

## Symptoms of Anxiety and Depression Among Adults: United States, 2019 and 2022

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### Abstract

**Objective**—This report examines the prevalence of symptoms of anxiety and depression among adults by sociodemographic and geographic characteristics, and how those may have changed between 2019 and 2022.

**Methods**—Data from the 2022 National Health Interview Survey were used to examine the prevalence of symptoms of anxiety, using the Generalized Anxiety Disorder scale (GAD-7), and symptoms of depression, using the Patient Health Questionnaire depression scale (PHQ-8).

**Results**—During 2022, about one in five adults age 18 and older experienced any symptoms of anxiety (18.2%) or symptoms of depression (21.4%) in the past 2 weeks. The severity of symptoms differed by sociodemographic and geographic characteristics. The percentages of adults with mild, moderate, or severe symptoms of both anxiety and depression were highest among adults ages 18–29 and decreased with age and were higher among women than men. Asian non-Hispanic adults were least likely to experience moderate and severe symptoms of anxiety and depression compared with the other race and Hispanic-origin groups examined. In addition, the percentage of adults with any symptoms of anxiety and depression was highest among those with less than a high school education and with family incomes less than 100% of the federal poverty level and was higher among those living in rural areas. A significant increase was seen in the percentage of adults with anxiety symptoms (from 15.6% to 18.2%, respectively) and depression symptoms (from 18.5% to 21.4%, respectively) between 2019 and 2022. Increases in symptoms of anxiety and depression were seen throughout the subgroups examined, including adults ages 18–44, Black non-Hispanic and White non-Hispanic adults, adults with a high school education or more, and adults with family incomes of 100% of the federal poverty level or higher, as well as adults from all regions and urbanization levels.

**Keywords:** generalized anxiety disorder • patient health questionnaire • mental health • National Health Interview Survey

### Introduction

Anxiety and depression are two of the most common mental health conditions experienced by adults in the United States (1). In 2019, about 6% of adults had experienced moderate or severe symptoms of anxiety in the past 2 weeks (2), and 7% had experienced moderate or severe symptoms of depression in the past 2 weeks (3). Mental and physical health are strongly linked, as adults diagnosed with mental health conditions are more likely to have physical health issues, as well as decreased health-related quality of life (4–6). In addition, anxiety or depressive disorders can negatively impact one's finances, as well as performance at work or school (7–12).

Previous studies have shown that symptoms of anxiety and depression increased over 2020 and into 2021 during the beginning of the COVID-19 pandemic (13). This report presents nationally representative estimates of symptoms of anxiety and depression in 2022 and compares with those in 2019 by selected demographic and socioeconomic characteristics.

## Methods

### Data source

Data used in this report come from the Sample Adult interview of the 2022 National Health Interview Survey (NHIS) (14). NHIS is an annual multipurpose health survey conducted by the National Center for Health Statistics. It serves as a primary source of health data on the U.S. civilian noninstitutionalized population, providing information on health status, health-related behaviors, and healthcare access and use. The cross-sectional survey collects data continuously throughout the year, with an annual data file release. Estimates from this file, when accounting for the complex survey design of NHIS, are representative of the civilian noninstitutionalized population. NHIS interviews are primarily conducted in person in the respondent's home, but some interviews are conducted over the phone. First, a household respondent provides basic demographic information about all individuals living in the household. Next, one adult (the "Sample Adult") and one child (the "Sample Child") are randomly selected to be the subjects of more detailed health interviews, which include questions about family demographics (such as food security and income). The Sample Adult responds for themselves unless a mental or physical condition prevents a self-response, in which case a knowledgeable adult serves as a proxy respondent. The final response rate for the Sample Adult interview in 2022 was 47.7%. For further information about the 2022 NHIS sample design and questionnaire, refer to the survey description documentation (14).

### Symptoms of anxiety

Symptoms of anxiety were measured using the Generalized Anxiety Disorder scale (GAD-7). The GAD-7 scale was developed based on the most correlated items from a 13-item scale that included 9 items from the criteria for generalized anxiety disorder in the Diagnostic and Statistical Manual for Mental Disorders, Fourth Edition (DSM-IV) (15) and 4 items from existing anxiety scales (16). Higher GAD-7 scores are associated with poorer functioning in multiple domains,

as well as increased disability days and healthcare use (17). The seven questions ask about anxiety disorder symptoms that the Sample Adult may have been bothered by in the past 2 weeks. The response options, "not at all," "several days," "more than half the days," and "nearly every day," are each scored from 0 to 3 points, respectively, and then added for a total score. Sample Adults with two or more GAD-7 questions answered as "refused" or "don't know," or whose answers were not determined, were not included in this analysis, which resulted in 2.4% missing data. According to the scale's creators, adults can be placed into four mutually exclusive anxiety symptom severity categories based on their total score (17). Adults with scores of 0-4 are categorized as having "none or minimal" anxiety symptoms, while those with scores of 5-9, 10-14, or 15-21 are categorized as having "mild," "moderate," or "severe" anxiety symptoms, respectively.

### Symptoms of depression

Symptoms of depression were measured using the Patient Health Questionnaire depression scale (PHQ-8). The PHQ-8 scale is a diagnostic and severity measure for current depressive disorders developed using the nine-item criteria for depressive disorders in DSM-IV. It is an abbreviated version of the nine-item PHQ-9 scale (18) that excludes the question about thoughts of death and self-injury, an indicator of possible suicide risk. Similar to how the GAD-7 scale is used to screen for generalized anxiety disorder (19,20), the PHQ-8 scale is used in clinical settings and population-based studies to screen for symptoms indicative of clinically significant depression and to assess the severity of depressive disorders (19). Adults with scores above the PHQ-8 threshold had a higher number of impairment days in multiple health-related quality-of-life domains (19). The PHQ-8 scale includes eight questions about depressive disorder symptoms that the Sample Adult may have been bothered by in the previous 2 weeks. The response options, "not at all," "several days," "more than half the days," and "nearly every day," are each scored from

0 to 3 points, respectively, and then added for a total score. Sample Adults with two or more PHQ-8 questions answered as "refused" or "don't know," or whose answers were not ascertained, were not included in this analysis, resulting in 2.3% missing data. According to the scale's creators, adults can be placed into four mutually exclusive depression symptom severity categories based on their total score (19). Adults with scores of 0-4 are categorized as having "none or minimal" depression symptoms, while those with scores of 5-9, 10-14, or 15-24 are categorized as having "mild," "moderate," or "severe" depression symptoms, respectively.

### Selected sociodemographic and geographic characteristics

Sociodemographic characteristics examined included age group (18-29, 30-44, 45-64, and 65 and older), sex, race and Hispanic origin, education level, and family income as a percentage of the federal poverty level. Geographic characteristics examined included region and urbanicity.

#### *Race and Hispanic origin*

Adults were categorized as Asian non-Hispanic (subsequently, Asian), Black non-Hispanic (subsequently, Black), White non-Hispanic (subsequently, White), and Hispanic or Latino (subsequently, Hispanic). Adults categorized as Hispanic may be of any race or combination of races. Adults categorized as Asian, Black, or White indicated one race only. Analyses were limited to the race and Hispanic-origin groups for which data were reliable and had large enough sample sizes to make group comparisons.

*Family income*—Family income is presented as percentage of the federal poverty level (FPL), which was derived from the family's income in the previous calendar year, family size, and number of children using the U.S. Census Bureau's poverty thresholds (21). These thresholds were used in creating the poverty ratios for NHIS respondents who provided a dollar amount or supplied sufficient income information in the follow-up income bracketing questions. Family income was imputed when missing using

a multiple imputation methodology (22). Multiple imputation accounts for the extra variability due to imputation in statistical analyses. For technical information about the imputation model, data users can refer to the “Imputed Income Technical Document” available with the 2022 file releases on the NHIS website, under “Using the NHIS.” Categories presented are “Less than 100% FPL,” “100% to less than 200% FPL,” “200% to less than 400% FPL,” and “400% or greater FPL.”

**Region**—In the geographic classification of the U.S. population, states are grouped into four regions used by the U.S. Census Bureau (23): Northeast, Midwest, South, and West.

**Urbanicity**—Based on the 2013 National Center for Health Statistics Urban–Rural Classification Scheme for Counties (24), which groups U.S. counties and county-equivalent entities into six urban–rural categories: large central metropolitan, large fringe metropolitan, medium metropolitan, small metropolitan, micropolitan, and noncore. For this analysis, medium and small metropolitan are collapsed into a single group and micropolitan and noncore are collapsed into a single group (nonmetropolitan).

## Statistical analysis

The first set of analyses examines symptoms of anxiety (GAD–7), while the second set examines symptoms of depression (PHQ–8). The same structure and sequence of analyses were used for both symptoms of anxiety and symptoms of depression.

First, the percent distribution of adults experiencing symptoms (none or minimal symptoms, mild symptoms, moderate symptoms, or severe symptoms) was estimated. Second, the percentage of adults experiencing any symptom severity, both overall and by mild, moderate, and severe symptoms, was estimated by selected sociodemographic and geographic characteristics. Differences between percentages were evaluated using two-sided significance tests at the 0.05 level. Linear and quadratic trends by age group, education level, family income, and urbanicity were evaluated

using orthogonal polynomials in logistic regression. Third, the percentage of adults experiencing any symptoms in 2019 for selected demographic characteristics was calculated and compared with corresponding 2022 estimates using two-sided significance tests at the 0.05 level (*t* tests).

All estimates were weighted while accounting for the complex sample design of NHIS using Stata SE Version 17.0 (25) and met the National Center for Health Statistics standards of reliability as specified in “National Center for Health Statistics Data Presentation Standards for Proportions” (26).

## Results

### Anxiety symptoms

Figure 1 presents the distribution of anxiety symptoms in the past 2 weeks among adults based on the GAD–7 symptom categorization. In total, 81.8% of adults were categorized as having none or minimal anxiety symptoms, 11.4% were categorized as having mild anxiety symptoms, 3.9% were categorized as having moderate anxiety symptoms, and 2.8% were categorized as having severe

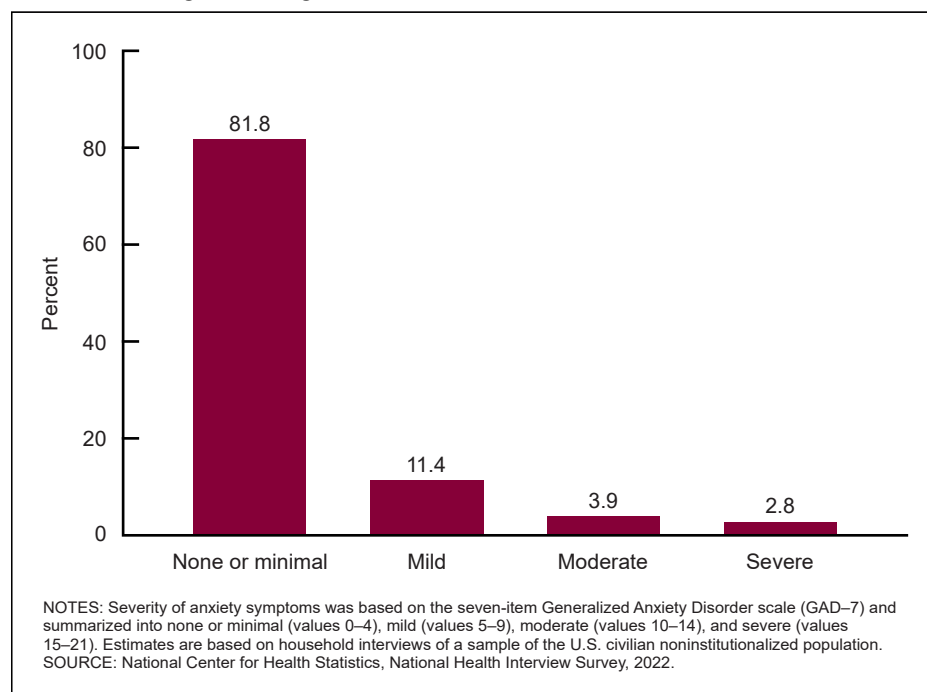
anxiety symptoms.

Figure 2 presents the percentage of adults who were categorized as having any anxiety symptoms, mild anxiety symptoms, moderate anxiety symptoms, and severe anxiety symptoms over the past 2 weeks, by age group (18–29, 30–44, 45–64, and 65 and older). Each symptom category had a significant linear trend by age, with anxiety symptoms generally decreasing with increasing age.

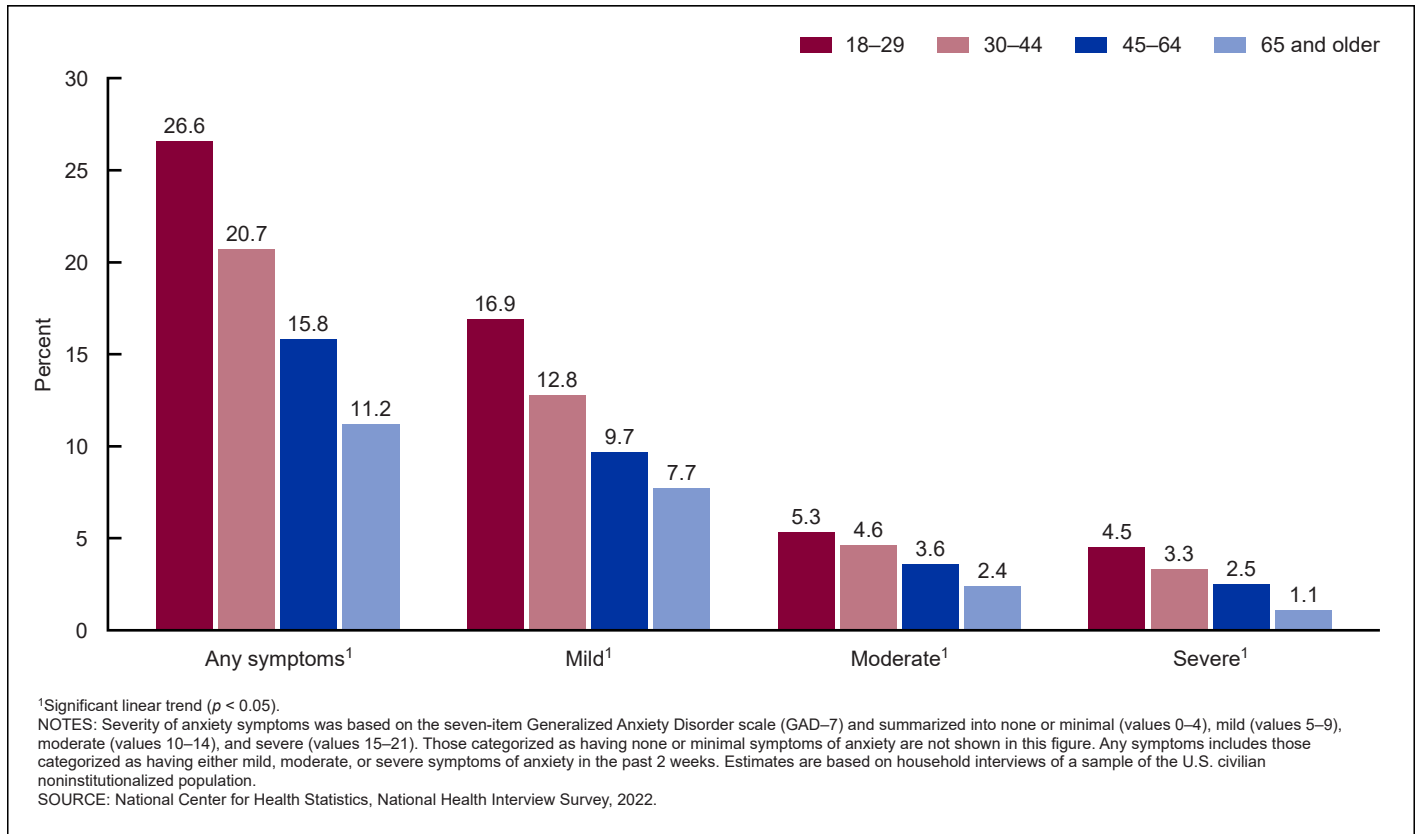
Figure 3 presents the percentage of adults by level of severity of anxiety symptoms and sex. Women were more likely than men to experience any anxiety symptoms (21.4% and 14.8%, respectively), mild anxiety symptoms (13.1% and 9.7%, respectively), moderate anxiety symptoms (4.7% and 3.1%, respectively), or severe anxiety symptoms (3.6% and 2.0%, respectively).

Figure 4 presents the percentage of adults by level of severity of anxiety symptoms and race and Hispanic origin. Asian adults were least likely to experience any (12.3%), moderate (1.7%), and severe (1.0%) anxiety symptoms, and less likely than White adults to experience mild anxiety symptoms (9.6% compared with 11.8%, respectively); the observed difference between Asian and Black adults

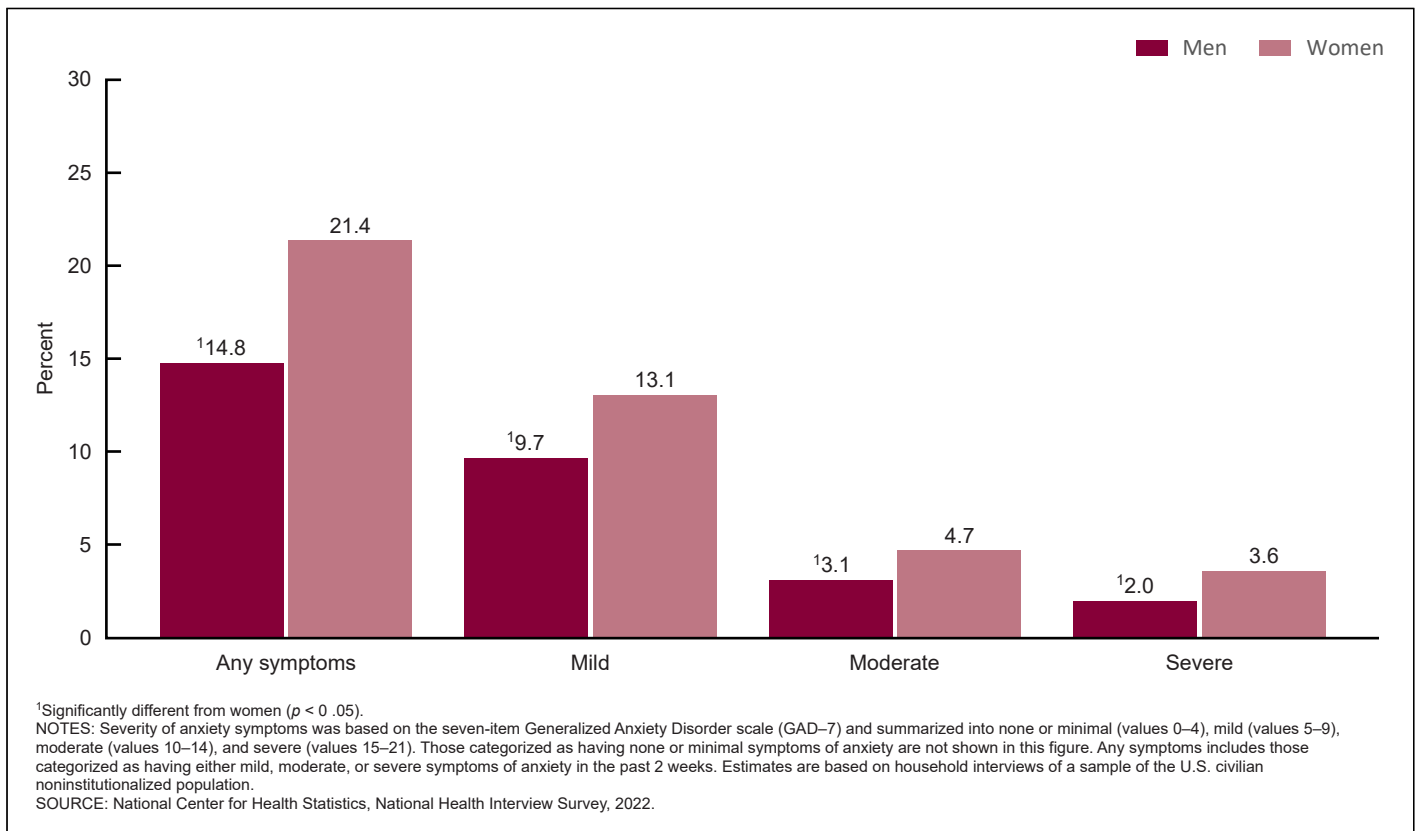
**Figure 1. Percent distribution of severity of anxiety symptoms in the past 2 weeks among adults age 18 and older: United States, 2022**

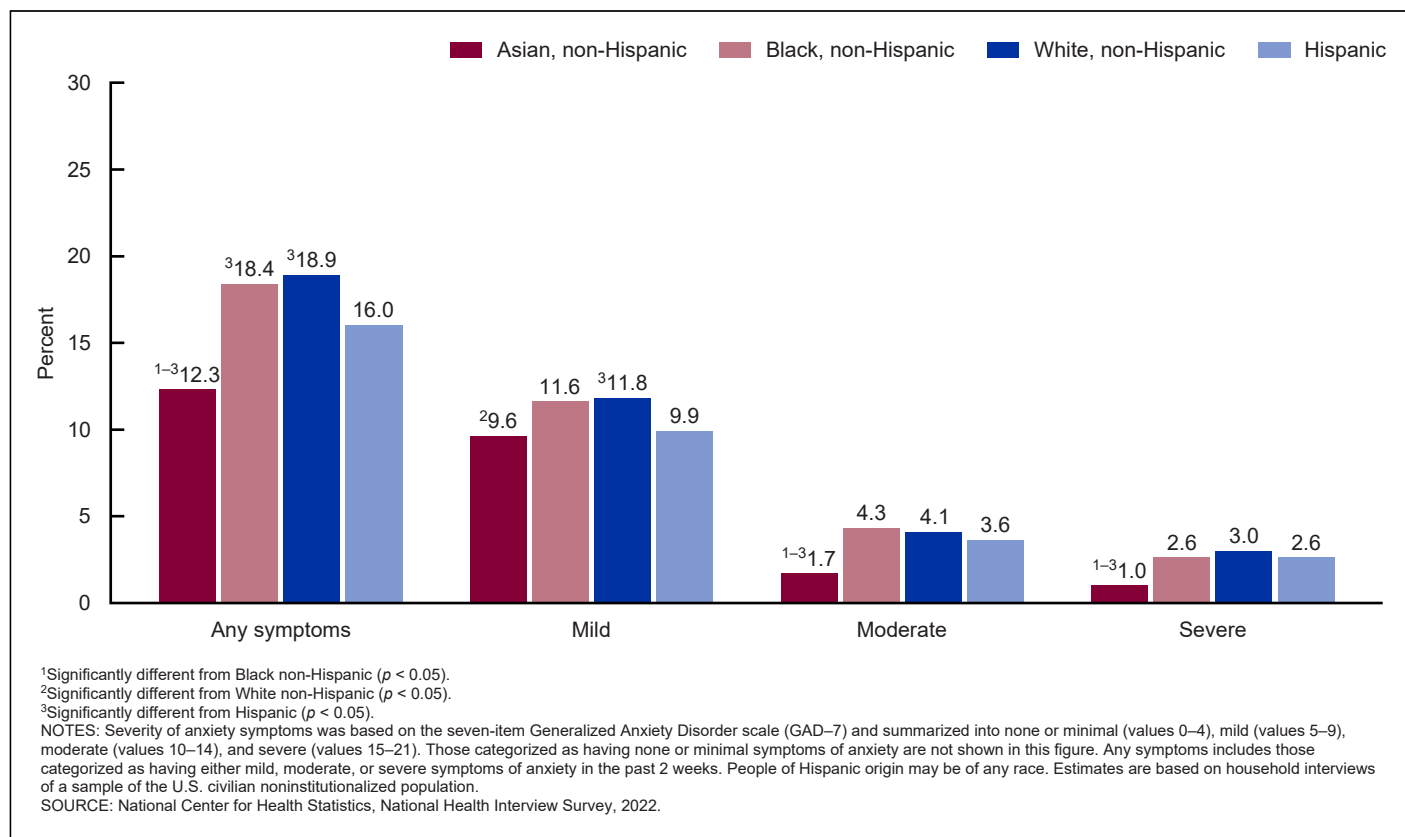


**Figure 2. Percentage of adults age 18 and older who experienced symptoms of anxiety in the past 2 weeks, by level of severity of symptoms and age group: United States, 2022**



**Figure 3. Percentage of adults age 18 and older with symptoms of anxiety in the past 2 weeks, by level of severity of symptoms and sex: United States, 2022**



**Figure 4. Percentage of adults age 18 and older with symptoms of anxiety in the past 2 weeks, by level of severity of symptoms and race and Hispanic origin: United States, 2022**

with mild anxiety symptoms was not significant). The percentages of White and Black adults who experienced any anxiety symptoms were not significantly different from each other (18.9% and 18.4%, respectively), and both were higher than the percentage among Hispanic adults. A similar pattern was seen among adults who experienced mild anxiety symptoms, although the difference between Black and Hispanic adults was not statistically significant. The percentages of Black, White, and Hispanic adults who experienced moderate and severe anxiety symptoms were similar.

Table A displays the percentage of adults by level of severity of anxiety symptoms and selected sociodemographic and geographic characteristics including age, sex, race and Hispanic origin, education level, family income, region, and urbanization level. Differences by age, sex, and race and Hispanic origin are reported in Figures 2–4. Additional differences included adults with higher education levels, higher family income, and those living in more urban areas

being less likely to experience severe and any anxiety symptoms. In addition, adults with higher education levels and family incomes were less likely to experience moderate anxiety symptoms, and adults with higher family incomes and those living in more urban areas were less likely to experience mild anxiety symptoms.

Table 1 examines differences in prevalence for any anxiety symptoms between 2019 and 2022 by selected sociodemographic and geographic characteristics. For all but a few of the characteristics examined, adults were more likely to experience anxiety symptoms in 2022 than in 2019. Increases were seen in both men and women, Asian, Black, and White adults, those ages 18–44, those with a high school education or more, those with a family income of 100% FPL or higher, as well as adults in all regions and urbanization levels.

## Depression symptoms

Figure 5 presents the distribution of depression symptoms in the past 2 weeks among adults based on the PHQ-8 symptom categorization. In total, 78.6% of adults were categorized as having none or minimal depression symptoms, 13.9% were categorized as having mild symptoms, 4.6% were categorized as having moderate symptoms, and 2.9% were categorized as having severe symptoms.

Figure 6 presents the percentage of adults who were categorized as having any depression symptoms, mild depression symptoms, moderate depression symptoms, and severe depression symptoms over the past 2 weeks, by age group (18–29, 30–44, 45–64, and 65 and older). Each symptom category had a significant trend by age, with depression symptoms generally decreasing with increasing age.

Figure 7 presents the percentage of adults by level of severity of depression symptoms and sex. Women were more likely than men to experience any depression symptoms (24.5% and 18.0%,

**Table A. Percentage of adults age 18 and older with symptoms of anxiety in the past 2 weeks, by level of severity of symptoms and selected characteristics: United States, 2022**

Characteristic	Any symptoms		Mild		Moderate		Severe	
	Percent	Standard error	Percent	Standard error	Percent	Standard error	Percent	Standard error
Total	18.2	0.29	11.4	0.24	3.9	1.48	2.8	1.28
Age group <sup>1</sup>								
18–29	26.6	0.86	16.9	0.71	5.3	0.44	4.5	0.43
30–44	20.7	0.56	12.8	0.47	4.6	0.31	3.3	0.26
45–64	15.8	0.45	9.7	0.36	3.6	0.23	2.5	0.19
65 and older	11.2	0.43	7.7	0.34	2.4	0.20	1.1	0.14
Sex <sup>2</sup>								
Men	14.8	0.39	9.7	0.33	3.1	0.20	2.0	0.15
Women	21.4	0.41	13.1	0.34	4.7	0.22	3.6	0.21
Race and Hispanic origin								
Asian, non-Hispanic	<sup>3</sup> 12.3	1.01	<sup>4</sup> 9.6	0.93	<sup>3–5</sup> 1.7	0.38	<sup>3–5</sup> 1.0	0.26
Black, non-Hispanic	<sup>5</sup> 18.4	0.88	11.6	0.69	4.3	0.46	2.6	0.37
White, non-Hispanic	<sup>5</sup> 18.9	0.37	<sup>5</sup> 11.8	0.30	4.1	0.19	3.0	0.17
Hispanic	16.0	0.68	9.9	0.61	3.6	0.34	2.6	0.31
Education <sup>6</sup>								
Less than high school diploma	20.4	1.02	11.8	0.81	4.7	0.51	3.9	0.49
High school diploma or GED	19.3	0.59	11.6	0.49	4.0	0.28	3.6	0.28
Some college or associate's degree	19.5	0.58	11.9	0.47	4.5	0.30	3.1	0.24
Bachelor's degree or more	15.4	0.42	10.8	0.36	3.1	0.20	1.5	0.15
Family income as a percentage of the federal poverty level <sup>7</sup>								
Less than 100%	28.4	1.05	15.8	0.92	6.9	0.58	5.7	0.57
100% to less than 200%	22.6	0.77	13.7	0.63	4.7	0.40	4.2	0.38
200% to less than 400%	19.1	0.56	11.7	0.48	4.5	0.32	2.9	0.25
400% or greater	13.4	0.38	9.4	0.32	2.6	0.18	1.5	0.15
Region								
Northeast	17.8	0.71	11.2	0.58	4.1	0.42	2.5	0.31
Midwest	19.3	0.60	12.2	0.53	4.1	0.32	2.9	0.27
South	17.8	0.49	11.1	0.38	3.7	0.22	3.0	0.22
West	18.1	0.56	11.4	0.49	4.0	0.30	2.7	0.25
Urbanization level <sup>8</sup>								
Large central metropolitan	16.6	0.49	10.7	0.39	3.8	0.26	2.1	0.21
Large fringe metropolitan	18.0	0.57	11.6	0.48	3.8	0.29	2.6	0.27
Medium and small metropolitan	18.9	0.56	11.5	0.46	4.2	0.29	3.2	0.25
Nonmetropolitan	20.5	0.78	12.7	0.68	4.0	0.37	3.8	0.31

<sup>1</sup>Significant linear trends were present by age group for those with any symptoms, mild, moderate, and severe symptoms.

<sup>2</sup>Significant differences between men and women for those with any symptoms, mild, moderate, and severe symptoms.

<sup>3</sup>Significantly different from Black non-Hispanic.

<sup>4</sup>Significantly different from White non-Hispanic.

<sup>5</sup>Significantly different from Hispanic.

<sup>6</sup>Significant linear trends were present by education level for those with any symptoms and moderate symptoms. A significant quadratic trend was present by education level for those with severe symptoms.

<sup>7</sup>Significant linear trends were present by family income as a percentage of the federal poverty level for those with any symptoms, mild, moderate, and severe symptoms.

<sup>8</sup>Significant linear trends were present by urbanization level for those with any symptoms, mild, and severe symptoms.

NOTES: Severity of anxiety symptoms was based on the seven-item Generalized Anxiety Disorder scale (GAD-7) and summarized into none or minimal (values 0–4), mild (values 5–9), moderate (values 10–14), and severe (values 15–21). Those categorized as having none or minimal symptoms of anxiety are not shown in this table. Any symptoms includes those categorized as having either mild, moderate, or severe symptoms of anxiety in the past 2 weeks. People of Hispanic origin may be of any race. Estimates are based on household interviews of a sample of the U.S. civilian noninstitutionalized population.

SOURCE: National Center for Health Statistics, National Health Interview Survey, 2022.

respectively), mild depression symptoms (15.5% and 12.2%, respectively), moderate depression symptoms (5.4% and 3.7%, respectively), or severe depression symptoms (3.6% and 2.1%, respectively).

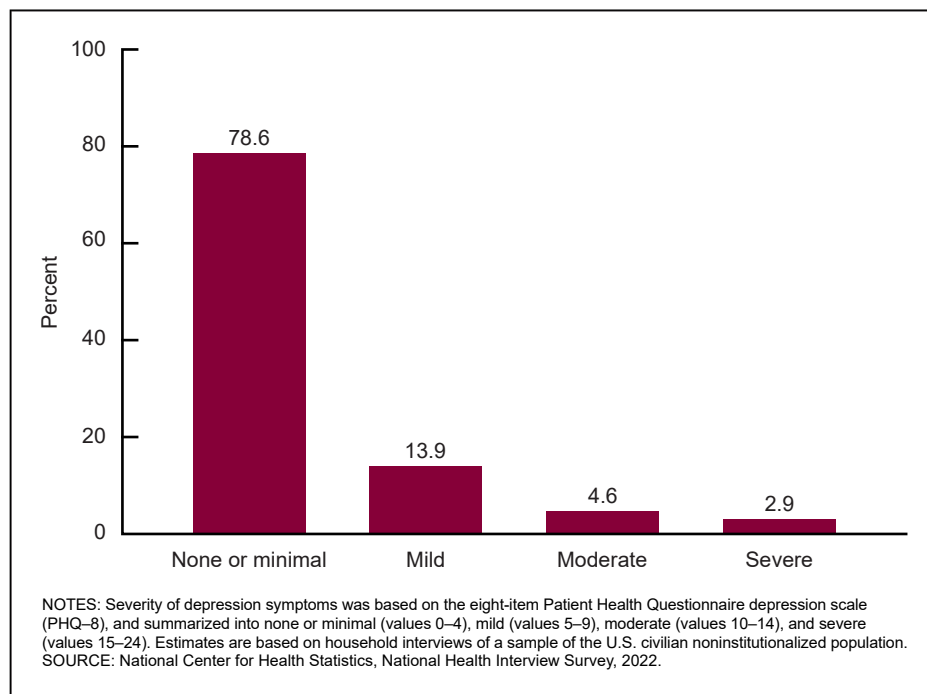
Figure 8 presents the percentage of adults by level of severity of depression symptoms and race and Hispanic origin. Asian adults were least likely

to experience any (13.0%), moderate (2.0%), and severe (1.1%) depression symptoms, and less likely than White and Black adults to experience mild depression symptoms (9.9% compared with 14.6% and 14.1%, respectively). The percentages of White and Black adults who experienced any or mild depression symptoms were not significantly different from each other, and both were higher than the percentage among Hispanic

adults. Black, White, and Hispanic adults had similar percentages who experienced moderate and severe depression symptoms.

Table B displays the percentage of adults by level of severity of depression symptoms and selected sociodemographic and geographic characteristics including age, sex, race and Hispanic origin, education level, family income, region, and urbanization level. Differences by

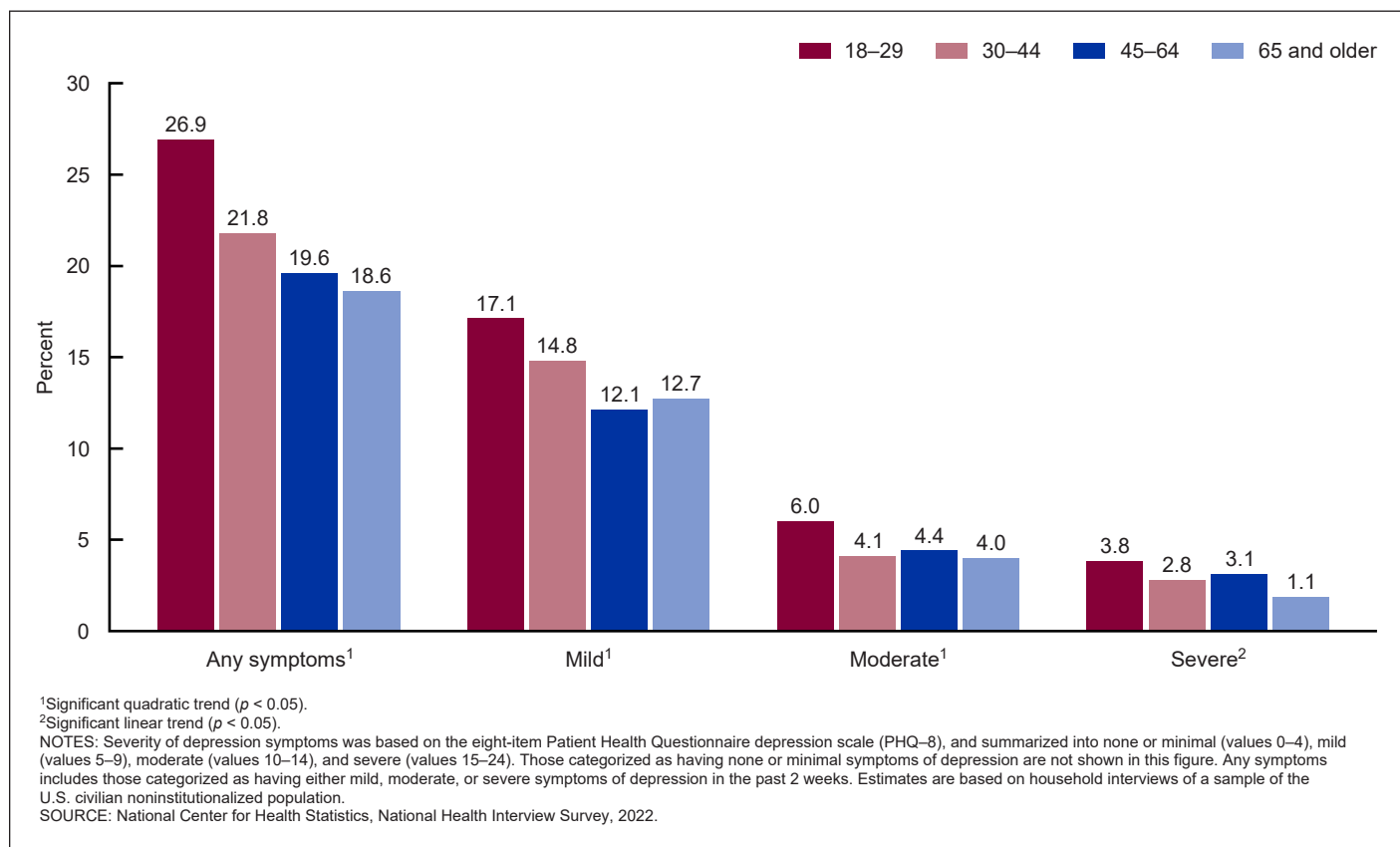
**Figure 5. Percent distribution of severity of depression symptoms in the past 2 weeks among adults age 18 and older: United States, 2022**



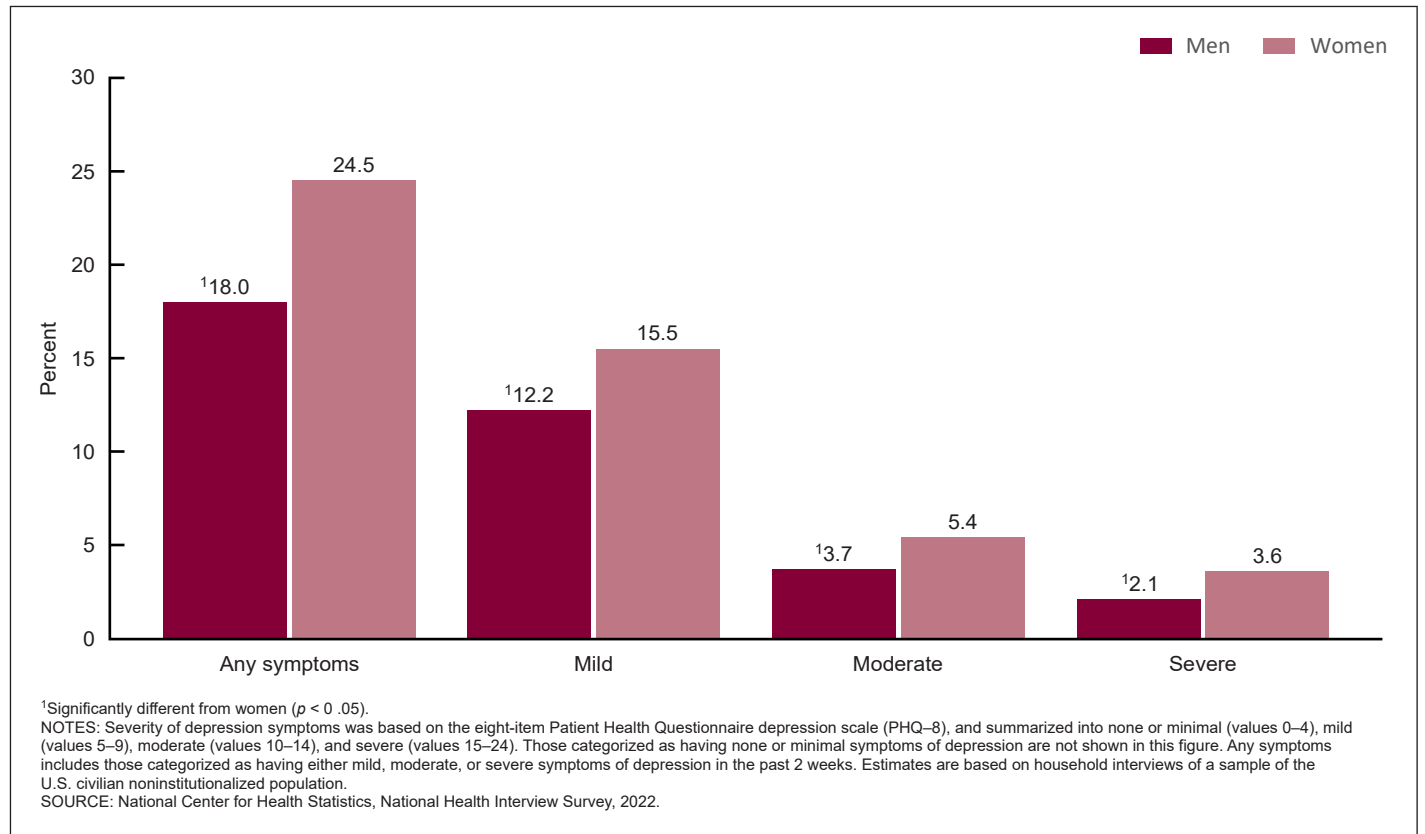
age, sex, and race and Hispanic origin are reported in Figures 6–8. Additional differences included adults with lower education levels, lower family income, and those living in more rural areas being more likely to experience any, mild, moderate, or severe depression symptoms. Adults living in the Northeast and South were less likely than those living in the Midwest and West to experience any depression symptoms. Adults living in the Midwest were more likely than adults living in the South to experience mild depression symptoms, and adults living in the Northeast and Midwest were less likely than adults living in the West to experience moderate depression symptoms.

Table 2 examines differences in prevalence for any depression symptoms between 2019 and 2022 by selected sociodemographic and geographic characteristics. For all but a few characteristics examined, adults were

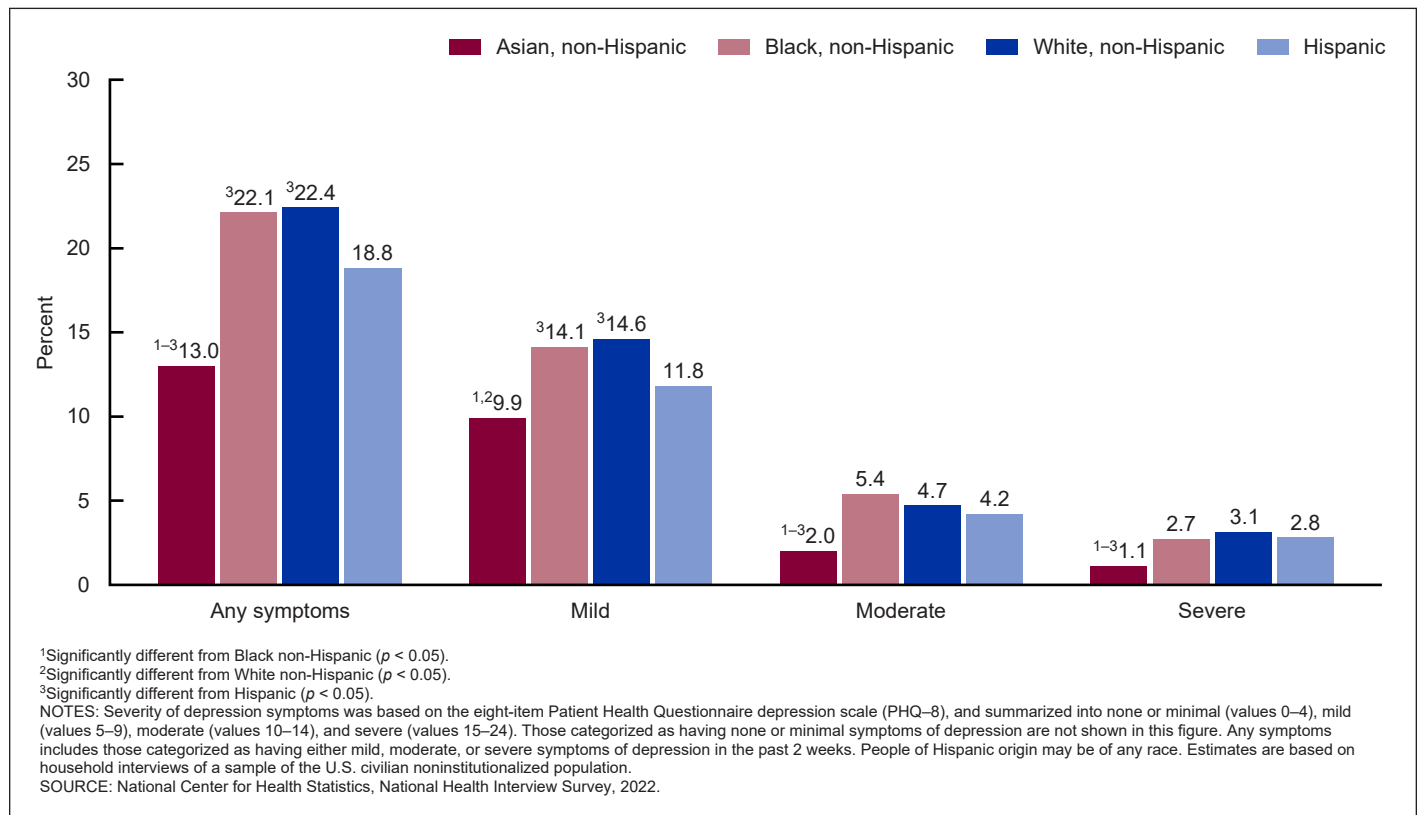
**Figure 6. Percentage of adults age 18 and older with symptoms of depression in the past 2 weeks, by level of severity of symptoms and age group: United States, 2022**



**Figure 7. Percentage of adults age 18 and older with symptoms of depression in the past 2 weeks, by level of severity of symptoms and sex: United States, 2022**



**Figure 8. Percentage of adults age 18 and older with symptoms of depression in the past 2 weeks, by level of severity of symptoms and race and Hispanic origin: United States, 2022**





**Table B. Percentage of adults age 18 and older with symptoms of depression in the past 2 weeks, by level of severity of symptoms and selected characteristics: United States, 2022**

Characteristic	Any symptoms		Mild		Moderate		Severe	
	Percent	Standard error	Percent	Standard error	Percent	Standard error	Percent	Standard error
Total	21.4	0.31	13.9	0.25	4.6	0.16	2.9	0.12
Age group <sup>1</sup>								
18–29	26.9	0.88	17.1	0.72	6.0	0.48	3.8	0.40
30–44	21.8	0.61	14.8	0.53	4.1	0.27	2.8	0.25
45–64	19.6	0.50	12.1	0.41	4.4	0.25	3.1	0.21
65 and older	18.6	0.49	12.7	0.42	4.0	0.27	1.9	0.18
Sex <sup>2</sup>								
Men	18.0	0.42	12.2	0.35	3.7	0.21	2.1	0.15
Women	24.5	0.44	15.5	0.36	5.4	0.23	3.6	0.20
Race and Hispanic origin								
Asian, non-Hispanic	<sup>3–5</sup> 13.0	0.95	<sup>3,4</sup> 9.9	0.84	<sup>3–5</sup> 2.0	0.43	<sup>3–5</sup> 1.1	0.29
Black, non-Hispanic	<sup>5</sup> 22.1	0.94	<sup>5</sup> 14.1	0.79	5.4	0.51	2.7	0.34
White, non-Hispanic	<sup>5</sup> 22.4	0.39	<sup>5</sup> 14.6	0.31	4.7	0.21	3.1	0.16
Hispanic	18.8	0.75	11.8	0.60	4.2	0.37	2.8	0.31
Education <sup>6</sup>								
Less than high school diploma	25.2	1.05	14.2	0.83	6.0	0.59	4.9	0.53
High school diploma or GED	23.5	0.64	15.0	0.54	4.9	0.33	3.5	0.26
Some college or associate's degree	22.8	0.59	14.3	0.47	5.2	0.30	3.4	0.27
Bachelor's degree or more	17.1	0.45	12.5	0.38	3.3	0.21	1.3	0.13
Family income as a percentage of the federal poverty level <sup>7</sup>								
Less than 100%	32.4	1.11	17.5	0.90	8.0	0.64	6.9	0.61
100% to less than 200%	28.3	0.82	18.3	0.69	5.8	0.43	4.2	0.35
200% to less than 400%	22.3	0.58	14.0	0.48	5.1	0.32	3.2	0.26
400% or greater	15.4	0.41	11.2	0.34	3.0	0.20	1.2	0.13
Region								
Northeast	<sup>8,9</sup> 20.0	0.83	13.5	0.64	<sup>9</sup> 3.8	0.40	2.7	0.31
Midwest	22.5	0.67	15.2	0.58	<sup>9</sup> 4.2	0.32	3.1	0.27
South	<sup>8,9</sup> 20.7	0.49	<sup>8</sup> 13.1	0.41	4.8	0.27	2.8	0.18
West	22.4	0.62	14.3	0.47	5.2	0.32	2.9	0.30
Urbanization level <sup>10</sup>								
Large central metropolitan	20.4	0.55	13.8	0.46	4.1	0.27	2.5	0.21
Large fringe metropolitan	19.8	0.61	12.5	0.49	4.7	0.33	2.5	0.24
Medium and small metropolitan	22.3	0.61	14.4	0.47	4.7	0.33	3.2	0.27
Nonmetropolitan	24.3	0.74	15.7	0.64	5.0	0.38	3.6	0.28

<sup>1</sup>Significant quadratic trends were present by age group for those with any symptoms, mild, or moderate symptoms. A significant linear trend was present by age group for those with severe symptoms.

<sup>2</sup>Significant differences between men and women for those with any symptoms, mild, moderate, and severe symptoms.

<sup>3</sup>Significantly different from Black non-Hispanic.

<sup>4</sup>Significantly different from White non-Hispanic.

<sup>5</sup>Significantly different from Hispanic.

<sup>6</sup>Significant linear trends were present by education level for those with mild, moderate, and severe symptoms. A significant quadratic trend was present by education level for those with any symptoms.

<sup>7</sup>Significant linear trends were present by family income as a percentage of the federal poverty level for those with any symptoms, mild, moderate, and severe symptoms.

<sup>8</sup>Significantly different from Midwest.

<sup>9</sup>Significantly different from West.

<sup>10</sup>Significant linear trends were present by urbanization level for those with any symptoms, mild, moderate, and severe symptoms.

NOTES: Severity of depression symptoms was based on the eight-item Patient Health Questionnaire scale (PHQ-8) and summarized into none or minimal (values 0–4), mild (values 5–9), moderate (values 10–14), and severe (values 15–24). Those categorized as having none or minimal symptoms of depression are not shown in this table. Any symptoms includes those categorized as having either mild, moderate, or severe symptoms of depression in the past 2 weeks. People of Hispanic origin may be of any race. Estimates are based on household interviews of a sample of the U.S. civilian noninstitutionalized population.

SOURCE: National Center for Health Statistics, National Health Interview Survey, 2022.

more likely to experience depression symptoms in 2022 than in 2019.

Increases were seen among both men and women, Black and White adults, those ages 18–44, those with a high school education or more, those with a family income of 100% FPL or higher, as well as adults in all regions and urbanization levels.

## Discussion

This report provides an update on the prevalence of anxiety and depression symptoms in the United States (1,2). During 2022, about one in five adults age 18 and older experienced any symptoms of anxiety (18.2%) or symptoms of depression (21.4%). The severity of symptoms continued to differ

by sociodemographic and geographic characteristics in 2022. The percentage of adults with mild, moderate, or severe symptoms of both anxiety and depression decreased with age and were higher among women than men. Asian adults were least likely to experience moderate and severe symptoms of anxiety and depression compared with the other race and Hispanic-origin groups examined.

The current report further explored whether differences existed by education level, family income, geographic region, and urbanicity. The percentage of adults with any symptoms of anxiety and depression decreased as education level and family income increased and was higher among those living in rural areas. Although no differences were found by geographic region for anxiety symptoms, a higher percentage of adults living in the West and Midwest experienced depression symptoms compared with adults residing in the Northwest and South.

A significant increase was seen in the percentage of adults with anxiety symptoms and depression symptoms between 2019 and 2022. While many of the percentage point differences were relatively small, significant increases in symptoms of anxiety and depression were seen throughout the subgroups examined, except for adults ages 45–64, adults age 65 and older, Hispanic adults, adults with less than a high school education, and adults with family incomes less than 100% FPL. Asian adults additionally had an increase in depression symptoms between 2019 and 2022.

Results from this study are in line with previous findings. Women have been shown to be more likely to be diagnosed with anxiety and depression than men (27), and both depression and anxiety symptoms have been found to be more common among younger adults (28,29). Both higher education level and family income have been associated with lower rates of depression and anxiety (30–32). Symptoms of both anxiety and depression have been found to be more common among adults living in rural than in urban settings (33,34).

Although both question sets used to determine if a person is experiencing anxiety or depression symptoms have been validated, they are not a substitute for a clinical diagnosis. Moreover, inherent challenges may have been present where a person did not understand the intent of the question being asked, or they may not have wanted to answer a question about their mental health. In addition, because both the GAD–7 and PHQ–8 scales were intended to be self-administered, interviewers may have influenced responses within NHIS.

This report provides a snapshot of two time periods, one before the COVID-19 pandemic and the other during the pandemic, although closer to the declared end to the pandemic than the peak (35). Although it is not possible to attribute increases seen in the prevalence of anxiety and depression symptoms directly to the pandemic, previous studies have found the pandemic contributed to increased stress levels as well as social isolation and loneliness, particularly at its onset (36,37).

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**Table 1. Percentage of adults age 18 and older with symptoms of anxiety in the past 2 weeks, by selected characteristics and year: United States, 2019 and 2022**

Characteristic	2019		2022	
	Percent	Standard error	Percent	Standard error
Total <sup>1</sup> . . . . .	15.6	0.28	18.2	0.29
Age group				
18–29 <sup>1</sup> . . . . .	19.5	0.71	26.6	0.86
30–44 <sup>1</sup> . . . . .	16.6	0.53	20.7	0.56
45–64 . . . . .	15.2	0.46	15.8	0.45
65 and older . . . . .	11.2	0.43	11.2	0.40
Sex				
Men <sup>1</sup> . . . . .	11.9	0.34	14.8	0.39
Women <sup>1</sup> . . . . .	19.0	0.39	21.4	0.41
Race and Hispanic origin				
Asian, non-Hispanic <sup>1</sup> . . . . .	8.5	0.89	12.3	1.01
Black, non-Hispanic <sup>1</sup> . . . . .	14.6	0.74	18.4	0.88
White, non-Hispanic <sup>1</sup> . . . . .	16.5	0.34	18.9	0.37
Hispanic . . . . .	14.5	0.68	16.0	0.74
Education				
Less than high school diploma . . . . .	20.8	0.96	20.4	1.02
High school diploma or GED <sup>1</sup> . . . . .	16.0	0.52	19.3	0.59
Some college or associate's degree <sup>1</sup> . . . . .	16.8	0.49	19.5	0.58
Bachelor's degree or more <sup>1</sup> . . . . .	11.9	0.37	15.4	0.42
Family income as a percentage of the federal poverty level				
Less than 100% . . . . .	26.6	1.03	28.4	1.05
100% to less than 200% <sup>1</sup> . . . . .	20.2	0.72	22.6	0.77
200% to less than 400% <sup>1</sup> . . . . .	14.9	0.47	19.1	0.56
400% or greater <sup>1</sup> . . . . .	10.9	0.34	13.4	0.38
Region				
Northeast <sup>1</sup> . . . . .	14.8	0.62	17.8	0.71
Midwest <sup>1</sup> . . . . .	16.7	0.70	19.3	0.60
South <sup>1</sup> . . . . .	15.6	0.43	17.8	0.49
West <sup>1</sup> . . . . .	15.3	0.55	18.1	0.56
Urbanization level				
Large central metropolitan <sup>1</sup> . . . . .	15.1	0.48	16.6	0.49
Large fringe metropolitan <sup>1</sup> . . . . .	13.9	0.54	18.0	0.57
Medium and small metropolitan <sup>1</sup> . . . . .	16.4	0.52	18.9	0.56
Nonmetropolitan <sup>1</sup> . . . . .	17.9	0.75	20.5	0.78

<sup>1</sup>Significantly different from 2022 ( $p < 0.05$ ).

NOTES: Severity of anxiety symptoms was based on the seven-item Generalized Anxiety Disorder scale (GAD-7) and summarized into none or minimal (values 0–4), mild (values 5–9), moderate (values 10–14), and severe (values 15–21). Those categorized as having none or minimal symptoms of anxiety are not shown in this table. Any symptoms includes those categorized as having either mild, moderate, or severe symptoms of anxiety in the past 2 weeks. Estimates are based on household interviews of a sample of the U.S. civilian noninstitutionalized population.

SOURCE: National Center for Health Statistics, National Health Interview Survey, 2019 and 2022.

**Table 2. Percentage of adults age 18 and older with symptoms of depression in the past 2 weeks, by selected characteristics and year: United States, 2019 and 2022**

Characteristic	2019		2022	
	Percent	Standard error	Percent	Standard error
Total <sup>1</sup> . . . . .	18.5	0.31	21.4	0.31
Age group				
18–29 <sup>1</sup> . . . . .	21.0	0.79	26.9	0.88
30–44 <sup>1</sup> . . . . .	16.8	0.53	21.8	0.61
45–64 . . . . .	18.4	0.48	19.6	0.50
65 and older . . . . .	18.4	0.53	18.6	0.49
Sex				
Men <sup>1</sup> . . . . .	15.0	0.39	18.0	0.42
Women <sup>1</sup> . . . . .	21.8	0.43	24.5	0.44
Race and Hispanic origin				
Asian, non-Hispanic . . . . .	10.2	1.08	13.0	0.95
Black, non-Hispanic <sup>1</sup> . . . . .	19.3	0.84	22.1	0.94
White, non-Hispanic <sup>1</sup> . . . . .	19.3	0.38	22.4	0.39
Hispanic . . . . .	16.9	0.74	18.8	0.75
Education				
Less than high school diploma . . . . .	26.2	1.09	25.2	1.05
High school diploma or GED <sup>1</sup> . . . . .	19.4	0.56	23.5	0.64
Some college or associate's degree <sup>1</sup> . . . . .	20.4	0.55	22.8	0.59
Bachelor's degree or more <sup>1</sup> . . . . .	12.4	0.37	17.1	0.45
Family income as a percentage of the federal poverty level				
Less than 100% . . . . .	32.5	1.11	32.4	1.11
100% to less than 200% <sup>1</sup> . . . . .	24.3	0.78	28.3	0.82
200% to less than 400% <sup>1</sup> . . . . .	18.3	0.53	22.3	0.58
400% or greater <sup>1</sup> . . . . .	12.0	0.36	15.4	0.41
Region				
Northeast <sup>1</sup> . . . . .	16.5	0.68	20.0	0.83
Midwest <sup>1</sup> . . . . .	19.3	0.78	22.5	0.67
South <sup>1</sup> . . . . .	18.9	0.51	20.7	0.49
West <sup>1</sup> . . . . .	18.7	0.61	22.4	0.62
Urbanization level				
Large central metropolitan <sup>1</sup> . . . . .	18.3	0.50	20.4	0.55
Large fringe metropolitan <sup>1</sup> . . . . .	16.4	0.59	19.8	0.61
Medium and small metropolitan <sup>1</sup> . . . . .	19.1	0.64	22.3	0.61
Nonmetropolitan <sup>1</sup> . . . . .	21.4	0.92	24.3	0.74

<sup>1</sup>Significantly different from 2022 ( $p < 0.05$ ).

NOTES: Severity of depression symptoms was based on the eight-item Patient Health Questionnaire scale (PHQ-8) and summarized into none or minimal (values 0–4), mild (values 5–9), moderate (values 10–14), and severe (values 15–24). Those categorized as having none or minimal symptoms of depression are not shown in this table. Any symptoms includes those categorized as having either mild, moderate, or severe symptoms of depression in the past 2 weeks. Estimates are based on household interviews of a sample of the U.S. civilian noninstitutionalized population.

SOURCE: National Center for Health Statistics, National Health Interview Survey, 2019 and 2022.

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