's or more education (15.2%) than among adults with any other educational attainment levels.

**School or Work Performance:** The prevalence of functional impairment with school or work performance in the past 12 months was significantly higher among adults with less than high school education (24.0%) than among adults with any other educational attainment levels. The prevalence was significantly lower among adults with an associate's or more education (13.0%) than among adults with any other educational attainment levels.

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## Family Income

**Household Chores:** The prevalence of functional impairment with household chores in the past 12 months was significantly higher among adults with an annual family income of \$15,000 or less (31.4%) than among adults with any other annual family income levels.

**Social Life:** The prevalence of functional impairment with social life in the past 12 months was significantly higher among adults with an annual family income of \$15,000 or less (37.1%) than among adults with any other annual family income levels.

**Friends and Family Relationships:** The prevalence of functional impairment with relationships with friends and family in the past 12 months was significantly higher among adults with an annual family income of \$15,000 or less (31.6%) than among adults with any other annual family income levels.

**School or Work Performance:** The prevalence of functional impairment with school or work performance in the past 12 months was significantly higher among adults with an annual family income of \$15,000 or less (27.2%) than among adults with any other annual family income levels.

## Race

**Household Chores:** The prevalence of functional impairment with household chores in the past 12 months was significantly higher among adults who were multi-racial or “other” (27.4%) than among adults who were White (19.4%).

**Social Life:** There was no significant difference in the prevalence of functional impairment with social life in the past 12 months among racial groups.

**Friends and Family Relationships:** The prevalence of functional impairment with relationships with friends and family in the past 12 months was significantly higher among adults who were multi-racial or “other” (27.6%) than among adults who were White (18.6%).

**School or Work Performance:** There was no significant difference in the prevalence of functional impairment with school or work performance in the past 12 months among racial groups.

## Marital Status

**Household Chores:** The prevalence of functional impairment with household chores in the past 12 months was significantly higher among adults who were never married (26.4%) than among adults with any other marital statuses. The prevalence was significantly lower among adults who were married or living with a partner (16.2%) than among adults with any other marital statuses.

**Social Life:** The prevalence of functional impairment with social life in the past 12 months was significantly higher among adults who were never married (30.2%) than among adults with any other marital statuses. The prevalence was significantly lower among adults who were married or living with a partner (19.0%) than among adults with any other marital statuses.

**Friends and Family Relationships:** The prevalence of functional impairment with relationships with friends and family in the past 12 months was significantly higher among adults who were never married (25.9%) than among adults with any other marital statuses. statuses.

**School or Work Performance:** The prevalence of functional impairment with school or work performance in the past 12 months was significantly higher among adults who were never married (23.4%) than among adults with any other marital statuses. The prevalence was significantly lower among adults who were married or living with a partner (12.0%) than among adults with any other marital statuses.

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

**Household Chores:** There was no significant difference in the prevalence of functional impairment with household chores in the past 12 months among DHHR, Bureau for Medical Services (BMS) regions compared to the state estimate.

**Social Life:** There was one DHHR, BMS region with a significantly higher prevalence of functional impairment with social life in the past 12 months compared to the state estimate (22.7%); region four (26.4%). There were no DHHR, BMS regions with a significantly lower prevalence compared to the state estimate.

**Friends and Family Relationships:** There was no significant difference in the prevalence of functional impairment with relationships with friends and family in the past 12 months among DHHR, BMS regions compared to the state estimate.

**School or Work Performance:** There was no significant difference in the prevalence of functional impairment with school or work performance in the past 12 months among DHHR, BMS regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

**Household Chores:** There was no significant difference in the prevalence of functional impairment with household chores in the past 12 months among DHHR, Bureau for Behavioral Health (BBH) regions compared to the state estimate.

**Social Life:** There was no significant difference in the prevalence of functional impairment with social life in the past 12 months among DHHR, BBH regions compared to the state estimate.

**Friends and Family Relationships:** There was no significant difference in the prevalence of functional impairment with relationships with friends and family in the past 12 months among DHHR, BBH regions compared to the state estimate.

**School or Work Performance:** There were no DHHR, BBH regions with a significantly higher prevalence of functional impairment with school or work performance in the past 12 months compared to the state estimate. There was one DHHR, BBH region with a significantly lower prevalence compared to the state estimate (15.7%); region one (10.3%).

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

**Household Chores:** There was no significant difference in the prevalence of functional impairment with household chores in the past 12 months among DHHR, BBH, Ryan Brown Fund (RBF) regions compared to the state estimate.

**Social Life:** There was no significant difference in the prevalence of functional impairment with social life in the past 12 months among DHHR, BBH, RBF regions compared to the state estimate.

**Friends and Family Relationships:** There was no significant difference in the prevalence of functional impairment with relationships with friends and family in the past 12 months among DHHR, BBH, RBF regions compared to the state estimate.

**School or Work Performance:** There was one DHHR, BBH, RBF region with a significantly higher prevalence of functional impairment with school or work performance in the past 12 months compared to the state estimate (15.7%); region five (20.2%). There was one DHHR, BBH, RBF region with a significantly lower prevalence compared to the state estimate; region one (10.3%).

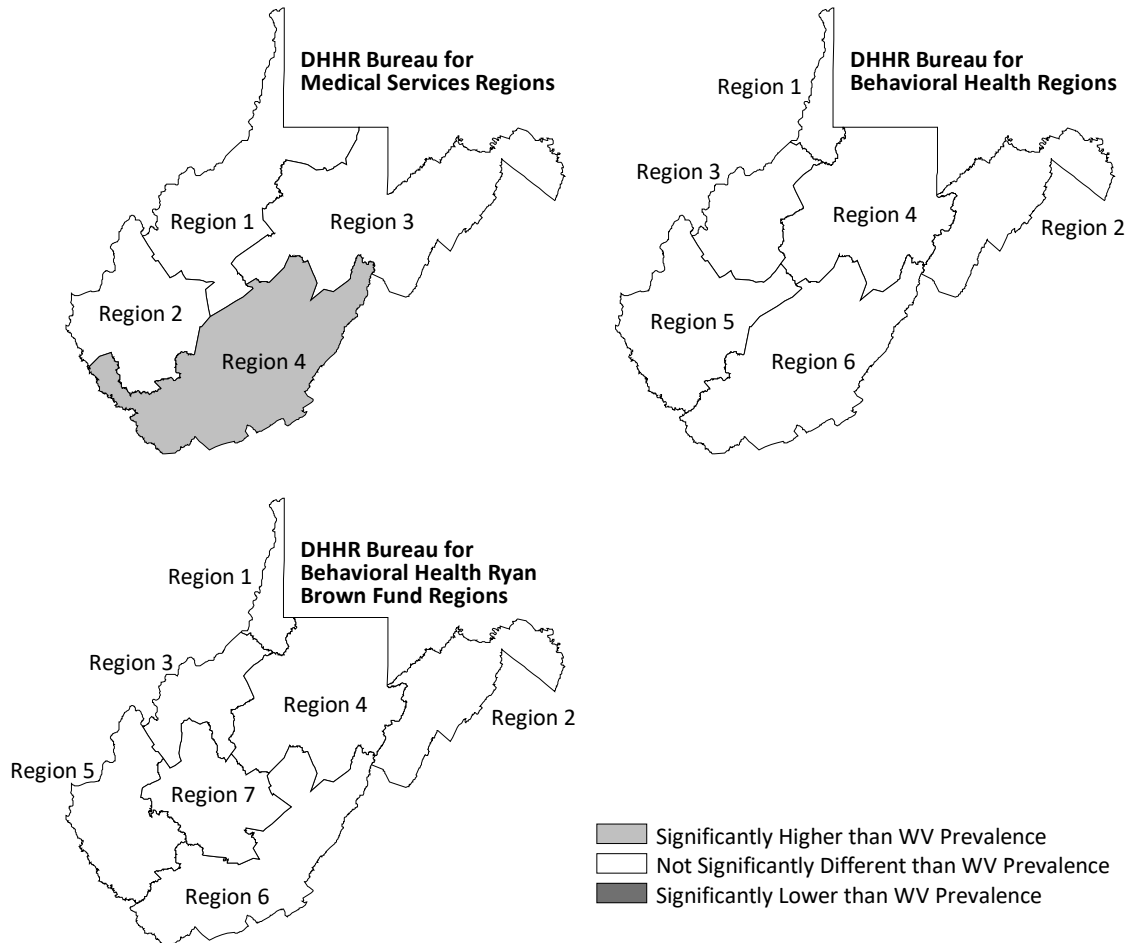
*Table 2.4.4: Weighted Prevalence of Functional Impairment in the Past 12 Months by Demographic Characteristics: MATCH, 2021<sup>a</sup>*

Characteristic	Household Chores		Social Life		Friends and Family Relationships		School/Work Performance	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
<b>TOTAL</b>	<b>19.7</b>	<b>18.7-20.7</b>	<b>22.7</b>	<b>21.6-23.8</b>	<b>19.1</b>	<b>18.0-20.1</b>	<b>15.7</b>	<b>14.5-16.8</b>
<b>Sex</b>								
Male	15.6	14.1-17.2	20.1	18.4-21.8	17.4	15.7-19.0	14.4	12.5-16.2
Female	23.4	22.0-24.7	25.2	23.8-26.6	20.6	19.3-21.9	17.0	15.5-18.4
<b>Age</b>								
18-34	29.0	26.5-31.6	31.5	28.9-34.2	27.9	25.4-30.5	23.6	21.0-26.2
35-49	25.1	22.8-27.4	30.1	27.6-32.5	25.5	23.2-27.9	19.2	16.8-21.6
50-64	16.3	14.6-18.0	19.8	17.9-21.6	16.2	14.5-17.9	9.0	7.5-10.6
65+	7.5	6.3-8.6	8.1	6.8-9.3	5.4	4.4-6.5	3.3	2.1-4.5
<b>Education</b>								
Less than HS	27.0	23.5-30.6	29.8	26.1-33.5	26.3	22.7-29.8	24.0	19.3-28.8
HS/GED	20.2	18.7-21.8	25.0	23.3-26.7	21.0	19.4-22.6	16.6	14.8-18.4
Associate's or more	17.2	15.7-18.7	18.6	17.0-20.1	15.2	13.8-16.6	13.0	11.5-14.6
<b>Annual Family Income</b>								
\$15,000 or less	31.4	29.0-33.8	37.1	34.6-39.7	31.6	29.1-34.0	27.2	24.1-30.4
\$15,001-\$35,000	22.9	20.7-25.0	26.7	24.3-29.0	21.2	19.1-23.3	20.1	17.5-22.7
\$35,001-\$50,000	16.8	14.1-19.5	18.3	15.6-21.1	15.8	13.2-18.4	12.6	9.8-15.4
\$50,001-\$85,000	14.7	12.4-17.0	16.6	14.2-18.9	14.2	11.9-16.4	10.9	8.7-13.2
\$85,001+	10.8	8.6-13.1	12.0	9.7-14.3	11.1	8.8-13.4	8.7	6.4-11.0
<b>Race</b>								
White	19.4	18.3-20.5	22.3	21.2-23.5	18.6	17.6-19.7	15.2	14.0-16.4
Black	20.1	15.0-25.3	27.4	21.7-33.1	21.6	16.5-26.7	20.3	12.7-27.9
Multi-racial or "Other"	27.4	21.5-33.4	29.8	23.4-36.1	27.6	21.1-34.2	22.7	16.0-29.5
<b>Marital Status</b>								
Married/Living with a partner	16.2	14.9-17.5	19.0	17.6-20.4	16.2	14.9-17.5	12.0	10.6-13.3
Widowed/Divorced/Separated	21.5	19.6-23.4	23.9	21.9-26.0	18.8	16.9-20.7	16.2	13.8-18.6
Never married	26.4	23.7-29.1	30.2	27.4-33.0	25.9	23.2-28.7	23.4	20.4-26.4

*Note.* CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

Figure 2.4.4: Weighted Prevalence of Functional Impairment with Social Life in the Past 12 Months by Region: MATCH, 2021<sup>a,b</sup>

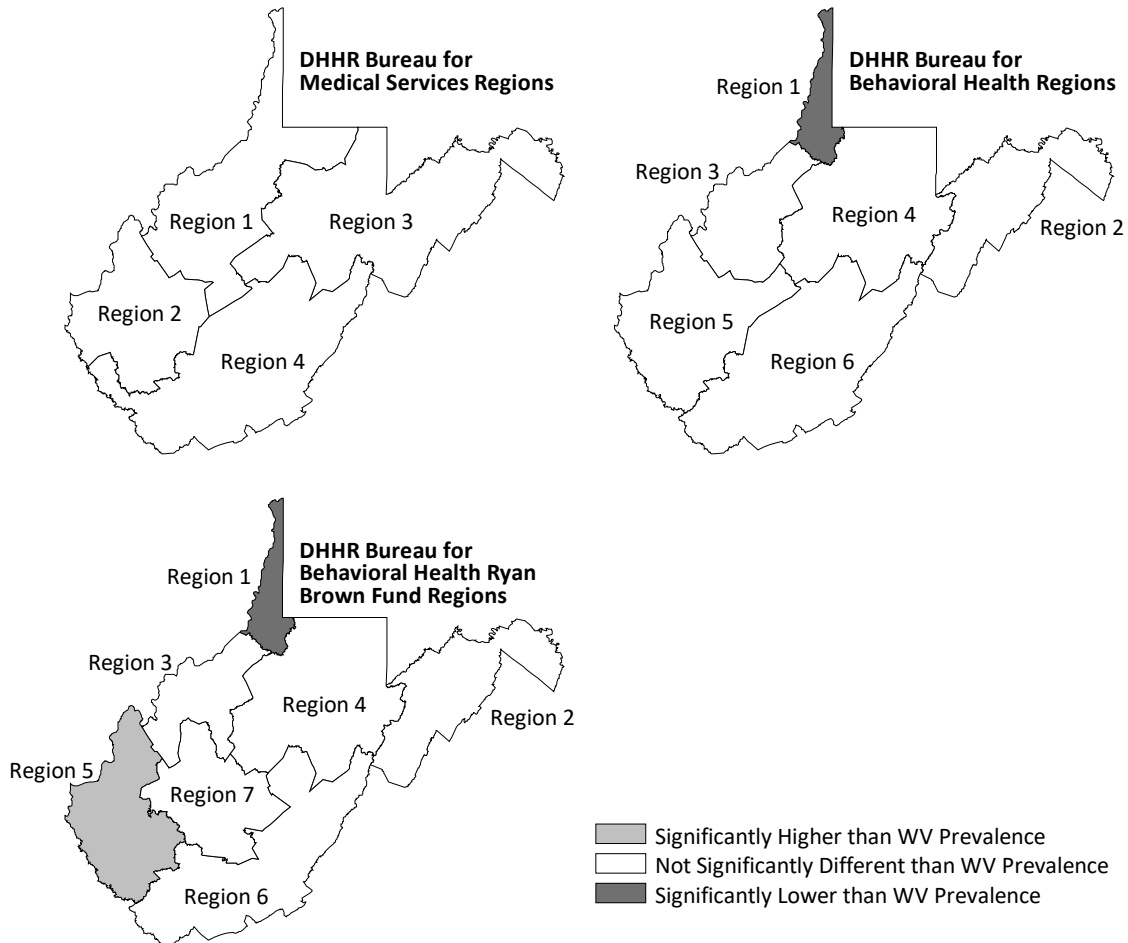


Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

Figure 2.4.5: Weighted Prevalence of Functional Impairment with School or Work Performance in the Past 12 Months by Region: MATCH, 2021<sup>a,b</sup>



Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.  
<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.  
<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

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## 2.5 Depression, Anxiety, or Post-Traumatic Stress Disorder (PTSD)

### Item

Responding “Yes” to the question, “In the past 12 months, has a doctor or other healthcare provider ever told you that you have depression, anxiety, or post-traumatic stress disorder (PTSD)?”

### Prevalence

**West Virginia:** 24.3% (95% CI: 23.3-25.3)

### Sex

**Male:** 18.2% (95% CI: 16.7-19.7)

**Female:** 30.0% (95% CI: 28.7-31.4)

The prevalence of depression, anxiety, or PTSD in the past 12 months was significantly higher among adults who were female (30.0%) than among adults who were male (18.2%).

### Age

The prevalence of depression, anxiety, or PTSD in the past 12 months was significantly higher among adults aged 18-34 (29.8%) and 35-49 (30.6%) than among any other adult age groups. The prevalence was significantly lower among adults aged 65 or older (13.0%) than among any other adult age groups.

### Education

The prevalence of depression, anxiety, or PTSD in the past 12 months was significantly higher among adults with less than high school education (28.5%) and high school or Graduate Equivalency Diploma (GED) education (25.4%) than among adults with an associate’s or more education (22.0%).

### Family Income

The prevalence of depression, anxiety, or PTSD in the past 12 months was significantly higher among adults with an annual family income of \$15,000 or less (36.1%) and \$15,001-\$35,000 (27.3%) than among adults with any other annual family income levels.

### Race

There was no significant difference in the prevalence of depression, anxiety, or PTSD in the past 12 months among racial groups.

### Marital Status

The prevalence of depression, anxiety, or PTSD in the past 12 months was significantly higher among adults who were widowed, divorced, or separated (29.6%) and never married (27.8%) than among adults who were married or living with a partner (20.4%).



## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There was no significant difference in the prevalence of depression, anxiety, or PTSD in the past 12 months among DHHR, Bureau for Medical Services (BMS) regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There was no significant difference in the prevalence of depression, anxiety, or PTSD in the past 12 months among DHHR, Bureau for Behavioral Health (BBH) regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There was no significant difference in the prevalence of depression, anxiety, or PTSD in the past 12 months among DHHR, BBH, Ryan Brown Fund (RBF) regions compared to the state estimate.

*Table 2.5.5: Weighted Prevalence of Depression, Anxiety, or Post-Traumatic Stress Disorder (PTSD) in the Past 12 Months by Demographic Characteristics: MATCH, 2021<sup>a</sup>*

Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>123,346</b>	<b>18.2</b>	<b>16.7–19.7</b>	<b>214,513</b>	<b>30.0</b>	<b>28.7–31.4</b>	<b>337,859</b>	<b>24.3</b>	<b>23.3–25.3</b>
<b>Age</b>									
18–34	38,326	21.7	18.1–25.3	65,275	38.2	35.0–41.4	103,601	29.8	27.3–32.3
35–49	34,246	22.7	19.4–25.9	59,543	38.2	35.1–41.4	93,789	30.6	28.2–32.9
50–64	32,747	17.4	14.9–19.9	60,812	31.0	28.4–33.6	93,560	24.3	22.5–26.2
65+	17,287	11.0	9.1–13.0	27,588	14.7	12.9–16.5	44,875	13.0	11.7–14.4
<b>Education</b>									
Less than HS	20,992	22.4	17.8–27.1	27,790	35.9	31.7–40.1	48,781	28.5	25.4–31.7
HS/GED	60,364	19.8	17.6–22.0	92,625	31.1	29.1–33.2	152,989	25.4	23.9–26.9
Associate’s or more	40,941	14.9	12.8–17.0	93,772	27.8	25.8–29.9	134,713	22.0	20.5–23.5
<b>Annual Family Income</b>									
\$15,000 or less	39,488	29.4	25.8–33.0	64,729	41.8	38.9–44.8	104,217	36.1	33.8–38.4
\$15,001–\$35,000	33,151	21.0	17.7–24.2	62,411	32.5	29.9–35.1	95,562	27.3	25.2–29.4
\$35,001–\$50,000	13,736	15.0	11.4–18.7	21,718	23.5	20.0–26.9	35,454	19.3	16.8–21.8
\$50,001–\$85,000	19,012	15.2	12.0–18.3	33,677	25.9	22.6–29.3	52,689	20.6	18.3–23.0
\$85,001+	14,899	10.3	7.5–13.2	26,469	22.9	19.3–26.5	41,368	15.9	13.6–18.2
<b>Race</b>									
White	112,791	18.0	16.4–19.5	201,729	29.9	28.5–31.3	314,520	24.1	23.1–25.2
Black	3,107	17.5	11.1–23.9	4,550	25.8	19.8–31.8	7,656	21.6	17.2–26.1
Multi-racial or "Other"	6,987	23.0	15.3–30.8	7,928	37.5	29.5–45.4	14,915	28.9	23.3–34.6
<b>Marital Status</b>									
Married/Living with a partner	49,872	13.6	11.9–15.2	103,199	26.9	25.1–28.7	153,071	20.4	19.1–21.6
Widowed/Divorced/Separated	32,256	24.9	21.3–28.5	65,569	32.7	30.3–35.1	97,824	29.6	27.6–31.7
Never married	40,320	22.7	19.3–26.1	44,557	35.0	31.4–38.6	84,877	27.8	25.3–30.3

*Note.* CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

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## 2.6 Attention-Deficit Hyperactivity Disorder (ADHD)

### Item

Responding “Yes” to “Attention-deficit/hyperactivity disorder (ADHD)” when asked the question, “Have you ever been told by a doctor, nurse, or other healthcare provider that you have any of the following conditions?” Respondents were presented with a list of 13 conditions, which included Attention Deficit Hyperactivity Disorder (ADHD), that they could select as “Yes” or “No.”

### Prevalence

**West Virginia:** 9.9% (95% CI: 9.1–10.7)

### Sex

**Male:** 11.2% (95% CI: 9.9–12.6)

**Female:** 8.6% (95% CI: 7.7–9.6)

The prevalence of ADHD was significantly higher among adults who were male (11.2%) than among adults who were female (8.6%).

### Age

The prevalence of ADHD was significantly higher among adults aged 18-34 (19.4%) than among any other adult age groups. The prevalence was significantly lower among adults aged 65 or older (2.1%) than among any other adult age groups.

### Education

The prevalence of ADHD was significantly higher among adults with less than high school education (15.1%) or high school or Graduate Equivalency Diploma (GED) education (11.5%) than among adults with an associate’s or more education (7.2%).

### Family Income

The prevalence of ADHD was significantly higher among adults with an annual family income of \$15,000 or less (18.4%) than among annual family income levels.

### Race

The prevalence of ADHD was significantly higher among adults who were multi-racial or “other” (16.7%) than among adults who were White (9.7%).

### Marital Status

The prevalence of ADHD was significantly higher among adults who were never married (18.7%) than among adults with any other marital statuses.

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There was no significant difference in the prevalence of ADHD among DHHR, Bureau for Medical Services (BMS) regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There was no significant difference in the prevalence of ADHD among DHHR, Bureau for Behavioral Health (BBH) regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There was no significant difference in the prevalence of ADHD among DHHR, BBH, Ryan Brown Fund (RBF) regions compared to the state estimate.

Table 2.6.6: Weighted Prevalence of Attention-Deficit/Hyperactivity Disorder (ADHD) by Demographic Characteristics: MATCH, 2021<sup>a</sup>

Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>70,587</b>	<b>11.2</b>	<b>9.9-12.6</b>	<b>57,035</b>	<b>8.6</b>	<b>7.7-9.6</b>	<b>127,622</b>	<b>9.9</b>	<b>9.1-10.7</b>
<b>Age</b>									
18-34	34,896	20.1	16.6-23.7	31,467	18.7	16.0-21.3	66,363	19.4	17.2-21.6
35-49	20,547	14.2	11.2-17.2	15,173	10.1	8.1-12.1	35,720	12.1	10.3-13.9
50-64	11,211	6.5	4.7-8.2	7,974	4.4	3.2-5.6	19,185	5.4	4.4-6.5
65+	3,707	2.8	1.4-4.2	2,303	1.5	0.8-2.1	6,011	2.1	1.3-2.8
<b>Education</b>									
Less than HS	14,251	17.2	12.3-22.1	8,303	12.5	9.3-15.7	22,554	15.1	12.0-18.2
HS/GED	36,260	12.9	10.8-15.0	27,233	10.0	8.5-11.5	63,493	11.5	10.2-12.7
Associate's or more	20,006	7.6	5.9-9.4	21,479	6.7	5.5-8.0	41,485	7.2	6.1-8.2
<b>Annual Family Income</b>									
\$15,000 or less	25,621	21.2	17.7-24.7	22,649	16.0	13.5-18.6	48,270	18.4	16.3-20.5
\$15,001-\$35,000	19,894	13.8	10.8-16.9	14,786	8.4	6.7-10.1	34,680	10.8	9.2-12.5
\$35,001-\$50,000	6,099	7.2	4.1-10.4	6,272	7.4	5.1-9.7	12,370	7.3	5.4-9.3
\$50,001-\$85,000	8,641	7.2	4.6-9.8	6,596	5.4	3.5-7.3	15,238	6.3	4.7-7.9
\$85,001+	8,569	6.2	3.3-9.0	5,127	4.6	2.7-6.5	13,695	5.5	3.6-7.3
<b>Race</b>									
White	62,944	10.8	9.4-12.2	53,614	8.6	7.7-9.5	116,558	9.7	8.8-10.5
Black	2,110	12.7	6.3-19.1	U	U	U	2,634	8.2	4.6-11.7
Multi-racial or "Other"	5,464	18.3	11.1-25.4	2,830	14.3	7.8-20.8	8,293	16.7	11.7-21.7
<b>Marital Status</b>									
Married/Living with a partner	25,124	7.4	5.9-8.8	24,667	6.8	5.7-8.0	49,791	7.1	6.2-8.0
Widowed/Divorced/Separated	10,240	9.1	6.7-11.5	12,232	7.0	5.5-8.5	22,471	7.8	6.5-9.1
Never married	34,786	20.4	16.9-24.0	20,035	16.3	13.3-19.3	54,821	18.7	16.3-21.1

Note. CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma; U = unstable prevalence estimate.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

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# Chapter 3: Physical Health Conditions

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## 3.1 Chronic Obstructive Pulmonary Disease (COPD)

### Item

Responding “Yes” to “Chronic Obstructive Pulmonary Disease or COPD” when asked the question, “Have you ever been told by a doctor, nurse, or other healthcare provider that you have any of the following conditions?” Respondents were presented with a list of 13 conditions, which included Chronic Obstructive Pulmonary Disease (COPD), that they could select as “Yes” or “No.”

### Prevalence

**West Virginia:** 10.7% (95% CI: 10.1–11.4)

### Sex

**Male:** 11.1% (95% CI: 10.0–12.2)

**Female:** 10.3% (95% CI: 9.4–11.2)

There was no significant difference in the prevalence of COPD between the sexes.

### Age

The prevalence of COPD was significantly higher among adults aged 50–64 (16.5%) and 65 or older (19.5%) than among any other adult age groups. The prevalence was significantly lower among adults aged 18–34 (1.1%) than among any other adult age groups.

### Education

The prevalence of COPD was significantly higher among adults with less than high school education (25.9%) than among adults with any other educational attainment levels. The prevalence was significantly lower among adults with an associate’s or more education (6.1%) than among adults with any other educational attainment levels.

### Family Income

The prevalence of COPD was significantly higher among adults with an annual family income of \$15,000 or less (19.8%) than among adults with any other annual family income levels. The prevalence was significantly lower among adults with an annual family income of \$85,001 or more (2.4%) than among adults with any other annual family income levels.

### Race

There was no significant difference in the prevalence of COPD among racial groups.

## Marital Status

The prevalence of COPD was significantly higher among adults who were widowed, divorced, or separated (21.8%) than among adults with any other marital statuses. The prevalence was significantly lower among adults who were never married (4.5%) than among adults with any other marital statuses.

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There was one DHHR, Bureau for Medical Services (BMS) region with a significantly higher prevalence of COPD compared to the state estimate (10.7%); region four (16.3%). There was one DHHR, BMS region with a significantly lower prevalence compared to the state estimate; region one (8.4%).

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There was one DHHR, Bureau for Behavioral Health (BBH) region with a significantly higher prevalence of COPD compared to the state estimate (10.7%); region six (16.2%). There were two DHHR, BBH regions with a significantly lower prevalence compared to the state estimate; regions one (7.3%) and four (8.2%).

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There was one DHHR, BBH, Ryan Brown Fund (RBF) region with a significantly higher prevalence of COPD compared to the state estimate (10.7%); region six (16.9%). There were two DHHR, BBH, RBF regions with a significantly lower prevalence compared to the state estimate; regions one (7.3%) and four (8.2%).

*Table 3.1.1: Weighted Prevalence of Chronic Obstructive Pulmonary Disease (COPD) by Demographic Characteristics: MATCH, 2021<sup>a</sup>*

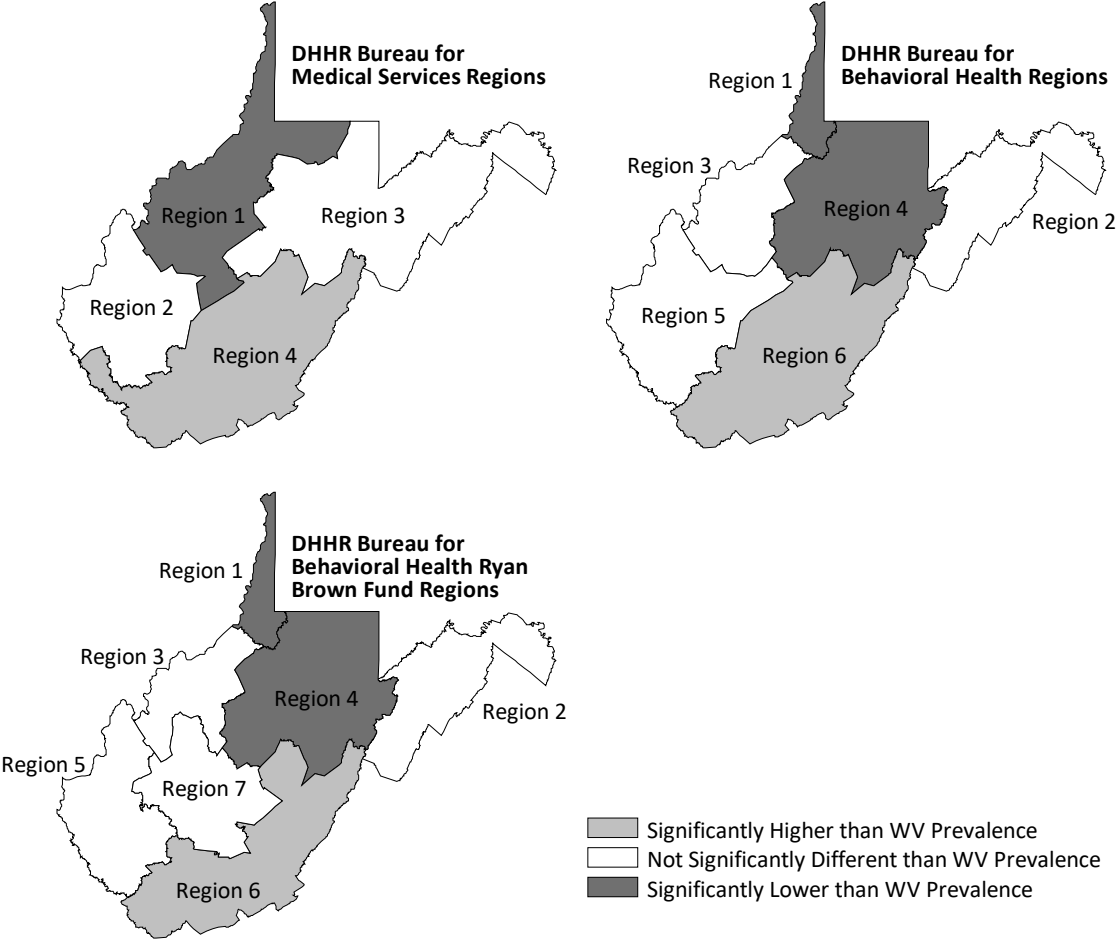
Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>70,441</b>	<b>11.1</b>	<b>10.0-12.2</b>	<b>68,892</b>	<b>10.3</b>	<b>9.4-11.2</b>	<b>139,333</b>	<b>10.7</b>	<b>10.0-11.4</b>
<b>Age</b>									
18-34	U	U	U	2,117	1.3	0.5-2.0	3,743	1.1	0.6-1.6
35-49	7,989	5.5	3.8-7.2	8,185	5.5	4.2-6.7	16,174	5.5	4.5-6.5
50-64	30,073	17.1	14.6-19.6	29,319	15.9	13.9-17.8	59,392	16.5	14.9-18.0
65+	30,205	21.9	19.1-24.7	28,591	17.6	15.3-19.8	58,796	19.5	17.8-21.3
<b>Education</b>									
Less than HS	19,682	23.5	19.2-27.7	20,076	28.9	24.7-33.1	39,758	25.9	22.9-28.9
HS/GED	33,628	11.8	10.3-13.3	29,096	10.5	9.3-11.7	62,725	11.2	10.2-12.1
Associate's or more	16,553	6.3	4.9-7.7	19,270	6.0	5.0-7.1	35,823	6.1	5.3-7.0
<b>Annual Family Income</b>									
\$15,000 or less	24,145	19.6	16.7-22.5	28,914	20.1	17.7-22.4	53,059	19.8	18.0-21.7
\$15,001-\$35,000	19,512	13.4	11.0-15.8	21,433	12.0	10.2-13.8	40,945	12.6	11.1-14.1
\$35,001-\$50,000	9,659	11.3	8.3-14.4	6,637	7.8	5.6-10.0	16,295	9.6	7.7-11.4
\$50,001-\$85,000	9,411	7.8	5.6-10.1	6,550	5.3	3.7-6.9	15,961	6.6	5.2-8.0
\$85,001+	4,128	3.0	1.6-4.3	1,877	1.7	0.8-2.6	6,005	2.4	1.5-3.2
<b>Race</b>									
White	65,032	11.1	10.0-12.2	64,456	10.2	9.3-11.1	129,488	10.6	9.9-11.3
Black	1,232	7.3	3.6-11.0	1,941	12.4	7.4-17.5	3,173	9.8	6.6-12.9
Multi-racial or "Other"	3,894	13.1	7.0-19.2	2,407	12.1	7.4-16.7	6,301	12.7	8.6-16.8
<b>Marital Status</b>									
Married/Living with a partner	34,768	10.1	8.7-11.5	25,270	7.0	6.0-8.0	60,038	8.5	7.6-9.3
Widowed/Divorced/Separated	27,757	23.5	20.1-26.8	37,162	20.6	18.4-22.8	64,920	21.8	19.9-23.6
Never married	7,633	4.5	3.2-5.8	5,613	4.6	3.3-5.9	13,246	4.5	3.6-5.5

*Note.* CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma; U = unstable prevalence estimate.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.



Figure 3.1.1: Weighted Prevalence of Chronic Obstructive Pulmonary Disease (COPD) by Region: MATCH, 2021<sup>a,b</sup>



Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

## 3.2 Hypertension

### Item

Responding “Yes” to “Hypertension, also called high blood pressure” when asked the question, “Have you ever been told by a doctor, nurse, or other healthcare provider that you have any of the following conditions?” Respondents were presented with a list of 13 conditions, which included hypertension, that they could select as “Yes” or “No.”

### Prevalence

**West Virginia:** 43.2% (95% CI: 42.0-44.4)

### Sex

**Male:** 46.0% (95% CI: 44.1-47.9)

**Female:** 40.6% (95% CI: 39.2-42.1)

The prevalence of hypertension was significantly higher among adults who were male (46.0%) than among adults who were female (40.6%).

### Age

The prevalence of hypertension was significantly higher among adults aged 65 or older (70.6%) than among any other adult age groups. The prevalence was significantly lower among adults aged 18-34 (14.0%) than among any other adult age groups.

### Education

The prevalence of hypertension was significantly higher among adults with any other education attainment levels than among adults with an associate’s or more education (40.3%).

### Family Income

The prevalence of hypertension was significantly higher among adults with any other annual family income levels than among adults with an annual family income of \$85,001 or more (35.2%).

### Race

The prevalence of hypertension was significantly higher among adults who were Black (51.5%) than among adults who were any other racial groups. The prevalence was significantly lower among adults who were multi-racial or “other” (32.8%) than among adults who were any other racial groups.

### Marital Status

The prevalence of hypertension was significantly higher among adults who were widowed, divorced, or separated (57.6%) than among adults with any other marital statuses. The prevalence was significantly lower among adults who were never married (28.0%) than among adults with any other marital statuses.

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There was one DHHR, Bureau for Medical Services (BMS) region with a significantly higher prevalence of hypertension compared to the state estimate (43.2%); region four (49.1%). There was one DHHR, BMS region with a significantly lower prevalence compared to the state estimate; region three (39.9%).

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There was one DHHR, Bureau for Behavioral Health (BBH) region with a significantly higher prevalence of hypertension compared to the state estimate (43.2%); region six (48.7%). There were two DHHR, BBH regions with a significantly lower prevalence compared to the state estimate; regions two (37.5%) and four (38.6%).

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There was one DHHR, BBH, Ryan Brown Fund (RBF) region with a significantly higher prevalence of hypertension compared to the state estimate (43.2%); region six (49.4%). There were two DHHR, BBH, RBF regions with a significantly lower prevalence compared to the state estimate; regions two (37.5%) and four (38.6%).

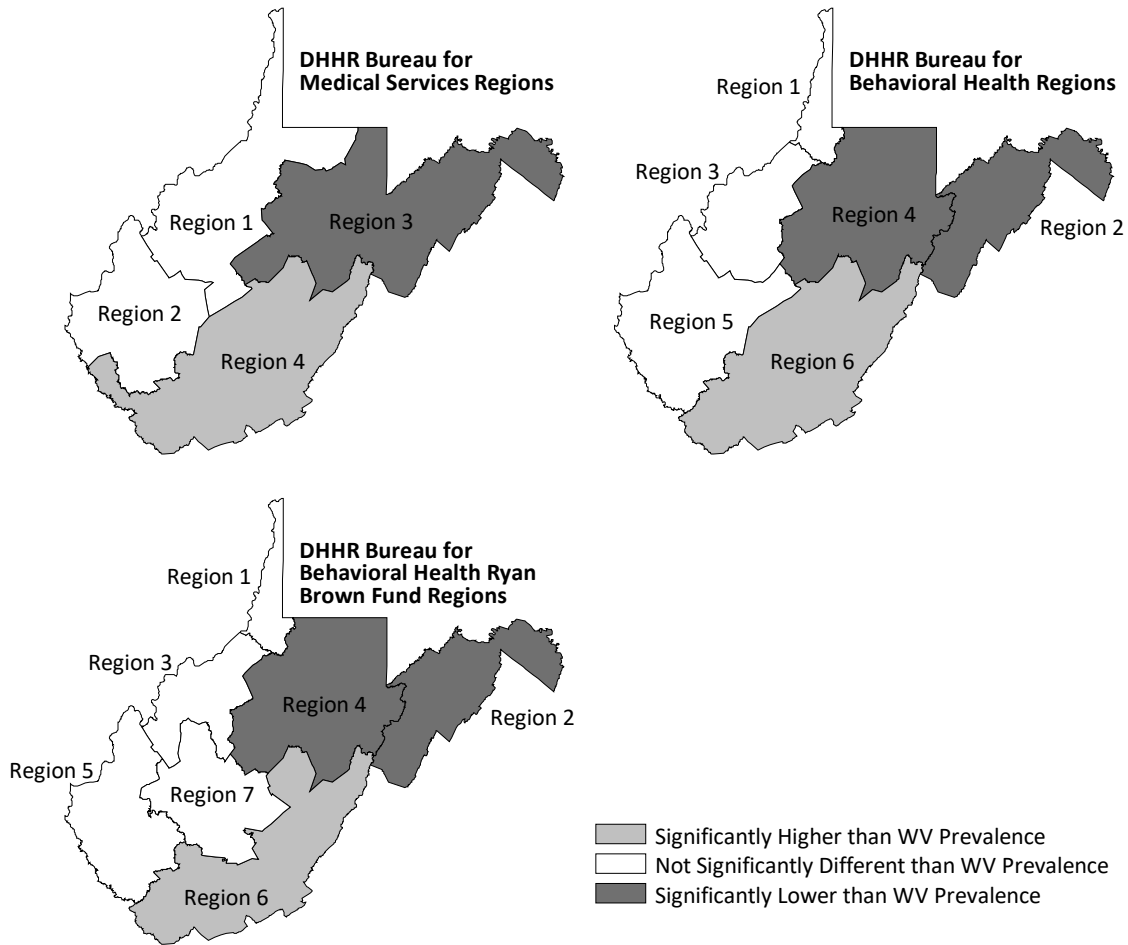
Table 3.2.2: Weighted Prevalence of Hypertension by Demographic Characteristics: MATCH, 2021<sup>a</sup>

Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>304,227</b>	<b>46.0</b>	<b>44.1-47.9</b>	<b>282,333</b>	<b>40.6</b>	<b>39.2-42.1</b>	<b>586,559</b>	<b>43.2</b>	<b>42.0-44.4</b>
<b>Age</b>									
18-34	27,695	15.9	12.9-19.0	20,166	12.0	9.9-14.2	47,861	14.0	12.1-15.9
35-49	58,135	39.1	34.9-43.3	43,038	28.3	25.4-31.2	101,172	33.7	31.1-36.2
50-64	107,923	58.7	55.3-62.2	92,322	48.1	45.2-51.0	200,244	53.3	51.1-55.6
65+	108,291	71.8	69.2-74.4	125,014	69.6	67.1-72.1	233,304	70.6	68.8-72.4
<b>Education</b>									
Less than HS	43,193	48.4	43.1-53.7	37,067	50.3	45.8-54.9	80,260	49.3	45.7-52.8
HS/GED	140,063	47.0	44.2-49.8	120,237	41.6	39.5-43.7	260,299	44.3	42.6-46.1
Associate's or more	118,929	43.8	40.8-46.8	123,389	37.4	35.2-39.7	242,319	40.3	38.5-42.1
<b>Annual Family Income</b>									
\$15,000 or less	54,305	42.3	38.4-46.1	64,538	43.5	40.6-46.5	118,844	42.9	40.6-45.3
\$15,001-\$35,000	73,001	47.5	43.6-51.4	85,228	45.7	42.9-48.5	158,229	46.5	44.2-48.8
\$35,001-\$50,000	43,152	48.1	42.9-53.3	38,255	42.7	38.5-46.8	81,407	45.4	42.1-48.7
\$50,001-\$85,000	62,195	50.3	45.7-54.8	46,062	36.3	32.8-39.8	108,257	43.2	40.3-46.1
\$85,001+	58,310	40.8	36.5-45.1	32,282	28.2	24.6-31.9	90,592	35.2	32.3-38.1
<b>Race</b>									
White	285,828	46.6	44.6-48.6	265,319	40.4	38.9-41.9	551,147	43.4	42.2-44.6
Black	8,516	48.4	39.1-57.8	9,241	54.6	47.6-61.6	17,757	51.5	45.6-57.3
Multi-racial or "Other"	9,347	31.4	23.1-39.8	7,195	34.7	26.8-42.7	16,542	32.8	26.8-38.7
<b>Marital Status</b>									
Married/Living with a partner	179,242	49.8	47.2-52.4	138,136	36.8	34.8-38.8	317,378	43.1	41.5-44.8
Widowed/Divorced/Separated	72,645	58.3	54.3-62.3	109,677	57.2	54.6-59.8	182,322	57.6	55.4-59.8
Never married	51,119	29.3	25.8-32.8	32,512	26.1	23.0-29.3	83,631	28.0	25.6-30.4

Note. CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

Figure 3.2.2: Weighted Prevalence of Hypertension by Region: MATCH, 2021<sup>a,b</sup>



Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.  
<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.  
<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

## 3.3 Diabetes

### Item

Responding “Yes” to “Diabetes” when asked the question, “Have you ever been told by a doctor, nurse, or other healthcare provider that you have any of the following conditions?” Respondents were presented with a list of 13 conditions, which included diabetes, that they could select as “Yes” or “No.”

### Prevalence

**West Virginia:** 18.1% (95% CI: 17.2–19.0)

### Sex

**Male:** 18.9% (95% CI: 17.5–20.4)

**Female:** 17.2% (95% CI: 16.2–18.3)

There was no significant difference in the prevalence of diabetes between the sexes.

### Age

The prevalence of diabetes was significantly higher among adults aged 65 or older (31.9%) than among any other adult age groups. The prevalence was significantly lower among adults aged 18–34 (4.5%) than among any other adult age groups.

### Education

The prevalence of diabetes was significantly higher among adults with less than high school education (25.6%) than among adults with any other educational attainment levels. The prevalence was significantly lower among adults with an associate’s or more education (14.9%) than among adults with any other educational attainment levels.

### Family Income

The prevalence of diabetes was significantly higher among adults with any other annual family income levels than among adults with an annual family income of \$85,001 or more (9.7%).

### Race

There was no significant difference in the prevalence of diabetes among racial groups.

### Marital Status

The prevalence of diabetes was significantly higher among adults who were widowed, divorced, or separated (27.6%) than among adults with any other marital statuses. The prevalence was significantly lower among adults who were never married (9.8%) than among adults with any other marital statuses.

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There were no DHHR, Bureau for Medical Services (BMS) regions with a significantly higher prevalence of diabetes compared to the state estimate. There was one DHHR, BMS region with a significantly lower prevalence compared to the state estimate (18.1%); region one (15.6%).

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There were no DHHR, Bureau for Behavioral Health (BBH) regions with a significantly higher prevalence of diabetes compared to the state estimate. There was one DHHR, BBH region with a significantly lower prevalence compared to the state estimate (18.1%); region four (14.9%).

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There were no DHHR, BBH, Ryan Brown Fund (RBF) regions with a significantly higher prevalence of diabetes compared to the state estimate. There was one DHHR, BBH, RBF region with a significantly lower prevalence compared to the state estimate (18.1%); region four (14.9%).

Table 3.3.3: Weighted Prevalence of Diabetes by Demographic Characteristics: MATCH, 2021<sup>a</sup>

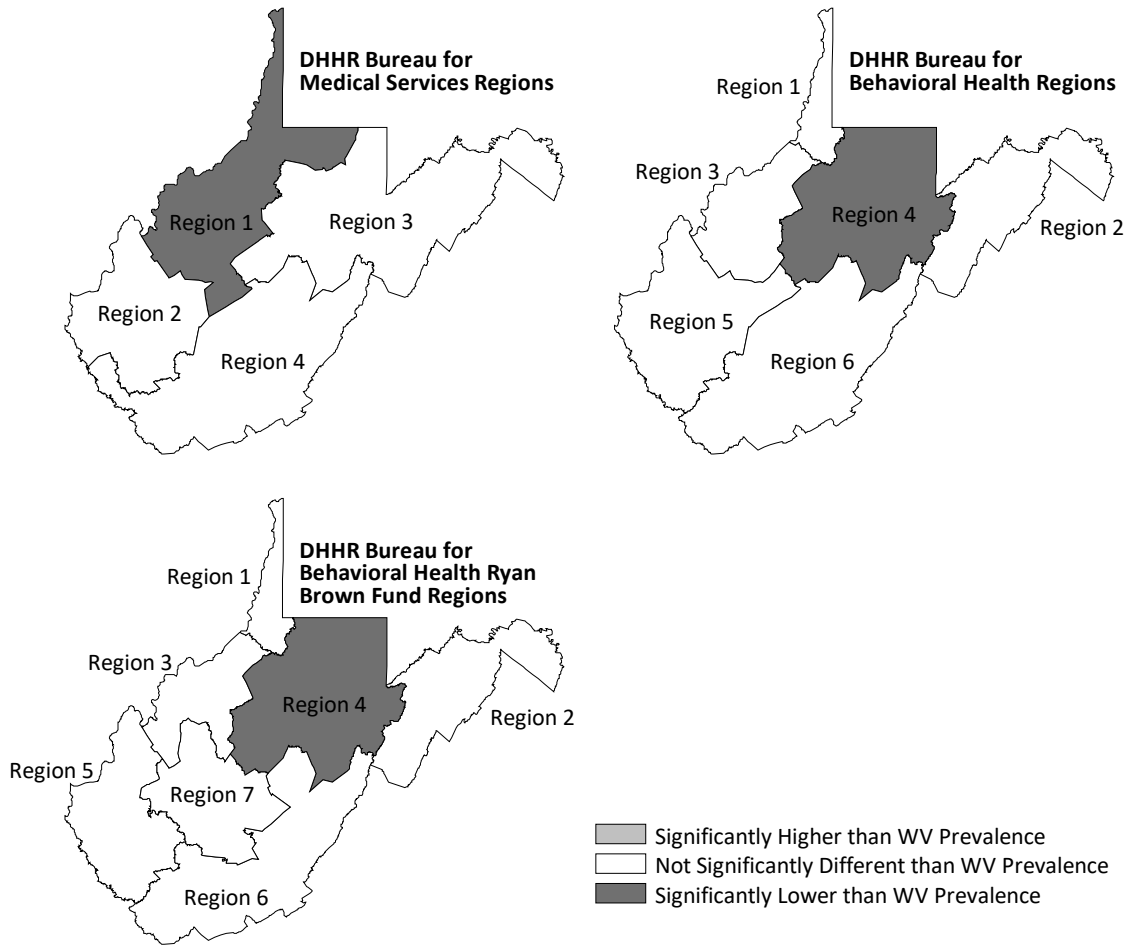
Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>121,962</b>	<b>18.9</b>	<b>17.5-20.4</b>	<b>116,591</b>	<b>17.2</b>	<b>16.2-18.3</b>	<b>238,553</b>	<b>18.1</b>	<b>17.2-19.0</b>
<b>Age</b>									
18-34	8,386	4.8	2.8-6.9	7,027	4.2	2.9-5.5	15,413	4.5	3.3-5.8
35-49	18,178	12.4	9.4-15.3	17,499	11.6	9.6-13.5	35,678	12.0	10.2-13.7
50-64	44,957	25.3	22.3-28.2	43,224	23.0	20.7-25.3	88,181	24.1	22.2-26.0
65+	50,004	35.1	32.0-38.2	48,222	29.1	26.5-31.7	98,226	31.9	29.9-33.9
<b>Education</b>									
Less than HS	20,862	23.9	19.6-28.1	19,524	27.6	23.5-31.8	40,386	25.6	22.6-28.6
HS/GED	58,316	20.2	18.0-22.5	50,893	18.1	16.6-19.7	109,209	19.2	17.8-20.6
Associate's or more	42,145	15.8	13.7-17.9	45,710	14.2	12.6-15.8	87,854	14.9	13.7-16.2
<b>Annual Family Income</b>									
\$15,000 or less	25,312	20.2	17.2-23.3	33,066	22.9	20.5-25.3	58,378	21.7	19.7-23.6
\$15,001-\$35,000	33,279	22.4	19.1-25.7	36,382	20.1	17.8-22.3	69,661	21.1	19.2-23.0
\$35,001-\$50,000	16,519	19.2	15.4-23.1	14,588	16.9	13.9-19.8	31,106	18.0	15.6-20.5
\$50,001-\$85,000	26,813	22.0	18.2-25.8	16,464	13.3	10.8-15.8	43,277	17.6	15.3-19.9
\$85,001+	15,096	10.7	8.4-12.9	9,601	8.5	6.3-10.7	24,696	9.7	8.1-11.3
<b>Race</b>									
White	113,831	19.1	17.6-20.6	109,650	17.2	16.0-18.3	223,481	18.1	17.2-19.0
Black	2,859	16.4	11.1-21.7	4,367	27.0	20.6-33.4	7,226	21.5	17.3-25.7
Multi-racial or "Other"	4,927	16.5	9.9-23.1	2,427	11.9	7.1-16.8	7,354	14.7	10.3-19.1
<b>Marital Status</b>									
Married/Living with a partner	71,362	20.4	18.3-22.4	54,250	14.7	13.3-16.2	125,611	17.5	16.3-18.7
Widowed/Divorced/Separated	35,763	29.8	26.0-33.6	47,776	26.2	23.9-28.6	83,539	27.6	25.6-29.7
Never married	14,628	8.5	6.6-10.4	14,133	11.5	9.3-13.7	28,761	9.8	8.3-11.2

Note. CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.



Figure 3.3.3: Weighted Prevalence of Diabetes by Region: MATCH, 2021<sup>a,b</sup>



Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.  
<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.  
<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

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## 3.4 Asthma

### Item

Responding “Yes” to “Asthma” when asked the question, “Have you ever been told by a doctor, nurse, or other healthcare provider that you have any of the following conditions?” Respondents were presented with a list of 13 conditions, which included asthma, that they could select as “Yes” or “No.”

### Prevalence

**West Virginia:** 16.2% (95% CI: 15.4-17.1)

### Sex

**Male:** 13.0% (95% CI: 11.7-14.3)

**Female:** 19.3% (95% CI: 18.1-20.5)

The prevalence of asthma was significantly higher among adults who were female (19.3%) than among adults who were male (13.0%).

### Age

The prevalence of asthma was significantly higher among adults aged 18-34 (18.8%) than among adults aged 65 or older (13.2%).

### Education

The prevalence of asthma was significantly higher among adults with less than high school education (22.6%) than among adults with any other educational attainment levels. The prevalence was significantly lower among adults with an associate’s or more education (13.9%) than among adults with any other educational attainment levels.

### Family Income

The prevalence of asthma was significantly higher among adults with an annual family income of \$15,000 or less (25.0%) than among adults with any other annual family income levels.

### Race

The prevalence of asthma was significantly higher among adults who were multi-racial or “other” (23.4%) than among adults who were White (15.9%).

### Marital Status

The prevalence of asthma was significantly higher among adults who were never married (19.1%) and widowed, separated, or divorced (18.2%) than among adults who were married or living with a partner (14.3%).

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There was no significant difference in the prevalence of asthma among DHHR, Bureau for Medical Services (BMS) regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There was no significant difference in the prevalence of asthma among DHHR, Bureau for Behavioral Health (BBH) regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There was no significant difference in the prevalence of asthma among DHHR, BBH, Ryan Brown Fund (RBF) regions compared to the state estimate.

Table 3.4.4: Weighted Prevalence of Asthma by Demographic Characteristics: MATCH, 2021<sup>a</sup>

Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>81,945</b>	<b>13.0</b>	<b>11.7-14.3</b>	<b>128,831</b>	<b>19.3</b>	<b>18.1-20.5</b>	<b>210,776</b>	<b>16.2</b>	<b>15.4-17.1</b>
<b>Age</b>									
18-34	30,064	17.3	13.9-20.7	34,285	20.4	17.8-23.0	64,349	18.8	16.7-21.0
35-49	18,794	13.0	10.3-15.7	29,699	19.8	17.3-22.2	48,493	16.4	14.6-18.3
50-64	20,286	11.7	9.6-13.7	37,538	20.3	17.9-22.7	57,824	16.1	14.5-17.7
65+	12,617	9.4	7.7-11.2	26,320	16.4	14.3-18.5	38,937	13.2	11.8-14.7
<b>Education</b>									
Less than HS	14,892	17.8	13.8-21.8	19,362	28.5	24.2-32.7	34,254	22.6	19.6-25.5
HS/GED	40,272	14.2	12.2-16.3	54,897	19.9	18.1-21.7	95,169	17.0	15.7-18.4
Associate's or more	26,595	10.2	8.3-12.0	54,054	16.8	15.1-18.6	80,649	13.9	12.6-15.1
<b>Annual Family Income</b>									
\$15,000 or less	24,805	20.4	17.0-23.9	41,217	28.9	26.1-31.7	66,022	25.0	22.8-27.2
\$15,001-\$35,000	20,803	14.4	11.3-17.4	37,102	20.8	18.4-23.2	57,906	17.9	16.0-19.8
\$35,001-\$50,000	8,610	10.1	7.2-13.1	13,947	16.3	13.1-19.6	22,558	13.2	11.0-15.5
\$50,001-\$85,000	13,378	11.3	8.4-14.2	19,196	15.6	12.8-18.4	32,575	13.5	11.5-15.5
\$85,001+	12,352	8.8	6.5-11.2	11,684	10.4	8.0-12.9	24,036	9.5	7.9-11.2
<b>Race</b>									
White	73,286	12.6	11.2-13.9	119,008	18.9	17.6-20.1	192,294	15.9	14.9-16.8
Black	2,325	13.8	7.5-20.1	4,178	26.3	20.0-32.6	6,503	19.9	15.4-24.4
Multi-racial or "Other"	6,248	21.1	12.9-29.3	5,417	26.8	19.2-34.4	11,665	23.4	17.7-29.2
<b>Marital Status</b>									
Married/Living with a partner	42,354	12.3	10.6-14.0	58,328	16.1	14.6-17.6	100,682	14.3	13.1-15.4
Widowed/Divorced/Separated	12,457	11.0	8.8-13.2	40,702	22.7	20.4-25.0	53,160	18.2	16.5-19.9
Never married	27,113	15.9	12.8-19.0	28,836	23.5	20.3-26.7	55,949	19.1	16.8-21.3

Note. CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

## 3.5 Endocarditis

### Item

Responding “Yes” to “Endocarditis” when asked the question, “Have you ever been told by a doctor, nurse, or other healthcare provider that you have any of the following conditions?” Respondents were presented with a list of 13 conditions, which included endocarditis, that they could select as “Yes” or “No.”

### Prevalence

**West Virginia:** 0.6% (95% CI: 0.4-0.7)

### Sex

**Male:** 0.7% (95% CI: 0.5-1.0)

**Female:** 0.4% (95% CI: 0.3-0.6)

There was no significant difference in the prevalence of endocarditis between the sexes.

### Age

There was no significant difference in the prevalence of endocarditis among adult age groups with stable estimates. There was an unstable prevalence estimate among adult age groups.

### Education

There was no significant difference in the prevalence of endocarditis among educational attainment levels.

### Family Income

There was no significant difference in the prevalence of endocarditis among annual family income level with stable estimates. There were unstable prevalence estimates among annual family income levels.

### Race

There were unstable estimates for the prevalence of endocarditis among racial groups.

### Marital Status

There was no significant difference in the prevalence of endocarditis among marital status with stable estimates. There was an unstable prevalence estimate among marital statuses.

### West Virginia Department of Health and Human Resources (DHHR) Regions

*DHHR, Bureau for Medical Services (BMS) Regions*

There was no significant difference in the prevalence of endocarditis among DHHR, Bureau for Medical Services (BMS) regions compared to the state estimate.

*DHHR, Bureau for Behavioral Health (BBH) Regions*

There was no significant difference in the prevalence of endocarditis among DHHR, Bureau for Behavioral Health (BBH) regions compared to the state estimate. There were unstable prevalence estimates among DHHR, BBH regions (see the [Appendix](#)).

*DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There was no significant difference in the prevalence of endocarditis among DHHR, BBH, Ryan Brown Fund (RBF) regions compared to the state estimate. There were unstable prevalence estimates among DHHR, BBH, RBF regions (see the [Appendix](#)).

Table 3.5.5: Weighted Prevalence of Endocarditis by Demographic Characteristics: MATCH, 2021<sup>a</sup>

Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>4,496</b>	<b>0.7</b>	<b>0.5-1.0</b>	<b>2,888</b>	<b>0.4</b>	<b>0.3-0.6</b>	<b>7,384</b>	<b>0.6</b>	<b>0.4-0.7</b>
<b>Age</b>									
18-34	U	U	U	U	U	U	2,187	0.6	0.3-1.0
35-49	U	U	U	U	U	U	U	U	U
50-64	U	U	U	1,146	0.6	0.3-1.0	2,054	0.6	0.3-0.8
65+	1,446	1.1	0.5-1.7	U	U	U	1,934	0.7	0.4-1.0
<b>Education</b>									
Less than HS	U	U	U	U	U	U	1,341	0.9	0.4-1.4
HS/GED	2,497	0.9	0.4-1.3	1,264	0.5	0.2-0.7	3,761	0.7	0.4-0.9
Associate's or more	U	U	U	U	U	U	2,214	0.4	0.2-0.6
<b>Annual Family Income</b>									
\$15,000 or less	1,695	1.4	0.6-2.2	1,380	1.0	0.5-1.5	3,075	1.2	0.7-1.6
\$15,001-\$35,000	U	U	U	U	U	U	2,192	0.7	0.4-1.0
\$35,001-\$50,000	U	U	U	U	U	U	U	U	U
\$50,001-\$85,000	U	U	U	U	U	U	U	U	U
\$85,001+	U	U	U	U	U	U	U	U	U
<b>Race</b>									
White	3,798	0.7	0.4-0.9	2,614	0.4	0.3-0.6	6,412	0.5	0.4-0.7
Black	U	U	U	U	U	U	U	U	U
Multi-racial or "Other"	U	U	U	U	U	U	U	U	U
<b>Marital Status</b>									
Married/Living with a partner	2,060	0.6	0.3-0.9	U	U	U	3,019	0.4	0.2-0.6
Widowed/Divorced/Separated	U	U	U	1,408	0.8	0.4-1.2	2,359	0.8	0.5-1.1
Never married	U	U	U	U	U	U	U	U	U

Note. CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma; U = unstable prevalence estimate.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

## 3.6 Hashimoto's Disease

### Item

Responding “Yes” to “Hashimoto’s disease” when asked the question, “Have you ever been told by a doctor, nurse, or other healthcare provider that you have any of the following conditions?” Respondents were presented with a list of 13 conditions, which included Hashimoto’s disease, that they could select as “Yes” or “No.”

### Prevalence

**West Virginia:** 2.0% (95% CI: 1.7-2.3)

### Sex

**Male:** 0.6% (95% CI: 0.3-0.8)

**Female:** 3.3% (95% CI: 2.8-3.9)

The prevalence of Hashimoto’s disease was significantly higher among adults who were female (3.3%) than among adults who were male (0.6%).

### Age

There was no significant difference in the prevalence of Hashimoto’s disease among adult age groups.

### Education

The prevalence of Hashimoto’s disease was significantly higher among adults with an associate’s or more education (2.6%) than among adults with a high school or Graduate Equivalency Diploma (GED) education (1.5%). There was an unstable prevalence estimate among educational attainment levels.

### Family Income

There was no significant difference in the prevalence of Hashimoto’s disease among annual family income levels.

### Race

There were unstable estimates for the prevalence of Hashimoto’s disease among racial groups.

### Marital Status

There was no significant difference in the prevalence of Hashimoto’s disease among marital statuses.

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There was no significant difference in the prevalence of Hashimoto’s disease among DHHR, Bureau for Medical Services (BMS) regions compared to the state estimate.



*DHHR, Bureau for Behavioral Health (BBH) Regions*

There were no DHHR, Bureau for Behavioral Health (BBH) regions with a significantly higher prevalence of Hashimoto's disease compared to the state estimate. There was one DHHR, Bureau for Behavioral Health (BBH) region with a significantly lower prevalence compared to the state estimate (2.0%); region four (1.2%). There was an unstable prevalence estimate among DHHR, BBH regions (see the [Appendix](#)).

*DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There were no DHHR, BBH, Ryan Brown Fund (RBF) regions with a significantly higher prevalence of Hashimoto's disease compared to the state estimate. There was one DHHR, BBH, Ryan Brown Fund (RBF) region with a significantly lower prevalence compared to the state estimate (2.0%); region four (1.2%). There was an unstable prevalence estimate among DHHR, BBH, RBF regions (see the [Appendix](#)).

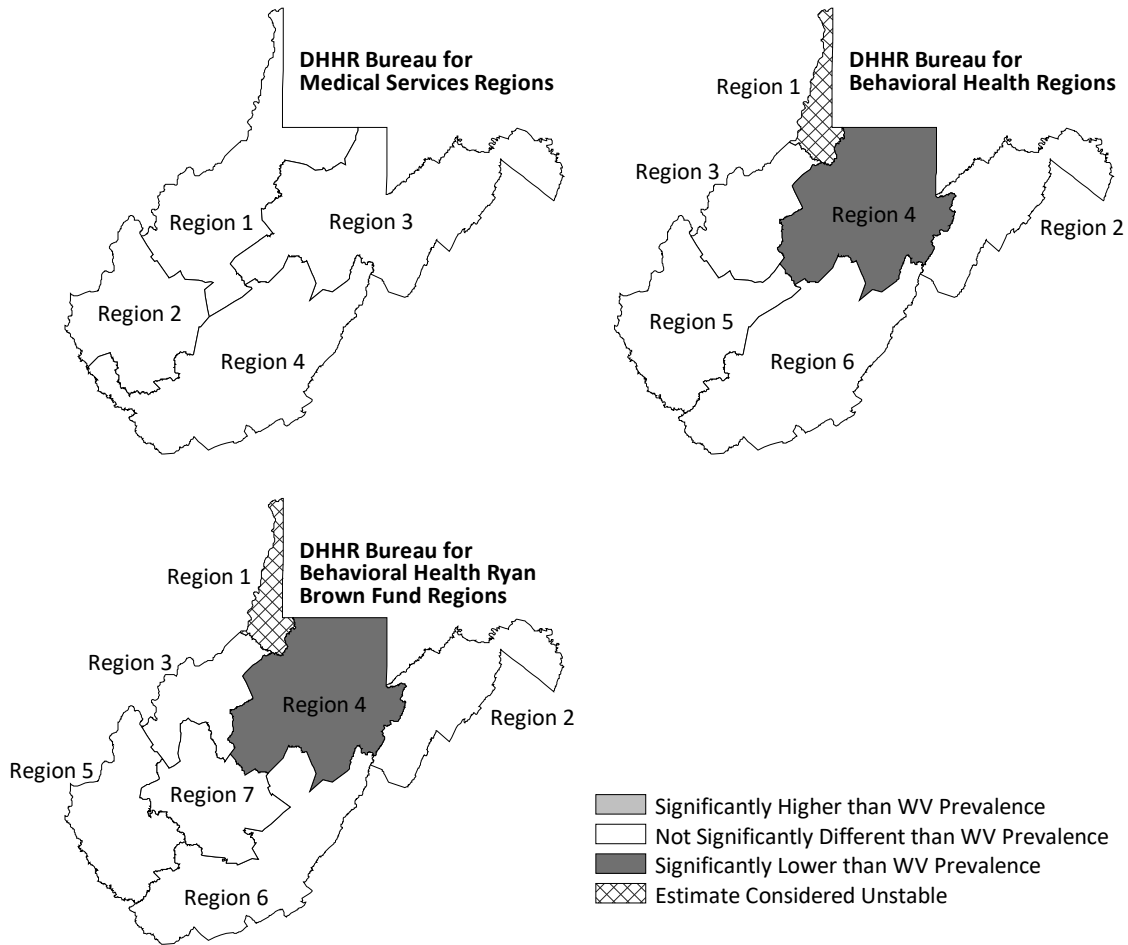
Table 3.6.6: Weighted Prevalence of Hashimoto's Disease by Demographic Characteristics: MATCH, 2021<sup>a</sup>

Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>3,460</b>	<b>0.6</b>	<b>0.3-0.8</b>	<b>21,792</b>	<b>3.3</b>	<b>2.8-3.9</b>	<b>25,252</b>	<b>2.0</b>	<b>1.7-2.3</b>
<b>Age</b>									
18-34	U	U	U	4,518	2.7	1.6-3.8	5,004	1.5	0.9-2.1
35-49	U	U	U	6,494	4.4	3.0-5.7	7,834	2.7	1.9-3.5
50-64	U	U	U	7,302	4.0	2.9-5.2	8,030	2.3	1.6-2.9
65+	U	U	U	3,294	2.1	1.4-2.9	4,173	1.5	1.0-1.9
<b>Education</b>									
Less than HS	U	U	U	U	U	U	U	U	U
HS/GED	1,739	0.6	0.3-1.0	6,626	2.5	1.7-3.2	8,365	1.5	1.1-1.9
Associate's or more	U	U	U	13,378	4.2	3.3-5.1	14,831	2.6	2.0-3.1
<b>Annual Family Income</b>									
\$15,000 or less	U	U	U	3,380	2.4	1.4-3.4	4,120	1.6	1.0-2.2
\$15,001-\$35,000	U	U	U	4,870	2.8	1.8-3.7	5,080	1.6	1.1-2.1
\$35,001-\$50,000	U	U	U	2,829	3.4	1.7-5.0	3,284	2.0	1.1-2.8
\$50,001-\$85,000	U	U	U	3,914	3.2	2.0-4.4	5,182	2.2	1.4-2.9
\$85,001+	U	U	U	5,775	5.2	3.5-6.9	6,400	2.6	1.7-3.4
<b>Race</b>									
White	2,959	0.5	0.3-0.8	20,623	3.3	2.7-3.9	23,582	2.0	1.6-2.3
Black	U	U	U	U	U	U	U	U	U
Multi-racial or "Other"	U	U	U	U	U	U	U	U	U
<b>Marital Status</b>									
Married/Living with a partner	2,237	0.7	0.3-1.0	13,751	3.8	3.0-4.6	15,988	2.3	1.8-2.7
Widowed/Divorced/Separated	U	U	U	4,313	2.5	1.7-3.3	4,825	1.7	1.2-2.2
Never married	U	U	U	3,728	3.1	1.5-4.6	4,439	1.5	0.8-2.2

Note. CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma; U = unstable prevalence estimate.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

Figure 3.6.4: Weighted Prevalence of Hashimoto’s Disease by Region: MATCH, 2021<sup>a,b</sup>



Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.  
<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.  
<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

## 3.7 Hepatitis C

### Item

Responding “Yes” to “Hepatitis C” when asked the question, “Have you ever been told by a doctor, nurse, or other healthcare provider that you have any of the following conditions?” Respondents were presented with a list of 13 conditions, which included hepatitis C, that they could select as “Yes” or “No.”

### Prevalence

**West Virginia:** 2.5% (95% CI: 2.1-2.8)

### Sex

**Male:** 2.6% (95% CI: 2.1-3.2)

**Female:** 2.3% (95% CI: 1.8-2.7)

There was no significant difference in the prevalence of hepatitis C between the sexes.

### Age

The prevalence of hepatitis C was significantly higher among any other adult age groups than among adults aged 65 or older (0.9%).

### Education

The prevalence of hepatitis C was significantly higher among adults with less than high school education (6.4%) than among adults with any other educational attainment levels. The prevalence was significantly lower among adults with an associate’s or more education (1.2%) than among adults with any other educational attainment levels.

### Family Income

The prevalence of hepatitis C was significantly higher among adults with an annual family income of \$15,000 or less (7.4%) than among adults with an annual family income of \$15,001-\$35,000 (2.3%). There were unstable prevalence estimates among annual family income levels.

### Race

There were unstable estimates for the prevalence of hepatitis C among racial groups.

### Marital Status

The prevalence of hepatitis C was significantly higher among adults who were widowed, divorced, or separated (3.6%) than among adults who were married or living with a partner (1.9%).

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There was one DHHR, Bureau for Medical Services (BMS) region with a significantly higher prevalence of hepatitis C compared to the state estimate (2.5%); region four (3.9%). There was one DHHR, Bureau for Medical Services (BMS) region with a significantly lower prevalence compared to the state estimate; region three (1.6%).

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There was no significant difference in the prevalence of hepatitis C among DHHR, Bureau for Behavioral Health (BBH) regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There was no significant difference in the prevalence of hepatitis C among DHHR, BBH, RBF regions.

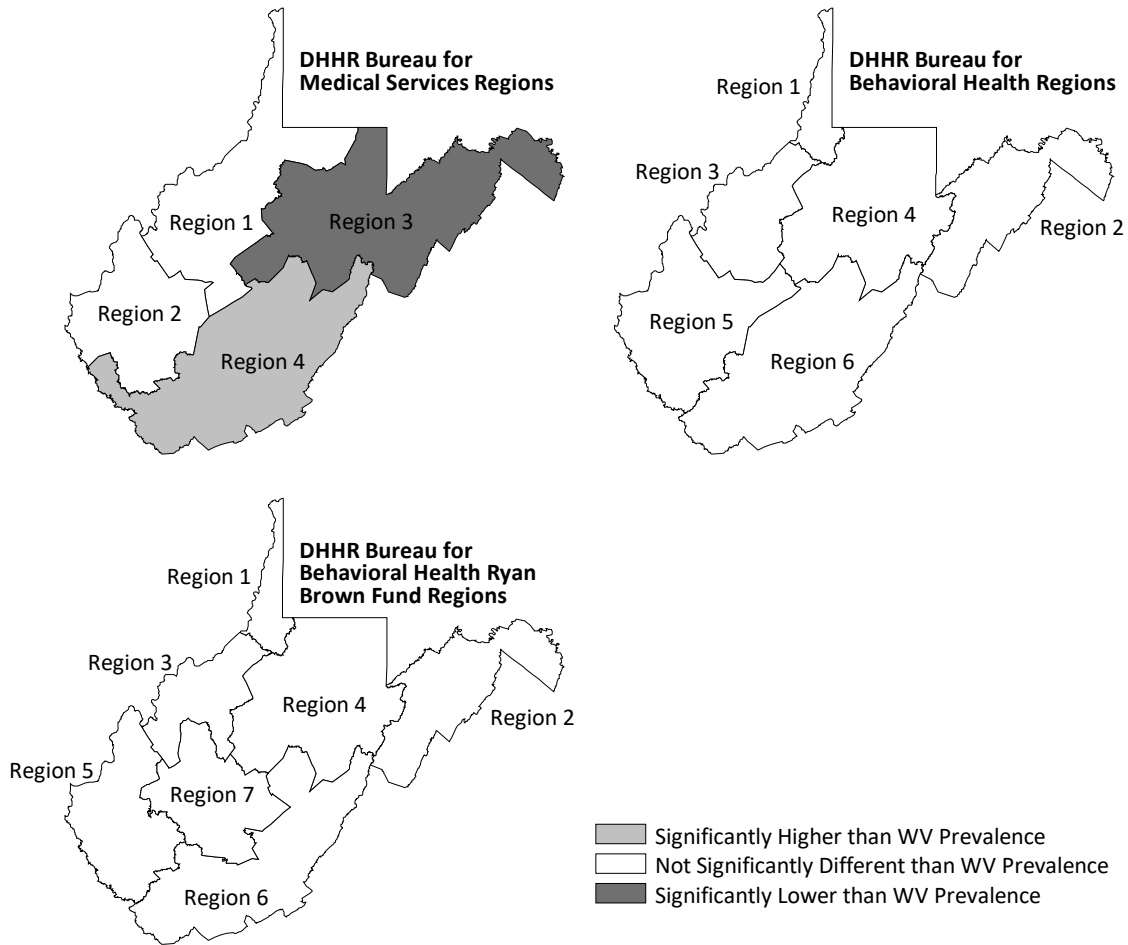
Table 3.7.7: Weighted Prevalence of Hepatitis C by Demographic Characteristics: MATCH, 2021<sup>a</sup>

Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>16,659</b>	<b>2.6</b>	<b>2.1-3.2</b>	<b>14,970</b>	<b>2.3</b>	<b>1.8-2.7</b>	<b>31,630</b>	<b>2.5</b>	<b>2.1-2.8</b>
<b>Age</b>									
18-34	3,011	1.7	0.9-2.6	5,847	3.5	2.2-4.8	8,858	2.6	1.8-3.4
35-49	7,332	5.1	3.2-6.9	5,429	3.6	2.5-4.7	12,761	4.3	3.3-5.4
50-64	4,846	2.8	1.8-3.8	2,327	1.3	0.8-1.8	7,172	2.0	1.5-2.6
65+	1,443	1.1	0.5-1.6	U	U	U	2,721	0.9	0.5-1.3
<b>Education</b>									
Less than HS	5,155	6.2	3.9-8.5	4,416	6.6	3.8-9.5	9,571	6.4	4.6-8.2
HS/GED	8,569	3.0	2.1-4.0	6,521	2.4	1.8-3.0	15,090	2.7	2.1-3.3
Associate's or more	2,801	1.1	0.5-1.7	3,979	1.3	0.8-1.8	6,780	1.2	0.8-1.6
<b>Annual Family Income</b>									
\$15,000 or less	9,486	7.8	5.6-10.0	10,012	7.1	5.3-8.9	19,498	7.4	6.0-8.8
\$15,001-\$35,000	4,211	2.9	1.6-4.3	3,214	1.8	1.2-2.5	7,426	2.3	1.6-3.0
\$35,001-\$50,000	U	U	U	U	U	U	U	U	U
\$50,001-\$85,000	U	U	U	U	U	U	U	U	U
\$85,001+	U	U	U	U	U	U	U	U	U
<b>Race</b>									
White	15,574	2.7	2.1-3.3	14,057	2.3	1.8-2.7	29,631	2.5	2.1-2.8
Black	U	U	U	U	U	U	U	U	U
Multi-racial or "Other"	U	U	U	U	U	U	U	U	U
<b>Marital Status</b>									
Married/Living with a partner	6,714	2.0	1.2-2.7	6,847	1.9	1.3-2.5	13,561	1.9	1.5-2.4
Widowed/Divorced/Separated	5,305	4.7	3.1-6.2	4,995	2.9	2.0-3.7	10,300	3.6	2.8-4.4
Never married	4,372	2.6	1.4-3.7	2,839	2.3	1.0-3.6	7,211	2.5	1.6-3.3

Note. CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma; U = unstable prevalence estimate.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

Figure 3.7.5: Weighted Prevalence of Hepatitis C by Region: MATCH, 2021<sup>a,b</sup>



Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.  
<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.  
<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

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## 3.8 Human Immunodeficiency Virus (HIV) and Acquired Immunodeficiency Syndrome (AIDS)

### Item

Responding “Yes” to “HIV/AIDS” when asked the question, “Have you ever been told by a doctor, nurse, or other healthcare provider that you have any of the following conditions?” Respondents were presented with a list of 13 conditions, which included HIV or AIDS as one category (“HIV/AIDS”), that they could select as “Yes” or “No.”

### Prevalence

**West Virginia:** 0.3% (95% CI: 0.2-0.5)

### Sex

**Male:** 0.5% (95% CI: 0.2-0.8)

**Female:** Unstable estimate

The prevalence of Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome (HIV/AIDS) among adults who were female was unstable.

### Age

There were no stable estimates for the prevalence of HIV/AIDS among adult age groups.

### Education

There were no stable estimates for the prevalence of HIV/AIDS among educational attainment levels.

### Family Income

There were no stable estimates for the prevalence of HIV/AIDS among annual family income levels.

### Race

There were no stable estimates for the prevalence of HIV/AIDS among racial groups.

### Marital Status

There were no stable estimates for the prevalence of HIV/AIDS among marital statuses.

## West Virginia Department of Health and Human Resources (DHHR) Regions

*DHHR, Bureau for Medical Services (BMS) Regions*

There were no stable estimates for the prevalence of HIV/AIDS among DHHR, Bureau for Medical Services (BMS) regions (see the [Appendix](#)).



*DHHR, Bureau for Behavioral Health (BBH) Regions*

There were no stable estimates for the prevalence of HIV/AIDS among DHHR, Bureau for Behavioral Health (BBH) regions (see the [Appendix](#)).

*DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There were no stable estimates for the prevalence of HIV/AIDS among DHHR, BBH, Ryan Brown Fund (RBF) regions (see the [Appendix](#)).

Table 3.8.8: Weighted Prevalence of Human Immunodeficiency Virus (HIV)/Acquired Immunodeficiency Syndrome (AIDS) by Demographic Characteristics: MATCH, 2021<sup>a</sup>

Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>3,174</b>	<b>0.5</b>	<b>0.2-0.8</b>	<b>U</b>	<b>U</b>	<b>U</b>	<b>3,973</b>	<b>0.3</b>	<b>0.2-0.5</b>
<b>Age</b>									
18-34	U	U	U	U	U	U	U	U	U
35-49	U	U	U	U	U	U	U	U	U
50-64	U	U	U	U	U	U	U	U	U
65+	U	U	U	U	U	U	U	U	U
<b>Education</b>									
Less than HS	U	U	U	U	U	U	U	U	U
HS/GED	U	U	U	U	U	U	U	U	U
Associate's or more	U	U	U	U	U	U	U	U	U
<b>Annual Family Income</b>									
\$15,000 or less	U	U	U	U	U	U	U	U	U
\$15,001-\$35,000	U	U	U	U	U	U	U	U	U
\$35,001-\$50,000	U	U	U	U	U	U	U	U	U
\$50,001-\$85,000	U	U	U	U	U	U	U	U	U
\$85,001+	U	U	U	U	U	U	U	U	U
<b>Race</b>									
White	U	U	U	U	U	U	2,617	0.2	0.1-0.3
Black	U	U	U	U	U	U	U	U	U
Multi-racial or "Other"	U	U	U	U	U	U	U	U	U
<b>Marital Status</b>									
Married/Living with a partner	U	U	U	U	U	U	U	U	U
Widowed/Divorced/Separated	U	U	U	U	U	U	U	U	U
Never married	U	U	U	U	U	U	U	U	U

Note. CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma; U = unstable prevalence estimate.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

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## 3.9 Cardiovascular Disease

### Item

Responding “Yes” to cardiovascular disease when asked the question, “Have you ever been told by a doctor, nurse, or other healthcare provider that you have any of the following conditions?” Respondents were presented with a list of 13 conditions, which included cardiovascular disease, that they could select as “Yes” or “No.”

### Prevalence

**West Virginia:** 10.6% (95% CI: 9.9-11.3)

### Sex

**Male:** 12.4% (95% CI: 11.2-13.5)

**Female:** 8.9% (95% CI: 8.1-9.7)

The prevalence of cardiovascular disease was significantly higher among adults who were male (12.4%) than among adults who were female (8.9%).

### Age

The prevalence of cardiovascular disease was significantly higher among adults aged 65 or older (25.5%) than among any other adult age groups. The prevalence was significantly lower among adults aged 18-34 (1.5%) than among any other adult age groups.

### Education

The prevalence of cardiovascular disease was significantly higher among adults with less than high school education (15.2%) than among adults with any other educational attainment levels.

### Family Income

The prevalence of cardiovascular disease was significantly higher among adults with an annual family income of \$15,001 or less (12.4%) and \$15,001–\$35,000 (12.7%) than among adults with an annual family income of \$50,001–\$85,000 (8.8%) and \$85,001 or more (6.6%).

### Race

There was no significant difference in the prevalence of cardiovascular disease among racial groups.

### Marital Status

The prevalence of cardiovascular disease was significantly higher among adults who were widowed, divorced, or separated (18.6%) than among adults with any other marital statuses. The prevalence was significantly lower among adults who were never married or living with a partner (4.1%) than among adults with any other marital statuses.

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There was no significant difference in the prevalence of cardiovascular disease among DHHR, Bureau for Medical Services (BMS) regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There were no DHHR, BBH regions with a significantly higher prevalence of cardiovascular disease compared to the state estimate. There was one DHHR, Bureau for Behavioral Health (BBH) region with a significantly lower prevalence compared to the state estimate (10.6%); region two (8.2%).

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There were no DHHR, BBH, Ryan Brown Fund regions with a significantly higher prevalence of cardiovascular disease compared to the state estimate. There was one DHHR, BBH, RBF region with a significantly lower prevalence compared to the state estimate (10.6%); region two (8.2%).

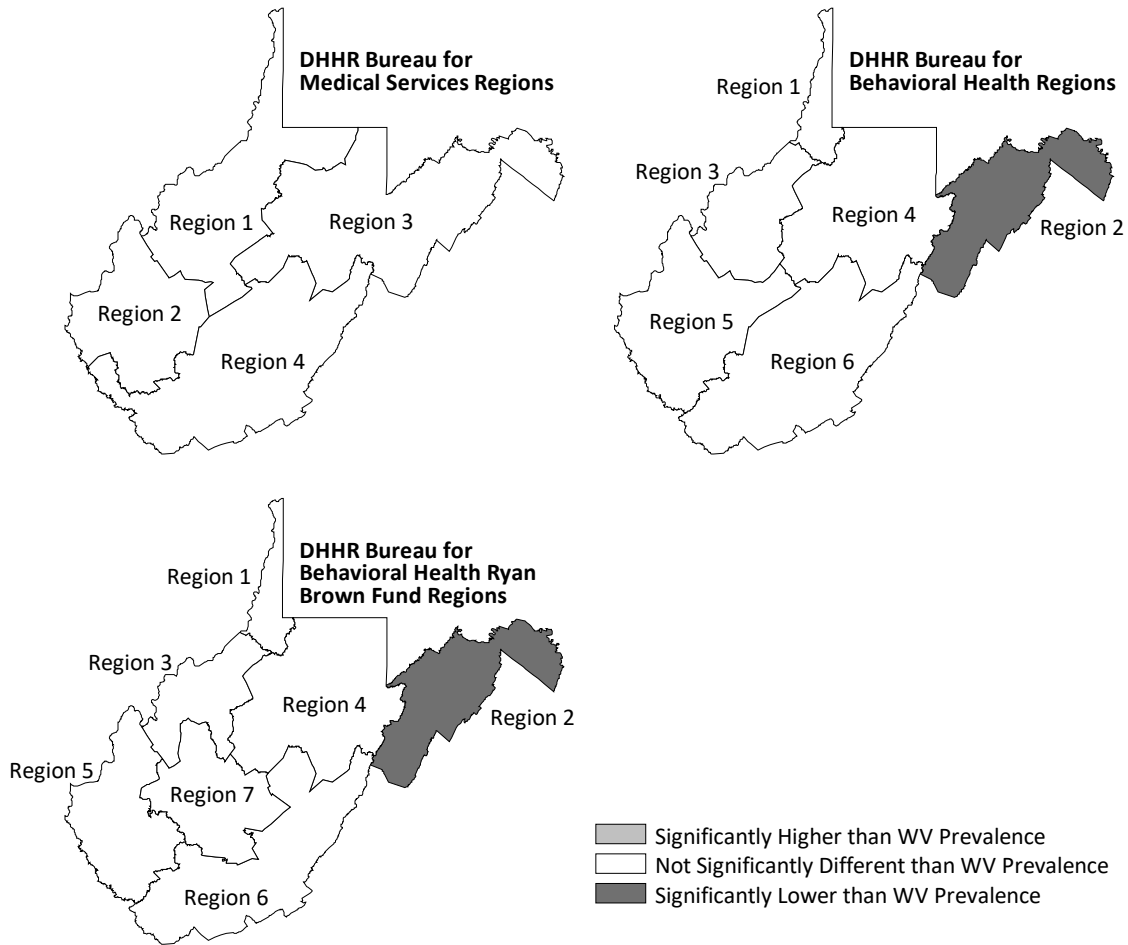
Table 3.9.9: Weighted Prevalence of Cardiovascular Disease by Demographic Characteristics: MATCH, 2021<sup>a</sup>

Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>78,767</b>	<b>12.4</b>	<b>11.2-13.5</b>	<b>59,231</b>	<b>8.9</b>	<b>8.1-9.7</b>	<b>137,998</b>	<b>10.6</b>	<b>9.9-11.3</b>
<b>Age</b>									
18-34	U	U	U	2,077	1.2	0.6-1.9	5,180	1.5	0.8-2.2
35-49	5,066	3.5	2.2-4.8	5,325	3.6	2.5-4.7	10,391	3.5	2.7-4.4
50-64	26,789	15.4	12.8-18.0	17,816	9.7	8.2-11.2	44,605	12.4	11.0-13.9
65+	43,599	31.1	28.0-34.2	33,226	20.7	18.3-23.0	76,825	25.5	23.6-27.5
<b>Education</b>									
Less than HS	13,361	16.0	12.3-19.7	9,542	14.3	11.0-17.5	22,903	15.2	12.7-17.7
HS/GED	34,552	12.1	10.4-13.7	23,291	8.5	7.4-9.5	57,843	10.3	9.3-11.3
Associate's or more	30,277	11.5	9.7-13.3	26,087	8.1	6.9-9.3	56,364	9.6	8.6-10.7
<b>Annual Family Income</b>									
\$15,000 or less	15,014	12.3	9.9-14.8	17,913	12.6	10.7-14.5	32,928	12.4	10.9-14.0
\$15,001-\$35,000	21,249	14.5	11.9-17.1	19,855	11.2	9.4-13.0	41,104	12.7	11.2-14.2
\$35,001-\$50,000	12,603	14.7	11.2-18.1	5,920	7.0	5.1-8.8	18,522	10.8	8.9-12.8
\$50,001-\$85,000	13,916	11.6	8.9-14.2	7,468	6.1	4.4-7.7	21,384	8.8	7.2-10.3
\$85,001+	12,011	8.5	6.4-10.7	4,709	4.2	2.7-5.7	16,720	6.6	5.2-8.0
<b>Race</b>									
White	74,231	12.6	11.4-13.8	55,802	8.9	8.0-9.7	130,033	10.7	10.0-11.4
Black	980	5.9	2.5-9.2	1,780	11.3	6.7-15.8	2,760	8.5	5.7-11.3
Multi-racial or "Other"	3,497	11.8	5.4-18.1	1,466	7.2	3.2-11.3	4,964	9.9	5.8-14.0
<b>Marital Status</b>									
Married/Living with a partner	47,763	13.8	12.1-15.4	22,901	6.3	5.4-7.3	70,665	10.0	9.0-10.9
Widowed/Divorced/Separated	24,078	20.8	17.5-24.0	30,452	17.1	15.1-19.1	54,530	18.6	16.8-20.3
Never married	6,566	3.9	2.5-5.2	5,579	4.5	3.2-5.9	12,145	4.1	3.2-5.1

Note. CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma; U = unstable prevalence estimate.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

Figure 3.9.6: Weighted Prevalence of Cardiovascular Disease by Region: MATCH, 2021<sup>a,b</sup>



Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.  
<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.  
<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

## 3.10 Kidney Disease or Damage

### Item

Responding “Yes” to “Kidney disease/damage” when asked the question, “Have you ever been told by a doctor, nurse, or other healthcare provider that you have any of the following conditions?” Respondents were presented with a list of 13 conditions, which included kidney disease or damage, that they could select as “Yes” or “No.”

### Prevalence

**West Virginia:** 6.6% (95% CI: 6.1-7.2)

### Sex

**Male:** 7.1% (95% CI: 6.2-8.0)

**Female:** 6.2% (95% CI: 5.5-6.9)

There was no significant difference in the prevalence of kidney disease or damage between the sexes.

### Age

The prevalence of kidney disease or damage was significantly higher among adults aged 65 or older (13.6%) than among any other adult age groups.

### Education

The prevalence of kidney disease or damage was significantly higher among adults with less than high school education (12.6%) than among adults with any other educational attainment levels.

### Family Income

The prevalence of kidney disease or damage was significantly higher among adults with an annual family income of \$15,000 or less (9.5%) and \$15,001–\$35,000 (8.2%) than among adults with an annual family income of \$50,001–\$85,000 (4.3%) and \$85,001 or more (2.6%).

### Race

There was no significant difference in the prevalence of kidney disease or damage among racial groups.

### Marital Status

The prevalence of kidney disease or damage was significantly higher among adults who were widowed, divorced, or separated (11.3%) than among adults with any other marital statuses.

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There were no DHHR, Bureau for Medical Services (BMS) regions with a significantly higher prevalence of kidney disease or damage compared to the state estimate. There was one DHHR, BMS region with a significantly lower prevalence compared to the state estimate (6.6%); region three (5.1%).

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There was one DHHR, Bureau for Behavioral Health (BBH) region with a significantly higher prevalence of kidney disease or damage compared to the state estimate (6.6%); region five (8.7%). There was one DHHR, BBH region with a significantly lower prevalence compared to the state estimate; region two (4.2%).

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There were no DHHR, BBH, Ryan Brown Fund (RBF) regions with a significantly higher prevalence of kidney disease or damage compared to the state estimate. There was one DHHR, BBH, RBF region with a significantly lower prevalence compared to the state estimate (6.6%); region two (4.2%).



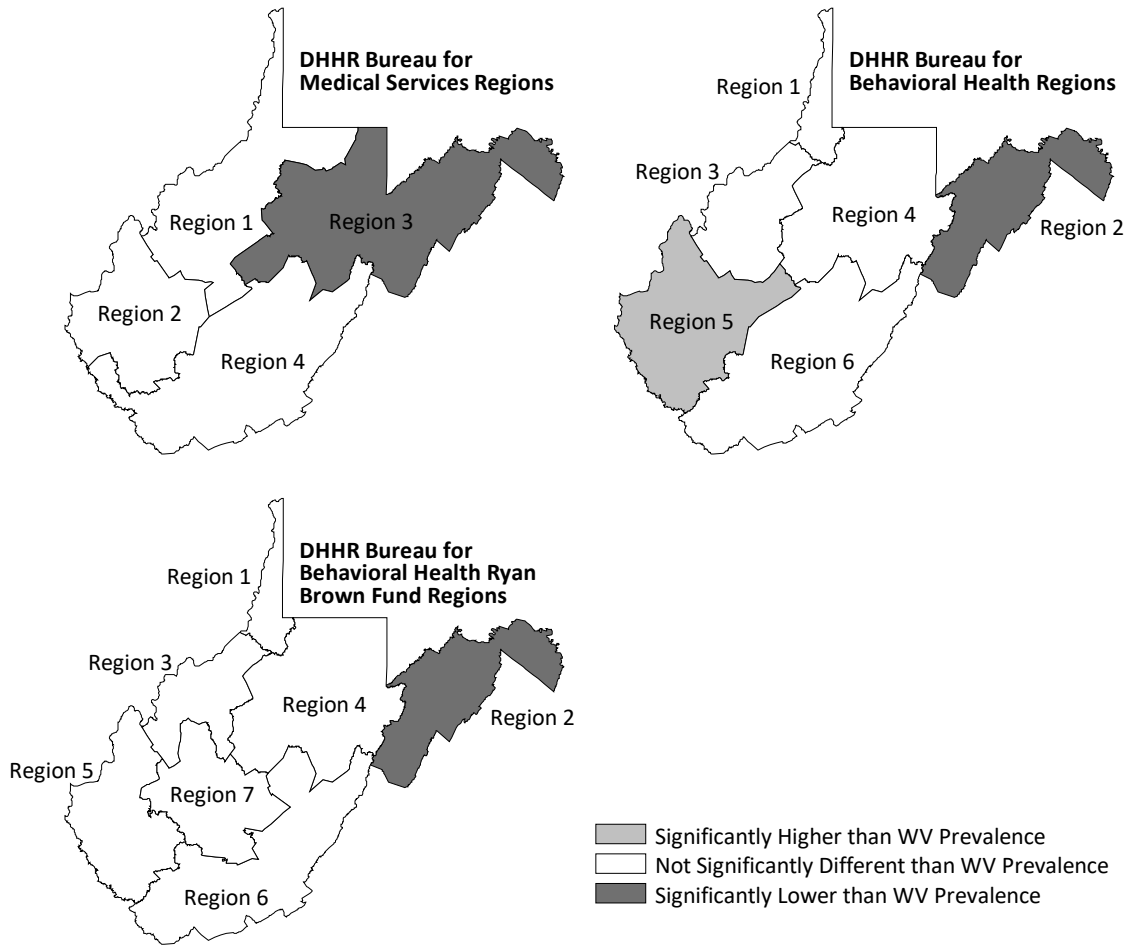
Table 3.10.10: Weighted Prevalence of Kidney Disease or Damage by Demographic Characteristics: MATCH, 2021<sup>a</sup>

Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>44,910</b>	<b>7.1</b>	<b>6.2-8.0</b>	<b>41,069</b>	<b>6.2</b>	<b>5.5-6.9</b>	<b>85,978</b>	<b>6.6</b>	<b>6.1-7.2</b>
<b>Age</b>									
18-34	4,566	2.6	1.1-4.2	3,670	2.2	1.2-3.1	8,237	2.4	1.5-3.3
35-49	6,921	4.8	3.2-6.4	5,705	3.8	2.5-5.2	12,626	4.3	3.2-5.3
50-64	11,958	6.9	5.3-8.5	12,124	6.6	5.2-8.0	24,082	6.8	5.7-7.8
65+	21,253	15.5	13.1-17.9	19,251	12.0	10.2-13.9	40,504	13.6	12.1-15.1
<b>Education</b>									
Less than HS	10,158	12.1	8.8-15.4	8,943	13.2	9.7-16.6	19,100	12.6	10.2-15.0
HS/GED	18,811	6.6	5.3-7.9	16,221	5.9	4.9-6.9	35,032	6.3	5.5-7.1
Associate's or more	15,372	5.8	4.6-7.1	15,717	4.9	4.0-5.9	31,089	5.3	4.6-6.1
<b>Annual Family Income</b>									
\$15,000 or less	12,684	10.4	8.0-12.8	12,337	8.7	7.0-10.4	25,021	9.5	8.1-10.9
\$15,001-\$35,000	12,733	8.8	6.6-10.9	13,726	7.7	6.3-9.2	26,459	8.2	6.9-9.5
\$35,001-\$50,000	7,297	8.6	6.0-11.2	6,610	7.8	5.6-10.1	13,907	8.2	6.5-9.9
\$50,001-\$85,000	7,394	6.2	4.2-8.1	3,078	2.5	1.5-3.5	10,472	4.3	3.2-5.4
\$85,001+	3,418	2.4	1.2-3.7	3,082	2.8	1.3-4.3	6,500	2.6	1.6-3.5
<b>Race</b>									
White	40,309	6.9	6.0-7.8	39,125	6.2	5.5-7.0	79,434	6.6	6.0-7.1
Black	2,115	12.7	5.3-20.2	815	5.2	2.8-7.6	2,930	9.1	5.0-13.1
Multi-racial or "Other"	2,448	8.2	3.5-12.9	U	U	U	3,383	6.8	3.8-9.8
<b>Marital Status</b>									
Married/Living with a partner	23,440	6.8	5.6-8.0	16,078	4.5	3.6-5.3	39,518	5.6	4.9-6.3
Widowed/Divorced/Separated	13,311	11.6	9.3-13.9	19,610	11.0	9.4-12.7	32,921	11.3	9.9-12.6
Never married	7,583	4.5	2.9-6.0	4,968	4.1	2.5-5.6	12,551	4.3	3.2-5.4

Note. CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma; U = unstable prevalence estimate.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

Figure 3.10.7: Weighted Prevalence of Kidney Disease or Damage by Region: MATCH, 2021<sup>a,b</sup>



Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.  
<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.  
<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

## 3.11 Liver Disease

### Item

Responding “Yes” to “Liver disease” when asked the question, “Have you ever been told by a doctor, nurse, or other healthcare provider that you have any of the following conditions?” Respondents were presented with a list of 13 conditions, which included liver disease, that they could select as “Yes” or “No.”

### Prevalence

**West Virginia:** 3.4% (95% CI: 3.0-3.9)

### Sex

**Male:** 3.3% (95% CI: 2.7-3.9)

**Female:** 3.6% (95% CI: 3.0-4.2)

There was no significant difference in the prevalence of liver disease between the sexes.

### Age

The prevalence of liver disease was significantly higher among any other adult age groups than among adults aged 18-34 (1.8%).

### Education

The prevalence of liver disease was significantly higher among adults with less than high school education (5.7%) than among adults with any other educational attainment levels.

### Family Income

The prevalence of liver disease was significantly higher among adults with an annual family income of \$15,000 or less (6.5%) than among adults with any other annual family income levels.

### Race

There was no significant difference in the prevalence of liver disease among racial groups with stable estimates. There was an unstable prevalence estimate among racial groups.

### Marital Status

The prevalence of liver disease was significantly higher among adults who were widowed, divorced, or separated (5.3%) than among adults with any other marital statuses.

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There were no DHHR, Bureau for Medical Services (BMS) regions with a significantly higher prevalence of liver disease compared to the state estimate. There was one DHHR, BMS region with a significantly lower prevalence compared to the state estimate (3.4%); region one (2.3%).

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There were no DHHR, Bureau for Behavioral Health (BBH) regions with a significantly higher prevalence of liver disease compared to the state estimate. There was one DHHR, BBH region with a significantly lower prevalence compared to the state estimate (3.4%); region four (2.3%).

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There were no DHHR, BBH, Ryan Brown Fund (RBF) regions with a significantly higher prevalence of liver disease compared to the state estimate. There was one DHHR, BBH, RBF region with a significantly lower prevalence compared to the state estimate (3.4%); region four (2.3%).

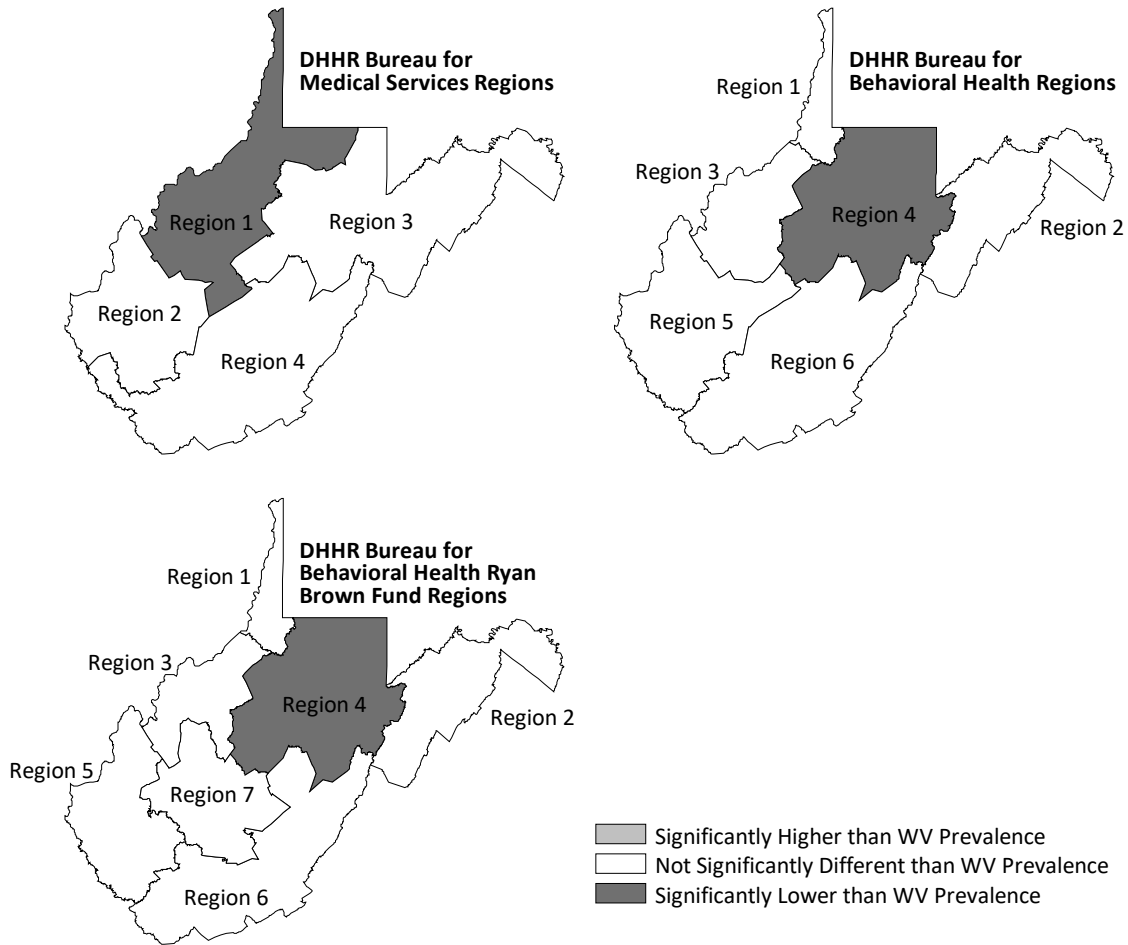
Table 3.11.11: Weighted Prevalence of Liver Disease by Demographic Characteristics: MATCH, 2021<sup>a</sup>

Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>20,773</b>	<b>3.3</b>	<b>2.7-3.9</b>	<b>23,544</b>	<b>3.6</b>	<b>3.0-4.2</b>	<b>44,317</b>	<b>3.4</b>	<b>3.0-3.9</b>
<b>Age</b>									
18-34	U	U	U	3,676	2.2	1.1-3.3	6,193	1.8	1.1-2.5
35-49	6,517	4.5	2.9-6.1	5,401	3.6	2.5-4.7	11,918	4.0	3.1-5.0
50-64	7,041	4.1	2.8-5.3	8,336	4.5	3.1-6.0	15,377	4.3	3.4-5.3
65+	4,608	3.4	2.0-4.8	6,099	3.9	2.8-5.0	10,707	3.7	2.8-4.5
<b>Education</b>									
Less than HS	5,193	6.2	3.7-8.8	3,441	5.1	3.0-7.2	8,634	5.7	4.1-7.4
HS/GED	8,781	3.1	2.3-3.9	8,229	3.0	2.3-3.7	17,010	3.1	2.5-3.6
Associate's or more	6,720	2.6	1.6-3.6	11,680	3.7	2.7-4.7	18,400	3.2	2.5-3.9
<b>Annual Family Income</b>									
\$15,000 or less	8,222	6.7	4.7-8.8	8,783	6.2	4.8-7.7	17,005	6.5	5.2-7.7
\$15,001-\$35,000	5,675	3.9	2.5-5.3	6,014	3.4	2.3-4.5	11,689	3.6	2.8-4.5
\$35,001-\$50,000	U	U	U	3,380	4.0	2.0-6.0	4,438	2.6	1.5-3.8
\$50,001-\$85,000	2,543	2.1	1.0-3.2	1,634	1.3	0.7-2.0	4,176	1.7	1.1-2.4
\$85,001+	U	U	U	U	U	U	5,742	2.3	1.2-3.4
<b>Race</b>									
White	18,268	3.1	2.5-3.8	22,567	3.6	3.0-4.2	40,835	3.4	2.9-3.8
Black	U	U	U	U	U	U	U	U	U
Multi-racial or "Other"	U	U	U	U	U	U	2,401	4.8	2.3-7.3
<b>Marital Status</b>									
Married/Living with a partner	9,459	2.8	2.0-3.5	11,633	3.2	2.4-4.1	21,092	3.0	2.4-3.6
Widowed/Divorced/Separated	6,749	5.9	4.1-7.8	8,668	5.0	3.7-6.2	15,417	5.3	4.3-6.4
Never married	4,245	2.5	1.3-3.7	2,826	2.3	1.1-3.5	7,071	2.4	1.6-3.3

Note. CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma; U = unstable prevalence estimate.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

Figure 3.11.8: Weighted Prevalence of Liver Disease by Region: MATCH, 2021<sup>a,b</sup>



Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.  
<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.  
<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

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## 3.12 Chronic Pain

### Item

Responding “Yes” to “Chronic pain” when asked the question, “Have you ever been told by a doctor, nurse, or other healthcare provider that you have any of the following conditions?” Respondents were presented with a list of 13 conditions, which included chronic pain, that they could select as “Yes” or “No.”

### Prevalence

**West Virginia:** 26.1% (95% CI: 25.1-27.1)

### Sex

**Male:** 25.2% (95% CI: 23.5-26.8)

**Female:** 27.0% (95% CI: 25.7-28.3)

There was no significant difference in the prevalence of chronic pain between the sexes.

### Age

The prevalence of chronic pain was significantly higher among adults aged 50-64 (34.6%) and 65 or older (32.2%) than among any other adult age groups. The prevalence was significantly lower among adults aged 18-34 (10.9%) than among any other adult age groups.

### Education

The prevalence of chronic pain was significantly higher among adults with less than high school education (41.6%) than among adults with any other educational attainment levels. The prevalence was significantly lower among adults with an associate’s or more education (21.1%) than among adults with any other educational attainment levels.

### Family Income

The prevalence of chronic pain was significantly higher among adults with an annual family income of \$15,000 or less (41.2%) than among adults with any other annual family income levels. The prevalence was significantly lower among adults with an annual family income of \$85,001 or more (12.6%) than among adults with any other annual family income levels.

### Race

There was no significant difference in the prevalence of chronic pain among racial groups.

### Marital Status

The prevalence of chronic pain was significantly higher among adults who were widowed, divorced, or separated (39.1%) than among adults with any other marital statuses. The prevalence was significantly lower among adults who never married (18.4%) than among adults with any other marital statuses.

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There was one DHHR, Bureau for Medical Services (BMS) region with a significantly higher prevalence of chronic pain compared to the state estimate (26.1%); region four (32.6%). There were no DHHR, BMS regions with a significantly lower prevalence compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There was one DHHR, Bureau for Behavioral Health (BBH) region with a significantly higher prevalence of chronic pain compared to the state estimate (26.1%); region six (31.9%). There was one DHHR, Bureau for Behavioral Health BBH region with a significantly lower prevalence compared to the state estimate; region four (22.2%).

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There was one DHHR, BBH, Ryan Brown Fund (RBF) region with a significantly higher prevalence of chronic pain compared to the state estimate (26.1%); region six (32.1%). There was one DHHR, BBH, RBF region with a significantly lower prevalence compared to the state estimate; region four (22.2%).



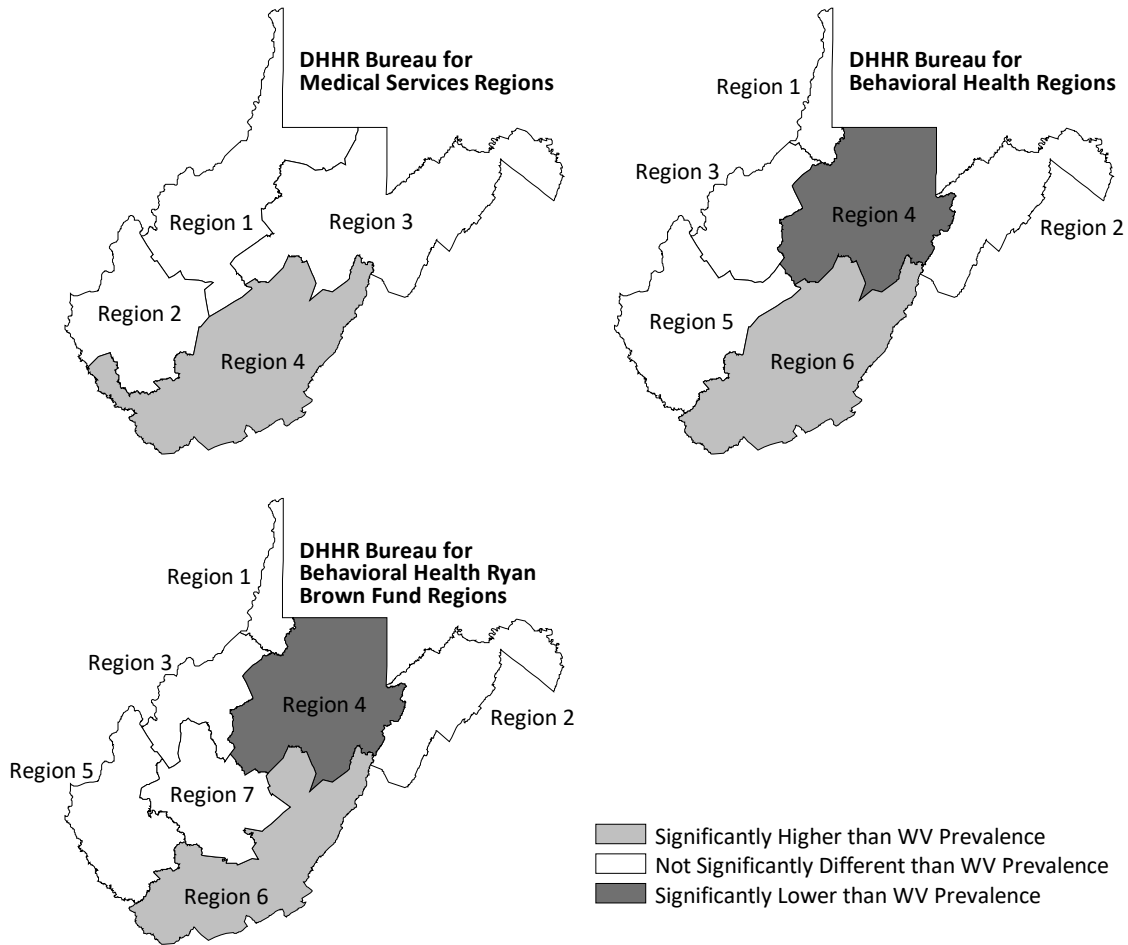
Table 3.12.12: Weighted Prevalence of Chronic Pain by Demographic Characteristics: MATCH, 2021<sup>a</sup>

Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>161,482</b>	<b>25.2</b>	<b>23.5-26.8</b>	<b>182,370</b>	<b>27.0</b>	<b>25.7-28.3</b>	<b>343,852</b>	<b>26.1</b>	<b>25.1-27.1</b>
<b>Age</b>									
18-34	17,093	9.8	7.4-12.3	20,230	12.1	9.9-14.2	37,324	10.9	9.3-12.6
35-49	39,354	26.7	23.0-30.4	41,087	27.1	24.3-29.8	80,441	26.9	24.6-29.2
50-64	61,751	34.6	31.4-37.9	65,034	34.5	31.8-37.3	126,784	34.6	32.5-36.7
65+	42,447	30.6	27.5-33.6	55,146	33.6	30.8-36.4	97,593	32.2	30.2-34.3
<b>Education</b>									
Less than HS	35,956	41.8	36.5-47.1	29,048	41.4	36.7-46.1	65,003	41.6	38.0-45.2
HS/GED	79,506	27.6	25.1-30.0	72,707	26.1	24.3-28.0	152,213	26.9	25.3-28.4
Associate's or more	44,334	16.8	14.6-19.0	79,549	24.5	22.5-26.6	123,883	21.1	19.5-22.6
<b>Annual Family Income</b>									
\$15,000 or less	52,915	42.0	38.1-45.9	59,121	40.6	37.6-43.6	112,036	41.2	38.8-43.7
\$15,001-\$35,000	43,462	29.4	25.8-32.9	59,642	32.9	30.2-35.7	103,104	31.3	29.1-33.5
\$35,001-\$50,000	20,453	23.8	19.4-28.1	18,793	21.9	18.4-25.4	39,246	22.8	20.0-25.6
\$50,001-\$85,000	23,530	19.4	16.0-22.9	21,155	17.0	14.3-19.7	44,685	18.2	16.0-20.4
\$85,001+	15,493	11.1	8.4-13.9	16,264	14.5	11.3-17.7	31,757	12.6	10.5-14.7
<b>Race</b>									
White	146,841	24.8	23.1-26.4	171,854	26.9	25.5-28.3	318,695	25.9	24.8-27.0
Black	3,904	22.8	16.1-29.6	4,137	26.1	20.0-32.3	8,041	24.4	19.8-29.1
Multi-racial or "Other"	10,298	34.0	25.1-42.9	6,100	29.7	22.2-37.1	16,398	32.2	26.2-38.3
<b>Marital Status</b>									
Married/Living with a partner	85,412	24.5	22.3-26.7	84,557	23.1	21.3-24.9	169,969	23.8	22.4-25.2
Widowed/Divorced/Separated	45,240	38.3	34.4-42.2	72,467	39.7	37.0-42.3	117,707	39.1	36.9-41.4
Never married	29,828	17.3	14.4-20.2	24,694	20.0	17.0-23.0	54,522	18.4	16.3-20.5

Note. CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

Figure 3.12.9: Weighted Prevalence of Chronic Pain by Region: MATCH, 2021<sup>a,b</sup>



Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.  
<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.  
<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

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# Chapter 4: Poor Health Limitations

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## 4.1 Difficulty Performing Daily Activities

### Item

Responding “Yes” to the question, “Because of a physical, mental, or emotional condition, do you have serious difficulty performing your daily activities? This includes things like bathing, climbing stairs, or doing errands alone.”

### Prevalence

**West Virginia:** 20.4% (95% CI: 19.5-21.3)

### Sex

**Male:** 20.4% (95% CI: 18.9-21.9)

**Female:** 20.3% (95% CI: 19.2-21.5)

There was no significant difference in the prevalence of serious difficulty performing daily activities between the sexes.

### Age

The prevalence of serious difficulty performing daily activities was significantly higher among adults aged 50-64 (22.8%) and 65 or older (24.0%) than among adults aged 18-34 (15.2%).

### Education

The prevalence of serious difficulty performing daily activities was significantly higher among adults with less than high school education (38.5%) than among adults with any other educational attainment levels. The prevalence was significantly lower among adults with an associate’s or more education (13.2%) than among adults with any other educational attainment levels.

### Family Income

The prevalence of serious difficulty performing daily activities was significantly higher among adults with an annual family income of \$15,000 or less (36.6%) than among adults with any other annual family income levels. The prevalence was significantly lower among adults with an annual family income of \$85,001 or more (6.2%) than among adults with any other annual family income levels.

### Race

There was no significant difference in the prevalence of serious difficulty performing daily activities among racial groups.

## Marital Status

The prevalence of serious difficulty performing daily activities was significantly higher among adults who were widowed, divorced, or separated (30.6%) than among adults with any other marital statuses. The prevalence was significantly lower among adults who were married or living with a partner (15.0%) than among adults with any other marital statuses.

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There was one DHHR, Bureau for Medical Services (BMS) region with a significantly higher prevalence of serious difficulty performing daily activities compared to the state estimate (20.4%); region four (24.9%). There was one DHHR, BMS region with a significantly lower prevalence compared to the state estimate; region one (17.5%).

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There was one DHHR, Bureau for Behavioral Health (BBH) region with a significantly higher prevalence of serious difficulty performing daily activities compared to the state estimate (20.4%); region six (24.5%). There was one DHHR, BBH region with a significantly lower prevalence compared to the state estimate; region three (16.8%).

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There was one DHHR, BBH, Ryan Brown Fund (RBF) region with a significantly higher prevalence of serious difficulty performing daily activities compared to the state estimate (20.4%); region six (25.1%). There was one DHHR, BBH, RBF region with a significantly lower prevalence compared to the state estimate; region three (16.2%).

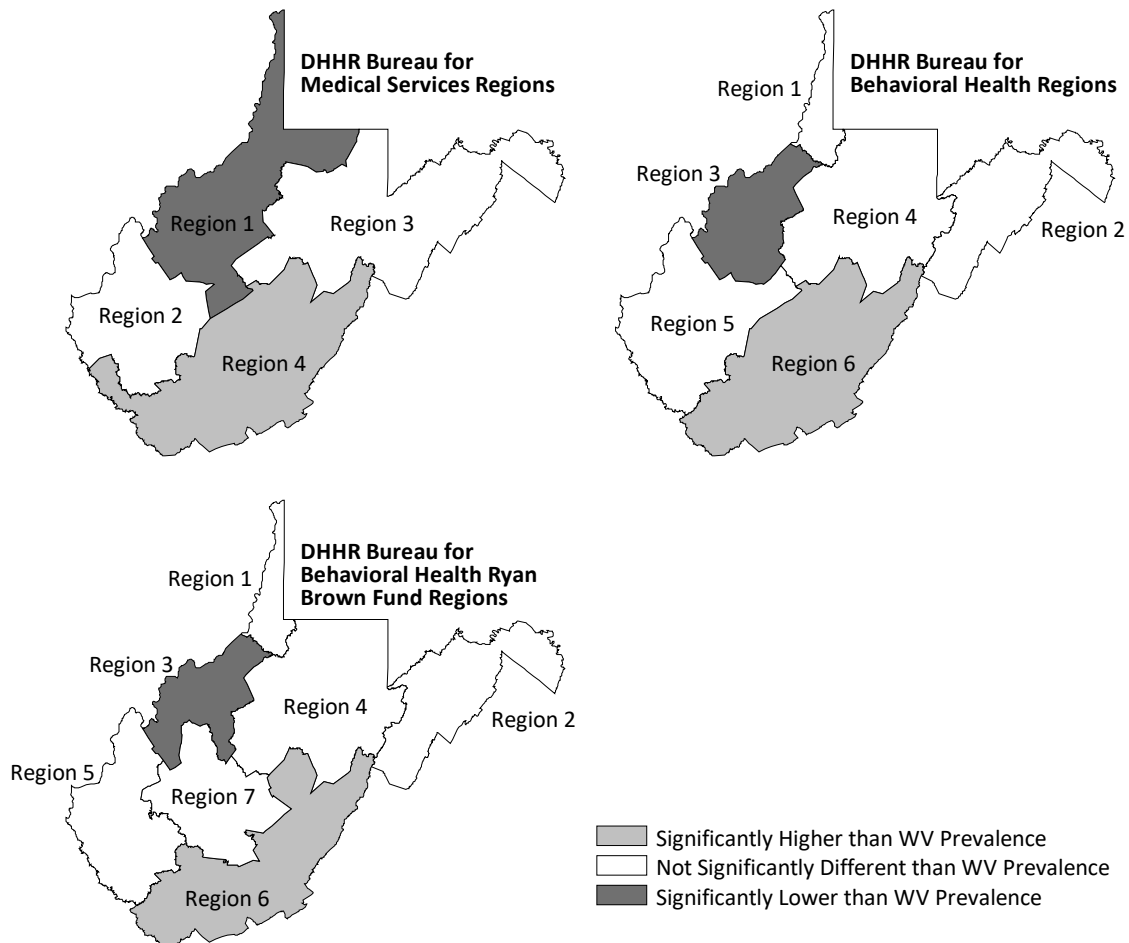
*Table 4.1.1: Weighted Prevalence of Serious Difficulty Performing Daily Activities by Demographic Characteristics: MATCH, 2021<sup>a</sup>*

Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>137,134</b>	<b>20.4</b>	<b>18.9-21.9</b>	<b>143,337</b>	<b>20.3</b>	<b>19.2-21.5</b>	<b>280,471</b>	<b>20.4</b>	<b>19.5-21.3</b>
<b>Age</b>									
18-34	28,057	16.0	12.7-19.3	24,706	14.5	12.3-16.7	52,763	15.2	13.2-17.2
35-49	29,930	20.0	16.8-23.2	28,440	18.4	16.1-20.7	58,370	19.2	17.2-21.1
50-64	43,715	23.6	20.8-26.3	42,960	22.1	19.9-24.3	86,675	22.8	21.1-24.6
65+	34,611	22.2	19.5-24.9	46,287	25.6	23.2-28.0	80,898	24.0	22.2-25.8
<b>Education</b>									
Less than HS	35,553	38.7	33.6-43.9	28,214	38.1	33.7-42.6	63,767	38.5	35.0-41.9
HS/GED	67,543	22.4	20.2-24.6	66,457	22.6	20.9-24.4	134,001	22.5	21.1-23.9
Associate's or more	32,724	11.9	10.0-13.8	47,675	14.3	12.7-15.8	80,398	13.2	12.0-14.4
<b>Annual Family Income</b>									
\$15,000 or less	49,257	37.5	33.7-41.2	54,059	35.9	33.0-38.7	103,317	36.6	34.3-38.9
\$15,001-\$35,000	44,112	28.1	24.6-31.7	49,833	26.4	23.9-28.8	93,945	27.2	25.1-29.3
\$35,001-\$50,000	14,222	15.5	12.1-18.9	12,916	14.1	11.3-16.8	27,137	14.8	12.6-17.0
\$50,001-\$85,000	15,572	12.5	9.5-15.4	12,764	9.9	7.8-12.0	28,337	11.2	9.4-13.0
\$85,001+	8,556	6.0	3.6-8.4	7,409	6.4	4.4-8.4	15,964	6.2	4.6-7.8
<b>Race</b>									
White	124,775	20.1	18.5-21.6	133,150	20.0	18.8-21.2	257,925	20.0	19.1-21.0
Black	4,498	25.4	17.9-32.9	3,965	23.2	17.4-29.1	8,464	24.4	19.6-29.1
Multi-racial or "Other"	7,580	25.0	16.5-33.5	5,957	28.7	21.4-36.0	13,537	26.5	20.6-32.3
<b>Marital Status</b>									
Married/Living with a partner	58,492	16.0	14.3-17.8	53,283	14.0	12.7-15.4	111,774	15.0	13.9-16.1
Widowed/Divorced/Separated	38,087	29.7	26.2-33.3	60,869	31.1	28.7-33.6	98,956	30.6	28.5-32.6
Never married	39,615	22.5	19.2-25.9	28,398	22.6	19.5-25.6	68,012	22.5	20.2-24.9

*Note.* CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

Figure 4.1.1: Weighted Prevalence of Serious Difficulty Performing Daily Activities by Region: MATCH, 2021<sup>a,b</sup>



Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

## 4.2 Reasons for Difficulty Performing Daily Activities

### Item

Responding “Yes” to the question, “Because of a physical, mental, or emotional condition, do you have serious difficulty performing your daily activities? This includes things like bathing, climbing stairs, or doing errands alone.” and then responding one of “Mostly physical health,” “Mostly mental health,” or “Both physical and mental health equally” to the question, “Is that mostly due to physical health, mostly due to mental health, or due to both equally?” *The prevalence estimates excluded adults responding “No” to the first stated question.*

### Prevalence

**Mostly Physical Health:** 57.1% (95% CI: 54.6-59.6)

**Mostly Mental Health:** 15.7% (95% CI: 13.6-17.8)

**Both Equally:** 27.1% (95% CI: 25.0-29.3)

### Sex

**Mostly Physical Health:** There was no significant difference in the prevalence of serious difficulty performing daily activities mostly because of physical health between the sexes.

**Mostly Mental Health:** There was no significant difference in the prevalence of serious difficulty performing daily activities mostly because of mental health between the sexes.

**Both Equally:** There was no significant difference in the prevalence of serious difficulty performing daily activities because of physical and mental health equally between the sexes.

### Age

**Mostly Physical Health:** The prevalence of serious difficulty performing daily activities mostly because of physical health was significantly higher among adults aged 65 or older (86.5%) than among any other adult age groups. The prevalence was significantly lower among adults aged 18-34 (19.1%) than among any other adult age groups.

**Mostly Mental Health:** The prevalence of serious difficulty performing daily activities mostly because of mental health was significantly higher among adults aged 18-34 (52.1%) than among any other adult age groups.

**Both Equally:** The prevalence of serious difficulty performing daily activities because of physical and mental health equally was significantly higher among adults aged 35-49 (45.0%) than among any other adult age groups. The prevalence was significantly lower among adults aged 65 or older (11.6%) than among any other adult age groups.

### Education

**Mostly Physical Health:** The prevalence of serious difficulty performing daily activities mostly because of physical health was significantly higher among adults with an associate’s or more education (64.4%) than among adults with a high school or General Equivalency Diploma (GED) education (52.8%).

**Mostly Mental Health:** There was no significant difference in the prevalence of serious difficulty performing daily activities mostly because of mental health among educational attainment levels.

**Both Equally:** The prevalence of serious difficulty performing daily activities because of physical and mental health equally was significantly higher among adults with less than high school education (29.9%) and high school or GED education (30.1%) than among adults with an associate's or more education (20.4%).

## Family Income

**Mostly Physical Health:** The prevalence of serious difficulty performing daily activities mostly because of physical health was significantly higher among any other annual family income levels than among adults with an annual family income of \$15,000 or less (47.2%).

**Mostly Mental Health:** There was no significant difference in the prevalence of serious difficulty performing daily activities mostly because of mental health among annual family income levels with stable estimates. There was an unstable prevalence estimate among annual family income levels.

**Both Equally:** The prevalence of serious difficulty performing daily activities because of physical and mental health equally was significantly higher among adults with an annual family income of \$15,000 or less (38.2%) than among adults with any other annual family income levels.

## Race

**Mostly Physical Health:** The prevalence of serious difficulty performing daily activities mostly because of physical health was significantly higher among adults who were White (58.2%) than among adults who were multi-racial or "other" (38.0%).

**Mostly Mental Health:** There was no significant difference in the prevalence of serious difficulty performing daily activities mostly because of mental health among racial groups with stable estimates. There was an unstable prevalence estimate among racial groups.

**Both Equally:** There was no significant difference in the prevalence of serious difficulty performing daily activities because of physical and mental health equally among racial groups.

## Marital Status

**Mostly Physical Health:** The prevalence of serious difficulty performing daily activities mostly because of physical health was significantly higher among adults who were married or living with a partner (62.0%) and widowed, divorced, or separated (67.9%) than among adults who were never married (34.1%).

**Mostly Mental Health:** The prevalence of serious difficulty performing daily activities mostly because of mental health was significantly higher among adults who were never married (32.2%) than among adults with any other marital statuses. The prevalence was significantly lower among adults who were widowed, divorced, or separated (6.4%) than among adults with any other marital statuses.

**Both Equally:** The prevalence of serious difficulty performing daily activities because of physical and mental health equally was significantly higher among adults who were never married (33.7%) than among adults who were married or living with a partner (24.1%).



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## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

**Mostly Physical Health:** There was no significant difference in the prevalence of serious difficulty performing daily activities mostly because of physical health among DHHR, Bureau for Medical Services (BMS) regions compared to the state estimate.

**Mostly Mental Health:** There was no significant difference in the prevalence of serious difficulty performing daily activities mostly because of mental health among DHHR, BMS regions compared to the state estimate.

**Both Equally:** There was no significant difference in the prevalence of serious difficulty performing daily activities because of physical and mental health equally among DHHR, BMS regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

**Mostly Physical Health:** There was no significant difference in the prevalence of serious difficulty performing daily activities mostly because of physical health among DHHR, Bureau for Behavioral Health (BBH) regions compared to the state estimate.

**Mostly Mental Health:** There was no significant difference in the prevalence of serious difficulty performing daily activities mostly because of mental health among DHHR, BBH regions compared to the state estimate.

**Both Equally:** There was no significant difference in the prevalence of serious difficulty performing daily activities because of physical and mental health equally among DHHR, BBH regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

**Mostly Physical Health:** There was no significant difference in the prevalence of serious difficulty performing daily activities mostly because of physical health among DHHR, BBH, Ryan Brown Fund (RBF) regions compared to the state estimate.

**Mostly Mental Health:** There was no significant difference in the prevalence of serious difficulty performing daily activities mostly because of mental health among DHHR, BBH, RBF regions compared to the state estimate.

**Both Equally:** There was no significant difference in the prevalence of serious difficulty performing daily activities because of physical and mental health equally among DHHR, BBH, RBF regions compared to the state estimate.

Table 4.2.2: Weighted Prevalence of Reasons for Serious Difficulty Performing Daily Activities by Demographic Characteristics: MATCH, 2021<sup>a,b</sup>

Characteristic	Mostly Physical Health		Mostly Mental Health		Both Equally	
	%	95% CI	%	95% CI	%	95% CI
<b>TOTAL</b>	<b>57.1</b>	<b>54.6-59.6</b>	<b>15.7</b>	<b>13.6-17.8</b>	<b>27.1</b>	<b>25.0-29.3</b>
<b>Sex</b>						
Male	56.8	52.7-60.9	16.1	12.5-19.7	27.1	23.6-30.6
Female	57.5	54.4-60.6	15.3	13.0-17.7	27.2	24.4-29.9
<b>Age</b>						
18-34	19.1	13.4-24.9	52.1	45.0-59.3	28.8	22.5-35.0
35-49	35.1	29.7-40.4	19.9	15.1-24.8	45.0	39.4-50.5
50-64	68.5	64.6-72.5	3.3	1.9-4.6	28.2	24.4-32.0
65+	86.5	83.9-89.2	1.9	0.9-2.9	11.6	9.1-14.0
<b>Education</b>						
Less than HS	56.3	50.4-62.2	13.9	8.7-19.1	29.9	24.7-35.0
HS/GED	52.8	49.3-56.3	17.1	14.1-20.0	30.1	26.9-33.4
Associate's or more	64.4	59.7-69.1	15.2	11.4-19.0	20.4	16.7-24.1
<b>Annual Family Income</b>						
\$15,000 or less	47.2	43.2-51.1	14.6	11.7-17.5	38.2	34.3-42.2
\$15,001-\$35,000	62.1	57.6-66.5	17.2	13.3-21.0	20.8	17.4-24.2
\$35,001-\$50,000	63.6	55.9-71.4	19.1	12.2-26.1	17.2	11.5-22.9
\$50,001-\$85,000	67.1	59.2-75.1	13.6	7.5-19.7	19.3	12.8-25.7
\$85,001+	61.6	47.3-75.9	U	U	20.9	10.8-31.0
<b>Race</b>						
White	58.2	55.6-60.8	15.4	13.2-17.6	26.3	24.1-28.6
Black	54.9	43.9-66.0	U	U	28.5	19.0-38.0
Multi-racial or "Other"	38.0	25.6-50.5	21.2	9.3-33.2	40.7	28.4-53.1
<b>Marital Status</b>						
Married/Living with a partner	62.0	58.1-65.8	14.0	10.9-17.0	24.1	20.8-27.3
Widowed/Divorced/Separated	67.9	64.2-71.6	6.4	4.5-8.3	25.7	22.3-29.1
Never married	34.1	28.7-39.4	32.2	26.3-38.1	33.7	28.3-39.2

Note. CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma; U = unstable prevalence estimate.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>Denominators in the estimates are based on a response to a preceding question in the survey and were not answered by all respondents. See "Item" section above.

Section 2

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HEALTH BEHAVIOR

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# Chapter 5: Substance Use

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## 5.1 Heavy Drinking

### Item

Responding one or more days to the question, “In the past 30 days, on how many days have you had at least one drink of any alcoholic beverage such as beer, wine, a malt beverage, or liquor?” and reporting a number of drinks that met the threshold for heavy drinking to the question, “In the past 30 days, on the days when you drank, about how many drinks did you drink on the average?” The reported frequency of drinking and quantity of drinks was used to estimate the average number of drinks the respondent had per day during the past month. If the respondent reported their birth sex as male, averaging more than two drinks per day during the past month was considered heavy drinking. If the respondent reported their birth sex as female, averaging more than one drink per day during the past month was considered heavy drinking.

### Prevalence

**West Virginia:** 6.9% (95% CI: 6.3-7.5)

### Sex

**Male:** 7.6% (95% CI: 6.6-8.5)

**Female:** 6.2% (95% CI: 5.5-7.0)

There was no significant difference in the prevalence of heavy drinking in the past 30 days between the sexes.

### Age

The prevalence of heavy drinking in the past 30 days was significantly higher among any other adult age groups than among adults 65 or older (4.3%).

### Education

The prevalence of heavy drinking in the past 30 days was significantly higher among adults with an associate’s or more education (8.0%) than among adults with a high school or Graduate Equivalency Diploma (GED) education (6.1%).

### Family Income

The prevalence of heavy drinking in the past 30 days was significantly higher among adults with an annual family income of \$85,001 or more (9.0%) than among adults with an annual family income of \$15,000 or less (5.6%) and \$15,001-\$35,000 (5.9%).

## Race

There was no significant difference in the prevalence of heavy drinking in the past 30 days among racial groups.

## Marital Status

There was no significant difference in the prevalence of heavy drinking in the past 30 days among marital statuses.

## West Virginia Department of Health and Human Resources (DHHR) Regions

There were no DHHR, Bureau for Medical Services (BMS) regions with a significantly higher prevalence of heavy drinking in the past 30 days compared to the state estimate. There was one DHHR, BMS region with a significantly lower prevalence compared to the state estimate (6.9%); region two (5.0%).

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There were no DHHR, Bureau for Behavioral Health (BBH) regions with a significantly higher prevalence of heavy drinking in the past 30 days compared to the state estimate. There was one DHHR, BBH region with a significantly lower prevalence compared to the state estimate (6.9%); region five (5.0%).

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There was no significant difference in the prevalence of heavy drinking in the past 30 days among DHHR, BBH, Ryan Brown Fund (RBF) regions compared to the state estimate.

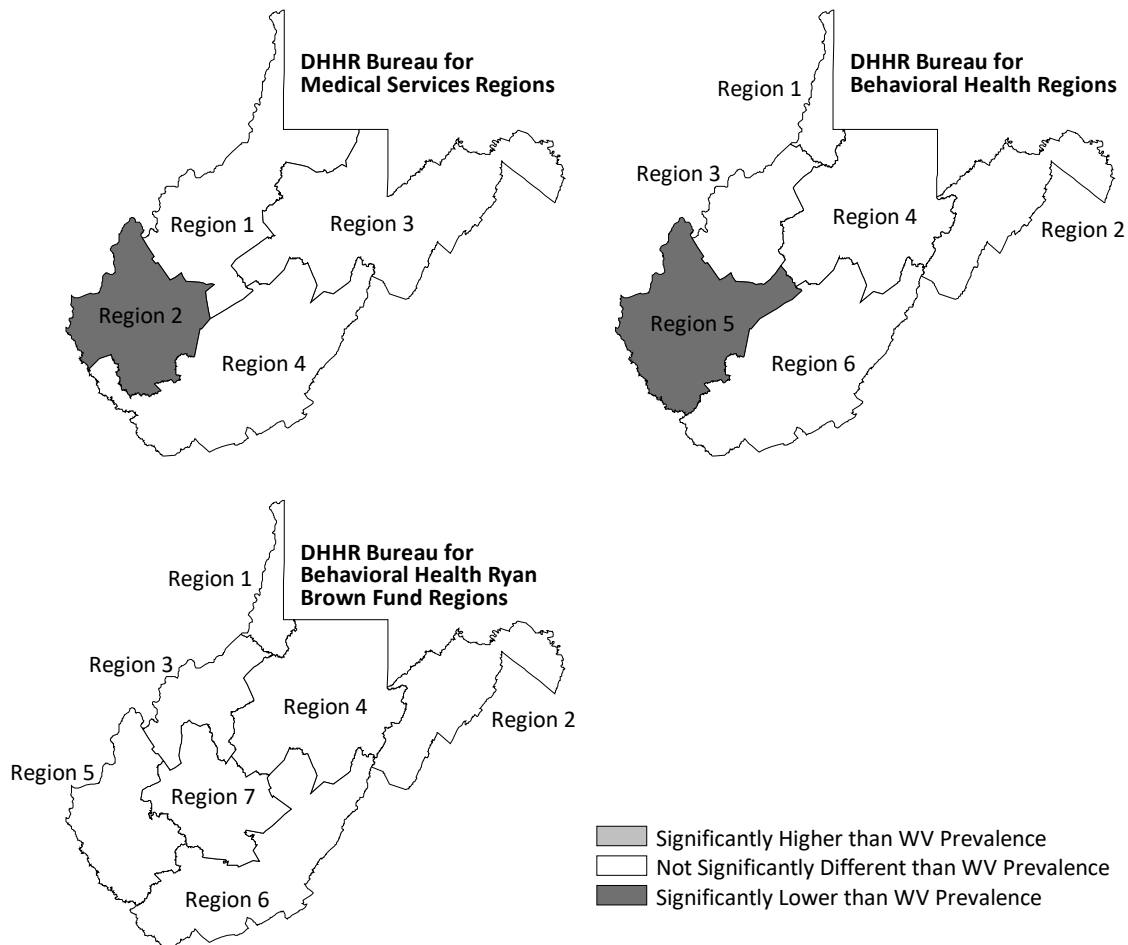
*Table 5.1.1: Weighted Prevalence of Heavy Drinking in the Past 30 Days by Demographic Characteristics: MATCH, 2021<sup>a</sup>*

Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>50,668</b>	<b>7.6</b>	<b>6.6-8.5</b>	<b>43,954</b>	<b>6.2</b>	<b>5.5-7.0</b>	<b>94,622</b>	<b>6.9</b>	<b>6.3-7.5</b>
<b>Age</b>									
18-34	9,957	5.7	3.9-7.5	13,892	8.2	6.4-10.0	23,849	6.9	5.7-8.2
35-49	13,020	8.7	6.3-11.1	12,155	7.9	6.0-9.7	25,175	8.3	6.8-9.8
50-64	18,532	10.0	8.0-12.0	12,183	6.3	4.9-7.6	30,715	8.1	6.9-9.3
65+	8,961	5.8	4.5-7.1	5,694	3.1	2.2-4.0	14,655	4.3	3.6-5.1
<b>Education</b>									
Less than HS	6,373	7.1	4.6-9.6	3,201	4.2	2.3-6.2	9,574	5.8	4.2-7.4
HS/GED	22,638	7.5	6.1-9.0	13,423	4.6	3.6-5.5	36,060	6.1	5.2-6.9
Associate's or more	21,248	7.8	6.3-9.2	27,246	8.1	6.9-9.4	48,494	8.0	7.0-8.9
<b>Annual Family Income</b>									
\$15,000 or less	9,266	7.0	5.1-9.0	6,567	4.3	3.2-5.4	15,833	5.6	4.5-6.6
\$15,001-\$35,000	10,662	6.8	5.2-8.5	9,952	5.2	4.1-6.4	20,614	5.9	5.0-6.9
\$35,001-\$50,000	7,040	7.7	5.2-10.2	6,367	6.9	4.9-8.9	13,408	7.3	5.7-8.9
\$50,001-\$85,000	9,186	7.4	5.0-9.7	10,094	7.9	5.7-10.1	19,280	7.6	6.0-9.2
\$85,001+	12,778	8.9	6.5-11.3	10,451	9.0	6.7-11.4	23,228	9.0	7.3-10.7
<b>Race</b>									
White	47,683	7.7	6.7-8.7	40,905	6.1	5.4-6.9	88,588	6.9	6.3-7.5
Black	1,303	7.5	4.3-10.7	1,108	6.7	2.7-10.6	2,411	7.1	4.6-9.6
Multi-racial or "Other"	1,663	5.5	2.4-8.7	1,932	9.4	4.6-14.1	3,595	7.1	4.4-9.8
<b>Marital Status</b>									
Married/Living with a partner	28,103	7.7	6.4-9.1	25,216	6.6	5.5-7.7	53,319	7.2	6.3-8.0
Widowed/Divorced/Separated	10,328	8.2	6.2-10.1	10,665	5.4	4.3-6.6	20,993	6.5	5.5-7.6
Never married	11,614	6.6	4.8-8.5	7,678	6.1	4.5-7.7	19,292	6.4	5.1-7.7

*Note.* CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

Figure 5.1.1: Weighted Prevalence of Heavy Drinking in the Past 30 Days by Region: MATCH, 2021<sup>a,b</sup>



Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

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## 5.2 Binge Drinking

### Item

Responding one or more days to the question, “In the past 30 days, on how many days have you had at least one drink of any alcoholic beverage such as beer, wine, a malt beverage, or liquor?” and then responding one or more days to the question, “Considering all types of alcoholic beverages, how many times in the past 30 days did you have at least 5 (for men) or 4 (for women) drinks on an occasion?”

### Prevalence

**West Virginia:** 16.0% (95% CI: 15.1-16.9)

### Sex

**Male:** 19.5% (95% CI: 18.0-21.0)

**Female:** 12.7% (95% CI: 11.7-13.7)

The prevalence of binge drinking in the past 30 days was significantly higher among adults who were male (19.5%) than among adults who were female (12.7%).

### Age

The prevalence of binge drinking in the past 30 days was significantly higher among any other adult age groups than among adults aged 65 or older (7.1%).

### Education

The prevalence of binge drinking in the past 30 days was significantly higher among adults with an associate’s or more education (19.5%) than among adults with any other educational attainment levels.

### Family Income

The prevalence of binge drinking in the past 30 days was significantly higher among adults with an annual family income of \$85,001 or more (23.3%) than among adults with any other annual family income levels.

### Race

The prevalence of binge drinking in the past 30 days was significantly higher among adults who were Black (22.2%) than among adults who were White (15.8%).

### Marital Status

There was no significant difference in the prevalence of binge drinking in the past 30 days among marital statuses.



## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There was one DHHR, Bureau for Medical Services (BMS) region with a significantly higher prevalence of binge drinking in the past 30 days compared to the state estimate (16.0%); region one (20.7%). There was one DHHR, BMS region with a significantly lower prevalence compared to the state estimate; region four (13.1%).

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There was one DHHR, Bureau for Behavioral Health (BBH) region with a significantly higher prevalence of binge drinking in the past 30 days compared to the state estimate (16.0%); region four (19.5%). There was one DHHR, BBH region with a significantly lower prevalence compared to the state estimate; region five (13.3%).

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There was one DHHR, BBH, Ryan Brown Fund (RBF) region with a significantly higher prevalence of binge drinking in the past 30 days compared to the state estimate (16.0%); region four (19.5%). There was one DHHR, BBH, RBF region with a significantly lower prevalence compared to the state estimate; region five (12.5%).

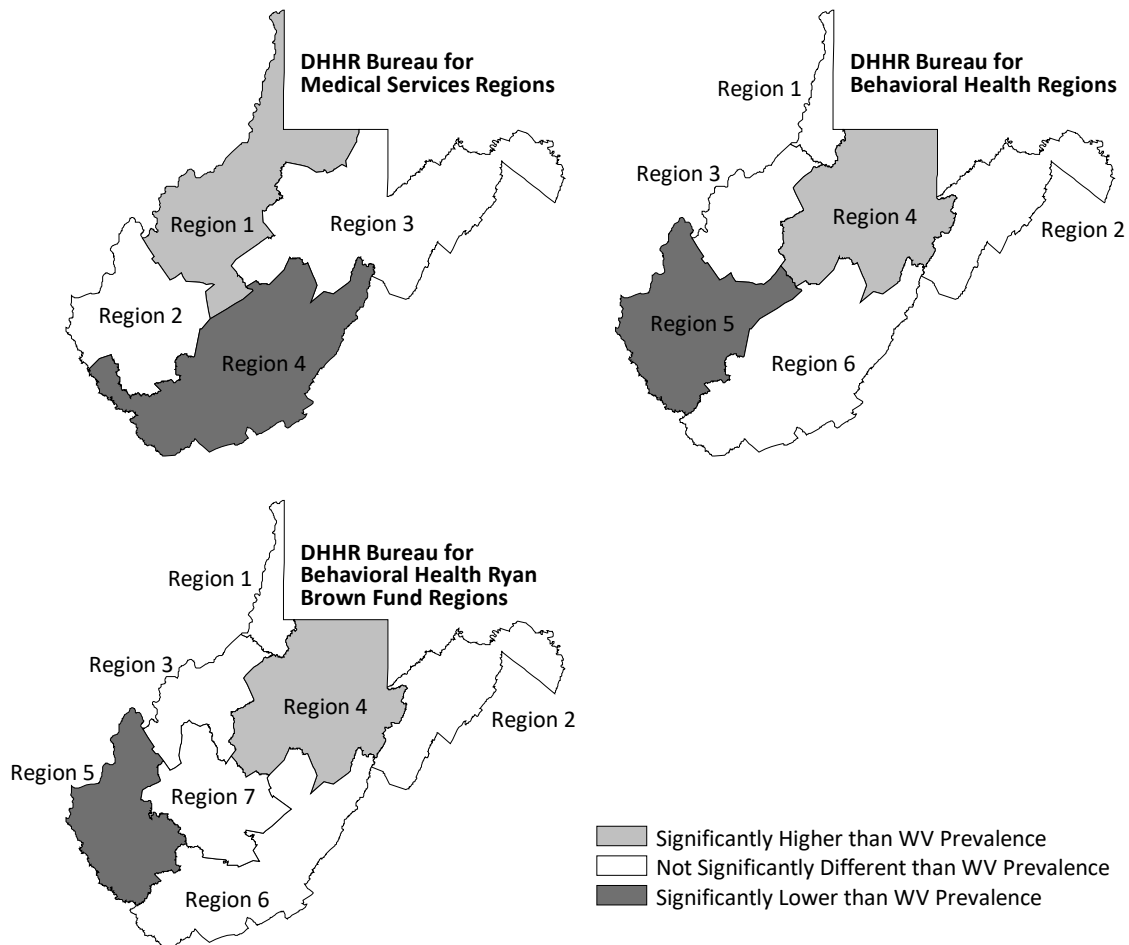
Table 5.2.2: Weighted Prevalence of Binge Drinking in the Past 30 Days by Demographic Characteristics: MATCH, 2021<sup>a</sup>

Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>130,324</b>	<b>19.5</b>	<b>18.0-21.0</b>	<b>89,501</b>	<b>12.7</b>	<b>11.7-13.7</b>	<b>219,825</b>	<b>16.0</b>	<b>15.1-16.9</b>
<b>Age</b>									
18-34	35,421	20.2	16.8-23.5	28,648	17.0	14.6-19.3	64,069	18.6	16.5-20.6
35-49	35,743	23.8	20.1-27.4	28,204	18.2	15.7-20.8	63,947	20.9	18.7-23.2
50-64	42,547	23.0	20.1-25.9	24,382	12.5	10.6-14.5	66,929	17.7	15.9-19.4
65+	16,187	10.5	8.7-12.3	7,958	4.3	3.3-5.3	24,146	7.1	6.1-8.1
<b>Education</b>									
Less than HS	15,134	16.8	13.0-20.6	5,897	7.9	5.5-10.3	21,031	12.7	10.4-15.1
HS/GED	49,447	16.4	14.3-18.5	30,258	10.3	8.9-11.6	79,705	13.4	12.1-14.6
Associate's or more	65,362	23.9	21.3-26.5	53,031	15.8	14.1-17.5	118,393	19.5	18.0-20.9
<b>Annual Family Income</b>									
\$15,000 or less	21,845	16.7	13.8-19.5	14,399	9.4	7.8-11.0	36,244	12.7	11.2-14.3
\$15,001-\$35,000	26,453	16.9	14.0-19.8	21,764	11.4	9.6-13.2	48,218	13.9	12.2-15.5
\$35,001-\$50,000	15,860	17.3	13.5-21.2	12,517	13.6	10.8-16.4	28,377	15.5	13.1-17.9
\$50,001-\$85,000	24,097	19.3	15.8-22.9	18,534	14.4	11.6-17.2	42,630	16.8	14.6-19.1
\$85,001+	39,535	27.5	23.5-31.5	20,775	18.0	14.9-21.2	60,310	23.3	20.6-25.9
<b>Race</b>									
White	121,146	19.5	17.9-21.1	82,341	12.3	11.3-13.4	203,487	15.8	14.9-16.7
Black	4,650	26.8	17.9-35.7	2,889	17.3	11.6-23.0	7,539	22.2	16.8-27.5
Multi-racial or "Other"	4,423	14.8	8.7-20.9	4,064	19.7	13.2-26.1	8,487	16.8	12.3-21.3
<b>Marital Status</b>									
Married/Living with a partner	65,599	18.1	16.1-20.0	50,933	13.4	11.9-14.9	116,532	15.7	14.4-16.9
Widowed/Divorced/Separated	27,674	21.8	18.5-25.1	19,102	9.7	8.2-11.3	46,776	14.5	12.8-16.1
Never married	36,326	20.7	17.4-23.9	18,704	14.8	12.4-17.3	55,029	18.2	16.1-20.4

Note. CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

Figure 5.2.2: Weighted Prevalence of Binge Drinking in the Past 30 Days by Region: MATCH, 2021<sup>a,b</sup>



Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

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## 5.3 Current Cigarette Smoking

### Item

Responding “Every day” or “Some days” to the question, “How often do you now smoke cigarettes?”

### Prevalence

**West Virginia:** 20.6% (95% CI: 19.7-21.6)

### Sex

**Male:** 20.6% (95% CI: 19.1-22.1)

**Female:** 20.7% (95% CI: 19.5-21.8)

There was no significant difference in the prevalence of current cigarette smoking between the sexes.

### Age

The prevalence of current cigarette smoking was significantly higher among adults aged 35-49 (31.5%) than among any other adult age groups. The prevalence was significantly lower among adults aged 65 or older (9.2%) than among any other adult age groups.

### Education

The prevalence of current cigarette smoking was significantly higher among adults with less than high school education (40.7%) than among adults with any other educational attainment levels. The prevalence was significantly lower among adults with an associate’s or more education (11.8%) than among adults with any other educational attainment levels.

### Family Income

The prevalence of current cigarette smoking was significantly higher among adults with an annual family income of \$15,000 or less (42.0%) than among adults with any other annual family income levels. The prevalence was significantly lower among adults with an annual family income of \$85,001 or more (7.4%) than among adults with any other annual family income levels.

### Race

The prevalence of current cigarette smoking was significantly higher among adults who were Black (29.7%) and multi-racial or “other” (29.8%) than among adults who were White (20.1%).

### Marital Status

The prevalence of current cigarette smoking was significantly higher among adults who were widowed, divorced, or separated (27.2%) than among adults with any other marital statuses.

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There was no significant difference in the prevalence of current cigarette smoking among DHHR, Bureau for Medical Services (BMS) regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There were no DHHR, Bureau for Behavioral Health (BBH) regions with a significantly higher prevalence of current cigarette smoking compared to the state estimate. There was one DHHR, BBH region with a significantly lower prevalence compared to the state estimate (20.6%); region two (16.5%).

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There were no DHHR, BBH, Ryan Brown Fund (RBF) regions with a significantly higher prevalence of current cigarette smoking compared to the state estimate. There was one DHHR, BBH, RBF region with a significantly lower prevalence compared to the state estimate (20.6%); region two (16.5%).

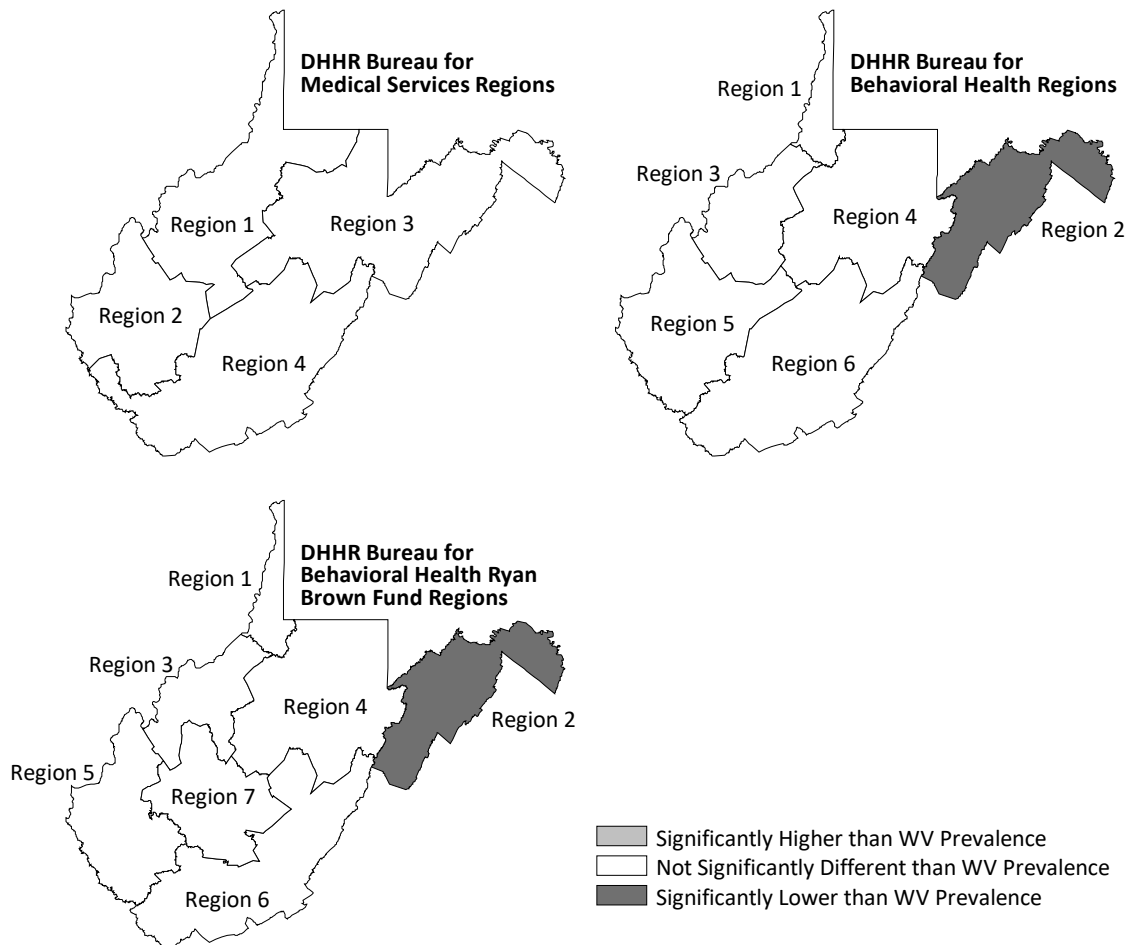
Table 5.3.3: Weighted Prevalence of Current Cigarette Smoking by Demographic Characteristics: MATCH, 2021<sup>a</sup>

Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>139,227</b>	<b>20.6</b>	<b>19.1-22.1</b>	<b>146,920</b>	<b>20.7</b>	<b>19.5-21.8</b>	<b>286,147</b>	<b>20.6</b>	<b>19.7-21.6</b>
<b>Age</b>									
18-34	35,809	20.3	17.0-23.7	38,322	22.6	20.0-25.3	74,131	21.5	19.3-23.6
35-49	48,370	32.1	28.2-36.0	48,068	31.0	28.1-33.9	96,438	31.5	29.1-33.9
50-64	39,819	21.2	18.6-23.8	43,090	21.9	19.8-24.1	82,909	21.6	19.9-23.3
65+	14,713	9.4	7.8-11.0	16,820	9.1	7.6-10.5	31,534	9.2	8.1-10.3
<b>Education</b>									
Less than HS	37,346	40.4	35.3-45.5	31,392	41.1	36.8-45.5	68,739	40.7	37.3-44.1
HS/GED	72,425	23.8	21.5-26.1	70,915	24.0	22.2-25.7	143,340	23.9	22.4-25.3
Associate's or more	28,154	10.2	8.4-12.1	43,903	13.1	11.6-14.6	72,057	11.8	10.6-13.0
<b>Annual Family Income</b>									
\$15,000 or less	60,442	45.4	41.4-49.3	60,433	39.2	36.3-42.0	120,875	42.0	39.6-44.4
\$15,001-\$35,000	37,717	23.9	20.8-27.0	44,897	23.4	21.2-25.7	82,615	23.7	21.8-25.5
\$35,001-\$50,000	13,545	14.7	11.1-18.3	13,754	14.9	12.0-17.8	27,299	14.8	12.5-17.1
\$50,001-\$85,000	13,982	11.1	8.1-14.2	15,243	11.8	9.3-14.2	29,225	11.5	9.5-13.4
\$85,001+	10,244	7.1	4.6-9.6	8,900	7.7	5.4-10.0	19,144	7.4	5.6-9.1
<b>Race</b>									
White	125,441	20.0	18.5-21.6	134,671	20.1	18.9-21.2	260,111	20.1	19.1-21.0
Black	5,421	30.6	23.0-38.2	4,944	28.8	22.1-35.5	10,365	29.7	24.6-34.8
Multi-racial or "Other"	8,112	27.0	19.0-34.9	7,133	33.9	25.9-41.9	15,245	29.8	24.1-35.5
<b>Marital Status</b>									
Married/Living with a partner	60,931	16.6	14.8-18.5	68,778	17.9	16.4-19.4	129,709	17.3	16.1-18.5
Widowed/Divorced/Separated	37,472	29.0	25.5-32.5	51,569	26.1	23.8-28.3	89,041	27.2	25.3-29.2
Never married	40,052	22.6	19.4-25.8	25,937	20.5	17.7-23.4	65,989	21.7	19.5-24.0

Note. CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

Figure 5.3.3: Weighted Prevalence of Current Cigarette Smoking by Region: MATCH, 2021<sup>a,b</sup>



Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

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## 5.4 Recent Marijuana Use

### Item

Responding one or more days to the question, “In the past 30 days, on how many days have you used marijuana or cannabis? Please do not include CBD products. If none, please enter 0.”

### Prevalence

**West Virginia:** 9.9% (95% CI: 9.2-10.7)

### Sex

**Male:** 11.5% (95% CI: 10.2-12.7)

**Female:** 8.4% (95% CI: 7.6-9.3)

The prevalence of marijuana use in the past 30 days was significantly higher among adults who were male (11.5%) than among adults who were female (8.4%).

### Age

The prevalence of marijuana use in the past 30 days was significantly higher among adults aged 18-34 (14.9%) and 35-49 (14.4%) than among any other adult age groups. The prevalence was significantly lower among adults aged 65 or older (2.9%) than among any other adult age groups.

### Education

The prevalence of marijuana use in the past 30 days was significantly higher among adults with less than high school education (14.1%) and high school or Graduate Equivalency Diploma (GED) education (10.6%) than among adults with an associate’s or more education (8.0%).

### Family Income

The prevalence of marijuana use in the past 30 days was significantly higher among adults with an annual family income of \$15,000 or less (17.5%) than among adults with any other annual family income levels.

### Race

The prevalence of marijuana use in the past 30 days was significantly higher among adults who were Black (16.5%) and multi-racial or “other” (16.8%) than among adults who were White (9.4%).

### Marital Status

The prevalence of marijuana use in the past 30 days was significantly higher among adults who were never married (15.7%) than among adults with any other marital statuses.



## The West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There was no significant difference in the prevalence of marijuana use in the past 30 days among DHHR, Bureau for Medical Services (BMS) regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There was no significant difference in the prevalence of marijuana use in the past 30 days among DHHR, Bureau for Behavioral Health (BBH) regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There was no significant difference in the prevalence of marijuana use in the past 30 days among DHHR, BBH, Ryan Brown Fund (RBF) regions compared to the state estimate.

Table 5.4.4: Weighted Prevalence of Marijuana Use In the Past 30 Days by Demographic Characteristics: MATCH, 2021<sup>a</sup>

Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>76,968</b>	<b>11.5</b>	<b>10.2-12.7</b>	<b>59,421</b>	<b>8.4</b>	<b>7.6-9.3</b>	<b>136,388</b>	<b>9.9</b>	<b>9.2-10.7</b>
<b>Age</b>									
18-34	27,794	15.8	12.7-19.0	23,706	14.0	11.7-16.3	51,500	14.9	13.0-16.9
35-49	24,816	16.5	13.4-19.7	18,918	12.2	10.2-14.3	43,734	14.4	12.5-16.2
50-64	17,884	9.6	7.7-11.5	13,083	6.7	5.2-8.3	30,967	8.1	6.9-9.3
65+	6,346	4.1	2.9-5.3	3,358	1.8	1.1-2.5	9,704	2.9	2.2-3.5
<b>Education</b>									
Less than HS	14,978	16.4	12.4-20.5	8,243	11.2	8.3-14.1	23,221	14.1	11.5-16.7
HS/GED	37,406	12.4	10.5-14.3	26,043	8.9	7.6-10.1	63,449	10.6	9.5-11.8
Associate's or more	23,620	8.6	7.0-10.3	24,972	7.4	6.1-8.8	48,592	8.0	6.9-9.0
<b>Annual Family Income</b>									
\$15,000 or less	28,864	22.0	18.7-25.2	20,708	13.6	11.5-15.7	49,572	17.5	15.6-19.4
\$15,001-\$35,000	22,574	14.4	11.4-17.3	18,165	9.6	7.8-11.3	40,740	11.7	10.1-13.4
\$35,001-\$50,000	8,500	9.3	6.3-12.3	6,342	6.9	4.6-9.2	14,842	8.1	6.2-10.0
\$50,001-\$85,000	6,802	5.4	3.6-7.3	6,673	5.2	3.3-7.1	13,474	5.3	4.0-6.6
\$85,001+	8,974	6.2	3.8-8.6	6,741	5.8	3.9-7.7	15,715	6.0	4.4-7.6
<b>Race</b>									
White	67,625	10.9	9.6-12.1	54,048	8.1	7.2-9.0	121,673	9.4	8.7-10.2
Black	3,824	21.7	13.1-30.4	1,797	10.8	7.4-14.3	5,620	16.5	11.5-21.4
Multi-racial or "Other"	5,182	17.1	10.0-24.2	3,431	16.5	10.5-22.4	8,614	16.8	12.0-21.7
<b>Marital Status</b>									
Married/Living with a partner	27,911	7.7	6.3-9.0	26,825	7.0	5.9-8.1	54,735	7.3	6.5-8.2
Widowed/Divorced/Separated	17,369	13.6	11.1-16.2	15,930	8.2	6.7-9.6	33,298	10.3	9.0-11.7
Never married	31,299	17.7	14.5-20.9	16,019	12.8	10.2-15.3	47,318	15.7	13.5-17.8

Note. CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

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## 5.5 Marijuana Use

### Items

Responding “Yes” to “Marijuana (also called cannabis, weed, or hashish)” when asked the question, “In the past 12 months, have you used any of the following?” Respondents were presented with a list of nine substances, which included Marijuana, that they could select as “Yes” or “No.”

### Prevalence

**West Virginia:** 13.0% (95% CI: 12.2-13.9)

### Sex

**Male:** 15.4% (95% CI: 13.9-16.8)

**Female:** 10.8% (95% CI: 9.9-11.8)

The prevalence of marijuana use in the past 12 months was significantly higher among adults who were male (15.4%) than among adults who were female (10.8%).

### Age

The prevalence of marijuana use in the past 12 months was significantly higher among adults aged 18-34 (20.1%) and 35-49 (18.4%) than among any other adult age groups. The prevalence was significantly lower among adults aged 65 or older (4.1%) than among any other adult age groups.

### Education

The prevalence of marijuana use in the past 12 months was significantly higher among adults with less than high school education (16.6%) or Graduate Education Diploma (GED) education (14.2%) than among adults with an associate’s or more education (10.9%).

### Family Income

The prevalence of marijuana use in the past 12 months was significantly higher among adults with an annual family income of \$15,000 or less (22.0%) and \$15,001-\$35,000 (15.3%) than among adults with any other annual family income levels.

### Race

The prevalence of marijuana use in the past 12 months was significantly higher among adults who were Black (20.9%) and multi-racial or “other” (24.8%) than among adults who were White (12.3%).

### Marital Status

The prevalence of marijuana use in the past 12 months was significantly higher among adults who were never married (20.6%) than among adults with any other marital statuses.

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There was no significant difference in the prevalence of marijuana use in the past 12 months among DHHR, Bureau for Medical Services (BMS) regions.

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There was no significant difference in the prevalence of marijuana use in the past 12 months among DHHR, Bureau for Behavioral Health (BBH) regions.

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There were no DHHR, BBH, Ryan Brown Fund (RBF) regions with a significantly higher prevalence of marijuana use in the past 12 months compared to the state estimate. There was one DHHR, BBH, RBF region with a significantly lower prevalence compared to the state estimate (13.0%); region three (9.7%).

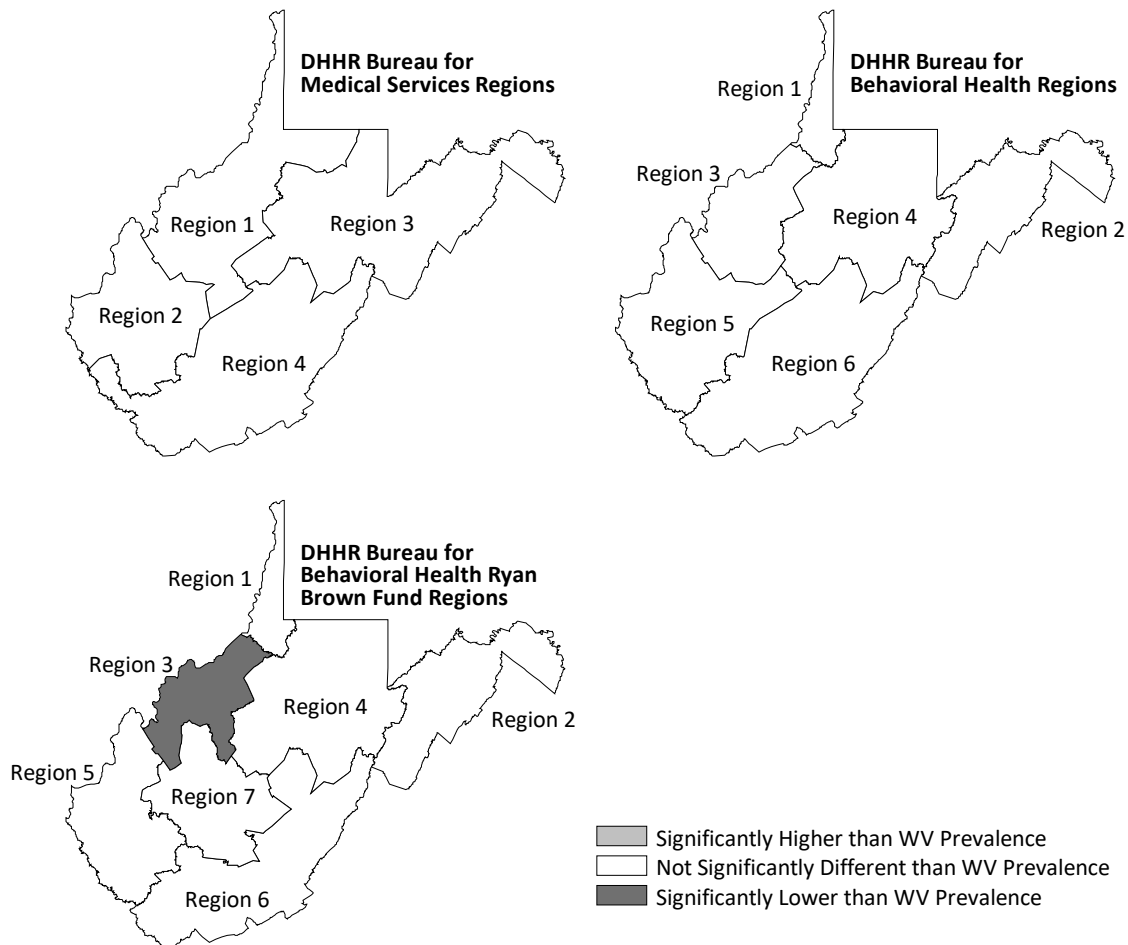
Table 5.5.5: Weighted Prevalence of Marijuana Use In the Past 12 Months by Demographic Characteristics: MATCH, 2021<sup>a</sup>

Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>103,004</b>	<b>15.4</b>	<b>13.9-16.8</b>	<b>76,097</b>	<b>10.8</b>	<b>9.9-11.8</b>	<b>179,101</b>	<b>13.0</b>	<b>12.2-13.9</b>
<b>Age</b>									
18-34	36,972	21.0	17.5-24.6	32,194	19.1	16.5-21.7	69,166	20.1	17.9-22.3
35-49	33,272	22.3	18.7-25.9	22,528	14.6	12.4-16.9	55,800	18.4	16.3-20.5
50-64	23,258	12.6	10.5-14.7	16,248	8.3	6.7-10.0	39,507	10.4	9.1-11.7
65+	9,049	5.8	4.3-7.4	4,654	2.6	1.8-3.4	13,703	4.1	3.2-4.9
<b>Education</b>									
Less than HS	18,401	20.0	15.8-24.2	9,314	12.5	9.6-15.4	27,716	16.6	13.9-19.3
HS/GED	49,253	16.4	14.1-18.6	34,806	11.9	10.5-13.4	84,058	14.2	12.8-15.5
Associate's or more	34,358	12.6	10.6-14.6	31,776	9.5	8.1-11.0	66,134	10.9	9.7-12.1
<b>Annual Family Income</b>									
\$15,000 or less	36,659	27.5	23.9-31.1	26,164	17.1	14.9-19.4	62,823	22.0	19.9-24.1
\$15,001-\$35,000	29,405	18.8	15.5-22.1	23,232	12.4	10.4-14.3	52,637	15.3	13.4-17.1
\$35,001-\$50,000	10,485	11.6	8.2-14.9	8,026	8.8	6.3-11.2	18,512	10.2	8.1-12.2
\$50,001-\$85,000	10,784	8.7	6.1-11.2	9,953	7.7	5.5-9.9	20,737	8.2	6.5-9.9
\$85,001+	13,974	9.7	6.9-12.6	7,550	6.5	4.5-8.5	21,524	8.3	6.5-10.1
<b>Race</b>									
White	89,968	14.5	13.1-15.9	68,637	10.3	9.4-11.3	158,605	12.3	11.5-13.2
Black	4,640	26.2	17.5-35.0	2,579	15.3	11.0-19.6	7,219	20.9	15.8-26.0
Multi-racial or "Other"	8,059	26.6	17.6-35.6	4,724	22.4	15.5-29.2	12,783	24.8	18.8-30.9
<b>Marital Status</b>									
Married/Living with a partner	40,984	11.3	9.6-13.0	34,573	9.1	7.9-10.3	75,557	10.2	9.1-11.2
Widowed/Divorced/Separated	21,264	16.7	13.8-19.5	19,177	9.8	8.2-11.4	40,442	12.5	11.0-14.0
Never married	40,179	22.8	19.3-26.2	21,744	17.4	14.5-20.3	61,922	20.6	18.2-22.9

Note. CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

Figure 5.5.4: Weighted Prevalence of Marijuana Use in the Past 12 Months by Region: MATCH, 2021<sup>a,b</sup>



Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

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## 5.6 Prescription Opioids/Pills

### Item

Responding “Yes” to “Prescription opioids/pills (opioid pain medications, such as hydrocodone, Lorcet®, Vicodin®, oxycodone, Percocet®, Oxycontin®, MS Contin®)” when asked the question, “In the past 12 months, have you used any of the following?” Respondents could select “Yes” or “No” when presented with a list of nine substances that included prescription opioids/pills, that they could select as “Yes” or “No.”

### Prevalence

**West Virginia:** 8.3% (95% CI: 7.6-8.9)

### Sex

**Male:** 8.9% (95% CI: 7.8-9.9)

**Female:** 7.7% (95% CI: 7.0-8.5)

There was no significant difference in the prevalence of prescription opioids/pills use in the past 12 months between the sexes.

### Age

The prevalence of prescription opioids/pills use in the past 12 months was significantly higher among any other adult age groups than among adults aged 18-34 (4.4%).

### Education

There was no significant difference in the prevalence of prescription opioids/pills use in the past 12 months among educational attainment levels.

### Family Income

The prevalence of prescription opioids/pills use in the past 12 months was significantly higher among adults with an annual family income of \$15,000 or less (10.3%) than among adults with an annual family income of \$85,001 or more (6.3%).

### Race

There was no significant difference in the prevalence of prescription opioids/pills use in the past 12 months among racial groups.

### Marital Status

The prevalence of prescription opioids/pills use in the past 12 months was significantly higher among adults who were widowed, divorced, or separated (11.0%) than among adults with any other marital statuses. The prevalence was significantly lower among adults who were never married (5.6%) than among adults with any other marital statuses.

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There was no significant difference in the prevalence of prescription opioids/pills use in the past 12 months among DHHR, Bureau for Medical Services (BMS) regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There was no significant difference in the prevalence of prescription opioids/pills use in the past 12 months among DHHR, Bureau for Behavioral Health (BBH) regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There was no significant difference in the prevalence of prescription opioids/pills use in the past 12 months among DHHR, BBH, Ryan Brown Fund (RBF) regions compared to the state estimate.



Table 5.6.6: Weighted Prevalence of Prescription Opioids/Pills Use in the Past 12 Months by Demographic Characteristics: MATCH, 2021<sup>a</sup>

Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>59,354</b>	<b>8.9</b>	<b>7.8-9.9</b>	<b>54,221</b>	<b>7.7</b>	<b>7.0-8.5</b>	<b>113,575</b>	<b>8.3</b>	<b>7.6-8.9</b>
<b>Age</b>									
18-34	7,208	4.1	2.6-5.6	7,888	4.7	3.4-6.0	15,096	4.4	3.4-5.4
35-49	12,875	8.6	6.2-11.0	9,691	6.3	4.8-7.8	22,566	7.4	6.0-8.8
50-64	21,795	11.8	9.6-14.0	21,638	11.1	9.3-12.9	43,433	11.5	10.0-12.9
65+	16,861	10.9	8.8-13.1	14,527	8.0	6.7-9.3	31,388	9.3	8.1-10.6
<b>Education</b>									
Less than HS	8,456	9.2	6.6-11.9	6,239	8.4	6.1-10.8	14,695	8.9	7.1-10.7
HS/GED	30,080	10.0	8.4-11.7	22,704	7.8	6.7-8.9	52,785	8.9	7.9-9.9
Associate's or more	20,014	7.3	5.8-8.8	25,095	7.5	6.4-8.7	45,108	7.4	6.5-8.4
<b>Annual Family Income</b>									
\$15,000 or less	14,821	11.3	9.0-13.5	14,535	9.5	8.0-11.1	29,356	10.3	9.0-11.7
\$15,001-\$35,000	14,421	9.2	7.1-11.4	17,057	9.1	7.4-10.7	31,477	9.1	7.8-10.5
\$35,001-\$50,000	9,200	10.2	7.3-13.1	4,598	5.1	3.5-6.6	13,799	7.6	6.0-9.3
\$50,001-\$85,000	10,566	8.5	5.7-11.2	8,922	6.9	5.1-8.8	19,489	7.7	6.0-9.3
\$85,001+	8,867	6.2	4.1-8.2	7,557	6.5	4.5-8.6	16,424	6.3	4.9-7.8
<b>Race</b>									
White	54,437	8.8	7.7-9.9	50,854	7.7	6.9-8.5	105,291	8.2	7.5-8.9
Black	1,340	7.6	3.5-11.8	1,118	6.6	4.3-9.0	2,458	7.2	4.8-9.5
Multi-racial or "Other"	3,484	11.5	5.8-17.1	2,092	10.0	5.5-14.5	5,576	10.9	7.0-14.7
<b>Marital Status</b>									
Married/Living with a partner	31,988	8.8	7.4-10.2	28,763	7.6	6.5-8.7	60,751	8.2	7.3-9.1
Widowed/Divorced/Separated	17,205	13.5	10.7-16.2	18,248	9.3	7.9-10.8	35,453	11.0	9.6-12.4
Never married	9,799	5.6	3.9-7.2	7,034	5.6	3.9-7.3	16,832	5.6	4.4-6.8

Note. CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

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## 5.7 Benzodiazepines

### Item

Responding “Yes” to “Benzodiazepines (‘downers’ or ‘benzies’ such as Xanax®, Ativan®, Klonopin®, Valium®)” when asked the question, “In the past 12 months, have you used any of the following?” Respondents were presented with a list of nine substances, which included benzodiazepines, that they could select as “Yes” or “No.”

### Prevalence

**West Virginia:** 6.5% (95% CI: 6.0-7.1)

### Sex

**Male:** 5.0% (95% CI: 4.2-5.8)

**Female:** 8.0% (95% CI: 7.2-8.8)

The prevalence of benzodiazepines use in the past 12 months was significantly higher among adults who were female (8.0%) than among adults who were male (5.0%).

### Age

The prevalence of benzodiazepines use in the past 12 months was significantly higher among adults aged 35-49 (8.8%) and 50-64 (7.4%) than among adults aged 65 or older (5.0%).

### Education

The prevalence of benzodiazepines use in the past 12 months was significantly higher among adults with less than high school education (8.8%) than among adults with an associate’s or more education (5.9%).

### Family Income

The prevalence of benzodiazepines use in the past 12 months was significantly higher among adults with an annual family income of \$15,000 or less (10.1%) than among adults with any other annual family income levels.

### Race

There was no significant difference in the prevalence of benzodiazepines use in the past 12 months among racial groups.

### Marital Status

The prevalence of benzodiazepines use in the past 12 months was significantly higher among adults who were widowed, divorced, or separated (8.5%) than among adults who were married or living with a partner (5.6%).

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There was no significant difference in the prevalence of benzodiazepines use in the past 12 months among DHHR, Bureau for Medical Services (BMS) regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There was no significant difference in the prevalence of benzodiazepines use in the past 12 months among DHHR, Bureau for Behavioral Health (BBH) regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There was no significant difference in the prevalence of benzodiazepines use in the past 12 months among DHHR, BBH, Ryan Brown Fund (RBF) regions compared to the state estimate.

Table 5.7.7: Weighted Prevalence of Benzodiazepines Use in the Past 12 Months by Demographic Characteristics: MATCH, 2021<sup>a</sup>

Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>33,260</b>	<b>5.0</b>	<b>4.2-5.8</b>	<b>56,205</b>	<b>8.0</b>	<b>7.2-8.8</b>	<b>89,466</b>	<b>6.5</b>	<b>6.0-7.1</b>
<b>Age</b>									
18-34	9,146	5.2	3.4-7.0	8,318	5.0	3.5-6.4	17,464	5.1	3.9-6.3
35-49	10,379	6.9	5.0-8.9	16,263	10.6	8.5-12.6	26,642	8.8	7.3-10.2
50-64	8,320	4.5	3.3-5.8	19,529	10.0	8.4-11.7	27,849	7.4	6.3-8.4
65+	5,207	3.4	2.2-4.5	11,761	6.5	5.2-7.8	16,968	5.0	4.2-5.9
<b>Education</b>									
Less than HS	6,576	7.2	4.7-9.7	7,890	10.7	7.9-13.6	14,466	8.8	6.9-10.6
HS/GED	15,411	5.1	4.0-6.3	22,836	7.8	6.7-8.9	38,247	6.5	5.7-7.3
Associate's or more	10,636	3.9	2.7-5.1	25,213	7.6	6.3-8.8	35,849	5.9	5.0-6.8
<b>Annual Family Income</b>									
\$15,000 or less	11,532	8.8	6.6-10.9	17,212	11.3	9.3-13.3	28,744	10.1	8.6-11.6
\$15,001-\$35,000	8,483	5.5	3.7-7.2	14,464	7.7	6.3-9.0	22,947	6.7	5.6-7.8
\$35,001-\$50,000	3,650	4.0	2.2-5.9	6,527	7.1	5.1-9.1	10,176	5.6	4.2-7.0
\$50,001-\$85,000	4,954	4.0	2.3-5.7	8,809	6.8	4.9-8.8	13,764	5.4	4.1-6.7
\$85,001+	3,849	2.7	1.3-4.1	7,761	6.7	4.6-8.8	11,610	4.5	3.3-5.7
<b>Race</b>									
White	30,808	5.0	4.2-5.8	53,000	8.0	7.1-8.8	83,808	6.5	5.9-7.1
Black	U	U	U	U	U	U	1,596	4.6	2.4-6.9
Multi-racial or "Other"	U	U	U	1,987	9.5	4.4-14.5	3,847	7.5	4.4-10.6
<b>Marital Status</b>									
Married/Living with a partner	14,232	3.9	3.0-4.9	27,185	7.2	6.1-8.3	41,417	5.6	4.9-6.3
Widowed/Divorced/Separated	7,854	6.2	4.4-8.0	19,624	10.0	8.5-11.5	27,478	8.5	7.4-9.7
Never married	10,922	6.2	4.4-8.1	9,188	7.4	5.3-9.5	20,110	6.7	5.3-8.1

Note. CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma; U = unstable prevalence estimate.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

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## 5.8 Over-the-Counter Stimulant Use

### Item

Responding “Yes” to “Over-the-Counter Stimulants (Dexatrim®, No-Doz®, Hydroxycut®, or 5-Hour Energy®)” when asked the question, “In the past 12 months, have you used any of the following?” Respondents were presented with a list of nine substances, which included over-the-counter stimulants, that they could select as “Yes” or “No.”

### Prevalence

**West Virginia:** 3.7% (95% CI: 3.2-4.2)

### Sex

**Male:** 4.1% (95% CI: 3.3-4.9)

**Female:** 3.3% (95% CI: 2.7-3.9)

There was no significant difference in the prevalence of over-the-counter stimulants use in the past 12 months between the sexes.

### Age

The prevalence of over-the-counter stimulants use in the past 12 months was significantly higher among adults aged 18-34 (5.3%) and 35-49 (5.6%) than among any other adult age groups.

### Education

There was no significant difference in the prevalence of over-the-counter stimulants use in the past 12 months among educational attainment levels.

### Family Income

There was no significant difference in the prevalence of over-the-counter stimulants use in the past 12 months among annual family income levels.

### Race

There was no significant difference in the prevalence of over-the-counter stimulants use in the past 12 months among racial groups.

### Marital Status

There was no significant difference in the prevalence of over-the-counter stimulants use in the past 12 months among marital statuses.

### West Virginia Department of Health and Human Resources (DHHR) Regions

There was no significant difference in the prevalence of over-the-counter stimulants use in the past 12 months among DHHR, Bureau for Medical Services (BMS) regions compared to the state estimate.

*DHHR, Bureau for Behavioral Health (BBH) Regions*

There was no significant difference in the prevalence of over-the-counter stimulants use in the past 12 months among DHHR, Bureau for Behavioral Health (BBH) regions compared to the state estimate.

*DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There was no significant difference in the prevalence of over-the-counter stimulants use in the past 12 months among DHHR, BBH, Ryan Brown Fund (RBF) regions compared to the state estimate.

Table 5.8.8: Weighted Prevalence of Over-the-Counter Stimulants Use in the Past 12 Months by Demographic Characteristics: MATCH, 2021<sup>a</sup>

Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>27,290</b>	<b>4.1</b>	<b>3.3-4.9</b>	<b>23,096</b>	<b>3.3</b>	<b>2.7-3.9</b>	<b>50,386</b>	<b>3.7</b>	<b>3.2-4.2</b>
<b>Age</b>									
18-34	10,236	5.8	3.6-8.0	8,128	4.8	3.4-6.3	18,363	5.3	4.0-6.7
35-49	8,583	5.8	3.8-7.8	8,396	5.4	4.0-6.9	16,979	5.6	4.4-6.8
50-64	5,399	2.9	1.8-4.1	5,424	2.8	1.8-3.8	10,823	2.9	2.1-3.6
65+	2,870	1.9	1.1-2.6	U	U	U	3,986	1.2	0.8-1.6
<b>Education</b>									
Less than HS	4,170	4.6	2.3-6.9	3,310	4.5	2.5-6.5	7,479	4.5	3.0-6.1
HS/GED	10,648	3.6	2.5-4.6	8,813	3.0	2.3-3.7	19,461	3.3	2.7-3.9
Associate's or more	12,381	4.5	3.1-6.0	10,974	3.3	2.4-4.2	23,355	3.8	3.0-4.7
<b>Annual Family Income</b>									
\$15,000 or less	5,418	4.1	2.5-5.7	8,243	5.4	3.9-7.0	13,661	4.8	3.7-5.9
\$15,001-\$35,000	7,941	5.1	3.3-6.9	5,077	2.7	1.9-3.6	13,018	3.8	2.8-4.7
\$35,001-\$50,000	2,967	3.3	1.6-5.0	2,736	3.0	1.6-4.4	5,703	3.1	2.0-4.2
\$50,001-\$85,000	3,523	2.8	1.3-4.3	3,638	2.8	1.5-4.1	7,161	2.8	1.8-3.8
\$85,001+	7,224	5.0	2.7-7.4	2,875	2.5	1.2-3.8	10,099	3.9	2.5-5.3
<b>Race</b>									
White	24,950	4.0	3.2-4.9	21,936	3.3	2.7-3.9	46,885	3.7	3.1-4.2
Black	U	U	U	U	U	U	927	2.7	1.4-4.0
Multi-racial or "Other"	U	U	U	U	U	U	2,541	5.0	2.3-7.7
<b>Marital Status</b>									
Married/Living with a partner	12,868	3.5	2.5-4.6	11,933	3.1	2.4-3.9	24,801	3.3	2.7-4.0
Widowed/Divorced/Separated	5,336	4.2	2.5-5.9	4,775	2.5	1.6-3.3	10,111	3.2	2.3-4.0
Never married	8,717	5.0	3.2-6.7	6,304	5.1	3.3-6.8	15,021	5.0	3.7-6.3

Note. CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma; U = unstable prevalence estimate.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

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## 5.9 Stimulant Use

### Item

Responding “Yes” to “Stimulants (Adderall® or Dexedrine®)” when asked the question, “In the past 12 months, have you used any of the following?” Respondents were presented with a list of nine substances that included stimulants, that they could select as “Yes” or “No.”

### Prevalence

**West Virginia:** 2.2% (95% CI: 1.9-2.6)

### Sex

**Male:** 2.3% (95% CI: 1.7-2.8)

**Female:** 2.2% (95% CI: 1.7-2.7)

There was no significant difference in the prevalence of stimulants use in the past 12 months between the sexes.

### Age

The prevalence of stimulants use in the past 12 months was significantly higher among adults aged 18-34 (4.6%) and 35-49 (2.8%) than among any other adult age groups.

### Education

There was no significant difference in the prevalence of stimulants use in the past 12 months among educational attainment levels.

### Family Income

There was no significant difference in the prevalence of stimulants use in the past 12 months among annual family income levels.

### Race

There were unstable estimates for the prevalence of stimulants use in the past 12 months among racial groups.

### Marital Status

The prevalence of stimulants use in the past 12 months was significantly higher among adults who were never married (3.9%) than among adults with any other marital statuses.

## West Virginia Department of Health and Human Resources (DHHR) Regions

*DHHR, Bureau for Medical Services (BMS) Regions*

There was no significant difference in the prevalence of stimulants use in the past 12 months among DHHR, Bureau for Medical Services (BMS) regions.



*DHHR, Bureau for Behavioral Health (BBH) Regions*

There was no significant difference in the prevalence of stimulants use in the past 12 months among DHHR, Bureau for Behavioral Health (BBH) regions compared to the state estimate. There was an unstable prevalence estimate of stimulant use in the past 12 months among DHHR, BBH regions.

*DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There was no significant difference in the prevalence of stimulants use in the past 12 months among DHHR, BBH, Ryan Brown Fund (RBF) regions compared to the state estimate. There was an unstable prevalence estimate of stimulant use in the past 12 months among DHHR, BBH, RBF regions (see the [Appendix](#)).

Table 5.9.9: Weighted Prevalence of Stimulants Use in the Past 12 Months by Demographic Characteristics: MATCH, 2021<sup>a</sup>

Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>15,148</b>	<b>2.3</b>	<b>1.7-2.8</b>	<b>15,294</b>	<b>2.2</b>	<b>1.7-2.7</b>	<b>30,442</b>	<b>2.2</b>	<b>1.9-2.6</b>
<b>Age</b>									
18-34	7,956	4.5	2.8-6.3	7,939	4.7	3.2-6.2	15,894	4.6	3.5-5.8
35-49	4,169	2.8	1.5-4.1	4,427	2.9	1.7-4.1	8,596	2.8	1.9-3.7
50-64	U	U	U	2,331	1.2	0.7-1.7	3,957	1.0	0.7-1.4
65+	1,008	0.7	0.3-1.0	U	U	U	1,572	0.5	0.2-0.7
<b>Education</b>									
Less than HS	2,203	2.4	1.0-3.8	U	U	U	4,113	2.5	1.4-3.6
HS/GED	6,895	2.3	1.4-3.2	6,002	2.1	1.4-2.7	12,897	2.2	1.6-2.7
Associate's or more	5,933	2.2	1.3-3.1	7,382	2.2	1.5-2.9	13,315	2.2	1.6-2.8
<b>Annual Family Income</b>									
\$15,000 or less	4,699	3.6	2.1-5.1	3,533	2.3	1.4-3.3	8,232	2.9	2.0-3.8
\$15,001-\$35,000	4,125	2.6	1.3-4.0	4,172	2.2	1.2-3.2	8,297	2.4	1.6-3.2
\$35,001-\$50,000	U	U	U	2,625	2.9	1.4-4.4	4,526	2.5	1.5-3.5
\$50,001-\$85,000	U	U	U	U	U	U	3,553	1.4	0.6-2.2
\$85,001+	U	U	U	3,091	2.7	1.3-4.1	5,083	2.0	1.2-2.8
<b>Race</b>									
White	13,462	2.2	1.6-2.8	14,207	2.1	1.7-2.6	27,669	2.2	1.8-2.5
Black	U	U	U	U	U	U	U	U	U
Multi-racial or "Other"	U	U	U	U	U	U	U	U	U
<b>Marital Status</b>									
Married/Living with a partner	6,142	1.7	1.1-2.3	6,267	1.7	1.1-2.2	12,409	1.7	1.3-2.1
Widowed/Divorced/Separated	2,597	2.0	0.9-3.2	3,481	1.8	1.1-2.5	6,078	1.9	1.3-2.5
Never married	6,143	3.5	2.0-5.0	5,522	4.4	2.7-6.1	11,665	3.9	2.7-5.0

Note. CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma; U = unstable prevalence estimate.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

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## 5.10 Cocaine, Methamphetamine, Heroin, or 3,4 Methylenedioxymethamphetamine (“MDMA”) Use

### Item

Responding “Yes” to the question, “In the past 12 months, have you used any of the following?” for the following substances:

- “Cocaine (or powder, ‘crack,’ free base, or coca paste)”
- “Methamphetamine (smoked, snorted, or injected)”
- “Heroin (smoked, snorted, or injected)”
- “MDMA (Ecstasy, Molly, Adam, XTC)”

The category ‘cocaine, methamphetamine, heroin, or MDMA use’ represents responding “Yes” to one or more of cocaine, methamphetamine, heroin, and MDMA in the past 12 months. Respondents were presented with a list of nine substances, which included the four above stated, that they could select as “Yes” or “No.”

### Prevalence

**West Virginia:** 2.5% (95% CI: 2.1-2.9)

### Sex

**Male:** 3.0% (95% CI: 2.3-3.7)

**Female:** 2.0% (95% CI: 1.6-2.4)

There was no significant difference in the prevalence of cocaine, methamphetamine, heroin, or MDMA use in the past 12 months between the sexes.

### Age

The prevalence of cocaine, methamphetamine, heroin, or MDMA use in the past 12 months was significantly higher among adults aged 18-34 (4.0%) and 35-49 (4.2%) than among any other adult age groups. The prevalence was significantly lower among adults aged 65 or older (0.5%) than among any other adult age groups.

### Education

The prevalence of cocaine, methamphetamine, heroin, or MDMA use in the past 12 months was significantly higher among adults with less than high school education (4.1%) or high school Diploma (GED) education (3.0%) than among adults with an associate’s or more education (1.5%).

### Family Income

The prevalence of cocaine, methamphetamine, heroin, or MDMA use in the past 12 months was significantly higher among adults with an annual family income of \$15,000 or less (6.5%) than among

adults with any other annual family income levels with stable estimates. There were unstable prevalence estimates among annual family income levels.

## Race

There was no significant difference in the prevalence of cocaine, methamphetamine, heroin, or MDMA use in the past 12 months among racial groups.

## Marital Status

The prevalence of cocaine, methamphetamine, heroin, or MDMA use in the past 12 months was significantly higher among adults who were never married (4.1%) than among adults who were married or living with a partner (1.8%).

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There was no significant difference in the prevalence of cocaine, methamphetamine, heroin, or MDMA use in the past 12 months among DHHR, Bureau for Medical Services (BMS) regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There was no significant difference in the prevalence of cocaine, methamphetamine, heroin, or MDMA use in the past 12 months among DHHR, Bureau for Behavioral Health (BBH) regions. There was an unstable prevalence estimate among DHHR, BBH regions (see the [Appendix](#)).

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There was no significant difference in the prevalence of cocaine, methamphetamine, heroin, or MDMA use in the past 12 months among DHHR, BBH, Ryan Brown Fund (RBF) regions compared to the state estimate. There was an unstable prevalence estimate among DHHR, BBH, RBF regions (see the [Appendix](#)).

*Table 5.10.10: Weighted Prevalence of Cocaine, Methamphetamine, Heroin, or 3,4-Methylenedioxymethamphetamine (MDMA) Use in the Past 12 Months by Demographic Characteristics: MATCH, 2021<sup>a</sup>*

Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>19,966</b>	<b>3.0</b>	<b>2.3-3.7</b>	<b>13,913</b>	<b>2.0</b>	<b>1.6-2.4</b>	<b>33,879</b>	<b>2.5</b>	<b>2.1-2.9</b>
<b>Age</b>									
18-34	7,077	4.0	2.3-5.8	6,796	4.0	2.8-5.3	13,873	4.0	2.9-5.1
35-49	7,656	5.1	3.3-6.9	5,115	3.3	2.1-4.5	12,770	4.2	3.1-5.3
50-64	3,707	2.0	1.1-3.0	1,415	0.7	0.4-1.1	5,122	1.4	0.9-1.9
65+	1,210	0.8	0.3-1.2	U	U	U	1,675	0.5	0.3-0.7
<b>Education</b>									
Less than HS	3,893	4.3	2.0-6.5	2,837	3.9	2.0-5.7	6,730	4.1	2.6-5.6
HS/GED	11,189	3.7	2.6-4.9	6,601	2.3	1.6-2.9	17,790	3.0	2.4-3.7
Associate's or more	4,814	1.8	1.0-2.6	4,475	1.3	0.8-1.9	9,289	1.5	1.1-2.0
<b>Annual Family Income</b>									
\$15,000 or less	9,962	7.6	5.4-9.8	8,443	5.6	4.0-7.1	18,405	6.5	5.2-7.8
\$15,001-\$35,000	4,981	3.2	1.8-4.5	3,271	1.7	1.0-2.4	8,252	2.4	1.7-3.1
\$35,001-\$50,000	U	U	U	U	U	U	2,303	1.3	0.6-1.9
\$50,001-\$85,000	U	U	U	U	U	U	U	U	U
\$85,001+	U	U	U	U	U	U	U	U	U
<b>Race</b>									
White	18,248	2.9	2.2-3.7	12,944	2.0	1.5-2.4	31,192	2.4	2.0-2.9
Black	U	U	U	U	U	U	1,046	3.0	1.4-4.7
Multi-racial or "Other" <sup>1</sup>	U	U	U	U	U	U	1,518	3.0	1.5-4.5
<b>Marital Status</b>									
Married/Living with a partner	6,622	1.8	1.1-2.5	6,415	1.7	1.2-2.2	13,037	1.8	1.3-2.2
Widowed/Divorced/Separated	4,722	3.7	2.4-5.0	3,485	1.8	1.1-2.5	8,207	2.6	1.9-3.2
Never married	8,308	4.7	2.8-6.6	3,946	3.2	1.7-4.7	12,254	4.1	2.8-5.4

*Note.* CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma; U = unstable prevalence estimate.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

## 5.11 No Substance Use

### Item

Responding “No” to the question, “In the past 12 months, have you used any of the following?” for each of the following substances:

- “Marijuana (also called cannabis, weed, or hashish)”
- “Prescription opioids/pills (opioid pain medications, such as hydrocodone, Lorcet®, Vicodin®, oxycodone, Percocet®, Oxycontin®, MS Contin®)”
- “Benzodiazepines (‘downers’ or ‘benzies’ such as Xanax®, Ativan®, Klonopin®, Valium®)”
- “Over the Counter Stimulants (Dexatrim®, No-Doz®, Hydroxycut®, or 5-Hour Energy®)”
- “Stimulants (Adderall® or Dexedrine®)”
- “Cocaine (or powder, ‘crack,’ free base, or coca paste)”
- “Methamphetamine (smoked, snorted, or injected)”
- “Heroin (smoked, snorted, or injected)”
- “MDMA (Ecstasy, Molly, Adam, XTC)”

### Prevalence

**West Virginia:** 74.1% (95% CI: 73.0-75.2)

### Sex

**Male:** 73.0% (95% CI: 71.3-74.7)

**Female:** 75.1% (95% CI: 73.8-76.4)

There was no significant difference in the prevalence of no substance use in the past 12 months between the sexes.

### Age

The prevalence of no substance use in the past 12 months was significantly lower among adults aged 35-49 (67.8%) than among adults aged 50-64 (74.0%) and 65 or older (83.6%).

### Education

There was no significant difference in the prevalence of no substance use in the past 12 months among educational attainment levels.

### Family Income

The prevalence of no substance use in the past 12 months was significantly lower among adults with an annual family income of \$15,000 or less (63.8%) than among adults with any other annual family income levels.

## Race

The prevalence of no substance use in the past 12 months was significantly lower among adults who were multi-racial or “other” (62.9%) than among adults who were White (74.6%).

## Marital Status

The prevalence of no substance use in the past 12 months was significantly lower among adults who were widowed, divorced, or separated (72.7%) and never married (68.2%) than among adults who were married or living with a partner (77.1%).

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There was no significant difference in the prevalence of no substance use in the past 12 months among DHHR, Bureau for Medical Services (BMS) regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There was no significant difference in the prevalence of no substance use in the past 12 months among DHHR, Bureau for Behavioral Health (BBH) regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There was no significant difference in the prevalence of no substance use in the past 12 months among DHHR, BBH, Ryan Brown Fund (RBF) regions compared to the state estimate.

Table 5.11.11: Weighted Prevalence of No Substance Use in the Past 12 Months by Demographic Characteristics: MATCH, 2021<sup>a</sup>

Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>489,644</b>	<b>73.0</b>	<b>71.3–74.7</b>	<b>528,888</b>	<b>75.1</b>	<b>73.8–76.4</b>	<b>1,018,532</b>	<b>74.1</b>	<b>73.0–75.2</b>
<b>Age</b>									
18–34	123,441	70.3	66.3-74.4	118,472	70.4	67.3-73.4	241,913	70.4	67.8-72.9
35-49	98,943	65.7	61.6-69.8	107,963	69.9	66.9-72.8	206,906	67.8	65.3-70.3
50-64	136,358	73.7	70.8-76.7	144,766	74.3	71.7-76.8	281,124	74.0	72.1-75.9
65+	127,344	82.2	79.7-84.7	154,456	84.9	83.1-86.7	281,800	83.6	82.1-85.2
<b>Education</b>									
Less than HS	64,668	70.2	65.4-75.0	54,295	73.2	69.3-77.2	118,963	71.5	68.4-74.7
HS/GED	216,562	71.9	69.3-74.5	219,253	74.9	73.0-76.8	435,815	73.4	71.8-75.0
Associate's or more	206,425	75.4	72.7-78.0	252,889	75.8	73.7-77.8	459,314	75.6	73.9-77.2
<b>Annual Family Income</b>									
\$15,000 or less	80,464	60.6	56.8-64.5	101,678	66.6	63.8-69.5	182,142	63.8	61.5-66.2
\$15,001-\$35,000	107,842	68.7	65.0-72.4	138,124	73.2	70.7-75.7	245,966	71.2	69.0-73.3
\$35,001-\$50,000	69,949	77.4	73.2-81.5	72,346	78.8	75.4-82.1	142,295	78.1	75.4-80.7
\$50,001-\$85,000	99,538	79.7	76.0-83.4	102,355	79.1	76.0-82.3	201,892	79.4	77.0-81.8
\$85,001+	113,614	79.0	75.1-82.9	92,377	79.9	76.5-83.3	205,991	79.4	76.8-82.1
<b>Race</b>									
White	457,693	73.7	71.9-75.5	501,980	75.5	74.2-76.9	959,673	74.6	73.5-75.7
Black	11,835	67.0	58.0-75.9	12,607	74.6	69.0-80.3	24,442	70.7	65.3-76.1
Multi-racial or "Other"	18,872	62.2	52.7-71.7	13,495	63.8	55.7-71.9	32,367	62.9	56.4-69.4
<b>Marital Status</b>									
Married/Living with a partner	276,685	76.2	73.9-78.5	295,932	77.9	76.2-79.7	572,617	77.1	75.7-78.5
Widowed/Divorced/Separated	90,687	70.5	66.9-74.0	145,265	74.2	72.0-76.4	235,952	72.7	70.8-74.7
Never married	119,934	68.1	64.3-71.9	85,454	68.3	64.7-71.9	205,388	68.2	65.5-70.9

Note. CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma.

<sup>a</sup>95% confidence intervals were used to determine significance. This approach is conservative, so significance testing must be done for a true statement of statistical significance.



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## 5.12 Prescription Opioids/Pills Not Used as Prescribed

### Item

Responding “Yes” to “Prescription opioids/pills (opioid pain medications, such as hydrocodone, Lorcet®, Vicodin®, oxycodone, Percocet®, Oxycontin®, MS Contin®)” when asked the question, “In the past 12 months, have you used any of the following?” and then responding “Yes” to the question, “At any time in the past 12 months, have you used prescription opioids, also called ‘pills,’ in any way a doctor did not direct you to use it, including:

- Using it without a prescription of your own,
- Using it in greater amounts, more often, or longer than you were told to take it, or
- Using it in any other way a doctor did not direct you to use it?”

The prevalence estimates excluded adults responding “No” to “Prescription opioids/pills (opioid pain medications, such as hydrocodone, Lorcet®, Vicodin®, oxycodone, Percocet®, Oxycontin®, MS Contin®)” when asked the first stated question.

### Prevalence

**West Virginia:** 9.3% (95% CI: 7.1-11.6)

### Sex

**Male:** 10.3% (95% CI: 6.6-14.0)

**Female:** 8.3% (95% CI: 5.4-11.1)

There was no significant difference in the prevalence of prescription opioids/pills that were not used as prescribed in the past 12 months between the sexes.

### Age

The prevalence of prescription opioids/pills that were not used as prescribed in the past 12 months was significantly higher among adults aged 18-34 (26.1%) than among adults aged 50-64 (5.5%). There was an unstable prevalence estimate among adult age groups.

### Education

There was no significant difference in the prevalence of prescription opioids/pills that were not used as prescribed in the past 12 months among educational attainment levels.

### Family Income

There was no significant difference in the prevalence of prescription opioids/pills that were not used as prescribed in the past 12 months among annual family income levels with stable estimates. There were unstable prevalence estimates among annual family income levels.

## Race

There were unstable estimates for the prevalence of prescription opioids/pills that were not used as prescribed in the past 12 months among racial groups.

## Marital Status

There was no significant difference in the prevalence of prescription opioids/pills that were not used as prescribed in the past 12 months among marital statuses.

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There was no significant difference in the prevalence of prescription opioids/pills that were not used as prescribed in the past 12 months among DHHR, Bureau for Medical Services (BMS) regions compared to the state estimate. There was an unstable prevalence estimate among DHHR, BMS regions (see the [Appendix](#)).

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There was no significant difference in the prevalence of prescription opioids/pills that were not used as prescribed in the past 12 months among DHHR, Bureau for Behavioral Health (BBH) regions compared to the state estimate. There were unstable prevalence estimates among DHHR, BBH regions (see the [Appendix](#)).

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There was no significant difference in the prevalence of prescription opioids/pills that were not used as prescribed in the past 12 months among DHHR, BBH, Ryan Brown Fund (RBF) regions compared to the state estimate. There were unstable prevalence estimates among DHHR, BBH, RBF regions (see the [Appendix](#)).

Table 5.12.12: Weighted Prevalence of Prescription Opioids/Pills Not Used as Prescribed in the Past 12 Months by Demographic Characteristics: MATCH, 2021<sup>a,b</sup>

Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>6,094</b>	<b>10.3</b>	<b>6.6-14.0</b>	<b>4,456</b>	<b>8.3</b>	<b>5.4-11.1</b>	<b>10,551</b>	<b>9.3</b>	<b>7.1-11.6</b>
<b>Age</b>									
18-34	U	U	U	1,894	24.4	11.6-37.3	3,893	26.1	16.0-36.2
35-49	U	U	U	U	U	U	3,537	15.3	8.1-22.6
50-64	U	U	U	U	U	U	2,342	5.5	2.8-8.1
65+	U	U	U	U	U	U	U	U	U
<b>Education</b>									
Less than HS	U	U	U	U	U	U	2,591	17.4	8.7-26.1
HS/GED	3,084	10.3	4.8-15.7	1,896	8.4	4.3-12.5	4,980	9.5	5.9-13.1
Associate's or more	U	U	U	1,607	6.6	2.8-10.4	2,882	6.5	3.5-9.5
<b>Annual Family Income</b>									
\$15,000 or less	2,957	19.6	11.1-28.1	2,408	16.6	9.1-24.1	5,365	18.1	12.5-23.8
\$15,001-\$35,000	U	U	U	U	U	U	2,848	9.3	5.0-13.6
\$35,001-\$50,000	U	U	U	U	U	U	U	U	U
\$50,001-\$85,000	U	U	U	U	U	U	U	U	U
\$85,001+	U	U	U	U	U	U	U	U	U
<b>Race</b>									
White	5,243	9.6	5.8-13.4	4,233	8.4	5.4-11.4	9,476	9.0	6.6-11.4
Black	U	U	U	U	U	U	U	U	U
Multi-racial or "Other"	U	U	U	U	U	U	U	U	U
<b>Marital Status</b>									
Married/Living with a partner	1,477	4.6	2.1-7.1	2,207	7.9	4.3-11.5	3,684	6.1	4.0-8.3
Widowed/Divorced/Separated	2,900	17.6	8.1-27.1	1,168	6.4	2.7-10.1	4,068	11.7	6.7-16.7
Never married	U	U	U	U	U	U	2,773	15.7	7.3-24.1

Note. CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma; U = unstable prevalence estimate.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>Denominators in the estimates are based on a response to a preceding question in the survey and were not answered by all respondents. See "Item" section above.

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# Chapter 6: Overdoses

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## 6.1 Ever Overdosed

### Item

Responding “Yes” to the question, “Have you ever (even once) overdosed?” A statement before the question clarifies the meaning of overdose: “The next question asks about any overdose you may have had of illegal drugs, over-the-counter medications, or prescription medications.”

### Prevalence

**West Virginia:** 3.2% (95% CI: 2.7-3.7)

### Sex

**Male:** 3.4% (95% CI: 2.6-4.2)

**Female:** 3.0% (95% CI: 2.5-3.5)

There was no significant difference in the prevalence of ever overdosed between the sexes.

### Age

The prevalence of ever overdosed was significantly higher among adults aged 18-34 (4.6%) and 35-49 (5.5%) than among any other adult age groups. The prevalence was significantly lower among adults aged 65 or older (0.6%) than among any other adult age groups.

### Education

The prevalence of ever overdosed was significantly higher among adults with less than high school education (6.1%) and high school or Graduate Equivalency Diploma (GED) education (3.7%) than among adults with an associate’s or more education (1.9%).

### Family Income

The prevalence of ever overdosed was significantly higher among adults with an annual family income of \$15,000 or less (7.3%) than among adults with any other annual family income levels with stable estimates. There was an unstable prevalence estimate among annual family income levels.

### Race

There were unstable estimates for the prevalence of ever overdosed among racial groups.

### Marital Status

The prevalence of ever overdosed was significantly higher among adults who were widowed, divorced, or separated (4.4%) and never married (4.3%) than among adults who were married or living with a partner (2.2%).

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There was no significant difference in the prevalence of ever overdosed among DHHR, Bureau for Medical Services (BMS) regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There were no DHHR, Bureau for Behavioral Health (BBH) regions with a significantly higher prevalence of ever overdosed compared to the state estimate. There was one DHHR, BBH region with a significantly lower prevalence compared to the state estimate (3.2%); region three (1.6%).

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There were no DHHR, BBH, Ryan Brown Fund (RBF) regions with a significantly higher prevalence of ever overdosed compared to the state estimate. There was one DHHR, BBH, RBF region with a significantly lower prevalence compared to the state estimate (3.2%); region three (1.6%).

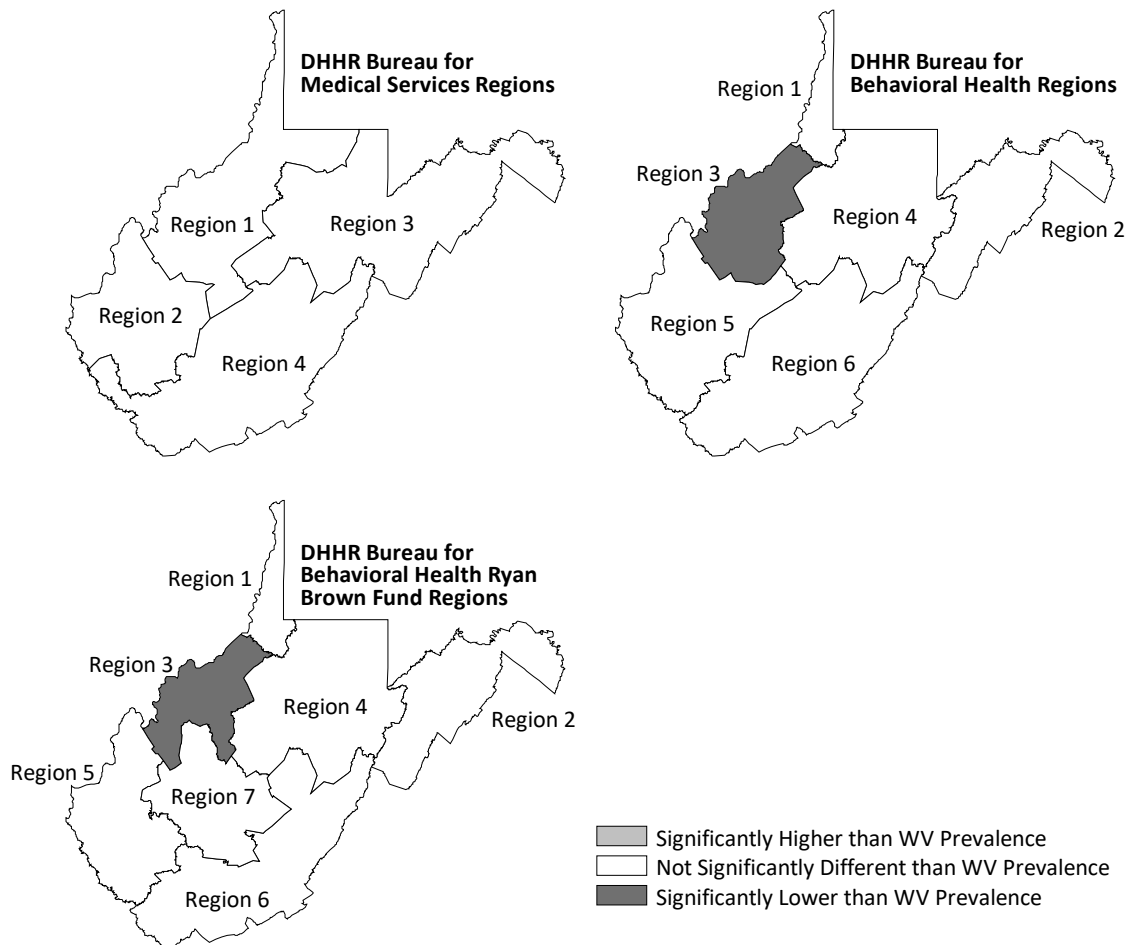
Table 6.1.1: Weighted Prevalence of Ever Overdosed by Demographic Characteristics: MATCH, 2021<sup>a</sup>

Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>22,858</b>	<b>3.4</b>	<b>2.6-4.2</b>	<b>21,500</b>	<b>3.0</b>	<b>2.5-3.5</b>	<b>44,359</b>	<b>3.2</b>	<b>2.7-3.7</b>
<b>Age</b>									
18-34	8,629	4.9	2.8-7.0	7,394	4.4	3.0-5.8	16,023	4.6	3.4-5.9
35-49	8,373	5.6	3.5-7.7	8,552	5.5	4.1-6.9	16,925	5.5	4.3-6.8
50-64	5,256	2.8	1.6-4.0	3,904	2.0	1.4-2.6	9,161	2.4	1.7-3.1
65+	486	0.3	0.1-0.5	1,540	0.8	0.4-1.2	2,026	0.6	0.4-0.8
<b>Education</b>									
Less than HS	7,297	7.9	4.0-11.9	2,988	3.9	2.3-5.5	10,284	6.1	3.8-8.4
HS/GED	9,461	3.1	2.2-4.0	12,706	4.3	3.4-5.2	22,167	3.7	3.1-4.3
Associate's or more	5,905	2.1	1.2-3.1	5,739	1.7	1.2-2.3	11,643	1.9	1.4-2.4
<b>Annual Family Income</b>									
\$15,000 or less	11,882	8.9	6.5-11.3	9,136	5.9	4.5-7.4	21,018	7.3	6.0-8.7
\$15,001-\$35,000	4,659	3.0	1.6-4.3	6,749	3.5	2.6-4.5	11,408	3.3	2.5-4.1
\$35,001-\$50,000	U	U	U	U	U	U	4,195	2.3	1.0-3.5
\$50,001-\$85,000	U	U	U	U	U	U	3,774	1.5	0.7-2.3
\$85,001+	U	U	U	U	U	U	U	U	U
<b>Race</b>									
White	19,933	3.2	2.4-4.0	20,110	3.0	2.5-3.5	40,042	3.1	2.6-3.6
Black	U	U	U	U	U	U	U	U	U
Multi-racial or "Other"	U	U	U	U	U	U	U	U	U
<b>Marital Status</b>									
Married/Living with a partner	6,651	1.8	1.1-2.6	9,896	2.6	1.9-3.3	16,547	2.2	1.7-2.7
Widowed/Divorced/Separated	7,598	5.9	3.8-8.0	6,693	3.4	2.6-4.2	14,291	4.4	3.4-5.4
Never married	8,437	4.8	2.7-6.8	4,666	3.7	2.2-5.2	13,103	4.3	3.0-5.7

Note. CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma; U = unstable prevalence estimate.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

Figure 6.1.1: Weighted Prevalence of Ever Overdosed by Region: MATCH, 2021<sup>a,b</sup>



Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

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## 6.2 Immediate Family Members in West Virginia (WV) Overdosed

### Item

Responding “Yes” to the question, “In the past 12 months, has anyone in your immediate family in West Virginia (WV) overdosed?”

### Prevalence

**West Virginia:** 4.6% (95% CI: 4.1-5.1)

### Sex

**Male:** 3.6% (95% CI: 2.8-4.3)

**Female:** 5.6% (95% CI: 4.9-6.2)

The prevalence of having an immediate family member in WV experience an overdose in the past 12 months was significantly higher among adults who were female (5.6%) than among adults who were male (3.6%).

### Age

The prevalence of having an immediate family member in WV experience an overdose in the past 12 months was significantly higher among adults aged 18-34 (6.4%) and 35-49 (5.7%) than among adults aged 65 or older (2.5%).

### Education

The prevalence of having an immediate family member in WV experience an overdose in the past 12 months was significantly higher among adults with less than high school education (7.7%) than among adults with any other educational attainment levels. The prevalence was significantly lower among adults with an associate’s or more education (3.4%) than among adults with any other educational attainment levels.

### Family Income

The prevalence of having an immediate family member in WV experience an overdose in the past 12 months was significantly higher among adults with an annual family income of \$15,000 or less (8.7%) than among adults with any other annual family income levels.

### Race

There was no significant difference in the prevalence of having an immediate family member in WV experience an overdose in the past 12 months among racial groups.



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## Marital Status

The prevalence of having an immediate family member in WV experience an overdose in the past 12 months was significantly higher among adults who were widowed, divorced, or separated (6.1%) than among adults who were married or living with a partner (3.8%).

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There was one DHHR, Bureau for Medical Services (BMS) region with a significantly higher prevalence of having an immediate family member in WV experience an overdose in the past 12 months compared to the state estimate (4.6%); region four (7.0%). There was one DHHR, BMS region with a significantly lower prevalence compared to the state estimate; region one (2.5%).

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There was one DHHR, Bureau for Behavioral Health (BBH) region with a significantly higher prevalence of having an immediate family member in WV experience an overdose in the past 12 months compared to the state estimate (4.6%); region six (7.2%). There were two DHHR, BBH regions with a significantly lower prevalence compared to the state estimate; regions one (1.9%) and four (2.6%).

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There were two DHHR, BBH, Ryan Brown Fund (RBF) regions with a significantly higher prevalence of having an immediate family member in WV experience an overdose in the past 12 months compared to the state estimate (4.6%); regions five (6.8%) and six (7.3%). There were two DHHR, BBH, RBF regions with a significantly lower prevalence compared to the state estimate; regions one (1.9%) and four (2.6%).

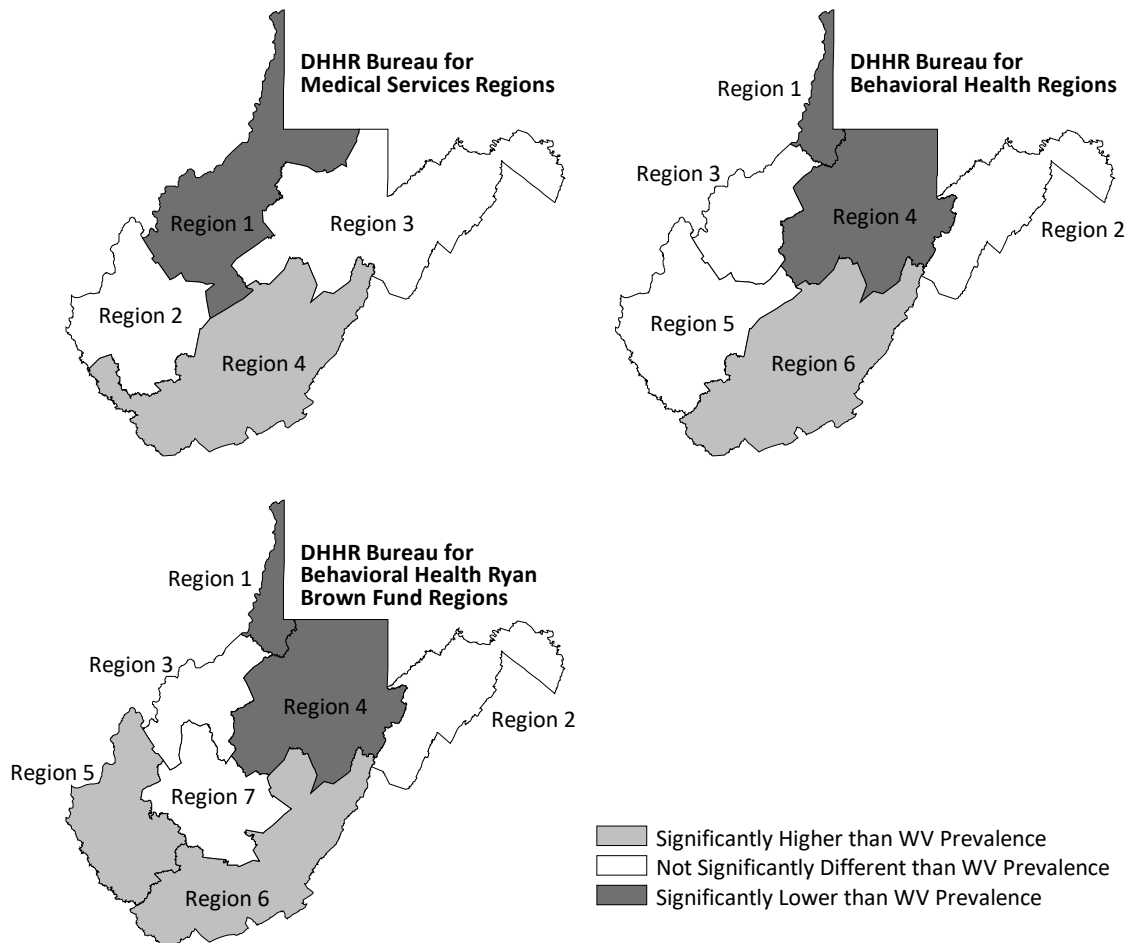
*Table 6.2.2: Weighted Prevalence of Having an Immediate Family Member in West Virginia (WV) Experience an Overdose in the Past 12 Months by Demographic Characteristics: MATCH, 2021<sup>a</sup>*

Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>23,921</b>	<b>3.6</b>	<b>2.8-4.3</b>	<b>39,399</b>	<b>5.6</b>	<b>4.9-6.2</b>	<b>63,320</b>	<b>4.6</b>	<b>4.1-5.1</b>
<b>Age</b>									
18-34	8,578	4.9	3.2-6.6	13,358	7.9	6.2-9.6	21,936	6.4	5.2-7.6
35-49	6,221	4.1	2.6-5.7	11,234	7.3	5.7-8.8	17,455	5.7	4.6-6.8
50-64	6,816	3.6	2.3-5.0	8,482	4.3	3.2-5.5	15,298	4.0	3.1-4.9
65+	U	U	U	6,181	3.3	2.2-4.5	8,460	2.5	1.7-3.2
<b>Education</b>									
Less than HS	5,879	6.4	3.7-9.1	6,980	9.2	6.5-12.0	12,859	7.7	5.8-9.6
HS/GED	12,457	4.1	3.1-5.2	16,883	5.7	4.8-6.7	29,340	4.9	4.2-5.6
Associate's or more	5,435	2.0	1.0-2.9	15,338	4.6	3.6-5.6	20,773	3.4	2.7-4.1
<b>Annual Family Income</b>									
\$15,000 or less	8,980	6.7	4.8-8.7	15,924	10.4	8.5-12.2	24,904	8.7	7.3-10.0
\$15,001-\$35,000	8,531	5.4	3.5-7.3	11,978	6.3	5.0-7.6	20,509	5.9	4.8-7.0
\$35,001-\$50,000	3,751	4.1	1.7-6.5	3,915	4.2	2.6-5.9	7,666	4.2	2.7-5.6
\$50,001-\$85,000	U	U	U	3,779	2.9	1.6-4.2	4,861	1.9	1.2-2.6
\$85,001+	U	U	U	3,340	2.9	1.3-4.5	4,808	1.9	1.0-2.7
<b>Race</b>									
White	21,411	3.4	2.7-4.2	37,062	5.5	4.8-6.2	58,474	4.5	4.0-5.0
Black	U	U	U	U	U	U	1,375	4.0	2.0-5.9
Multi-racial or "Other"	U	U	U	U	U	U	3,279	6.4	2.9-9.9
<b>Marital Status</b>									
Married/Living with a partner	10,402	2.8	2.0-3.7	18,187	4.8	3.9-5.6	28,589	3.8	3.2-4.4
Widowed/Divorced/Separated	6,109	4.8	2.9-6.6	13,725	6.9	5.5-8.4	19,835	6.1	4.9-7.2
Never married	7,323	4.1	2.6-5.7	7,381	5.9	4.2-7.5	14,704	4.9	3.7-6.0

*Note.* CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma; U = unstable prevalence estimate.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

Figure 6.2.2: Weighted Prevalence of Having an Immediate Family Member in West Virginia (WV) Experience an Overdose in the Past 12 Months by Region: MATCH, 2021<sup>a,b</sup>



Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

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# Chapter 7: Suicide

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## 7.1 Suicide Risk

### Item

In the survey, respondents were presented with the question, “Have you ever thought about or attempted to kill yourself?” The following responses were offered, and only one could be selected:

- “Never”
- “It was just a brief passing thought”
- “I have had a plan at least once to kill myself but did not try to do it”
- “I have had a plan at least once to kill myself and really wanted to die”
- “I have attempted to kill myself, but did not want to die”
- “I have attempted to kill myself, and really wanted to die”

The category “suicide risk” includes all those who responded to one of the items above, except “Never.” Responding “Never” to the question, “Have you ever thought about or attempted to kill yourself?” is considered as having no suicide risk.

### Prevalence

**West Virginia:** 27.5% (95% CI: 26.4-28.6)

### Sex

**Male:** 27.2% (95% CI: 25.4-29.0)

**Female:** 27.8% (95% CI: 26.4-29.1)

There was no significant difference in the prevalence of suicide risk between the sexes.

### Age

The prevalence of suicide risk was significantly higher among adults aged 18–34 (40.2%) than among any other adult age groups. The prevalence was significantly lower among adults aged 65 or older (13.7%) than among any other adult age groups.

### Education

The prevalence of suicide risk was significantly higher among adults with an associate’s or more education (28.4%) than among adults with less than a high school education (23.2%).

## Family Income

The prevalence of suicide risk was significantly higher among adults with an annual family income of \$15,000 or less (33.8%) and \$15,001-\$35,000 (31.8%) than among adults with any other annual family income levels.

## Race

The prevalence of suicide risk was significantly higher among adults who were multi-racial or “other” (40.3%) than among adults who were in any other racial groups.

## Marital Status

The prevalence of suicide risk was significantly higher among adults who were never married (39.4%) than among adults with any other marital statuses.

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There was no significant difference in the prevalence of suicide risk among DHHR, Bureau for Medical Services (BMS) regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There was no significant difference in the prevalence of suicide risk among DHHR, Bureau for Behavioral Health (BBH) regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There was no significant difference in the prevalence of suicide risk among DHHR, BBH, Ryan Brown Fund (RBF) regions compared to the state estimate.

Table 7.1.1: Weighted Prevalence of Suicide Risk by Demographic Characteristics: MATCH, 2021<sup>a</sup>

Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>179,338</b>	<b>27.2</b>	<b>25.4-29.0</b>	<b>193,326</b>	<b>27.8</b>	<b>26.4-29.1</b>	<b>372,665</b>	<b>27.5</b>	<b>26.4-28.6</b>
<b>Age</b>									
18-34	66,653	38.3	33.9-42.6	70,224	42.2	38.9-45.4	136,877	40.2	37.4-42.9
35-49	49,317	33.3	29.3-37.4	49,727	32.5	29.6-35.5	99,044	32.9	30.4-35.4
50-64	42,732	23.5	20.5-26.5	47,608	24.9	22.3-27.4	90,340	24.2	22.2-26.2
65+	20,431	13.6	11.5-15.6	25,039	13.8	12.0-15.6	45,470	13.7	12.3-15.1
<b>Education</b>									
Less than HS	22,058	25.1	20.0-30.3	15,499	20.8	17.2-24.5	37,557	23.2	19.9-26.4
HS/GED	84,972	28.4	25.7-31.1	78,778	27.2	25.2-29.2	163,751	27.8	26.2-29.5
Associate's or more	71,726	26.7	23.9-29.4	98,551	29.9	27.8-32.0	170,277	28.4	26.7-30.1
<b>Annual Family Income</b>									
\$15,000 or less	42,713	32.6	28.8-36.4	52,661	34.8	31.9-37.7	95,374	33.8	31.4-36.1
\$15,001-\$35,000	51,528	33.1	29.1-37.1	57,883	30.7	28.1-33.4	109,410	31.8	29.5-34.1
\$35,001-\$50,000	22,441	24.9	20.4-29.4	23,755	25.9	22.3-29.5	46,196	25.4	22.5-28.3
\$50,001-\$85,000	30,755	24.8	20.9-28.6	31,878	24.8	21.6-28.1	62,634	24.8	22.3-27.3
\$85,001+	29,995	21.2	17.3-25.2	25,835	22.6	19.1-26.1	55,830	21.8	19.1-24.5
<b>Race</b>									
White	162,833	26.7	24.8-28.5	181,150	27.5	26.1-28.9	343,983	27.1	26.0-28.3
Black	4,897	27.8	18.4-37.2	3,530	21.1	15.9-26.2	8,427	24.5	19.0-30.1
Multi-racial or "Other"	11,575	39.4	29.2-49.6	8,551	41.6	33.3-50.0	20,126	40.3	33.4-47.2
<b>Marital Status</b>									
Married/Living with a partner	75,541	21.0	18.8-23.2	94,771	25.2	23.4-27.0	170,312	23.1	21.7-24.6
Widowed/Divorced/Separated	34,413	27.9	24.2-31.5	49,408	25.5	23.2-27.8	83,821	26.4	24.4-28.4
Never married	68,416	39.5	35.4-43.6	48,337	39.2	35.4-42.9	116,752	39.4	36.5-42.2

Note. CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

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# Chapter 8: Sleep

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## 8.1 Difficulty Sleeping

### Item

In the survey, respondents were presented with the question, “In the past two weeks, how often have you had trouble falling asleep, staying asleep, or sleeping too much?” The following responses were offered, and only one could be selected:

- “Always”
- “Usually”
- “Sometimes”
- “Rarely”
- “Never”

The category “Always or Usually” was used for those responding “Always” or “Usually” to this question. The category “Sometimes or Rarely” was used for those responding “Sometimes” or “Rarely” to this question. The category “Never” was used for those responding “Never” to this question.

### Prevalence

**Always/Usually:** 34.0% (95% CI: 32.9-35.1)

**Sometimes/Rarely:** 56.0% (95% CI: 54.8-57.2)

**Never:** 10.0% (95% CI: 9.2-10.7)

### Sex

**Always/Usually:** The prevalence of always or usually having difficulty sleeping in the past two weeks was significantly higher among adults who were female (36.5%) than among adults who were male (31.3%).

**Sometimes/Rarely:** There was no significant difference in the prevalence of sometimes or rarely having difficulty sleeping in the past two weeks between the sexes.

**Never:** The prevalence of never having difficulty sleeping in the past two weeks was significantly lower among adults who were female (8.2%) than among adults who were male (11.9%).

### Age

**Always/Usually:** The prevalence of always or usually having difficulty sleeping in the past two weeks was significantly higher among any other adults age groups than among adults aged 65 or older (27.2%).

**Sometimes/Rarely:** The prevalence of sometimes or rarely having difficulty sleeping in the past two weeks was significantly higher among adults aged 65 or older (64.0%) than among any other adult age groups.

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**Never:** The prevalence of never having difficulty sleeping in the past two weeks was significantly lower among adults aged 50-64 (8.8%) and 65 or older (8.9%) than among adults aged 18-34 (12.2%).

## Education

**Always/Usually:** The prevalence of always or usually having difficulty sleeping in the past two weeks was significantly higher among adults with less than high school education (44.0%) than among adults with any other educational attainment levels. The prevalence was significantly lower among adults with an associate's or more education (28.9%) than among adults with any other educational attainment levels.

**Sometimes/Rarely:** The prevalence of sometimes or rarely having difficulty sleeping in the past two weeks was significantly higher among adults with an associate's or more education (59.9%) than among adults with any other educational attainment levels. The prevalence was significantly lower among adults with less than a high school education (47.4%) than among adults with any other educational attainment levels.

**Never:** There was no significant difference in the prevalence of never having difficulty sleeping in the past two weeks among educational attainment levels.

## Family Income

**Always/Usually:** The prevalence of always or usually having difficulty sleeping in the past two weeks was significantly higher among adults with an annual family income of less than \$15,000 (48.4%) than among adults with any other annual family income levels. The prevalence was significantly lower among adults with an annual family income of \$85,001 or more (20.9%) than among adults with any other annual family income levels.

**Sometimes/Rarely:** The prevalence of sometimes or rarely having difficulty sleeping in the past two weeks was significantly higher among adults with any other annual family income levels than among adults with an annual family income of \$15,000 or less (43.6%).

**Never:** The prevalence of never having difficulty sleeping in the past two weeks was significantly lower among adults with an annual family income of \$15,000 or less (8.0%) and \$15,001-\$35,000 (7.2%) than among adults with an annual family income of \$85,001 or more (14.6%).

## Race

**Always/Usually:** The prevalence of always or usually having difficulty sleeping in the past two weeks was significantly higher among adults who were multi-racial or "other" (44.9%) than among adults who were in any other racial groups.

**Sometimes/Rarely:** The prevalence of sometimes or rarely having difficulty sleeping in the past two weeks was significantly higher among adults who were White (56.4%) and Black (58.1%) than among adults who were multi-racial or "other" (44.4%).

**Never:** There was no significant difference in the prevalence of never having difficulty sleeping in the past two weeks among racial groups.



## Marital Status

**Always/Usually:** The prevalence of always or usually having difficulty sleeping in the past two weeks was significantly higher among adults who were widowed, divorced, or separated (40.0%) and never married (36.0%) than among adults who were married or living with a partner (30.5%).

**Sometimes/Rarely:** The prevalence of sometimes or rarely having difficulty sleeping in the past two weeks was significantly higher among adults who were married or living with a partner (58.8%) than among adults with any other marital statuses.

**Never:** The prevalence of never having difficulty sleeping in the past two weeks was significantly lower among adults who were widowed, divorced, or separated (7.4%) than among adults with any other marital statuses.

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

**Always/Usually:** There was no significant difference in the prevalence of always or usually having difficulty sleeping in the past two weeks among DHHR, Bureau for Medical Services (BMS) regions compared to the state estimate.

**Sometimes/Rarely:** There was no significant difference in the prevalence of sometimes or rarely having difficulty sleeping in the past two weeks among DHHR, BMS regions compared to the state estimate.

**Never:** There was no significant difference in the prevalence of never having difficulty sleeping in the past two weeks among DHHR, BMS regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

**Always/Usually:** There was no significant difference in the prevalence of always or usually having difficulty sleeping in the past two weeks among DHHR, Bureau for Behavioral Health (BBH) regions compared to the state estimate.

**Sometimes/Rarely:** There was no significant difference in the prevalence of sometimes or rarely having difficulty sleeping in the past two weeks among DHHR, BBH regions compared to the state estimate.

**Never:** There was no significant difference in the prevalence of never having difficulty sleeping in the past two weeks among DHHR, BBH regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

**Always/Usually:** There was one DHHR, BBH, Ryan Brown Fund (RBF) region with a significantly higher prevalence of always or usually having difficulty sleeping in the past two weeks compared to the state estimate (34.0%); region five (38.0%). There were no DHHR, BBH, RBF regions with a significantly lower prevalence compared to the state estimate.

**Sometimes/Rarely:** There was no significant difference in the prevalence of sometimes or rarely having difficulty sleeping in the past two weeks among DHHR, BBH, RBF regions compared to the state estimate.

**Never:** There was no significant difference in the prevalence of never having difficulty sleeping in the past two weeks among DHHR, BBH, RBF regions compared to the state estimate.

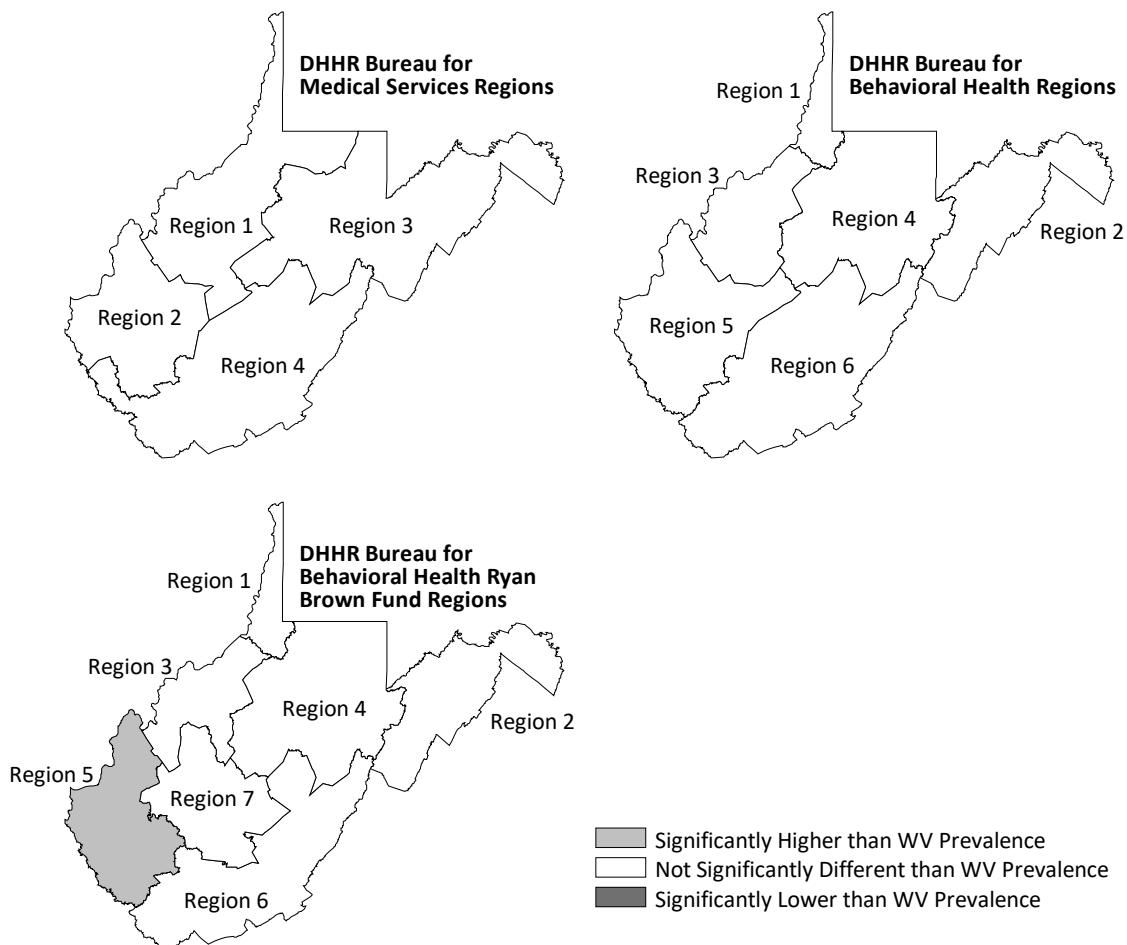
*Table 8.1.1: Weighted Prevalence of Frequency of Difficulty Sleeping in the Past Two Weeks by Demographic Characteristics: MATCH, 2021<sup>a</sup>*

Characteristic	Always/Usually		Sometimes/Rarely		Never	
	%	95% CI	%	95% CI	%	95% CI
<b>TOTAL</b>	<b>34.0</b>	<b>32.9-35.1</b>	<b>56.0</b>	<b>54.8-57.2</b>	<b>10.0</b>	<b>9.2-10.7</b>
<b>Sex</b>						
Male	31.3	29.5-33.0	56.9	55.0-58.7	11.9	10.6-13.1
Female	36.5	35.1-38.0	55.2	53.8-56.7	8.2	7.4-9.1
<b>Age</b>						
18-34	33.8	31.2-36.3	54.0	51.3-56.8	12.2	10.4-14.0
35-49	37.2	34.7-39.8	52.8	50.2-55.5	9.9	8.3-11.6
50-64	38.0	35.8-40.1	53.2	51.0-55.5	8.8	7.5-10.1
65+	27.2	25.4-28.9	64.0	62.1-65.9	8.9	7.8-10.0
<b>Education</b>						
Less than HS	44.0	40.6-47.4	47.4	43.9-50.8	8.6	6.7-10.5
HS/GED	36.2	34.6-37.9	54.7	52.9-56.4	9.1	8.0-10.1
Associate's or more	28.9	27.3-30.6	59.9	58.1-61.7	11.2	10.0-12.4
<b>Annual Family Income</b>						
\$15,000 or less	48.4	46.0-50.8	43.6	41.2-46.0	8.0	6.7-9.4
\$15,001-\$35,000	39.4	37.1-41.7	53.5	51.2-55.8	7.2	6.0-8.3
\$35,001-\$50,000	30.3	27.3-33.3	59.4	56.2-62.7	10.3	8.2-12.3
\$50,001-\$85,000	27.3	24.7-29.9	61.9	59.1-64.8	10.8	8.9-12.7
\$85,001+	20.9	18.5-23.4	64.5	61.5-67.4	14.6	12.4-16.9
<b>Race</b>						
White	33.7	32.5-34.8	56.4	55.2-57.7	9.9	9.1-10.7
Black	30.2	25.3-35.0	58.1	52.6-63.6	11.7	8.5-15.0
Multi-racial or "Other"	44.9	38.3-51.4	44.4	37.9-51.0	10.7	6.1-15.2
<b>Marital Status</b>						
Married/Living with a partner	30.5	29.0-32.0	58.8	57.2-60.5	10.7	9.6-11.7
Widowed/Divorced/Separated	40.0	37.8-42.1	52.7	50.5-54.8	7.4	6.2-8.6
Never married	36.0	33.3-38.6	52.9	50.1-55.7	11.2	9.4-12.9

*Note.* CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

Figure 8.1.1: Weighted Prevalence of Always or Usually Having Difficulty Sleeping in the Past Two Weeks by Region: MATCH, 2021<sup>a,b</sup>



Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

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# Chapter 9: Nutrition

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## 9.1 Purchasing Fresh Fruits or Vegetables

### Item

In the survey, respondents were presented with the question, “When shopping for food, how often do you buy fresh fruits or vegetables that are not canned, frozen, or otherwise processed?” The following responses were offered, and only one could be selected:

- “Always”
- “Most of the time”
- “About half the time”
- “Sometimes”
- “Never”

The category ‘Always/Most of the Time’ is used for responding “Always” or “Most of the time” to the question. The category ‘About Half the Time/Sometimes’ is used for responding “About half the time” or “Sometimes” to the question. The category ‘Never’ is used for responding “Never” to the question.

### Prevalence

**Always/Most of the Time:** 49.4% (95% CI: 48.2-50.6)

**About Half the Time/Sometimes:** 47.2% (95% CI: 46.0-48.4)

**Never:** 3.5% (95% CI: 3.0-3.9)

### Sex

**Always/Most of the Time:** The prevalence of always or most of the time purchasing fresh fruits or vegetables when shopping for food was significantly lower among adults who were male (46.9%) than among adults who were female (51.7%).

**About Half the Time/Sometimes:** There was no significant difference in the prevalence of about half the time or sometimes purchasing fresh fruits or vegetables when shopping for food between the sexes.

**Never:** The prevalence of never purchasing fresh fruits or vegetables when shopping for food was significantly higher among adults who were male (4.5%) than among adults who were female (2.5%).

### Age

**Always/Most of the Time:** There was no significant difference in the prevalence of always or most of the time purchasing fresh fruits or vegetables when shopping for food among adult age groups.

**About Half the Time/Sometimes:** There was no significant difference in the prevalence of about half the time or sometimes purchasing fresh fruits or vegetables when shopping for food among adult age groups.

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**Never:** The prevalence of never purchasing fresh fruits or vegetables when shopping for food was significantly higher among adults aged 18-34 (5.7%) than among adults aged 65 or older (2.1%).

## Education

**Always/Most of the Time:** The prevalence of always or most of the time purchasing fresh fruits or vegetables when shopping for food was significantly lower among adults with less than a high school education (36.8%) than among adults with any other educational attainment levels. The prevalence was significantly higher among adults with an associate's or more education (57.8%) than among adults with any other educational attainment levels.

**About Half the Time/Sometimes:** The prevalence of about half the time or sometimes purchasing fresh fruits or vegetables when shopping for food was significantly lower among adults with an associate's or more education (40.0%) than among adults with any other educational attainment levels.

**Never:** The prevalence of never purchasing fresh fruits or vegetables when shopping for food was significantly higher among adults with less than a high school education (5.8%) and a high school or Graduate Equivalency Diploma (GED) education (4.1%) than among adults with an associate's or more education (2.2%).

## Family Income

**Always/Most of the Time:** The prevalence of always or most of the time purchasing fresh fruits or vegetables when shopping for food was significantly lower among adults with an annual family income of \$15,000 or less (39.2%) and \$15,001-\$35,000 (39.9%) than among adults with any other annual family income levels. The prevalence was significantly higher among adults with an annual family income of \$85,001 or more (69.4%) than among adults with any other annual family income levels.

**About Half the Time/Sometimes:** The prevalence of about half the time or sometimes purchasing fresh fruits or vegetables when shopping for food was significantly lower among adults with an annual family income of \$50,001-\$85,000 (43.7%) and \$85,001 or more (29.9%) than among adults with any other annual family income levels.

**Never:** The prevalence of never purchasing fresh fruits or vegetables when shopping for food was significantly higher among adults with an annual family income of \$15,000 or less (6.9%) than among adults with any other annual family income levels with stable estimates. There was an unstable prevalence estimate among annual family income levels.

## Race

**Always/Most of the Time:** There was no significant difference in the prevalence of always or most of the time purchasing fresh fruits or vegetables when shopping for food among racial groups.

**About Half the Time/Sometimes:** There was no significant difference in the prevalence of about half the time or sometimes purchasing fresh fruits or vegetables when shopping for food among racial groups.

**Never:** There was no significant difference in the prevalence of never purchasing fresh fruits or vegetables when shopping for food among racial groups.

## Marital Status

**Always/Most of the Time:** The prevalence of always or most of the time purchasing fresh fruits or vegetables when shopping for food was significantly lower among adults who were widowed, divorced, or separated (43.2%) and never married (41.4%) than among adults who were married or living with a partner (55.2%).

**About Half the Time/Sometimes:** The prevalence of about half the time or sometimes purchasing fresh fruits or vegetables when shopping for food was significantly lower among adults who were married or living with a partner (42.8%) than among adults with any other marital statuses.

**Never:** The prevalence of never purchasing fresh fruits or vegetables when shopping for food was significantly higher among adults who were never married (6.4%) than among adults with any other marital statuses. The prevalence was significantly lower among adults who were married or living with a partner (2.0%) than among adults with any other marital status.

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

**Always/Most of the Time:** There was one DHHR, Bureau for Medical Services (BMS) region with a significantly lower prevalence of always or most of the time purchasing fresh fruits or vegetables when shopping for food compared to the state estimate (49.4%); region four (45.3%). There were no DHHR, BMS regions with a significantly higher prevalence compared to the state estimate.

**About Half the Time/Sometimes:** There was no significant difference in the prevalence of about half the time or sometimes purchasing fresh fruits or vegetables when shopping for food among DHHR, BMS regions compared to the state estimate.

**Never:** There was no significant difference in the prevalence of never purchasing fresh fruits or vegetables when shopping for food among DHHR, BMS regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

**Always/Most of the Time:** There was no significant difference in the prevalence of always or most of the time purchasing fresh fruits or vegetables when shopping for food among DHHR, Bureau for Behavioral Health (BBH) regions compared to the state estimate.

**About Half the Time/Sometimes:** There was no significant difference in the prevalence of about half the time or sometimes purchasing fresh fruits or vegetables when shopping for food among DHHR, BBH regions compared to the state estimate.

**Never:** There was no significant difference in the prevalence of never purchasing fresh fruits or vegetables when shopping for food among DHHR, BBH regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

**Always/Most of the Time:** There was one DHHR, BBH, Ryan Brown Fund (RBF) region with a significantly lower prevalence of always or most of the time purchasing fresh fruits or vegetables when shopping for food compared to the state estimate (49.4%); region six (44.7%). There were no DHHR, BBH, RBF regions with a significantly higher prevalence compared to the state estimate.

**About Half the Time/Sometimes:** There was no significant difference in the prevalence of about half the time or sometimes purchasing fresh fruits or vegetables when shopping for food among DHHR, BBH, RBF regions compared to the state estimate.

**Never:** There was no significant difference in the prevalence of never purchasing fresh fruits or vegetables when shopping for food among DHHR, BBH, RBF regions compared to the state estimate.



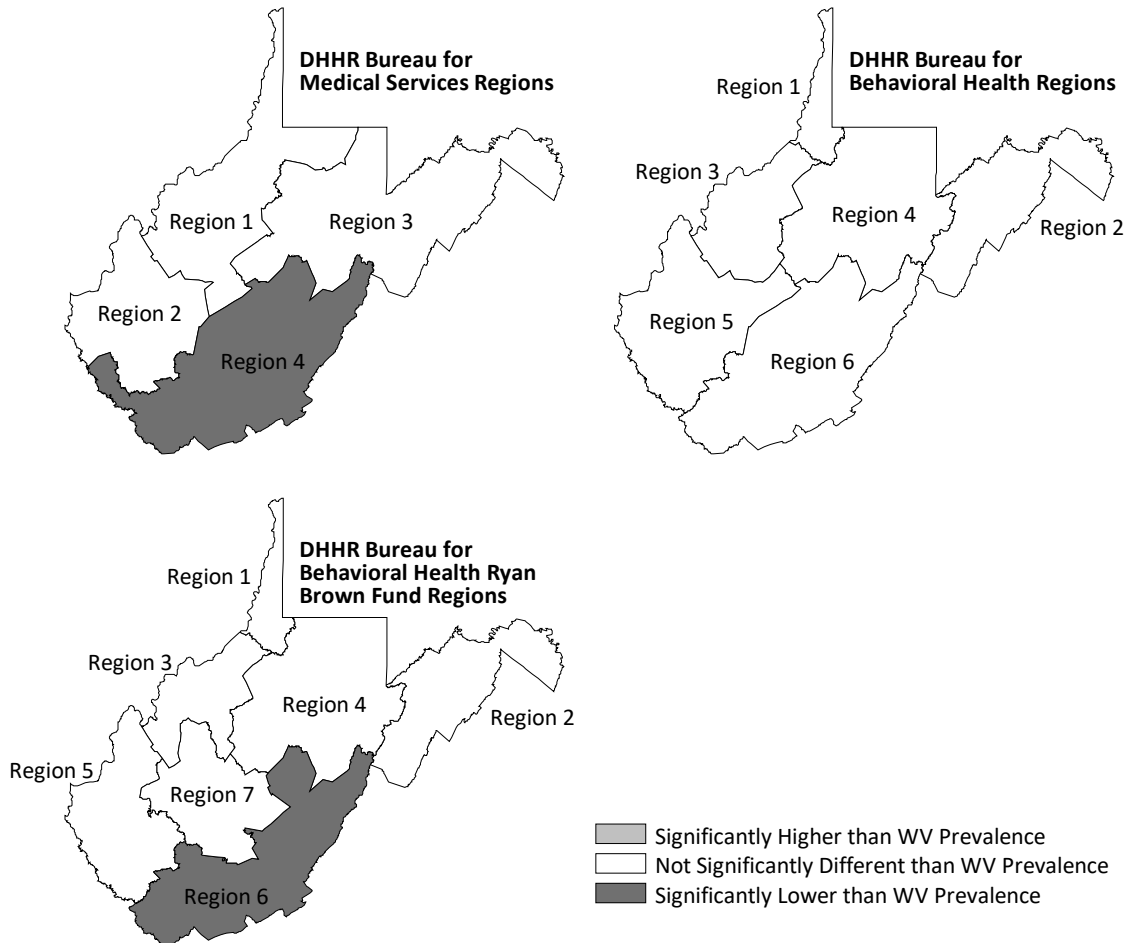
*Table 9.1.1: Weighted Prevalence of Frequency of Purchasing Fresh Fruits or Vegetables When Shopping for Food by Demographic Characteristics: MATCH, 2021<sup>a</sup>*

Characteristic	Always/Most of the Time		About Half the Time /Sometimes		Never	
	%	95% CI	%	95% CI	%	95% CI
<b>TOTAL</b>	<b>49.4</b>	<b>48.2-50.6</b>	<b>47.2</b>	<b>46.0-48.4</b>	<b>3.5</b>	<b>3.0-3.9</b>
<b>Sex</b>						
Male	46.9	45.0-48.8	48.6	46.7-50.5	4.5	3.7-5.3
Female	51.7	50.2-53.2	45.8	44.3-47.3	2.5	2.1-2.9
<b>Age</b>						
18-34	47.0	44.2-49.7	47.4	44.6-50.1	5.7	4.4-6.9
35-49	52.1	49.5-54.8	44.2	41.6-46.8	3.7	2.7-4.7
50-64	48.5	46.3-50.7	49.0	46.8-51.2	2.5	1.9-3.1
65+	50.7	48.7-52.7	47.1	45.1-49.2	2.1	1.6-2.7
<b>Education</b>						
Less than HS	36.8	33.4-40.1	57.4	54.0-60.9	5.8	4.4-7.2
HS/GED	44.3	42.5-46.1	51.6	49.8-53.4	4.1	3.4-4.8
Associate's or more	57.8	56.0-59.6	40.0	38.2-41.8	2.2	1.6-2.8
<b>Annual Family Income</b>						
\$15,000 or less	39.2	36.9-41.6	53.9	51.5-56.3	6.9	5.6-8.2
\$15,001-\$35,000	39.9	37.7-42.2	55.7	53.4-58.0	4.4	3.3-5.4
\$35,001-\$50,000	46.9	43.6-50.2	50.6	47.3-53.9	2.5	1.6-3.4
\$50,001-\$85,000	54.6	51.7-57.5	43.7	40.8-46.5	1.8	1.0-2.5
\$85,001+	69.4	66.6-72.2	29.9	27.1-32.7	U	U
<b>Race</b>						
White	49.6	48.3-50.8	47.0	45.8-48.3	3.4	2.9-3.8
Black	46.5	40.8-52.2	48.7	42.9-54.6	4.8	2.2-7.4
Multi-racial or "Other"	45.5	38.9-52.1	50.2	43.6-56.9	4.3	1.9-6.7
<b>Marital Status</b>						
Married/Living with a partner	55.2	53.6-56.9	42.8	41.2-44.4	2.0	1.5-2.5
Widowed/Divorced/Separated	43.2	41.1-45.4	52.7	50.5-54.9	4.0	3.2-4.9
Never married	41.4	38.6-44.2	52.2	49.4-55.0	6.4	5.1-7.7

*Note.* CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma; U = unstable prevalence estimate.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

Figure 9.1.1: Weighted Prevalence of Always or Most of the Time Purchasing Fresh Fruits or Vegetables When Shopping for Food by Region: MATCH, 2021<sup>a,b</sup>



Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

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# Chapter 10: Physical Activity

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## 10.1 No Leisure Time, Physical Activity, or Exercise

### Item

Responding “No” to the question, “During the past 30 days, other than your regular job, did you participate in any physical activities or exercises? Examples include walking for exercise, running, or gardening.” The category “physical inactivity” represents those responding “No” to the question.

### Prevalence

**West Virginia:** 34.3% (95% CI: 33.2-35.4)

### Sex

**Male:** 32.5% (95% CI: 30.7-34.2)

**Female:** 36.1% (95% CI: 34.6-37.5)

The prevalence of physical inactivity during the past 30 days was significantly higher among adults who were female (36.1%) than among adults who were male (32.5%).

### Age

The prevalence of physical inactivity during the past 30 days was significantly higher among adults aged 65 or older (38.4%) than among adults aged 18-34 (31.2%) and 35-49 (32.7%).

### Education

The prevalence of physical inactivity during the past 30 days was significantly higher among adults with less than a high school education (53.4%) than among adults with any other educational attainment levels. The prevalence was significantly lower among adults with an associate’s or more education (24.5%) than among adults with any other educational attainment levels.

### Family Income

The prevalence of physical inactivity during the past 30 days was significantly higher among adults with an annual family income of \$15,000 or less (49.6%) than among adults with any other annual family income levels. The prevalence was significantly lower among adults with an annual family income of \$85,001 or more (18.3%) than among adults with any other annual family income levels.

### Race

There was no significant difference in the prevalence of physical inactivity during the past 30 days among racial groups.

## Marital Status

The prevalence of physical inactivity during the past 30 days was significantly higher among adults who were widowed, divorced, or separated (41.9%) than among adults with any other marital statuses.

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There was one DHHR, Bureau for Medical Services (BMS) region with a significantly higher prevalence of physical inactivity during the past 30 days compared to the state estimate (34.3%); region four (40.6%). There was one DHHR, BMS region with a significantly lower prevalence compared to the state estimate; region one (30.9%).

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There was one DHHR, Bureau for Behavioral Health (BBH) region with a significantly higher prevalence of physical inactivity during the past 30 days compared to the state estimate (34.3%); region six (39.5%). There was one DHHR, BBH region with a significantly lower prevalence compared to the state estimate; region four (30.9%).

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There was one DHHR, BBH, Ryan Brown Fund (RBF) region with a significantly higher prevalence of physical inactivity during the past 30 days compared to the state estimate (34.3%); region six (39.8%). There was one DHHR, BBH, RBF region with a significantly lower prevalence compared to the state estimate; region four (30.9%).

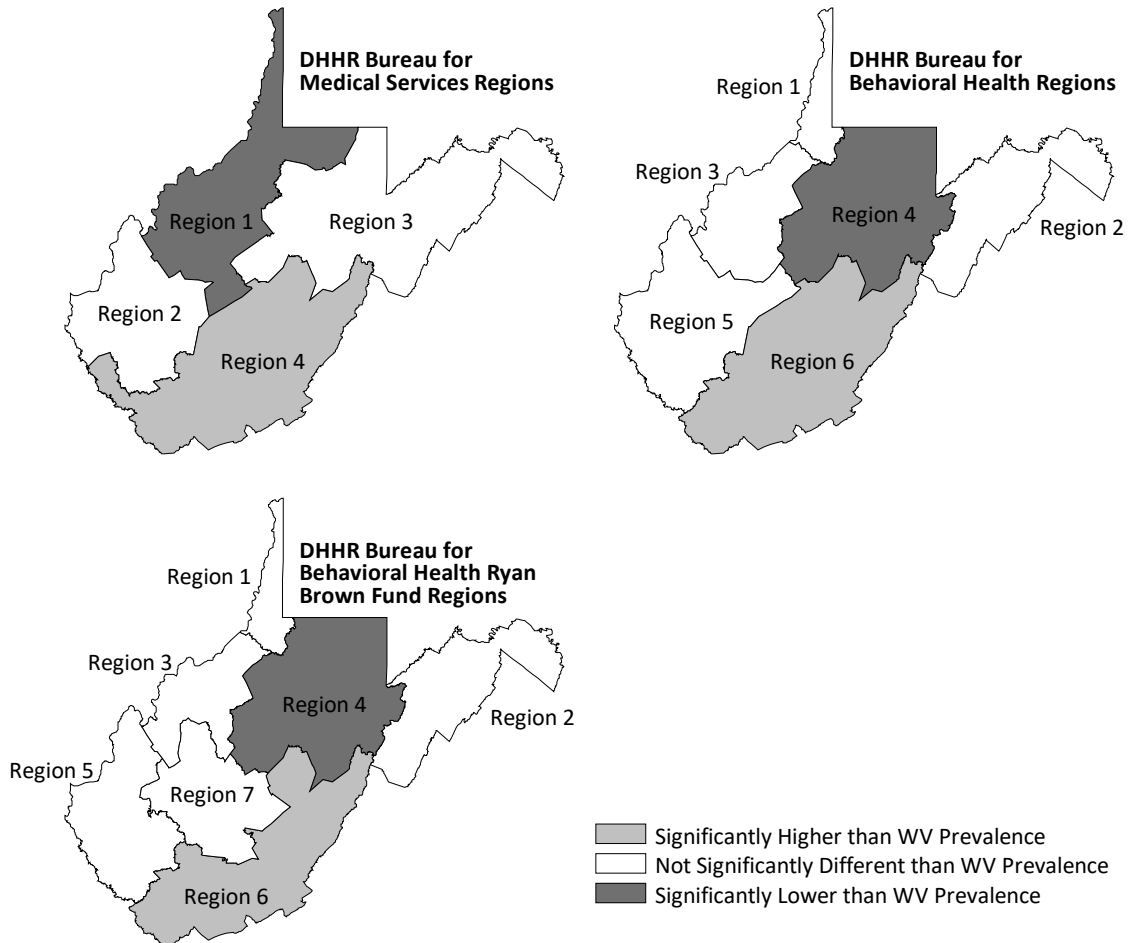
*Table 10.1.1: Weighted Prevalence of Physical Inactivity During the Past 30 Days by Demographic Characteristics: MATCH, 2021<sup>a</sup>*

Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>218,498</b>	<b>32.5</b>	<b>30.7-34.2</b>	<b>255,275</b>	<b>36.1</b>	<b>34.6-37.5</b>	<b>473,772</b>	<b>34.3</b>	<b>33.2-35.4</b>
<b>Age</b>									
18-34	56,922	32.4	28.3-36.4	50,591	29.9	27.0-32.9	107,513	31.2	28.7-33.7
35-49	48,685	32.3	28.5-36.2	51,059	33.0	30.0-35.9	99,744	32.7	30.2-35.1
50-64	59,884	32.1	29.0-35.1	73,470	37.5	34.8-40.3	133,354	34.9	32.8-36.9
65+	52,310	33.8	30.8-36.7	77,911	42.3	39.6-45.0	130,221	38.4	36.4-40.4
<b>Education</b>									
Less than HS	45,941	50.3	45.0-55.5	43,202	57.2	52.8-61.7	89,143	53.4	49.9-56.9
HS/GED	114,252	37.7	35.0-40.4	118,216	40.1	38.0-42.2	232,468	38.9	37.2-40.6
Associate's or more	57,025	20.8	18.4-23.2	92,575	27.6	25.6-29.7	149,600	24.5	23.0-26.1
<b>Annual Family Income</b>									
\$15,000 or less	65,476	49.1	45.2-53.0	76,948	50.0	47.0-53.0	142,424	49.6	47.2-52.0
\$15,001-\$35,000	64,159	40.7	36.8-44.5	76,768	40.1	37.4-42.8	140,927	40.4	38.1-42.6
\$35,001-\$50,000	29,628	32.2	27.4-37.1	31,807	34.4	30.5-38.3	61,434	33.3	30.2-36.4
\$50,001-\$85,000	29,069	23.3	19.6-27.0	35,041	27.0	23.8-30.3	64,111	25.2	22.7-27.6
\$85,001+	23,811	16.5	13.5-19.5	23,912	20.6	17.4-23.9	47,723	18.3	16.1-20.6
<b>Race</b>									
White	204,380	32.8	31.0-34.6	238,469	35.7	34.2-37.1	442,849	34.3	33.1-35.4
Black	5,185	29.2	21.6-36.8	7,905	46.3	39.2-53.4	13,090	37.6	32.1-43.0
Multi-racial or "Other"	8,695	28.9	20.1-37.6	8,588	41.0	32.6-49.4	17,283	33.9	27.6-40.1
<b>Marital Status</b>									
Married/Living with a partner	112,836	30.9	28.6-33.2	122,280	32.0	30.1-33.9	235,115	31.5	30.0-33.0
Widowed/Divorced/Separated	46,972	36.9	33.1-40.6	89,248	45.2	42.6-47.8	136,220	41.9	39.8-44.1
Never married	57,450	32.4	28.7-36.1	42,851	34.1	30.5-37.6	100,302	33.1	30.5-35.7

*Note.* CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

Figure 10.1.1: Weighted Prevalence of Physical Inactivity During the Past 30 Days by Region: MATCH, 2021<sup>a,b</sup>



Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.  
<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.  
<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

Section 3

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SOCIAL DETERMINANTS OF HEALTH

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# Chapter 11: Healthcare Access and Quality

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## 11.1 No Health Insurance Coverage

### Item

Responding “No” to the question, “Do you have any kind of health insurance coverage, including private health insurance or government plans such as Medicare or Medicaid?”

### Prevalence

**West Virginia:** 8.3% (95% CI: 7.4-9.1)

### Sex

**Male:** 9.4% (95% CI: 8.0-10.8)

**Female:** 7.1% (95% CI: 6.1-8.1)

There was no significant difference in the prevalence of no health insurance coverage among adults aged 18-64 between the sexes.

### Age

The prevalence of no health insurance coverage among adults aged 18-64 was significantly higher among adults aged 18-34 (9.7%) than among adults aged 50-64 (6.7%).

### Education

The prevalence of no health insurance coverage among adults aged 18-64 was significantly higher among adults with any other education attainment levels than among adults with an associate’s or more education (6.1%).

### Family Income

The prevalence of no health insurance coverage among adults aged 18-64 was significantly higher among adults with any other annual family income levels than among adults with an annual family income of \$85,001 or more (3.8%).

### Race

There was no significant difference in the prevalence of no health insurance coverage among adults aged 18–64 among racial groups.

### Marital Status

There was no significant difference in the prevalence of no health insurance coverage among adults aged 18-64 among marital statuses.



## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There was no significant difference in the prevalence of no health insurance coverage among adults aged 18-64 among DHHR, Bureau for Medical Services (BMS) regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There was no significant difference in the prevalence of no health insurance coverage among adults aged 18-64 among DHHR, Bureau for Behavioral Health (BBH) regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There was no significant difference in the prevalence of no health insurance coverage among adults aged 18-64 among DHHR, BBH, Ryan Brown Fund (RBF) regions compared to the state estimate.

*Table 11.1.1: Weighted Prevalence of No Health Insurance Coverage Among Adults Aged 18-64 by Demographic Characteristics: MATCH, 2021<sup>a</sup>*

Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>48,716</b>	<b>9.4</b>	<b>8.0-10.8</b>	<b>37,182</b>	<b>7.1</b>	<b>6.1-8.1</b>	<b>85,897</b>	<b>8.3</b>	<b>7.4-9.1</b>
<b>Age</b>									
18-34	20,091	11.4	8.5-14.2	13,571	7.9	6.2-9.7	33,662	9.7	8.0-11.4
35-49	13,342	8.8	6.3-11.3	12,949	8.3	6.2-10.4	26,291	8.6	6.9-10.2
50-64	15,283	8.1	6.1-10.1	10,661	5.4	4.1-6.7	25,944	6.7	5.6-7.9
<b>Education</b>									
Less than HS	10,547	15.2	9.9-20.4	4,889	9.5	6.5-12.5	15,436	12.7	9.4-16.0
HS/GED	24,467	10.3	8.2-12.4	16,910	7.9	6.4-9.4	41,378	9.1	7.8-10.5
Associate's or more	13,435	6.5	4.7-8.3	14,743	5.7	4.4-7.1	28,178	6.1	5.0-7.2
<b>Annual Family Income</b>									
\$15,000 or less	12,101	10.3	7.5-13.0	8,662	7.0	5.0-9.0	20,763	8.6	6.9-10.3
\$15,001-\$35,000	15,272	13.5	10.0-17.1	10,713	8.4	6.3-10.4	25,985	10.8	8.8-12.8
\$35,001-\$50,000	8,579	13.8	8.6-19.0	5,041	8.3	5.6-11.0	13,619	11.1	8.1-14.1
\$50,001-\$85,000	6,916	7.6	4.8-10.5	6,688	6.8	4.4-9.2	13,605	7.2	5.3-9.0
\$85,001+	U	U	U	4,638	4.6	2.6-6.6	8,342	3.8	2.3-5.2
<b>Race</b>									
White	43,355	9.2	7.7-10.6	35,490	7.2	6.2-8.2	78,845	8.2	7.3-9.0
Black	1,545	9.9	5.2-14.7	U	U	U	2,115	7.5	4.6-10.4
Multi-racial or "Other"	U	U	U	1,103	6.0	2.6-9.4	4,764	10.5	5.1-15.9
<b>Marital Status</b>									
Married/Living with a partner	19,614	7.5	5.6-9.3	20,895	7.0	5.7-8.2	40,508	7.2	6.1-8.3
Widowed/Divorced/Separated	9,654	11.7	8.1-15.3	6,395	6.2	4.2-8.1	16,049	8.6	6.7-10.6
Never married	19,091	11.3	8.6-14.1	9,757	8.3	5.8-10.7	28,848	10.1	8.2-12.0

*Note.* CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma; U = unstable prevalence estimate.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

## 11.2 Health Insurance Coverage

### Items

Responding to one or more of the items following the question, “What kinds of health insurance or healthcare coverage do you have?”

- “A plan purchased through your or someone else’s employer or union”
- “A plan that you or another family member bought on your own”
- “Medicare”
- “Medigap”
- “Medicaid or ‘Medical Card’ provided by Mountain Health Trust (Aetna, Health Plan, Unicare)”
- “Military related healthcare, such as Tricare (Champus) or VA healthcare (CHAMPVA)”
- “Public Employees Insurance Agency (PEIA)”
- “Another type of insurance”

The category ‘Medicare’ below represents responding “Yes” to “Medicare.” The category ‘Medicaid’ represents responding “Yes” to “Medicaid or ‘Medical Card’ provided by Mountain Health Trust (Aetna, Health Plan, Unicare).” The category ‘Other Insurance’ represents responding “Yes” to one or more of “A plan purchased through your or someone else’s employer or union,” “A plan that you or another family member bought on your own,” “Medigap,” “Military related healthcare, such as Tricare (Champus) or VA healthcare (CHAMPVA),” “Public Employees Insurance Agency (PEIA),” or “Another type of insurance.” The category ‘No Insurance’ represents responding “No” to the question, “Do you have any kind of health insurance coverage, including private health insurance or government plans such as Medicare or Medicaid?” or not selecting any of the options for “What kinds of health insurance or healthcare coverage do you have?”

### Prevalence

**Medicare:** 32.0% (95% CI: 30.9-33.0)

**Medicaid:** 26.3% (95% CI: 25.5-27.2)

**Other Insurance:** 57.1% (95% CI: 56.0-58.2)

**No Insurance:** 6.6% (95% CI: 5.9-7.2)

### Sex

**Medicare:** There was no significant difference in the prevalence of Medicare coverage between the sexes.

**Medicaid:** The prevalence of Medicaid coverage was significantly higher among adults who were female (28.5%) than among adults who were male (24.1%).

**Other Insurance:** There was no significant difference in the prevalence of other insurance coverage between the sexes.

**No Insurance:** The prevalence of no insurance coverage was significantly higher among adults who were male (7.7%) than among adults who were female (5.5%).

## Age

**Medicare:** The prevalence of Medicare coverage was significantly higher among adults aged 65 or older (89.1%) than among any other adult age groups.

**Medicaid:** The prevalence of Medicaid coverage was significantly higher among adults aged 18-34 (39.9%) than among any other adult age groups. The prevalence was significantly lower among adults aged 65 or older (7.3%) than among any other adult age groups.

**Other Insurance:** The prevalence of other insurance coverage was significantly higher among any other adult age groups than among adults aged 18-34 (47.3%).

**No Insurance:** The prevalence of no insurance coverage was significantly higher among any other adult age groups than among adults aged 65 or older (1.3%).

## Education

**Medicare:** The prevalence of Medicare coverage was significantly higher among adults with less than a high school education (42.2%) than among adults with any other educational attainment levels. The prevalence was significantly lower among adults with an associate's or more education (26.8%) than among adults with any other educational attainment levels.

**Medicaid:** The prevalence of Medicaid coverage was significantly higher among adults with less than a high school education (49.5%) than among adults with any other educational attainment levels. The prevalence was significantly lower among adults with an associate's or more education (14.0%) than among adults with any other educational attainment levels.

**Other Insurance:** The prevalence of other insurance coverage was significantly higher among adults with an associate's or more education (74.3%) than adults with any other educational attainment levels. The prevalence was significantly lower among adults with less than a high school education (24.2%) than adults with any other educational attainment levels.

**No Insurance:** The prevalence of no insurance coverage was significantly higher among adults with any other educational attainment levels than adults with an associate's or more education (4.7%).

## Family Income

**Medicare:** The prevalence of Medicare coverage was significantly higher among adults with any other annual family income levels than among adults with an annual family income of \$85,001 or more (14.7%).

**Medicaid:** The prevalence of Medicaid coverage was significantly higher among adults with an annual family income of \$15,000 or less (63.0%) than among adults with any other annual family income levels. The prevalence was significantly lower among adults with an annual family income of \$85,001 or more (2.4%) than among adults with any other annual family income levels.

**Other Insurance:** The prevalence of other insurance coverage was significantly higher among adults with an annual family income of \$85,001 or more (91.7%) than among adults with any other annual family

income levels. The prevalence was significantly lower among adults with an annual family income of \$15,000 or less (14.5%) than among adults with any other annual family income levels.

**No Insurance:** The prevalence of no insurance coverage was significantly higher among adults with an annual family income of \$15,000 or less (7.7%) than among adults with an annual family income of \$85,001 or more (3.3%).

## Race

**Medicare:** There was no significant difference in the prevalence of Medicare coverage among racial groups.

**Medicaid:** The prevalence of Medicaid coverage was significantly higher among adults who were Black (46.0%) and multi-racial or “other” (42.2%) than among adults who were White (25.2%).

**Other Insurance:** The prevalence of other insurance coverage was significantly higher among adults who were White (58.4%) than among adults who were any other racial groups.

**No Insurance:** There was no significant difference in the prevalence of no insurance coverage among racial groups.

## Marital Status

**Medicare:** The prevalence of Medicare coverage was significantly higher among adults who were widowed, divorced, or separated (50.6%) than among adults with any other marital statuses. The prevalence was significantly lower among adults who were never married (19.1%) than among adults with any other marital statuses.

**Medicaid:** The prevalence of Medicaid coverage was significantly higher among adults who were never married (42.6%) than among adults with any other marital statuses. The prevalence was significantly lower among adults who were married or living with a partner (17.7%) than among adults with any other marital statuses.

**Other Insurance:** The prevalence of other insurance coverage was significantly higher among adults who were married or living with a partner (67.7%) than among adults with any other marital statuses. The prevalence of other insurance coverage was significantly lower among adults who were never married (41.9%) than among adults with any other marital statuses.

**No Insurance:** The prevalence of no insurance coverage was significantly higher among adults with any other marital statuses than among adults who were never married (9.7%).

## West Virginia Department of Health and Human Resources (DHHR) Regions

*DHHR, Bureau for Medical Services (BMS) Regions*

**Medicare:** There was one DHHR, Bureau for Medical Services (BMS) region with a significantly higher prevalence of Medicare coverage compared to the state estimate (32.0%); region four (36.0%). There were no DHHR, BMS regions with a significantly lower prevalence compared to the state estimate.

**Medicaid:** There was one DHHR, BMS region with a significantly higher prevalence of Medicaid coverage compared to the state estimate (26.3%); region four (34.3%). There was one DHHR, BMS region with a significantly lower prevalence compared to the state estimate; region three (22.6%).

**Other Insurance:** There were two DHHR, BMS regions with a significantly higher prevalence of other insurance coverage compared to the state estimate (57.1%); regions one (61.0%) and three (60.3%). There was one DHHR, BMS region with a significantly lower prevalence compared to the state estimate; region four (47.8%).

**No Insurance:** There was no significant difference in the prevalence of no insurance coverage among DHHR, BMS Regions compared to the state estimate.

*DHHR, Bureau for Behavioral Health (BBH) Regions*

**Medicare:** There was one DHHR, Bureau for Behavioral Health (BBH) region with a significantly higher prevalence of Medicare coverage compared to the state estimate (32.0%); region six (36.1%). There were two DHHR, BBH regions with a significantly lower prevalence compared to the state estimate; regions two (28.0%) and four (28.2%).

**Medicaid:** There was one DHHR, BBH region with a significantly higher prevalence of Medicaid coverage compared to the state estimate (26.3%); region six (33.5%). There were two DHHR, BBH regions with a significantly lower prevalence compared to the state estimate; regions two (20.5%) and four (23.6%).

**Other Insurance:** There were three DHHR, BBH regions with a significantly higher prevalence of other insurance coverage compared to the state estimate (57.1%); regions one (62.1%), two (62.5%), and four (60.9%). There was one DHHR, BBH region with a significantly lower prevalence compared to the state estimate; region six (48.4%).

**No Insurance:** There was no significant difference in the prevalence of no insurance coverage among DHHR, BBH regions compared to the state estimate.

*DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

**Medicare:** There was one DHHR, BBH, Ryan Brown Fund (RBF) region with a significantly higher prevalence of Medicare coverage compared to the state estimate (32.0%); region six (36.2%). There were two DHHR, BBH, RBF regions with a significantly lower prevalence compared to the state estimate; regions two (28.0%) and four (28.2%).

**Medicaid:** There were two DHHR, BBH, RBF regions with a significantly higher prevalence of Medicaid coverage compared to the state estimate (26.3%); regions five (29.7%) and six (33.8%). There were two DHHR, BBH, RBF regions with a significantly lower prevalence compared to the state estimate; regions two (20.5%) and four (23.6%).

**Other Insurance:** There were three DHHR, BBH, RBF regions with a significantly higher prevalence of other insurance coverage compared to the state estimate (57.1%); regions one (62.1%), two (62.5%), and four (60.9%). There was one DHHR, BBH, RBF region with a significantly lower prevalence compared to the state estimate; region six (47.2%).

**No Insurance:** There was no significant difference in the prevalence of no insurance coverage among DHHR, BBH, RBF Regions compared to the state estimate.

Table 11.2.2: Weighted Prevalence of Health Insurance Coverage by Demographic Characteristics: MATCH, 2021<sup>a,b</sup>

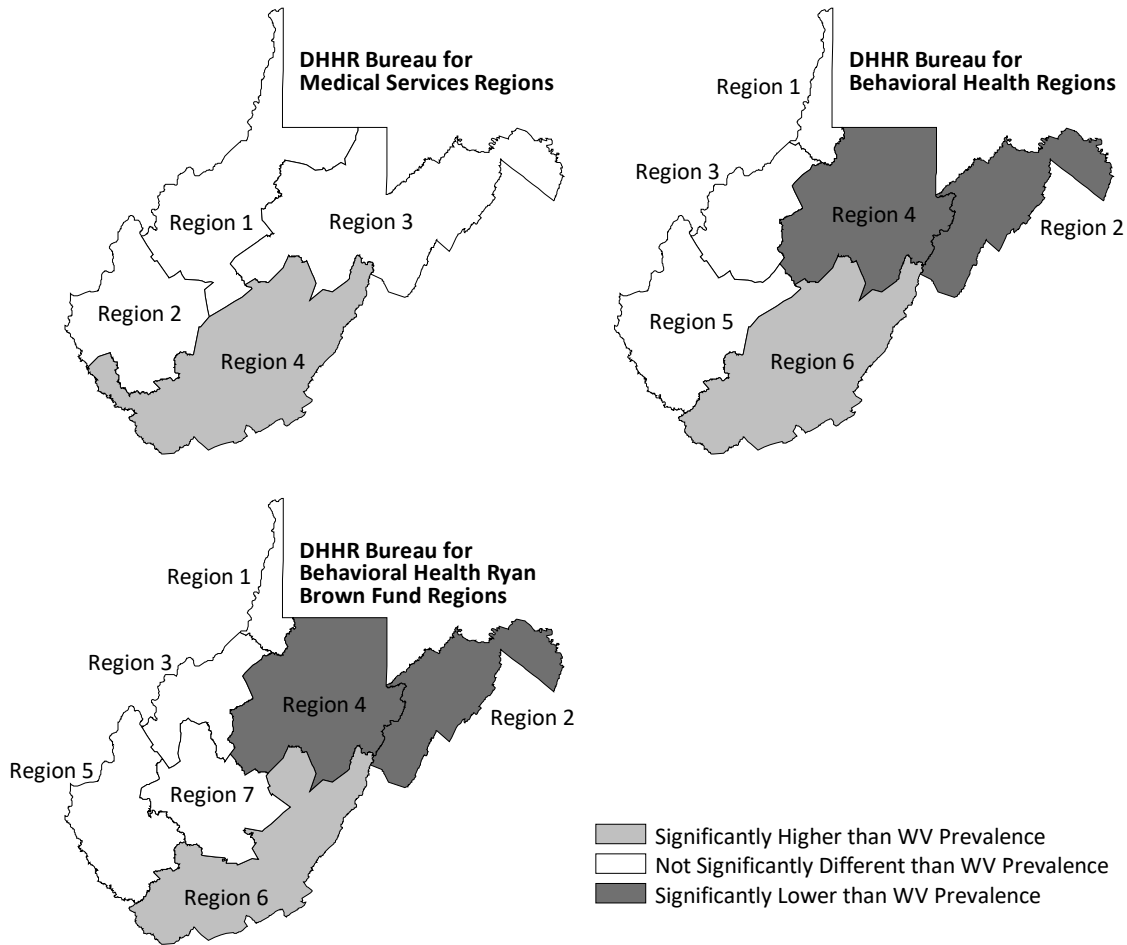
Characteristic	Medicare		Medicaid		Other Insurance		No Insurance	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
<b>TOTAL</b>	<b>32.0</b>	<b>30.9-33.0</b>	<b>26.3</b>	<b>25.5-27.2</b>	<b>57.1</b>	<b>56.0-58.2</b>	<b>6.6</b>	<b>5.9-7.2</b>
<b>Sex</b>								
Male	31.1	29.5-32.7	24.1	22.6-25.6	58.2	56.4-60.1	7.7	6.6-8.8
Female	32.8	31.4-34.2	28.5	27.4-29.6	56.0	54.7-57.4	5.5	4.8-6.3
<b>Age</b>								
18-34	11.4	9.7-13.1	39.9	37.3-42.5	47.3	44.6-50.0	9.7	8.0-11.4
35-49	10.5	9.0-12.0	34.5	32.3-36.8	54.0	51.5-56.6	8.6	6.9-10.2
50-64	18.4	16.7-20.1	24.0	22.5-25.5	62.1	60.1-64.1	6.7	5.6-7.9
65+	89.1	87.8-90.5	7.3	6.5-8.2	64.6	62.6-66.6	1.3	0.9-1.8
<b>Education</b>								
Less than HS	42.2	38.7-45.6	49.5	45.9-53.0	24.2	21.0-27.5	10.2	7.8-12.7
HS/GED	34.2	32.6-35.8	32.3	30.8-33.8	49.2	47.4-50.9	7.3	6.3-8.3
Associate's or more	26.8	25.3-28.4	14.0	13.0-15.1	74.3	72.7-75.8	4.7	3.9-5.6
<b>Annual Family Income</b>								
\$15,000 or less	38.2	35.8-40.6	63.0	60.6-65.4	14.5	12.6-16.3	7.7	6.2-9.1
\$15,001-\$35,000	40.5	38.3-42.8	34.8	32.7-36.9	41.4	39.1-43.7	7.8	6.4-9.2
\$35,001-\$50,000	32.4	29.5-35.2	16.7	14.1-19.2	68.4	65.2-71.6	7.6	5.6-9.6
\$50,001-\$85,000	27.0	24.5-29.4	6.3	5.0-7.5	84.2	82.1-86.2	5.5	4.1-6.9
\$85,001+	14.7	12.8-16.5	2.4	1.0-3.8	91.7	90.1-93.4	3.3	2.0-4.5
<b>Race</b>								
White	32.1	31.0-33.2	25.2	24.3-26.0	58.4	57.3-59.6	6.4	5.7-7.1
Black	35.9	30.3-41.4	46.0	40.3-51.7	34.9	28.8-41.0	6.5	4.1-8.8
Multi-racial or "Other"	26.0	20.5-31.5	42.2	35.7-48.7	40.3	33.7-47.0	10.1	5.3-14.9
<b>Marital Status</b>								
Married/Living with a partner	29.1	27.7-30.5	17.7	16.7-18.7	67.7	66.3-69.2	5.7	4.8-6.5
Widowed/Divorced/Separated	50.6	48.4-52.9	30.7	28.9-32.6	47.4	45.2-49.6	5.6	4.5-6.8
Never married	19.1	17.1-21.2	42.6	39.9-45.3	41.9	39.1-44.7	9.7	7.9-11.5

Note. CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>Respondents who reported having health insurance coverage were presented with a list of health insurance coverage types and could select one or more of the items from the list. See "Item" section above.

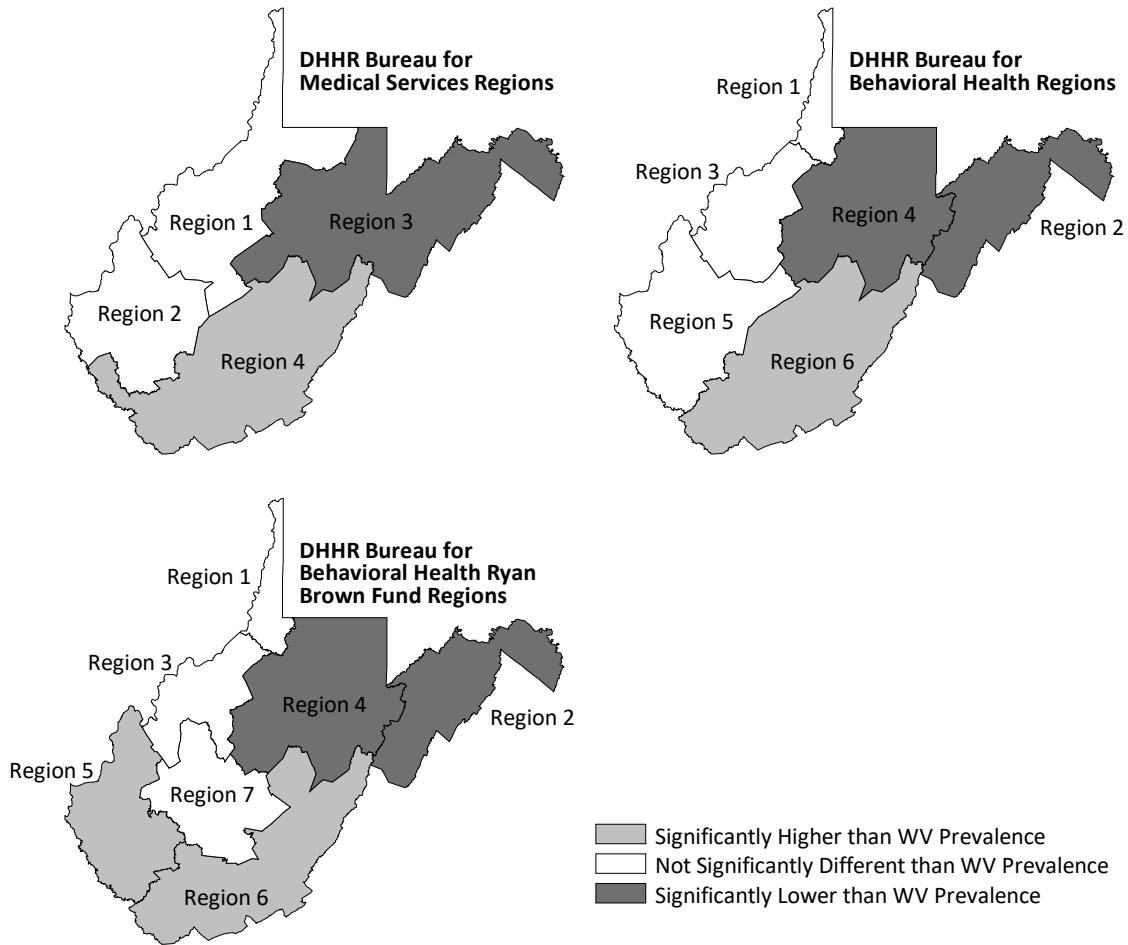
Figure 11.2.1: Weighted Prevalence of Medicare Coverage by Region: MATCH, 2021<sup>a,b</sup>



Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.  
<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.  
<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

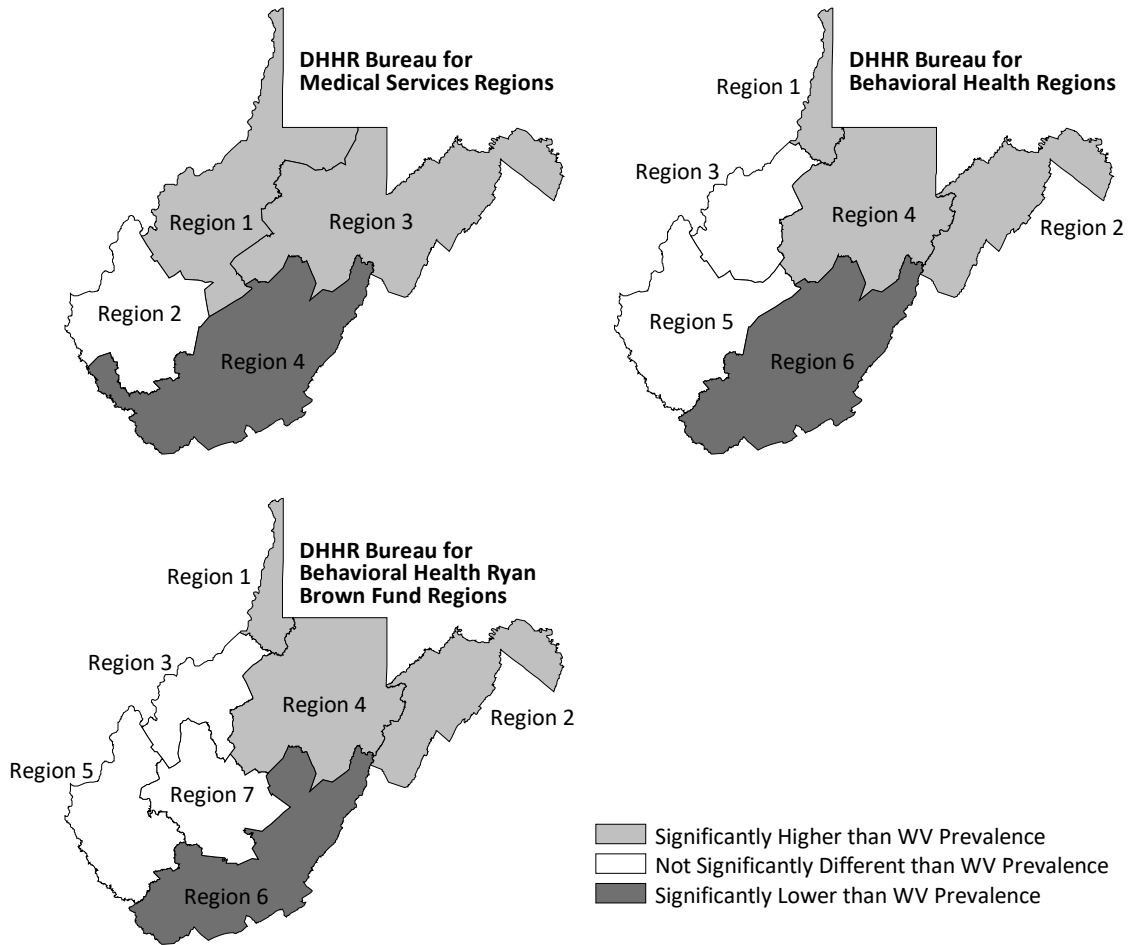


Figure 11.2.2: Weighted Prevalence of Medicaid Coverage by Region: MATCH, 2021<sup>a,b</sup>



Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.  
<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.  
<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

Figure 11.2.3: Weighted Prevalence of Other Insurance Coverage by Region: MATCH, 2021<sup>a,b</sup>



Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.  
<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.  
<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

## 11.3 Prescription Medication

### Item

In the survey, respondents were presented with the question, “Thinking about any medications that a doctor or healthcare provider prescribed for you in the past 12 months, which of the following are true? Select all that apply.” The following responses were offered, and one or more could be selected:

- “I did not have any prescriptions over the past 12 months”
- “I got my prescription medication on time”
- “I delayed getting my prescription medication”
- “I did not get my prescription medication at all”

The category ‘No Prescriptions’ is used for responding “I did not have any prescriptions over the past 12 months” to the question. The category ‘Got Prescription on Time’ is used for responding “I got my prescription medication on time” to the question. The category ‘Delayed Getting Prescription’ is used for responding “I delayed getting my prescription medication” to the question. The category ‘Never Got Prescription’ is used for responding “I did not get my prescription medication at all” to the question.

### Prevalence

**No Prescriptions:** 17.7% (95% CI: 16.7-18.7)

**Got Prescription on Time:** 76.7% (95% CI: 75.6-77.7)

**Delayed Getting Prescription:** 5.6% (95% CI: 5.0-6.1)

**Never Got Prescription:** 2.3% (95% CI: 1.9-2.7)

### Sex

**No Prescriptions:** The prevalence of not having a prescription medication in the past 12 months was significantly higher among adults who were male (21.8%) than among adults who were female (13.8%).

**Got Prescription on Time:** The prevalence of getting a prescription medication on time in the past 12 months was significantly higher among adults who were female (79.7%) than among adults who were male (73.4%).

**Delayed Getting Prescription:** The prevalence of delaying getting a prescription medication in the past 12 months was significantly higher among adults who were female (6.7%) than among adults who were male (4.3%).

**Never Got Prescription:** There was no significant difference in the prevalence of never getting a prescription medication in the past 12 months between the sexes.

### Age

**No Prescriptions:** The prevalence of not having a prescription medication in the past 12 months was significantly higher among adults aged 18-34 (32.3%) than among any other adult age groups. The

prevalence was significantly lower among adults aged 65 or older (5.6%) than among any other adult age groups.

**Got Prescription on Time:** The prevalence of getting a prescription medication on time in the past 12 months was significantly higher among adults aged 65 or older (91.4%) than among any other adult age groups. The prevalence was significantly lower among adults aged 18-34 (60.5%) than among any other adult age groups.

**Delayed Getting Prescription:** The prevalence of delaying getting a prescription in the past 12 months was significantly higher among any other adult age groups than among adults aged 65 or older (3.0%).

**Never Got Prescription:** The prevalence of never getting a prescription medication in the past 12 months was significantly higher among adults aged 18–34 (3.5%) and 35-49 (3.1%) than among adults aged 65 or older (0.9%).

## Education

**No Prescriptions:** The prevalence of not having a prescription medication in the past 12 months was significantly higher among adults with a high school or Graduate Equivalency Diploma (GED) education (19.4%) than among adults with an associate’s or more education (16.1%).

**Got Prescription on Time:** The prevalence of getting a prescription medication on time in the past 12 months was significantly higher among adults with an associate’s or more education (79.3%) than among adults with any other educational attainment levels.

**Delayed Getting Prescription:** The prevalence of delaying getting a prescription medication in the past 12 months was significantly higher among adults with less than high school education (7.7%) than among adults with an associate’s or more education (5.0%).

**Never Got Prescription:** There was no significant difference in the prevalence of never getting a prescription medication in the past 12 months among educational attainment levels.

## Family Income

**No Prescriptions:** The prevalence of not having a prescription medication in the past 12 months was significantly higher among adults with an annual family income of \$15,000 or less (19.0%) than among adults with an annual family income of \$50,001-\$85,000 (14.8%).

**Got Prescription on Time:** The prevalence of getting a prescription medication on time in the past 12 months was significantly higher among adults with an annual family income of \$50,001-\$85,000 (81.3%) than among adults with an annual family income of \$15,000 or less (70.5%).

**Delayed Getting Prescription:** The prevalence of delaying getting a prescription medication in the past 12 months was significantly higher among adults with any other annual family income levels than among adults with an annual family income of \$85,001 or more (2.1%).

**Never Got Prescription:** The prevalence of never getting a prescription medication in the past 12 months was significantly higher among adults with an annual family income of \$15,000 or less (4.8%) than among adults with any other annual family income levels with stable estimates. There was an unstable prevalence estimate among annual family income levels.

## Race

**No Prescriptions:** The prevalence of not having a prescription medication in the past 12 months was significantly higher among adults who were Black (24.3%) and multi-racial or “other” (28.4%) than among adults who were White (17.1%).

**Got Prescription on Time:** The prevalence of getting a prescription medication on time in the past 12 months was significantly higher among adults who were White (77.5%) than among adults who were any other racial groups.

**Delayed Getting Prescription:** The prevalence of delaying getting a prescription medication in the past 12 months was significantly higher among adults who were multi-racial or “other” (10.4%) than among adults who were White (5.4%).

**Never Got Prescription:** There was no significant difference in the prevalence of never getting a prescription medication in the past 12 months among racial groups.

## Marital Status

**No Prescriptions:** The prevalence of not having a prescription medication in the past 12 months was significantly higher among adults who were never married (28.6%) than among adults with any other marital statuses. The prevalence was significantly lower among adults who were widowed, divorced, or separated (10.1%) than among adults with any other marital statuses.

**Got Prescription on Time:** The prevalence of getting a prescription medication on time in the past 12 months was significantly higher among adults who were widowed, divorced, or separated (83.4%) than among adults with any other marital statuses. The prevalence was significantly lower among adults who were never married (63.9%) than among adults with any other marital statuses.

**Delayed Getting Prescription:** There was no significant difference in the prevalence of delaying getting a prescription medication in the past 12 months among marital statuses.

**Never Got Prescription:** The prevalence of never getting a prescription medication in the past 12 months was significantly higher among adults who were never married (4.0%) than among adults who were married or living with a partner (1.7%).

## West Virginia Department of Health and Human Resources (DHHR) Regions

*DHHR, Bureau for Medical Services (BMS) Regions*

**No Prescriptions:** There was no significant difference in the prevalence of having a prescription medication in the past 12 months among DHHR, Bureau for Medical Services (BMS) regions compared to the state estimate.

**Got Prescription on Time:** There was no significant difference in the prevalence of getting a prescription medication on time in the past 12 months among DHHR, BMS regions compared to the state estimate.

**Delayed Getting Prescription:** There was no significant difference in the prevalence of delaying getting a prescription medication in the past 12 months among DHHR, BMS regions compared to the state estimate.

**Never Got Prescription:** There was no significant difference in the prevalence of never getting a prescription medication in the past 12 months among DHHR, BMS regions compared to the state estimate.

*DHHR, Bureau for Behavioral Health (BBH) Regions*

**No Prescriptions:** There was no significant difference in the prevalence of not having a prescription medication in the past 12 months among DHHR, Bureau for Behavioral Health (BBH) regions compared to the state estimate.

**Got Prescription on Time:** There was no significant difference in the prevalence of getting a prescription medication on time in the past 12 months among DHHR, BBH regions compared to the state estimate.

**Delayed Getting Prescription:** There was no significant difference in the prevalence of delaying getting a prescription medication in the past 12 months among DHHR, BBH regions compared to the state estimate.

**Never Got Prescription:** There were no DHHR, BBH regions with a significantly higher prevalence of never getting a prescription medication in the past 12 months compared to the state estimate. There was one DHHR, BBH region with a significantly lower prevalence compared to the state estimate (2.3%); region three (1.1%).

*DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

**No Prescriptions:** There was no significant difference in the prevalence of not having a prescription medication in the past 12 months among DHHR, BBH, Ryan Brown Fund (RBF) regions compared to the state estimate.

**Got Prescription on Time:** There was no significant difference in the prevalence of getting a prescription medication on time in the past 12 months among DHHR, BBH, RBF regions compared to the state estimate.

**Delayed Getting Prescription:** There was no significant difference in the prevalence of delaying getting a prescription medication in the past 12 months among DHHR, BBH, RBF regions compared to the state estimate.

**Never Got Prescription:** There were no DHHR, BBH, RBF regions with a significantly higher prevalence of never getting a prescription medication in the past 12 months compared to the state estimate. There was one DHHR, BBH, RBF region with a significantly lower prevalence compared to the state estimate (2.3%); region three (1.1%).

*Table 11.3.3: Weighted Prevalence of Receipt and Timing of Prescription Medication in the Past 12 Months by Demographic Characteristics: MATCH, 2021<sup>a,b</sup>*

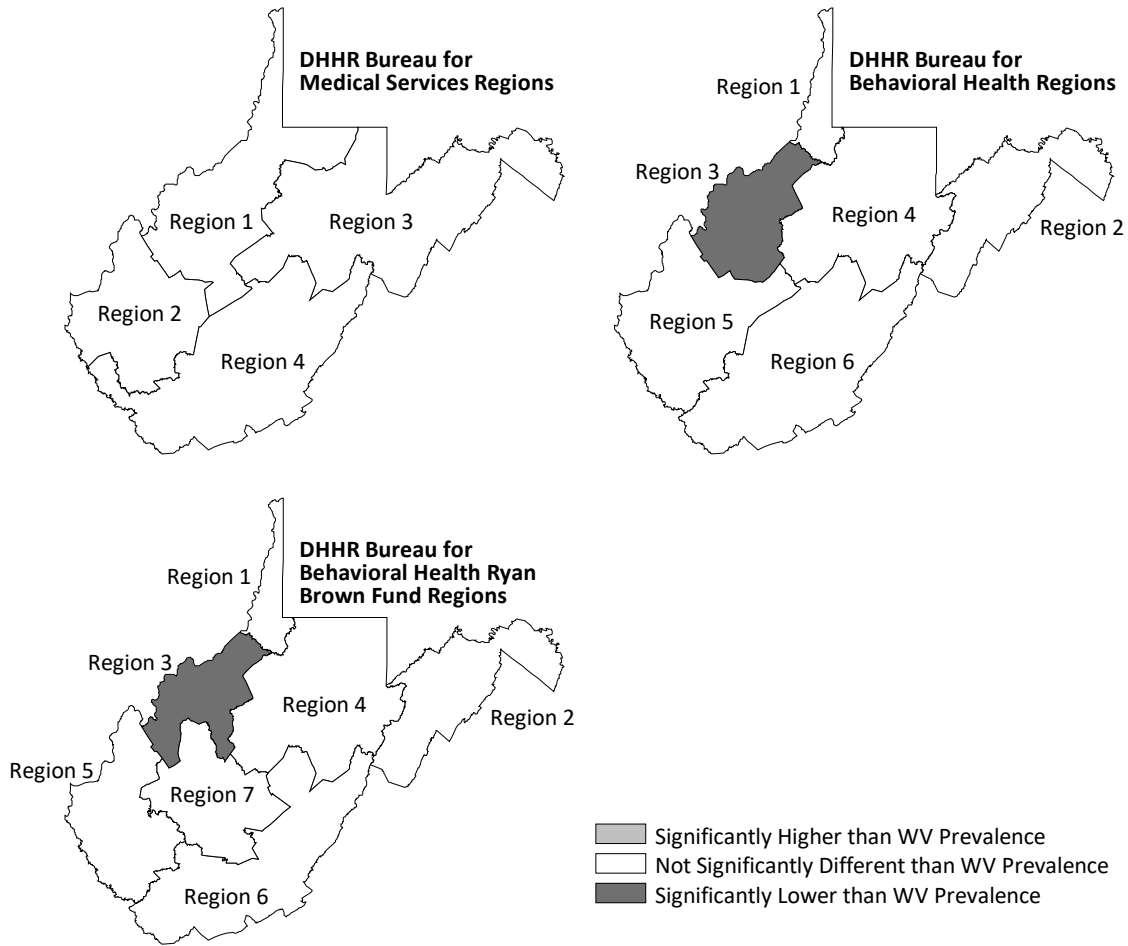
Characteristic	No Prescriptions		Got Prescription on Time		Delayed Getting Prescription		Never Got Prescription	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
<b>TOTAL</b>	<b>17.7</b>	<b>16.7-18.7</b>	<b>76.7</b>	<b>75.6-77.7</b>	<b>5.6</b>	<b>5.0-6.1</b>	<b>2.3</b>	<b>1.9-2.7</b>
<b>Sex</b>								
Male	21.8	20.1-23.5	73.4	71.6-75.2	4.3	3.6-5.0	2.4	1.8-3.0
Female	13.8	12.8-14.9	79.7	78.5-81.0	6.7	6.0-7.5	2.3	1.8-2.8
<b>Age</b>								
18-34	32.3	29.7-35.0	60.5	57.8-63.2	6.5	5.3-7.8	3.5	2.5-4.5
35-49	21.6	19.4-23.9	71.9	69.5-74.3	6.3	5.2-7.5	3.1	2.1-4.1
50-64	11.7	10.2-13.2	82.3	80.5-84.0	6.3	5.2-7.3	1.9	1.3-2.5
65+	5.6	4.7-6.6	91.4	90.3-92.6	3.0	2.3-3.8	0.9	0.5-1.3
<b>Education</b>								
Less than HS	17.3	14.6-20.0	74.5	71.5-77.6	7.7	5.9-9.5	3.3	2.0-4.6
HS/GED	19.4	17.9-21.0	74.5	72.9-76.2	5.5	4.8-6.3	2.4	1.8-3.0
Associate's or more	16.1	14.6-17.6	79.3	77.7-80.9	5.0	4.2-5.8	1.9	1.3-2.5
<b>Annual Family Income</b>								
\$15,000 or less	19.0	17.0-21.1	70.5	68.2-72.9	8.5	7.1-9.9	4.8	3.6-5.9
\$15,001-\$35,000	18.9	16.9-21.0	73.9	71.7-76.1	7.3	6.0-8.5	2.6	1.8-3.3
\$35,001-\$50,000	17.7	14.8-20.6	77.9	74.9-81.0	5.2	4.0-6.5	1.8	0.8-2.9
\$50,001-\$85,000	14.8	12.6-16.9	81.3	79.0-83.7	4.3	3.1-5.5	1.4	0.6-2.2
\$85,001+	18.0	15.5-20.5	80.4	77.8-83.0	2.1	1.3-3.0	U	U
<b>Race</b>								
White	17.1	16.1-18.1	77.5	76.4-78.6	5.4	4.8-5.9	2.2	1.8-2.6
Black	24.3	18.5-30.2	69.0	63.1-74.8	5.5	3.5-7.5	2.8	1.2-4.3
Multi-racial or "Other"	28.4	21.9-34.8	59.7	53.0-66.5	10.4	6.1-14.6	4.6	2.2-6.9
<b>Marital Status</b>								
Married/Living with a partner	16.6	15.3-17.9	78.9	77.5-80.3	4.9	4.3-5.6	1.7	1.2-2.2
Widowed/Divorced/Separated	10.1	8.7-11.5	83.4	81.7-85.1	6.4	5.3-7.6	2.1	1.5-2.8
Never married	28.6	25.9-31.3	63.9	61.1-66.7	6.1	4.8-7.4	4.0	2.8-5.1

*Note.* CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma; U = unstable prevalence estimate.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>Respondents were presented with a list of statements about receiving prescription medication and could select one or more of the items from the list. See "Item" section above.

Figure 11.3.4: Weighted Prevalence of Never Getting a Prescription Medication in the Past 12 Months by Region: MATCH, 2021<sup>a,b</sup>



Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.



## 11.4 Needed Medical Care

### Item

Responding “Yes” to the question, “Was there a time in the past 12 months when you needed medical care? (Do not include dental care.)”

### Prevalence

**West Virginia:** 65.6% (95% CI: 64.5-66.8)

### Sex

**Male:** 59.8% (95% CI: 57.9-61.6)

**Female:** 71.2% (95% CI: 69.8-72.5)

The prevalence of needing medical care in the past 12 months was significantly higher among adults who were female (71.2%) than among adults who were male (59.8%).

### Age

The prevalence of needing medical care in the past 12 months was significantly higher among any other adult age groups than among adults aged 18-34 (59.3%).

### Education

The prevalence of needing medical care in the past 12 months was significantly higher among adults with an associate’s or more education (68.2%) than among adults with any other educational attainment levels.

### Family Income

There was no significant difference in the prevalence of needing medical care in the past 12 months among annual family income levels.

### Race

The prevalence of needing medical care in the past 12 months was significantly higher among adults who were White (66.1%) than among adults who were Black (52.7%).

### Marital Status

The prevalence of needing medical care in the past 12 months was significantly higher among adults who were widowed, divorced, or separated (70.0%) and married or living with a partner (66.9%) than among adults who were never married (58.0%).

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There was no significant difference in the prevalence of needing medical care in the past 12 months among DHHR, Bureau for Medical Services (BMS) regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There was no significant difference in the prevalence of needing medical care in the past 12 months among DHHR, Bureau for Behavioral Health (BBH) regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There was no significant difference in the prevalence of needing medical care in the past 12 months among DHHR, BBH, Ryan Brown Fund (RBF) regions compared to the state estimate.

Table 11.4.4: Weighted Prevalence of Needing Medical Care in the Past 12 Months by Demographic Characteristics: MATCH, 2021<sup>a</sup>

Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>402,510</b>	<b>59.8</b>	<b>57.9-61.6</b>	<b>505,171</b>	<b>71.2</b>	<b>69.8-72.5</b>	<b>907,681</b>	<b>65.6</b>	<b>64.5-66.8</b>
<b>Age</b>									
18-34	90,350	51.2	46.8-55.6	115,460	67.6	64.5-70.6	205,809	59.3	56.5-62.0
35-49	87,576	58.1	53.8-62.4	112,816	72.8	70.0-75.7	200,393	65.6	63.0-68.2
50-64	118,734	63.7	60.5-67.0	143,885	73.4	70.9-76.0	262,619	68.7	66.6-70.8
65+	103,794	66.7	63.9-69.5	130,611	71.2	68.7-73.6	234,405	69.1	67.2-71.0
<b>Education</b>									
Less than HS	55,751	60.2	55.1-65.2	48,586	64.4	60.1-68.6	104,337	62.1	58.7-65.4
HS/GED	179,515	59.3	56.5-62.0	202,320	68.6	66.6-70.6	381,835	63.9	62.1-65.6
Associate's or more	164,679	60.0	57.0-63.0	251,903	74.9	72.9-77.0	416,582	68.2	66.5-70.0
<b>Annual Family Income</b>									
\$15,000 or less	78,754	59.4	55.5-63.3	104,486	68.2	65.4-71.0	183,240	64.1	61.7-66.5
\$15,001-\$35,000	94,833	60.2	56.4-64.1	137,220	72.1	69.6-74.7	232,053	66.8	64.5-69.0
\$35,001-\$50,000	53,963	59.0	53.8-64.2	64,008	69.3	65.4-73.2	117,970	64.2	60.9-67.5
\$50,001-\$85,000	77,096	61.8	57.4-66.2	94,843	73.4	70.2-76.7	171,939	67.7	65.0-70.4
\$85,001+	83,164	57.7	53.2-62.2	85,639	74.0	70.6-77.5	168,803	65.0	62.0-67.9
<b>Race</b>									
White	374,188	59.9	58.0-61.9	481,168	71.8	70.4-73.2	855,356	66.1	64.9-67.3
Black	8,863	50.7	41.3-60.0	9,408	54.7	47.5-62.0	18,271	52.7	46.8-58.6
Multi-racial or "Other"	18,406	61.1	51.7-70.5	13,756	65.3	56.8-73.8	32,162	62.8	56.3-69.4
<b>Marital Status</b>									
Married/Living with a partner	223,372	61.2	58.6-63.7	276,786	72.4	70.5-74.2	500,158	66.9	65.3-68.5
Widowed/Divorced/Separated	83,763	65.3	61.6-68.9	143,838	73.0	70.7-75.4	227,601	70.0	68.0-72.0
Never married	93,505	52.9	48.9-57.0	82,633	65.2	61.6-68.8	176,138	58.0	55.2-60.9

Note. CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

## 11.5 Received Needed Medical Care

### Item

Responding “Yes” to the question, “Was there a time in the past 12 months when you needed medical care? (Do not include dental care.)” and then responding “Yes” to the question, “Were you able to get the medical care you needed in the past 12 months?” *The prevalence estimates excluded adults responding “No” to the first stated question.*

### Prevalence

**West Virginia:** 92.0% (95% CI: 91.1-92.8)

### Sex

**Male:** 91.4% (95% CI: 90.0-92.8)

**Female:** 92.4% (95% CI: 91.5-93.3)

There was no significant difference in the prevalence of receiving needed medical care in the past 12 months between the sexes.

### Age

The prevalence of receiving needed medical care in the past 12 months was significantly lower among any other adult age groups than among adults aged 65 or older (97.4%).

### Education

The prevalence of receiving needed medical care in the past 12 months was significantly lower among adults with less than a high school education (87.7%) than among adults with an associate’s or more education (93.3%).

### Family Income

The prevalence of receiving needed medical care in the past 12 months was significantly lower among adults with an annual family income of \$15,000 or less (86.4%) and \$15,001-\$35,000 (89.6%) than among adults with an annual family income of \$50,001-\$85,000 (94.9%) and \$85,001 or more (96.8%).

### Race

The prevalence of receiving needed medical care in the past 12 months was significantly lower among adults who were multi-racial or “other” (83.3%) than among adults who were White (92.3%).

### Marital Status

The prevalence of receiving needed medical care in the past 12 months was significantly lower among adults who were never married (88.8%) than among adults who were married or living with a partner (93.1%).

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There was no significant difference in the prevalence of receiving needed medical care in the past 12 months among DHHR, Bureau for Medical Services (BMS) regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There were no DHHR, Bureau for Behavioral Health (BBH) regions with a significantly lower prevalence of receiving needed medical care in the past 12 months compared to the state estimate. There was one DHHR, BBH region with a significantly higher prevalence compared to the state estimate (92.0%); region two (94.9%).

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There were no DHHR, BBH, Ryan Brown Fund (RBF) regions with a significantly lower prevalence of receiving needed medical care in the past 12 months compared to the state estimate. There was one DHHR, BBH, RBF region with a significantly higher prevalence compared to the state estimate (92.0%); region two (94.9%).

Table 11.5.5: Weighted Prevalence of Receiving Needed Medical Care in the Past 12 Months by Demographic Characteristics: MATCH, 2021<sup>a,b</sup>

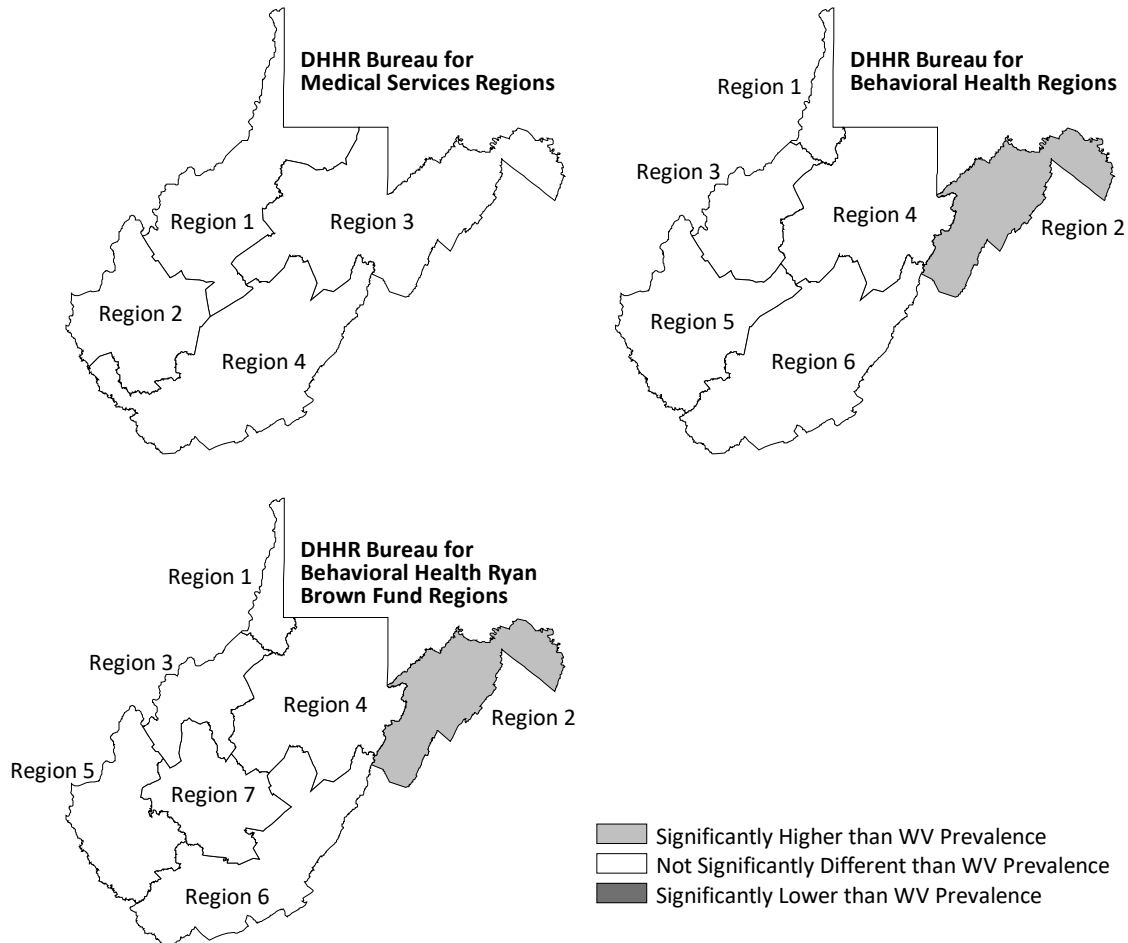
Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>364,674</b>	<b>91.4</b>	<b>90.0-92.8</b>	<b>460,373</b>	<b>92.4</b>	<b>91.5-93.3</b>	<b>825,047</b>	<b>92.0</b>	<b>91.1-92.8</b>
<b>Age</b>									
18-34	80,462	89.6	86.1-93.1	105,866	92.0	90.0-94.0	186,328	91.0	89.0-92.9
35-49	76,727	88.2	84.5-91.9	97,190	87.2	84.7-89.8	173,917	87.7	85.5-89.8
50-64	106,901	90.6	88.0-93.1	130,457	91.7	89.9-93.6	237,357	91.2	89.7-92.7
65+	98,596	96.6	95.2-98.1	124,647	98.0	97.3-98.6	223,244	97.4	96.6-98.1
<b>Education</b>									
Less than HS	46,963	86.7	81.5-91.9	42,180	88.9	85.3-92.5	89,142	87.7	84.5-90.9
HS/GED	161,885	90.8	88.7-93.0	184,282	92.6	91.2-94.0	346,167	91.8	90.5-93.0
Associate's or more	153,681	93.7	91.8-95.5	232,077	93.0	91.7-94.3	385,758	93.3	92.2-94.3
<b>Annual Family Income</b>									
\$15,000 or less	66,601	85.3	81.8-88.9	88,927	87.1	84.5-89.8	155,528	86.4	84.2-88.5
\$15,001-\$35,000	82,614	88.6	85.3-91.9	122,651	90.3	88.4-92.2	205,265	89.6	87.9-91.4
\$35,001-\$50,000	49,130	91.4	86.9-96.0	59,616	94.4	92.3-96.6	108,746	93.1	90.6-95.5
\$50,001-\$85,000	71,749	93.7	90.7-96.7	90,385	96.0	94.5-97.4	162,134	94.9	93.4-96.5
\$85,001+	U	U	U	81,264	95.6	93.4-97.7	162,750	96.8	95.6-98.1
<b>Race</b>									
White	340,830	92.0	90.5-93.4	439,954	92.6	91.7-93.6	780,784	92.3	91.5-93.1
Black	U	U	U	8,721	94.8	92.5-97.2	16,442	91.3	87.2-95.4
Multi-racial or "Other"	15,395	83.6	74.7-92.5	10,918	82.9	75.6-90.2	26,312	83.3	77.3-89.3
<b>Marital Status</b>									
Married/Living with a partner	206,378	92.9	91.0-94.7	255,827	93.3	92.2-94.5	462,205	93.1	92.1-94.2
Widowed/Divorced/Separated	75,418	91.4	88.6-94.2	129,552	92.2	90.5-93.9	204,970	91.9	90.4-93.4
Never married	81,268	88.0	84.5-91.4	73,528	89.8	87.0-92.6	154,795	88.8	86.6-91.1

Note. CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma; U = unstable prevalence estimate.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>Denominators in the estimates are based on a response to a preceding question in the survey and were not answered by all respondents. See "Item" section above.

Figure 11.5.5: Weighted Prevalence of Receiving Needed Medical Care in the Past 12 Months by Region: MATCH, 2021<sup>a,b,c</sup>



Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

<sup>c</sup>Denominators in the estimates are based on a response to a preceding question in the survey and were not answered by all respondents. See “Item” section above.

## 11.6 Telehealth Visit

### Item

Responding “Yes” to the question, “In the past 12 months, have you had a telehealth visit with a doctor or healthcare provider? Telehealth would include phone, video chat, mobile app, or online patient portals such as MyWVUChart or MyCareCorner.”

### Prevalence

**West Virginia:** 35.5% (95% CI: 34.4-36.7)

### Sex

**Male:** 31.8% (95% CI: 30.0-33.6)

**Female:** 39.0% (95% CI: 37.6-40.5)

The prevalence of having a telehealth visit in the past 12 months was significantly lower among adults who were male (31.8%) than among adults who were female (39.0%).

### Age

The prevalence of having a telehealth visit in the past 12 months was significantly lower among adults aged 18-34 (30.5%) than among any other adult age groups.

### Education

The prevalence of having a telehealth visit in the past 12 months was significantly lower among adults with a high school or Graduate Equivalency Diploma (GED) education (33.9%) than among adults with an associate’s or more education (37.7%).

### Family Income

There was no significant difference in the prevalence of having a telehealth visit in the past 12 months among annual family income levels.

### Race

There was no significant difference in the prevalence of having a telehealth visit in the past 12 months among racial groups.

### Marital Status

The prevalence of having a telehealth visit in the past 12 months was significantly lower among adults who were never married (31.1%) than among adults with any other marital statuses.



## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There was one DHHR, Bureau for Medical Services (BMS) region with a significantly lower prevalence of having a telehealth visit in the past 12 months compared to the state estimate (35.5%); region one (31.1%). There were no DHHR, BMS regions with a significantly higher prevalence compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There were two DHHR, Bureau for Behavioral Health (BBH) regions with a significantly lower prevalence of having a telehealth visit in the past 12 months compared to the state estimate (35.5%); regions one (26.4%) and three (30.9%). There was one DHHR, BBH region with a significantly higher prevalence compared to the state estimate; region two (42.7%).

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There were two DHHR, BBH, Ryan Brown Fund (RBF) regions with a significantly lower prevalence of having a telehealth visit in the past 12 months compared to the state estimate (35.5%); regions one (26.4%) and three (30.4%). There was one DHHR, BBH, RBF region with a significantly higher prevalence compared to the state estimate; region two (42.7%).

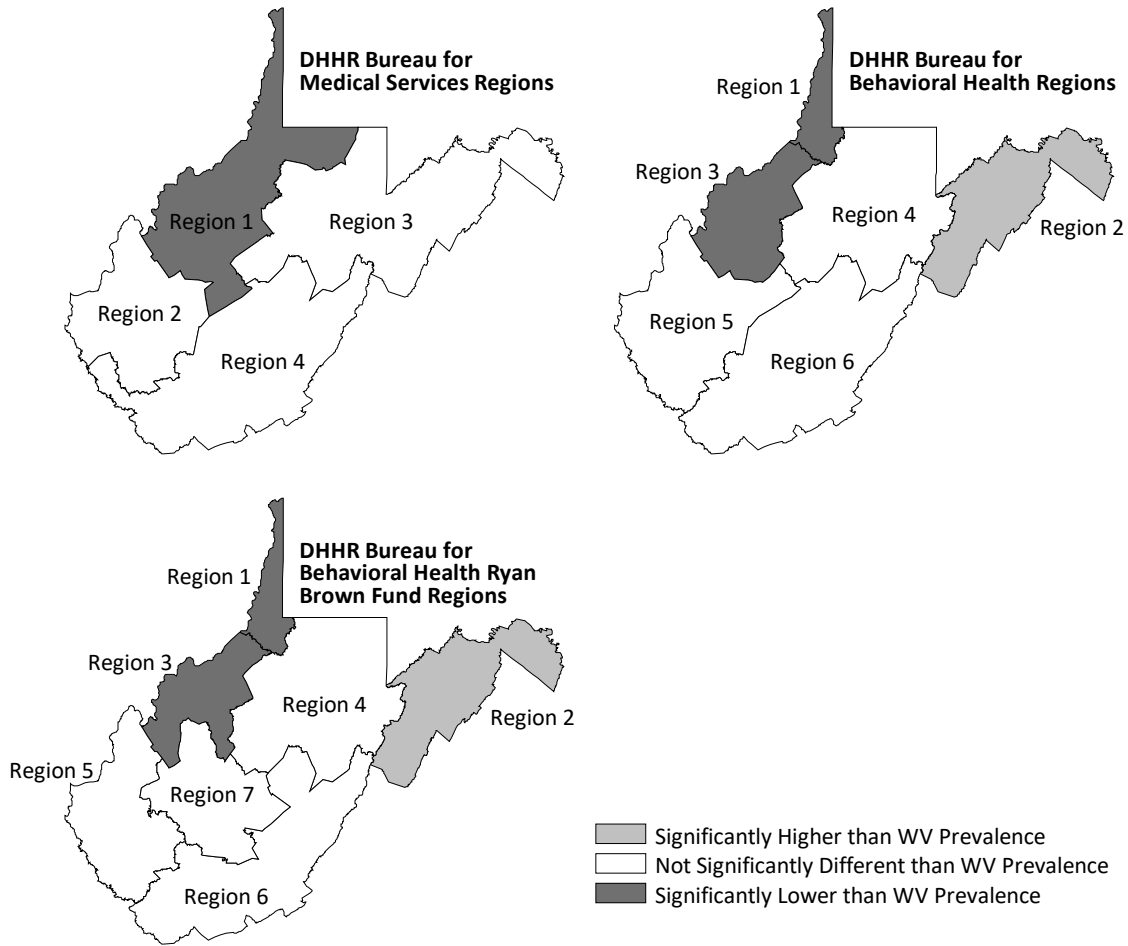
Table 11.6.6: Weighted Prevalence of Having a Telehealth Visit in the Past 12 Months by Demographic Characteristics: MATCH, 2021<sup>a</sup>

Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>214,888</b>	<b>31.8</b>	<b>30.0-33.6</b>	<b>278,043</b>	<b>39.0</b>	<b>37.6-40.5</b>	<b>492,931</b>	<b>35.5</b>	<b>34.4-36.7</b>
<b>Age</b>									
18-34	42,887	24.3	20.6-28.1	63,149	36.9	33.7-40.1	106,036	30.5	28.0-33.0
35-49	49,218	32.6	28.6-36.6	64,130	41.2	38.1-44.3	113,349	37.0	34.4-39.5
50-64	65,246	34.7	31.5-38.0	80,313	40.8	38.0-43.7	145,559	37.8	35.7-40.0
65+	55,968	35.9	32.9-38.9	69,114	37.5	34.8-40.1	125,082	36.7	34.8-38.7
<b>Education</b>									
Less than HS	26,630	28.7	24.2-33.2	29,898	39.4	34.9-43.9	56,528	33.5	30.3-36.8
HS/GED	93,516	30.7	28.1-33.4	110,100	37.1	35.0-39.2	203,616	33.9	32.2-35.6
Associate's or more	93,630	34.0	31.2-36.8	137,408	40.8	38.5-43.1	231,037	37.7	36.0-39.5
<b>Annual Family Income</b>									
\$15,000 or less	41,101	30.9	27.3-34.5	60,538	39.4	36.5-42.3	101,639	35.4	33.1-37.7
\$15,001-\$35,000	48,470	30.7	27.1-34.3	74,941	39.3	36.6-42.0	123,411	35.4	33.2-37.6
\$35,001-\$50,000	28,238	30.8	26.1-35.4	34,839	37.6	33.6-41.6	63,077	34.2	31.1-37.3
\$50,001-\$85,000	42,171	33.7	29.4-38.0	52,513	40.6	36.9-44.2	94,684	37.2	34.3-40.0
\$85,001+	47,893	33.2	29.0-37.4	43,280	37.4	33.4-41.4	91,172	35.1	32.1-38.0
<b>Race</b>									
White	199,587	31.9	30.0-33.7	262,564	39.1	37.5-40.6	462,151	35.6	34.4-36.8
Black	5,444	30.5	22.0-39.1	6,470	37.0	30.3-43.7	11,914	33.8	28.3-39.2
Multi-racial or "Other"	9,627	32.0	23.4--40.6	8,434	39.9	31.7-48.1	18,061	35.2	29.1-41.4
<b>Marital Status</b>									
Married/Living with a partner	120,796	33.0	30.6-35.4	147,541	38.5	36.5-40.6	268,338	35.8	34.2-37.4
Widowed/Divorced/Separated	46,441	36.0	32.2-39.7	82,342	41.4	38.8-44.0	128,783	39.3	37.1-41.4
Never married	47,020	26.6	22.9-30.2	47,564	37.4	33.8-41.0	94,585	31.1	28.5-33.7

Note. CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

Figure 11.6.6: Weighted Prevalence of Having a Telehealth Visit in the Past 12 Months by Region: MATCH, 2021<sup>a,b</sup>



Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

## 11.7 Emergency Room (ER) Visits

### Item

Responding two or more visits to the question, “In the past 12 months, how many different times have you gone to the emergency room to receive medical care for yourself?”

### Prevalence

**West Virginia:** 11.4% (95% CI: 10.6-12.1)

### Sex

**Male:** 11.1% (95% CI: 9.9-12.3)

**Female:** 11.6% (95% CI: 10.7-12.5)

There was no significant difference in the prevalence of two or more ER visits in the past 12 months between the sexes.

### Age

The prevalence of two or more ER visits in the past 12 months was significantly higher among adults aged 18-34 (13.6%) than among adults aged 50-64 (10.0%).

### Education

The prevalence of two or more ER visits in the past 12 months was significantly higher among adults with less than a high school education (20.2%) than among adults with any other educational attainment levels. The prevalence was significantly lower among adults with an associate’s or more education (7.2%) than among adults with any other educational attainment levels.

### Family Income

The prevalence of two or more ER visits in the past 12 months was significantly higher among adults with an annual family income of \$15,000 or less (20.8%) than among adults with any other annual family income levels. The prevalence was significantly lower among adults with an annual family income of \$85,001 or more (3.7%) than among adults with any other annual family income levels.

### Race

There was no significant difference in the prevalence of two or more ER visits in the past 12 months among racial groups.

### Marital Status

The prevalence of two or more ER visits in the past 12 months was significantly higher among adults who were widowed, divorced, or separated (15.5%) than among adults with any other marital statuses.

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There was no significant difference in the prevalence of two or more ER visits in the past 12 months among DHHR, Bureau for Medical Services (BMS) regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There was no significant difference in the prevalence of two or more ER visits in the past 12 months among DHHR, Bureau for Behavioral Health (BBH) regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There was no significant difference in the prevalence of two or more ER visits in the past 12 months among DHHR, BBH, Ryan Brown Fund (RBF) regions compared to the state estimate.

Table 11.7.7: Weighted Prevalence of Two or More Emergency Room (ER) Visits in the Past 12 Months by Demographic Characteristics: MATCH, 2021<sup>a</sup>

Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>75,015</b>	<b>11.1</b>	<b>9.9-12.3</b>	<b>82,597</b>	<b>11.6</b>	<b>10.7-12.5</b>	<b>157,612</b>	<b>11.4</b>	<b>10.6-12.1</b>
<b>Age</b>									
18-34	19,681	11.2	8.3-14.0	27,654	16.2	13.9-18.5	47,335	13.6	11.8-15.5
35-49	15,460	10.2	7.9-12.5	18,400	11.8	9.9-13.7	33,860	11.0	9.6-12.5
50-64	20,437	10.9	9.0-12.9	17,714	9.1	7.6-10.5	38,151	10.0	8.8-11.2
65+	19,066	12.2	10.1-14.3	18,190	9.8	8.3-11.3	37,256	10.9	9.6-12.1
<b>Education</b>									
Less than HS	17,057	18.5	14.5-22.4	17,048	22.2	18.6-25.9	34,105	20.2	17.5-22.9
HS/GED	37,791	12.4	10.6-14.3	40,637	13.7	12.3-15.1	78,427	13.0	11.9-14.2
Associate's or more	19,478	7.1	5.6-8.5	24,545	7.3	6.2-8.4	44,023	7.2	6.3-8.1
<b>Annual Family Income</b>									
\$15,000 or less	26,280	19.8	16.8-22.8	33,112	21.6	19.1-24.0	59,393	20.8	18.8-22.7
\$15,001-\$35,000	20,689	13.1	10.2-16.1	26,458	13.8	12.0-15.6	47,147	13.5	11.9-15.2
\$35,001-\$50,000	8,359	9.1	6.6-11.6	8,149	8.8	6.6-11.0	16,508	9.0	7.3-10.6
\$50,001-\$85,000	10,431	8.3	5.8-10.9	7,312	5.6	3.9-7.4	17,743	7.0	5.4-8.5
\$85,001+	5,739	4.0	2.5-5.5	3,950	3.4	2.2-4.7	9,689	3.7	2.7-4.7
<b>Race</b>									
White	67,942	10.9	9.6-12.1	75,982	11.3	10.4-12.2	143,925	11.1	10.3-11.8
Black	2,149	12.2	7.8-16.6	2,835	16.4	12.2-20.5	4,984	14.2	11.2-17.3
Multi-racial or "Other"	4,628	15.2	8.5-21.9	3,525	16.6	10.5-22.8	8,153	15.8	11.1-20.5
<b>Marital Status</b>									
Married/Living with a partner	36,606	10.0	8.5-11.5	36,571	9.5	8.4-10.7	73,177	9.8	8.8-10.7
Widowed/Divorced/Separated	20,194	15.7	12.9-18.6	30,447	15.3	13.5-17.1	50,640	15.5	13.9-17.0
Never married	18,106	10.2	7.8-12.6	15,091	11.9	9.6-14.2	33,197	10.9	9.2-12.6

Note. CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

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## 11.8 Treated Unfairly by Healthcare Provider

### Item

Responding “Yes” to the question, “In your opinion, have you felt that a doctor, other healthcare provider, or their staff treated you unfairly?” A statement before the question clarifies the recall period “For the next questions, think about the healthcare you have received in the past 12 months.”

### Prevalence

**West Virginia:** 9.7% (95% CI: 9.0-10.4)

### Sex

**Male:** 9.4% (95% CI: 8.2-10.6)

**Female:** 10.0% (95% CI: 9.1-10.8)

There was no significant difference in the prevalence of being treated unfairly by a healthcare provider in the past 12 months between the sexes.

### Age

The prevalence of being treated unfairly by a healthcare provider in the past 12 months was significantly higher among any other adult age groups than among adults aged 65 or older (5.8%).

### Education

There was no significant difference in the prevalence of being treated unfairly by a healthcare provider in the past 12 months among educational attainment levels.

### Family Income

The prevalence of being treated unfairly by a healthcare provider in the past 12 months was significantly higher among adults with an annual family income of \$15,000 or less (14.0%) and \$15,001-\$35,000 (11.7%) than among adults with an annual family income of \$50,001-\$85,000 (8.2%) and \$85,001 or more (5.3%).

### Race

The prevalence of being treated unfairly by a healthcare provider in the past 12 months was significantly higher among adults who were multi-racial or “other” (20.5%) than among adults who were any other racial groups.

### Marital Status

There was no significant difference in the prevalence of being treated unfairly by a healthcare provider in the past 12 months among marital statuses.

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There was no significant difference in the prevalence of being treated unfairly by a healthcare provider in the past 12 months among DHHR, Bureau for Medical Services (BMS) regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There was no significant difference in the prevalence of being treated unfairly by a healthcare provider in the past 12 months among DHHR, Bureau for Behavioral Health (BBH) regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There was no significant difference in the prevalence of being treated unfairly by a healthcare provider in the past 12 months among DHHR, BBH, Ryan Brown Fund (RBF) regions compared to the state estimate.



*Table 11.8.8: Weighted Prevalence of Being Treated Unfairly by a Healthcare Provider in the Past 12 Months by Demographic Characteristics: MATCH, 2021<sup>a</sup>*

Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>63,447</b>	<b>9.4</b>	<b>8.2-10.6</b>	<b>71,009</b>	<b>10.0</b>	<b>9.1-10.8</b>	<b>134,456</b>	<b>9.7</b>	<b>9.0-10.4</b>
<b>Age</b>									
18-34	20,094	11.4	8.4-14.4	23,219	13.6	11.5-15.7	43,313	12.5	10.6-14.3
35-49	15,766	10.5	8.0-13.0	17,391	11.2	9.3-13.1	33,157	10.8	9.3-12.4
50-64	17,425	9.3	7.2-11.4	19,913	10.2	8.4-11.9	37,338	9.7	8.4-11.1
65+	9,753	6.3	4.7-7.8	10,106	5.4	4.3-6.6	19,859	5.8	4.9-6.8
<b>Education</b>									
Less than HS	12,246	13.2	9.1-17.3	8,816	11.5	8.6-14.3	21,061	12.4	9.8-15.0
HS/GED	30,771	10.1	8.3-11.9	28,388	9.6	8.4-10.8	59,159	9.8	8.8-10.9
Associate's or more	19,839	7.2	5.7-8.8	33,543	10.0	8.6-11.3	53,382	8.7	7.7-9.8
<b>Annual Family Income</b>									
\$15,000 or less	19,468	14.6	11.7-17.5	20,823	13.5	11.5-15.5	40,290	14.0	12.3-15.7
\$15,001-\$35,000	18,565	11.8	9.0-14.6	22,135	11.6	9.8-13.4	40,700	11.7	10.1-13.3
\$35,001-\$50,000	6,474	7.1	4.2-10.0	8,809	9.5	7.1-12.0	15,283	8.3	6.4-10.2
\$50,001-\$85,000	9,532	7.6	5.2-10.0	11,300	8.7	6.8-10.7	20,832	8.2	6.6-9.7
\$85,001+	7,512	5.2	2.8-7.6	6,281	5.4	3.7-7.1	13,794	5.3	3.7-6.9
<b>Race</b>									
White	54,876	8.8	7.6-10.0	65,463	9.7	8.8-10.6	120,339	9.3	8.5-10.0
Black	1,571	8.9	4.7-13.1	1,522	8.9	5.9-11.9	3,092	8.9	6.3-11.4
Multi-racial or "Other"	6,759	22.4	13.7-31.1	3,754	17.8	11.3-24.2	10,514	20.5	14.7-26.3
<b>Marital Status</b>									
Married/Living with a partner	29,012	7.9	6.4-9.4	36,470	9.5	8.3-10.7	65,483	8.7	7.8-9.7
Widowed/Divorced/Separated	16,623	12.9	10.2-15.6	18,970	9.5	8.0-11.0	35,593	10.9	9.5-12.3
Never married	17,660	10.0	7.3-12.6	15,035	11.9	9.6-14.1	32,695	10.8	9.0-12.5

*Note.* CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

## 11.9 Ever Asked about Mental Health by Healthcare Provider

### Item

Responding “Yes” to the question, “Has a doctor or other healthcare provider ever asked you questions about your mental health, such as whether you have been feeling worried, anxious, down, or depressed?”

### Prevalence

**West Virginia:** 65.7% (95% CI: 64.5-66.8)

### Sex

**Male:** 59.1% (95% CI: 57.3-61.0)

**Female:** 71.8% (95% CI: 70.5-73.2)

The prevalence of ever being asked about mental health by a healthcare provider was significantly lower among adults who were male (59.1%) than among adults who were female (71.8%).

### Age

The prevalence of ever being asked about mental health by a healthcare provider was significantly lower among adults aged 65 or older (62.9%) than among adults aged 35-49 (69.3%).

### Education

There was no significant difference in the prevalence of ever being asked about mental health by a healthcare provider among educational attainment levels.

### Family Income

The prevalence of ever being asked about mental health by a healthcare provider was significantly lower among adults with an annual family income of \$35,001-\$50,000 (62.6%) and \$85,001 or more (63.2%) than among adults with an annual family income of \$15,000 or less (69.8%).

### Race

There was no significant difference in the prevalence of ever being asked about mental health by a healthcare provider among racial groups.

### Marital Status

The prevalence of ever being asked about mental health by a healthcare provider was significantly lower among adults who were never married (63.0%) than among adults who were widowed, divorced, or separated (68.4%).

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There was no significant difference in the prevalence of ever being asked about mental health by a healthcare provider among DHHR, Bureau for Medical Services (BMS) regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There was no significant difference in the prevalence of ever being asked about mental health by a healthcare provider among DHHR, Bureau for Behavioral Health (BBH) regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There were no DHHR, BBH, Ryan Brown Fund (RBF) regions with a significantly lower prevalence of ever being asked about mental health by a healthcare provider compared to the state estimate. There was one DHHR, BBH, RBF region with a significantly higher prevalence compared to the state estimate (65.7%); region five (69.7%).

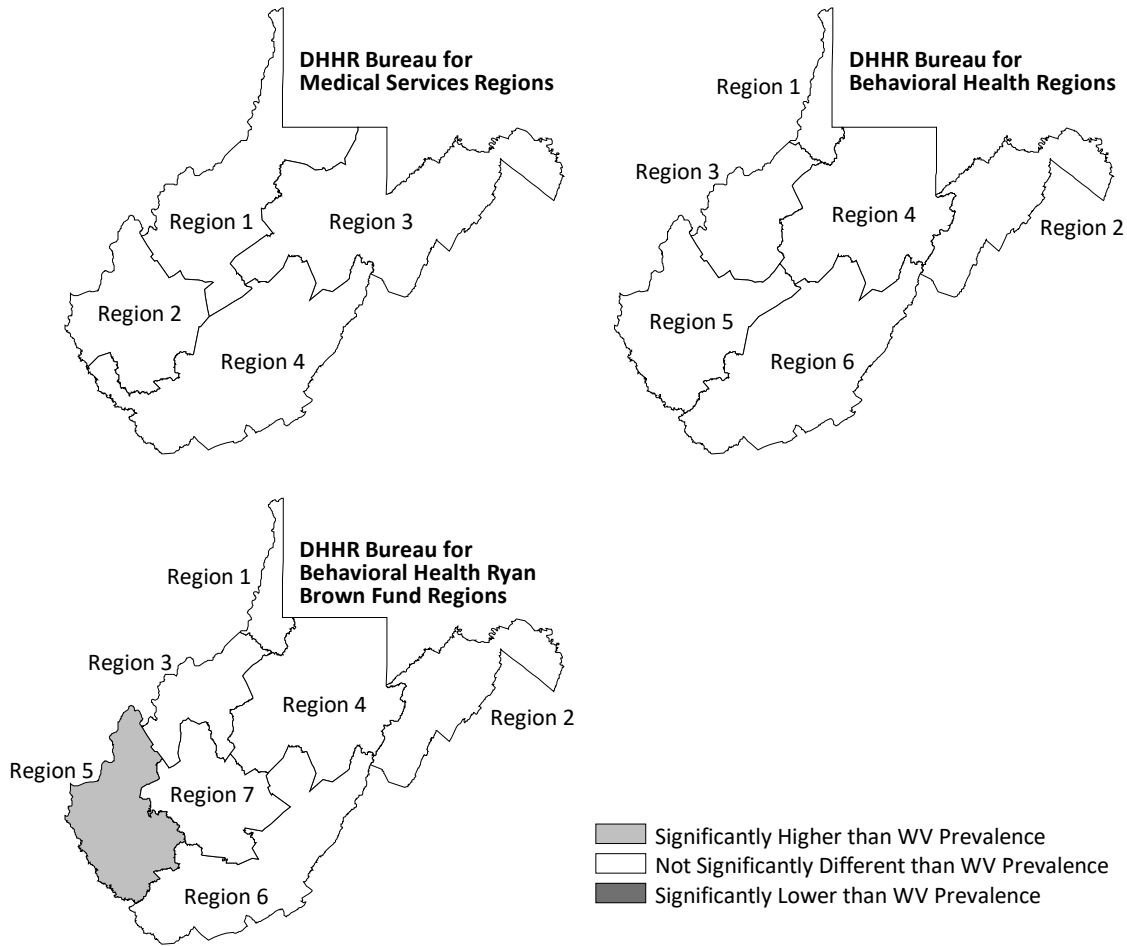
Table 11.9.9: Weighted Prevalence of Ever Being Asked About Mental Health by a Healthcare Provider by Demographic Characteristics: MATCH, 2021<sup>a</sup>

Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>399,868</b>	<b>59.1</b>	<b>57.3-61.0</b>	<b>513,016</b>	<b>71.8</b>	<b>70.5-73.2</b>	<b>912,884</b>	<b>65.7</b>	<b>64.5-66.8</b>
<b>Age</b>									
18-34	98,174	55.6	51.2-60.0	128,681	75.4	72.7-78.2	226,855	65.4	62.7-68.1
35-49	93,380	61.9	57.7-66.1	118,846	76.4	73.6-79.2	212,226	69.3	66.7-71.8
50-64	111,297	59.4	56.1-62.7	141,939	72.0	69.4-74.7	253,236	65.9	63.8-68.0
65+	95,567	61.0	58.1-64.0	120,297	64.5	61.9-67.0	215,863	62.9	61.0-64.8
<b>Education</b>									
Less than HS	55,624	59.6	54.6-64.7	53,947	69.8	65.6-74.0	109,571	64.2	60.9-67.6
HS/GED	179,506	59.0	56.2-61.8	209,737	70.6	68.6-72.5	389,243	64.7	63.0-66.4
Associate's or more	163,026	59.3	56.3-62.3	247,390	73.5	71.5-75.6	410,416	67.1	65.4-68.9
<b>Annual Family Income</b>									
\$15,000 or less	83,607	62.5	58.6-66.3	117,647	76.1	73.5-78.7	201,253	69.8	67.5-72.1
\$15,001-\$35,000	96,109	60.8	57.0-64.6	135,193	70.6	68.0-73.1	231,301	66.2	63.9-68.4
\$35,001-\$50,000	50,397	55.5	50.2-60.7	64,622	69.7	65.9-73.5	115,019	62.6	59.4-65.9
\$50,001-\$85,000	76,439	61.1	56.7-65.4	93,202	71.8	68.5-75.2	169,641	66.5	63.8-69.3
\$85,001+	81,352	56.3	51.8-60.8	82,840	71.8	68.2-75.4	164,192	63.2	60.2-66.2
<b>Race</b>									
White	372,315	59.4	57.4-61.4	485,031	71.9	70.6-73.3	857,346	65.9	64.7-67.1
Black	9,008	50.5	41.2-59.7	12,315	70.1	64.0-76.1	21,322	60.2	54.3-66.0
Multi-racial or "Other"	17,509	58.0	48.4-67.7	14,962	70.7	62.3-79.1	32,471	63.2	56.6-69.9
<b>Marital Status</b>									
Married/Living with a partner	214,866	58.7	56.2-61.3	277,296	72.2	70.3-74.0	492,161	65.6	64.0-67.2
Widowed/Divorced/Separated	82,383	63.5	59.8-67.3	143,159	71.5	69.2-73.9	225,541	68.4	66.3-70.4
Never married	101,129	57.0	53.0-61.0	90,418	71.4	68.0-74.8	191,547	63.0	60.2-65.7

Note. CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

Figure 11.9.7: Weighted Prevalence of Ever Being Asked About Mental Health by a Healthcare Provider by Region: MATCH, 2021<sup>a,b</sup>



Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

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## 11.10 Needed Mental Health Care

### Item

Responding “Yes” to the question, “In the past 12 months, was there ever a time when you felt that you might need to see a doctor or healthcare provider for problems with your mental health, emotions, or nerves?”

### Prevalence

**West Virginia:** 31.2% (95% CI: 30.0-32.3)

### Sex

**Male:** 25.0% (95% CI: 23.3-26.7)

**Female:** 37.0% (95% CI: 35.5-38.4)

The prevalence of needing mental health care in the past 12 months was significantly higher among adults who were female (37.0%) than among adults who were male (25.0%).

### Age

The prevalence of needing mental health care in the past 12 months was significantly higher among adults aged 18-34 (45.2%) and 35-49 (41.3%) than among any other adult age groups.

### Education

There was no significant difference in the prevalence of needing mental health care in the past 12 months among educational attainment levels.

### Family Income

The prevalence of needing mental health care in the past 12 months was significantly higher among adults with an annual family income of \$15,000 or less (42.3%) than among adults with any other annual family income levels.

### Race

The prevalence of needing mental health care in the past 12 months was significantly higher among adults who were multi-racial or “other” (42.3%) than among adults of any other racial groups.

### Marital Status

The prevalence of needing mental health care in the past 12 months was significantly higher among adults who were never married (42.3%) than among adults with any other marital statuses.

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There was no significant difference in the prevalence of needing mental health care in the past 12 months among DHHR, Bureau for Medical Services (BMS) regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There were no DHHR, Bureau for Behavioral Health (BBH) regions with a significantly higher prevalence of needing mental health care in the past 12 months compared to the state estimate. There was one DHHR, BBH region with a significantly lower prevalence compared to the state estimate (31.2%); region one (25.7%).

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There was one DHHR, BBH, Ryan Brown Fund (RBF) region with a significantly higher prevalence compared to the state estimate (31.2%); region five (36.6%). There was one DHHR, BBH, RBF region with a significantly lower prevalence compared to the state estimate; region one (25.7%).

*Table 11.10.10: Weighted Prevalence of Needing Mental Health Care in the Past 12 Months by Demographic Characteristics: MATCH, 2021<sup>a</sup>*

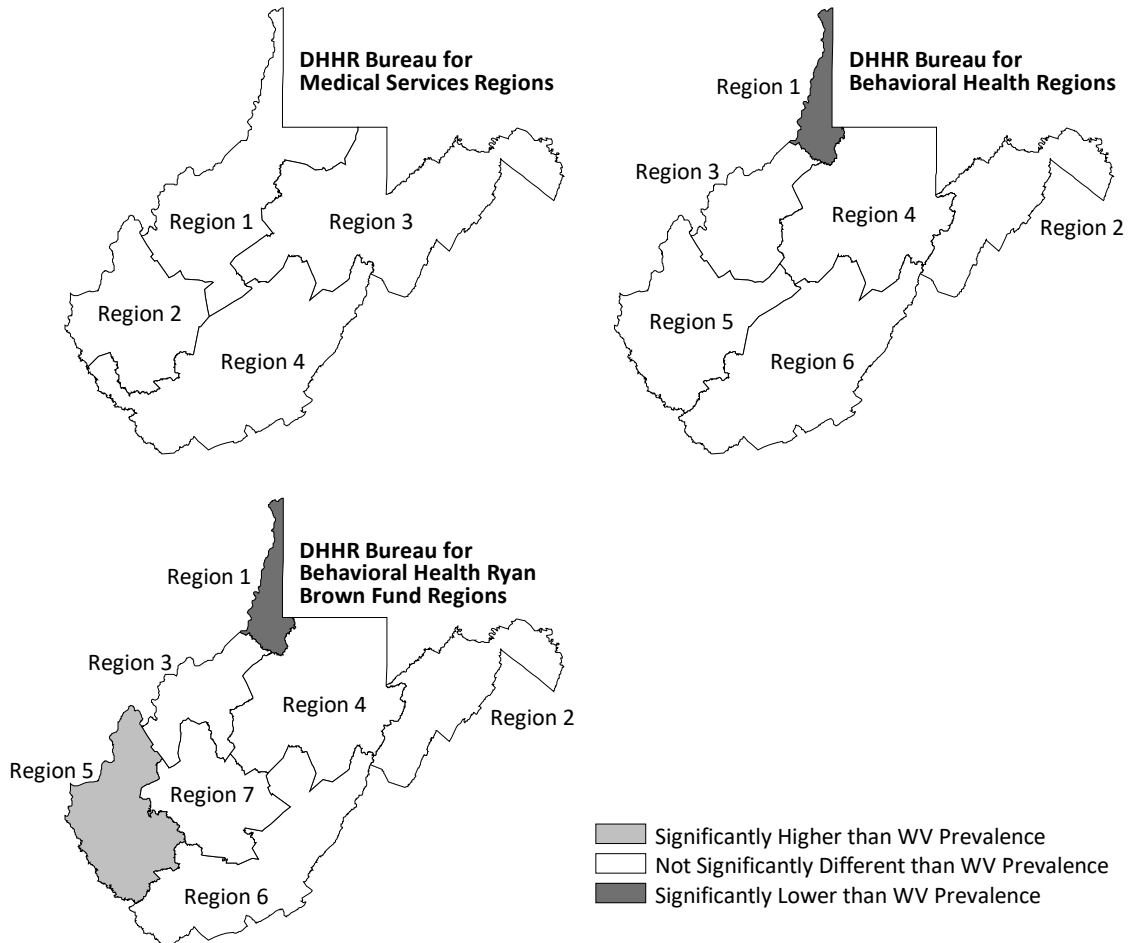
Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>169,260</b>	<b>25.0</b>	<b>23.3-26.7</b>	<b>263,708</b>	<b>37.0</b>	<b>35.5-38.4</b>	<b>432,968</b>	<b>31.2</b>	<b>30.0-32.3</b>
<b>Age</b>									
18-34	63,979	36.2	31.9-40.5	93,086	54.5	51.2-57.8	157,066	45.2	42.5-48.0
35-49	49,471	32.8	28.9-36.7	77,136	49.6	46.4-52.8	126,607	41.3	38.8-43.9
50-64	41,698	22.2	19.3-25.1	66,212	33.7	30.9-36.5	107,910	28.1	26.1-30.1
65+	13,434	8.6	7.0-10.2	25,898	13.9	12.1-15.8	39,332	11.5	10.2-12.7
<b>Education</b>									
Less than HS	25,093	26.9	22.1-31.8	28,848	37.6	33.3-41.9	53,941	31.8	28.5-35.1
HS/GED	81,251	26.7	24.1-29.3	107,298	36.2	34.1-38.3	188,549	31.4	29.7-33.1
Associate's or more	61,945	22.5	20.0-25.0	126,733	37.7	35.4-39.9	188,678	30.8	29.1-32.6
<b>Annual Family Income</b>									
\$15,000 or less	49,610	37.0	33.2-40.8	72,256	46.8	43.9-49.8	121,866	42.3	39.9-44.7
\$15,001-\$35,000	43,533	27.6	23.9-31.3	72,614	37.9	35.2-40.7	116,147	33.3	31.0-35.5
\$35,001-\$50,000	20,206	22.1	17.4-26.7	28,301	30.6	26.8-34.3	48,507	26.3	23.3-29.3
\$50,001-\$85,000	25,290	20.2	16.6-23.8	42,828	33.1	29.5-36.6	68,118	26.7	24.2-29.3
\$85,001+	27,656	19.2	15.3-23.0	41,418	35.8	31.8-39.8	69,074	26.6	23.7-29.4
<b>Race</b>									
White	152,555	24.3	22.6-26.1	247,378	36.7	35.2-38.2	399,933	30.8	29.6-31.9
Black	5,441	30.5	21.3-39.7	5,157	29.6	23.6-35.7	10,598	30.1	24.5-35.6
Multi-racial or "Other"	10,796	35.9	26.4-45.5	10,792	51.4	43.0-59.8	21,588	42.3	35.7-48.9
<b>Marital Status</b>									
Married/Living with a partner	71,645	19.6	17.5-21.6	132,622	34.6	32.6-36.6	204,267	27.2	25.8-28.7
Widowed/Divorced/Separated	32,010	24.7	21.3-28.1	65,906	33.1	30.6-35.5	97,916	29.8	27.8-31.8
Never married	64,907	36.6	32.5-40.6	63,952	50.4	46.6-54.1	128,859	42.3	39.5-45.2

*Note.* CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.



Figure 11.10.8: Weighted Prevalence of Needing Mental Health Care in the Past 12 Months by Region: MATCH, 2021<sup>a,b</sup>



Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

## 11.11 Received Needed Mental Health Care

### Item

Responding “Yes” to the question, “In the past 12 months, was there ever a time when you felt that you might need to see a doctor or healthcare provider for problems with your mental health, emotions, or nerves?” and then responding “Yes” to the question, “In the past 12 months, did you see a doctor or healthcare provider for problems with your mental health, emotions, or nerves?” The prevalence estimates excluded adults responding “No” to the first stated question.

### Prevalence

**West Virginia:** 56.7% (95% CI: 54.5-58.9)

### Sex

**Male:** 52.0% (95% CI: 47.9-56.0)

**Female:** 59.8% (95% CI: 57.3-62.3)

The prevalence of receiving needed mental health care in the past 12 months was significantly higher among adults who were female (59.8%) than among adults who were male (52.0%).

### Age

There was no significant difference in the prevalence of receiving needed mental health care in the past 12 months among adult age groups.

### Education

There was no significant difference in the prevalence of receiving needed mental health care in the past 12 months among educational attainment levels.

### Family Income

There was no significant difference in the prevalence of receiving needed mental health care in the past 12 months among annual family income levels.

### Race

There was no significant difference in the prevalence of receiving needed mental health care in the past 12 months among racial groups.

### Marital Status

The prevalence of receiving needed mental health care in the past 12 months was significantly higher among adults who were widowed, divorced, or separated (60.4%) than among adults who were never married (51.6%).

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There was no significant difference in the prevalence of receiving needed mental health care in the past 12 months among DHHR, Bureau for Medical Services (BMS) regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There was one DHHR, Bureau for Behavioral Health (BBH) region with a significantly higher prevalence of receiving needed mental health care in the past 12 months compared to the state estimate (56.7%); region one (67.6%). There were no DHHR, BBH regions with a significantly lower prevalence compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There was one DHHR, BBH, Ryan Brown Fund (RBF) region with a significantly higher prevalence of receiving needed mental health care in the past 12 months compared to the state estimate (56.7%); region one (67.6%). There were no DHHR, BBH, RBF regions with a significantly lower prevalence compared to the state estimate.

Table 11.11.11: Weighted Prevalence of Receiving Needed Mental Health Care in the Past 12 Months by Demographic Characteristics: MATCH, 2021<sup>a,b</sup>

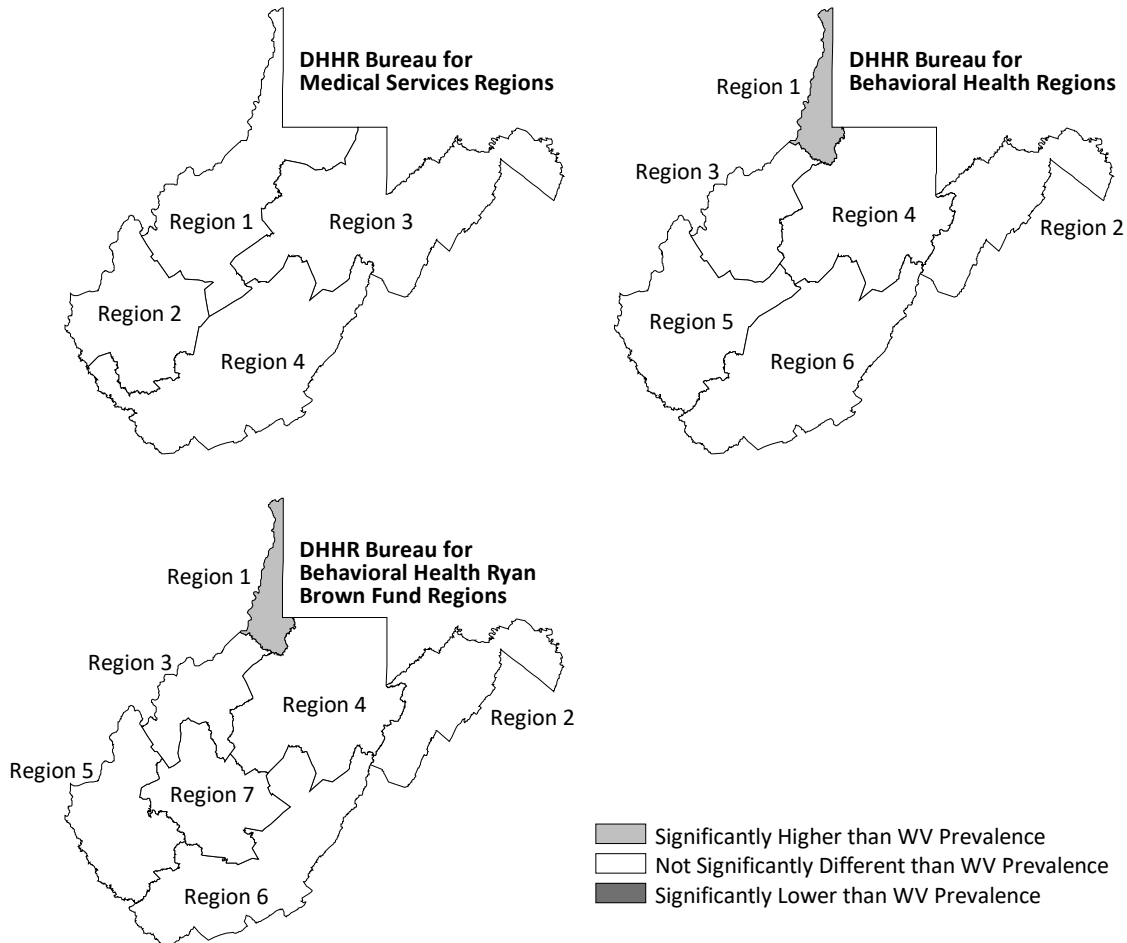
Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>87,464</b>	<b>52.0</b>	<b>47.9-56.0</b>	<b>155,508</b>	<b>59.8</b>	<b>57.3-62.3</b>	<b>242,972</b>	<b>56.7</b>	<b>54.5-58.9</b>
<b>Age</b>									
18-34	32,574	50.9	43.4-58.5	52,045	56.1	51.7-60.6	84,619	54.0	49.9-58.0
35-49	25,545	51.9	44.9-59.0	45,979	60.4	56.0-64.8	71,525	57.1	53.2-60.9
50-64	20,900	50.5	43.1-57.9	40,759	62.8	57.7-67.8	61,659	58.0	53.8-62.2
65+	8,091	60.8	50.9-70.7	15,936	64.0	57.3-70.8	24,026	62.9	57.3-68.5
<b>Education</b>									
Less than HS	13,887	56.4	45.7-67.1	15,624	55.4	48.0-62.8	29,511	55.9	49.5-62.2
HS/GED	39,674	49.1	43.1-55.1	64,394	61.0	57.4-64.7	104,068	55.9	52.5-59.2
Associate's or more	33,407	54.0	47.6-60.4	75,319	59.9	56.1-63.7	108,726	58.0	54.6-61.3
<b>Annual Family Income</b>									
\$15,000 or less	27,028	55.0	48.4-61.5	40,298	56.6	52.0-61.1	67,326	55.9	52.1-59.7
\$15,001-\$35,000	19,605	45.2	37.1-53.3	43,924	61.8	57.4-66.3	63,530	55.5	51.2-59.8
\$35,001-\$50,000	9,339	46.3	34.2-58.5	17,797	63.8	56.7-71.0	27,135	56.5	49.7-63.3
\$50,001-\$85,000	14,773	58.4	48.3-68.5	25,863	60.6	54.0-67.2	40,636	59.8	54.2-65.4
\$85,001+	14,990	54.2	43.0-65.5	24,042	58.2	51.1-65.3	39,032	56.6	50.4-62.8
<b>Race</b>									
White	80,104	52.8	48.5-57.0	146,873	60.2	57.6-62.8	226,977	57.3	55.1-59.6
Black	2,043	37.8	20.7-54.9	2,792	55.2	43.5-66.9	4,835	46.2	35.1-57.3
Multi-racial or "Other"	4,911	46.0	29.1-63.0	5,613	52.9	41.3-64.6	10,524	49.5	39.0-59.9
<b>Marital Status</b>									
Married/Living with a partner	38,276	53.5	47.5-59.5	80,013	60.9	57.4-64.4	118,289	58.3	55.2-61.4
Widowed/Divorced/Separated	17,594	56.0	48.0-64.0	40,194	62.6	58.1-67.2	57,788	60.4	56.4-64.5
Never married	31,243	48.3	41.1-55.6	34,847	55.0	49.5-60.5	66,090	51.6	47.1-56.2

Note. CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>Denominators in the estimates are based on a response to a preceding question in the survey and were not answered by all respondents. See "Item" section above.

Figure 11.11.9: Weighted Prevalence of Receiving Needed Mental Health Care in the Past 12 Months by Region: MATCH, 2021<sup>a,b,c</sup>



Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

<sup>c</sup>Denominators in the estimates are based on a response to a preceding question in the survey and were not answered by all respondents. See “Item” section above.

## 11.12 Had Mental Health Prescription for Medication

### Item

Responding “Yes” to the question, “In the past 12 months, did you have a prescription for medicine(s) to help with your mental health, emotions, or nerves?”

### Prevalence

**West Virginia:** 28.7% (95% CI: 27.6-29.7)

### Sex

**Male:** 20.8% (95% CI: 19.3-22.4)

**Female:** 36.1% (95% CI: 34.7-37.6)

The prevalence of having a mental health prescription for medication in the past 12 months was significantly higher among adults who were female (36.1%) than among adults who were male (20.8%).

### Age

The prevalence of having a mental health prescription for medication in the past 12 months was significantly higher among any other adult age groups than among adults aged 65 or older (21.9%).

### Education

There was no significant difference in the prevalence of having a mental health prescription for medication in the past 12 months among educational attainment levels.

### Family Income

The prevalence of having a mental health prescription for medication in the past 12 months was significantly higher among adults with an annual family income of \$15,000 or less (35.1%) than among adults with \$85,001 or more (22.7%).

### Race

The prevalence of having a mental health prescription for medication in the past 12 months was significantly higher among adults who were White (28.8%) than among adults who were Black (20.1%).

### Marital Status

The prevalence of having a mental health prescription for medication in the past 12 months was significantly higher among adults who were widowed, divorced, or separated (33.3%) than among adults who were married or living with a partner (26.3%).

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There was no significant difference in the prevalence of having a mental health prescription for medication in the past 12 months among DHHR, Bureau for Medical Services (BMS) regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There was no significant difference in the prevalence of having a mental health prescription for medication in the past 12 months among DHHR, Bureau for Behavioral Health (BBH) regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There was no significant difference in the prevalence of having a mental health prescription for medication in the past 12 months among DHHR, BBH, Ryan Brown Fund (RBF) regions compared to the state estimate.

Table 11.12.12: Weighted Prevalence of Having a Mental Health Prescription for Medication in the Past 12 Months by Demographic Characteristics: MATCH, 2021<sup>a</sup>

Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>140,695</b>	<b>20.8</b>	<b>19.3-22.4</b>	<b>257,147</b>	<b>36.1</b>	<b>34.7-37.6</b>	<b>397,842</b>	<b>28.7</b>	<b>27.6-29.7</b>
<b>Age</b>									
18-34	40,497	22.9	19.2-26.7	60,948	35.7	32.5-38.8	101,445	29.2	26.7-31.7
35-49	38,339	25.4	21.9-28.9	63,277	40.7	37.5-43.8	101,616	33.1	30.7-35.5
50-64	38,425	20.5	17.8-23.2	79,636	40.5	37.7-43.4	118,061	30.7	28.7-32.8
65+	22,713	14.5	12.4-16.7	51,754	28.1	25.7-30.5	74,467	21.9	20.2-23.5
<b>Education</b>									
Less than HS	23,014	24.7	20.0-29.4	27,104	35.7	31.5-39.9	50,117	29.7	26.5-32.8
HS/GED	63,986	21.0	18.8-23.3	106,157	35.8	33.7-38.0	170,144	28.3	26.8-29.9
Associate's or more	52,784	19.2	16.8-21.5	123,403	36.7	34.4-38.9	176,187	28.8	27.1-30.5
<b>Annual Family Income</b>									
\$15,000 or less	38,572	28.9	25.3-32.4	62,378	40.5	37.6-43.4	100,950	35.1	32.8-37.4
\$15,001-\$35,000	33,816	21.4	18.1-24.6	73,648	38.6	35.9-41.4	107,464	30.8	28.7-33.0
\$35,001-\$50,000	16,288	17.9	14.1-21.8	30,564	33.2	29.3-37.0	46,852	25.6	22.8-28.4
\$50,001-\$85,000	24,733	19.7	16.2-23.3	46,062	35.5	31.9-39.2	70,795	27.8	25.2-30.4
\$85,001+	23,019	15.9	12.5-19.4	36,076	31.2	27.3-35.1	59,096	22.7	20.1-25.3
<b>Race</b>									
White	129,977	20.7	19.1-22.4	244,461	36.4	34.9-37.9	374,437	28.8	27.7-29.9
Black	2,758	15.5	8.9-22.1	4,286	24.9	19.0-30.8	7,044	20.1	15.7-24.6
Multi-racial or "Other"	7,469	24.8	17.0-32.6	8,015	37.9	30.0-45.9	15,484	30.2	24.5-36.0
<b>Marital Status</b>									
Married/Living with a partner	64,838	17.7	15.8-19.6	132,566	34.6	32.6-36.6	197,404	26.3	24.9-27.8
Widowed/Divorced/Separated	30,509	23.5	20.1-27.0	78,705	39.7	37.2-42.3	109,214	33.3	31.3-35.4
Never married	44,703	25.2	21.6-28.8	44,623	35.1	31.5-38.7	89,326	29.3	26.8-31.9

Note. CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.



## 11.13 Needed to See a Healthcare Provider Because of Alcohol or Drug Use

### Item

Responding “Yes” to the question, “In the past 12 months, was there ever a time when you felt that you might need to see a doctor or healthcare provider because of problems with alcohol or drug use?”

### Prevalence

**West Virginia:** 2.8% (95% CI: 2.4-3.1)

### Sex

**Male:** 3.2% (95% CI: 2.6-3.9)

**Female:** 2.3% (95% CI: 1.9-2.7)

There was no significant difference in the prevalence of needing to see a healthcare provider because of alcohol or drug use in the past 12 months between the sexes.

### Age

The prevalence of needing to see a healthcare provider because of alcohol or drug use in the past 12 months was significantly higher among adults aged 35-49 (5.4%) than among any other adult age groups. The prevalence was significantly lower among adults aged 65 or older (0.7%) than among any other adult age groups.

### Education

The prevalence of needing to see a healthcare provider because of alcohol or drug use in the past 12 months was significantly higher among adults with less than a high school education (4.3%) than among adults with an associate’s or more education (2.2%).

### Family Income

The prevalence of needing to see a healthcare provider because of alcohol or drug use in the past 12 months was significantly higher among adults with an annual family income of \$15,000 or less (6.3%) than among adults with any other annual family income levels.

### Race

There was no significant difference in the prevalence of needing to see a healthcare provider because of alcohol or drug use in the past 12 months among racial groups.

### Marital Status

The prevalence of needing to see a healthcare provider because of alcohol or drug use in the past 12 months was significantly higher among adults who were widowed, divorced, or separated (3.5%) and never married (3.8%) than among adults who were married or living with a partner (2.0%).

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There was no significant difference in the prevalence of needing to see a healthcare provider because of alcohol or drug use in the past 12 months among DHHR, Bureau for Medical Services (BMS) regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There was no significant difference in the prevalence of needing to see a healthcare provider because of alcohol or drug use in the past 12 months among DHHR, Bureau for Behavioral Health (BBH) regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There was no significant difference in the prevalence of needing to see a healthcare provider because of alcohol or drug use in the past 12 months among DHHR, BBH, Ryan Brown Fund (RBF) regions compared to the state estimate.

*Table 11.13.13: Weighted Prevalence of Needing to See a Healthcare Provider Because of Alcohol or Drug Use in the Past 12 Months by Demographic Characteristics: MATCH, 2021<sup>a</sup>*

Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>21,773</b>	<b>3.2</b>	<b>2.6-3.9</b>	<b>16,216</b>	<b>2.3</b>	<b>1.9-2.7</b>	<b>37,989</b>	<b>2.8</b>	<b>2.4-3.1</b>
<b>Age</b>									
18-34	5,752	3.3	2.1-4.4	5,244	3.1	2.0-4.2	10,996	3.2	2.4-4.0
35-49	9,857	6.6	4.6-8.5	6,719	4.3	3.1-5.6	16,576	5.4	4.3-6.6
50-64	4,419	2.4	1.5-3.3	3,277	1.7	1.1-2.3	7,697	2.0	1.5-2.6
65+	U	U	U	U	U	U	2,386	0.7	0.3-1.1
<b>Education</b>									
Less than HS	4,433	4.8	2.8-6.8	2,696	3.6	1.8-5.3	7,129	4.3	2.9-5.6
HS/GED	9,681	3.2	2.3-4.1	7,369	2.5	1.9-3.1	17,050	2.9	2.3-3.4
Associate's or more	7,463	2.7	1.8-3.7	6,151	1.8	1.3-2.4	13,614	2.2	1.7-2.8
<b>Annual Family Income</b>									
\$15,000 or less	9,615	7.2	5.3-9.2	8,366	5.4	4.0-6.9	17,981	6.3	5.1-7.5
\$15,001-\$35,000	6,834	4.3	2.8-5.9	4,502	2.4	1.6-3.1	11,336	3.3	2.5-4.1
\$35,001-\$50,000	U	U	U	1,369	1.5	0.6-2.3	2,246	1.2	0.6-1.8
\$50,001-\$85,000	U	U	U	U	U	U	2,767	1.1	0.5-1.7
\$85,001+	U	U	U	U	U	U	3,241	1.2	0.6-1.9
<b>Race</b>									
White	20,284	3.3	2.6-3.9	15,525	2.3	1.9-2.8	35,809	2.8	2.4-3.2
Black	U	U	U	U	U	U	937	2.7	1.2-4.2
Multi-racial or "Other"	U	U	U	U	U	U	1,153	2.3	1.0-3.5
<b>Marital Status</b>									
Married/Living with a partner	6,606	1.8	1.2-2.4	8,048	2.1	1.6-2.7	14,653	2.0	1.6-2.4
Widowed/Divorced/Separated	6,512	5.1	3.2-6.9	4,900	2.5	1.7-3.3	11,412	3.5	2.6-4.4
Never married	8,561	4.8	3.4-6.3	3,063	2.4	1.2-3.6	11,624	3.8	2.8-4.8

*Note.* CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma; U = unstable prevalence estimate.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

## 11.14 Saw Healthcare Provider Because of Alcohol or Drug Use

### Item

Responding “Yes” to the question, “In the past 12 months, was there ever a time when you felt that you might need to see a doctor or healthcare provider because of problems with alcohol or drug use?” and then responding “Yes” to the question, “In the past 12 months, have you seen any doctor or healthcare provider for problems with alcohol or drug use?” *The prevalence estimates excluded adults responding “No” to the first stated question.*

### Prevalence

**West Virginia:** 65.1% (95% CI: 59.2-71.1)

### Sex

**Male:** 68.9% (95% CI: 60.0-77.8)

**Female:** 60.0% (95% CI: 50.2-69.7)

There was no significant difference in the prevalence of seeing a healthcare provider because of alcohol or drug use in the past 12 months between the sexes.

### Age

There was no significant difference in the prevalence of seeing a healthcare provider because of alcohol or drug use in the past 12 months among adult age groups with stable estimates. There were unstable prevalence estimates among adult age groups.

### Education

The prevalence of seeing a healthcare provider because of alcohol or drug use in the past 12 months was significantly higher among adults with a high school or Graduate Equivalency Diploma (GED) education (72.4%) than among adults with an associate’s or more education (51.3%).

### Family Income

There was no significant difference in the prevalence of seeing a healthcare provider because of alcohol or drug use in the past 12 months among annual family income levels with stable estimates. There were unstable prevalence estimates among annual family income levels.

### Race

There were unstable estimates for the prevalence of seeing a healthcare provider because of alcohol or drug use in the past 12 months among racial groups.

### Marital Status

There was no significant difference in the prevalence of seeing a healthcare provider because of alcohol or drug use in the past 12 months among marital statuses.

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There was no significant difference in the prevalence of seeing a healthcare provider because of alcohol or drug use in the past 12 months among DHHR, Bureau for Medical Services (BMS) regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There was no significant difference in the prevalence of seeing a healthcare provider because of alcohol or drug use in the past 12 months among DHHR, Bureau for Behavioral Health (BBH) regions compared to the state estimate. There were unstable prevalence estimates among DHHR, BBH regions (see the [Appendix](#)).

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There was one DHHR, BBH, Ryan Brown Fund (RBF) region with a significantly higher prevalence of seeing a healthcare provider because of alcohol or drug use in the past 12 months compared to the state estimate (65.1%); region five (83.1%). There were no DHHR, BBH, RBF regions with a significantly lower prevalence compared to the state estimate. There were unstable prevalence estimates among DHHR, BBH, RBF regions (see the [Appendix](#)).

Table 11.14.14: Weighted Prevalence of Seeing a Healthcare Provider Because of Alcohol or Drug Use in the Past 12 Months by Demographic Characteristics: MATCH, 2021<sup>a,b</sup>

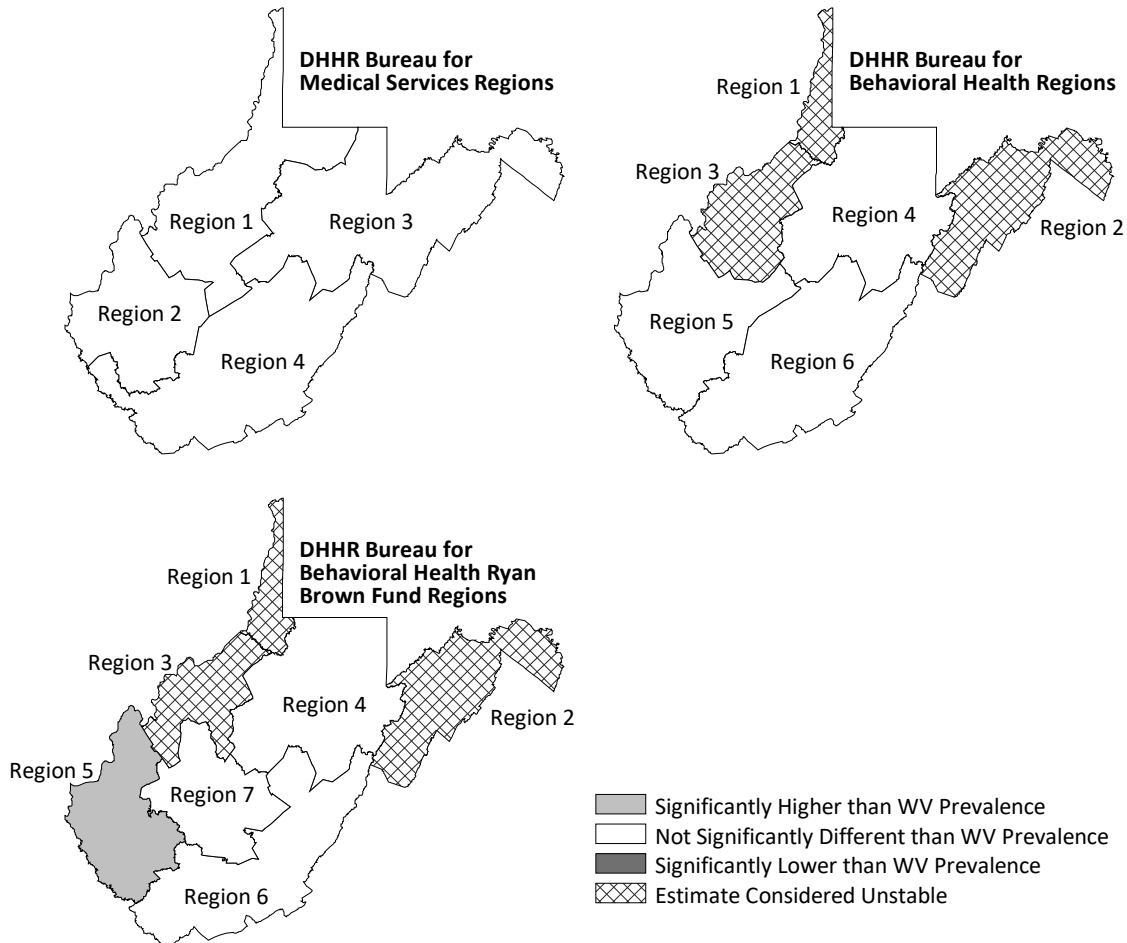
Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>14,956</b>	<b>68.9</b>	<b>60.0-77.8</b>	<b>9,472</b>	<b>60.0</b>	<b>50.2-69.7</b>	<b>24,428</b>	<b>65.1</b>	<b>59.2-71.1</b>
<b>Age</b>									
18-34	U	U	U	2,497	49.0	31.2-66.7	6,411	59.1	46.2-72.0
35-49	U	U	U	5,057	76.3	63.4-89.3	12,940	78.5	69.6-87.4
50-64	U	U	U	1,683	54.3	34.3-74.3	4,156	55.4	41.2-69.7
65+	U	U	U	U	U	U	U	U	U
<b>Education</b>									
Less than HS	U	U	U	U	U	U	5,226	73.8	58.6-88.9
HS/GED	7,383	76.4	65.2-87.7	4,637	66.7	53.2-80.3	12,019	72.4	63.5-81.2
Associate's or more	3,964	53.1	35.6-70.6	3,023	49.1	33.1-65.1	6,987	51.3	39.2-63.4
<b>Annual Family Income</b>									
\$15,000 or less	7,696	80.2	70.2-90.2	5,594	68.5	54.1-82.9	13,290	74.8	65.9-83.7
\$15,001-\$35,000	4,579	67.4	50.7-84.2	2,851	66.6	49.2-84.1	7,430	67.1	54.8-79.4
\$35,001-\$50,000	U	U	U	U	U	U	U	U	U
\$50,001-\$85,000	U	U	U	U	U	U	U	U	U
\$85,001+	U	U	U	U	U	U	U	U	U
<b>Race</b>									
White	14,180	70.0	60.6-79.3	8,945	59.1	49.0-69.3	23,124	65.3	58.5-72.2
Black	U	U	U	U	U	U	U	U	U
Multi-racial or "Other"	U	U	U	U	U	U	U	U	U
<b>Marital Status</b>									
Married/Living with a partner	5,020	76.0	62.3-89.6	4,930	62.4	49.0-75.8	9,950	68.6	58.7-78.5
Widowed/Divorced/Separated	4,143	64.3	46.0-82.5	3,109	67.2	52.0-82.4	7,252	65.5	53.1-77.9
Never married	5,793	67.7	53.6-81.7	U	U	U	7,020	60.4	47.3-73.5

Note. CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma; U = unstable prevalence estimate.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>Denominators in the estimates are based on a response to a preceding question in the survey and were not answered by all respondents. See "Item" section above.

Figure 11.14.10: Weighted Prevalence of Seeing a Healthcare Provider Because of Alcohol or Drug Use in the Past 12 Months by Region: MATCH, 2021<sup>a,b,c</sup>



Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

<sup>c</sup>Denominators in the estimates are based on a response to a preceding question in the survey and were not answered by all respondents. See “Item” section above.

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# Chapter 12: Economic Stability

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## 12.1 Difficulty Paying Debt

### Item

In the survey, respondents were presented with the question, “In the past 12 months, has paying off your debt gotten easier, stayed the same, or gotten harder?” The following responses were offered, and only one could be selected:

- “Easier”
- “Stayed the same”
- “Harder”
- “I do not have any debt”

The category ‘paying off debt got harder’ is used for responding “Harder” to the question. *The prevalence estimates excluded adults responding, “I do not have any debt” to the question.*

### Prevalence

**West Virginia:** 36.4% (95% CI: 35.1-37.7)

### Sex

**Male:** 33.8% (95% CI: 31.7-35.8)

**Female:** 38.7% (95% CI: 37.1-40.4)

The prevalence of adults reporting that paying off debt got harder in the past 12 months was significantly higher among adults who were female (38.7%) than among adults who were male (33.8%).

### Age

The prevalence of adults reporting that paying off debt got harder in the past 12 months was significantly higher among adults aged 18-34 (46.2%) and 35-49 (43.1%) than among any other adult age groups.

### Education

The prevalence of adults reporting that paying off debt got harder in the past 12 months was significantly higher among adults with less than high school education (44.7%) than among adults with an associate’s or more education (31.8%).

### Family Income

The prevalence of adults reporting that paying off debt got harder in the past 12 months was significantly higher among adults with an annual family income of \$15,000 or less (53.8%) than among adults with any other annual family income levels. The prevalence was significantly lower among adults



with an annual family income of \$85,001 or more (17.9%) than among adults with any other annual family income levels.

## Race

The prevalence of adults reporting that paying off debt got harder in the past 12 months was significantly higher among adults who were multi-racial or “other” (50.1%) than among adults who were White (35.6%).

## Marital Status

The prevalence of adults reporting that paying off debt got harder in the past 12 months was significantly higher among adults who were widowed, divorced, or separated (39.3%) and never married (43.0%) than among adults who were married or living with a partner (33.1%).

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There was no significant difference in the prevalence of adults reporting that paying off debt got harder in the past 12 months among DHHR, Bureau for Medical Services (BMS) regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There was no significant difference in the prevalence of adults reporting that paying off debt got harder in the past 12 months among DHHR, Behavioral Health (BBH) regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There was no significant difference in the prevalence of adults reporting that paying off debt got harder in the past 12 months among DHHR, BBH, Ryan Brown Fund (RBF) regions compared to the state estimate.

Table 12.1.1: Weighted Prevalence of Adults Reporting That Paying Off Debt Got Harder in the Past 12 Months by Demographic Characteristics: MATCH, 2021<sup>a,b</sup>

Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>171,696</b>	<b>33.8</b>	<b>31.7-35.8</b>	<b>216,508</b>	<b>38.7</b>	<b>37.1-40.4</b>	<b>388,204</b>	<b>36.4</b>	<b>35.1-37.7</b>
<b>Age</b>									
18-34	48,365	41.3	36.2-46.3	64,983	50.8	47.0-54.5	113,348	46.2	43.1-49.4
35-49	52,638	39.7	35.3-44.1	64,826	46.2	42.9-49.5	117,464	43.1	40.3-45.8
50-64	48,700	31.4	27.9-34.9	58,762	35.0	32.0-38.0	107,462	33.3	31.0-35.5
65+	20,617	20.4	17.1-23.6	26,687	22.3	19.4-25.1	47,304	21.4	19.3-23.5
<b>Education</b>									
Less than HS	29,418	45.3	39.3-51.4	23,717	44.0	38.6-49.3	53,134	44.7	40.6-48.8
HS/GED	80,063	35.8	32.7-38.8	96,035	42.4	39.9-44.8	176,098	39.1	37.1-41.1
Associate's or more	60,811	28.0	24.9-31.1	96,139	34.8	32.4-37.2	156,951	31.8	29.9-33.7
<b>Annual Family Income</b>									
\$15,000 or less	48,819	52.5	47.9-57.0	62,232	55.0	51.6-58.4	111,051	53.8	51.1-56.6
\$15,001-\$35,000	50,107	43.2	38.7-47.7	71,532	47.3	44.2-50.4	121,639	45.5	42.9-48.1
\$35,001-\$50,000	24,208	33.9	28.2-39.5	25,026	34.0	29.7-38.4	49,235	34.0	30.4-37.5
\$50,001-\$85,000	25,708	26.1	21.5-30.7	35,194	31.9	27.9-35.9	60,903	29.2	26.1-32.2
\$85,001+	18,989	16.5	12.9-20.1	18,259	19.6	15.8-23.4	37,247	17.9	15.2-20.5
<b>Race</b>									
White	154,445	32.6	30.5-34.8	201,786	38.3	36.6-40.0	356,230	35.6	34.3-37.0
Black	5,734	42.6	32.6-52.6	6,199	42.6	35.2-50.0	11,932	42.6	36.4-48.7
Multi-racial or "Other"	10,799	52.3	41.6-63.0	8,121	47.5	38.4-56.5	18,920	50.1	42.9-57.3
<b>Marital Status</b>									
Married/Living with a partner	91,483	30.7	28.1-33.4	113,514	35.2	33.1-37.4	204,996	33.1	31.4-34.8
Widowed/Divorced/Separated	37,949	38.1	33.7-42.6	60,555	40.1	37.1-43.0	98,504	39.3	36.8-41.8
Never married	41,706	38.2	33.5-43.0	41,410	49.2	44.6-53.9	83,115	43.0	39.6-46.4

Note. CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>The prevalence estimates excluded adults responding, "I do not have any debt" to the question, "In the past 12 months, has paying off your debt gotten easier, stayed the same, or gotten harder?"

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## 12.2 Difficulty Paying for Housing

### Item

In the survey, respondents were presented with the question, “In the past 12 months, has paying your rent or mortgage gotten easier, stayed the same, or gotten harder?” The following responses were offered, and only one could be selected:

- “Easier”
- “Stayed the same”
- “Harder”
- “I do not pay rent or a mortgage”

The category “paying for housing got harder” was used for those responding “Harder” to the question. *The prevalence estimates excluded adults responding, “I do not pay rent or mortgage” to the question.*

### Prevalence

**West Virginia:** 28.6% (95% CI: 27.2-29.9)

### Sex

**Male:** 28.0% (95% CI: 25.8-30.2)

**Female:** 29.1% (95% CI: 27.4-30.7)

There was no significant difference in the prevalence of adults reporting that paying for housing got harder in the past 12 months between the sexes.

### Age

The prevalence of adults reporting that paying for housing got harder in the past 12 months was significantly higher among adults aged 18-34 (40.3%) than among any other adult age groups. The prevalence was significantly lower among adults aged 65 or older (14.6%) than among any other adult age groups.

### Education

The prevalence of adults reporting that paying for housing got harder in the past 12 months was significantly higher among adults with less than high school education (40.2%) than among adults with any other educational attainment levels. The prevalence was significantly lower among adults with an associate’s or more education (23.4%) than among adults with any other educational attainment levels.

### Family Income

The prevalence of adults reporting that paying for housing got harder in the past 12 months was significantly higher among adults with an annual family income of \$15,000 or less (44.0%) and \$15,001-\$35,000 (39.2%) than among adults with any other annual family income levels. The prevalence was

significantly lower among adults with an annual family income of \$85,001 or more (10.9%) than among adults with any other annual family income levels.

## Race

The prevalence of adults reporting that paying for housing got harder in the past 12 months was significantly higher among adults who were multi-racial or “other” (38.9%) than among adults who were White (27.9%).

## Marital Status

The prevalence of adults reporting that paying for housing got harder in the past 12 months was significantly higher among adults who were never married (37.0%) than among adults with any other marital statuses. The prevalence was significantly lower among adults who were married or living with a partner (24.9%) than among adults with any other marital statuses.

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There was no significant difference in the prevalence of adults reporting that paying for housing got harder in the past 12 months among DHHR, Bureau for Medical Services (BMS) regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There were no DHHR, Bureau for Behavioral Health (BBH) regions with a significantly higher prevalence of adults reporting that paying for housing got harder in the past 12 months compared to the state estimate. There was one DHHR, BBH region with a significantly lower prevalence compared to the state estimate (28.6%); region three (22.6%).

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There was one DHHR, BBH, Ryan Brown Fund (RBF) region with a significantly higher prevalence of adults reporting that paying for housing got harder in the past 12 months compared to the state estimate (28.6%); region five (34.2%). There was one DHHR, BBH, RBF region with a significantly lower prevalence compared to the state estimate; region three (22.6%).

Table 12.2.2: Weighted Prevalence of Adults Reporting That Paying for Housing Got Harder in the Past 12 Months by Demographic Characteristics: MATCH, 2021<sup>a,b</sup>

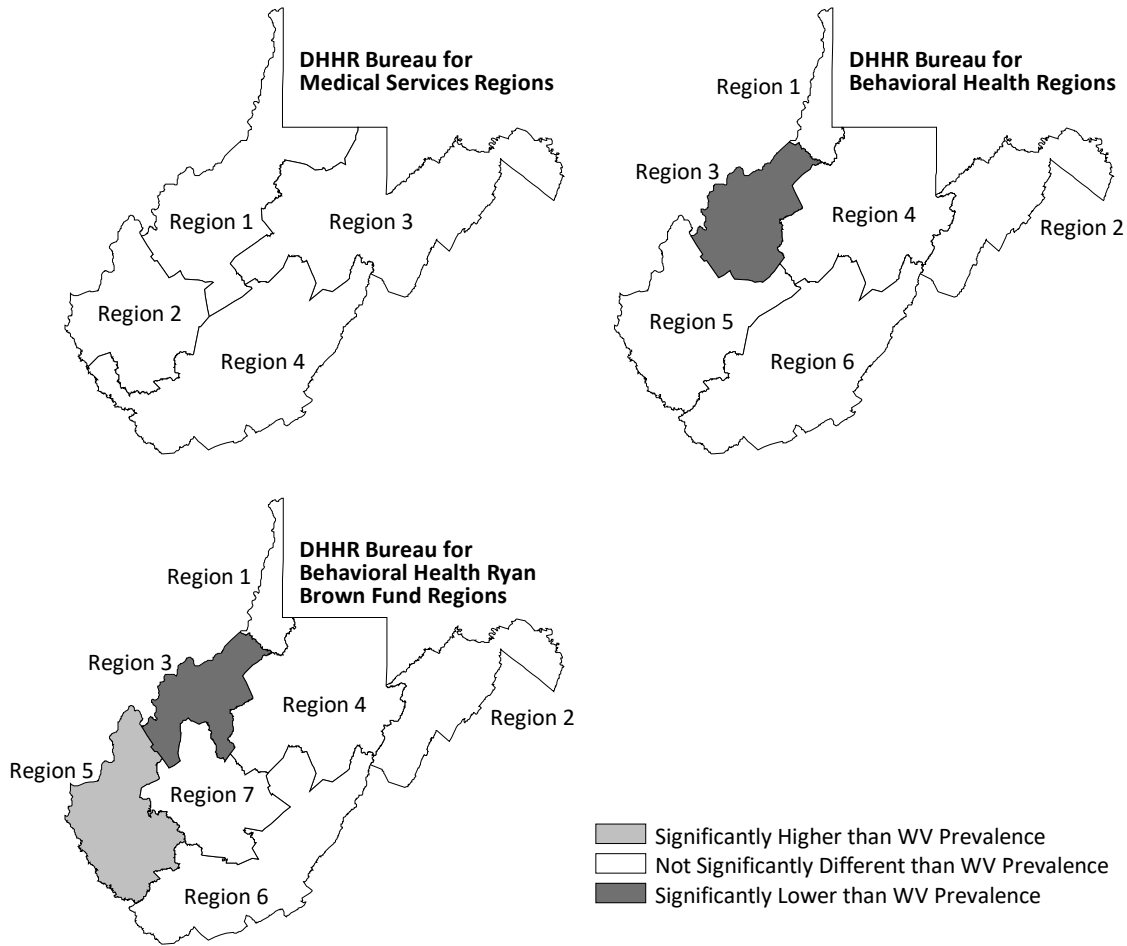
Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>124,049</b>	<b>28.0</b>	<b>25.8-30.2</b>	<b>136,726</b>	<b>29.1</b>	<b>27.4-30.7</b>	<b>260,774</b>	<b>28.6</b>	<b>27.2-29.9</b>
<b>Age</b>									
18-34	48,408	40.4	35.2-45.5	48,947	40.2	36.5-43.9	97,355	40.3	37.1-43.5
35-49	37,315	29.8	25.6-34.0	41,478	32.0	28.8-35.2	78,794	30.9	28.3-33.5
50-64	27,350	21.5	18.3-24.8	33,102	25.4	22.4-28.4	60,452	23.5	21.3-25.7
65+	9,659	14.2	10.6-17.8	12,886	14.9	11.6-18.2	22,545	14.6	12.2-17.0
<b>Education</b>									
Less than HS	24,922	43.2	36.7-49.8	18,183	36.7	31.3-42.0	43,104	40.2	35.9-44.5
HS/GED	59,657	30.9	27.6-34.3	55,897	31.1	28.6-33.7	115,554	31.0	28.9-33.1
Associate's or more	38,473	20.2	17.1-23.3	62,132	26.0	23.5-28.4	100,605	23.4	21.5-25.3
<b>Annual Family Income</b>									
\$15,000 or less	40,349	44.8	40.1-49.6	46,374	43.3	39.8-46.9	86,723	44.0	41.1-46.9
\$15,001-\$35,000	37,959	39.4	34.2-44.6	46,191	39.0	35.5-42.6	84,150	39.2	36.2-42.2
\$35,001-\$50,000	16,640	28.2	21.9-34.4	14,492	25.7	21.0-30.3	31,132	27.0	23.0-30.9
\$50,001-\$85,000	15,473	19.2	14.6-23.8	16,389	18.5	14.8-22.1	31,862	18.8	15.9-21.8
\$85,001+	10,242	9.9	6.8-12.9	10,417	12.2	9.1-15.3	20,659	10.9	8.7-13.1
<b>Race</b>									
White	110,603	27.2	24.9-29.4	125,714	28.7	26.9-30.4	236,318	27.9	26.5-29.4
Black	4,988	36.1	26.8-45.3	3,920	27.6	21.4-33.9	8,908	31.8	26.3-37.3
Multi-racial or "Other"	7,814	37.3	26.4-48.3	6,906	40.9	31.9-49.9	14,720	38.9	31.7-46.1
<b>Marital Status</b>									
Married/Living with a partner	61,509	24.9	22.0-27.8	64,801	24.8	22.7-27.0	126,309	24.9	23.1-26.6
Widowed/Divorced/Separated	24,498	28.4	23.9-32.8	40,026	31.0	28.0-34.0	64,524	29.9	27.4-32.5
Never married	37,365	35.1	30.2-40.0	31,130	39.6	35.0-44.2	68,496	37.0	33.5-40.4

Note. CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>The prevalence estimates excluded adults responding, "I do not pay rent or a mortgage" to the question, "In the past 12 months, has paying your rent or mortgage gotten easier, stayed the same, or gotten harder?"

Figure 12.2.1: Weighted Prevalence of Adults Reporting That Paying for Housing Got Harder in the Past 12 Months by Region: MATCH, 2021<sup>a,b,c</sup>



Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

<sup>c</sup>The prevalence estimates excluded adults responding, “I do not pay rent or a mortgage” to the question, “In the past 12 months, has paying your rent or mortgage gotten easier, stayed the same, or gotten harder?”

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## 12.3 Very Worried an Incident May Prevent Ability to Pay Housing

### Item

In the survey, respondents were presented with the question, “How worried are you that if you get sick or have an accident, you will not be able to pay your rent or mortgage?” The following responses were offered, and only one could be selected:

- “Very worried”
- “Somewhat worried”
- “Not at all worried”
- “I do not pay rent or a mortgage”

The category ‘very worried an incident might prevent them from paying for housing’ is used for responding “Very worried” to the question. *The prevalence estimates excluded adults responding, “I do not pay rent or mortgage” to the question.*

### Prevalence

**West Virginia:** 23.1% (95% CI: 21.9-24.4)

### Sex

**Male:** 21.1% (95% CI: 19.1-23.1)

**Female:** 25.0% (95% CI: 23.5-26.6)

The prevalence of being very worried an incident might prevent them from paying for housing was significantly higher among adults who were female (25.0%) than among adults who were male (21.1%).

### Age

The prevalence of very worried an incident might prevent them from paying for housing was significantly higher among adults aged 18-34 (30.0%) and 35-49 (30.0%) than among any other adult age groups. The prevalence was significantly lower among adults aged 65 or older (7.1%) than among any other adult age groups.

### Education

The prevalence of very worried an incident might prevent them from paying for housing was significantly higher among adults with less than high school education (31.3%) and high school or Graduate Equivalency Diploma (GED) education (27.6%) than among adults with an associate’s or more education (17.2%).

### Family Income

The prevalence of very worried an incident might prevent them from paying for housing was significantly higher among adults with an annual family income of \$15,000 or less (33.8%) and \$15,001-\$35,000 (33.8%) than among adults with any other annual family income levels. The prevalence was

significantly lower among adults with an annual family income of \$85,001 or more (6.9%) than among adults with any other annual family income levels.

## Race

The prevalence of very worried an incident might prevent them from paying for housing was significantly higher among adults who were multi-racial or “other” (32.8%) than among adults who were White (22.6%).

## Marital Status

The prevalence of very worried an incident might prevent them from paying for housing was significantly higher among adults who were widowed, divorced, or separated (25.3%) and never married (28.8%) than among adults who were married or living with a partner (20.2%).

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There was no significant difference in the prevalence of being very worried an incident might prevent them from paying for housing among DHHR, Bureau for Medical Services (BMS) regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There was no significant difference in the prevalence of being very worried an incident might prevent them from paying for housing among DHHR, Bureau for Behavioral Health (BBH) regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There was no significant difference in the prevalence of being very worried an incident might prevent them from paying for housing among DHHR, BBH, Ryan Brown Fund (RBF) regions compared to the state estimate.



Table 12.3.3: Weighted Prevalence of Very Worried an Incident May Prevent Their Ability to Pay for Housing by Demographic Characteristics: MATCH, 2021<sup>a,b</sup>

Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>92,248</b>	<b>21.1</b>	<b>19.1-23.1</b>	<b>115,430</b>	<b>25.0</b>	<b>23.5-26.6</b>	<b>207,678</b>	<b>23.1</b>	<b>21.9-24.4</b>
<b>Age</b>									
18-34	32,833	27.5	22.7-32.3	39,500	32.5	29.0-35.9	72,333	30.0	27.1-32.9
35-49	33,066	26.2	22.1-30.2	43,816	33.7	30.4-37.0	76,883	30.0	27.4-32.6
50-64	22,341	17.7	14.7-20.8	25,250	19.8	17.1-22.4	47,591	18.8	16.7-20.8
65+	3,544	5.6	3.5-7.7	6,539	8.2	5.9-10.6	10,083	7.1	5.5-8.7
<b>Education</b>									
Less than HS	17,661	30.8	24.6-37.1	15,334	31.8	26.5-37.0	32,995	31.3	27.1-35.4
HS/GED	49,363	26.0	22.7-29.3	51,419	29.3	26.7-31.9	100,783	27.6	25.5-29.7
Associate's or more	24,473	13.0	10.5-15.5	48,299	20.5	18.4-22.7	72,772	17.2	15.6-18.8
<b>Annual Family Income</b>									
\$15,000 or less	28,247	31.7	27.2-36.2	37,458	35.5	32.1-39.0	65,705	33.8	31.0-36.6
\$15,001-\$35,000	32,649	34.0	28.8-39.3	39,150	33.7	30.4-37.0	71,799	33.8	30.8-36.8
\$35,001-\$50,000	13,554	23.4	17.4-29.3	12,926	23.7	19.3-28.2	26,481	23.5	19.8-27.3
\$50,001-\$85,000	9,704	12.2	8.6-15.9	17,581	20.2	16.2-24.2	27,285	16.4	13.7-19.1
\$85,001+	6,175	6.0	3.7-8.3	6,789	8.0	5.6-10.4	12,964	6.9	5.3-8.6
<b>Race</b>									
White	80,973	20.2	18.1-22.3	106,551	24.8	23.2-26.4	187,524	22.6	21.2-23.9
Black	4,326	31.2	20.7-41.7	3,045	22.1	16.0-28.1	7,371	26.6	20.4-32.8
Multi-racial or "Other"	6,629	31.6	21.3-42.0	5,726	34.2	25.2-43.1	12,354	32.8	25.8-39.8
<b>Marital Status</b>									
Married/Living with a partner	44,333	18.2	15.6-20.8	56,492	22.0	20.0-24.1	100,825	20.2	18.5-21.8
Widowed/Divorced/Separated	18,289	21.6	17.4-25.7	34,630	27.8	24.9-30.8	52,919	25.3	22.9-27.7
Never married	29,254	27.4	22.7-32.1	23,980	30.6	26.3-34.9	53,234	28.8	25.5-32.0

Note. CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>The prevalence estimates excluded adults responding, "I do not pay rent or a mortgage" to the question, "How worried are you that if you get sick or have an accident, you will not be able to pay your rent or mortgage?"

## 12.4 Type of Home Payment

### Item

In the survey, respondents were presented with the question, “How do you pay for your home?” The following responses were offered, and only one could be selected:

- “Pay rent”
- “Pay mortgage”
- “Purchased home with no payments due”
- “Inherited home with no payments due”
- “Some other arrangement”

The category ‘No Payments, Purchased Home’ is used for responding “Purchased home with no payments due” to the question. The category ‘No Payments, Inherited Home’ is used for responding “Inherited home with no payments due” to the question.

### Prevalence

**Pay Rent:** 22.7% (95% CI: 21.7-23.6)

**Pay Mortgage:** 32.7% (95% CI: 31.6-33.8)

**No Payments, Purchased Home:** 24.5% (95% CI: 23.6-25.5)

**No Payments, Inherited Home:** 6.0% (95% CI: 5.5-6.6)

**Some Other Arrangement:** 14.1% (95% CI: 13.3-15.0)

### Sex

**Pay Rent:** There was no significant difference in the prevalence of adults paying rent between the sexes.

**Pay Mortgage:** There was no significant difference in the prevalence of adults paying a mortgage between the sexes.

**No Payments, Purchased Home:** There was no significant difference in the prevalence of adults with no payments because they purchased their home between the sexes.

**No Payments, Inherited Home:** There was no significant difference in the prevalence of adults with no payments because they inherited their home between the sexes.

**Some Other Arrangement:** There was no significant difference in the prevalence of adults with some other arrangement for paying for home between the sexes.

### Age

**Pay Rent:** The prevalence of adults paying rent was significantly higher among adults aged 18-34 (37.6%) than among any other adult age groups. The prevalence was significantly lower among adults aged 65 or older (10.4%) than among any other adult age groups.

**Pay Mortgage:** The prevalence of adults paying a mortgage was significantly higher among adults aged 35-49 (44.6%) than among any other adult age groups. The prevalence was significantly lower among adults aged 65 or older (22.5%) than among any other adult age groups.

**No Payments, Purchased Home:** The prevalence of adults with no payments because they purchased their home was significantly higher among adults aged 65 or older (51.6%) than among any other adult age groups. The prevalence was significantly lower among adults aged 18-34 (7.1%) than among any other adult age groups.

**No payments, Inherited Home:** There was no significant difference in the prevalence of adults with no payments because they inherited their home among adult age groups.

**Some Other Arrangement:** The prevalence of adults with some other arrangement for paying for home was significantly higher among adults aged 18-34 (23.7%) than among any other adult age groups.

## Education

**Pay Rent:** The prevalence of adults paying rent was significantly higher among adults with less than high school education (37.0%) than among adults with any other educational attainment levels. The prevalence of adults paying rent was significantly lower among adults with an associate's or more education (16.2%) than among adults with any other educational attainment levels.

**Pay Mortgage:** The prevalence of adults paying a mortgage was significantly higher among adults with an associate's or more education (44.4%) than among adults with any other educational attainment levels. The prevalence of adults paying a mortgage was significantly lower among adults with less than high school education (13.8%) than among adults with any other educational attainment levels.

**No Payments, Purchased Home:** There was no significant difference in the prevalence of adults with no payments because they purchased their home among educational attainment levels.

**No Payments, Inherited Home:** There was no significant difference in the prevalence of adults with no payments because they inherited their home among educational attainment levels.

**Some Other Arrangement:** The prevalence of adults with some other arrangement for paying for home was significantly higher among adults with less than high school education (21.2%) than among adults with any other educational attainment levels. The prevalence was significantly lower among adults with an associate's or more education (9.6%) than among adults with any other educational attainment levels.

## Family Income

**Pay Rent:** The prevalence of adults paying rent was significantly higher among adults with an annual family income of \$15,000 or less (43.7%) than among adults with any other annual family income levels. The prevalence was significantly lower among adults with an annual family income of \$85,001 or more (5.6%) than among adults with any other annual family income levels.

**Pay Mortgage:** The prevalence of adults paying a mortgage was significantly higher among adults with an annual family income of \$85,001 or more (63.3%) than among adults with any other annual family income levels. The prevalence was significantly lower among adults with an annual family income of \$15,000 or less (7.8%) than among adults with any other annual family income levels.

**No Payments, Purchased Home:** The prevalence of adults with no payments because they purchased their home was significantly higher among adults with any other annual family income levels than among adults with an annual family income of \$15,000 or less (13.6%).

**No Payments, Inherited Home:** The prevalence of adults with no payments because they inherited their home was significantly higher among adults with an annual family income of \$15,000 or less (8.2%) and \$15,001-\$35,000 (8.9%) than among adults with any other annual family income levels. The prevalence was significantly lower among adults with an annual family income of \$85,001 or more (2.3%) than among adults with any other annual family income levels.

**Some Other Arrangement:** The prevalence of adults with some other arrangement for paying for home was significantly higher among adults with an annual family income of \$15,000 or less (26.6%) than among adults with any other annual family income levels.

## Race

**Pay Rent:** The prevalence of adults paying rent was significantly higher among adults who were Black (50.1%) and multi-racial or “other” (37.0%) than among adults who were White (21.3%).

**Pay Mortgage:** The prevalence of adults paying a mortgage was significantly higher among adults who were White (33.4%) than among multi-racial or “other” (18.8%).

**No Payments, Purchased Home:** The prevalence of adults with no payments because they purchased their home was significantly higher among adults who were White (25.5%) than among adults who were any other racial groups. The prevalence was significantly lower among adults who were Black (6.4%) than among adults who were any other racial groups.

**No Payments, Inherited Home:** There was no significant difference in the prevalence of adults with no payments because they inherited their home among racial groups.

**Some Other Arrangement:** The prevalence of adults with some other arrangement for paying for home was significantly higher among adults who were multi-racial or “other” (25.2%) than among adults who were any other racial groups.

## Marital Status

**Pay Rent:** The prevalence of paying rent was significantly higher among adults who were never married (38.0%) than among adults with any other marital statuses. The prevalence was significantly lower among adults who were married or living with a partner (14.0%) than among adults with any other marital statuses.

**Pay Mortgage:** The prevalence of paying a mortgage was significantly higher among adults who were married or living with a partner (43.7%) than among adults with any other marital statuses. The prevalence was significantly lower among adults who were never married (17.0%) than among adults with any other marital statuses.

**No Payments, Purchased Home:** The prevalence of no payments because they purchased their home was significantly higher among adults who were married or living with a partner (29.2%) and widowed, divorced, or separated (27.7%) than among adults who were never married (10.0%).

**No Payments, Inherited Home:** The prevalence of no payments because they inherited their home was significantly higher among adults who were widowed, divorced, or separated (7.0%) or never married (8.4%) than among adults who were married or living with a partner (4.6%).

**Some Other Arrangement:** The prevalence of some other arrangement for paying for housing was significantly higher among adults who were never married (26.6%) than among adults with any other marital statuses. The prevalence was significantly lower among adults who were married or living with a partner (8.6%) than among adults with any other marital statuses.

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

**Pay Rent:** There was one DHHR, Bureau for Medical Services (BMS) region with a significantly higher prevalence of adults paying rent compared to the state estimate (22.7%); region one (25.9%). There were no DHHR, BMS regions with a significantly lower prevalence compared to the state estimate.

**Pay Mortgage:** There was one DHHR, BMS region with a significantly higher prevalence of adults paying a mortgage compared to the state estimate (32.7%); region three (38.6%). There was one DHHR, BMS region with a significantly lower prevalence compared to the state estimate; region four (27.3%).

**No Payments, Purchased Home:** There was no significant difference in the prevalence of adults with no payments because they purchased their home among DHHR, BMS regions compared to the state estimate.

**No Payments, Inherited Home:** There was no significant difference in the prevalence of adults with no payments because they inherited their home among DHHR, BMS regions compared to the state estimate.

**Some Other Arrangement:** There was one DHHR, BMS region with a significantly higher prevalence of adults with some other arrangement for paying for home compared to the state estimate (14.1%); region four (17.2%). There were no DHHR, BMS regions with a significantly lower prevalence compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

**Pay Rent:** There was no significant difference in the prevalence of adults paying rent among DHHR, Bureau for Behavioral Health (BBH) regions compared to the state estimate.

**Pay Mortgage:** There was one DHHR, BBH region with a significantly higher prevalence of adults paying a mortgage compared to the state estimate (32.7%); region two (43.4%). There was one DHHR, BBH region with a significantly lower prevalence compared to the state estimate; region six (28.3%).

**No Payments, Purchased Home:** There was one DHHR, BBH region with a significantly higher prevalence of adults with no payments because they purchased their home compared to the state estimate (24.5%); region one (30.0%). There was one DHHR, BBH region with a significantly lower prevalence compared to the state estimate; region two (19.1%).

**No Payments, Inherited Home:** There were no DHHR, BBH regions with a significantly higher prevalence of adults with no payments because they inherited their home compared to the state estimate. There

was one DHHR, BBH region with a significantly lower prevalence compared to the state estimate (6.0%); region two (3.6%).

**Some Other Arrangement:** There was no significant difference in the prevalence of adults with some other arrangement for paying for home among DHHR, BBH regions compared to the state estimate.

*DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

**Pay Rent:** There was no significant difference in the prevalence of adults paying rent among DHHR, BBH, Ryan Brown Fund (RBF) regions compared to the state estimate.

**Pay Mortgage:** There was one DHHR, BBH, RBF region with a significantly higher prevalence of adults paying a mortgage compared to the state estimate (32.7%); region two (43.4%). There was one DHHR, BBH, RBF region with a significantly lower prevalence compared to the state estimate; region six (26.6%).

**No Payments, Purchased Home:** There was one DHHR, BBH, RBF region with a significantly higher prevalence of adults with no payments because they purchased their home compared to the state estimate (24.5%); region one (30.0%). There was one DHHR, BBH, RBF region with a significantly lower prevalence compared to the state estimate; region two (19.1%).

**No Payments, Inherited Home:** There were no DHHR, BBH, RBF regions with a significantly higher prevalence of adults with no payments because they inherited their home compared to the state estimate. There was one DHHR, BBH, RBF region with a significantly lower prevalence compared to the state estimate (6.0%); region two (3.6%).

**Some Other Arrangement:** There was no significant difference in the prevalence of adults with some other arrangement for paying for home among DHHR, BBH, RBF regions compared to the state estimate.

Table 12.4.4: Weighted Prevalence of Type of Home Payment by Demographic Characteristics: MATCH, 2021<sup>a</sup>

Characteristic	Pay Rent		Pay Mortgage	
	%	95% CI	%	95% CI
<b>TOTAL</b>	<b>22.7</b>	<b>21.7-23.6</b>	<b>32.7</b>	<b>31.6-33.8</b>
<b>Sex</b>				
Male	21.9	20.4-23.5	33.4	31.5-35.2
Female	23.3	22.1-24.6	32.0	30.6-33.4
<b>Age</b>				
18-34	37.6	35.0-40.2	25.7	23.3-28.2
35-49	26.8	24.5-29.0	44.6	42.0-47.2
50-64	16.6	15.1-18.0	38.5	36.3-40.7
65+	10.4	9.2-11.6	22.5	20.7-24.2
<b>Education</b>				
Less than HS	37.0	33.6-40.4	13.8	11.2-16.3
HS/GED	25.2	23.7-26.7	26.0	24.4-27.7
Associate's or more	16.2	14.9-17.6	44.4	42.5-46.3
<b>Annual Family Income</b>				
\$15,000 or less	43.7	41.3-46.1	7.8	6.5-9.0
\$15,001-\$35,000	29.4	27.2-31.6	19.5	17.7-21.4
\$35,001-\$50,000	19.3	16.5-22.0	34.4	31.2-37.6
\$50,001-\$85,000	10.0	8.3-11.8	48.3	45.4-51.2
\$85,001+	5.6	4.2-7.0	63.3	60.3-66.2
<b>Race</b>				
White	21.3	20.3-22.3	33.4	32.2-34.6
Black	50.1	44.3-56.0	27.8	22.0-33.6
Multi-racial or "Other"	37.0	30.6-43.5	18.8	14.2-23.4
<b>Marital Status</b>				
Married/Living with a partner	14.0	12.8-15.1	43.7	42.1-45.4
Widowed/Divorced/Separated	28.1	26.1-30.0	22.4	20.5-24.3
Never married	38.0	35.3-40.7	17.0	14.8-19.2

Note. CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

Table 12.4.1: Weighted Prevalence of Type of Home Payment by Demographic Characteristics: MATCH, 2021 (continued)<sup>a</sup>

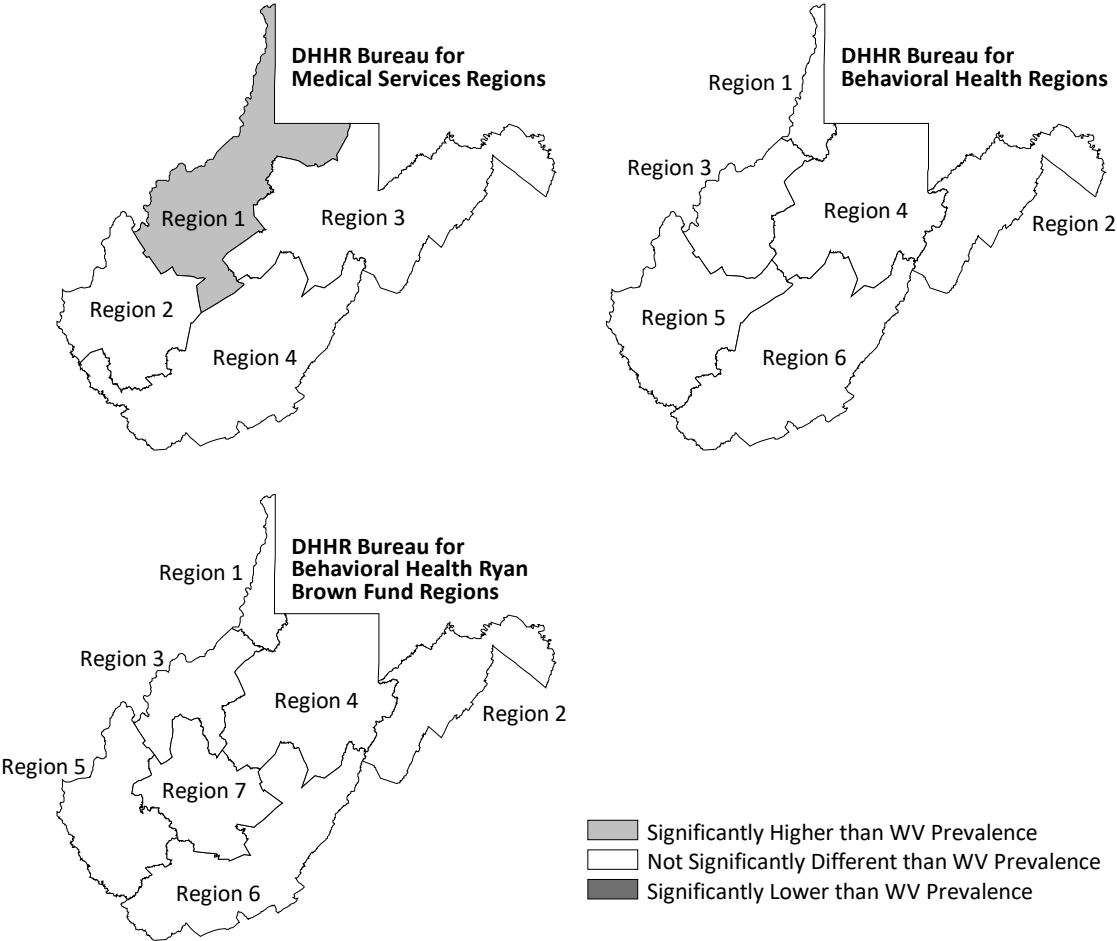
Characteristic	No Payments, Purchased Home		No Payments, Inherited Home		Some Other Arrangement	
	%	95% CI	%	95% CI	%	95% CI
<b>TOTAL</b>	<b>24.5</b>	<b>23.6-25.5</b>	<b>6.0</b>	<b>5.5-6.6</b>	<b>14.1</b>	<b>13.3-15.0</b>
<b>Sex</b>						
Male	24.0	22.5-25.5	5.8	5.0-6.6	14.9	13.5-16.3
Female	25.0	23.8-26.2	6.2	5.5-6.9	13.4	12.3-14.4
<b>Age</b>						
18-34	7.1	5.6-8.6	5.8	4.6-7.1	23.7	21.3-26.1
35-49	11.5	9.9-13.2	5.3	4.2-6.4	11.9	10.3-13.5
50-64	27.0	25.0-28.9	6.5	5.4-7.6	11.5	10.1-12.9
65+	51.6	49.5-53.6	6.4	5.5-7.3	9.2	8.0-10.4
<b>Education</b>						
Less than HS	21.3	18.6-24.0	6.6	5.0-8.3	21.2	18.2-24.3
HS/GED	25.5	24.0-27.0	6.5	5.7-7.4	16.8	15.4-18.1
Associate's or more	24.4	22.9-25.9	5.3	4.5-6.2	9.6	8.5-10.8
<b>Annual Family Income</b>						
\$15,000 or less	13.6	12.1-15.2	8.2	6.9-9.6	26.6	24.4-28.8
\$15,001-\$35,000	25.9	24.1-27.8	8.9	7.6-10.2	16.3	14.4-18.1
\$35,001-\$50,000	32.4	29.4-35.5	4.4	3.3-5.5	9.5	7.4-11.5
\$50,001-\$85,000	29.2	26.6-31.7	4.7	3.4-6.0	7.8	6.2-9.5
\$85,001+	22.2	19.8-24.5	2.3	1.4-3.1	6.7	4.8-8.6
<b>Race</b>						
White	25.5	24.5-26.5	6.1	5.5-6.6	13.7	12.9-14.6
Black	6.4	4.1-8.8	4.5	2.0-7.0	11.2	8.0-14.4
Multi-racial or "Other"	13.4	8.9-18.0	5.5	3.1-7.9	25.2	19.0-31.4
<b>Marital Status</b>						
Married/Living with a partner	29.2	27.7-30.6	4.6	3.9-5.3	8.6	7.7-9.5
Widowed/Divorced/Separated	27.7	25.8-29.5	7.0	5.9-8.1	14.9	13.2-16.6
Never married	10.0	8.3-11.7	8.4	7.0-9.8	26.6	24.1-29.2

Note. CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

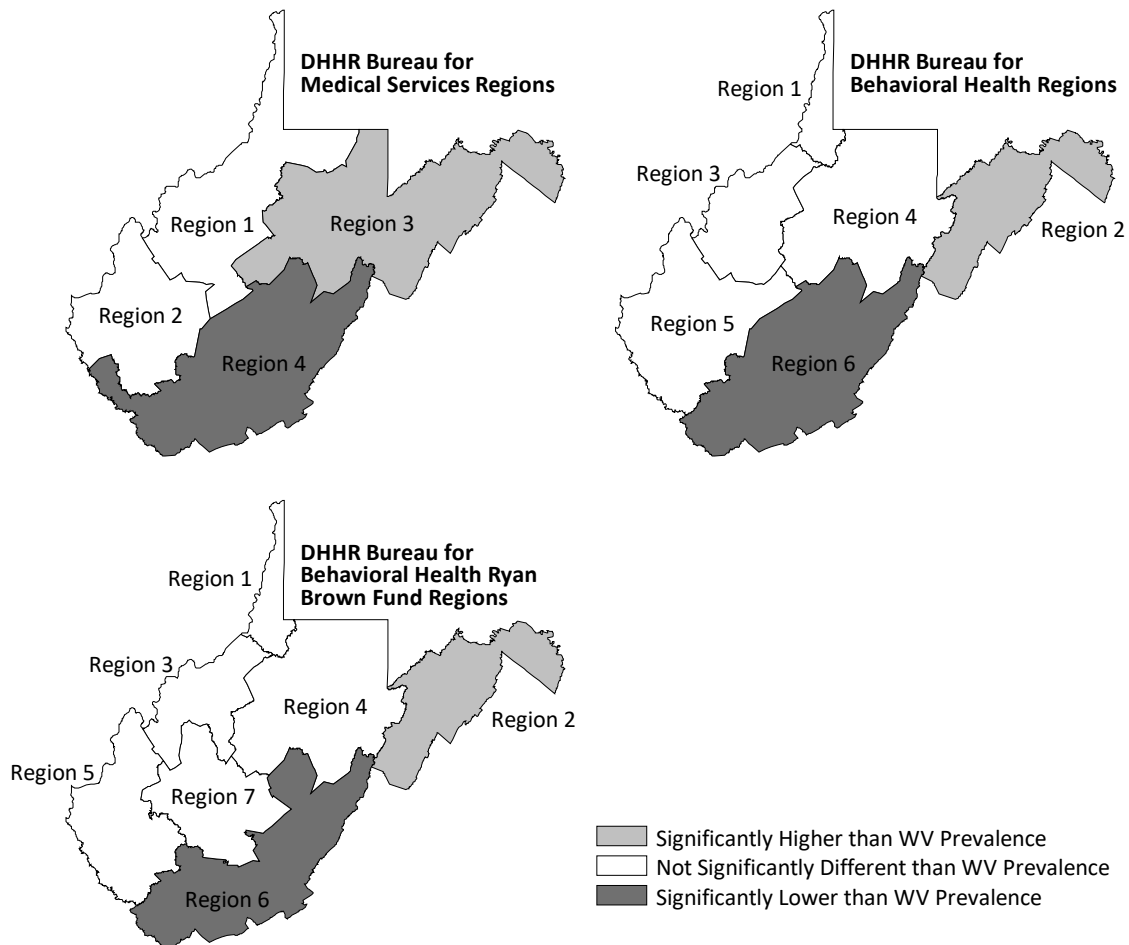


Figure 12.4.2: Weighted Prevalence of Adults Paying Rent by Region: MATCH, 2021<sup>a,b</sup>



Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.  
<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.  
<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

Figure 12.4.3: Weighted Prevalence of Adults Paying a Mortgage by Region: MATCH, 2021<sup>a,b</sup>

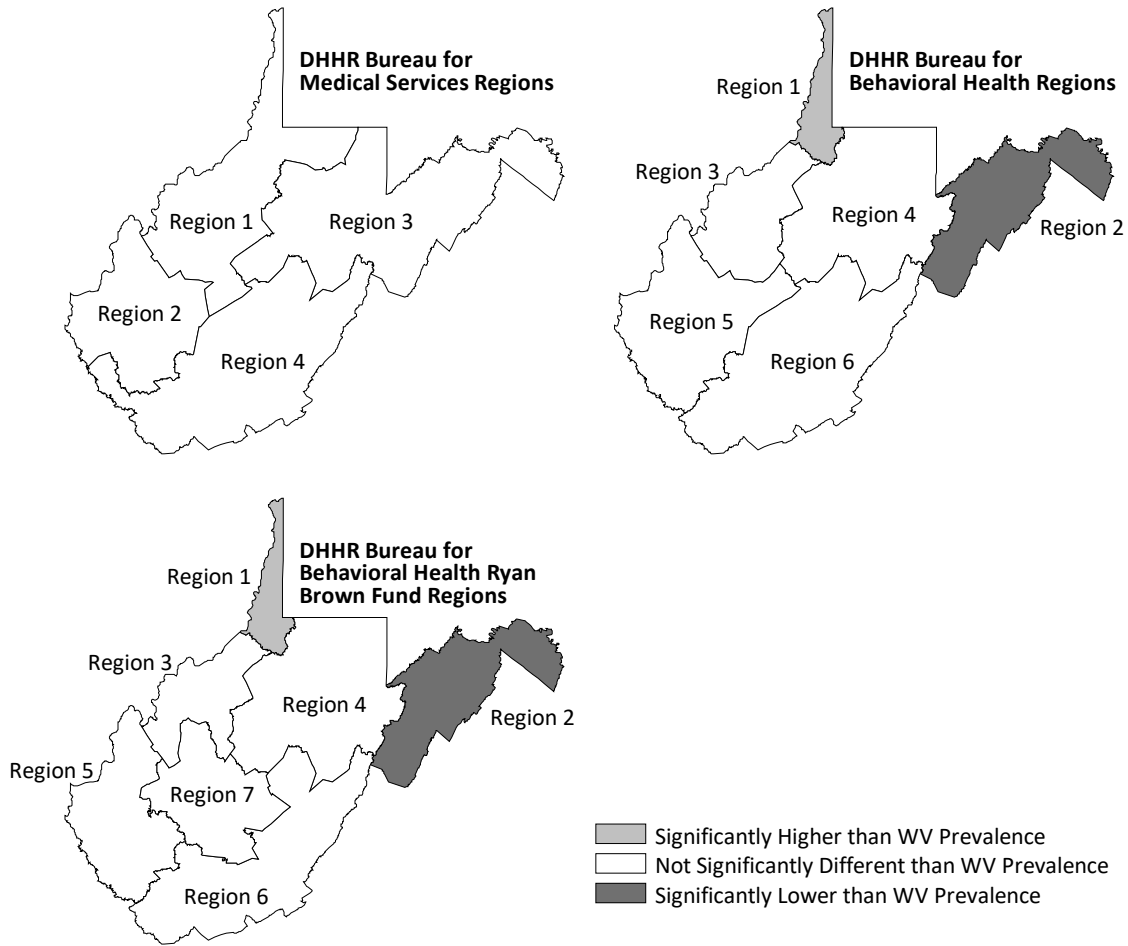


Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

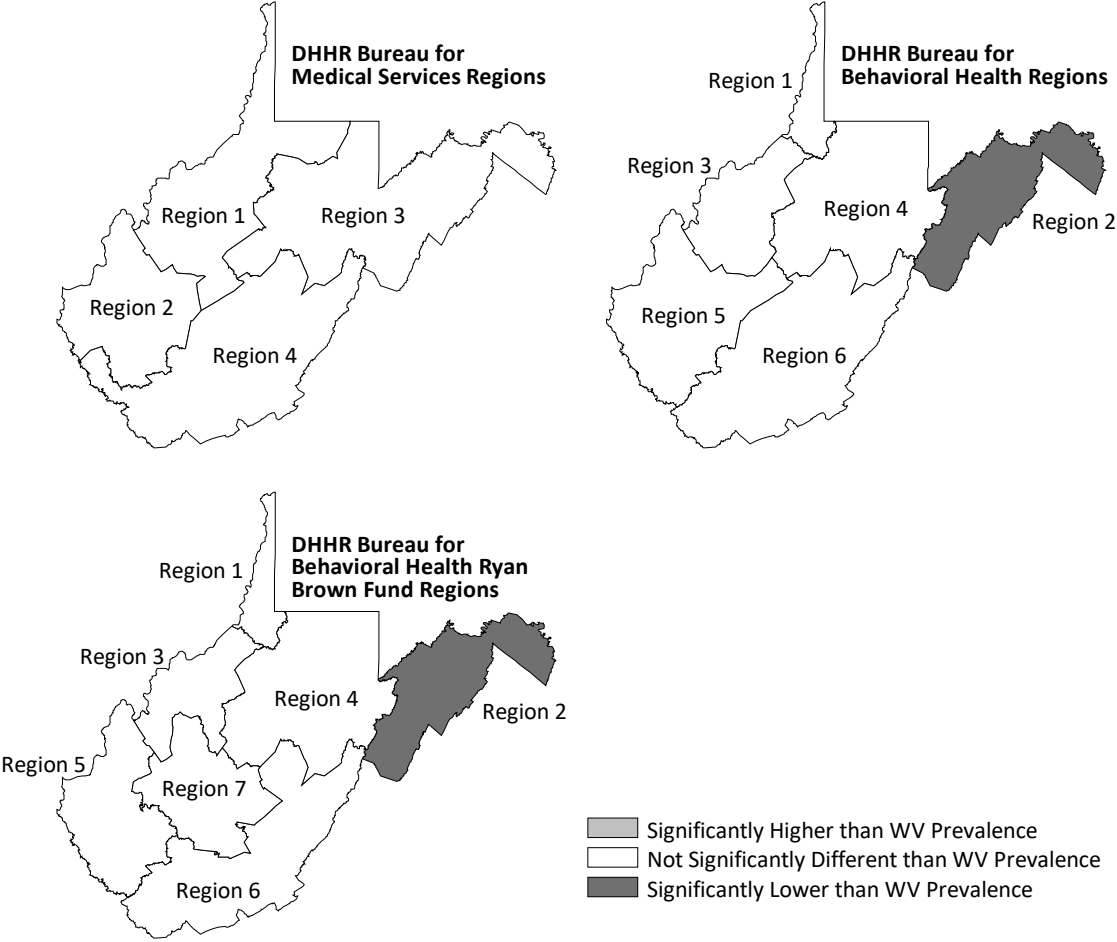
<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

Figure 12.4.4: Weighted Prevalence of Adults with No Payments Because They Purchased Their Home by Region: MATCH, 2021<sup>a,b</sup>



Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.  
<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.  
<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

Figure 12.4.5: Weighted Prevalence of Adults with No Payments Because They Inherited Their Home by Region: MATCH, 2021<sup>a,b</sup>

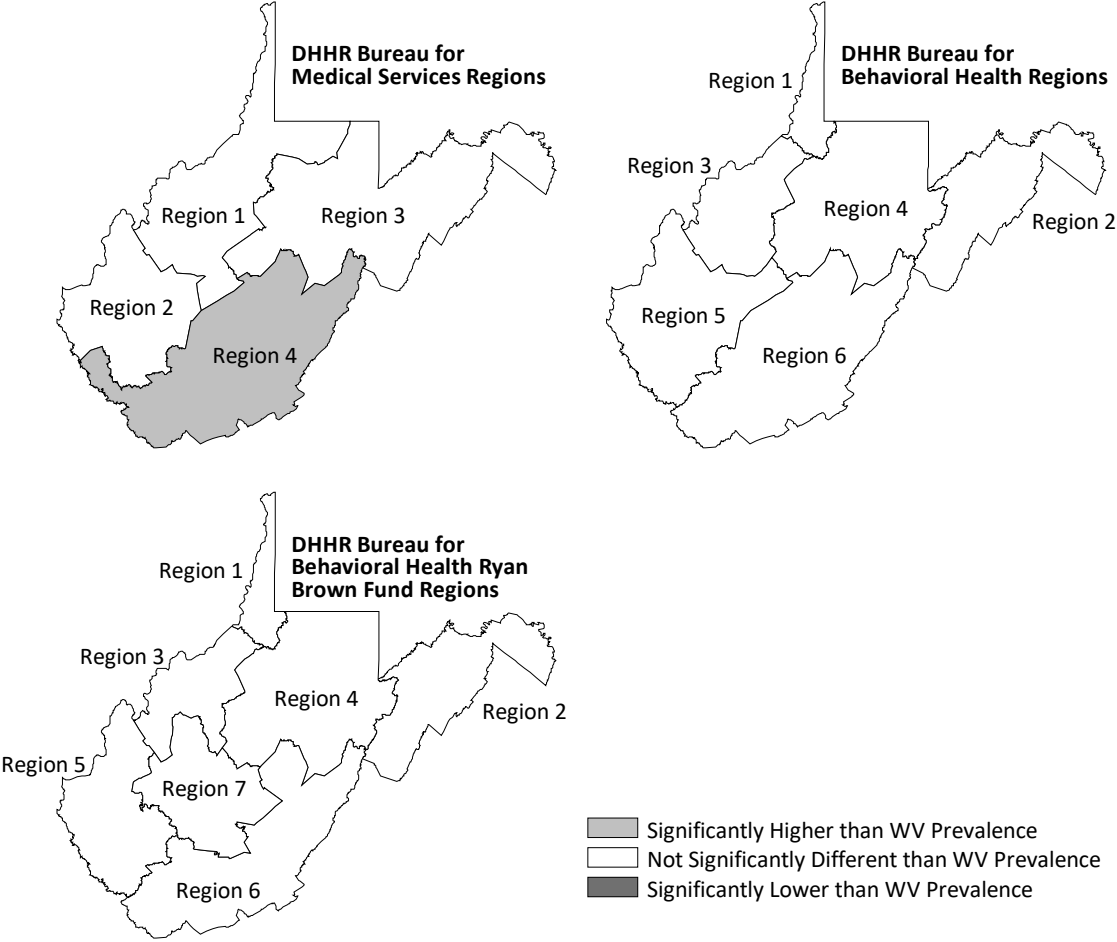


Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

Figure 12.4.6: Weighted Prevalence of Adults with Some Other Arrangement for Paying for Home by Region: MATCH, 2021<sup>a,b</sup>



Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

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## 12.5 Difficulty Buying Food

### Item

In the survey, respondents were presented with the question, “In the past 12 months, has buying food for yourself or your household gotten easier, stayed the same, or gotten harder?” The following responses were offered, and only one could be selected:

- “Easier”
- “Stayed the same”
- “Harder”

The category ‘buying food for the household got harder’ is used for respondents who responded “Harder” to the question.

### Prevalence

**West Virginia:** 30.3% (95% CI: 29.1-31.4)

### Sex

**Male:** 30.0% (95% CI: 28.2-31.7)

**Female:** 30.5% (95% CI: 29.2-31.9)

There was no significant difference in the prevalence of buying food for the household got harder in the past 12 months between the sexes.

### Age

The prevalence of buying food for the household got harder in the past 12 months was significantly higher among adults aged 18-34 (32.5%) and 35-49 (36.6%) than among adults aged 65 or older (23.2%).

### Education

The prevalence of buying food for the household got harder in the past 12 months was significantly higher among adults with a high school or Graduate Equivalency Diploma (GED) education (31.7%) than among adults with an associate’s or more education (28.1%).

### Family Income

The prevalence of buying food for the household got harder in the past 12 months was significantly higher among adults with any other annual family income levels than among adults with an annual family income of \$85,001 or more (18.2%).

### Race

There was no significant difference in the prevalence of buying food for the household got harder in the past 12 months among racial groups.

## Marital Status

There was no significant difference in the prevalence of buying food for the household got harder in the past 12 months among marital statuses.

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There was one DHHR, Bureau for Medical Services (BMS) region with a significantly higher prevalence of buying food for the household got harder in the past 12 months compared to the state estimate (30.3%); region four (35.8%). There was one DHHR, BMS region with a significantly lower prevalence compared to the state estimate; region one (25.5%).

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There was one DHHR, Bureau for Behavioral Health (BBH) region with a significantly higher prevalence of buying food for the household got harder in the past 12 months compared to the state estimate (30.3%); region six (35.6%). There were two DHHR, BBH regions with a significantly lower prevalence compared to the state estimate; regions three (25.5%) and four (25.9%).

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There were two DHHR, BBH, Ryan Brown Fund (RBF) regions with a significantly higher prevalence of buying food for the household got harder in the past 12 months compared to the state estimate (30.3%); regions five (34.5%) and six (35.5%). There were two DHHR, BBH, RBF regions with a significantly lower prevalence compared to the state estimate; regions three (24.9%) and four (25.9%).

Table 12.5.5: Weighted Prevalence of Buying Food for the Household Got Harder in the Past 12 Months by Demographic Characteristics: MATCH, 2021<sup>a</sup>

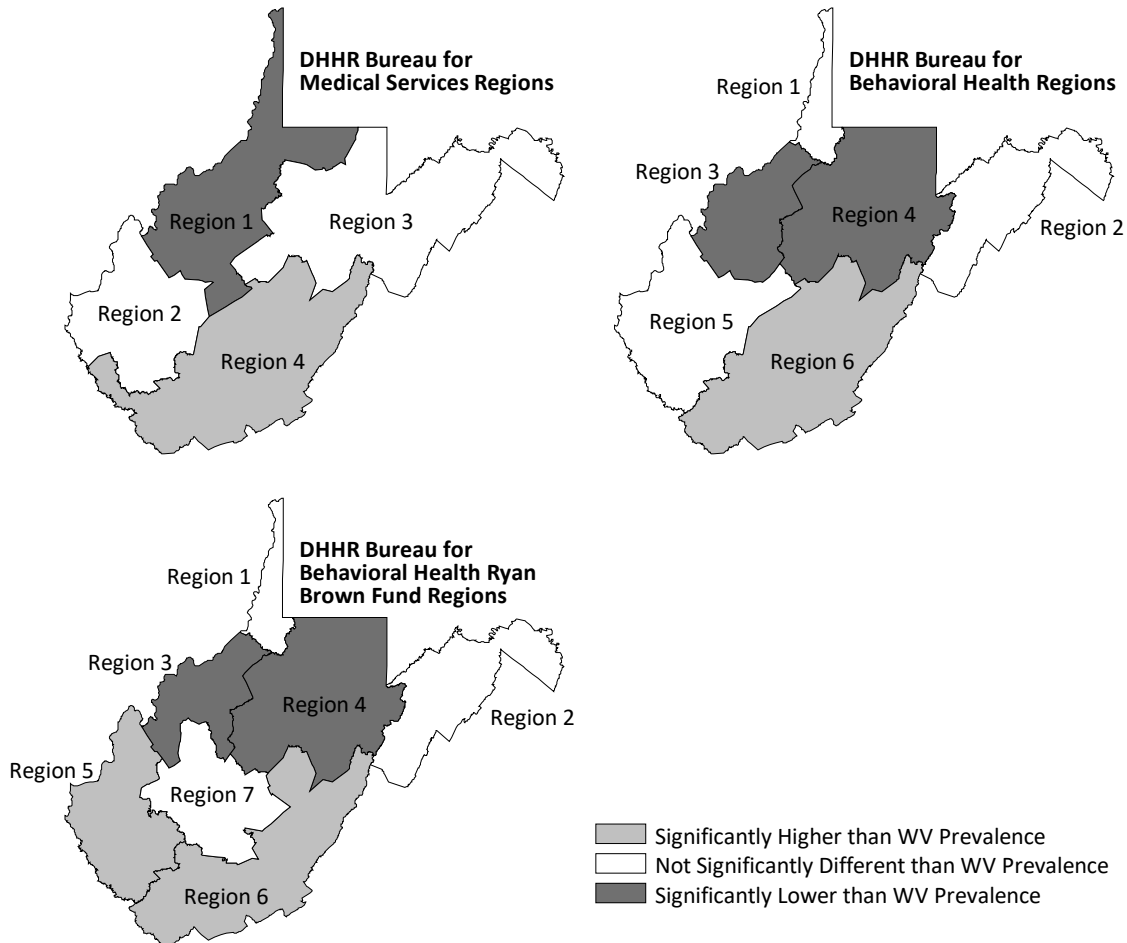
Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>203,336</b>	<b>30.0</b>	<b>28.2-31.7</b>	<b>218,092</b>	<b>30.5</b>	<b>29.2-31.9</b>	<b>421,428</b>	<b>30.3</b>	<b>29.1-31.4</b>
<b>Age</b>									
18-34	58,120	32.9	28.7-37.1	54,750	32.0	28.9-35.1	112,869	32.5	29.8-35.1
35-49	52,560	34.7	30.7-38.7	59,542	38.4	35.2-41.5	112,102	36.6	34.0-39.1
50-64	53,486	28.4	25.4-31.4	59,975	30.5	27.8-33.1	113,461	29.5	27.5-31.5
65+	36,990	23.5	20.8-26.1	42,752	22.9	20.6-25.2	79,742	23.2	21.4-24.9
<b>Education</b>									
Less than HS	33,521	35.8	30.7-40.8	22,307	29.0	25.0-33.0	55,828	32.7	29.4-36.0
HS/GED	93,436	30.6	28.0-33.2	97,716	32.8	30.7-34.9	191,152	31.7	30.0-33.4
Associate's or more	74,997	27.2	24.5-29.9	96,827	28.8	26.7-30.9	171,825	28.1	26.4-29.7
<b>Annual Family Income</b>									
\$15,000 or less	46,590	34.7	30.9-38.5	52,410	34.0	31.1-36.8	99,000	34.3	32.0-36.6
\$15,001-\$35,000	56,989	36.0	32.2-39.8	71,293	37.2	34.5-39.9	128,282	36.7	34.4-38.9
\$35,001-\$50,000	29,627	32.2	27.2-37.3	29,996	32.4	28.5-36.2	59,623	32.3	29.1-35.5
\$50,001-\$85,000	36,461	29.1	25.0-33.1	36,158	27.9	24.4-31.3	72,619	28.5	25.8-31.1
\$85,001+	26,604	18.4	14.9-22.0	20,822	18.0	14.7-21.2	47,426	18.2	15.8-20.6
<b>Race</b>									
White	189,031	30.1	28.2-31.9	204,935	30.4	29.0-31.8	393,966	30.2	29.1-31.4
Black	3,728	20.9	14.2-27.6	4,914	27.9	21.3-34.6	8,642	24.4	19.6-29.2
Multi-racial or "Other"	9,799	32.2	23.1-41.4	7,766	36.7	28.7-44.7	17,565	34.1	27.8-40.4
<b>Marital Status</b>									
Married/Living with a partner	111,798	30.4	28.0-32.8	117,847	30.7	28.7-32.6	229,645	30.6	29.0-32.1
Widowed/Divorced/Separated	37,847	29.1	25.7-32.6	58,195	29.1	26.7-31.5	96,042	29.1	27.1-31.1
Never married	53,153	29.8	26.1-33.6	40,827	32.2	28.6-35.8	93,981	30.8	28.2-33.5

Note. CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.



Figure 12.5.7: Weighted Prevalence of Buying Food for the Household Got Harder in the Past 12 Months by Region: MATCH, 2021<sup>a,b</sup>



Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

## 12.6 Cut Size of or Skipped Meals

### Item

Responding “Yes” to the question, “At any time during the past 30 days, have you or anyone in your household cut the size of your meals or skipped meals because there was not enough money for food?”

### Prevalence

**West Virginia:** 14.0% (95% CI: 13.2-14.8)

### Sex

**Male:** 13.4% (95% CI: 12.1-14.7)

**Female:** 14.6% (95% CI: 13.6-15.7)

There was no significant difference in the prevalence of anyone in the household cutting the size of meals or skipping meals during the past 30 days between the sexes.

### Age

The prevalence of the household cutting the size of meals or skipping meals during the past 30 days was significantly higher among adults aged 18-34 (20.8%) and 35-49 (19.7%) than among any other adult age groups. The prevalence was significantly lower among adults aged 65 or older (4.5%) than among any other adult age groups.

### Education

The prevalence of the household cutting the size of meals or skipping meals during the past 30 days was significantly higher among adults with less than high school education (22.9%) than among adults with any other educational attainment levels. The prevalence was significantly lower among adults with an associate’s or more education (10.5%) than among adults with any other educational attainment levels.

### Family Income

The prevalence of the household cutting the size of meals or skipping meals during the past 30 days was significantly higher among adults with an annual family income of \$15,000 or less (25.4%) than among adults with any other annual family income levels. The prevalence was significantly lower among adults with an annual family income of \$85,001 or more (2.9%) than among adults with any other annual family income levels.

### Race

The prevalence of anyone in the household reducing the size of or skipping meals during the past 30 days the household cutting the size of meals or skipping meals during the past 30 days was significantly higher among adults who were multi-racial or “other” (24.2%) than among adults who were White (13.5%).

## Marital Status

The prevalence of the household cutting the size of meals or skipping meals during the past 30 days was significantly higher among adults who were never married (19.5%) than among adults with any other marital statuses. The prevalence was significantly lower among adults who were married or living with a partner (11.6%) than among adults with any other marital statuses.

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There was one DHHR, Bureau for Medical Services (BMS) region with a significantly higher prevalence of the household cutting the size of meals or skipping meals during the past 30 days compared to the state estimate (14.0%); region two (16.9%). There were no DHHR, BMS regions with a significantly lower prevalence compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There was one DHHR, Bureau for Behavioral Health (BBH) region with a significantly higher prevalence of the household cutting the size of meals or skipping meals during the past 30 days compared to the state estimate (14.0%); region five (17.0%). There was one DHHR, BBH region with a significantly lower prevalence compared to the state estimate; region three (11.1%).

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There was one DHHR, BBH, Ryan Brown Fund (RBF) region with a significantly higher prevalence of the household cutting the size of meals or skipping meals during the past 30 days compared to the state estimate (14.0%); region five (17.9%). There was one DHHR, BBH, RBF region with a significantly lower prevalence compared to the state estimate; region three (10.8%).

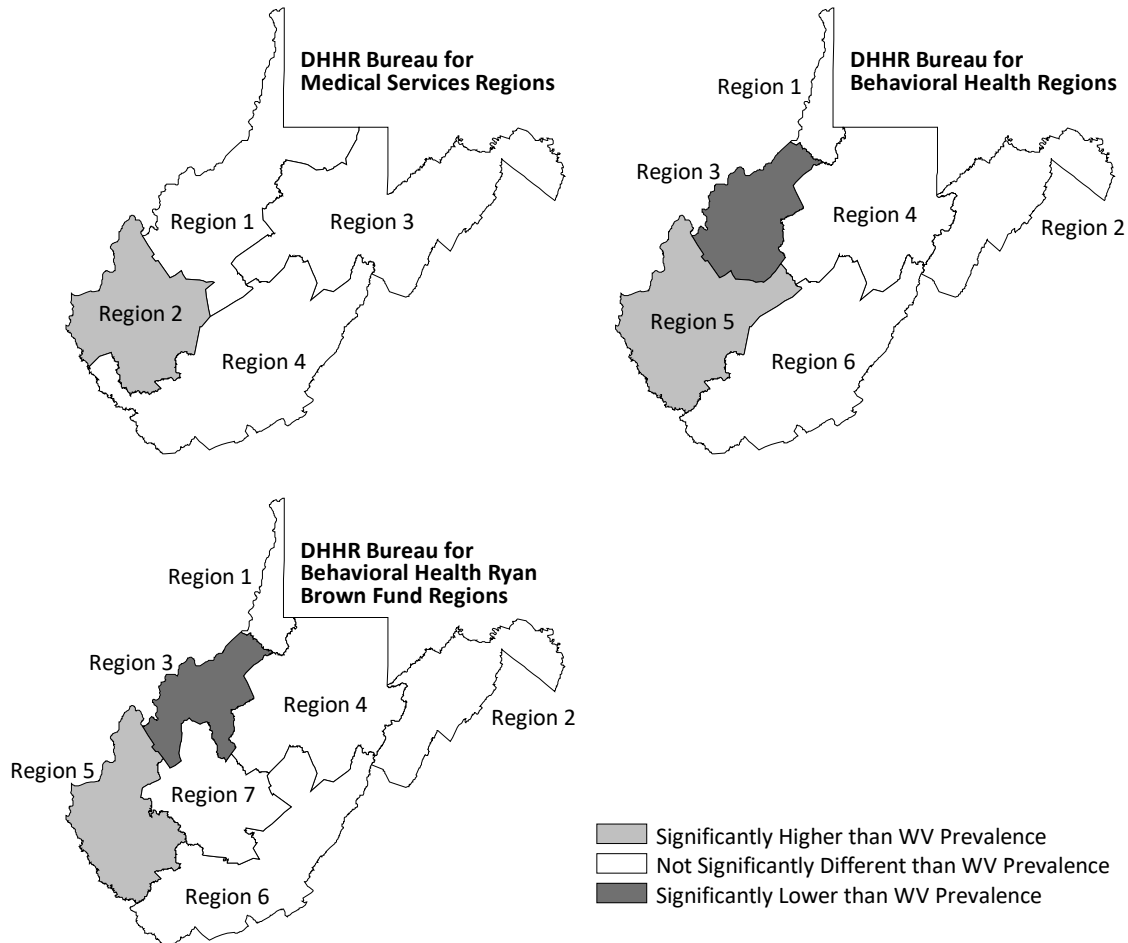
Table 12.6.6: Weighted Prevalence of the Household Cutting the Size of Meals or Skipping Meals During the Past 30 Days by Demographic Characteristics: MATCH, 2021<sup>a</sup>

Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>90,808</b>	<b>13.4</b>	<b>12.1-14.7</b>	<b>104,670</b>	<b>14.6</b>	<b>13.6-15.7</b>	<b>195,478</b>	<b>14.0</b>	<b>13.2-14.8</b>
<b>Age</b>									
18-34	36,204	20.5	17.0-24.0	36,072	21.1	18.5-23.7	72,276	20.8	18.6-23.0
35-49	29,282	19.3	16.1-22.6	31,354	20.1	17.7-22.6	60,636	19.7	17.7-21.8
50-64	19,458	10.3	8.4-12.2	26,638	13.5	11.6-15.5	46,096	12.0	10.6-13.3
65+	5,163	3.3	2.3-4.3	10,257	5.5	4.2-6.7	15,420	4.5	3.6-5.3
<b>Education</b>									
Less than HS	21,889	23.4	18.8-28.0	17,228	22.2	18.5-26.0	39,116	22.9	19.8-25.9
HS/GED	41,881	13.7	11.8-15.6	48,320	16.2	14.6-17.8	90,201	14.9	13.7-16.2
Associate's or more	26,160	9.5	7.7-11.3	38,194	11.3	9.9-12.8	64,354	10.5	9.4-11.6
<b>Annual Family Income</b>									
\$15,000 or less	35,465	26.4	22.8-30.0	37,833	24.5	21.9-27.0	73,298	25.4	23.2-27.5
\$15,001-\$35,000	30,676	19.4	16.1-22.7	37,972	19.8	17.5-22.1	68,647	19.6	17.7-21.5
\$35,001-\$50,000	9,291	10.1	6.9-13.3	11,605	12.5	9.8-15.3	20,896	11.3	9.2-13.5
\$50,001-\$85,000	9,319	7.4	5.2-9.6	11,381	8.8	6.6-11.0	20,700	8.1	6.5-9.7
\$85,001+	3,906	2.7	1.2-4.2	3,674	3.2	1.7-4.6	7,580	2.9	1.9-4.0
<b>Race</b>									
White	79,389	12.6	11.3-14.0	96,349	14.3	13.2-15.3	175,738	13.5	12.6-14.3
Black	4,267	23.9	14.9-32.9	2,559	14.6	10.1-19.0	6,825	19.3	14.1-24.4
Multi-racial or "Other"	6,742	22.2	14.4-30.0	5,713	27.0	19.8-34.2	12,455	24.2	18.7-29.7
<b>Marital Status</b>									
Married/Living with a partner	36,395	9.9	8.4-11.4	50,608	13.2	11.8-14.6	87,003	11.6	10.6-12.6
Widowed/Divorced/Separated	18,258	14.1	11.4-16.7	29,497	14.7	12.9-16.5	47,755	14.4	12.9-15.9
Never married	35,622	20.0	16.7-23.4	23,961	18.9	16.0-21.8	59,583	19.5	17.2-21.8

Note. CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

Figure 12.6.8: Weighted Prevalence of the Household Cutting the Size of Meals or Skipping Meals During the Past 30 Days by Region: MATCH, 2021<sup>a,b</sup>



Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

## 12.7 Received Free Groceries or Meals

### Item

In the survey, respondents were presented with the question, “In the past 30 days, did you or anyone in your household get free groceries or free meals from the following? Select all that apply.” The following responses were offered, and one or more could be selected:

- “Food pantries or food banks”
- “Meals on Wheels”
- “Religious organizations”
- “Shelters or soup kitchens”
- “None of the above”

The category “Other Places” was used for those responding that the household received free groceries or meals from “Meals on Wheels,” “Religious organizations,” and/or “Shelters or soup kitchens” to the question. The category ‘No Free Groceries or Meals’ was used for those responding that the household did not receive free groceries or meals from any of these places.

### Prevalence

**Food Pantries or Banks:** 8.0% (95% CI: 7.5-8.6)

**Other Place:** 3.9% (95% CI: 3.4-4.3)

**No Free Groceries or Meals:** 89.9% (95% CI: 89.2-90.5)

### Sex

**Food Pantries or Banks:** There was no significant difference in the prevalence of the household receiving free groceries or meals from food banks or pantries in the past 30 days between the sexes.

**Other Place:** There was no significant difference in the prevalence of the household receiving free groceries or meals from some other place besides food banks or pantries in the past 30 days between the sexes.

**No Free Groceries or Meals:** There was no significant difference in the prevalence of the household not receiving free groceries or meals in the past 30 days between the sexes.

### Age

**Food Pantries or Banks:** The prevalence of the household receiving free groceries or meals from food banks or pantries in the past 30 days was significantly higher among adults aged 35-49 (9.6%) than among adults aged 65 or older (6.9%).

**Other Place:** There was no significant difference in the prevalence of the household receiving free groceries or meals from some other place besides food banks or pantries in the past 30 days among adult age groups.

**No Free Groceries or Meals:** There was no significant difference in the prevalence of the household not receiving free groceries or meals in the past 30 days among adult age groups.

## Education

**Food Pantries or Banks:** The prevalence of the household receiving free groceries or meals from food banks or pantries in the past 30 days was significantly higher among adults with less than high school education (19.1%) than among adults with any other educational attainment levels. The prevalence was significantly lower among adults with an associate's or more education (4.0%) than among adults with any other educational attainment levels.

**Other Place:** The prevalence of the household receiving free groceries or meals from some other place besides food banks or pantries in the past 30 days was significantly higher among adults with less than high school education (7.5%) than among adults with any other educational attainment levels. The prevalence was significantly lower among adults with an associate's or more education (2.5%) than among adults with any other educational attainment levels.

**No Free Groceries or Meals:** The prevalence of the household not receiving free groceries or meals in the past 30 days was significantly higher among adults with an associate's or more education (94.5%) than among adults with any other educational attainment levels. The prevalence was significantly lower among adults with less than high school education (77.2%) than among adults with any other educational attainment levels.

## Family Income

**Food Pantries or Banks:** The prevalence of the household receiving free groceries or meals from food banks or pantries in the past 30 days was significantly higher among adults with an annual family income of \$15,000 or less (20.2%) than among adults with any other annual family income levels with stable estimates. There was an unstable prevalence estimate among family income levels.

**Other Place:** The prevalence of the household receiving free groceries or meals from some other place besides food banks or pantries in the past 30 days was significantly higher among adults with an annual family income of \$15,000 or less (8.7%) than among adults with any other annual family income levels with stable estimates. There were unstable prevalence estimates among family income levels.

**No Free Groceries or Meals:** The prevalence of the household not receiving free groceries or meals in the past 30 days was significantly higher among adults with any other annual family income levels than among adults with an annual family income of \$15,000 or less (75.9%).

## Race

**Food Pantries or Banks:** The prevalence of the household receiving free groceries or meals from food banks or pantries in the past 30 days was significantly higher among adults who were Black (12.4%) than among adults who were White (7.9%).

**Other Place:** The prevalence of the household receiving free groceries or meals from some other place besides food banks or pantries in the past 30 days was significantly higher among adults who were Black (8.3%) than among adults who were White (3.7%).

**No Free Groceries or Meals:** The prevalence of the household not receiving free groceries or meals in the past 30 days was significantly higher among adults who were White (90.2%) than among adults who were Black (82.5%).

## Marital Status

**Food Pantries or Banks:** The prevalence of the household receiving free groceries or meals from food banks or pantries in the past 30 days was significantly higher among adults who were widowed, divorced, or separated (11.6%) than among adults with any other marital status.

**Other Place:** The prevalence of the household receiving free groceries or meals from some other place besides food banks or pantries in the past 30 days was significantly higher among adults who were widowed, divorced, or separated (6.4%) and never married (4.3%) than among adults who were married or living with a partner (2.6%).

**No Free Groceries or Meals:** The prevalence of the household not receiving free groceries or meals in the past 30 days was significantly higher among adults who were married or living with a partner (92.5%) than among adults with any other marital status. The prevalence was significantly lower among adults who were widowed, divorced, or separated (84.3%) than among adults with any other marital status.

## The West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

**Food Pantries or Banks:** There was one DHHR, Bureau for Medical Services (BMS) region with a significantly higher prevalence of the household receiving free groceries or meals from food banks or pantries in the past 30 days compared to the state estimate (8.0%); region four (10.8%). There were no DHHR, BMS regions with a significantly lower prevalence compared to the state estimate.

**Other Place:** There was no significant difference in the prevalence of the household receiving free groceries or meals from some other place besides food banks or pantries in the past 30 days among DHHR, BMS regions compared to the state estimate.

**No Free Groceries or Meals:** There was one DHHR, BMS region with a significantly higher prevalence of the household not receiving free groceries or meals in the past 30 days compared to the state estimate (89.9%); region three (91.8%). There was one DHHR, BMS region with a significantly lower prevalence compared to the state estimate; region four (86.1%).

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

**Food Pantries or Banks:** There was one DHHR, Bureau for Behavioral Health (BBH) region with a significantly higher prevalence of the household receiving free groceries or meals from food banks or pantries in the past 30 days compared to the state estimate (8.0%); region six (10.6%). There were two DHHR, BBH regions with a significantly lower prevalence compared to the state estimate; regions one (6.0%) and two (4.8%).

**Other Place:** There was no significant difference in the prevalence of the household receiving free groceries or meals from some other place besides food banks or pantries in the past 30 days among DHHR, BBH regions compared to the state estimate.



**No Free Groceries or Meals:** There was one DHHR, BBH region with a significantly higher prevalence of the household not receiving free groceries or meals in the past 30 days compared to the state estimate (89.9%); region two (93.7%). There was one DHHR, BBH region with a significantly lower prevalence compared to the state estimate; region six (86.2%).

*DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

**Food Pantries or Banks:** There was one DHHR, BBH, Ryan Brown Fund (RBF) region with a significantly higher prevalence of the household receiving free groceries or meals from food banks or pantries in the past 30 days compared to the state estimate (8.0%); region six (10.9%). There were two DHHR, BBH, RBF regions with a significantly lower prevalence compared to the state estimate; regions one (6.0%) and two (4.8%).

**Other Place:** There was no significant difference in the prevalence of the household receiving free groceries or meals from some other place besides food banks or pantries in the past 30 days among DHHR, BBH, RBF regions compared to the state estimate.

**No Free Groceries or Meals:** There was one DHHR, BBH, RBF region with a significantly higher prevalence of the household not receiving free groceries or meals in the past 30 days compared to the state estimate (89.9%); region two (93.7%). There was one DHHR, BBH, RBF region with a significantly lower prevalence compared to the state estimate; region six (86.0%).

*Table 12.7.7: Weighted Prevalence of the Household Receiving Free Groceries or Meals in the Past 30 Days by Demographic Characteristics: MATCH, 2021<sup>a,b</sup>*

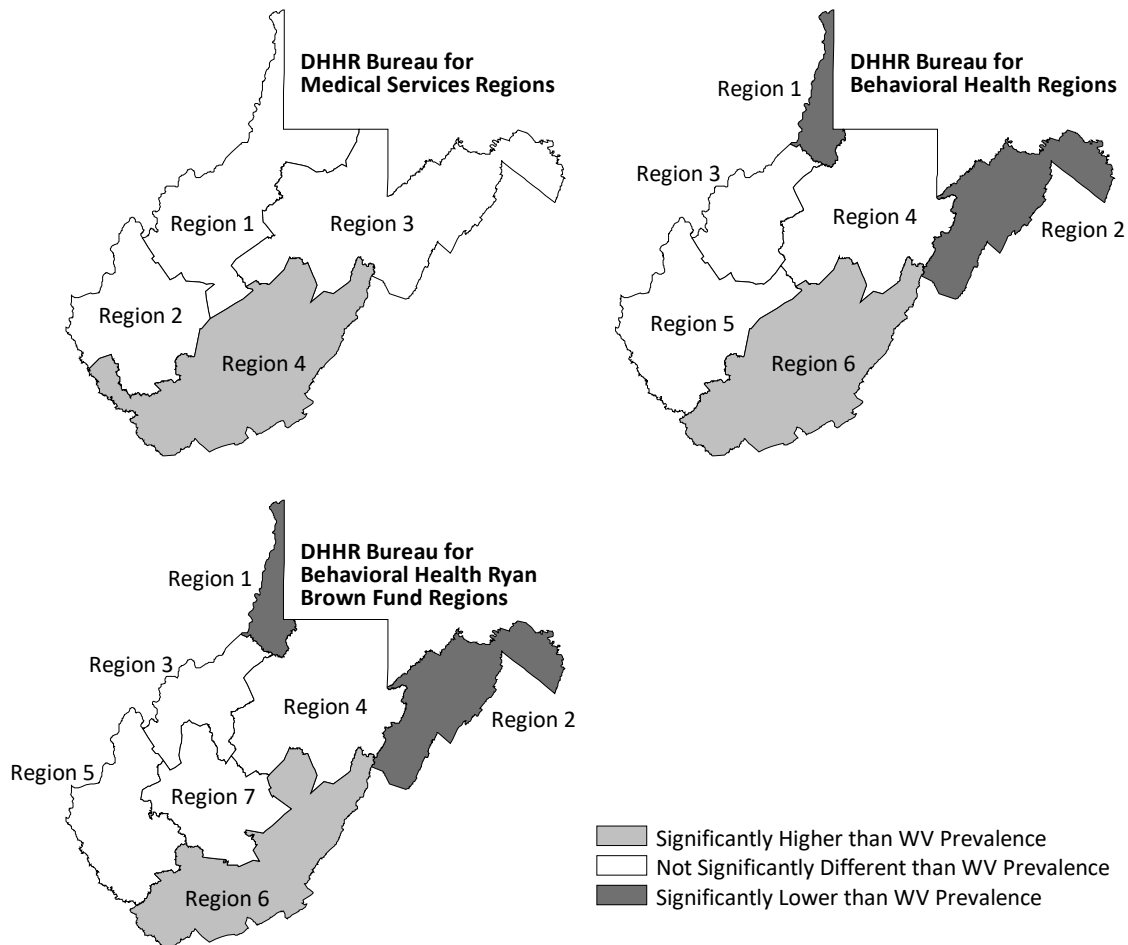
Characteristic	Food Banks or Pantries		Other Place		No Free Groceries or Meals	
	%	95% CI	%	95% CI	%	95% CI
<b>TOTAL</b>	<b>8.0</b>	<b>7.5-8.6</b>	<b>3.9</b>	<b>3.4-4.3</b>	<b>89.9</b>	<b>89.2-90.5</b>
<b>Sex</b>						
Male	7.6	6.7-8.5	4.1	3.4-4.8	90.1	89.1-91.2
Female	8.5	7.7-9.2	3.7	3.1-4.2	89.6	88.8-90.4
<b>Age</b>						
18-34	7.4	6.2-8.6	3.7	2.8-4.7	90.7	89.3-92.0
35-49	9.6	8.1-11.0	4.1	3.0-5.1	89.0	87.4-90.5
50-64	8.3	7.3-9.4	3.4	2.6-4.1	89.7	88.5-90.9
65+	6.9	6.0-7.8	4.4	3.6-5.1	90.2	89.1-91.3
<b>Education</b>						
Less than HS	19.1	16.6-21.7	7.5	5.9-9.2	77.2	74.5-79.9
HS/GED	9.1	8.2-9.9	4.1	3.5-4.8	88.8	87.8-89.8
Associate's or more	4.0	3.3-4.7	2.5	2.0-3.1	94.5	93.7-95.3
<b>Annual Family Income</b>						
\$15,000 or less	20.2	18.3-22.0	8.7	7.4-10.0	75.9	73.9-77.9
\$15,001-\$35,000	10.4	9.1-11.7	5.2	4.1-6.2	86.6	85.1-88.1
\$35,001-\$50,000	2.7	1.9-3.5	2.2	1.3-3.2	95.5	94.4-96.7
\$50,001-\$85,000	2.5	1.6-3.4	U	U	97.1	96.1-98.0
\$85,001+	U	U	U	U	99.1	98.6-99.6
<b>Race</b>						
White	7.9	7.3-8.5	3.7	3.2-4.1	90.2	89.5-90.8
Black	12.4	8.9-16.0	8.3	5.1-11.5	82.5	78.3-86.6
Multi-racial or "Other"	9.5	6.5-12.4	6.5	4.0-9.0	87.3	83.8-90.8
<b>Marital Status</b>						
Married/Living with a partner	6.4	5.7-7.2	2.6	2.0-3.1	92.5	91.7-93.3
Widowed/Divorced/Separated	11.6	10.3-12.9	6.4	5.4-7.4	84.3	82.8-85.8
Never married	8.0	6.7-9.3	4.3	3.3-5.4	89.6	88.0-91.1

*Note.* CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma; U = unstable prevalence estimate.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>Respondents were presented with a list of statements about their household receiving free groceries or free meals and could select one or more of the items from the list. See "Item" section above.

Figure 12.7.9: Weighted Prevalence of the Household Receiving Free Groceries or Meals from Food Banks or Pantries in the Past 30 Days by Region: MATCH, 2021<sup>a,b</sup>

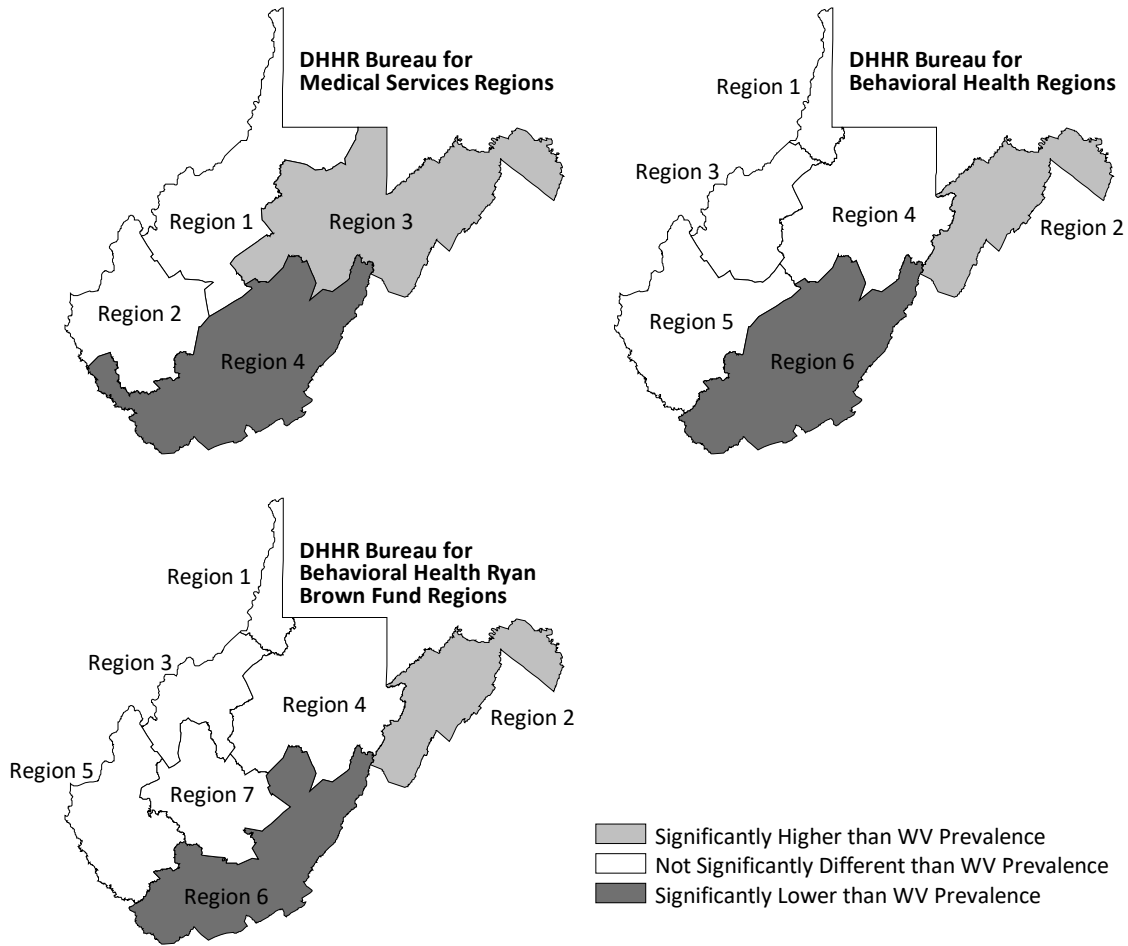


Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

Figure 12.7.10: Weighted Prevalence of the Household Not Receiving Free Groceries or Meals in the Past 30 Days by Region: MATCH, 2021<sup>a,b</sup>



Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.  
<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.  
<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

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## 12.8 Temporary Assistance for Needy Families (TANF)

### Item

Responding “Yes” to TANF when asked the question, “In the past 12 months, has anyone in your household received any of the following public benefits?” Respondents could select “Yes” or “No” when presented with a list of eight public benefits that included TANF.

### Prevalence

**West Virginia:** 1.6% (95% CI: 1.3-1.9)

### Sex

**Male:** 1.3% (95% CI: 0.8-1.7)

**Female:** 1.9% (95% CI: 1.5-2.3)

There was no significant difference in the prevalence of the household receiving TANF in the past 12 months between the sexes.

### Age

The prevalence of the household receiving TANF in the past 12 months was significantly higher among adults aged 35-49 (2.6%) than among adults aged 65 or older (0.7%).

### Education

The prevalence of the household receiving TANF in the past 12 months was significantly higher among adults with less than high school education (4.0%) than among adults with any other educational attainment levels. The prevalence was significantly lower among adults with an associate’s or more education (0.7%) than among adults with any other educational attainment levels.

### Family Income

The prevalence of the household receiving TANF in the past 12 months was significantly higher among adults with an annual family income of \$15,000 or less (4.6%) than among adults with an annual family income of \$15,001-\$35,000 (2.0%). There were unstable prevalence estimates among annual family income levels.

### Race

The prevalence of the household receiving TANF in the past 12 months was significantly higher among adults who were Black (3.5%) than among adults who were White (1.5%). There was an unstable prevalence estimate among racial groups.

### Marital Status

There was no significant difference in the prevalence of the household receiving TANF in the past 12 months among marital statuses.

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There was no significant difference in the prevalence of the household receiving TANF in the past 12 months among DHHR, Bureau for Medical Services (BMS) regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There was no significant difference in the prevalence of the household receiving TANF in the past 12 months among DHHR, Bureau for Behavioral Health (BBH) regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There was no significant difference in the prevalence of the household receiving TANF in the past 12 months among DHHR, BBH, Ryan Brown Fund (RBF) regions compared to the state estimate.

*Table 12.8.8: Weighted Prevalence of the Household Receiving Temporary Assistance for Needy Families (TANF) in the Past 12 Months by Demographic Characteristics: MATCH, 2021<sup>a</sup>*

Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>8,160</b>	<b>1.3</b>	<b>0.8-1.7</b>	<b>12,869</b>	<b>1.9</b>	<b>1.5-2.3</b>	<b>21,029</b>	<b>1.6</b>	<b>1.3-1.9</b>
<b>Age</b>									
18-34	U	U	U	3,951	2.3	1.6-3.1	5,522	1.6	1.1-2.2
35-49	4,538	3.1	1.5-4.8	3,269	2.2	1.2-3.2	7,806	2.6	1.7-3.6
50-64	U	U	U	4,148	2.3	1.4-3.1	5,376	1.5	1.0-2.0
65+	U	U	U	U	U	U	2,263	0.7	0.4-1.1
<b>Education</b>									
Less than HS	2,874	3.5	1.7-5.3	3,072	4.7	2.6-6.7	5,946	4.0	2.7-5.4
HS/GED	4,475	1.6	0.8-2.4	6,200	2.2	1.6-2.8	10,675	1.9	1.4-2.4
Associate's or more	U	U	U	3,577	1.1	0.6-1.6	4,367	0.7	0.5-1.0
<b>Annual Family Income</b>									
\$15,000 or less	4,882	4.1	2.4-5.7	6,869	5.0	3.6-6.4	11,751	4.6	3.5-5.7
\$15,001-\$35,000	U	U	U	4,187	2.3	1.4-3.2	6,579	2.0	1.3-2.8
\$35,001-\$50,000	U	U	U	U	U	U	U	U	U
\$50,001-\$85,000	U	U	U	U	U	U	U	U	U
\$85,001+	U	U	U	U	U	U	U	U	U
<b>Race</b>									
White	6,596	1.1	0.7-1.6	11,891	1.9	1.4-2.3	18,487	1.5	1.2-1.8
Black	U	U	U	670	4.3	2.0-6.7	1,123	3.5	2.0-5.1
Multi-racial or "Other"	U	U	U	U	U	U	U	U	U
<b>Marital Status</b>									
Married/Living with a partner	4,890	1.4	0.7-2.0	6,018	1.6	1.1-2.1	10,908	1.5	1.1-1.9
Widowed/Divorced/Separated	U	U	U	4,545	2.5	1.6-3.4	6,264	2.1	1.5-2.8
Never married	U	U	U	2,243	1.8	0.8-2.8	3,794	1.3	0.7-1.9

*Note.* CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma; U = unstable prevalence estimate.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

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## 12.9 Supplemental Nutrition Assistance Program (SNAP)

### Item

Responding “Yes” to SNAP when asked the question, “In the past 12 months, has anyone in your household received any of the following public benefits?” Respondents could select “Yes” or “No” when presented with a list of eight public benefits that included SNAP.

### Prevalence

**West Virginia:** 27.4% (95% CI: 26.4-28.3)

### Sex

**Male:** 24.5% (95% CI: 23.0-26.1)

**Female:** 30.1% (95% CI: 28.8-31.3)

The prevalence of the household receiving SNAP in the past 12 months was significantly higher among adults who were female (30.1%) than among adults who were male (24.5%).

### Age

The prevalence of the household receiving SNAP in the past 12 months was significantly higher among adults aged 18-34 (35.5%) and 35-49 (37.1%) than among any other adult age groups.

### Education

The prevalence of the household receiving SNAP in the past 12 months was significantly higher among adults with less than high school education (54.3%) than among adults with any other educational attainment levels. The prevalence was significantly lower among adults with an associate’s or more education (15.2%) than among adults with any other educational attainment levels.

### Family Income

The prevalence of the household receiving SNAP in the past 12 months was significantly higher among adults with an annual family income of \$15,000 or less (69.0%) than among adults with any other annual family income levels. The prevalence was significantly lower among adults with an annual family income of \$85,001 or more (4.2%) than among adults with any other annual family income levels.

### Race

The prevalence of the household receiving SNAP in the past 12 months was significantly higher among adults who were Black (48.1%) and multi-racial or “other” (43.1%) than among adults who were White (26.2%).



## Marital Status

The prevalence of the household receiving SNAP in the past 12 months was significantly higher among adults who were widowed, divorced, or separated (36.7%) or never married (33.9%) than among adults who were married or living with a partner (20.6%).

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There was one DHHR, Bureau for Medical Services (BMS) region with a significantly higher prevalence of the household receiving SNAP in the past 12 months compared to the state estimate (27.4%); region four (35.1%). There were two DHHR, BMS regions with a significantly lower prevalence compared to the state estimate; regions one (24.6%) and three (23.2%).

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There were two DHHR, Bureau for Behavioral Health (BBH) regions with a significantly higher prevalence of the household receiving SNAP in the past 12 months compared to the state estimate (27.4%); regions five (30.4%) and six (33.9%). There were two DHHR, BBH regions with a significantly lower prevalence compared to the state estimate; regions two (21.7%) and four (22.7%).

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There were two DHHR, BBH, Ryan Brown Fund (RBF) regions with a significantly higher prevalence of the household receiving SNAP in the past 12 months compared to the state estimate (27.4%); regions five (32.3%) and six (33.9%). There were two DHHR, BBH, RBF regions with a significantly lower prevalence compared to the state estimate; regions two (21.7%) and four (22.7%).

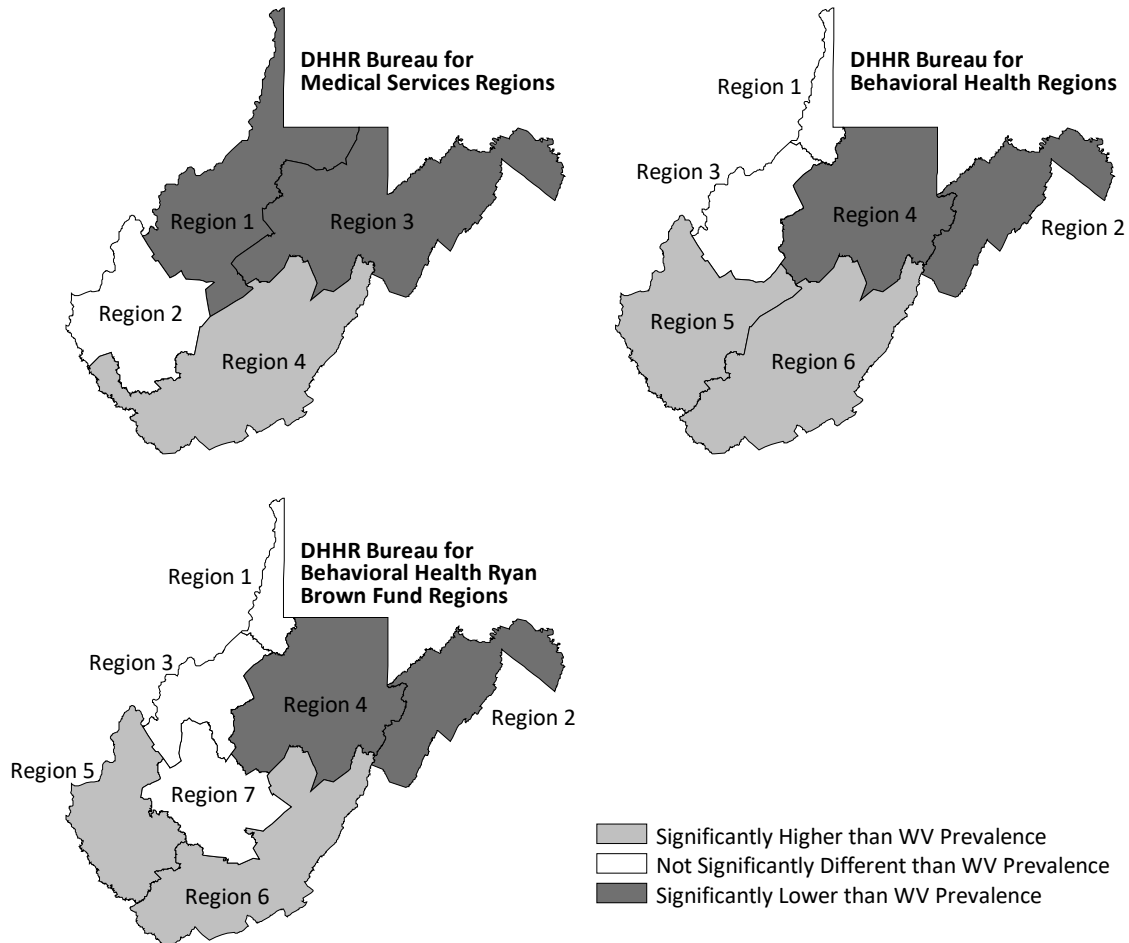
*Table 12.9.9: Weighted Prevalence of the Household Receiving Supplemental Nutrition Assistance Program (SNAP) in the Past 12 Months by Demographic Characteristics: MATCH, 2021<sup>a</sup>*

Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>161,281</b>	<b>24.5</b>	<b>23.0-26.1</b>	<b>209,315</b>	<b>30.1</b>	<b>28.8-31.3</b>	<b>370,596</b>	<b>27.4</b>	<b>26.4-28.3</b>
<b>Age</b>									
18-34	51,112	29.7	25.8-33.5	70,538	41.4	38.3-44.6	121,650	35.5	33.0-38.0
35-49	51,234	34.9	31.0-38.8	60,558	39.1	36.2-42.1	111,791	37.1	34.7-39.5
50-64	44,336	24.2	21.5-26.9	50,234	26.3	24.0-28.5	94,570	25.2	23.5-27.0
65+	13,812	9.2	7.5-10.8	27,072	15.4	13.5-17.3	40,885	12.5	11.2-13.8
<b>Education</b>									
Less than HS	42,637	47.6	42.3-52.9	45,579	62.6	58.2-67.1	88,215	54.3	50.8-57.9
HS/GED	86,015	29.4	26.9-31.9	102,767	35.5	33.5-37.5	188,782	32.4	30.9-34.0
Associate's or more	31,627	11.6	9.7-13.5	60,312	18.2	16.6-19.9	91,939	15.2	14.0-16.5
<b>Annual Family Income</b>									
\$15,000 or less	81,412	63.1	59.2-67.0	111,167	74.0	71.2-76.8	192,578	69.0	66.6-71.3
\$15,001-\$35,000	49,257	32.5	28.7-36.3	63,824	34.4	31.8-37.0	113,081	33.5	31.3-35.8
\$35,001-\$50,000	11,253	12.7	9.5-16.0	11,267	12.5	9.9-15.0	22,520	12.6	10.5-14.7
\$50,001-\$85,000	10,515	8.5	5.9-11.2	11,164	8.7	6.7-10.8	21,679	8.6	7.0-10.3
\$85,001+	5,013	3.5	2.2-4.8	5,706	5.0	3.4-6.5	10,720	4.2	3.2-5.2
<b>Race</b>									
White	141,582	23.3	21.7-24.9	190,055	28.9	27.6-30.2	331,636	26.2	25.2-27.2
Black	7,402	43.1	34.3-51.9	8,897	53.3	45.9-60.6	16,299	48.1	42.3-53.9
Multi-racial or "Other"	11,948	39.4	29.9-48.9	10,069	48.5	40.0-57.0	22,018	43.1	36.5-49.7
<b>Marital Status</b>									
Married/Living with a partner	67,672	18.8	16.9-20.7	83,864	22.3	20.7-23.8	151,535	20.6	19.4-21.8
Widowed/Divorced/Separated	41,064	33.0	29.3-36.8	74,944	39.2	36.6-41.7	116,008	36.7	34.6-38.8
Never married	51,214	30.1	26.5-33.7	48,677	39.0	35.4-42.6	99,891	33.9	31.3-36.5

*Note.* CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

Figure 12.9.11: Weighted Prevalence of the Household Receiving Supplemental Nutrition Assistance Program (SNAP) in the Past 12 Months by Region: MATCH, 2021<sup>a,b</sup>



Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

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## 12.10 Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)

### Item

Responding “Yes” to WIC when asked the question, “In the past 12 months, has anyone in your household received any of the following public benefits?” Respondents could select “Yes” or “No” when presented with a list of eight public benefits that included WIC.

### Prevalence

**West Virginia:** 4.9% (95% CI: 4.3-5.4)

### Sex

**Male:** 3.8% (95% CI: 3.0-4.6)

**Female:** 5.9% (95% CI: 5.2-6.6)

The prevalence of the household receiving WIC in the past 12 months was significantly higher among adults who were female (5.9%) than among adults who were male (3.8%).

### Age

The prevalence of the household receiving WIC in the past 12 months was significantly higher among adults aged 18-34 (12.5%) than among any other adult age groups. The prevalence was significantly lower among adults aged 65 or older (0.3%) than among any other adult age groups.

### Education

The prevalence of the household receiving WIC in the past 12 months was significantly higher among adults with less than high school education (7.4%) and high school or Graduate Equivalency Diploma (GED) education (6.7%) than among adults with an associate’s or more education (2.5%).

### Family Income

The prevalence of the household receiving WIC in the past 12 months was significantly higher among adults with an annual family income of \$15,000 or less (9.1%) than among adults with an annual family income of \$85,001 or more (1.2%).

### Race

The prevalence of the household receiving WIC in the past 12 months was significantly higher among adults who were Black (9.0%) than among adults who were White (4.7%).

### Marital Status

The prevalence of the household receiving WIC in the past 12 months was significantly higher among adults who were married or living with a partner (5.7%) or never married (4.9%) than among adults who were widowed, divorced, or separated (2.9%).

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There was no significant difference in the prevalence of the household receiving WIC in the past 12 months among DHHR, Bureau for Medical Services (BMS) regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There was no significant difference in the prevalence of the household receiving WIC in the past 12 months among DHHR, Behavioral Health (BBH) regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There was no significant difference in the prevalence of the household receiving WIC in the past 12 months among DHHR, BBH, Ryan Brown Fund (RBF) regions compared to the state estimate.

*Table 12.10.10: Weighted Prevalence of the Household Receiving Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) in the Past 12 Months by Demographic Characteristics: MATCH, 2021<sup>a</sup>*

Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>23,857</b>	<b>3.8</b>	<b>3.0-4.6</b>	<b>39,758</b>	<b>5.9</b>	<b>5.2-6.6</b>	<b>63,616</b>	<b>4.9</b>	<b>4.3-5.4</b>
<b>Age</b>									
18-34	13,920	8.3	6.0-10.6	28,358	16.8	14.5-19.1	42,278	12.5	10.9-14.2
35-49	6,638	4.6	2.7-6.5	6,241	4.1	3.0-5.3	12,879	4.4	3.3-5.5
50-64	2,891	1.7	0.7-2.6	4,497	2.5	1.5-3.4	7,387	2.1	1.4-2.7
65+	U	U	U	662	0.4	0.2-0.6	1,071	0.3	0.2-0.5
<b>Education</b>									
Less than HS	4,911	6.0	3.1-9.0	5,912	9.2	6.2-12.2	10,824	7.4	5.3-9.6
HS/GED	14,609	5.2	3.8-6.5	23,137	8.3	7.0-9.5	37,746	6.7	5.8-7.6
Associate's or more	4,337	1.6	0.8-2.4	10,632	3.3	2.6-4.0	14,969	2.5	2.0-3.0
<b>Annual Family Income</b>									
\$15,000 or less	6,448	5.5	3.5-7.6	16,514	12.2	10.0-14.5	22,961	9.1	7.6-10.7
\$15,001-\$35,000	8,787	6.1	3.8-8.3	13,408	7.5	6.1-8.9	22,195	6.8	5.6-8.1
\$35,001-\$50,000	3,431	3.9	1.8-6.0	4,427	4.9	3.2-6.7	7,859	4.4	3.1-5.8
\$50,001-\$85,000	U	U	U	2,682	2.1	1.2-3.0	6,035	2.4	1.5-3.4
\$85,001+	U	U	U	U	U	U	3,178	1.2	0.6-1.9
<b>Race</b>									
White	20,867	3.5	2.7-4.3	36,287	5.7	5.0-6.4	57,154	4.7	4.1-5.2
Black	U	U	U	1,910	12.4	6.4-18.3	2,849	9.0	5.3-12.7
Multi-racial or "Other"	U	U	U	1,562	7.8	3.7-11.9	3,612	7.5	3.4-11.6
<b>Marital Status</b>									
Married/Living with partner	19,367	5.5	4.2-6.8	21,696	5.9	5.0-6.8	41,063	5.7	4.9-6.5
Widowed/Divorced/Separated	U	U	U	6,391	3.6	2.5-4.7	8,442	2.9	2.1-3.7
Never married	2,259	1.4	0.6-2.2	11,672	9.6	7.4-11.7	13,930	4.9	3.8-5.9

*Note.* CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma; U = unstable prevalence estimate.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

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## 12.11 Medicaid

### Item

Responding “Yes” to Medicaid when asked the question, “In the past 12 months, has anyone in your household received any of the following public benefits?” Respondents could select “Yes” or “No” when presented with a list of eight public benefits that included Medicaid.

### Prevalence

**West Virginia:** 34.5% (95% CI: 33.6-35.5)

### Sex

**Male:** 31.4% (95% CI: 29.7-33.2)

**Female:** 37.5% (95% CI: 36.2-38.8)

The prevalence of the household receiving Medicaid in the past 12 months was significantly higher among adults who were female (37.5%) than between adults who were male (31.4%).

### Age

The prevalence of the household receiving Medicaid in the past 12 months was significantly higher among adults aged 18-34 (49.1%) and 35-49 (43.9%) than among any other adult age groups. The prevalence was significantly lower among adults aged 65 or older (14.5%) than among any other adult age groups.

### Education

The prevalence of the household receiving Medicaid in the past 12 months was significantly higher among adults with less than high school education (61.9%) than among adults with any other educational attainment levels. The prevalence was significantly lower among adults with an associate’s or more education (20.7%) than among adults with any other educational attainment levels.

### Family Income

The prevalence of the household receiving Medicaid in the past 12 months was significantly higher among adults with an annual family income of \$15,000 or less (75.4%) than among adults with any other annual family income levels. The prevalence was significantly lower among adults with an annual family income of \$85,001 or more (6.0%) than among adults with any other annual family income levels.

### Race

The prevalence of the household receiving Medicaid in the past 12 months was significantly higher among adults who were Black (60.0%) and multi-racial or “other” (54.4%) than among adults who were White (33.1%).

## Marital Status

The prevalence of the household receiving Medicaid in the past 12 months was significantly higher among adults who were never married (49.3%) than among adults with any other marital statuses. The prevalence was significantly lower among adults who were married or living with a partner (25.8%) than among adults with any other marital statuses.

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There was one DHHR, Bureau for Medical Services (BMS) region with a significantly higher prevalence of the household receiving Medicaid in the past 12 months compared to the state estimate (34.5%); region four (44.0%). There were two DHHR, BMS regions with a significantly lower prevalence compared to the state estimate; regions one (30.6%) and three (30.7%).

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There was one DHHR, Bureau for Behavioral Health (BBH) region with a significantly higher prevalence of the household receiving Medicaid in the past 12 months compared to the state estimate (34.5%); region six (42.8%). There were three DHHR, BBH regions with a significantly lower prevalence compared to the state estimate; regions one (30.5%), two (28.6%), and four (30.4%).

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There were two DHHR, BBH, Ryan Brown Fund (RBF) regions with a significantly higher prevalence of the household receiving Medicaid in the past 12 months compared to the state estimate (34.5%); regions five (39.1%) and six (42.5%). There were three DHHR, BBH, RBF regions with a significantly lower prevalence compared to the state estimate; regions one (30.5%), two (28.6%), and four (30.4%).



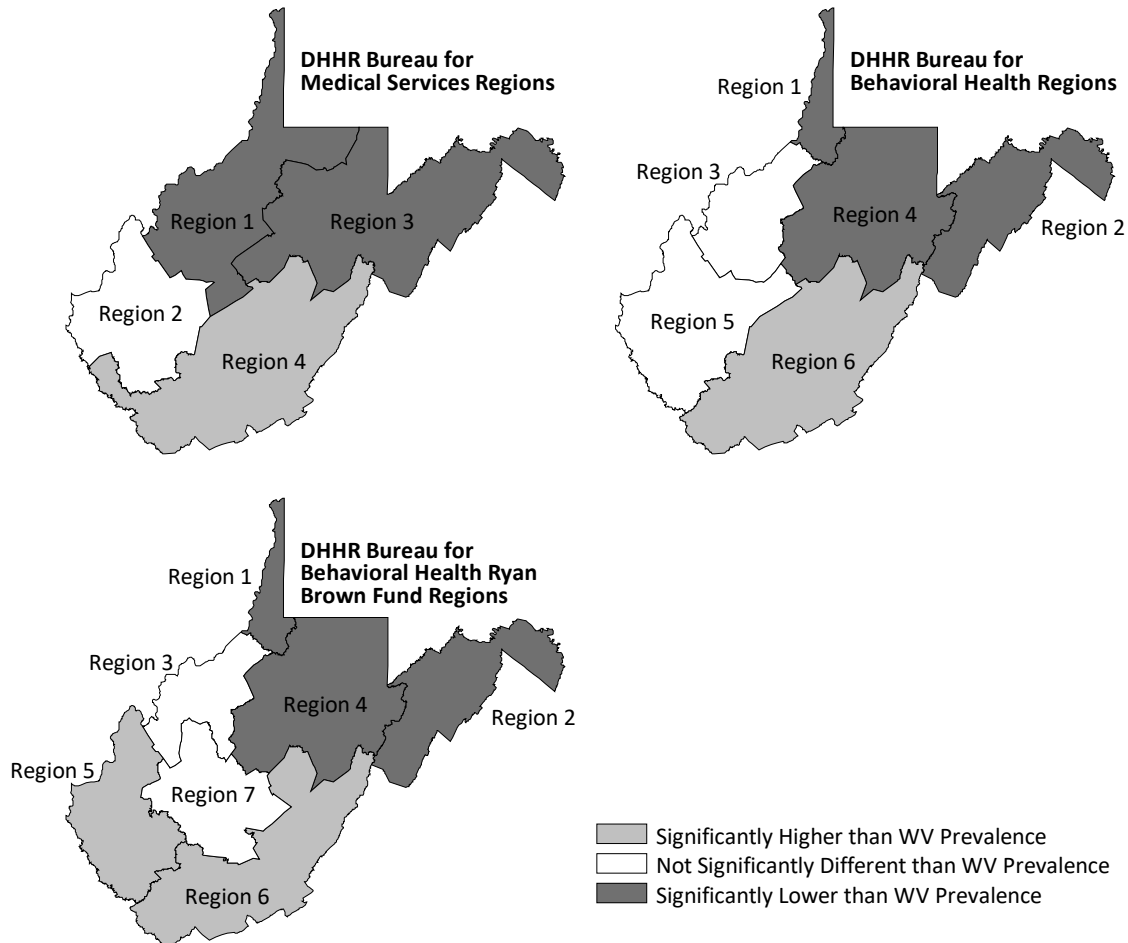
Table 12.11.11: Weighted Prevalence of the Household Receiving Medicaid in the Past 12 Months by Demographic Characteristics: MATCH, 2021<sup>a</sup>

Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>207,038</b>	<b>31.4</b>	<b>29.7-33.2</b>	<b>260,727</b>	<b>37.5</b>	<b>36.2-38.8</b>	<b>467,765</b>	<b>34.5</b>	<b>33.6-35.5</b>
<b>Age</b>									
18-34	78,319	44.8	40.5-49.2	90,814	53.5	50.2-56.7	169,132	49.1	46.4-51.8
35-49	59,025	40.0	35.9-44.0	73,498	47.6	44.5-50.7	132,523	43.9	41.4-46.4
50-64	51,757	28.4	25.5-31.2	66,181	34.2	31.7-36.8	117,937	31.4	29.5-33.2
65+	17,670	11.8	9.9-13.7	29,421	16.8	15.0-18.7	47,091	14.5	13.2-15.8
<b>Education</b>									
Less than HS	49,339	56.9	51.5-62.3	48,481	68.1	63.8-72.4	97,820	61.9	58.4-65.5
HS/GED	111,103	37.5	34.7-40.2	131,763	45.4	43.4-47.5	242,865	41.4	39.7-43.1
Associate's or more	45,219	16.6	14.4-18.9	79,640	24.0	22.2-25.8	124,859	20.7	19.3-22.1
<b>Annual Family Income</b>									
\$15,000 or less	89,490	70.2	66.5-74.0	119,127	79.9	77.2-82.5	208,617	75.4	73.2-77.7
\$15,001-\$35,000	67,115	44.3	40.3-48.3	86,684	46.5	43.8-49.2	153,799	45.5	43.2-47.8
\$35,001-\$50,000	18,887	20.9	16.4-25.3	21,767	24.1	20.6-27.5	40,653	22.5	19.6-25.3
\$50,001-\$85,000	18,087	14.7	11.3-18.0	18,180	14.1	11.6-16.7	36,266	14.4	12.3-16.5
\$85,001+	8,386	5.9	3.4-8.3	7,091	6.2	4.4-8.0	15,477	6.0	4.4-7.6
<b>Race</b>									
White	181,317	29.7	28.0-31.5	237,916	36.2	34.9-37.5	419,232	33.1	32.1-34.1
Black	9,848	57.3	48.0-66.6	10,360	62.8	55.6-69.9	20,208	60.0	54.1-65.9
Multi-racial or "Other"	15,512	52.1	42.4-61.7	11,994	57.8	49.4-66.2	27,506	54.4	47.8-61.1
<b>Marital Status</b>									
Married/Living with a partner	81,646	22.7	20.7-24.8	108,424	28.7	27.0-30.4	190,070	25.8	24.5-27.1
Widowed/Divorced/Separated	44,822	36.2	32.4-40.1	83,153	43.9	41.4-46.4	127,975	40.9	38.8-43.0
Never married	79,399	45.9	41.9-50.0	67,593	53.8	50.1-57.5	146,992	49.3	46.4-52.1

Note. CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

Figure 12.11.12: Weighted Prevalence of the Household Receiving Medicaid in the Past 12 Months by Region: MATCH, 2021<sup>a,b</sup>



Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

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## 12.12 Low Income Energy Assistance Program (LIEAP)

### Item

Responding “Yes” to LIEAP when asked the question, “In the past 12 months, has anyone in your household received any of the following public benefits?” Respondents could select “Yes” or “No” when presented with a list of eight public benefits that included LIEAP.

### Prevalence

**West Virginia:** 10.7% (95% CI: 10.0-11.3)

### Sex

**Male:** 9.5% (95% CI: 8.4-10.5)

**Female:** 11.8% (95% CI: 10.9-12.6)

The prevalence of the household receiving LIEAP in the past 12 months was significantly higher among adults who were female (11.8%) than among adults who were male (9.5%).

### Age

The prevalence of the household receiving LIEAP in the past 12 months was significantly higher among adults aged 35-49 (12.8%) and 50-64 (12.5%) than among any other adult age groups.

### Education

The prevalence of the household receiving LIEAP in the past 12 months was significantly higher among adults with less than high school education (28.3%) than among adults with any other educational attainment levels. The prevalence was significantly lower among adults with an associate’s or more education (4.4%) than among adults with any other educational attainment levels.

### Family Income

The prevalence of the household receiving LIEAP in the past 12 months was significantly higher among adults with an annual family income of \$15,000 or less (32.2%) than among any other annual family income levels with stable estimates. There was an unstable prevalence estimate among annual family income levels.

### Race

The prevalence of the household receiving LIEAP in the past 12 months was significantly higher among adults who were Black (20.4%) and multi-racial or “other” (16.4%) than among adults who were White (10.2%).

### Marital Status

The prevalence of the household receiving LIEAP in the past 12 months was significantly higher among adults who were widowed, divorced, or separated (17.3%) than among adults with any other marital

statuses. The prevalence was significantly lower among adults who were married or living with a partner (7.3%) than among adults with any other marital statuses.

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There was one DHHR, Bureau for Medical Services (BMS) region with a significantly higher prevalence of the household receiving LIEAP in the past 12 months compared to the state estimate (10.7%); region four (16.5%). There were two DHHR, BMS regions with a significantly lower prevalence compared to the state estimate; regions one (8.7%) and three (7.8%).

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There was one DHHR, Bureau for Behavioral Health (BBH) region with a significantly higher prevalence of the household receiving LIEAP in the past 12 months compared to the state estimate (10.7%); region six (15.8%). There were two DHHR, BBH regions with a significantly lower prevalence compared to the state estimate; regions two (6.4%) and four (8.4%).

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There were two DHHR, BBH, Ryan Brown Fund (RBF) regions with a significantly higher prevalence of the household receiving LIEAP in the past 12 months compared to the state estimate (10.7%); regions five (13.2%) and six (16.0%). There were two DHHR, BBH, RBF regions with a significantly lower prevalence compared to the state estimate; regions two (6.4%) and four (8.4%).

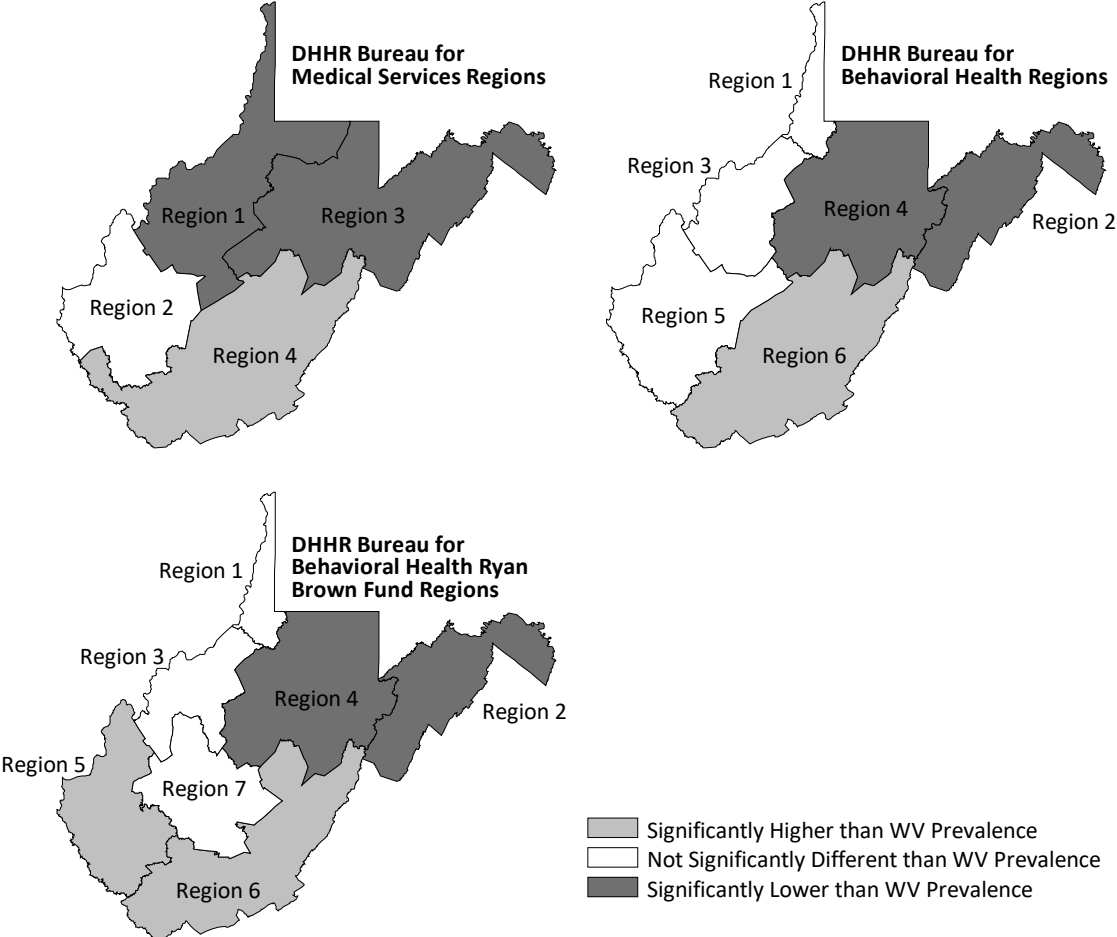
*Table 12.12.12: Weighted Prevalence of the Household Receiving Low Income Energy Assistance Program (LIEAP) in the Past 12 Months by Demographic Characteristics: MATCH, 2021<sup>a</sup>*

Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>60,969</b>	<b>9.5</b>	<b>8.4-10.5</b>	<b>80,442</b>	<b>11.8</b>	<b>10.9-12.6</b>	<b>141,411</b>	<b>10.7</b>	<b>10.0-11.3</b>
<b>Age</b>									
18-34	15,851	9.4	6.9-11.9	14,842	8.8	7.1-10.5	30,693	9.1	7.6-10.6
35-49	17,645	12.2	9.5-14.8	20,308	13.3	11.4-15.3	37,953	12.8	11.2-14.4
50-64	19,725	11.1	9.2-12.9	25,958	13.9	12.2-15.5	45,683	12.5	11.3-13.7
65+	7,087	4.8	3.7-5.9	18,926	11.0	9.4-12.5	26,013	8.1	7.1-9.1
<b>Education</b>									
Less than HS	22,175	26.2	21.6-30.8	21,486	31.0	26.8-35.2	43,661	28.3	25.2-31.5
HS/GED	30,592	10.7	9.1-12.4	40,281	14.2	12.8-15.5	70,873	12.4	11.4-13.5
Associate's or more	7,895	2.9	2.0-3.8	18,286	5.6	4.7-6.5	26,181	4.4	3.7-5.0
<b>Annual Family Income</b>									
\$15,000 or less	35,791	29.0	25.4-32.6	50,698	34.9	32.1-37.7	86,489	32.2	29.9-34.4
\$15,001-\$35,000	18,620	12.7	10.0-15.4	23,423	12.9	11.1-14.8	42,043	12.8	11.3-14.4
\$35,001-\$50,000	U	U	U	2,298	2.6	1.5-3.6	4,464	2.5	1.5-3.5
\$50,001-\$85,000	U	U	U	844	0.7	0.3-1.0	3,270	1.3	0.6-2.1
\$85,001+	U	U	U	U	U	U	U	U	U
<b>Race</b>									
White	52,723	8.8	7.8-9.9	73,809	11.4	10.6-12.3	126,532	10.2	9.5-10.8
Black	2,970	18.1	11.8-24.4	3,623	22.8	17.6-28.0	6,594	20.4	16.3-24.5
Multi-racial or "Other"	5,210	17.8	10.7-24.9	2,902	14.4	9.8-18.9	8,112	16.4	11.8-21.0
<b>Marital Status</b>									
Married/Living with a partner	24,855	7.0	5.8-8.3	28,258	7.6	6.6-8.5	53,113	7.3	6.5-8.1
Widowed/Divorced/Separated	16,536	13.9	11.3-16.5	36,222	19.6	17.6-21.5	52,758	17.3	15.8-18.9
Never married	18,967	11.4	8.9-13.8	15,067	12.2	9.9-14.5	34,034	11.7	10.0-13.4

*Note.* CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma; U = unstable prevalence estimate.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

Figure 12.12.13: Weighted Prevalence of the Household Receiving Low Income Energy Assistance Program (LIEAP) in the Past 12 Months by Region: MATCH, 2021<sup>a,b</sup>



Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

## 12.13 School Clothing Vouchers

### Item

Responding “Yes” to school clothing vouchers when asked the question, “In the past 12 months, has anyone in your household received any of the following public benefits?” Respondents could select “Yes” or “No” when presented with a list of eight public benefits that included school clothing vouchers.

### Prevalence

**West Virginia:** 7.5% (95% CI: 6.9-8.1)

### Sex

**Male:** 6.0% (95% CI: 5.1-6.9)

**Female:** 8.9% (95% CI: 8.1-9.7)

The prevalence of the household receiving school clothing vouchers in the past 12 months was significantly higher among adults who were female (8.9%) than among adults who were male (6.0%).

### Age

The prevalence of the household receiving school clothing vouchers in the past 12 months was significantly higher among adults aged 18-34 (12.0%) and 35-49 (13.9%) than among any other adult age groups. The prevalence was significantly lower among adults aged 65 or older (1.5%) than among any other adult age groups.

### Education

The prevalence of the household receiving school clothing vouchers in the past 12 months was significantly higher among adults with less than high school education (15.6%) than among adults with any other educational attainment levels. The prevalence was significantly lower among adults with an associate’s or more education (4.1%) than among adults with any other educational attainment levels.

### Family Income

The prevalence of the household receiving school clothing vouchers in the past 12 months was significantly higher among adults with an annual family income of \$15,000 or less (16.3%) than among adults with any other annual family income levels. The prevalence was significantly lower among adults with an annual family income of \$85,001 or more (1.0%) than among adults with any other annual family income levels.

### Race

The prevalence of the household receiving school clothing vouchers in the past 12 months was significantly higher among adults who were Black (15.5%) and multi-racial or “other” (15.2%) than among adults who were White (7.0%).

## Marital Status

There was no significant difference in the prevalence of the household receiving school clothing vouchers in the past 12 months among marital statuses.

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There were no DHHR, Bureau for Medical Services (BMS) regions with a significantly higher prevalence of the household receiving school clothing vouchers in the past 12 months compared to the state estimate. There was one DHHR, BMS region with a significantly lower prevalence compared to the state estimate (7.5%); region three (5.9%).

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There were no DHHR, Bureau for Medical Services (BMS) regions with a significantly higher prevalence of the household receiving school clothing vouchers in the past 12 months compared to the state estimate. There was one DHHR, BBH region with a significantly lower prevalence compared to the state estimate (7.5%); region two (4.4%).

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There were no DHHR, BBH, Ryan Brown Fund (RBF) regions with a significantly higher prevalence of the household receiving school clothing vouchers in the past 12 months compared to the state estimate. There was one DHHR, BBH, RBF region with a significantly lower prevalence compared to the state estimate (7.5%); region two (4.4%).



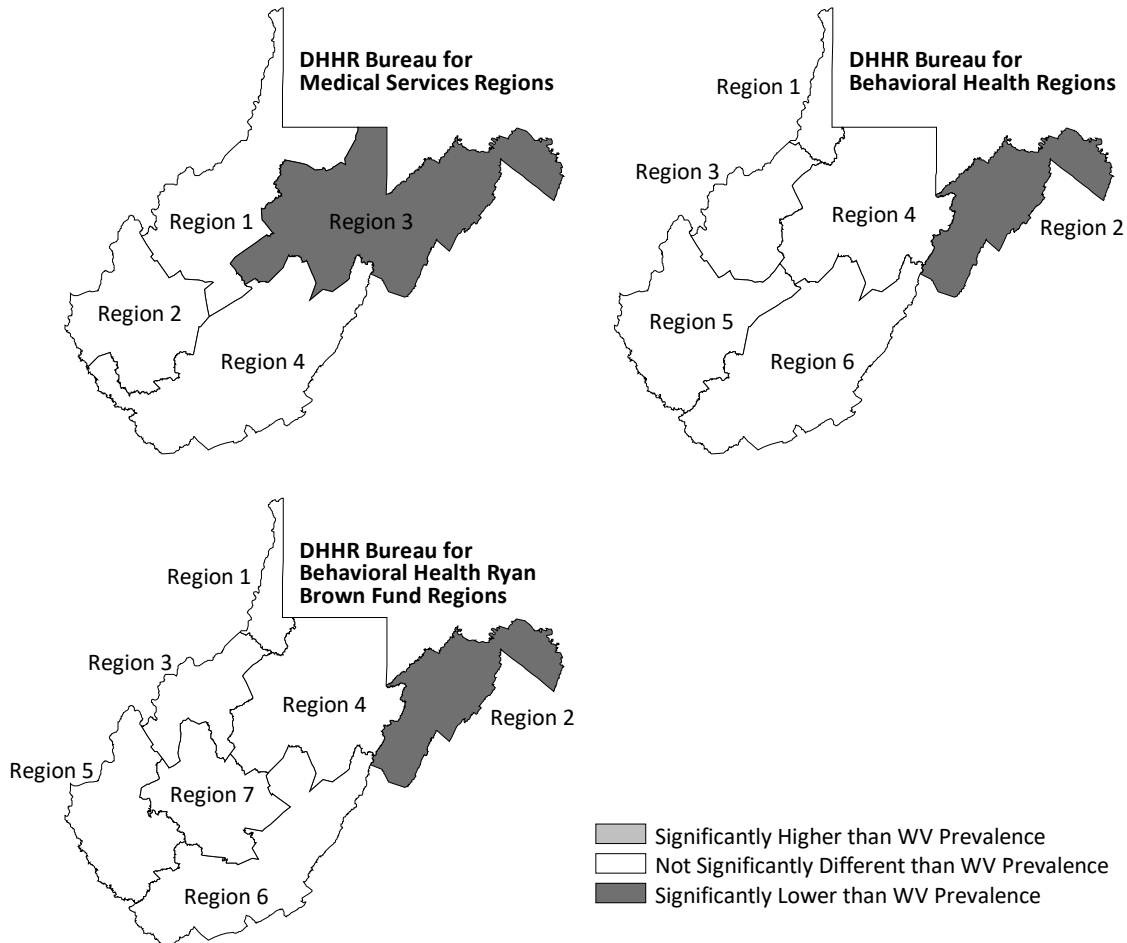
Table 12.13.13: Weighted Prevalence of the Household Receiving School Clothing Vouchers in the Past 12 Months by Demographic Characteristics: MATCH, 2021<sup>a</sup>

Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>38,216</b>	<b>6.0</b>	<b>5.1-6.9</b>	<b>60,354</b>	<b>8.9</b>	<b>8.1-9.7</b>	<b>98,570</b>	<b>7.5</b>	<b>6.9-8.1</b>
<b>Age</b>									
18-34	14,360	8.5	6.2-10.8	26,158	15.5	13.4-17.6	40,518	12.0	10.4-13.5
35-49	16,104	11.2	8.8-13.6	24,902	16.4	14.2-18.6	41,006	13.9	12.2-15.5
50-64	5,090	2.9	1.9-3.9	7,198	3.9	2.8-5.0	12,288	3.4	2.7-4.1
65+	U	U	U	2,031	1.2	0.7-1.8	4,683	1.5	0.9-2.1
<b>Education</b>									
Less than HS	10,779	13.0	9.1-16.8	12,471	19.0	15.1-22.9	23,250	15.6	12.9-18.4
HS/GED	20,379	7.2	5.7-8.6	30,288	10.7	9.5-12.0	50,667	9.0	8.0-9.9
Associate's or more	6,894	2.6	1.7-3.4	17,525	5.4	4.4-6.3	24,418	4.1	3.4-4.7
<b>Annual Family Income</b>									
\$15,000 or less	14,113	11.8	9.0-14.7	27,947	20.3	17.8-22.8	42,060	16.3	14.5-18.2
\$15,001-\$35,000	14,177	9.7	7.4-11.9	22,997	12.7	11.0-14.5	37,174	11.4	10.0-12.8
\$35,001-\$50,000	3,389	3.9	1.9-5.8	3,801	4.2	2.6-5.8	7,190	4.1	2.8-5.3
\$50,001-\$85,000	4,226	3.5	1.8-5.1	2,460	1.9	1.0-2.9	6,687	2.7	1.7-3.6
\$85,001+	U	U	U	U	U	U	2,593	1.0	0.4-1.6
<b>Race</b>									
White	31,682	5.3	4.4-6.2	54,405	8.5	7.7-9.3	86,086	7.0	6.4-7.6
Black	1,807	11.0	6.0-16.1	3,155	20.3	14.9-25.7	4,962	15.5	11.8-19.3
Multi-racial or "Other"	4,727	16.3	9.3-23.2	2,769	13.7	8.2-19.1	7,496	15.2	10.5-19.8
<b>Marital Status</b>									
Married/Living with a partner	21,756	6.1	5.0-7.3	28,064	7.6	6.6-8.6	49,820	6.9	6.1-7.6
Widowed/Divorced/Separated	7,256	6.2	3.9-8.4	16,466	9.1	7.6-10.6	23,721	8.0	6.7-9.2
Never married	8,917	5.4	3.5-7.3	15,690	12.8	10.5-15.1	24,607	8.6	7.1-10.0

Note. CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma; U = unstable prevalence estimate.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

Figure 12.13.14: Weighted Prevalence of the Household Receiving School Clothing Vouchers in the Past 12 Months by Region: MATCH, 2021<sup>a,b</sup>



Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

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## 12.14 No Public Benefits

### Item

Responding “No” to the question, “In the past 12 months, has anyone in your household received any of the following public benefits?” for each of the following public benefits:

- “Temporary Assistance for Needy Families (TANF)”
- “Supplemental Nutrition Assistance Program (SNAP)”
- “Women Infants and Children (WIC)”
- “Medicaid”
- “Low Income Energy Assistance Program (LIEAP)”
- “Tel-Assistance/LIFELINE”
- “Jobs and Hope”

‘Jobs and Hope’ and ‘Tel-Assistance/LIFELINE’ categories were not presented in this report because they did not meet the criteria for stability. However, if respondents selected either one or both responses they would be categorized as a household receiving public benefits.

### Prevalence

**West Virginia:** 59.7% (95% CI: 58.7-60.7)

### Sex

**Male:** 62.8% (95% CI: 61.0-64.6)

**Female:** 56.7% (95% CI: 55.4-58.1)

The prevalence of the household not receiving public benefits in the past 12 months was significantly lower among adults who were female (56.7%) than among adults who were male (62.8%).

### Age

The prevalence of households not receiving public benefits in the past 12 months was significantly lower among adults aged 18-34 (44.9%) and 35-49 (49.4%) than among any other adult age groups. The prevalence of households not receiving public benefits in the past 12 months was significantly higher among adults aged 65 or older (79.8%) than among any other adult age groups.

### Education

The prevalence of households not receiving public benefits in the past 12 months was significantly lower among adults with less than high school education (30.0%) than among adults with any other educational attainment levels. The prevalence was significantly higher among adults with an associate’s or more education (75.0%) than among adults with any other educational attainment levels.

## Family Income

The prevalence of the households not receiving public benefits in the past 12 months was significantly lower among adults with an annual family income of \$15,000 or less (16.4%) than among adults with any other annual family income levels. The prevalence was significantly higher among adults with an annual family income of \$85,001 or more (90.6%) than among adults with any other annual family income levels.

## Race

The prevalence of the households not receiving public benefits in the past 12 months was significantly lower among adults who were Black (33.4%) and multi-racial or “other” (39.2%) than among adults who were White (61.2%).

## Marital Status

The prevalence of the households not receiving public benefits in the past 12 months was significantly lower among adults who were never married (45.3%) than among adults with any other marital statuses.

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There was one DHHR, Bureau for Medical Services (BMS) region with a significantly lower prevalence of the households not receiving public benefits in the past 12 months compared to the state estimate (59.7%); region four (50.5%). There were two DHHR, BMS regions with a significantly higher prevalence compared to the state estimate; regions one (63.5%) and three (63.9%).

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There was one DHHR, Bureau for Behavioral Health (BBH) region with a significantly lower prevalence of the households not receiving public benefits in the past 12 months compared to the state estimate (59.7%); region six (51.8%). There were two DHHR, BBH regions with a significantly higher prevalence compared to the state estimate; regions two (66.5%) and four (64.2%).

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There were two DHHR, BBH, Ryan Brown Fund (RBF) regions with a significantly lower prevalence of the households not receiving public benefits in the past 12 months compared to the state estimate (59.7%); regions five (55.1%) and six (51.7%). There were two DHHR, BBH, RBF regions with a significantly higher prevalence compared to the state estimate; regions two (66.5%) and four (64.2%).

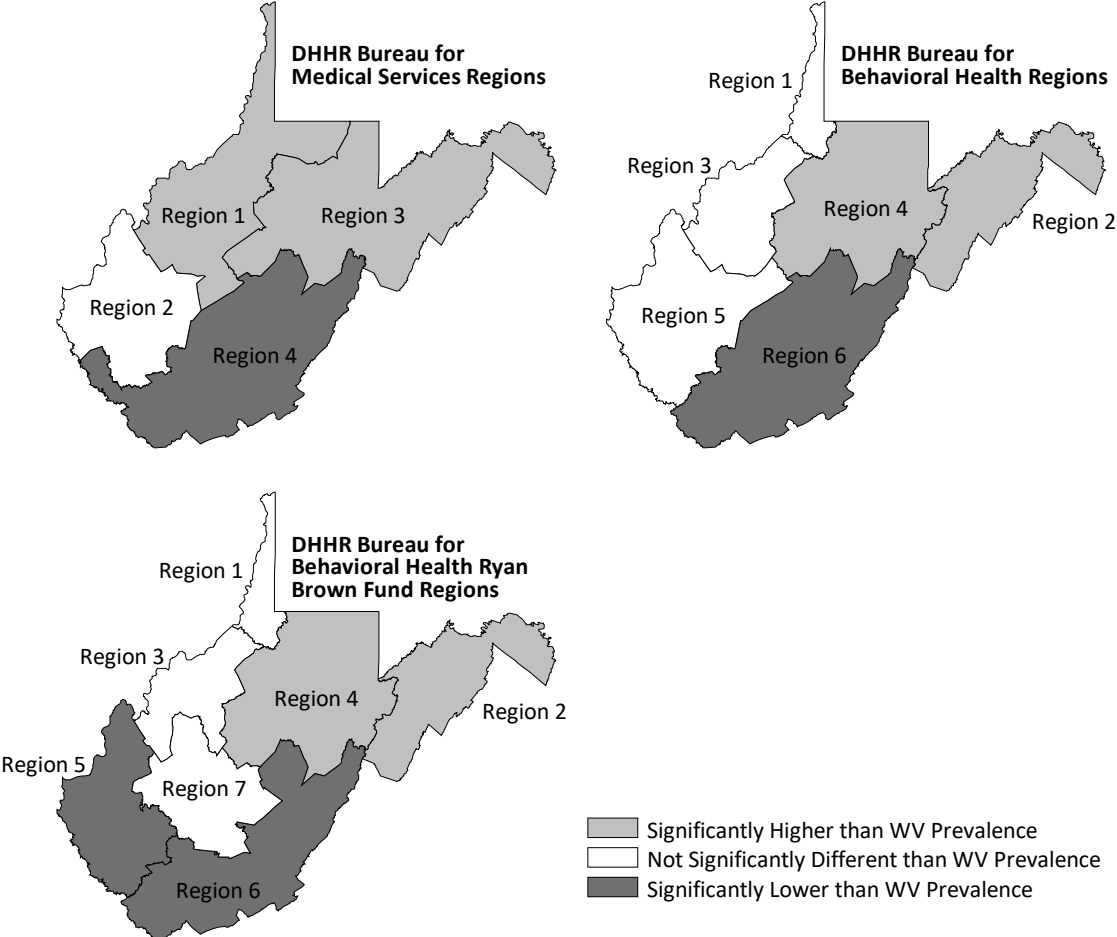
Table 12.14.14: Weighted Prevalence of the Households Not Receiving Public Benefits in the Past 12 Months by Demographic Characteristics: MATCH, 2021<sup>a</sup>

Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>420,334</b>	<b>62.8</b>	<b>61.0-64.6</b>	<b>400,755</b>	<b>56.7</b>	<b>55.4-58.1</b>	<b>821,088</b>	<b>59.7</b>	<b>58.7-60.7</b>
<b>Age</b>									
18-34	87,945	50.0	45.6-54.4	67,633	39.6	36.4-42.7	155,578	44.9	42.2-47.5
35-49	79,428	53.0	48.8-57.1	71,606	46.0	42.8-49.1	151,033	49.4	46.8-52.0
50-64	121,473	65.2	62.2-68.2	121,206	62.1	59.5-64.7	242,679	63.6	61.7-65.6
65+	128,101	83.9	81.8-86.0	137,766	76.4	74.2-78.6	265,867	79.8	78.3-81.4
<b>Education</b>									
Less than HS	33,349	36.4	31.2-41.5	16,793	22.2	18.6-25.9	50,142	30.0	26.7-33.3
HS/GED	167,920	55.8	53.1-58.6	143,548	48.9	46.8-51.0	311,469	52.4	50.7-54.1
Associate's or more	217,227	79.5	77.1-81.9	238,755	71.4	69.5-73.4	455,982	75.0	73.6-76.5
<b>Annual Family Income</b>									
\$15,000 or less	28,002	21.2	17.8-24.6	18,890	12.3	10.1-14.5	46,892	16.4	14.4-18.4
\$15,001-\$35,000	75,004	48.3	44.3-52.2	88,923	47.1	44.4-49.9	163,927	47.6	45.4-49.9
\$35,001-\$50,000	66,962	73.7	69.0-78.5	65,756	72.5	68.8-76.1	132,718	73.1	70.1-76.1
\$50,001-\$85,000	102,091	82.4	78.9-86.0	105,827	82.1	79.3-84.9	207,918	82.3	80.0-84.5
\$85,001+	130,867	91.3	88.7-94.0	103,542	89.6	87.3-92.0	234,409	90.6	88.8-92.4
<b>Race</b>									
White	400,355	64.6	62.8-66.4	387,634	58.1	56.7-59.5	787,989	61.2	60.2-62.3
Black	6,316	35.5	26.8-44.2	5,396	31.3	24.4-38.2	11,712	33.4	27.9-39.0
Multi-racial or "Other"	12,933	42.6	33.2-52.0	7,137	34.4	26.6-42.2	20,070	39.2	32.8-45.7
<b>Marital Status</b>									
Married/Living with a partner	261,617	72.1	69.9-74.3	252,391	66.2	64.4-68.1	514,007	69.1	67.8-70.5
Widowed/Divorced/Separated	71,069	55.9	52.0-59.8	96,363	49.2	46.7-51.8	167,432	51.8	49.7-54.0
Never married	86,028	48.8	44.8-52.8	50,948	40.3	36.7-44.0	136,976	45.3	42.5-48.0

Note. CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

Figure 12.14.15: Weighted Prevalence of the Households Not Receiving Public Benefits in the Past 12 Months by Region: MATCH, 2021<sup>a,b</sup>



Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

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# Chapter 13: Neighborhood and Built Environment

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## 13.1 Type of Home

### Item

In the survey, respondents were presented with the question, “What kind of home do you live in?” The following responses were offered, and only one could be selected:

- “House”
- “Apartment”
- “Condominium”
- “Mobile home or trailer”
- “Townhouse”
- “Rooming house or boarding house”
- “Some other housing arrangement”

The category ‘Condominium or Townhouse’ was used for those responding “Condominium” or “Townhouse” to this question. The category ‘Some Other Housing Arrangement’ was used for those responding “Some other housing arrangement” or “Rooming house or boarding house” to this question.

### Prevalence

**House:** 72.5% (95% CI: 71.5-73.5)

**Apartment:** 10.6% (95% CI: 9.9-11.2)

**Condominium or Townhouse:** 2.8% (95% CI: 2.3-3.2)

**Mobile Home or Trailer:** 12.9% (95% CI: 12.1-13.6)

**Some Other Housing Arrangement:** 1.3% (95% CI: 1.0-1.6)

### Sex

**House:** There was no significant difference in the prevalence of living in a house between the sexes.

**Apartment:** There was no significant difference in the prevalence of living in an apartment between the sexes.

**Condominium or Townhouse:** There was no significant difference in the prevalence of living in a condominium or townhouse between the sexes.

**Mobile Home or Trailer:** There was no significant difference in the prevalence of living in a mobile home or trailer between the sexes.

**Some Other Housing Arrangement:** There was no significant difference in the prevalence of living in some other housing arrangement between the sexes.

## Age

**House:** The prevalence of living in a house was significantly lower among adults aged 18-34 (61.7%) than among any other adult age groups. The prevalence was significantly higher among adults aged 65 or older (81.2%) than among any other adult age groups.

**Apartment:** The prevalence of living in an apartment was significantly lower among adults aged 65 or older (6.0%) than among any other adult age groups. The prevalence of living in an apartment was significantly higher among adults aged 18-34 (18.0%) than among any other adult age groups.

**Condominium or Townhouse:** The prevalence of living in a condominium or townhouse was significantly lower among adults aged 65 or older (1.7%) than among adults aged 18-34 (4.3%).

**Mobile Home or Trailer:** The prevalence of living in a mobile home or trailer was significantly lower among adults aged 65 or older (10.5%) than among adults aged 50-64 (13.8%).

**Some Other Housing Arrangement:** The prevalence of living in some other housing arrangement was significantly lower among adults aged 50-64 (0.7%) and 65 or older (0.6%) than among adults aged 18-34 (2.4%).

## Education

**House:** The prevalence of living in a house was significantly lower among adults with less than high school education (54.7%) than among adults with any other educational attainment levels. The prevalence was significantly higher among adults with an associate's or more education (81.0%) than among adults with any other educational attainment levels.

**Apartment:** The prevalence of living in an apartment was significantly lower among adults with an associate's or more education (8.2%) than among adults with any other educational attainment levels. The prevalence was significantly higher among adults with less than high school education (15.8%) than among adults with any other educational attainment levels.

**Condominium or Townhouse:** The prevalence of living in a condominium or townhouse was significantly lower among adults with a high school or Graduate Equivalency Diploma (GED) education (2.1%) than among adults with an associate's or more education (4.1%). There was an unstable prevalence estimate among educational attainment levels.

**Mobile Home or Trailer:** The prevalence was of living in a mobile home or trailer was significantly lower among adults with an associate's or more education (6.1%) than among adults with any other educational attainment levels. The prevalence was significantly higher among adults with less than high school education (24.9%) than among adults with any other educational attainment levels.

**Some Other Housing Arrangement:** The prevalence of living in some other housing arrangement was significantly lower among adults with a high school or GED education (1.2%) and associate's or more education (0.6%) than among adults with less than high school education (4.1%).



## Family Income

**House:** The prevalence of living in a house was significantly lower among adults with an annual family income of \$15,000 or less (48.5%) than among adults with any other annual family income levels. The prevalence of living in a house was significantly higher among adults with an annual family income of \$85,001 or more (89.2%) than among adults with any other annual family income levels.

**Apartment:** The prevalence of living in an apartment was significantly lower among adults with any other annual family income levels than among adults with an annual family income of \$15,000 or less (23.4%).

**Condominium or Townhouse:** The prevalence of living in a condominium or townhouse was significantly lower among adults with an annual family income of \$15,000 or less (1.5%) than among adults with an annual family income of \$35,001-\$50,000 (4.6%) and \$50,001-\$85,000 (3.2%).

**Mobile Home or Trailer:** The prevalence of living in a mobile home or trailer was significantly lower among adults with an annual family income of \$85,001 or more (2.9%) than among adults with any other annual family income levels. The prevalence was significantly higher among adults with an annual family income of \$15,000 or less (23.1%) than among adults with any other annual family income levels.

**Some Other Housing Arrangement:** The prevalence of living in some other housing arrangement was significantly lower among adults with an annual family income of \$15,001-\$35,000 (0.9%) than among adults with an annual family income of \$15,000 or less (3.5%). There were unstable prevalence estimates among annual family income levels.

## Race

**House:** The prevalence of living in a house was significantly lower among adults who were Black (55.7%) and multi-racial or “other” (59.3%) than among adults who were White (73.5%).

**Apartment:** The prevalence of living in an apartment was significantly lower among adults who were White (9.8%) than among adults who were any other ages. The prevalence of living in an apartment was significantly higher among adults who were Black (31.4%) than among adults who were any other racial groups.

**Condominium or Townhouse:** The prevalence of living in a condominium or townhouse was significantly lower among adults who were White (2.5%) than among adults who were any other racial groups.

**Mobile Home or Trailer:** The prevalence of living in a mobile home or trailer was significantly lower among adults who were Black (4.9%) than among adults who were any other racial groups.

**Some Other Housing Arrangement:** The prevalence of living in some other housing arrangement was significantly lower among adults who were White (1.1%) than among adults who were multi-racial or “other” (5.6%). There was an unstable prevalence estimate among racial groups.

## Marital Status

**House:** The prevalence of living in a house was significantly lower among adults who were widowed, divorced, or separated (65.0%) or never married (60.4%) than among adults who were married or living with a partner (80.8%).

**Apartment:** The prevalence of living in an apartment was significantly lower among adults who were married or living with a partner (4.7%) than among adults with any other marital status. The prevalence was significantly higher among adults who were never married (21.0%) than among adults with any other marital statuses.

**Condominium or Townhouse:** There was no significant difference in the prevalence of living in a condominium or townhouse among marital statuses.

**Mobile Home or Trailer:** The prevalence of living in a mobile home or trailer was significantly lower among adults with any other marital statuses than among adults who were widowed, divorced, or separated (16.3%).

**Some Other Housing Arrangement:** The prevalence of living in some other housing arrangement was significantly lower among adults who were married or living with a partner (0.6%) or widowed, divorced, or separated (1.2%) than among adults who were never married (3.2%).

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

**House:** There were no DHHR, Bureau for Medical Services (BMS) regions with a significantly lower prevalence of living in a house compared to the state estimate. There was one DHHR, BMS region with a significantly higher prevalence compared to the state estimate (72.5%); region three (75.5%).

**Apartment:** There were two DHHR, BMS regions with a significantly lower prevalence of living in an apartment compared to the state estimate (10.6%); regions three (7.8%) and four (7.6%). There was one DHHR, BMS region with a significantly higher prevalence compared to the state estimate; region one (15.1%).

**Condominium or Townhouse:** There was no significant difference in the prevalence of living in a condominium or townhouse among DHHR, BMS regions compared to the state estimate. There was an unstable prevalence estimate among DHHR, BMS regions (see the [Appendix](#)).

**Mobile Home or Trailer:** There was one DHHR, BMS region with a significantly lower prevalence of living in a mobile home or trailer compared to the state estimate (12.9%); region one (9.5%). There was one DHHR, BMS region with a significantly higher prevalence compared to the state estimate; region four (18.1%).

**Some Other Housing Arrangement:** There was no significant difference in the prevalence of living in some other housing arrangement among DHHR, BMS regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

**House:** There were no DHHR, Bureau for Behavioral Health (BBH) regions with a significantly lower prevalence of living in a house compared to the state estimate. There was one DHHR, BBH region with a significantly higher prevalence compared to the state estimate (72.5%); region one (80.4%).

**Apartment:** There were two DHHR, BBH regions with a significantly lower prevalence of living in an apartment compared to the state estimate (10.6%); regions two (7.3%) and six (7.6%). There was one DHHR, BBH region with a significantly higher prevalence compared to the state estimate; region four (14.4%).

**Condominium or Townhouse:** There were no DHHR, BBH regions with a significantly lower prevalence of living in a condominium or townhouse compared to the state estimate. There was one DHHR, BBH region with a significantly higher prevalence compared to the state estimate (2.8%); region two (4.9%). There were unstable prevalence estimates among DHHR, BBH regions (see the [Appendix](#)).

**Mobile Home or Trailer:** There were two DHHR, BBH regions with a significantly lower prevalence of living in a mobile home or trailer compared to the state estimate (12.9%); regions one (5.9%) and two (10.1%). There was one DHHR, BBH region with a significantly higher prevalence compared to the state estimate; region six (16.9%).

**Some Other Housing Arrangement:** There was no significant difference in the prevalence of living in some other housing arrangement among DHHR, BBH regions compared to the state estimate. There were unstable prevalence estimates among DHHR, BBH regions (see the [Appendix](#)).

*DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

**House:** There was one DHHR, BBH, Ryan Brown Fund (RBF) region with a significantly lower prevalence of living in a house compared to the state estimate (72.5%); region five (68.0%). There was one DHHR, BBH, RBF region with a significantly higher prevalence compared to the state estimate; region one (80.4%).

**Apartment:** There were two DHHR, BBH, RBF regions with a significantly lower prevalence of living in an apartment compared to the state estimate (10.6%); regions two (7.3%) and six (8.0%). There was one DHHR, BBH, RBF region with a significantly higher prevalence compared to the state estimate; region four (14.4%).

**Condominium or Townhouse:** There was one DHHR, BBH, RBF region with a significantly lower prevalence of living in a condominium or townhouse compared to the state estimate (2.8%); region five (1.2%). There was one DHHR, BBH, RBF region with a significantly higher prevalence compared to the state estimate; region two (4.9%). There were unstable prevalence estimates among DHHR, BBH, RBF regions (see the [Appendix](#)).

**Mobile Home or Trailer:** There were two DHHR, BBH, RBF regions with a significantly lower prevalence of living in a mobile home or trailer compared to the state estimate (12.9%); regions one (5.9%) and two (10.1%). There were two DHHR, BBH, RBF regions with a significantly higher prevalence compared to the state estimate; regions five (18.8%) and six (17.1%).

**Some Other Housing Arrangement:** There was no significant difference in the prevalence of living in some other housing arrangement among DHHR, BBH, RBF regions compared to the state estimate. There were unstable prevalence estimates among DHHR, BBH, RBF regions (see the [Appendix](#)).

Table 13.1.1: Weighted Prevalence of the Type of Home by Demographic Characteristics: MATCH, 2021<sup>a</sup>

Characteristic	House		Apartment		Condominium or Townhouse	
	%	95% CI	%	95% CI	%	95% CI
<b>TOTAL</b>	<b>72.5</b>	<b>71.5-73.5</b>	<b>10.6</b>	<b>9.9-11.2</b>	<b>2.8</b>	<b>2.3-3.2</b>
<b>Sex</b>						
Male	72.6	71.0-74.3	10.5	9.4-11.5	2.8	2.1-3.5
Female	72.4	71.1-73.7	10.7	9.8-11.5	2.7	2.2-3.3
<b>Age</b>						
18-34	61.7	59.0-64.3	18.0	16.1-19.9	4.3	3.1-5.5
35-49	71.8	69.5-74.1	10.3	8.8-11.8	3.1	2.1-4.1
50-64	75.2	73.5-77.0	8.2	7.2-9.3	2.1	1.3-2.9
65+	81.2	79.6-82.8	6.0	5.1-6.9	1.7	1.1-2.3
<b>Education</b>						
Less than HS	54.7	51.3-58.2	15.8	13.5-18.2	U	U
HS/GED	69.0	67.4-70.6	11.4	10.4-12.5	2.1	1.5-2.7
Associate's or more	81.0	79.6-82.4	8.2	7.2-9.1	4.1	3.3-5.0
<b>Annual Family Income</b>						
\$15,000 or less	48.5	46.0-50.9	23.4	21.4-25.4	1.5	1.0-2.0
\$15,001-\$35,000	68.5	66.3-70.6	12.0	10.6-13.5	2.6	1.6-3.5
\$35,001-\$50,000	76.0	73.1-78.9	6.6	5.0-8.3	4.6	2.9-6.4
\$50,001-\$85,000	84.8	82.7-86.9	4.0	3.0-5.1	3.2	2.1-4.3
\$85,001+	89.2	87.3-91.2	4.1	3.0-5.2	3.0	2.0-4.1
<b>Race</b>						
White	73.5	72.4-74.5	9.8	9.1-10.5	2.5	2.0-2.9
Black	55.7	49.9-61.4	31.4	26.0-36.8	6.5	3.7-9.3
Multi-racial or "Other"	59.3	52.9-65.7	15.7	11.7-19.7	7.4	3.5-11.2
<b>Marital Status</b>						
Married/Living with a partner	80.8	79.5-82.0	4.7	4.0-5.3	2.2	1.6-2.8
Widowed/Divorced/Separated	65.0	62.9-67.0	14.4	12.9-15.8	3.1	2.2-4.0
Never married	60.4	57.7-63.1	21.0	18.9-23.1	3.6	2.5-4.8

Note. CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma; U = unstable prevalence estimate.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

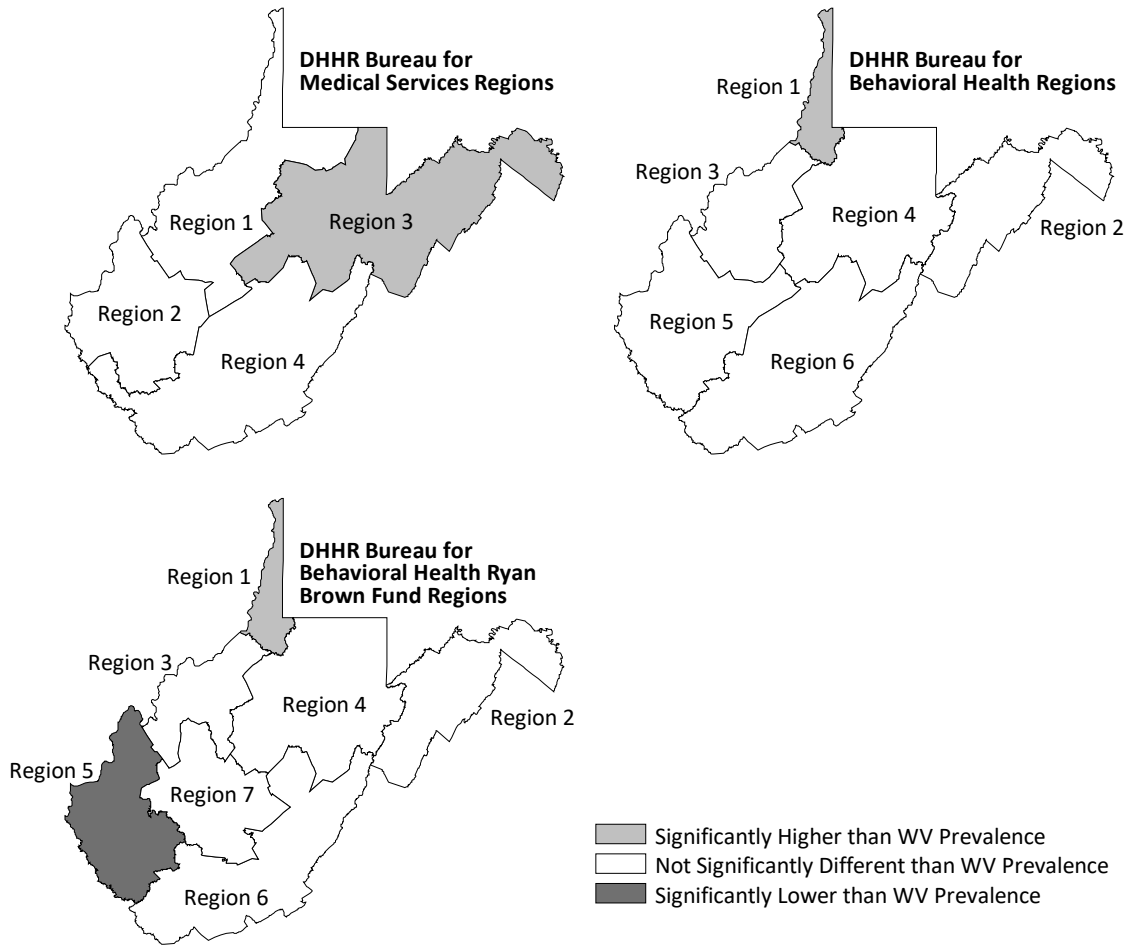
*Table 13.1.1: Weighted Prevalence of the Type of Home by Demographic Characteristics: MATCH, 2021 (continued)<sup>a</sup>*

Characteristic	Mobile Home or Trailer		Some Other Housing Arrangement	
	%	95% CI	%	95% CI
<b>TOTAL</b>	<b>12.9</b>	<b>12.1-13.6</b>	<b>1.3</b>	<b>1.0-1.6</b>
<b>Sex</b>				
Male	12.5	11.4-13.7	1.6	1.0-2.1
Female	13.2	12.2-14.2	1.0	0.7-1.3
<b>Age</b>				
18-34	13.6	11.8-15.4	2.4	1.4-3.4
35-49	13.3	11.7-14.9	1.5	0.9-2.1
50-64	13.8	12.4-15.1	0.7	0.4-0.9
65+	10.5	9.2-11.9	0.6	0.4-0.9
<b>Education</b>				
Less than HS	24.9	22.0-27.9	4.1	2.2-6.1
HS/GED	16.3	15.1-17.6	1.2	0.8-1.5
Associate's or more	6.1	5.2-6.9	0.6	0.4-0.9
<b>Annual Family Income</b>				
\$15,000 or less	23.1	21.0-25.1	3.5	2.6-4.5
\$15,001-\$35,000	16.1	14.5-17.7	0.9	0.4-1.3
\$35,001-\$50,000	12.3	10.2-14.4	U	U
\$50,001-\$85,000	7.6	6.1-9.2	U	U
\$85,001+	2.9	1.9-3.9	U	U
<b>Race</b>				
White	13.1	12.4-13.9	1.1	0.8-1.4
Black	4.9	2.6-7.1	U	U
Multi-racial or "Other"	12.0	7.8-16.3	5.6	2.5-8.7
<b>Marital Status</b>				
Married/Living with a partner	11.8	10.8-12.8	0.6	0.3-0.8
Widowed/Divorced/Separated	16.3	14.7-17.8	1.2	0.8-1.7
Never married	11.8	10.1-13.5	3.2	2.0-4.3

*Note.* CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma; U = unstable prevalence estimate.

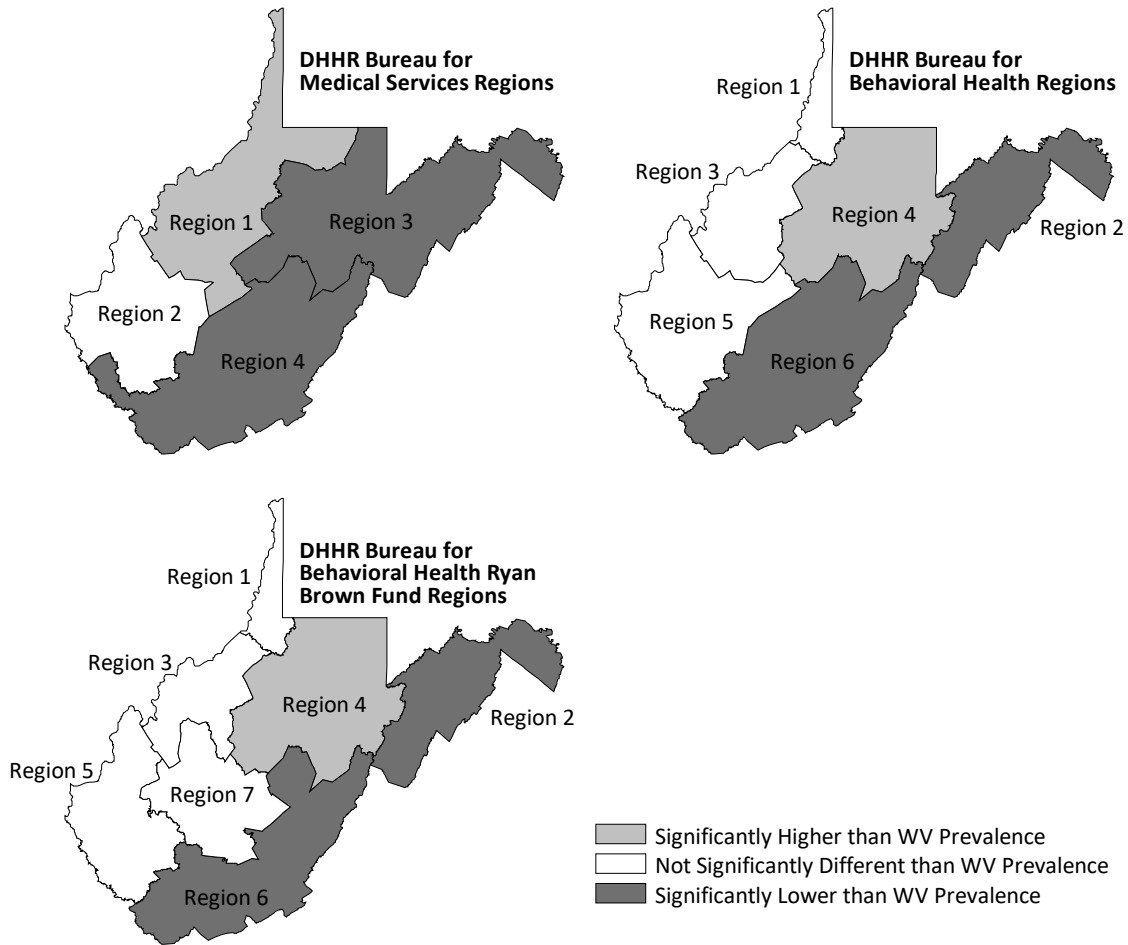
<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

Figure 13.1.1: Weighted Prevalence of Living in a House by Region: MATCH, 2021<sup>a,b</sup>



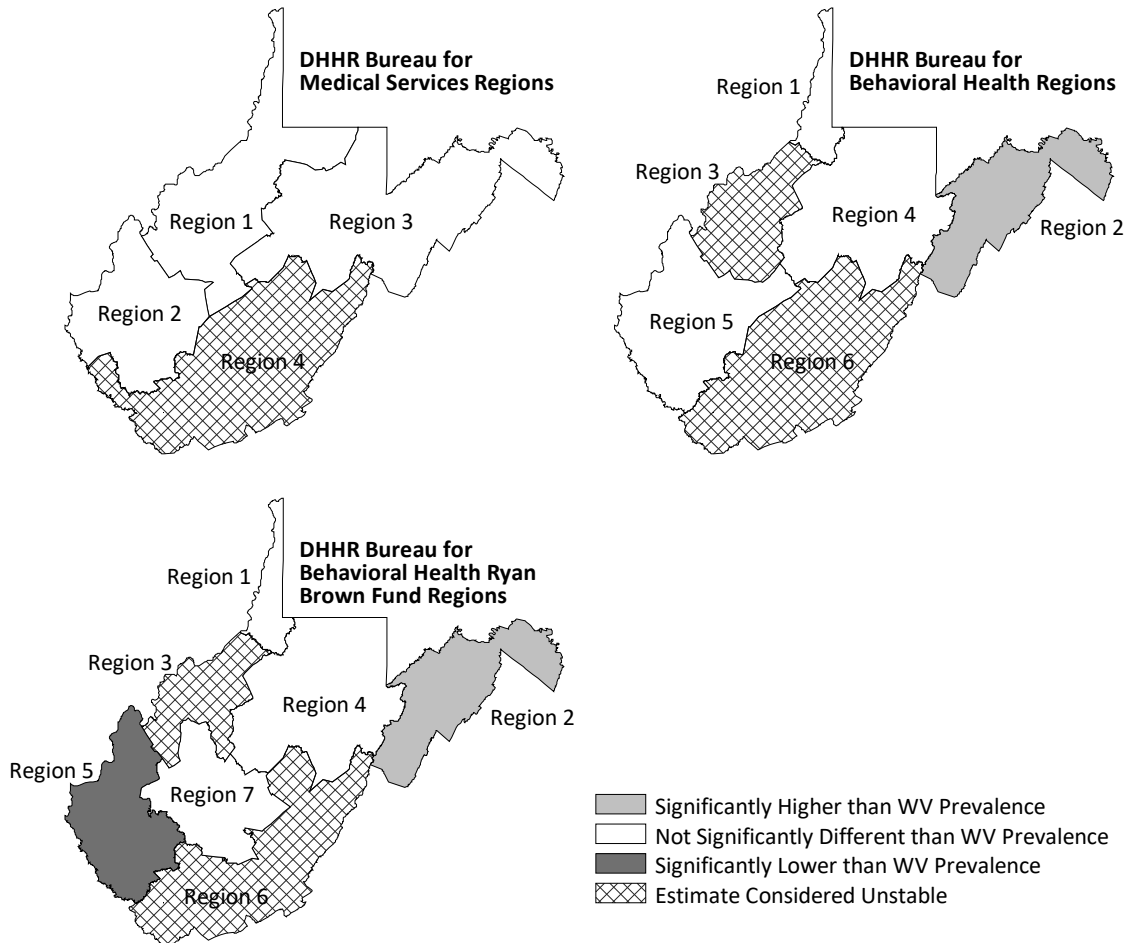
Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.  
<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.  
<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

Figure 13.1.2: Weighted Prevalence of Living in an Apartment by Region: MATCH, 2021<sup>a,b</sup>



Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.  
<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.  
<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

Figure 13.1.3: Weighted Prevalence of Living in a Condominium or Townhouse by Region: MATCH, 2021<sup>a,b</sup>



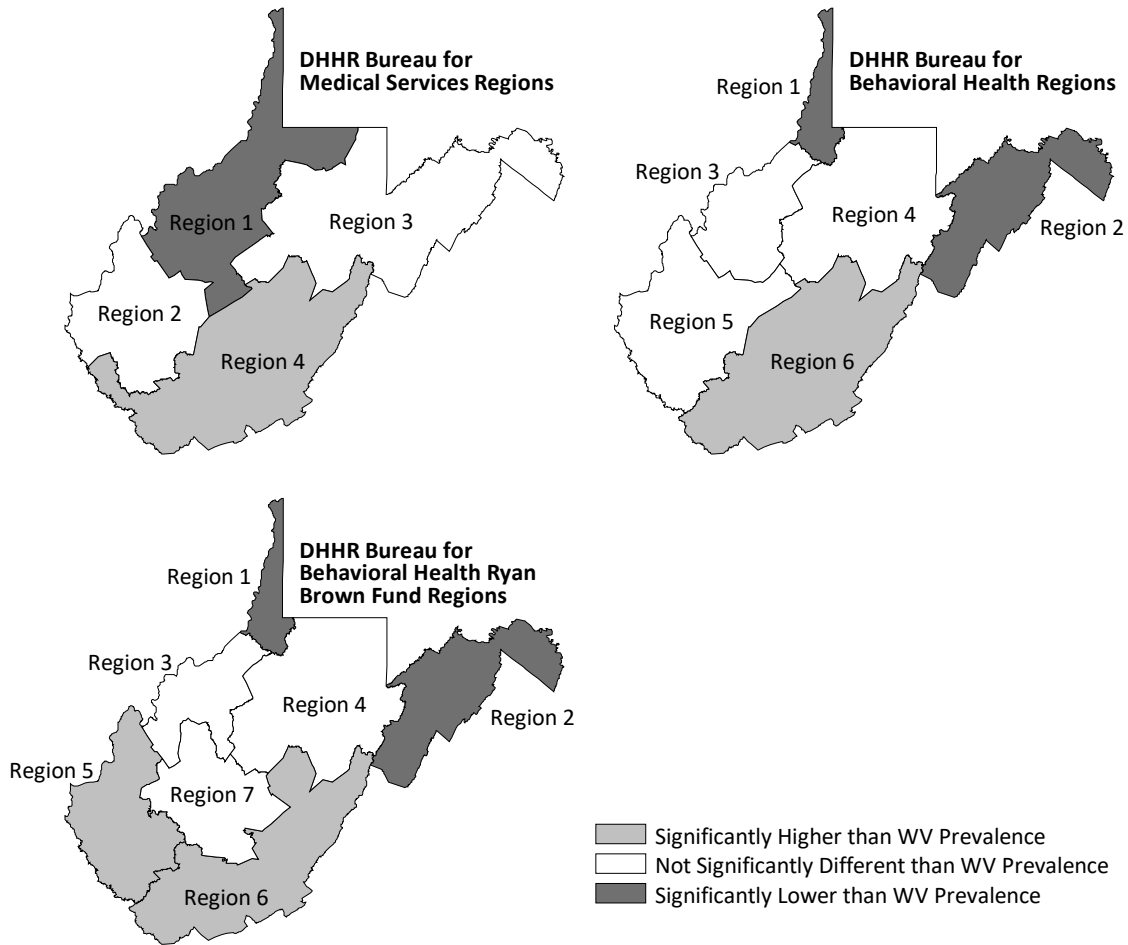
Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.



Figure 13.1.4: Weighted Prevalence of Living in a Mobile Home or Trailer by Region: MATCH, 2021<sup>a,b</sup>



Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.  
<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.  
<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

## 13.2 Physical Activity Resources

### Item

In the survey, respondents were presented with the question, “Which of the following do you have access to? Select all that apply.” The following responses were offered, and one or more could be selected:

- “Public gym (for example, one that requires a membership)”
- “Private gym (for example, one at an apartment complex or a workplace)”
- “Gym equipment at home (for example, weights, treadmill, stationary bike)”
- “Personal trainer”
- “Exercise buddy or exercise group”
- “Other exercise facility not listed”
- “None of the above”

The category ‘Public Gym’ is used for responding “Public gym (for example, one that requires a membership)” to the question. The category ‘Private Gym or Personal Trainer’ is used for responding “Private gym (for example, one at an apartment complex or a workplace)” or “Personal trainer” to the question. The category ‘Gym Equipment at Home’ is used for responding “Gym equipment at home (for example, weights, treadmill, stationary bike)” to the question. The category ‘Exercise Buddy or Group’ is used for responding “Exercise buddy or exercise group” to the question. The category ‘Other Exercise Facility’ is used for responding “Other exercise facility not listed” to the question.

### Prevalence

**Public Gym:** 27.5% (95% CI: 26.4-28.6)

**Private Gym or Personal Trainer:** 7.9% (95% CI: 7.2-8.6)

**Gym Equipment at Home:** 29.2% (95% CI: 28.1-30.4)

**Exercise Buddy or Group:** 11.2% (95% CI: 10.4-12.0)

**Other Exercise Facility:** 7.8% (95% CI: 7.1-8.5)

### Sex

**Public Gym:** There was no significant difference in the prevalence of access to a public gym between the sexes.

**Private Gym or Personal Trainer:** The prevalence of access to a private gym or personal trainer was significantly lower among adults who were female (6.2%) than among adults who were male (9.7%).

**Gym Equipment at Home:** There was no significant difference in the prevalence of access to gym equipment at home between the sexes.

**Exercise Buddy or Group:** The prevalence of access to an exercise buddy or group was significantly lower among adults who were male (9.9%) than among adults who were female (12.5%).

**Other Exercise Facility:** The prevalence of access to some other type of exercise facility was significantly lower among adults who were female (6.8%) than among adults who were male (8.9%).

## Age

**Public Gym:** The prevalence of access to a public gym was significantly lower among adults aged 50-64 (25.4%) than among adults aged 18-34 (30.6%).

**Private Gym or Personal Trainer:** The prevalence of access to a private gym or personal trainer was significantly lower among adults aged 65 or older (5.0%) than among any other adult age groups.

**Gym Equipment at Home:** The prevalence of access to gym equipment at home was significantly lower among adults aged 65 or older (25.9%) than among adults aged 35-49 (32.9%).

**Exercise Buddy or Group:** The prevalence of access to an exercise buddy or group was significantly lower among adults aged 65 or older (6.6%) than among any other adult age groups. The prevalence was significantly higher among adults aged 18-34 (17.7%) than among any other adult age groups.

**Other Exercise Facility:** There was no significant difference in the prevalence of access to some other type of exercise facility among adult age groups.

## Education

**Public Gym:** The prevalence of access to a public gym was significantly lower among adults with less than high school education (12.7%) than among adults with any other educational attainment levels. The prevalence was significantly higher among adults with an associate's or more education (32.4%) than among adults with any other educational attainment levels.

**Private Gym or Personal Trainer:** The prevalence of access to a private gym or personal trainer was significantly lower among adults with less than high school education (1.9%) than among adults with any other educational attainment levels. The prevalence was significantly higher among adults with an associate's or more education (10.8%) than among adults with any other educational attainment levels.

**Gym Equipment at Home:** The prevalence of access to gym equipment at home was significantly lower among adults with less than high school education (10.6%) than among adults with any other educational attainment levels. The prevalence was significantly higher among adults with an associate's or more education (38.7%) than among adults with any other educational attainment levels.

**Exercise Buddy or Group:** The prevalence of access to an exercise buddy or group was significantly lower among adults with less than high school education (3.8%) than among adults with any other educational attainment levels. The prevalence was significantly higher among adults with an associate's or more education (14.8%) than among adults with any other educational attainment levels.

**Other Exercise Facility:** The prevalence of access to some other type of exercise facility was significantly lower among adults with less than high school education (4.5%) than among adults with any other educational attainment levels. The prevalence was significantly higher among adults with an associate's or more education (9.7%) than among adults with any other educational attainment levels.

## Family Income

**Public Gym:** The prevalence of access to a public gym was significantly lower among adults with an annual family income of \$15,000 or less (16.5%) than among adults with any other annual family income levels.

**Private Gym or Personal Trainer:** The prevalence of access to a private gym or personal trainer was significantly lower among adults with any other annual family income levels than among adults with an annual family income of \$85,001 or more (14.9%).

**Gym Equipment at Home:** The prevalence of access to gym equipment at home was significantly lower among adults with an annual family income of \$15,000 or less (12.7%) than among adults with any other annual family income levels. The prevalence was significantly higher among adults with an annual family income of \$85,001 or more (48.1%) than among adults with any other annual family income levels.

**Exercise Buddy or Group:** The prevalence of access to an exercise buddy or group was significantly lower among adults with any other annual family income levels than among adults with an annual family income of \$85,001 or more (18.8%).

**Other Exercise Facility:** The prevalence of access to some other type of exercise facility was significantly lower among adults with an annual family income of \$15,000 or less (6.1%) than among adults with an annual family income of \$85,001 or more (9.7%).

## Race

**Public Gym:** The prevalence of access to a public gym was significantly lower among adults who were White (27.4%) than among adults who were Black (34.6%).

**Private Gym or Personal Trainer:** There was no significant difference in the prevalence of access to a private gym or personal trainer among racial groups.

**Gym Equipment at Home:** The prevalence of access to gym equipment at home was significantly lower among adults who were Black (23.1%) than among adults who were White (29.5%).

**Exercise Buddy or Group:** The prevalence of access to an exercise buddy or group was significantly lower among adults who were White (11.0%) and Black (9.3%) than among adults who were multi-racial or “other” (19.2%).

**Other Exercise Facility:** There was no significant difference in the prevalence of access to some other exercise facility among racial groups.

## Marital Status

**Public Gym:** The prevalence of access to a public gym was significantly lower among adults who were widowed, divorced, or separated (25.1%) than among adults who were never married (29.9%).

**Private Gym or Personal Trainer:** The prevalence of access to a private gym or personal trainer was significantly lower among adults who were widowed, divorced, or separated (6.2%) than among adults who were never married (9.2%).

**Gym Equipment at Home:** The prevalence of access to gym equipment at home was significantly lower among adults who were widowed, divorced, or separated (20.8%) than among adults with any other

marital statuses. The prevalence was significantly higher among adults who were married or living with a partner (34.0%) than among adults with any other marital statuses.

**Exercise Buddy or Group:** The prevalence of access to an exercise buddy or group was significantly lower among adults who were widowed, divorced, or separated (8.2%) than among adults with any marital statuses.

**Other Exercise Facility:** There was no significant difference in the prevalence of access to some other type of exercise facility among marital statuses.

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

**Public Gym:** There was no significant difference in the prevalence of access to a public gym among DHHR, Bureau for Medical Services (BMS) regions compared to the state estimate.

**Private Gym or Personal Trainer:** There was one DHHR, BMS region with a significantly lower prevalence of access to a private gym or personal trainer compared to the state estimate (7.9%); region four (5.5%). There were no DHHR, BMS regions with a significantly higher prevalence compared to the state estimate.

**Gym Equipment at Home:** There was one DHHR, BMS region with a significantly lower prevalence of access to gym equipment at home compared to the state estimate (29.2%); region four (23.7%). There were no DHHR, BMS regions with a significantly higher prevalence compared to the state estimate.

**Exercise Buddy or Group:** There was one DHHR, BMS region with a significantly lower prevalence of access to an exercise buddy or group compared to the state estimate (11.2%); region four (8.4%). There were no DHHR, BMS regions with a significantly higher prevalence compared to the state estimate.

**Other Exercise Facility:** There was no significant difference in the prevalence of having access to some other type of exercise facility among DHHR, BMS regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

**Public Gym:** There was no significant difference in the prevalence of access to a public gym among DHHR, Bureau for Behavioral Health (BBH) regions compared to the state estimate.

**Private Gym or Personal Trainer:** There was one DHHR, BBH region with a significantly lower prevalence of access to a private gym or personal trainer compared to the state estimate (7.9%); region six (5.5%). There was one DHHR, BBH region with a significantly higher prevalence compared to the state estimate; region four (10.1%).

**Gym Equipment at Home:** There was one DHHR, BBH region with a significantly lower prevalence of access to gym equipment at home compared to the state estimate (29.2%); region six (23.9%). There were no DHHR, BBH regions with a significantly higher prevalence compared to the state estimate.

**Exercise Buddy or Group:** There was one DHHR, BBH region with a significantly lower prevalence of access to an exercise buddy or group compared to the state estimate (11.2%); region six (8.5%). There were no DHHR, BBH regions with a significantly higher prevalence compared to the state estimate.

**Other Exercise Facility:** There was no significant difference in the prevalence of access to some other type of exercise facility among DHHR, BBH regions compared to the state estimate.

*DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

**Public Gym:** There was no significant difference in the prevalence of access to a public gym among DHHR, BBH, Ryan Brown Fund (RBF) regions compared to the state estimate.

**Private Gym or Personal Trainer:** There were no DHHR, BBH, RBF regions with a significantly lower prevalence of access to a private gym or personal trainer compared to the state estimate. There was one DHHR, BBH, RBF region with a significantly higher prevalence compared to the state estimate (7.9%); region four (10.1%).

**Gym Equipment at Home:** There was one DHHR, BBH, RBF region with a significantly lower prevalence of access to gym equipment at home compared to the state estimate (29.2%); region six (23.1%). There were no DHHR, BBH, RBF regions with a significantly higher prevalence compared to the state estimate.

**Exercise Buddy or Group:** There was one DHHR, BBH, RBF region with a significantly lower prevalence of access to an exercise buddy or group compared to the state estimate (11.2%); region six (7.2%). There were no DHHR, BBH, RBF regions with a significantly higher prevalence compared to the state estimate.

**Other Exercise Facility:** There was no significant difference in the prevalence of access to some other type of exercise facility among DHHR, BBH, RBF regions compared to the state estimate.

*Table 13.2.1: Weighted Prevalence of Access to Physical Activity Resources by Demographic Characteristics: MATCH, 2021<sup>a,b</sup>*

Characteristic	Public Gym		Private Gym or Personal Trainer		Gym Equipment at Home	
	%	95% CI	%	95% CI	%	95% CI
<b>TOTAL</b>	<b>27.5</b>	<b>26.4-28.6</b>	<b>7.9</b>	<b>7.2-8.6</b>	<b>29.2</b>	<b>28.1-30.4</b>
<b>Sex</b>						
Male	28.0	26.2-29.7	9.7	8.5-10.9	30.8	29.0-32.7
Female	27.1	25.7-28.4	6.2	5.4-6.9	27.7	26.3-29.1
<b>Age</b>						
18-34	30.6	28.1-33.2	10.2	8.6-11.9	29.9	27.2-32.5
35-49	27.4	24.9-29.8	9.2	7.5-11.0	32.9	30.3-35.4
50-64	25.4	23.5-27.4	7.2	6.0-8.5	28.7	26.7-30.8
65+	26.8	25.0-28.7	5.0	4.0-5.9	25.9	24.1-27.7
<b>Education</b>						
Less than HS	12.7	10.4-15.0	1.9	1.0-2.7	10.6	8.2-13.1
HS/GED	26.6	25.0-28.3	6.6	5.5-7.6	24.8	23.1-26.4
Associate's or more	32.4	30.6-34.1	10.8	9.7-12.0	38.7	36.9-40.5
<b>Annual Family Income</b>						
\$15,000 or less	16.5	14.7-18.4	3.2	2.4-4.0	12.7	11.0-14.3
\$15,001-\$35,000	24.1	22.0-26.1	5.2	4.0-6.3	21.0	19.1-23.0
\$35,001-\$50,000	31.7	28.5-34.8	7.5	5.7-9.3	27.9	25.0-30.8
\$50,001-\$85,000	34.1	31.3-36.8	10.5	8.6-12.4	41.1	38.2-44.0
\$85,001+	35.1	32.2-38.1	14.9	12.7-17.1	48.1	45.0-51.2
<b>Race</b>						
White	27.4	26.2-28.5	7.8	7.1-8.5	29.5	28.3-30.6
Black	34.6	28.6-40.6	9.1	5.7-12.6	23.1	18.5-27.6
Multi-racial or "Other"	26.2	19.9-32.6	9.3	6.0-12.6	27.2	21.2-33.2
<b>Marital Status</b>						
Married/Living with a partner	27.5	26.0-29.0	8.1	7.1-9.1	34.0	32.4-35.6
Widowed/Divorced/Separated	25.1	23.1-27.1	6.2	4.8-7.5	20.8	19.0-22.7
Never married	29.9	27.3-32.6	9.2	7.7-10.8	26.6	23.9-29.2

*Note.* CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>Respondents were presented with a list of statements about their access to physical activity resources and could select one or more of the items from the list. See "Item" section above.

Table 13.2.1: Weighted Prevalence of Access to Physical Activity Resources by Demographic Characteristics: MATCH, 2021 (continued)<sup>a,b</sup>

Characteristic	Exercise Buddy or Group		Other Exercise Facility	
	%	95% CI	%	95% CI
<b>TOTAL</b>	<b>11.2</b>	<b>10.4-12.0</b>	<b>7.8</b>	<b>7.1-8.5</b>
<b>Sex</b>				
Male	9.9	8.6-11.2	8.9	7.8-10.1
Female	12.5	11.5-13.5	6.8	6.0-7.6
<b>Age</b>				
18-34	17.7	15.5-19.9	9.7	7.9-11.5
35-49	12.0	10.3-13.7	6.7	5.3-8.1
50-64	9.1	7.8-10.4	6.9	5.7-8.1
65+	6.6	5.6-7.5	7.8	6.8-8.9
<b>Education</b>				
Less than HS	3.8	2.0-5.6	4.5	3.2-5.7
HS/GED	9.7	8.6-10.9	6.8	5.8-7.8
Associate's or more	14.8	13.4-16.1	9.7	8.5-10.8
<b>Annual Family Income</b>				
\$15,000 or less	6.3	5.1-7.5	6.1	4.9-7.3
\$15,001-\$35,000	8.9	7.4-10.3	6.4	5.3-7.5
\$35,001-\$50,000	10.1	8.2-12.1	9.0	7.0-11.1
\$50,001-\$85,000	13.7	11.7-15.6	8.9	7.3-10.6
\$85,001+	18.8	16.3-21.4	9.7	7.6-11.8
<b>Race</b>				
White	11.0	10.1-11.8	7.7	7.0-8.4
Black	9.3	6.2-12.4	6.9	4.4-9.3
Multi-racial or "Other"	19.2	13.1-25.2	10.7	6.9-14.5
<b>Marital Status</b>				
Married/Living with a partner	11.3	10.2-12.3	7.3	6.4-8.2
Widowed/Divorced/Separated	8.2	6.8-9.7	7.9	6.6-9.3
Never married	14.3	12.1-16.5	9.0	7.3-10.7

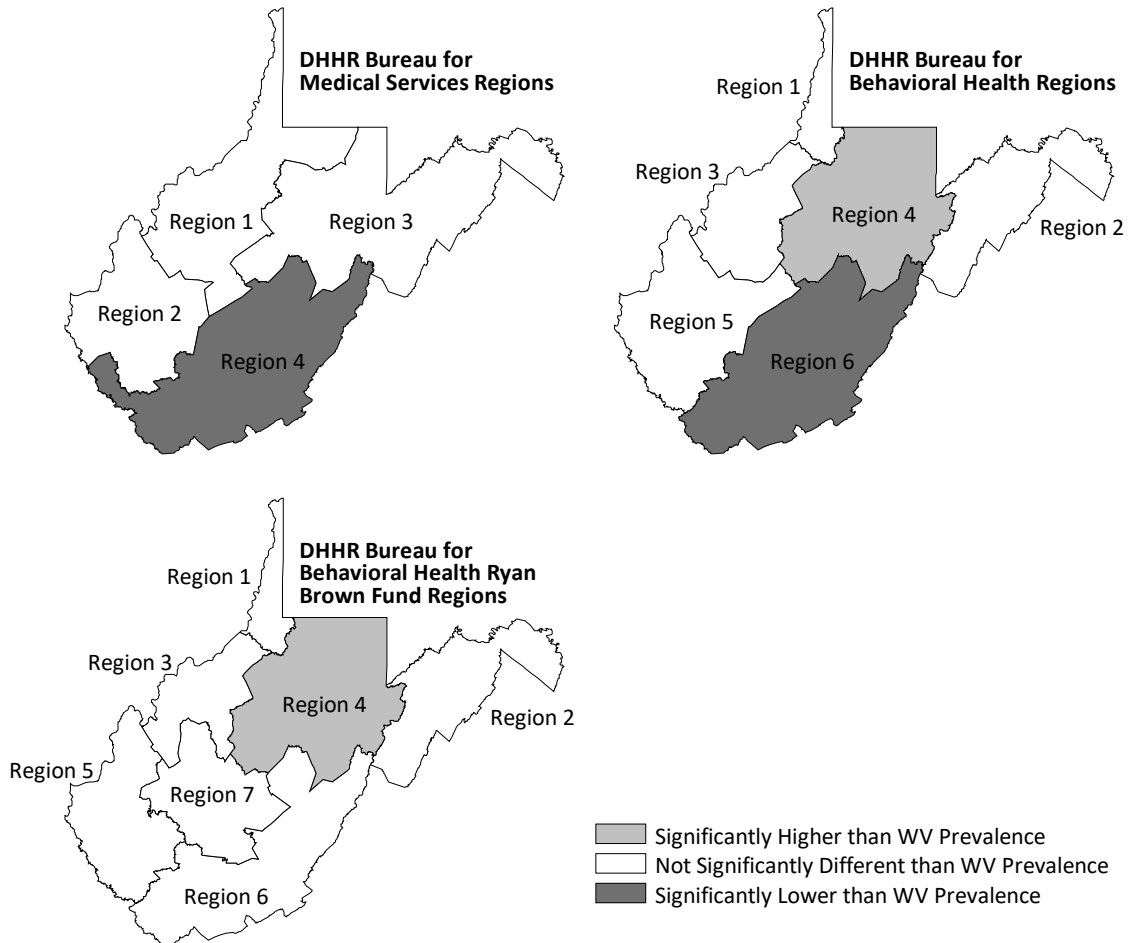
Note. CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>Respondents were presented with a list of statements about their access to physical activity resources and could select one or more of the items from the list. See "Item" section above.



Figure 13.2.1: Weighted Prevalence of Access to a Private Gym or Personal Trainer by Region: MATCH, 2021<sup>a,b</sup>

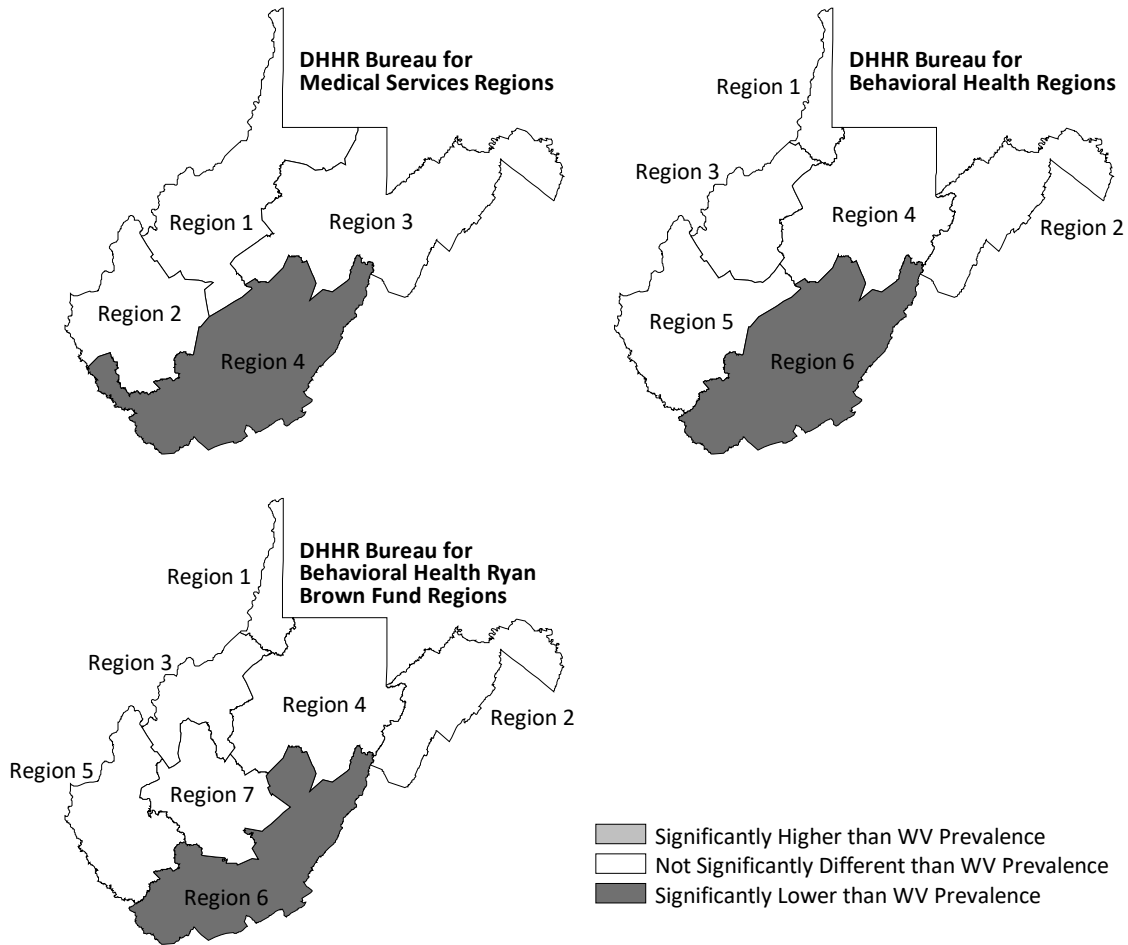


Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

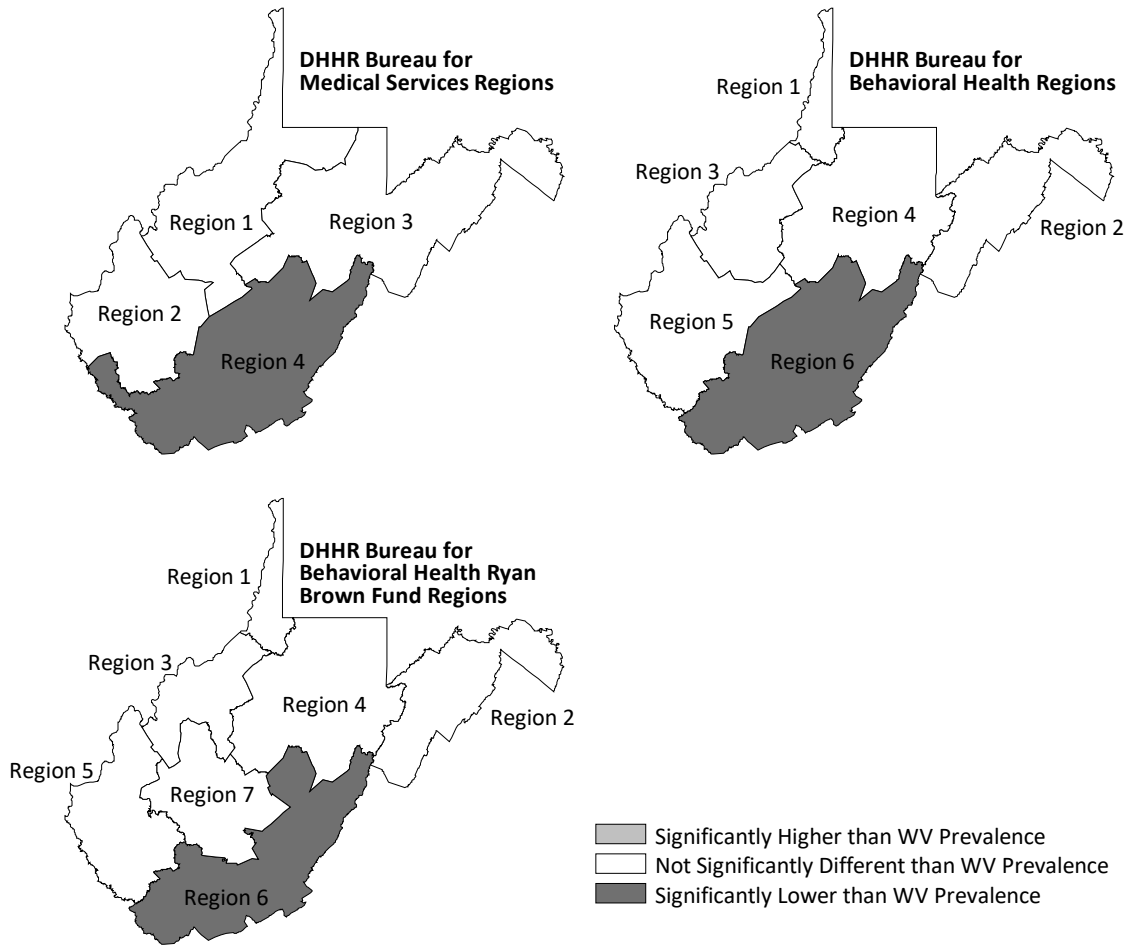
<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

Figure 13.2.2: Weighted Prevalence of Access to Gym Equipment at Home by Region: MATCH, 2021<sup>a,b</sup>



Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.  
<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.  
<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

Figure 13.2.3: Weighted Prevalence of Access to an Exercise Buddy or Group by Region: MATCH, 2021<sup>a,b</sup>



Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.  
<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.  
<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

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# Chapter 14: Social and Community Context

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## 14.1 Received Needed Emotional Support

### Items

In the survey, respondents were presented with the question, “How often do you get the emotional support you need?” The following responses were offered, and only one could be selected:

- “Always”
- “Usually”
- “Sometimes”
- “Rarely”
- “Never”

The category ‘Always/Usually’ is used for responding “Always” or “Usually” to the question. The category ‘Sometimes/Rarely’ is used for responding “Sometimes” or “Rarely” to the question. The category ‘Never’ is used for responding “Never” to the question.

### Prevalence

**Always/Usually:** 58.6% (95% CI: 57.4-59.8)

**Sometimes/Rarely:** 21.0% (95% CI: 20.0-22.0)

**Never:** 20.4% (95% CI: 19.4-21.4)

### Sex

**Always/Usually:** There was no significant difference in the prevalence of always or usually receiving the emotional support they need between the sexes.

**Sometimes/Rarely:** There was no significant difference in the prevalence of sometimes or rarely receiving the emotional support they need between the sexes.

**Never:** The prevalence of never receiving the emotional support they need was significantly higher among adults who were male (22.8%) than among adults who were female (18.1%).

### Age

**Always/Usually:** The prevalence of always or usually receiving the emotional support they need was significantly lower among any other adult age groups than among adults aged 65 or older (69.1%).

**Sometimes/Rarely:** The prevalence of sometimes or rarely receiving the emotional support they need was significantly lower among adults aged 65 or older (14.5%) than among any other adult age groups.

**Never:** The prevalence of never receiving the emotional support they need was significantly higher among any other adult age groups than among adults aged 65 or older (16.4%).

## Education

**Always/Usually:** The prevalence of always or usually receiving the emotional support they need was significantly lower among adults with less than high school education (51.5%) than among adults with any other educational attainment levels. The prevalence was significantly higher among adults with an associate's or more education (61.7%) than among adults with any other educational attainment levels.

**Sometimes/Rarely:** There was no significant difference in the prevalence of sometimes or rarely receiving the emotional support they need among educational attainment levels.

**Never:** The prevalence of never receiving the emotional support they need was significantly higher among adults with less than high school education (25.1%) or high school or Graduate Equivalency Diploma (GED) education (21.6%) than among adults with any other educational attainment levels.

## Family Income

**Always/Usually:** The prevalence of always or usually receiving the emotional support they need was significantly lower among adults with an annual family income of \$15,000 or less (45.6%) than among adults with any other annual family income levels.

**Sometimes/Rarely:** The prevalence of sometimes or rarely receiving the emotional support they need was significantly lower among adults with an annual family income of \$85,001 or more (17.4%) than among adults with an annual family income of \$15,000 or less (26.0%) or \$15,001-\$35,000 (22.4%).

**Never:** The prevalence of never receiving the emotional support they need was significantly higher among adults with an annual family income of \$15,000 or less (28.5%) than among adults with any other annual family income levels.

## Race

**Always/Usually:** The prevalence of always or usually receiving the emotional support they need was significantly lower among adults who were multi-racial or "other" (50.9%) than among adults who were White (59.0%).

**Sometimes/Rarely:** There was no significant difference in the prevalence of sometimes or rarely receiving the emotional support they need among racial groups.

**Never:** There was no significant difference in the prevalence of never receiving the emotional support they need among racial groups.

## Marital Status

**Always/Usually:** The prevalence of always or usually receiving the emotional support they need was significantly lower among adults who were never married (49.4%) than among adults with any other marital statuses. The prevalence was significantly higher among adults who were married or living with a partner (64.1%) than among adults with any other marital statuses.

**Sometimes/Rarely:** The prevalence of sometimes or rarely receiving the emotional support they need was significantly lower among adults who were married or living with a partner (18.9%) than among adults with any other marital status.

**Never:** The prevalence of never receiving the emotional support they need was significantly higher among adults who were widowed, divorced, or separated (23.1%) or never married (25.5%) than among adults who were married or living with a partner (17.0%).

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

**Always/Usually:** There was one DHHR, Bureau for Medical Services (BMS) region with a significantly lower prevalence of always or usually receiving the emotional support they need compared to the state estimate (58.6%); region two (54.2%). There were no DHHR, BMS regions with a significantly higher prevalence compared to the state estimate.

**Sometimes/Rarely:** There was no significant difference in the prevalence of sometimes or rarely receiving the emotional support they need among DHHR, BMS regions compared to the state estimate.

**Never:** There was no significant difference in the prevalence of never receiving the emotional support they need among DHHR, BMS regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

**Always/Usually:** There was one DHHR, Bureau for Behavioral Health (BBH) region with a significantly lower prevalence of always or usually receiving the emotional support they need compared to the state estimate (58.6%); region five (54.4%). There was one DHHR, BBH region with a significantly higher prevalence compared to the state estimate; region one (64.0%).

**Sometimes or Rarely:** There was no significant difference in the prevalence of sometimes or rarely receiving the emotional support they need among DHHR, BBH regions compared to the state estimate.

**Never:** There was one DHHR, BBH region with a significantly higher prevalence of never receiving the emotional support they need compared to the state estimate (20.4%); region five (23.6%). There were no DHHR, BBH regions with a significantly lower prevalence compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

**Always/Usually:** There was one DHHR, BBH, Ryan Brown Fund (RBF) region with a significantly lower prevalence of always or usually receiving the emotional support they need compared to the state estimate (58.6%); region five (53.6%). There was one DHHR, BBH, RBF region with a significantly higher prevalence compared to the state estimate; region one (64.0%).

**Sometimes/Rarely:** There was no significant difference in the prevalence of sometimes or rarely receiving the emotional support they need among DHHR, BBH, RBF regions compared to the state estimate.

**Never:** There was one DHHR, BBH, RBF region with a significantly higher prevalence of never receiving needed emotional support compared to the state estimate (20.4%); region five (24.8%). There were no DHHR, BBH, RBF regions with a significantly lower prevalence compared to the state estimate.

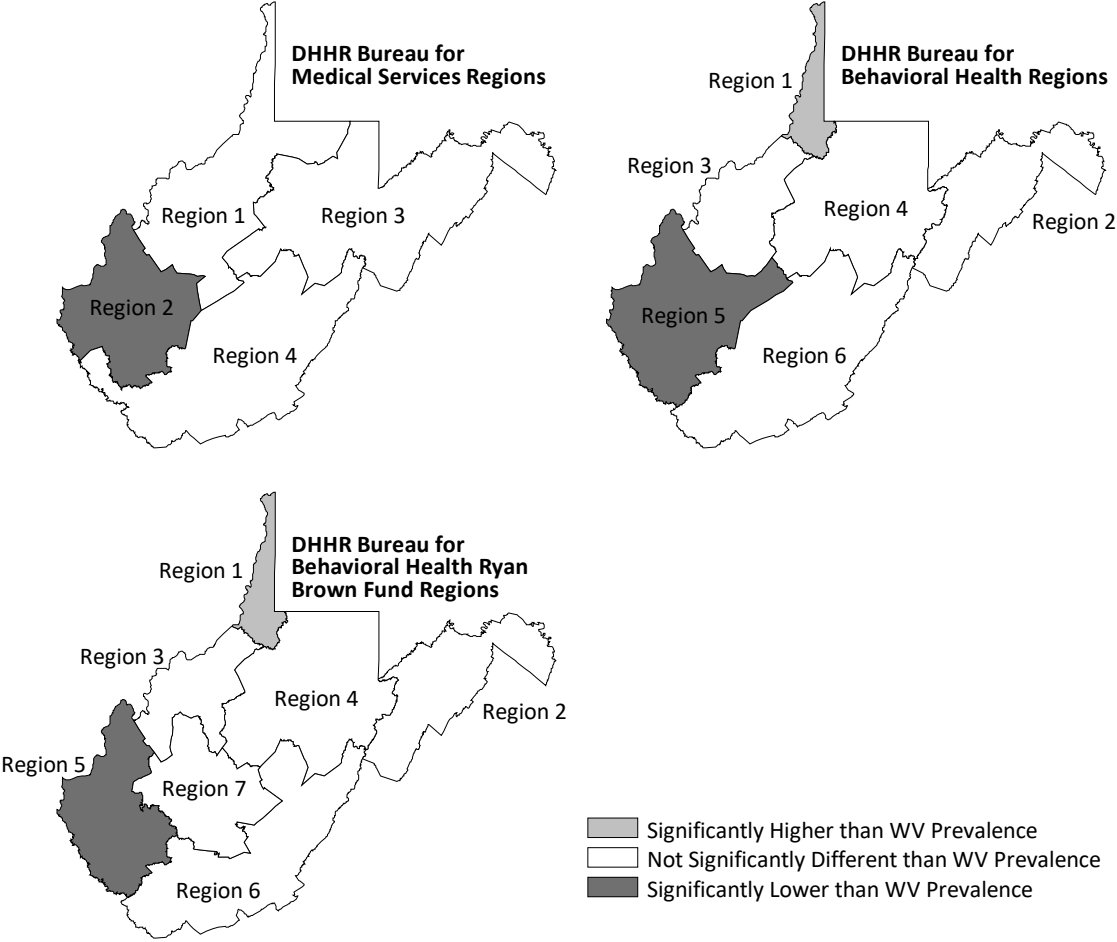
Table 14.1.1: Weighted Prevalence of Frequency of Receiving the Emotional Support They Need by Demographic Characteristics: MATCH, 2021<sup>a</sup>

Characteristic	Always/Usually		Sometimes/Rarely		Never	
	%	95% CI	%	95% CI	%	95% CI
<b>TOTAL</b>	<b>58.6</b>	<b>57.4-59.8</b>	<b>21.0</b>	<b>20.0-22.0</b>	<b>20.4</b>	<b>19.4-21.4</b>
<b>Sex</b>						
Male	57.5	55.6-59.4	19.7	18.1-21.3	22.8	21.2-24.4
Female	59.6	58.1-61.1	22.3	21.0-23.5	18.1	17.0-19.3
<b>Age</b>						
18-34	53.7	51.0-56.5	24.5	22.1-26.9	21.8	19.5-24.0
35-49	53.5	50.9-56.2	23.6	21.4-25.8	22.9	20.7-25.1
50-64	57.9	55.7-60.1	21.6	19.7-23.5	20.5	18.8-22.3
65+	69.1	67.2-71.1	14.5	13.0-15.9	16.4	14.9-17.9
<b>Education</b>						
Less than HS	51.5	47.9-55.0	23.4	20.2-26.6	25.1	22.1-28.2
HS/GED	57.5	55.7-59.2	20.9	19.4-22.4	21.6	20.2-23.1
Associate's or more	61.7	59.9-63.6	20.5	18.9-22.0	17.8	16.3-19.2
<b>Annual Family Income</b>						
\$15,000 or less	45.6	43.1-48.0	26.0	23.8-28.1	28.5	26.2-30.7
\$15,001-\$35,000	55.0	52.6-57.3	22.4	20.4-24.4	22.7	20.7-24.7
\$35,001-\$50,000	60.4	57.1-63.7	19.7	16.9-22.4	19.9	17.1-22.8
\$50,001-\$85,000	64.5	61.7-67.3	19.1	16.7-21.5	16.4	14.3-18.5
\$85,001+	69.7	66.8-72.6	17.4	14.9-19.9	12.9	10.9-15.0
<b>Race</b>						
White	59.0	57.8-60.3	20.8	19.8-21.9	20.2	19.1-21.2
Black	53.4	47.5-59.3	23.8	18.3-29.3	22.9	18.3-27.4
Multi-racial or "Other"	50.9	44.3-57.6	24.0	18.4-29.5	25.1	19.3-30.9
<b>Marital Status</b>						
Married/Living with a partner	64.1	62.5-65.7	18.9	17.6-20.2	17.0	15.7-18.2
Widowed/Divorced/Separated	54.7	52.5-56.9	22.2	20.3-24.0	23.1	21.3-25.0
Never married	49.4	46.6-52.2	25.0	22.5-27.6	25.5	23.1-28.0

Note. CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

Figure 14.1.1: Weighted Prevalence of Always or Usually Receiving the Emotional Support They Need by Region: MATCH, 2021<sup>a,b</sup>



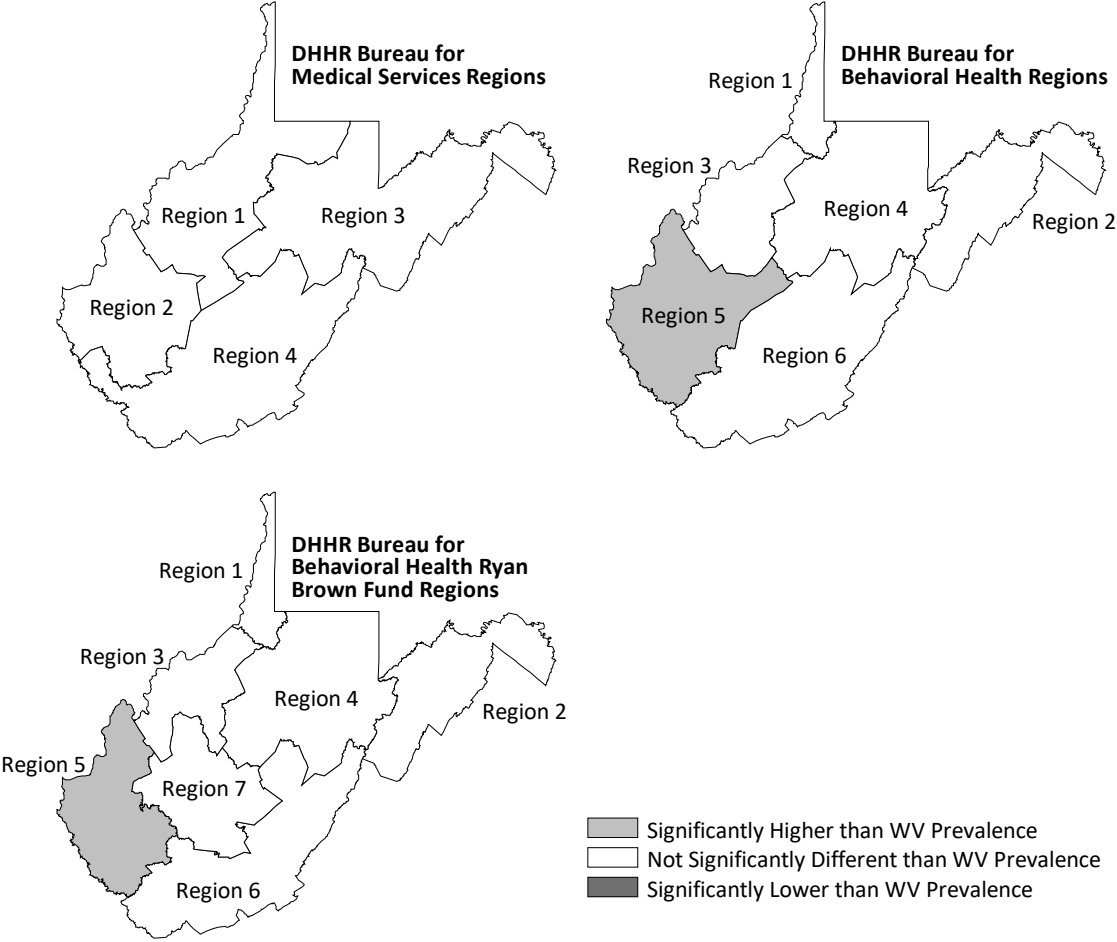
Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.



Figure 14.1.2: Weighted Prevalence of Never Receiving the Emotional Support They Need by Region: MATCH, 2021<sup>a,b</sup>



Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

## Section 4

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# CORONAVIRUS DISEASE 2019 (COVID-19)

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# Chapter 15: Coronavirus Disease 2019 (COVID-19)

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## 15.1 COVID-19 Impact on Household Employment

### Item

In the survey, respondents were presented with the question, “Have you or someone in your household experienced any of the following because of COVID-19?” Respondents could select “Yes” or “No” for each of the following:

- “Been laid off temporarily”
- “Been laid off permanently”
- “Did less temporary, contract, or freelance work”
- “Been scheduled for fewer hours or had less demand for your work”
- “Taken unpaid time off”
- “Had your wages or salary reduced”
- “Had unpaid or delayed wages”
- “Lost employer-paid benefits such as health insurance”
- “Quit a job”
- “Been fired from a job”
- “Been unable to pay a bill”
- “Received unemployment benefits”

The category ‘COVID-19 impact on household employment’ was used for those responding “Yes” to any of the 12 options presented above.

### Prevalence

**West Virginia:** 41.2% (95% CI: 40.0-42.4)

### Sex

**Male:** 40.3% (95% CI: 38.4-42.2)

**Female:** 42.0% (95% CI: 40.5-43.4)

There was no significant difference in the prevalence of COVID-19 impact on household employment between the sexes.

## Age

The prevalence of COVID-19 impact on household employment was significantly higher among adults aged 18-34 (58.5%) than among any other adult age groups. The prevalence was significantly lower among adults aged 65 or older (14.6%) than among any other adult age groups.

## Education

There was no significant difference in the prevalence of the COVID-19 impact on household employment among educational attainment levels.

## Family Income

The prevalence of COVID-19 impact on household employment was significantly higher among adults with an annual family income of \$15,000 or less (47.0%) and \$15,001-\$35,000 (47.1%) than among adults with any other annual family income levels.

## Race

The prevalence of COVID-19 impact on household employment was significantly higher among adults who were Black (47.6%) and multi-racial or “other” (58.4%) than among adults who were White (40.3%).

## Marital Status

The prevalence of COVID-19 impact on household employment was significantly higher among adults who were never married (49.0%) than among adults with any other marital statuses. The prevalence was significantly lower among adults who were widowed, divorced, or separated (32.6%) than among adults with any other marital statuses.

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There was no significant difference in the prevalence of COVID-19 impact on household employment among DHHR, Bureau for Medical Services (BMS) regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There was no significant difference in the prevalence of COVID-19 impact on household employment among DHHR, Bureau for Behavioral Health (BBH) regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There was no significant difference in the prevalence of COVID-19 impact on household employment among DHHR, BBH, Ryan Brown Fund (RBF) regions compared to the state estimate.

*Table 15.1.1: Weighted Prevalence of Coronavirus Disease 2019 (COVID-19) Impact on Household Employment by Demographic Characteristics: MATCH, 2021<sup>a</sup>*

Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>268,627</b>	<b>40.3</b>	<b>38.4-42.2</b>	<b>294,521</b>	<b>42.0</b>	<b>40.5-43.4</b>	<b>563,147</b>	<b>41.2</b>	<b>40.0-42.4</b>
<b>Age</b>									
18-34	99,224	56.4	52.0-60.8	103,477	60.7	57.4-63.9	202,702	58.5	55.7-61.3
35-49	74,115	49.6	45.3-53.8	84,637	54.5	51.3-57.7	158,751	52.1	49.4-54.7
50-64	71,470	38.6	35.2-41.9	79,684	41.2	38.3-44.1	151,154	39.9	37.7-42.1
65+	22,204	14.7	12.3-17.1	25,808	14.5	12.6-16.3	48,012	14.6	13.1-16.1
<b>Education</b>									
Less than HS	35,746	40.0	34.6-45.3	27,434	37.5	33.1-42.0	63,180	38.9	35.3-42.4
HS/GED	126,472	42.2	39.3-45.0	123,187	42.2	40.1-44.4	249,659	42.2	40.4-44.0
Associate's or more	104,761	38.3	35.3-41.3	142,690	42.6	40.4-44.9	247,451	40.7	38.8-42.5
<b>Annual Family Income</b>									
\$15,000 or less	63,773	49.1	45.1-53.1	68,324	45.2	42.2-48.3	132,096	47.0	44.6-49.5
\$15,001-\$35,000	73,967	47.6	43.7-51.6	87,444	46.6	43.8-49.3	161,412	47.1	44.7-49.4
\$35,001-\$50,000	34,734	38.2	33.1-43.2	37,033	40.4	36.3-44.5	71,767	39.3	36.0-42.5
\$50,001-\$85,000	43,826	35.2	30.8-39.5	53,947	41.7	38.0-45.4	97,772	38.5	35.6-41.4
\$85,001+	46,376	32.3	27.9-36.7	42,693	36.9	32.8-40.9	89,069	34.4	31.3-37.4
<b>Race</b>									
White	239,299	38.8	36.8-40.8	276,367	41.7	40.1-43.2	515,666	40.3	39.0-41.5
Black	9,450	53.8	44.5-63.0	6,864	41.1	34.5-47.6	16,314	47.6	41.7-53.5
Multi-racial or "Other"	19,146	63.2	54.4-72.1	10,877	51.4	43.0-59.8	30,023	58.4	51.9-64.8
<b>Marital Status</b>									
Married/Living with a partner	139,543	38.5	35.9-41.0	170,794	44.9	42.9-47.0	310,337	41.8	40.1-43.4
Widowed/Divorced/Separated	43,090	34.4	30.5-38.3	60,682	31.4	29.0-33.9	103,772	32.6	30.5-34.7
Never married	85,080	48.6	44.5-52.7	62,304	49.4	45.7-53.2	147,384	49.0	46.1-51.8

*Note.* CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

## 15.2 Household Financial Action to COVID-19

### Item

In the survey, respondents were presented with the question, “Because of the COVID-19 impact, have you or your household done any of the following?” Respondents could select “Yes” or “No” for each of the following:

- “Use up all or most of your savings”
- “Cut back your spending on food”
- “Increased your credit card debt”
- “Took money out of retirement, college, or long-term savings accounts”
- “Borrowed money from family or friends”
- “Pawned or sold possessions”
- “Received unemployment benefits”

The category “household financial action to COVID-19” was used for those responding “Yes” to any of the seven options above.

### Prevalence

**West Virginia:** 54.8% (95% CI: 53.6-56.0)

### Sex

**Male:** 52.6% (95% CI: 50.7-54.5)

**Female:** 56.9% (95% CI: 55.4-58.3)

The prevalence of household financial action to COVID-19 was significantly higher among adults who were female (56.9%) than among adults who were male (52.6%).

### Age

The prevalence of household financial action to COVID-19 was significantly higher among adults aged 18-34 (66.4%) and 35-49 (65.3%) than among any other adult age groups. The prevalence was significantly lower among adults aged 65 or older (33.1%) than among any other adult age groups.

### Education

The prevalence of household financial action to COVID-19 was significantly higher among adults with less than high school education (62.3%) or high school or Graduate Equivalency Diploma (GED) education (57.7%) than among adults with an associate’s or more education (49.8%).

### Family Income

The prevalence of household financial action to COVID-19 was significantly higher among adults with an annual family income of \$15,000 or less (69.1%) than among adults with any other annual family income

levels. The prevalence was significantly lower among adults with an annual family income of \$85,001 or more (35.9%) than among adults with any other annual family income levels.

## Race

The prevalence of household financial action to COVID-19 was significantly higher among adults who were Black (69.4%) and multi-racial or “other” (70.6%) than among adults who were White (53.8%).

## Marital Status

The prevalence of household financial action to COVID-19 was significantly higher among adults who were never married (61.0%) than among adults with any other marital statuses.

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There was no significant difference in the prevalence of household financial action to COVID-19 among DHHR, Bureau for Medical Services (BMS) regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There was no significant difference in the prevalence of household financial action to COVID-19 among DHHR, Bureau for Behavioral Health (BBH) regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There was no significant difference in the prevalence of household financial action to COVID-19 among DHHR, BBH, Ryan Brown Fund (RBF) regions compared to the state estimate.

Table 15.2.2: Weighted Prevalence of Household Financial Action to Coronavirus Disease 2019 (COVID-19) by Demographic Characteristics: MATCH, 2021<sup>a</sup>

Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>353,195</b>	<b>52.6</b>	<b>50.7-54.5</b>	<b>401,258</b>	<b>56.9</b>	<b>55.4-58.3</b>	<b>754,453</b>	<b>54.8</b>	<b>53.6-56.0</b>
<b>Age</b>									
18-34	109,687	62.2	57.9-66.5	120,163	70.7	67.6-73.8	229,850	66.4	63.7-69.0
35-49	92,304	61.5	57.3-65.7	106,951	68.9	65.9-71.9	199,254	65.3	62.7-67.8
50-64	99,984	53.7	50.3-57.0	110,371	56.6	53.7-59.5	210,355	55.2	53.0-57.4
65+	48,856	31.8	28.8-34.8	62,080	34.2	31.6-36.7	110,937	33.1	31.1-35.0
<b>Education</b>									
Less than HS	58,945	64.5	59.6-69.4	44,283	59.5	55.0-64.0	103,227	62.3	58.9-65.7
HS/GED	166,845	55.4	52.6-58.2	176,598	60.0	57.9-62.2	343,443	57.7	55.9-59.4
Associate's or more	125,136	45.6	42.5-48.6	178,495	53.4	51.1-55.7	303,630	49.8	48.0-51.7
<b>Annual Family Income</b>									
\$15,000 or less	92,927	70.7	67.2-74.1	103,269	67.7	64.9-70.5	196,196	69.1	66.9-71.3
\$15,001-\$35,000	94,779	60.6	56.8-64.3	126,905	66.9	64.3-69.4	221,684	64.0	61.8-66.2
\$35,001-\$50,000	46,635	51.3	46.1-56.5	49,767	54.3	50.1-58.4	96,402	52.8	49.5-56.1
\$50,001-\$85,000	60,641	48.4	43.9-52.9	68,897	53.2	49.5-56.9	129,538	50.9	48.0-53.8
\$85,001+	49,993	34.6	30.2-39.1	43,518	37.6	33.6-41.6	93,511	35.9	32.9-39.0
<b>Race</b>									
White	319,370	51.4	49.4-53.4	373,195	56.0	54.5-57.5	692,565	53.8	52.5-55.0
Black	12,587	71.2	63.8-78.6	11,559	67.6	60.4-74.8	24,146	69.4	64.2-74.6
Multi-racial or "Other"	20,366	67.1	58.5-75.7	15,912	75.5	68.2-82.9	36,278	70.6	64.7-76.4
<b>Marital Status</b>									
Married/Living with a partner	180,224	49.4	46.8-52.0	214,951	56.3	54.2-58.4	395,175	52.9	51.3-54.6
Widowed/Divorced/Separated	69,408	54.4	50.5-58.3	103,591	53.3	50.7-55.9	172,999	53.7	51.5-55.9
Never married	102,701	58.5	54.5-62.4	81,592	64.5	60.9-68.1	184,293	61.0	58.2-63.8

Note. CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.



## 15.3 Long-Term Emotional or Mental Health Effects Related to Having COVID-19

### Item

In the survey, respondents were presented with the question, “Have you experienced any long-term emotional or mental health effects that you think might be related to you having COVID-19?” The following responses were offered:

- “I have not had COVID-19”
- “Yes”
- “No”

The category ‘long-term emotional or mental health effects related to having COVID-19’ is used for responding “Yes” to the question. *The prevalence estimates excluded adults responding, “I have not had COVID-19” to the question.*

### Prevalence

**West Virginia:** 21.0% (95% CI: 19.4-22.6)

### Sex

**Male:** 18.5% (95% CI: 16.0-20.9)

**Female:** 23.5% (95% CI: 21.4-25.6)

The prevalence of long-term emotional or mental health effects related to having COVID-19 was significantly higher among adults who were female (23.5%) than among adults who were male (18.5%).

### Age

The prevalence of long-term emotional or mental health effects related to having COVID-19 was significantly higher among any other adult age groups than among adults aged 65 or older (11.4%).

### Education

There was no significant difference in the prevalence of long-term emotional or mental health effects related to having COVID-19 among educational attainment levels.

### Family Income

The prevalence of long-term emotional or mental health effects related to having COVID-19 was significantly higher among adults with an annual family income of \$15,000 or less (29.2%) and \$15,001-\$35,000 (24.5%) than among adults with an annual family income of \$85,001 or more (13.6%).

## Race

The prevalence of long-term emotional or mental health effects related to having COVID-19 was significantly higher among adults who were multi-racial or “other” (36.0%) than among adults who were White (20.3%).

## Marital Status

There was no significant difference in the prevalence of long-term emotional or mental health effects related to having COVID-19 among marital statuses.

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There was no significant difference in the prevalence of long-term emotional or mental health effects related to having COVID-19 among DHHR, Bureau for Medical Services (BMS) regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There was no significant difference in the prevalence of long-term emotional or mental health effects related to having COVID-19 among DHHR, Bureau for Behavioral Health (BBH) regions compared to the state estimate.

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There was no significant difference in the prevalence of long-term emotional or mental health effects related to having COVID-19 among DHHR, BBH, Ryan Brown Fund (RBF) regions compared to the state estimate.

Table 15.3.3: Weighted Prevalence of Long-Term Emotional or Mental Health Effects Related to Having Coronavirus Disease 2019 (COVID-19) by Demographic Characteristics: MATCH, 2021<sup>a,b</sup>

Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>44,674</b>	<b>18.5</b>	<b>16.0-20.9</b>	<b>57,497</b>	<b>23.5</b>	<b>21.4-25.6</b>	<b>102,171</b>	<b>21.0</b>	<b>19.4-22.6</b>
<b>Age</b>									
18-34	12,941	21.3	15.4-27.1	22,547	33.9	29.0-38.8	35,488	27.9	24.0-31.7
35-49	12,481	22.3	16.7-27.9	16,343	27.8	23.4-32.2	28,824	25.1	21.6-28.7
50-64	15,079	20.1	15.8-24.3	11,102	17.6	14.1-21.1	26,181	18.9	16.1-21.8
65+	4,173	8.8	6.0-11.5	7,378	13.7	10.0-17.4	11,551	11.4	9.0-13.8
<b>Education</b>									
Less than HS	7,233	19.7	13.3-26.0	5,675	19.7	14.4-25.0	12,908	19.7	15.5-24.0
HS/GED	19,279	17.9	14.4-21.4	26,714	24.7	21.6-27.9	45,993	21.3	18.9-23.7
Associate's or more	17,858	18.5	14.5-22.5	25,034	23.6	20.2-26.9	42,892	21.2	18.6-23.8
<b>Annual Family Income</b>									
\$15,000 or less	12,576	26.5	20.5-32.5	17,564	31.6	26.8-36.4	30,140	29.2	25.4-33.0
\$15,001-\$35,000	11,045	22.2	16.8-27.6	16,706	26.3	22.1-30.5	27,751	24.5	21.1-27.8
\$35,001-\$50,000	5,759	15.5	9.9-21.1	6,940	21.7	16.1-27.3	12,699	18.4	14.4-22.4
\$50,001-\$85,000	8,116	16.8	11.0-22.5	10,052	22.5	17.4-27.6	18,168	19.5	15.6-23.4
\$85,001+	6,499	12.9	7.8-18.0	5,554	14.4	10.1-18.7	12,053	13.6	10.1-17.0
<b>Race</b>									
White	38,971	17.5	15.0-20.0	53,070	23.1	20.9-25.3	92,041	20.3	18.7-22.0
Black	1,681	23.4	12.4-34.4	1,383	21.6	13.6-29.6	3,064	22.5	15.6-29.4
Multi-racial or "Other"	3,966	34.4	19.5-49.3	2,945	38.3	25.6-50.9	6,912	36.0	25.7-46.2
<b>Marital Status</b>									
Married/Living with a partner	21,937	16.2	13.0-19.4	29,668	22.0	19.2-24.8	51,605	19.1	17.0-21.2
Widowed/Divorced/Separated	11,390	24.3	18.9-29.8	13,605	22.1	18.3-25.8	24,995	23.0	19.9-26.2
Never married	11,346	19.6	14.3-24.9	14,016	29.9	24.2-35.6	25,362	24.2	20.3-28.2

Note. CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>The prevalence estimates excluded adults responding, "I have not had COVID-19" to the question, "Have you experienced any long-term emotional or mental health effects that you think might be related to you having COVID-19?"

## 15.4 Long-Term Emotional or Mental Health Effects Related to a Family Member or Friend Having COVID-19

### Item

In the survey, respondents were presented with the question, “Have you experienced any long-term emotional or mental health effects that you think might be related to a family member or friend having COVID-19?” The following responses were offered:

- “I am not aware of any family members or friends who have had COVID-19”
- “Yes”
- “No”

The category ‘long-term emotional or mental health effects related to a family member or friend having COVID-19’ is used for responding “Yes” to the question. *The prevalence estimates excluded adults who responded, “I am not aware of any family members or friends who have had COVID-19” to this question.*

### Prevalence

**West Virginia:** 19.7% (95% CI: 18.6-20.8)

### Sex

**Male:** 16.9% (95% CI: 15.2-18.5)

**Female:** 22.3% (95% CI: 20.9-23.8)

The prevalence of long-term emotional or mental health effects related to a family member or friend having COVID-19 was significantly higher among adults who were female (22.3%) than among adults who were male (16.9%).

### Age

The prevalence of long-term emotional or mental health effects related to a family member or friend having COVID-19 was significantly higher among any other adult age groups than among adults aged 65 or older (13.0%).

### Education

The prevalence of long-term emotional or mental health effects related to a family member or friend having COVID-19 was significantly higher among adults with less than high school education (24.8%) than among adults with an associate’s or more education (18.0%).

### Family Income

The prevalence of long-term emotional or mental health effects related to a family member or friend having COVID-19 was significantly higher among adults with an annual family income of \$15,000 or less (30.0%) than among adults with any other annual family income levels. The prevalence was significantly

lower among adults with an annual family income of \$85,001 or more (11.9%) than among adults with any other annual family income levels.

## Race

The prevalence of long-term emotional or mental health effects related to a family member or friend having COVID-19 was significantly higher among adults who were multi-racial or “other” (29.6%) than among adults who were White (19.2%).

## Marital Status

The prevalence of long-term emotional or mental health effects related to a family member or friend having COVID-19 was significantly higher among adults who were never married (22.6%) than among adults who were married or living with a partner (18.0%).

## West Virginia Department of Health and Human Resources (DHHR) Regions

### *DHHR, Bureau for Medical Services (BMS) Regions*

There was one DHHR, Bureau for Medical Services (BMS) region with a significantly higher prevalence of long-term emotional or mental health effects related to a family member or friend having COVID-19 compared to the state estimate (19.7%); region four (24.0%). There was one DHHR, BMS region with a significantly lower prevalence compared to the state estimate; region three (15.2%).

### *DHHR, Bureau for Behavioral Health (BBH) Regions*

There was one DHHR, Bureau for Behavioral Health (BBH) region with a significantly higher prevalence of long-term emotional or mental health effects related to a family member or friend having COVID-19 compared to the state estimate (19.7%); region six (23.8%). There was one DHHR, BBH region with a significantly lower prevalence compared to the state estimate; region two (14.0%).

### *DHHR, Bureau for Behavioral Health (BBH), Ryan Brown Fund (RBF) Regions*

There were no DHHR, BBH, Ryan Brown Fund (RBF) regions with a significantly higher prevalence of long-term emotional or mental health effects related to a family member or friend having COVID-19 compared to the state estimate. There was one DHHR, BBH, RBF region with a significantly lower prevalence compared to the state estimate (19.7%); region two (14.0%).

*Table 15.4.4: Weighted Prevalence of Long-Term Emotional or Mental Health Effects Related to a Family Member or Friend Having Coronavirus Disease 2019 (COVID-19) by Demographic Characteristics: MATCH, 2021<sup>a,b</sup>*

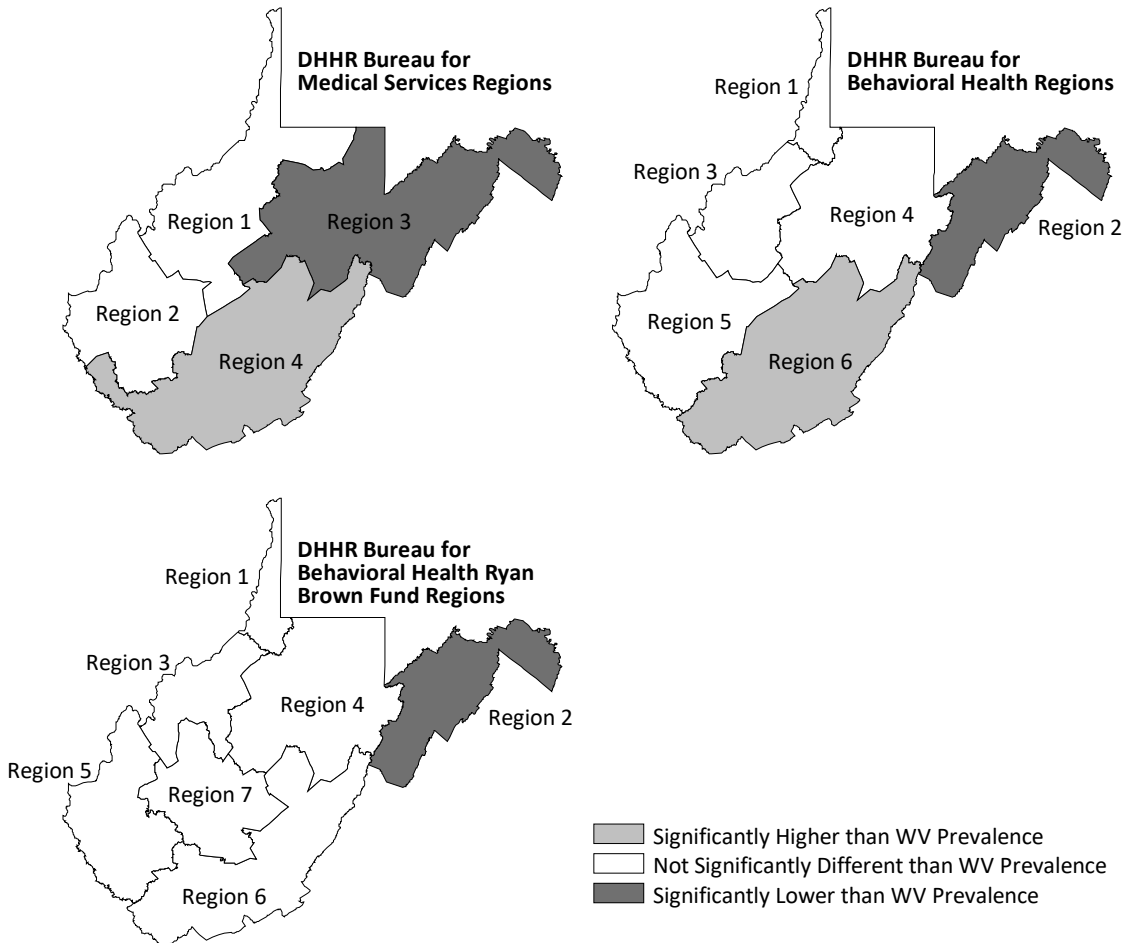
Characteristic	Male			Female			Total		
	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI	Weighted Frequency	%	95% CI
<b>TOTAL</b>	<b>83,075</b>	<b>16.9</b>	<b>15.2-18.5</b>	<b>117,582</b>	<b>22.3</b>	<b>20.9-23.8</b>	<b>200,656</b>	<b>19.7</b>	<b>18.6-20.8</b>
<b>Age</b>									
18-34	27,119	20.8	16.8-24.8	36,595	29.9	26.3-33.5	63,715	25.2	22.5-27.9
35-49	19,443	18.7	15.1-22.3	29,483	24.6	21.5-27.7	48,926	21.9	19.5-24.2
50-64	23,813	16.6	13.7-19.6	32,386	21.1	18.5-23.7	56,199	18.9	17.0-20.9
65+	12,497	11.2	8.7-13.7	18,674	14.6	12.4-16.8	31,171	13.0	11.4-14.7
<b>Education</b>									
Less than HS	14,682	22.5	17.4-27.6	15,202	27.5	22.9-32.2	29,884	24.8	21.3-28.3
HS/GED	38,526	17.4	14.9-19.8	49,619	23.0	20.9-25.2	88,144	20.1	18.5-21.8
Associate's or more	29,448	14.5	12.1-17.0	52,638	20.7	18.5-22.9	82,086	18.0	16.3-19.6
<b>Annual Family Income</b>									
\$15,000 or less	23,638	27.0	22.6-31.3	35,356	32.4	29.0-35.8	58,993	30.0	27.3-32.7
\$15,001-\$35,000	24,241	22.4	18.4-26.3	33,726	24.6	21.8-27.4	57,967	23.6	21.3-26.0
\$35,001-\$50,000	9,122	12.8	8.9-16.6	12,430	17.9	14.2-21.5	21,552	15.3	12.6-18.0
\$50,001-\$85,000	12,997	13.6	10.1-17.1	21,634	21.2	17.7-24.7	34,631	17.5	15.0-20.0
\$85,001+	11,406	10.3	7.2-13.3	12,438	13.9	10.6-17.2	23,844	11.9	9.6-14.1
<b>Race</b>									
White	73,469	16.2	14.5-17.9	109,335	22.0	20.5-23.5	182,804	19.2	18.1-20.4
Black	3,151	24.2	14.6-33.7	2,428	18.7	13.3-24.1	5,579	21.4	15.9-26.9
Multi-racial or "Other"	6,291	26.0	17.7-34.3	5,708	34.9	25.6-44.3	11,999	29.6	23.2-36.0
<b>Marital Status</b>									
Married/Living with a partner	40,616	14.7	12.7-16.8	62,123	21.1	19.2-23.1	102,739	18.0	16.6-19.5
Widowed/Divorced/Separated	17,053	18.9	15.1-22.7	32,010	22.7	20.1-25.3	49,063	21.2	19.1-23.4
Never married	25,279	20.4	16.5-24.3	23,068	25.6	21.7-29.4	48,347	22.6	19.8-25.4

*Note.* CI = confidence interval; HS = high school; GED = Graduate Equivalency Diploma.

<sup>a</sup>95% confidence intervals were used to determine "significance." This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>The prevalence estimates excluded adults who responded, "I am not aware of any family members or friends who have had COVID-19" to the question, "Have you experienced any long-term emotional or mental health effects that you think might be related to a family member or friend having COVID-19?"

Figure 15.4.1: Weighted Prevalence of Long-Term Emotional or Mental Health Effects Related to a Family Member or Friend Having Coronavirus Disease 2019 (COVID-19) by Region: MATCH, 2021<sup>a,b,c</sup>



Note. DHHR = West Virginia Department of Health and Human Resources; WV = West Virginia.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>See [Table A.1](#) in the Appendix for the regional prevalence estimates.

<sup>c</sup>The prevalence estimates excluded adults who responded, “I am not aware of any family members or friends who have had COVID-19” to the question, “Have you experienced any long-term emotional or mental health effects that you think might be related to a family member or friend having COVID-19?”

Section 5

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CONCLUSION



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# Conclusion

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## Summary

The Mountain State Assessment of Trends in Community Health (MATCH) is a population health survey that provides a wide array of information about health status, health behavior, and access to care in West Virginia (WV). This information is vitally important to understanding the health and well-being, as well as the successes and challenges facing all WV adult residents. In addition to exploring health behavior, status, and access to care, WV adult residents who responded to the MATCH survey were also asked about the impact of coronavirus disease 2019 (COVID-19) on their lives and health during the 2021 MATCH data collection. During this time, the number of new COVID-19 infections and deaths were decreasing, and many West Virginians had already received a COVID-19 vaccination. Although the state had reopened and daily activities had resumed to a new normal, the data collected during this period were most certainly influenced by the pandemic and its long-term impact.

This report highlights some of the most important information obtained through the MATCH 2021 data collection. The complete data are available for review by using the MATCH Data Explorer found on the [MATCH website](#). Using the online tool, anyone can analyze the data in multiple ways, including by different subgroups (e.g., demographic and economic characteristics of the respondents) and geographic areas (county, region, and state).

Below is a summary of the 2021 MATCH survey findings, which highlight the most important results at the state-level. For complete information at the state and regional level as well as findings from various subgroups (e.g., those based on gender, income, or educational level), the reader can review the relevant sections of the report or explore the data using the MATCH Data Explorer on the [MATCH website](#).

## Health Status

Most West Virginians are in good physical health. However, compared to residents of other states in the U.S., many West Virginians are experiencing only fair or even poor health. Nearly a quarter (24%) of WV adults consider their overall health to be fair or poor. According to the 2021 Behavioral Risk Factor Surveillance System (BRFSS) survey conducted by the Centers for Disease Control and Prevention (CDC), the only region with more Americans that describe their health as fair or poor is Puerto Rico.<sup>4</sup> When asked about suffering from physical ailments, WV adults reported they suffered primarily from hypertension (43%), followed by chronic pain (26%), diabetes (18%), asthma (16%), cardiovascular disease (11%), and chronic obstructive pulmonary disease (11%). Physical ailments also led to difficulties in performing daily activities, which was reported by more than one-half of WV adults (57%). However, some WV adults also reported experiencing difficulty in performing daily activities due to issues with mental health (16%), and also due to both physical and mental health reasons (27%). Of those who reported difficulties associated with both physical and mental health issues, approximately one-third

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<sup>4</sup> Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. BRFSS Prevalence & Trends Data [online]. 2015. [accessed Apr 20, 2023]. URL: <https://www.cdc.gov/brfss/brfssprevalence/>.

(34%) reported experiencing frequent sleep problems in the past two weeks. [An inability to sleep well has been linked to many chronic health issues, such as heart disease, kidney disease, high blood pressure, diabetes, stroke, and obesity, as well as mental health issues such as depression.](#)<sup>5</sup>

The mental health status of West Virginians is overall better than their physical health status. The majority of West Virginians reported good or excellent mental health. Less than a quarter (22%) rated their overall mental health as fair or poor. Nearly one-quarter (24%) of West Virginians reported having a healthcare provider diagnose them with either depression, anxiety, or post-traumatic stress disorder. Interestingly, one in 10 (10%) of WV adults reported that they had been diagnosed with attention-deficit/hyperactivity disorder (ADHD). This is much higher than the national estimates for adult ADHD, which have been reported as 4.4% by the [National Institute for Mental Health](#).<sup>6</sup> While this difference might be related to the self-reported nature of the survey data compared to rates determined by formal clinical diagnosis, this finding does warrant additional inquiry to explore the factors that might be contributing to the high rate of adult ADHD in WV.

The 2021 MATCH findings also reveal the many ways mental health issues can have an impact on individual lives. West Virginians report experiencing interference with their social life (23%), household chores (20%), relationships with friends and family (19%), and performance at work or school (16%). Unfortunately, the number of West Virginians suffering from serious psychological distress is high, with 14% of WV adults reporting this issue. This finding is similar to the recent national estimate of 13.6% reported by [Johns Hopkins University](#)<sup>7</sup> in 2020. Of note, both the national and WV estimates for serious psychological distress were much higher in 2020 and 2021, respectively than in 2018, when the national estimate was 3.9%. These national rates can also be compared to the 2009–2013 estimate of 2.4% as [assessed by the CDC](#).<sup>8</sup> This rapid and steep national and state increase in serious psychological distress could potentially be an outcome of challenges related to the COVID-19 pandemic. Unfortunately, and potentially related to these mental health challenges, more than one in four (28%) of WV adults reported having thoughts or attempting suicide at some point in their lives. This finding supports the important need to implement the lifesaving 988 Mental Health Crisis Hotline in WV. This was recently passed into law during the 2022 legislative session through [Senate Bill 181](#).<sup>9</sup>

On a positive note, most West Virginians who need mental health care from a medical provider are receiving it. More than one-half (57%) of the 31% of WV adults who stated they needed to see a medical provider for mental health issues did receive care. Additionally, most WV adults (66%) reported that a doctor or healthcare provider had asked them about their mental health. This means that most West Virginians are receiving mental health screenings from their healthcare providers, which could

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<sup>5</sup> National Institutes of Health, National Heart, Lung, and Blood Institute. Sleep Deprivation and Deficiency [online]. 2022. [accessed Apr 20, 2023]. URL: <https://www.nhlbi.nih.gov/health/sleep-deprivation#:~:text=Sleep%20deficiency%20is%20linked%20to,adults%2C%20teens%2C%20and%20children>.

<sup>6</sup> National Institutes of Health, National Institute of Mental Health. Attention-Deficit/Hyperactivity Disorder (ADHD) [online]. [accessed Apr 20, 2023]. URL: <https://www.nimh.nih.gov/health/statistics/attention-deficit-hyperactivity-disorder-adhd>

<sup>7</sup> McGinty EE, Presskreischer R, Han H, Barry CL. Psychological Distress and Loneliness Reported by US Adults in 2018 and April 2020. *JAMA*. 2020;324(1):93–94. doi:10.1001/jama.2020.9740

<sup>8</sup> Weissman J, Pratt LA, Miller EA, Parker JD. Serious psychological distress among adults: United States, 2009–2013. NCHS data brief, no 203. Hyattsville, MD: National Center for Health Statistics. 2015.

<sup>9</sup> West Virginia Legislature. Senate Bill 181. February 2, 2022. [accessed Apr 20, 2023] URL: [www.wvlegislature.gov/Bill\\_Text\\_HTML/2022\\_SESSIONS/RS/bills/SB181%20SUB1.pdf](http://www.wvlegislature.gov/Bill_Text_HTML/2022_SESSIONS/RS/bills/SB181%20SUB1.pdf)

contribute to early diagnosis and treatment of mental health issues. In support of this finding, a little over a quarter (29%) of WV adults reported that they received a prescription for medication to treat a mental health condition in the past year. Additionally, from a social support perspective (which is vital to supporting the overall mental health of all individuals), over one-half of all WV adults (59%) reported that they frequently received the emotional support that they needed. This speaks to the social strength and cohesiveness of WV families and communities.

## Substance Use

The MATCH survey found that most West Virginian adults do not use substances. For those who do, there is a high risk of premature death, which leads to negative social and economic outcomes for the state. When assessing substance use in WV, the MATCH survey found that one in five (21%) of WV adults reported smoking cigarettes. While this represents a decrease from the [CDC 2018](#) WV estimate of 25.2%,<sup>10</sup> it is still significantly higher than the [CDC 2020](#)<sup>11</sup> national estimates of 12.5%. This finding reinforces the need for continued investment in tobacco prevention in WV and also supports the success of current [WV tobacco cessation initiatives](#) in decreasing smoking rates.<sup>12</sup> When assessing the rates of alcohol use among West Virginians, MATCH found that 33% of WV adults drank some alcohol in the past month. This estimate is much lower than the [2019 National Survey on Drug Use and Health](#)<sup>13</sup> national estimate of about 54.9%. Additionally, for those WV adults who drink alcohol, 16% engaged in binge drinking, which is also slightly lower than the national estimate of 17%, but much higher than the [2021 CDC BRFSS](#)<sup>14</sup> estimates of 9.4% for binge drinking in WV. The differences in these estimates might be because the MATCH survey used different modes of data collection than the [CDC BRFSS](#).<sup>11</sup> In contrast to these positive trends, West Virginian adults who reported heavy drinking accounted for 7% of the population, which is an increase from the [2019 national heavy drinking](#)<sup>11</sup> estimate of 6.3%. Therefore, although most WV adults drink much less alcohol than the national average, those West Virginians who do drink alcohol use it heavily and are surpassing the national-level adult estimates for heavy drinking.

When assessing the use of other substances in WV, MATCH found that while most WV adults (74%) have not used marijuana, prescription opioids, benzodiazepines, stimulants, or the other substances listed in the survey (see [Chapter 5: Substance Use](#) for the full list of substances), between 2% to 13% of WV adults have used these substances. When WV adults were asked about the substances they used in the

<sup>10</sup> Centers for Disease Control and Prevention. Current Cigarette Smoking Among Adults in the United States [online]. [accessed Apr 20, 2023]. URL:

[https://www.cdc.gov/tobacco/data\\_statistics/fact\\_sheets/adult\\_data/cig\\_smoking/index.htm](https://www.cdc.gov/tobacco/data_statistics/fact_sheets/adult_data/cig_smoking/index.htm)

<sup>11</sup> Centers for Disease Control and Prevention. Smoking & Tobacco Use. Fast Facts and Fact Sheets [online]. [accessed Apr 20, 2023] URL:

[https://www.cdc.gov/tobacco/data\\_statistics/fact\\_sheets/fast\\_facts/index.htm?CDC\\_AA\\_refVal=https%3A%2F%2Fwww.cdc.gov%2Ftobacco%2Fdata\\_statistics%2Ffact\\_sheets%2Findex.htm](https://www.cdc.gov/tobacco/data_statistics/fact_sheets/fast_facts/index.htm?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Ftobacco%2Fdata_statistics%2Ffact_sheets%2Findex.htm)

<sup>12</sup> Centers for Disease Control and Prevention. Smoking & Tobacco Use, West Virginia in Action [online]. [accessed Apr 24, 2023]. URL: <https://www.cdc.gov/tobacco/stateandcommunity/tobacco-control/programs-in-action/west-virginia.html>

<sup>13</sup> National Institute on Alcohol Abuse and Alcoholism. Alcohol Facts and Statistics [online]. [accessed Apr 24, 2023]. URL:

[https://www.niaaa.nih.gov/sites/default/files/publications/NIAAA\\_Alcohol\\_FactsandStats\\_102020\\_0.pdf](https://www.niaaa.nih.gov/sites/default/files/publications/NIAAA_Alcohol_FactsandStats_102020_0.pdf)

<sup>14</sup> Centers for Disease Control and Prevention. Alcohol and Public Health. Data on Excessive Drinking [online]. [accessed Apr 24, 2023]. URL: <https://www.cdc.gov/alcohol/data-stats.htm#:~:text=According%20to%20the%20Behavioral%20Risk,drink%20heavily%20also%20binge%20drink.>

past 12 months, 13% reported using marijuana, 8% reported using prescription opioids, 7% reported using benzodiazepines, 4% reported use of over-the-counter stimulants, 3% used cocaine, methamphetamine, heroin, or MDMA, and 2% reported using some other type of stimulant. Although the WV estimate for adult prescription opioid use is higher than the last national estimate of adult prescription opioid use (6.5%),<sup>15</sup> it is much lower than the national estimate for those who experience chronic pain and used opioids in the past three months (22.5%).<sup>16</sup> Given that 26% of West Virginians experienced chronic pain, the MATCH estimate for opioid use could be viewed as reasonable in the context of chronic pain management. Additionally, fewer than one in 10 (9%) of WV adults reported using prescription opioids for a different purpose than which it was prescribed. This means that 91% of WV adults who are prescribed opioids reported using them as prescribed by their medical care provider. However, the opioid and illicit substance estimates presented above are self-reported information, and it is known that individuals often underreport the frequency of usage for these types of questions. Therefore, there is a substantial probability that the actual level of opioid and illicit substance use among WV adults is higher than presented by these estimates.

[Opioid overdoses in West Virginia are a known issue.](#)<sup>17</sup> Importantly, MATCH found about 3% of WV adults reported that they had overdosed on legal or illegal drugs at least once in their lifetime, and 5% reported having an immediate family member in WV who had overdosed in the past year. Of those WV adults who reported overdosing and needing medical attention, 38% received naloxone for treatment, which is [a drug that rapidly reverses an opioid overdose.](#)<sup>18</sup> This finding supports the statewide initiative to implement a naloxone standing order (August 2021) to ensure that residents of WV who are at risk of experiencing an opioid-related overdose, or who are family members, friends, or other persons who are [in a position to assist a person at risk of experiencing an opioid-related overdose can obtain naloxone.](#)<sup>19</sup> Additionally, among the 3% of WV adults who felt in the past year that they needed to see a doctor or a healthcare provider because of problems with alcohol or drug use, most (65%) were able to see a provider. Therefore, this finding indicates that most West Virginians who want to receive treatment for their substance use are receiving that care.

## Healthcare Access and Quality

[Healthcare access and quality are important indicators of health equity for marginalized groups.](#)<sup>20</sup> When assessing healthcare access and quality of healthcare received for West Virginians, most of the adults (92%) reported having some type of health insurance coverage. For example, almost one in three (32%)

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<sup>15</sup> Gu, Ja K. MSPH; Allison, Penelope PhD; Grimes Trotter, Alexis MPH; Charles, Luenda E. PhD, MPH; Ma, Claudia C. MS, MPH; Groenewold, Matthew PhD, MSPH; Andrew, Michael E. PhD; Luckhaupt, Sara E. MD, MPH. Prevalence of Self-Reported Prescription Opioid Use and Illicit Drug Use Among U.S. Adults: NHANES 2005–2016. *Journal of Occupational and Environmental Medicine* 64(1):p 39-45, January 2022. | DOI: 10.1097/JOM.0000000000002328

<sup>16</sup> Dahlhamer JM, Connor EM, Bose J, Lucas JL, Zelaya CE. Prescription Opioid Use Among Adults With Chronic Pain: United States, 2019. *Natl Health Stat Report*. 2021 Aug;(162):1-9. PMID: 34524076.

<sup>17</sup> West Virginia Department of Health and Human Resources Bureau for Public Health, Health Statistics Center. Synthetic Opioid Fast Stats. February 2019. [accessed online Apr 20, 2024]. URL:

[www.wvdhhr.org/bph/hsc/pubs/other/SyntheticOpioidFastStats/Synthetic\\_Opioid\\_Fast\\_Stats.pdf](http://www.wvdhhr.org/bph/hsc/pubs/other/SyntheticOpioidFastStats/Synthetic_Opioid_Fast_Stats.pdf)

<sup>18</sup> Substance Abuse and Mental Health Services Administration. Naloxone. January 2023. [access online Apr 20, 2024]. URL: [www.wvdhhr.org/bph/hsc/pubs/other/SyntheticOpioidFastStats/Synthetic\\_Opioid\\_Fast\\_Stats.pdf](http://www.wvdhhr.org/bph/hsc/pubs/other/SyntheticOpioidFastStats/Synthetic_Opioid_Fast_Stats.pdf)

<sup>19</sup> Help&HopeWV. Naloxone. 2022. [accessed online Apr 20, 2024]. URL:

<https://helpandhopewv.org/naloxone.html>

<sup>20</sup> KFF. Disparities in Health and Health Care: 5 Key Questions and Answers. April 21, 2023. [accessed online Apr 24, 2023]. URL: Link: <https://www.kff.org/racial-equity-and-health-policy/issue-brief/disparities-in-health-and-health-care-5-key-question-and-answers/>

WV adults reported having Medicare coverage. Similarly, slightly more than a quarter (26%) were covered by Medicaid, and over one-half (57%) reported having another type of insurance (e.g., a plan purchased through an employer or union). This increased healthcare insurance coverage, partially supported by WV Medicaid expansion, is potentially facilitating WV adults' access to vital healthcare services. Of the 66% of WV adults who stated they needed medical care within the past year, most (92%) reported being able to receive the needed care. WV health providers' ability to provide care was also recently expanded through additional telehealth services offered in 2020 in response to the COVID-19 pandemic. This expansion could have contributed to the high percentage of WV adults receiving healthcare services. Approximately 35% of WV adults reported using telehealth to visit a doctor or a healthcare provider. Additionally, most WV adults reported being able to access the medication their healthcare provider had prescribed to them; 77% reported receiving their prescriptions on time during the last 12 months, with only a small minority (8%) either delaying or never receiving their prescriptions. This is a demonstration of positive indicators of health equity in WV.

Inequalities in healthcare treatment were reported in the MATCH survey. Although most WV adults reported being able to access healthcare when needed, many reported feeling as if they were treated unfairly by their healthcare provider. One in 10 (10%) WV adults reported that they felt their healthcare provider had treated them unfairly. This was particularly true for those who do not identify as white or Black (i.e., those identified as multi-racial or other); more than one in five (21%) of these WV adults felt they had been treated unfairly by their healthcare provider. As the WV population continues to diversify and income inequalities continue to grow, it is increasingly important to address these health disparities in our state.

## COVID-19 and Economic Hardship

The economic hardship inflicted on West Virginians' lives by the COVID-19 pandemic is reflected in the MATCH survey findings. Forty-one percent of WV adults reported living in a household in which a household member's job had been negatively affected by COVID-19. For example, West Virginians reported their household had experienced temporary and/or permanent layoffs, their wages or salary had been reduced, or they had taken unpaid time off. Potentially, as an outcome of these COVID-19-related changes in employment, paying down debt became harder for 36% of WV adults in the past year, as did paying rent or mortgage (29%). Consequently, almost a quarter (23%) of WV adults reported worrying that if they got sick or had an accident, they would not be able to pay their rent or mortgage. Buying food also became more difficult for nearly one-third (30%) of WV adults; so much so, that 14% reported that they or someone in their household had cut the size of a meal or skipped a meal entirely because they didn't have enough money for food. Related to these challenges, more than one in ten (12%) of WV adults reported having to rely on food pantries, food banks, or other places for free food in the previous month. The COVID-19 pandemic forced over one-half (55%) of WV adults, or their household members, to take drastic financial measures, such as using up most of their savings or taking money out of their retirement, college, or long-term savings accounts.

The public benefits provided by West Virginia Department of Health and Human Resources (DHHR) were used heavily by West Virginians for medical, housing, and nutritional support during the COVID-19 pandemic. Forty percent of WV adults reported relying on at least one type of public benefit in the past year; 26% of WV adults reported receiving Medicaid, 27% utilized Supplemental Nutrition Assistance Program (SNAP), and 11% received assistance from the Low-Income Energy Assistance Program (LIEAP).

Fewer than 10% of WV adults benefitted from school clothing vouchers (8%), Women, Infants, and Children Supplemental Nutrition Program (WIC) (5%), or Temporary Assistance for Needy Families (TANF) (2%). In addition to the long-term economic consequences, the pandemic had an impact on the long-term mental well-being of many West Virginians, with more than one in five (21%) of WV adults reporting they experienced long-term emotional or mental health effects because they had COVID-19. Similarly, one in five (20%) reported that they experienced long-term emotional or mental health effects because a family member or friend had COVID-19.

## Health Behavior

The MATCH survey also collected information about various health behaviors, such as physical exercise and eating habits. The survey findings revealed the population of WV could benefit from additional nutrition programs; only approximately one-half of WV adults (49%) reported buying fresh fruits or vegetables always or most of the time when shopping for groceries. Additionally, increasing physical activity could benefit WV adults, as only two-thirds (66%) reported participating in physical activities or exercises outside work in the previous month. Increasing access to physical activity facilities in WV could also assist the population, as only 43% of WV adults reported having access to some type of exercise facility (e.g., a public or private gym) or a personal trainer, and only about one-third (29%) had gym equipment at home. As a testament to the resilience of the Mountain State residents, 42% of WV adults reported being satisfied or extremely satisfied with their life despite the many health challenges.

## Conclusion

DHHR and the West Virginia University Health Affairs Institute (Health Affairs) want to extend their deep gratitude to all the West Virginians who completed the MATCH survey. The data provided by the respondents collectively form an invaluable source of information that will be used in various ways to improve the health of West Virginians in the different regions of the state.

This report provides information at the state and regional level. In the next few months, the findings for the 55 WV counties will be posted on the MATCH website. The county-level reports will allow readers to examine the results for individual counties and compare with those collected from other counties. This information can be used to inform improvements in health service delivery within the state and the allocation of resources to the areas most in need.

MATCH is a biennial survey. The second round of data collection will begin in the fall of 2023. The results from future data collections will be combined to create a rich source of data trends that can be used by researchers, healthcare officials, decision-makers, and others to ensure that health resources are directed to the WV communities that are most in need. The information provided by MATCH can also be used to inform health policy and program decision-making with accurate information about the health needs of different West Virginia communities and to improve and expand health services to communities across the state. The ultimate goal of this effort is to improve the health of all Mountain State residents.

Section 6

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APPENDIX

# Appendix

The Appendix presents a series of tables that show the weighted prevalence and ranking of health-related indicators by region and a statistical comparison of the regional prevalence estimates to West Virginia state prevalence estimates.

*Table A.1: Weighted Prevalence, Ranking, and Significance of Health-Related Indicators by Region: MATCH, 2021<sup>a,b</sup>*

Geographic Area	Fair or Poor General Health			Fair or Poor Mental Health			Extremely Satisfied or Satisfied with Life			Serious Psychological Distress			Functional Impairment Household Chores		
	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.
West Virginia	24.2			21.9			41.7			14.1			19.7		
<b>DHHR Bureau for Medical Services Regions</b>															
Region one	21.0	4	L	21.7	3	ns	42.6	2	ns	13.0	3	ns	18.9	3	ns
Region two	27.1	2	ns	23.6	2	ns	38.3	4	ns	15.4	2	ns	21.8	1	ns
Region three	21.4	3	L	18.7	4	L	45.3	1	H	12.3	4	ns	17.1	4	ns
Region four	29.2	1	H	24.5	1	ns	39.8	3	ns	16.2	1	ns	21.7	2	ns
<b>DHHR Bureau for Behavioral Health Regions</b>															
Region one	18.6	6	L	19.8	5	ns	44.0	3	ns	12.4	5	ns	16.6	6	ns
Region two	19.9	5	L	18.2	6	L	44.2	2	ns	10.7	6	L	17.0	5	ns
Region three	25.3	3	ns	21.8	3	ns	42.3	4	ns	13.2	4	ns	18.6	4	ns
Region four	21.0	4	L	20.8	4	ns	44.5	1	ns	13.8	3	ns	18.9	3	ns
Region five	27.5	2	H	24.0	2	ns	38.4	6	ns	15.8	1	ns	22.2	1	ns
Region six	28.8	1	H	24.1	1	ns	39.6	5	ns	15.7	2	ns	21.0	2	ns
<b>DHHR Bureau for Behavioral Health Ryan Brown Fund Regions</b>															
Region one	18.6	7	L	19.8	6	ns	44.0	3	ns	12.4	6	ns	16.6	7	ns
Region two	19.9	6	L	18.2	7	L	44.2	2	ns	10.7	7	L	17.0	6	ns
Region three	24.1	4	ns	21.5	4	ns	42.9	4	ns	12.8	5	ns	17.9	5	ns
Region four	21.0	5	L	20.8	5	ns	44.5	1	ns	13.8	3	ns	18.9	4	ns
Region five	28.0	2	H	25.9	1	H	37.0	7	L	17.9	1	H	23.2	1	ns
Region six	29.5	1	H	24.3	2	ns	38.5	6	ns	16.3	2	ns	21.5	2	ns
Region seven	27.3	3	ns	21.7	3	ns	41.2	5	ns	13.0	4	ns	20.6	3	ns

*Note.* Sig. = prevalence estimate that was not significantly different (ns) or significantly lower (L) or higher (H) than the state prevalence estimate; DHHR = West Virginia Department of Health and Human Resources.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>Only regions with stable estimates were ranked.



Table A.1: Weighted Prevalence, Ranking, and Significance of Health-Related Indicators by Region: MATCH, 2021 (continued)<sup>a,b</sup>

Geographic Area	Functional Impairment Social Life			Functional Impairment Friends and Family Relationships			Functional Impairment School/Work Performance			Depression, Anxiety, or PTSD			ADHD		
	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.
<b>West Virginia</b>	<b>22.7</b>			<b>19.1</b>			<b>15.7</b>			<b>24.3</b>			<b>9.9</b>		
<b>DHHR Bureau for Medical Services Regions</b>															
Region one	21.6	3	ns	18.5	3	ns	14.4	4	ns	23.5	3	ns	9.5	2	ns
Region two	24.3	2	ns	20.2	2	ns	17.4	1	ns	25.4	1	ns	11.2	1	ns
Region three	19.9	4	ns	17.5	4	ns	14.5	3	ns	23.3	4	ns	9.4	3	ns
Region four	26.4	1	H	20.6	1	ns	16.9	2	ns	25.2	2	ns	9.4	4	ns
<b>DHHR Bureau for Behavioral Health Regions</b>															
Region one	20.5	5	ns	17.7	6	ns	10.3	6	L	23.1	5	ns	9.9	3	ns
Region two	19.8	6	ns	17.7	5	ns	14.4	4	ns	24.2	3	ns	10.0	2	ns
Region three	22.1	3	ns	18.6	3	ns	13.0	5	ns	23.4	4	ns	9.7	4	ns
Region four	20.9	4	ns	18.1	4	ns	16.5	2	ns	23.0	6	ns	9.0	6	ns
Region five	24.7	2	ns	20.3	2	ns	17.6	1	ns	25.4	1	ns	11.0	1	ns
Region six	25.7	1	ns	20.3	1	ns	16.4	3	ns	25.2	2	ns	9.4	5	ns
<b>DHHR Bureau for Behavioral Health Ryan Brown Fund Regions</b>															
Region one	20.5	6	ns	17.7	6	ns	10.3	7	L	23.1	6	ns	9.9	3	ns
Region two	19.8	7	ns	17.7	5	ns	14.4	4	ns	24.2	3	ns	10.0	2	ns
Region three	22.0	4	ns	18.0	4	ns	12.5	6	ns	23.3	5	ns	9.6	5	ns
Region four	20.9	5	ns	18.1	3	ns	16.5	3	ns	23.0	7	ns	9.0	7	ns
Region five	26.0	1	ns	22.4	1	ns	20.2	1	H	26.7	1	ns	11.9	1	ns
Region six	26.0	2	ns	21.3	2	ns	17.0	2	ns	24.8	2	ns	9.7	4	ns
Region seven	23.1	3	ns	17.2	7	ns	14.0	5	ns	24.1	4	ns	9.2	6	ns

Note. PTSD = Post-Traumatic Stress Disorder; ADHD = Attention-Deficit/Hyperactivity Disorder; Sig. = prevalence estimate that was not significantly different (ns) or significantly lower (L) or higher (H) than the state prevalence estimate; DHHR = West Virginia Department of Health and Human Resources.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>Only regions with stable estimates were ranked.

Table A.1: Weighted Prevalence, Ranking, and Significance of Health-Related Indicators by Region: MATCH, 2021 (continued)<sup>a,b</sup>

Geographic Area	COPD			Hypertension			Diabetes			Asthma			Endocarditis		
	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.
West Virginia	10.7			43.2			18.1			16.2			0.6		
<b>DHHR Bureau for Medical Services Regions</b>															
Region one	8.4	4	L	40.5	3	ns	15.6	4	L	15.9	3	ns	0.7	1	ns
Region two	10.6	2	ns	45.3	2	ns	20.0	2	ns	16.2	2	ns	0.5	3	ns
Region three	9.3	3	ns	39.9	4	L	16.9	3	ns	15.6	4	ns	0.5	4	ns
Region four	16.3	1	H	49.1	1	H	20.7	1	ns	17.8	1	ns	0.6	2	ns
<b>DHHR Bureau for Behavioral Health Regions</b>															
Region one	7.3	6	L	42.6	4	ns	16.7	5	ns	13.8	6	ns	U	U	U
Region two	8.9	4	ns	37.5	6	L	17.1	3	ns	14.9	5	ns	U	U	U
Region three	10.9	3	ns	45.6	3	ns	16.9	4	ns	17.7	1	ns	U	U	U
Region four	8.2	5	L	38.6	5	L	14.9	6	L	16.0	4	ns	U	U	U
Region five	11.1	2	ns	45.9	2	ns	20.3	2	ns	16.5	3	ns	0.5	2	ns
Region six	16.2	1	H	48.7	1	H	20.6	1	ns	17.7	2	ns	0.7	1	ns
<b>DHHR Bureau for Behavioral Health Ryan Brown Fund Regions</b>															
Region one	7.3	7	L	42.6	5	ns	16.7	5	ns	13.8	7	ns	U	U	U
Region two	8.9	5	ns	37.5	7	L	17.1	4	ns	14.9	5	ns	U	U	U
Region three	10.9	3	ns	44.8	3	ns	16.5	6	ns	17.5	2	ns	U	U	U
Region four	8.2	6	L	38.6	6	L	14.9	7	L	16.0	4	ns	U	U	U
Region five	11.8	2	ns	47.4	2	ns	20.1	3	ns	18.7	1	ns	0.7	2	ns
Region six	16.9	1	H	49.4	1	H	20.7	1	ns	17.3	3	ns	0.8	1	ns
Region seven	10.9	4	ns	44.7	4	ns	20.6	2	ns	14.7	6	ns	U	U	U

Note. COPD = Chronic Obstructive Pulmonary Disease; Sig. = prevalence estimate that was not significantly different (ns) or significantly lower (L) or higher (H) than the state prevalence estimate; DHHR = West Virginia Department of Health and Human Resources; U = unstable prevalence estimate. <sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>Only regions with stable estimates were ranked.

Table A.1: Weighted Prevalence, Ranking, and Significance of Health-Related Indicators by Region: MATCH, 2021 (continued)<sup>a,b</sup>

Geographic Area	Hashimoto's Disease			Hepatitis C			HIV/AIDS			Cardiovascular Disease			Kidney Disease or Damage		
	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.
<b>West Virginia</b>	<b>2.0</b>			<b>2.5</b>			<b>0.3</b>			<b>10.6</b>			<b>6.6</b>		
<b>DHHR Bureau for Medical Services Regions</b>															
Region one	1.6	4	ns	1.9	3	ns	U	U	U	9.8	3	ns	5.4	3	ns
Region two	2.3	1	ns	3.0	2	ns	U	U	U	11.9	1	ns	8.5	1	ns
Region three	1.9	3	ns	1.6	4	L	U	U	U	9.4	4	ns	5.1	4	L
Region four	2.1	2	ns	3.9	1	H	U	U	U	11.7	2	ns	8.0	2	ns
<b>DHHR Bureau for Behavioral Health Regions</b>															
Region one	U	U	U	2.6	3	ns	U	U	U	10.3	4	ns	5.4	5	ns
Region two	2.1	3	ns	1.6	5	ns	U	U	U	8.2	6	L	4.2	6	L
Region three	2.7	1	ns	1.4	6	ns	U	U	U	11.1	3	ns	6.4	3	ns
Region four	1.2	5	L	1.6	4	ns	U	U	U	9.6	5	ns	5.4	4	ns
Region five	2.3	2	ns	3.1	2	ns	U	U	U	11.9	1	ns	8.7	1	H
Region six	2.1	4	ns	3.8	1	ns	U	U	U	11.7	2	ns	7.7	2	ns
<b>DHHR Bureau for Behavioral Health Ryan Brown Fund Regions</b>															
Region one	U	U	U	2.6	3	ns	U	U	U	10.3	5	ns	5.4	6	ns
Region two	2.1	4	ns	1.6	6	ns	U	U	U	8.2	7	L	4.2	7	L
Region three	2.7	1	ns	1.5	7	ns	U	U	U	10.3	4	ns	6.6	4	ns
Region four	1.2	6	L	1.6	5	ns	U	U	U	9.6	6	ns	5.4	5	ns
Region five	2.3	3	ns	2.6	4	ns	U	U	U	11.5	2	ns	8.8	1	ns
Region six	1.9	5	ns	3.8	1	ns	U	U	U	11.5	3	ns	8.0	2	ns
Region seven	2.5	2	ns	3.6	2	ns	U	U	U	12.9	1	ns	7.9	3	ns

Note. HIV = Human Immunodeficiency Virus; AIDS = Acquired Immunodeficiency Syndrome; Sig. = prevalence estimate that was not significantly different (ns) or significantly lower (L) or higher (H) than the state prevalence estimate; DHHR = West Virginia Department of Health and Human Resources; U = unstable prevalence estimate.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>Only regions with stable estimates were ranked.

Table A.1: Weighted Prevalence, Ranking, and Significance of Health-Related Indicators by Region: MATCH, 2021 (continued)<sup>a,b</sup>

Geographic Area	Liver Disease			Chronic Pain			Difficulty Performing Daily Activities			Reason Daily Difficulty Mostly Physical Health			Reason Daily Difficulty Mostly Mental Health		
	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.
<b>West Virginia</b>	<b>3.4</b>			<b>26.1</b>			<b>20.4</b>			<b>57.1</b>			<b>15.7</b>		
<b>DHHR Bureau for Medical Services Regions</b>															
Region one	2.3	4	L	23.8	3	ns	17.5	4	L	54.8	4	ns	18.3	1	ns
Region two	4.1	2	ns	26.8	2	ns	21.5	2	ns	56.6	3	ns	15.8	2	ns
Region three	2.8	3	ns	23.3	4	ns	19.1	3	ns	59.3	1	ns	14.2	4	ns
Region four	5.1	1	ns	32.6	1	H	24.9	1	H	57.8	2	ns	14.6	3	ns
<b>DHHR Bureau for Behavioral Health Regions</b>															
Region one	2.4	5	ns	25.3	4	ns	18.0	5	ns	58.5	2	ns	14.9	5	ns
Region two	3.0	3	ns	22.5	5	ns	18.2	4	ns	60.8	1	ns	16.2	3	ns
Region three	2.6	4	ns	26.4	3	ns	16.8	6	L	58.4	3	ns	16.6	1	ns
Region four	2.3	6	L	22.2	6	L	18.9	3	ns	53.8	6	ns	16.5	2	ns
Region five	4.2	2	ns	27.7	2	ns	22.0	2	ns	56.5	5	ns	16.0	4	ns
Region six	5.0	1	ns	31.9	1	H	24.5	1	H	58.0	4	ns	14.1	6	ns
<b>DHHR Bureau for Behavioral Health Ryan Brown Fund Regions</b>															
Region one	2.4	6	ns	25.3	5	ns	18.0	6	ns	58.5	4	ns	14.9	5	ns
Region two	3.0	4	ns	22.5	6	ns	18.2	5	ns	60.8	1	ns	16.2	4	ns
Region three	2.7	5	ns	26.4	3	ns	16.2	7	L	58.6	3	ns	16.7	2	ns
Region four	2.3	7	L	22.2	7	L	18.9	4	ns	53.8	7	ns	16.5	3	ns
Region five	4.3	2	ns	29.8	2	ns	23.1	2	ns	55.3	6	ns	17.2	1	ns
Region six	5.3	1	ns	32.1	1	H	25.1	1	H	57.3	5	ns	13.6	7	ns
Region seven	3.9	3	ns	26.0	4	ns	21.0	3	ns	59.3	2	ns	14.5	6	ns

Note. Sig. = prevalence estimate that was not significantly different (ns) or significantly lower (L) or higher (H) than the state prevalence estimate; DHHR = West Virginia Department of Health and Human Resources.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>Only regions with stable estimates were ranked.

Table A.1: Weighted Prevalence, Ranking, and Significance of Health-Related Indicators by Region: MATCH, 2021 (continued)<sup>a,b</sup>

Geographic Area	Reason Daily Difficulty Both Equally			Heavy Drinking			Binge Drinking			Current Cigarette Smoking			Recent Marijuana Use		
	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.
<b>West Virginia</b>	<b>27.1</b>			<b>6.9</b>			<b>16.0</b>			<b>20.6</b>			<b>9.9</b>		
<b>DHHR Bureau for Medical Services Regions</b>															
Region one	26.9	3	ns	8.6	1	ns	20.7	1	H	20.0	3	ns	10.8	1	ns
Region two	27.6	2	ns	5.0	4	L	13.8	3	ns	22.0	2	ns	10.2	3	ns
Region three	26.4	4	ns	7.5	2	ns	15.3	2	ns	18.2	4	ns	8.3	4	ns
Region four	27.6	1	ns	6.1	3	ns	13.1	4	L	23.4	1	ns	10.6	2	ns
<b>DHHR Bureau for Behavioral Health Regions</b>															
Region one	26.7	4	ns	8.2	2	ns	19.8	1	ns	21.5	3	ns	9.1	4	ns
Region two	22.9	6	ns	8.4	1	ns	15.6	4	ns	16.5	6	L	8.2	5	ns
Region three	25.0	5	ns	7.9	3	ns	17.2	3	ns	20.0	4	ns	8.2	6	ns
Region four	29.6	1	ns	7.7	4	ns	19.5	2	H	19.4	5	ns	11.3	1	ns
Region five	27.5	3	ns	5.0	6	L	13.3	6	L	22.6	2	ns	10.0	3	ns
Region six	27.9	2	ns	6.4	5	ns	13.8	5	ns	22.7	1	ns	10.7	2	ns
<b>DHHR Bureau for Behavioral Health Ryan Brown Fund Regions</b>															
Region one	26.7	4	ns	8.2	3	ns	19.8	1	ns	21.5	4	ns	9.1	5	ns
Region two	22.9	7	ns	8.4	1	ns	15.6	4	ns	16.5	7	L	8.2	6	ns
Region three	24.7	6	ns	8.3	2	ns	18.3	3	ns	18.9	6	ns	8.0	7	ns
Region four	29.6	1	ns	7.7	4	ns	19.5	2	H	19.4	5	ns	11.3	1	ns
Region five	27.5	3	ns	4.9	7	ns	12.5	7	L	23.2	1	ns	10.3	3	ns
Region six	29.1	2	ns	5.6	6	ns	13.1	6	ns	22.7	2	ns	11.1	2	ns
Region seven	26.2	5	ns	6.1	5	ns	14.5	5	ns	22.4	3	ns	9.5	4	ns

Note. Sig. = prevalence estimate that was not significantly different (ns) or significantly lower (L) or higher (H) than the state prevalence estimate; DHHR = West Virginia Department of Health and Human Resources.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>Only regions with stable estimates were ranked.

Table A.1: Weighted Prevalence, Ranking, and Significance of Health-Related Indicators by Region: MATCH, 2021 (continued)<sup>a,b</sup>

Geographic Area	Marijuana Use			Prescription Opioids/sPills Use			Benzodiazepines Use			Over-the-Counter Stimulants Use			Stimulants Use		
	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.
<b>West Virginia</b>	<b>13.0</b>			<b>8.3</b>			<b>6.5</b>			<b>3.7</b>			<b>2.2</b>		
<b>DHHR Bureau for Medical Services Regions</b>															
Region one	13.7	1	ns	8.3	2	ns	6.6	3	ns	3.0	4	ns	2.5	2	ns
Region two	13.5	2	ns	7.7	4	ns	6.8	2	ns	4.8	1	ns	2.5	1	ns
Region three	11.8	4	ns	8.2	3	ns	5.5	4	ns	3.4	3	ns	1.8	4	ns
Region four	13.3	3	ns	9.1	1	ns	7.4	1	ns	3.6	2	ns	2.1	3	ns
<b>DHHR Bureau for Behavioral Health Regions</b>															
Region one	11.8	5	ns	10.2	1	ns	7.2	2	ns	3.7	2	ns	2.8	1	ns
Region two	12.5	4	ns	8.2	3	ns	6.2	5	ns	3.6	4	ns	1.9	5	ns
Region three	10.3	6	ns	8.0	4	ns	6.7	4	ns	3.0	5	ns	U	U	U
Region four	14.4	1	ns	7.8	5	ns	5.5	6	ns	2.8	6	ns	2.4	2	ns
Region five	13.4	2	ns	7.7	6	ns	6.7	3	ns	4.7	1	ns	2.4	3	ns
Region six	13.2	3	ns	9.3	2	ns	7.5	1	ns	3.6	3	ns	2.2	4	ns
<b>DHHR Bureau for Behavioral Health Ryan Brown Fund Regions</b>															
Region one	11.8	6	ns	10.2	1	ns	7.2	2	ns	3.7	3	ns	2.8	1	ns
Region two	12.5	5	ns	8.2	4	ns	6.2	6	ns	3.6	4	ns	1.9	5	ns
Region three	9.7	7	L	8.1	5	ns	6.6	5	ns	2.7	7	ns	U	U	U
Region four	14.4	1	ns	7.8	6	ns	5.5	7	ns	2.8	6	ns	2.4	3	ns
Region five	13.2	3	ns	8.2	3	ns	6.7	4	ns	4.6	2	ns	2.7	2	ns
Region six	13.9	2	ns	9.1	2	ns	7.6	1	ns	3.4	5	ns	2.4	4	ns
Region seven	13.1	4	ns	7.7	7	ns	6.8	3	ns	4.8	1	ns	1.7	6	ns

Note. Sig. = prevalence estimate that was not significantly different (ns) or significantly lower (L) or higher (H) than the state prevalence estimate; DHHR = West Virginia Department of Health and Human Resources; U = unstable prevalence estimate.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>Only regions with stable estimates were ranked.

Table A.1: Weighted Prevalence, Ranking, and Significance of Health-Related Indicators by Region: MATCH, 2021 (continued)<sup>a,b</sup>

Geographic Area	Cocaine, Meth., Heroin, or MDMA Use			No Substance Use			Prescription Opioids/Pills Not Used as Prescribed			Ever edOverdosed			Immediate Family Member in WV Overdosed		
	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.
<b>West Virginia</b>	<b>2.5</b>			<b>74.1</b>			<b>9.3</b>			<b>3.2</b>			<b>4.6</b>		
<b>DHHR Bureau for Medical Services Regions</b>															
Region one	2.2	3	ns	74.0	2	ns	6.6	3	ns	2.3	4	ns	2.5	4	L
Region two	3.3	1	ns	72.3	4	ns	12.1	2	ns	3.0	3	ns	6.1	2	ns
Region three	1.7	4	ns	76.1	1	ns	U	U	U	3.4	2	ns	3.6	3	ns
Region four	2.9	2	ns	73.9	3	ns	15.1	1	ns	4.5	1	ns	7.0	1	H
<b>DHHR Bureau for Behavioral Health Regions</b>															
Region one	2.4	3	ns	74.8	2	ns	U	U	U	2.9	4	ns	1.9	6	L
Region two	U	U	U	74.4	4	ns	U	U	U	4.0	2	ns	4.2	3	ns
Region three	1.6	5	ns	76.7	1	ns	6.8	3	ns	1.6	6	L	3.2	4	ns
Region four	1.9	4	ns	74.7	3	ns	U	U	U	2.6	5	ns	2.6	5	L
Region five	3.2	1	ns	72.5	6	ns	11.8	2	ns	3.1	3	ns	5.9	2	ns
Region six	3.0	2	ns	73.9	5	ns	15.4	1	ns	4.5	1	ns	7.2	1	H
<b>DHHR Bureau for Behavioral Health Ryan Brown Fund Regions</b>															
Region one	2.4	4	ns	74.8	2	ns	U	U	U	2.9	5	ns	1.9	7	L
Region two	U	U	U	74.4	4	ns	U	U	U	4.0	2	ns	4.2	4	ns
Region three	1.5	6	ns	77.2	1	ns	7.0	3	ns	1.6	7	L	3.3	5	ns
Region four	1.9	5	ns	74.7	3	ns	U	U	U	2.6	6	ns	2.6	6	L
Region five	3.3	1	ns	72.6	7	ns	U	U	U	3.4	3	ns	6.8	2	H
Region six	2.7	3	ns	73.4	5	ns	14.3	2	ns	4.3	1	ns	7.3	1	H
Region seven	3.3	2	ns	73.2	6	ns	17.0	1	ns	3.1	4	ns	4.9	3	ns

Note. Meth. = Methamphetamine; MDMA = 3,4-Methylenedioxymethamphetamine; WV = West Virginia; Sig. = prevalence estimate that was not significantly different (ns) or significantly lower (L) or higher (H) than the state prevalence estimate; DHHR = West Virginia Department of Health and Human Resources; U = unstable prevalence estimate.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>Only regions with stable estimates were ranked.

Table A.1: Weighted Prevalence, Ranking, and Significance of Health-Related Indicators by Region: MATCH, 2021 (continued)<sup>a,b</sup>

Geographic Area	Suicide Risk			Difficulty Sleeping Always/Usually			Difficulty Sleeping Sometimes/Rarely			Difficulty Sleeping Never			Purchased Fresh Produce Always/Most of the Time		
	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.
<b>West Virginia</b>	<b>27.5</b>			<b>34.0</b>			<b>56.0</b>			<b>10.0</b>			<b>49.4</b>		
<b>DHHR Bureau for Medical Services Regions</b>															
Region one	29.2	1	ns	32.9	3	ns	57.3	1	ns	9.8	2	ns	49.7	3	ns
Region two	28.3	2	ns	35.2	2	ns	55.2	4	ns	9.6	3	ns	50.9	1	ns
Region three	26.5	3	ns	32.8	4	ns	56.0	2	ns	11.2	1	ns	50.5	2	ns
Region four	25.3	4	ns	35.7	1	ns	55.3	3	ns	9.0	4	ns	45.3	4	L
<b>DHHR Bureau for Behavioral Health Regions</b>															
Region one	26.0	5	ns	34.2	3	ns	56.4	3	ns	9.4	5	ns	49.3	4	ns
Region two	27.8	3	ns	32.4	5	ns	55.8	4	ns	11.8	1	ns	50.2	3	ns
Region three	26.2	4	ns	32.4	6	ns	56.7	2	ns	10.8	2	ns	47.1	5	ns
Region four	29.2	1	ns	32.8	4	ns	57.3	1	ns	9.9	3	ns	51.5	1	ns
Region five	28.2	2	ns	35.3	2	ns	55.1	6	ns	9.6	4	ns	50.3	2	ns
Region six	25.3	6	ns	35.4	1	ns	55.7	5	ns	8.9	6	ns	45.6	6	ns
<b>DHHR Bureau for Behavioral Health Ryan Brown Fund Regions</b>															
Region one	26.0	6	ns	34.2	3	ns	56.4	4	ns	9.4	5	ns	49.3	4	ns
Region two	27.8	3	ns	32.4	6	ns	55.8	6	ns	11.8	1	ns	50.2	3	ns
Region three	26.2	5	ns	31.8	7	ns	56.9	3	ns	11.2	2	ns	47.5	6	ns
Region four	29.2	1	ns	32.8	4	ns	57.3	1	ns	9.9	4	ns	51.5	1	ns
Region five	27.8	4	ns	38.0	1	H	52.7	7	ns	9.3	6	ns	48.9	5	ns
Region six	25.0	7	ns	35.2	2	ns	56.4	5	ns	8.4	7	ns	44.7	7	L
Region seven	28.1	2	ns	32.7	5	ns	57.3	2	ns	10.1	3	ns	51.3	2	ns

Note. Sig. = prevalence estimate that was not significantly different (ns) or significantly lower (L) or higher (H) than the state prevalence estimate; DHHR = West Virginia Department of Health and Human Resources.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>Only regions with stable estimates were ranked.



Table A.1: Weighted Prevalence, Ranking, and Significance of Health-Related Indicators by Region: MATCH, 2021 (continued)<sup>a,b</sup>

Geographic Area	Purchased Fresh Produce About Half the Time/Sometimes			Purchased Fresh Produce Never			Physical Inactivity			No Insurance (Age 18-64)			Type of Health Insurance Medicare		
	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.
<b>West Virginia</b>	<b>47.2</b>			<b>3.5</b>			<b>34.3</b>			<b>8.3</b>			<b>32.0</b>		
<b>DHHR Bureau for Medical Services Regions</b>															
Region one	46.7	3	ns	3.6	3	ns	30.9	4	L	7.9	3	ns	30.1	3	ns
Region two	45.2	4	ns	3.9	1	ns	35.4	2	ns	8.2	2	ns	33.6	2	ns
Region three	46.8	2	ns	2.7	4	ns	32.4	3	ns	9.7	1	ns	29.5	4	ns
Region four	51.0	1	ns	3.7	2	ns	40.6	1	H	6.8	4	ns	36.0	1	H
<b>DHHR Bureau for Behavioral Health Regions</b>															
Region one	46.4	4	ns	4.2	1	ns	31.2	4	ns	7.0	5	ns	33.2	4	ns
Region two	47.1	3	ns	2.7	6	ns	31.0	5	ns	9.6	1	ns	28.0	6	L
Region three	49.9	2	ns	3.0	5	ns	34.2	3	ns	9.5	2	ns	33.4	3	ns
Region four	45.4	6	ns	3.1	4	ns	30.9	6	L	8.6	3	ns	28.2	5	L
Region five	45.7	5	ns	4.0	2	ns	36.4	2	ns	7.9	4	ns	33.8	2	ns
Region six	50.9	1	ns	3.6	3	ns	39.5	1	H	6.9	6	ns	36.1	1	H
<b>DHHR Bureau for Behavioral Health Ryan Brown Fund Regions</b>															
Region one	46.4	5	ns	4.2	2	ns	31.2	5	ns	7.0	6	ns	33.2	4	ns
Region two	47.1	4	ns	2.7	7	ns	31.0	6	ns	9.6	2	ns	28.0	7	L
Region three	49.7	2	ns	2.8	6	ns	33.7	4	ns	9.7	1	ns	33.3	3	ns
Region four	45.4	6	ns	3.1	5	ns	30.9	7	L	8.6	3	ns	28.2	6	L
Region five	47.9	3	ns	3.3	4	ns	37.3	2	ns	7.8	5	ns	33.0	5	ns
Region six	51.4	1	ns	4.0	3	ns	39.8	1	H	8.1	4	ns	36.2	1	H
Region seven	44.3	7	ns	4.4	1	ns	36.2	3	ns	6.8	7	ns	35.2	2	ns

Note. Sig. = prevalence estimate that was not significantly different (ns) or significantly lower (L) or higher (H) than the state prevalence estimate; DHHR = West Virginia Department of Health and Human Resources.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>Only regions with stable estimates were ranked.

Table A.1: Weighted Prevalence, Ranking, and Significance of Health-Related Indicators by Region: MATCH, 2021 (continued)<sup>a,b</sup>

Geographic Area	Type of Health Insurance Medicaid			Type of Health Insurance Other Insurance			Type of Health Insurance No Insurance			No Prescriptions			Got Prescription on Time		
	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.
<b>West Virginia</b>	<b>26.3</b>			<b>57.1</b>			<b>6.6</b>			<b>17.7</b>			<b>76.7</b>		
<b>DHHR Bureau for Medical Services Regions</b>															
Region one	24.1	3	ns	61.0	1	H	6.4	2	ns	19.0	1	ns	76.2	4	ns
Region two	27.0	2	ns	56.4	3	ns	6.4	3	ns	17.1	3	ns	76.6	3	ns
Region three	22.6	4	L	60.3	2	H	7.8	1	ns	17.5	2	ns	76.7	2	ns
Region four	34.3	1	H	47.8	4	L	5.2	4	ns	16.9	4	ns	77.3	1	ns
<b>DHHR Bureau for Behavioral Health Regions</b>															
Region one	23.4	5	ns	62.1	2	H	5.7	5	ns	16.6	6	ns	77.9	2	ns
Region two	20.5	6	L	62.5	1	H	7.7	1	ns	19.3	1	ns	74.6	6	ns
Region three	26.7	3	ns	56.2	4	ns	7.4	2	ns	16.6	5	ns	78.5	1	ns
Region four	23.6	4	L	60.9	3	H	7.2	3	ns	18.9	2	ns	76.2	5	ns
Region five	27.9	2	ns	55.5	5	ns	6.3	4	ns	16.9	4	ns	76.8	4	ns
Region six	33.5	1	H	48.4	6	L	5.2	6	ns	17.1	3	ns	77.2	3	ns
<b>DHHR Bureau for Behavioral Health Ryan Brown Fund Regions</b>															
Region one	23.4	6	ns	62.1	2	H	5.7	6	ns	16.6	5	ns	77.9	2	ns
Region two	20.5	7	L	62.5	1	H	7.7	1	ns	19.3	1	ns	74.6	7	ns
Region three	25.0	4	ns	57.0	4	ns	7.6	2	ns	16.4	6	ns	78.7	1	ns
Region four	23.6	5	L	60.9	3	H	7.2	3	ns	18.9	2	ns	76.2	5	ns
Region five	29.7	2	H	53.4	6	ns	6.3	4	ns	16.0	7	ns	77.3	3	ns
Region six	33.8	1	H	47.2	7	L	6.0	5	ns	17.5	4	ns	77.2	4	ns
Region seven	28.0	3	ns	56.7	5	ns	5.3	7	ns	17.7	3	ns	76.2	6	ns

Note. Sig. = prevalence estimate that was not significantly different (ns) or significantly lower (L) or higher (H) than the state prevalence estimate; DHHR = West Virginia Department of Health and Human Resources.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>Only regions with stable estimates were ranked.

Table A.1: Weighted Prevalence, Ranking, and Significance of Health-Related Indicators by Region: MATCH, 2021 (continued)<sup>a,b</sup>

Geographic Area	Delayed Getting Prescription			Never Got Prescription			Needed Medical Care			Received Needed Medical Care			Telehealth Visit		
	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.
<b>West Virginia</b>	<b>5.6</b>			<b>2.3</b>			<b>65.6</b>			<b>92.0</b>			<b>35.5</b>		
<b>DHHR Bureau for Medical Services Regions</b>															
Region one	5.1	4	ns	1.7	4	ns	64.9	3	ns	92.1	2	ns	31.1	4	L
Region two	6.1	1	ns	2.5	3	ns	63.5	4	ns	90.7	4	ns	38.4	1	ns
Region three	5.6	2	ns	2.7	1	ns	67.6	1	ns	93.7	1	ns	37.6	2	ns
Region four	5.4	3	ns	2.5	2	ns	66.8	2	ns	90.8	3	ns	34.8	3	ns
<b>DHHR Bureau for Behavioral Health Regions</b>															
Region one	5.6	3	ns	2.1	5	ns	62.9	6	ns	90.6	6	ns	26.4	6	L
Region two	5.7	2	ns	2.6	1	ns	67.8	1	ns	94.9	1	H	42.7	1	H
Region three	5.5	4	ns	1.1	6	L	64.4	4	ns	93.0	2	ns	30.9	5	L
Region four	4.9	6	ns	2.4	4	ns	67.1	2	ns	92.5	3	ns	32.8	4	ns
Region five	6.1	1	ns	2.5	3	ns	63.5	5	ns	90.6	5	ns	38.1	2	ns
Region six	5.4	5	ns	2.5	2	ns	67.0	3	ns	90.8	4	ns	35.0	3	ns
<b>DHHR Bureau for Behavioral Health Ryan Brown Fund Regions</b>															
Region one	5.6	4	ns	2.1	6	ns	62.9	6	ns	90.6	5	ns	26.4	7	L
Region two	5.7	2	ns	2.6	2	ns	67.8	1	ns	94.9	1	H	42.7	1	H
Region three	5.6	3	ns	1.1	7	L	64.6	5	ns	93.2	2	ns	30.4	6	L
Region four	4.9	7	ns	2.4	4	ns	67.1	3	ns	92.5	3	ns	32.8	5	ns
Region five	6.8	1	ns	2.5	3	ns	64.9	4	ns	91.5	4	ns	38.5	2	ns
Region six	5.1	6	ns	2.7	1	ns	67.3	2	ns	90.2	6	ns	33.9	4	ns
Region seven	5.2	5	ns	2.1	5	ns	62.6	7	ns	90.1	7	ns	37.7	3	ns

Note. Sig. = prevalence estimate that was not significantly different (ns) or significantly lower (L) or higher (H) than the state prevalence estimate; DHHR = West Virginia Department of Health and Human Resources.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>Only regions with stable estimates were ranked.

Table A.1: Weighted Prevalence, Ranking, and Significance of Health-Related Indicators by Region: MATCH, 2021 (continued)<sup>a,b</sup>

Geographic Area	Two or More ER Visits			Treated Unfairly by Healthcare Provider			Provider Asked About Mental Health			Needed Mental Health Care			Received Needed Mental Health Care		
	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.
<b>West Virginia</b>	<b>11.4</b>			<b>9.7</b>			<b>65.7</b>			<b>31.2</b>			<b>56.7</b>		
<b>DHHR Bureau for Medical Services Regions</b>															
Region one	10.9	3	ns	9.1	4	ns	65.3	3	ns	30.2	3	ns	59.9	2	ns
Region two	10.8	4	ns	9.6	3	ns	67.9	1	ns	34.1	1	ns	52.5	4	ns
Region three	11.7	2	ns	9.7	2	ns	65.6	2	ns	29.0	4	ns	60.1	1	ns
Region four	12.2	1	ns	10.7	1	ns	63.2	4	ns	31.7	2	ns	54.1	3	ns
<b>DHHR Bureau for Behavioral Health Regions</b>															
Region one	12.5	1	ns	11.0	1	ns	61.6	6	ns	25.7	6	L	67.6	1	H
Region two	10.4	6	ns	10.0	3	ns	62.8	5	ns	30.5	3	ns	62.0	2	ns
Region three	11.8	3	ns	7.9	6	ns	64.1	3	ns	30.5	4	ns	58.8	3	ns
Region four	11.3	4	ns	8.9	5	ns	68.9	1	ns	30.0	5	ns	56.8	4	ns
Region five	11.1	5	ns	9.8	4	ns	67.8	2	ns	34.3	1	ns	52.7	6	ns
Region six	11.9	2	ns	10.6	2	ns	63.2	4	ns	31.0	2	ns	54.1	5	ns
<b>DHHR Bureau for Behavioral Health Ryan Brown Fund Regions</b>															
Region one	12.5	1	ns	11.0	1	ns	61.6	7	ns	25.7	7	L	67.6	1	H
Region two	10.4	7	ns	10.0	4	ns	62.8	5	ns	30.5	4	ns	62.0	2	ns
Region three	11.9	3	ns	7.7	7	ns	63.8	4	ns	30.4	5	ns	59.2	3	ns
Region four	11.3	5	ns	8.9	6	ns	68.9	2	ns	30.0	6	ns	56.8	4	ns
Region five	12.0	2	ns	9.5	5	ns	69.7	1	H	36.6	1	H	53.5	6	ns
Region six	11.6	4	ns	10.6	2	ns	62.7	6	ns	30.6	3	ns	53.9	5	ns
Region seven	10.5	6	ns	10.3	3	ns	64.9	3	ns	31.0	2	ns	52.3	7	ns

Note. ER = emergency room; Sig. = prevalence estimate that was not significantly different (ns) or significantly lower (L) or higher (H) than the state prevalence estimate; DHHR = West Virginia Department of Health and Human Resources.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>Only regions with stable estimates were ranked.

Table A.1: Weighted Prevalence, Ranking, and Significance of Health-Related Indicators by Region: MATCH, 2021 (continued)<sup>a,b</sup>

Geographic Area	Had Mental Health Prescription for Medication			Needed Healthcare for Alcohol or Drug Use			Saw Provider for Alcohol or Drug Use			Paying Off Debt Got Harder			Paying for Housing Got Harder		
	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.
<b>West Virginia</b>	<b>28.7</b>			<b>2.8</b>			<b>65.1</b>			<b>36.4</b>			<b>28.6</b>		
<b>DHHR Bureau for Medical Services Regions</b>															
Region one	27.6	4	ns	2.8	3	ns	54.6	4	ns	34.4	3	ns	25.2	4	ns
Region two	30.0	1	ns	2.8	2	ns	73.6	1	ns	37.9	2	ns	31.5	2	ns
Region three	28.5	3	ns	2.0	4	ns	69.9	2	ns	34.2	4	ns	26.3	3	ns
Region four	28.6	2	ns	3.7	1	ns	63.9	3	ns	40.2	1	ns	33.0	1	ns
<b>DHHR Bureau for Behavioral Health Regions</b>															
Region one	26.9	5	ns	3.1	2	ns	U	U	U	32.0	6	ns	24.4	5	ns
Region two	29.3	3	ns	1.7	6	ns	U	U	U	34.7	4	ns	25.8	4	ns
Region three	30.3	1	ns	2.3	5	ns	U	U	U	32.1	5	ns	22.6	6	L
Region four	26.7	6	ns	2.7	4	ns	59.5	3	ns	35.5	3	ns	27.3	3	ns
Region five	30.1	2	ns	2.9	3	ns	73.5	1	ns	38.0	2	ns	31.8	2	ns
Region six	28.3	4	ns	3.6	1	ns	63.5	2	ns	40.2	1	ns	32.5	1	ns
<b>DHHR Bureau for Behavioral Health Ryan Brown Fund Regions</b>															
Region one	26.9	6	ns	3.1	3	ns	U	U	U	32.0	6	ns	24.4	6	ns
Region two	29.3	3	ns	1.7	7	ns	U	U	U	34.7	5	ns	25.8	5	ns
Region three	30.5	2	ns	2.5	6	ns	U	U	U	31.8	7	ns	22.6	7	L
Region four	26.7	7	ns	2.7	5	ns	59.5	4	ns	35.5	4	ns	27.3	4	ns
Region five	31.4	1	ns	2.7	4	ns	83.1	1	H	39.7	2	ns	34.2	1	H
Region six	28.4	4	ns	3.3	2	ns	64.0	2	ns	40.1	1	ns	33.2	2	ns
Region seven	28.0	5	ns	3.4	1	ns	60.5	3	ns	36.7	3	ns	28.3	3	ns

Note. Sig. = prevalence estimate that was not significantly different (ns) or significantly lower (L) or higher (H) than the state prevalence estimate; DHHR = West Virginia Department of Health and Human Resources; U = unstable prevalence estimate.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>Only regions with stable estimates were ranked.

Table A.1: Weighted Prevalence, Ranking, and Significance of Health-Related Indicators by Region: MATCH, 2021 (continued)<sup>a,b</sup>

Geographic Area	Very Worried Incident Prevents Paying Housing			Home Payment Pay rent			Home Payment Pay Mortgage			Home Payment No Payments, Purchased Home			Home Payment No Payments, Inherited Home		
	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.
<b>West Virginia</b>	<b>23.1</b>			<b>22.7</b>			<b>32.7</b>			<b>24.5</b>			<b>6.0</b>		
<b>DHHR Bureau for Medical Services Regions</b>															
Region one	21.6	3	ns	25.9	1	H	30.3	3	ns	25.5	2	ns	5.0	4	ns
Region two	24.6	2	ns	23.1	2	ns	32.9	2	ns	23.6	3	ns	6.8	2	ns
Region three	21.0	4	ns	20.1	4	ns	38.6	1	H	22.9	4	ns	5.1	3	ns
Region four	26.7	1	ns	21.0	3	ns	27.3	4	L	26.7	1	ns	7.8	1	ns
<b>DHHR Bureau for Behavioral Health Regions</b>															
Region one	25.1	2	ns	21.5	4	ns	31.7	3	ns	30.0	1	H	4.3	5	ns
Region two	19.8	5	ns	20.9	6	ns	43.4	1	H	19.1	6	L	3.6	6	L
Region three	19.2	6	ns	22.7	3	ns	31.0	4	ns	26.7	2	ns	5.6	4	ns
Region four	22.0	4	ns	25.0	1	ns	30.9	5	ns	24.5	4	ns	6.0	3	ns
Region five	24.6	3	ns	23.2	2	ns	31.9	2	ns	24.2	5	ns	6.9	2	ns
Region six	26.6	1	ns	20.9	5	ns	28.3	6	L	26.1	3	ns	7.6	1	ns
<b>DHHR Bureau for Behavioral Health Ryan Brown Fund Regions</b>															
Region one	25.1	3	ns	21.5	5	ns	31.7	3	ns	30.0	1	H	4.3	6	ns
Region two	19.8	6	ns	20.9	7	ns	43.4	1	H	19.1	7	L	3.6	7	L
Region three	19.2	7	ns	23.4	2	ns	31.3	4	ns	26.5	3	ns	5.0	5	ns
Region four	22.0	5	ns	25.0	1	ns	30.9	5	ns	24.5	5	ns	6.0	4	ns
Region five	26.5	2	ns	22.8	3	ns	30.4	6	ns	24.6	4	ns	7.8	1	ns
Region six	27.2	1	ns	22.5	4	ns	26.6	7	L	26.8	2	ns	7.5	2	ns
Region seven	22.2	4	ns	21.2	6	ns	34.0	2	ns	23.9	6	ns	6.5	3	ns

Note. Sig. = prevalence estimate that was not significantly different (ns) or significantly lower (L) or higher (H) than the state prevalence estimate; DHHR = West Virginia Department of Health and Human Resources.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>Only regions with stable estimates were ranked.

Table A.1: Weighted Prevalence, Ranking, and Significance of Health-Related Indicators by Region: MATCH, 2021 (continued)<sup>a,b</sup>

Geographic Area	Home Payment Some Other Arrangement			Buying Food Got Harder <sup>c</sup>			Cut Size of/Skipped Meals <sup>c</sup>			Free Meals Food Banks or Pantries <sup>c</sup>			Free Meals Other Place <sup>c</sup>		
	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.
<b>West Virginia</b>	<b>14.1</b>			<b>30.3</b>			<b>14.0</b>			<b>8.0</b>			<b>3.9</b>		
<b>DHHR Bureau for Medical Services Regions</b>															
Region one	13.3	3	ns	25.5	4	L	12.1	4	ns	6.8	3	ns	3.2	3	ns
Region two	13.6	2	ns	32.4	2	ns	16.9	1	H	9.0	2	ns	4.4	2	ns
Region three	13.3	4	ns	29.2	3	ns	12.1	3	ns	6.5	4	ns	3.0	4	ns
Region four	17.2	1	H	35.8	1	H	15.5	2	ns	10.8	1	H	5.4	1	ns
<b>DHHR Bureau for Behavioral Health Regions</b>															
Region one	12.6	6	ns	26.1	4	ns	12.7	4	ns	6.0	5	L	3.5	3	ns
Region two	13.1	5	ns	30.9	3	ns	11.3	5	ns	4.8	6	L	3.0	5	ns
Region three	13.9	2	ns	25.5	6	L	11.1	6	L	8.0	3	ns	2.8	6	ns
Region four	13.5	4	ns	25.9	5	L	12.8	3	ns	7.3	4	ns	3.3	4	ns
Region five	13.9	3	ns	32.7	2	ns	17.0	1	H	9.3	2	ns	4.4	2	ns
Region six	17.0	1	ns	35.6	1	H	15.3	2	ns	10.6	1	H	5.3	1	ns
<b>DHHR Bureau for Behavioral Health Ryan Brown Fund Regions</b>															
Region one	12.6	7	ns	26.1	5	ns	12.7	5	ns	6.0	6	L	3.5	4	ns
Region two	13.1	6	ns	30.9	4	ns	11.3	6	ns	4.8	7	L	3.0	6	ns
Region three	13.9	4	ns	24.9	7	L	10.8	7	L	7.7	4	ns	2.6	7	ns
Region four	13.5	5	ns	25.9	6	L	12.8	4	ns	7.3	5	ns	3.3	5	ns
Region five	14.5	2	ns	34.5	2	H	17.9	1	H	9.6	2	ns	4.4	3	ns
Region six	16.5	1	ns	35.5	1	H	15.9	2	ns	10.9	1	H	5.1	1	ns
Region seven	14.5	3	ns	31.4	3	ns	14.9	3	ns	9.2	3	ns	4.8	2	ns

Note. Sig. = prevalence estimate that was not significantly different (ns) or significantly lower (L) or higher (H) than the state prevalence estimate; DHHR = West Virginia Department of Health and Human Resources.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>Only regions with stable estimates were ranked.

<sup>c</sup>Question asked about information for the respondent’s household.

Table A.1: Weighted Prevalence, Ranking, and Significance of Health-Related Indicators by Region: MATCH, 2021 (continued)<sup>a,b</sup>

Geographic Area	Free Meals No Free Groceries or Meals <sup>c</sup>			TANF <sup>c</sup>			SNAP <sup>c</sup>			WIC <sup>c</sup>			Medicaid (Household) <sup>c</sup>		
	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.
<b>West Virginia</b>	<b>89.9</b>			<b>1.6</b>			<b>27.4</b>			<b>4.9</b>			<b>34.5</b>		
<b>DHHR Bureau for Medical Services Regions</b>															
Region one	91.3	2	ns	1.2	4	ns	24.6	3	L	4.3	4	ns	30.6	4	L
Region two	89.1	3	ns	1.7	2	ns	29.2	2	ns	4.5	3	ns	35.8	2	ns
Region three	91.8	1	H	1.3	3	ns	23.2	4	L	5.6	1	ns	30.7	3	L
Region four	86.1	4	L	2.6	1	ns	35.1	1	H	5.0	2	ns	44.0	1	H
<b>DHHR Bureau for Behavioral Health Regions</b>															
Region one	92.0	2	ns	1.6	4	ns	26.1	4	ns	4.7	4	ns	30.5	4	L
Region two	93.7	1	H	1.2	5	ns	21.7	6	L	5.6	1	ns	28.6	6	L
Region three	90.3	4	ns	1.6	3	ns	27.6	3	ns	4.1	6	ns	34.3	3	ns
Region four	90.7	3	ns	1.0	6	ns	22.7	5	L	5.1	2	ns	30.4	5	L
Region five	88.8	5	ns	1.6	2	ns	30.4	2	H	4.6	5	ns	37.1	2	ns
Region six	86.2	6	L	2.7	1	ns	33.9	1	H	4.8	3	ns	42.8	1	H
<b>DHHR Bureau for Behavioral Health Ryan Brown Fund Regions</b>															
Region one	92.0	2	ns	1.6	5	ns	26.1	4	ns	4.7	5	ns	30.5	5	L
Region two	93.7	1	H	1.2	6	ns	21.7	7	L	5.6	1	ns	28.6	7	L
Region three	90.8	3	ns	1.8	3	ns	26.0	5	ns	4.2	6	ns	33.4	4	ns
Region four	90.7	4	ns	1.0	7	ns	22.7	6	L	5.1	2	ns	30.4	6	L
Region five	88.6	5	ns	1.8	2	ns	32.3	2	H	4.8	4	ns	39.1	2	H
Region six	86.0	7	L	2.6	1	ns	33.9	1	H	5.0	3	ns	42.5	1	H
Region seven	88.2	6	ns	1.7	4	ns	29.8	3	ns	4.2	7	ns	36.8	3	ns

*Note.* TANF = Temporary Assistance for Needy Families; SNAP = Supplemental Nutrition Assistance Program; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children; Sig. = prevalence estimate that was not significantly different (ns) or significantly lower (L) or higher (H) than the state prevalence estimate; DHHR = West Virginia Department of Health and Human Resources.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>Only regions with stable estimates were ranked.

<sup>c</sup>Question asked about information for the respondent’s household.



Table A.1: Weighted Prevalence, Ranking, and Significance of Health-Related Indicators by Region: MATCH, 2021 (continued)<sup>a,b</sup>

Geographic Area	LIEAP <sup>c</sup>			School Clothing Vouchers <sup>c</sup>			No Public Benefits <sup>c</sup>			Home Type House			Home Type Apartment		
	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.
<b>West Virginia</b>	<b>10.7</b>			<b>7.5</b>			<b>59.7</b>			<b>72.5</b>			<b>10.6</b>		
<b>DHHR Bureau for Medical Services Regions</b>															
Region one	8.7	3	L	7.2	3	ns	63.5	2	H	71.1	4	ns	15.1	1	H
Region two	11.6	2	ns	8.1	2	ns	58.0	3	ns	71.3	3	ns	10.9	2	ns
Region three	7.8	4	L	5.9	4	L	63.9	1	H	75.5	1	H	7.8	3	L
Region four	16.5	1	H	9.4	1	ns	50.5	4	L	71.9	2	ns	7.6	4	L
<b>DHHR Bureau for Behavioral Health Regions</b>															
Region one	8.3	5	ns	8.1	4	ns	62.0	3	ns	80.4	1	H	11.3	3	ns
Region two	6.4	6	L	4.4	6	L	66.5	1	H	75.5	2	ns	7.3	6	L
Region three	10.0	3	ns	8.2	3	ns	60.2	4	ns	72.9	3	ns	12.0	2	ns
Region four	8.4	4	L	6.8	5	ns	64.2	2	H	69.5	6	ns	14.4	1	H
Region five	12.5	2	ns	8.3	2	ns	56.6	5	ns	70.7	5	ns	10.6	4	ns
Region six	15.8	1	H	9.1	1	ns	51.8	6	L	72.8	4	ns	7.6	5	L
<b>DHHR Bureau for Behavioral Health Ryan Brown Fund Regions</b>															
Region one	8.3	6	ns	8.1	3	ns	62.0	3	ns	80.4	1	H	11.3	3	ns
Region two	6.4	7	L	4.4	7	L	66.5	1	H	75.5	2	ns	7.3	7	L
Region three	9.8	4	ns	7.8	4	ns	61.3	4	ns	73.9	4	ns	12.1	2	ns
Region four	8.4	5	L	6.8	6	ns	64.2	2	H	69.5	6	ns	14.4	1	H
Region five	13.2	2	H	9.4	2	ns	55.1	6	L	68.0	7	L	10.3	4	ns
Region six	16.0	1	H	9.7	1	ns	51.7	7	L	71.8	5	ns	8.0	6	L
Region seven	12.3	3	ns	7.0	5	ns	56.8	5	ns	74.8	3	ns	9.7	5	ns

Note. LIEAP = Low Income Energy Assistance Program; Sig. = prevalence estimate that was not significantly different (ns) or significantly lower (L) or higher (H) than the state prevalence estimate; DHHR = West Virginia Department of Health and Human Resources.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>Only regions with stable estimates were ranked.

<sup>c</sup>Question asked about information for the respondent’s household.

Table A.1: Weighted Prevalence, Ranking, and Significance of Health-Related Indicators by Region: MATCH, 2021 (continued)<sup>a,b</sup>

Geographic Area	Home Type Condominium or Townhouse			Home Type Mobile Home or Trailer			Home Type Some Other Housing			Physical Activity Resources: Public Gym			Physical Activity Resources: Private Gym or Personal Trainer		
	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.
<b>West Virginia</b>	<b>2.8</b>			<b>12.9</b>			<b>1.3</b>			<b>27.5</b>			<b>7.9</b>		
<b>DHHR Bureau for Medical Services Regions</b>															
Region one	3.6	1	ns	9.5	4	L	0.7	4	ns	28.2	2	ns	9.1	1	ns
Region two	2.7	3	ns	13.7	2	ns	1.4	2	ns	28.7	1	ns	8.4	2	ns
Region three	3.1	2	ns	11.9	3	ns	1.7	1	ns	26.9	3	ns	7.7	3	ns
Region four	U	U	U	18.1	1	H	1.3	3	ns	25.6	4	ns	5.5	4	L
<b>DHHR Bureau for Behavioral Health Regions</b>															
Region one	1.8	4	ns	5.9	6	L	U	U	U	30.0	1	ns	8.4	2	ns
Region two	4.9	1	H	10.1	5	L	U	U	U	28.5	2	ns	7.7	4	ns
Region three	U	U	U	12.8	3	ns	U	U	U	27.0	4	ns	5.8	5	ns
Region four	3.6	2	ns	11.6	4	ns	0.9	3	ns	26.7	5	ns	10.1	1	H
Region five	2.6	3	ns	14.8	2	ns	1.3	2	ns	27.8	3	ns	8.2	3	ns
Region six	U	U	U	16.9	1	H	1.4	1	ns	26.4	6	ns	5.5	6	L
<b>DHHR Bureau for Behavioral Health Ryan Brown Fund Regions</b>															
Region one	1.8	4	ns	5.9	7	L	U	U	U	30.0	1	ns	8.4	2	ns
Region two	4.9	1	H	10.1	6	L	U	U	U	28.5	2	ns	7.7	4	ns
Region three	U	U	U	11.7	3	ns	U	U	U	27.6	4	ns	6.3	6	ns
Region four	3.6	2	ns	11.6	4	ns	0.9	3	ns	26.7	6	ns	10.1	1	H
Region five	1.2	5	L	18.8	1	H	1.7	1	ns	27.8	3	ns	7.3	5	ns
Region six	U	U	U	17.1	2	H	1.5	2	ns	26.7	7	ns	5.7	7	ns
Region seven	3.4	3	ns	11.1	5	ns	U	U	U	26.8	5	ns	8.0	3	ns

Note. Sig. = prevalence estimate that was not significantly different (ns) or significantly lower (L) or higher (H) than the state prevalence estimate; DHHR = West Virginia Department of Health and Human Resources; U = unstable prevalence estimate.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>Only regions with stable estimates were ranked.

Table A.1: Weighted Prevalence, Ranking, and Significance of Health-Related Indicators by Region: MATCH, 2021 (continued)<sup>a,b</sup>

Geographic Area	Physical Activity Resources Gym Equipment at Home			Physical Activity Resources Exercise Buddy or Group			Physical Activity Resources Other Exercise Facility			Emotional Support Always/Usually			Emotional Support Sometimes/Rarely		
	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.
<b>West Virginia</b>	<b>29.2</b>			<b>11.2</b>			<b>7.8</b>			<b>58.6</b>			<b>21.0</b>		
<b>DHHR Bureau for Medical Services Regions</b>															
Region one	31.7	1	ns	12.8	1	ns	8.5	2	ns	61.4	1	ns	19.9	4	ns
Region two	28.2	3	ns	11.1	3	ns	9.1	1	ns	54.2	4	L	22.3	1	ns
Region three	31.6	2	ns	11.7	2	ns	6.9	3	ns	61.2	2	ns	20.3	3	ns
Region four	23.7	4	L	8.4	4	L	6.4	4	ns	56.9	3	ns	21.9	2	ns
<b>DHHR Bureau for Behavioral Health Regions</b>															
Region one	29.1	4	ns	11.0	4	ns	6.6	4	ns	64.0	1	H	18.5	6	ns
Region two	32.6	1	ns	12.4	2	ns	6.5	5	ns	60.1	4	ns	20.0	4	ns
Region three	30.3	3	ns	12.0	3	ns	8.5	2	ns	61.0	3	ns	19.2	5	ns
Region four	32.5	2	ns	12.8	1	ns	8.5	3	ns	61.1	2	ns	21.2	3	ns
Region five	27.8	5	ns	10.9	5	ns	8.9	1	ns	54.4	6	L	22.0	2	ns
Region six	23.9	6	L	8.5	6	L	6.5	6	ns	57.1	5	ns	22.2	1	ns
<b>DHHR Bureau for Behavioral Health Ryan Brown Fund Regions</b>															
Region one	29.1	4	ns	11.0	5	ns	6.6	5	ns	64.0	1	H	18.5	7	ns
Region two	32.6	1	ns	12.4	3	ns	6.5	6	ns	60.1	4	ns	20.0	5	ns
Region three	31.5	3	ns	12.7	2	ns	8.4	4	ns	61.3	2	ns	18.8	6	ns
Region four	32.5	2	ns	12.8	1	ns	8.5	3	ns	61.1	3	ns	21.2	4	ns
Region five	26.2	6	ns	10.2	6	ns	8.8	1	ns	53.6	7	L	21.7	3	ns
Region six	23.1	7	L	7.2	7	L	6.3	7	ns	57.9	5	ns	21.8	2	ns
Region seven	28.8	5	ns	11.9	4	ns	8.7	2	ns	55.5	6	ns	22.9	1	ns

Note. Sig. = prevalence estimate that was not significantly different (ns) or significantly lower (L) or higher (H) than the state prevalence estimate; DHHR = West Virginia Department of Health and Human Resources.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>Only regions with stable estimates were ranked.

Table A.1: Weighted Prevalence, Ranking, and Significance of Health-Related Indicators by Region: MATCH, 2021 (continued)<sup>a,b</sup>

Geographic Area	Emotional Support Never			COVID-19 Impact on Household Employment <sup>c</sup>			Household Financial Action to COVID-19 <sup>c</sup>			COVID-19 Impacts on Mental Health			Family or Friends with COVID-19 MH Impacts		
	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.	%	Rank	Sig.
<b>West Virginia</b>	<b>20.4</b>			<b>41.2</b>			<b>54.8</b>			<b>21.0</b>			<b>19.7</b>		
<b>DHHR Bureau for Medical Services Regions</b>															
Region one	18.7	3	ns	41.7	2	ns	54.0	3	ns	22.5	1	ns	18.4	3	ns
Region two	23.5	1	ns	43.3	1	ns	55.0	2	ns	22.3	2	ns	22.6	2	ns
Region three	18.5	4	ns	39.0	4	ns	53.5	4	ns	18.4	4	ns	15.2	4	L
Region four	21.1	2	ns	40.5	3	ns	57.6	1	ns	21.3	3	ns	24.0	1	H
<b>DHHR Bureau for Behavioral Health Regions</b>															
Region one	17.5	6	ns	39.8	4	ns	52.9	5	ns	19.8	5	ns	19.0	3	ns
Region two	19.9	3	ns	38.6	6	ns	54.4	3	ns	18.4	6	ns	14.0	6	L
Region three	19.7	4	ns	39.1	5	ns	52.1	6	ns	20.7	4	ns	18.3	4	ns
Region four	17.7	5	ns	42.3	2	ns	54.1	4	ns	21.8	2	ns	17.3	5	ns
Region five	23.6	1	H	42.8	1	ns	55.1	2	ns	21.9	1	ns	22.8	2	ns
Region six	20.7	2	ns	41.0	3	ns	57.9	1	ns	21.7	3	ns	23.8	1	H
<b>DHHR Bureau for Behavioral Health Ryan Brown Fund Regions</b>															
Region one	17.5	7	ns	39.8	5	ns	52.9	6	ns	19.8	5	ns	19.0	4	ns
Region two	19.9	5	ns	38.6	7	ns	54.4	3	ns	18.4	7	ns	14.0	7	L
Region three	19.9	4	ns	39.3	6	ns	51.6	7	ns	19.9	4	ns	17.3	5	ns
Region four	17.7	6	ns	42.3	2	ns	54.1	4	ns	21.8	2	ns	17.3	6	ns
Region five	24.8	1	H	44.4	1	ns	56.7	2	ns	24.3	1	ns	23.2	2	ns
Region six	20.3	3	ns	40.7	3	ns	58.5	1	ns	21.7	3	ns	23.9	1	ns
Region seven	21.7	2	ns	40.4	4	ns	53.5	5	ns	19.2	6	ns	22.8	3	ns

Note. COVID-19 = Coronavirus Disease 2019; MH = mental health; Sig. = prevalence estimate that was not significantly different (ns) or significantly lower (L) or higher (H) than the state prevalence estimate; DHHR = West Virginia Department of Health and Human Resources.

<sup>a</sup>95% confidence intervals were used to determine “significance.” This approach is conservative, so significance testing must be done for a true statement of statistical significance.

<sup>b</sup>Only regions with stable estimates were ranked.

<sup>c</sup>Question asked about information for the respondent’s household.