

# **Suicide**

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# Definitions

**Suicide** is defined as death caused by self-directed injurious behavior with intent to die as a result of the behavior.

A **suicide attempt** is a non-fatal, self-directed, potentially injurious behavior with intent to die as a result of the behavior. A suicide attempt might not result in injury.

**Suicidal ideation** refers to thinking about, considering, or planning suicide.

# Suicide is a leading cause of death in the United States

According to the Centers for Disease Control and Prevention, (CDC) WISQARS (Web-based Injury Statistics Query and Reporting System) Leading Causes of Death Reports in 2018:

Suicide was the **tenth leading cause of death overall in the United States**, claiming the lives of over **48,000 people**.

Suicide was the **second leading cause of death among individuals between the ages of 10 and 34**, and the fourth leading cause of death among individuals between the ages of 35 and 54.

**There were more than two and a half times as many suicides (48,344) in the United States as there were homicides (18,830).**

Leading Cause of Death in the United States (2018)							
Data Courtesy of CDC							
Rank	Select Age Groups						
	10-14	15-24	25-34	35-44	45-54	55-64	All Ages
1	Unintentional Injury 692	Unintentional Injury 12,044	Unintentional Injury 24,614	Unintentional Injury 22,667	Malignant Neoplasms 37,301	Malignant Neoplasms 113,947	Heart Disease 655,381
2	<b>Suicide 596</b>	<b>Suicide 6,211</b>	<b>Suicide 8,020</b>	Malignant Neoplasms 10,640	Heart Disease 32,220	Heart Disease 81,042	Malignant Neoplasms 599,274
3	Malignant Neoplasms 450	Homicide 4,607	Homicide 5,234	Heart Disease 10,532	Unintentional Injury 23,056	Unintentional Injury 23,693	Unintentional Injury 167,127
4	Congenital Abnormalities 172	Malignant Neoplasms 1,371	Malignant Neoplasms 3,684	<b>Suicide 7,521</b>	<b>Suicide 8,345</b>	CLRD 18,804	CLRD 159,486
5	Homicide 168	Heart Disease 905	Heart Disease 3,561	Homicide 3,304	Liver Disease 8,157	Diabetes Mellitus 14,941	Cerebro-vascular 147,810
6	Heart Disease 101	Congenital Anomalies 354	Liver Disease 1,008	Liver Disease 3,108	Diabetes Mellitus 6,414	Liver Disease 13,945	Alzheimer's Disease 122,019
7	CLRD 64	Diabetes Mellitus 246	Diabetes Mellitus 837	Diabetes Mellitus 2,282	Cerebro-vascular 5,128	Cerebro-vascular 12,789	Diabetes Mellitus 84,946
8	Cerebro-vascular 54	Influenza & Pneumonia 200	Cerebro-vascular 567	Cerebro-vascular 1,704	CLRD 3,807	<b>Suicide 8,540</b>	Influenza & Pneumonia 59,120
9	Influenza & Pneumonia 51	CLRD 165	HIV 482	Influenza & Pneumonia 956	Septicemia 2,380	Septicemia 5,956	Nephritis 51,386
10	Benign Neoplasms 30	Complicated Pregnancy 151	Influenza & Pneumonia 457	Septicemia 829	Influenza & Pneumonia 2,339	Influenza & Pneumonia 5,858	<b>Suicide 48,344</b>

## Trends over Time

Suicide rates are based on the number of people who have died by suicide per 100,000 population. Because changes in population size are taken into account, rates allow for comparisons from one year to the next.

Figure 1 shows age-adjusted suicide rates in the United States for each year from **1999 through 2018** for the total population, and for males and females presented separately.

During that 20-year period, the total **suicide rate in the United States increased 35%** from 10.5 per 100,000 in 1999 to 14.2 per 100,000 in 2018.

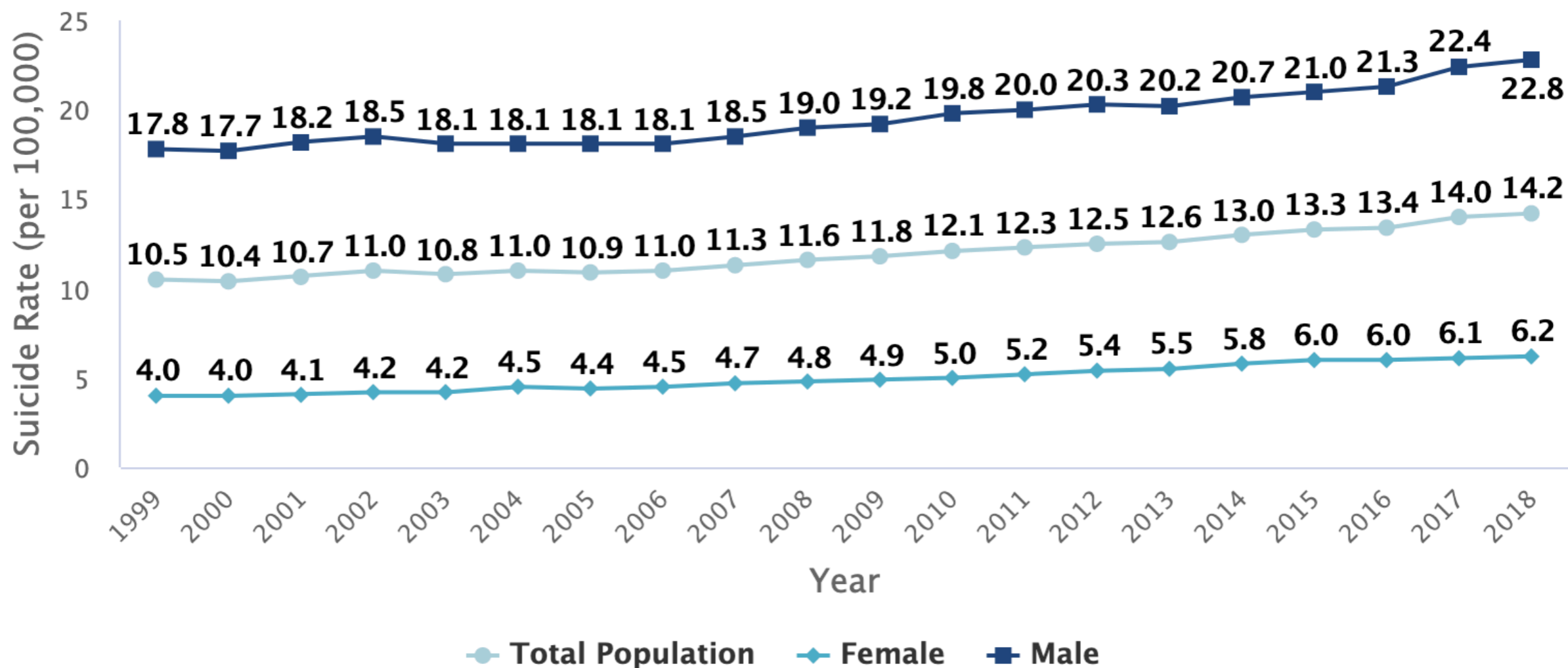
In 2018, the **suicide rate among males was 3.7 times higher (22.8 per 100,000) than among females (6.2 per 100,000).**

Figure 1

### Age-Adjusted Suicide Rates in the United States (1999–2018)



Data Courtesy of CDC



## Demographics

Because suicide rates take population size into account, they can be a useful tool for understanding the relative proportion of people affected within different demographic groups.

Figure 2 shows the crude rates of suicide within sex and age categories in 2018.

Among **females**, the suicide rate was **highest for those aged 45-64** (10.2 per 100,000).

Among **males**, the suicide rate was **highest for those aged 75 and older** (39.9 per 100,000).

Figure 2

### Suicide Rates by Age (per 100,000; 2018)

Data Courtesy of CDC

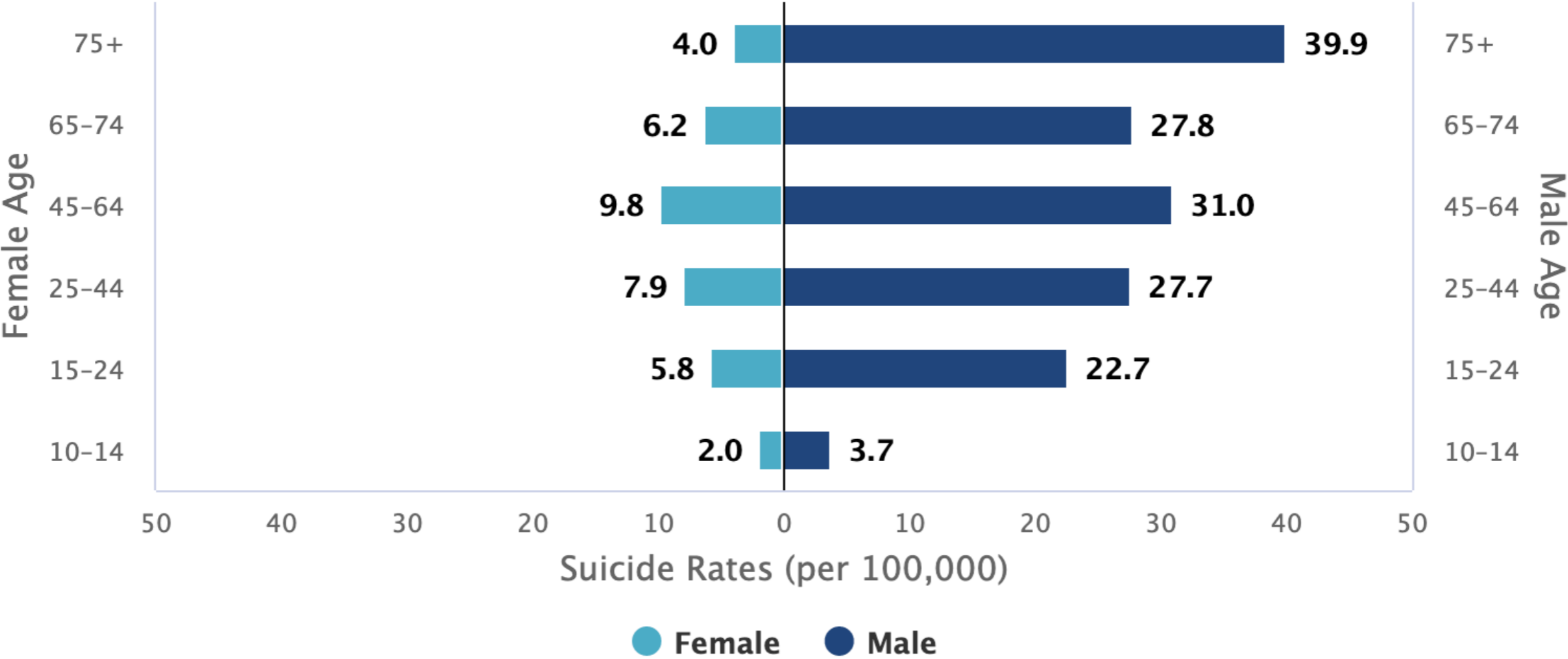
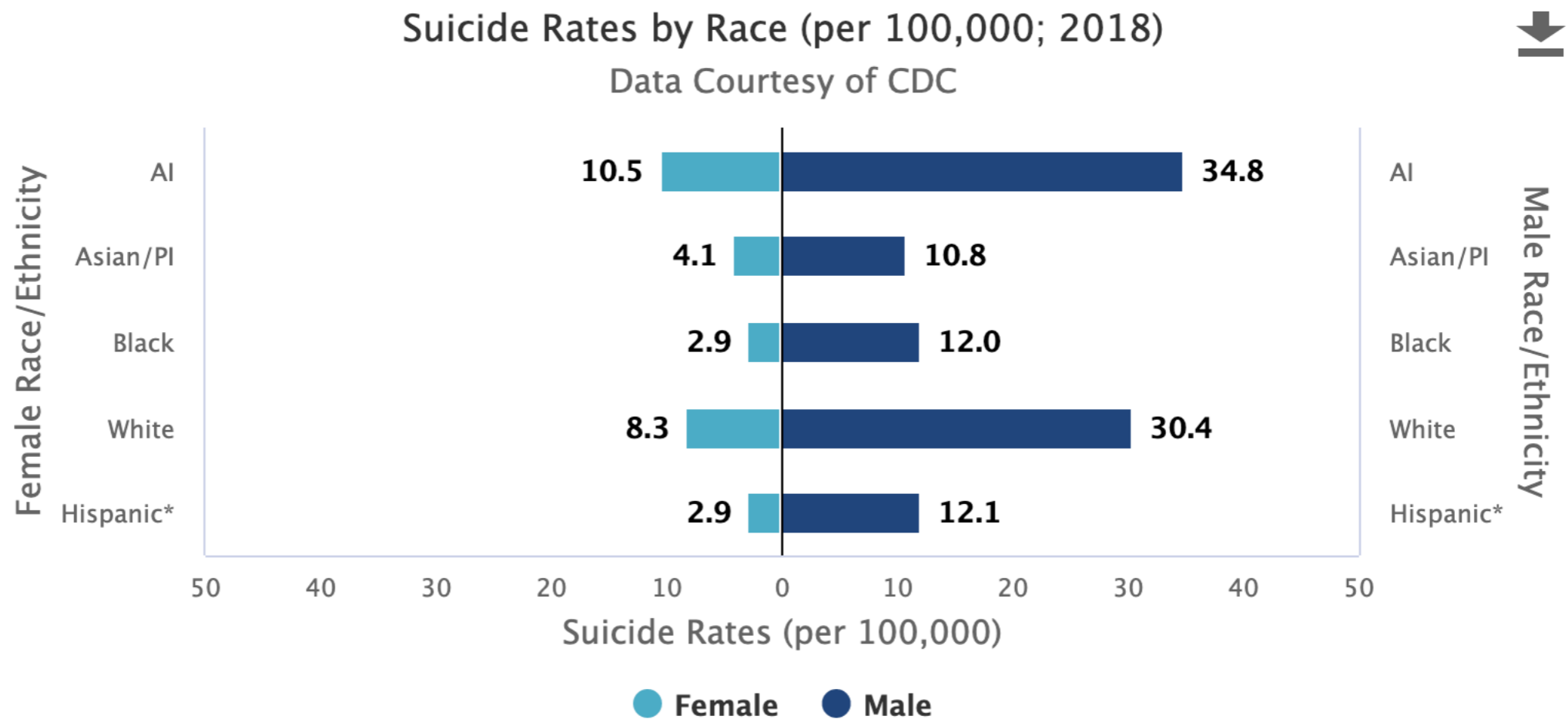




Figure 3 shows the rates of suicide for race/ethnicity groups in 2018 based on data from the CDC's [WISQARS Fatal Injury Data Visualization Tool](#).

The crude rates of suicide were highest for American Indian, Non-Hispanic males (34.8 per 100,000) and females (10.5 per 100,000), followed by White, Non-Hispanic males (30.4 per 100,000) and females (8.3 per 100,000).

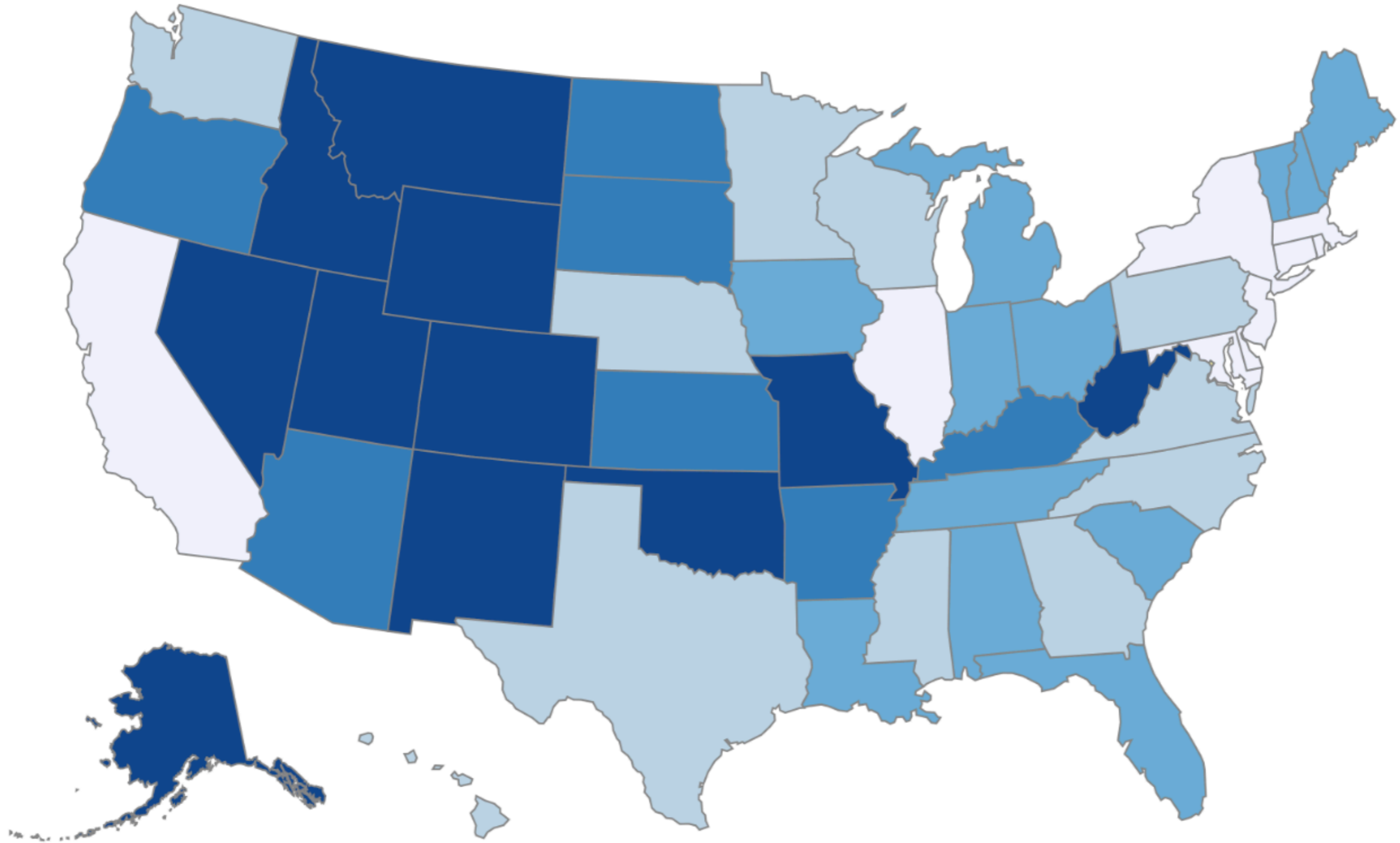
Figure 3



\*Persons of Hispanic origin may be of any race; all other racial/ethnic groups are non-Hispanic  
AI = American Indian, PI = Pacific Islander

# Suicide Rates in the United States (by state; per 100,000; 2018)

Data Courtesy of CDC



7.4 - 11.8   11.8 - 15.1   15.1 - 17.4   17.4 - 19.5   19.5 - 25.0   No Data   Suppressed Value

**Suicide by Method (2018)**  
**Data Courtesy of CDC**

<b>Suicide Method</b>	<b>Number of Deaths</b>
<b>Total</b>	48,344
<b>Firearm</b>	24,432
<b>Suffocation</b>	13,840
<b>Poisoning</b>	6,237
<b>Other</b>	3,835

## Percent of Suicide Deaths by Method

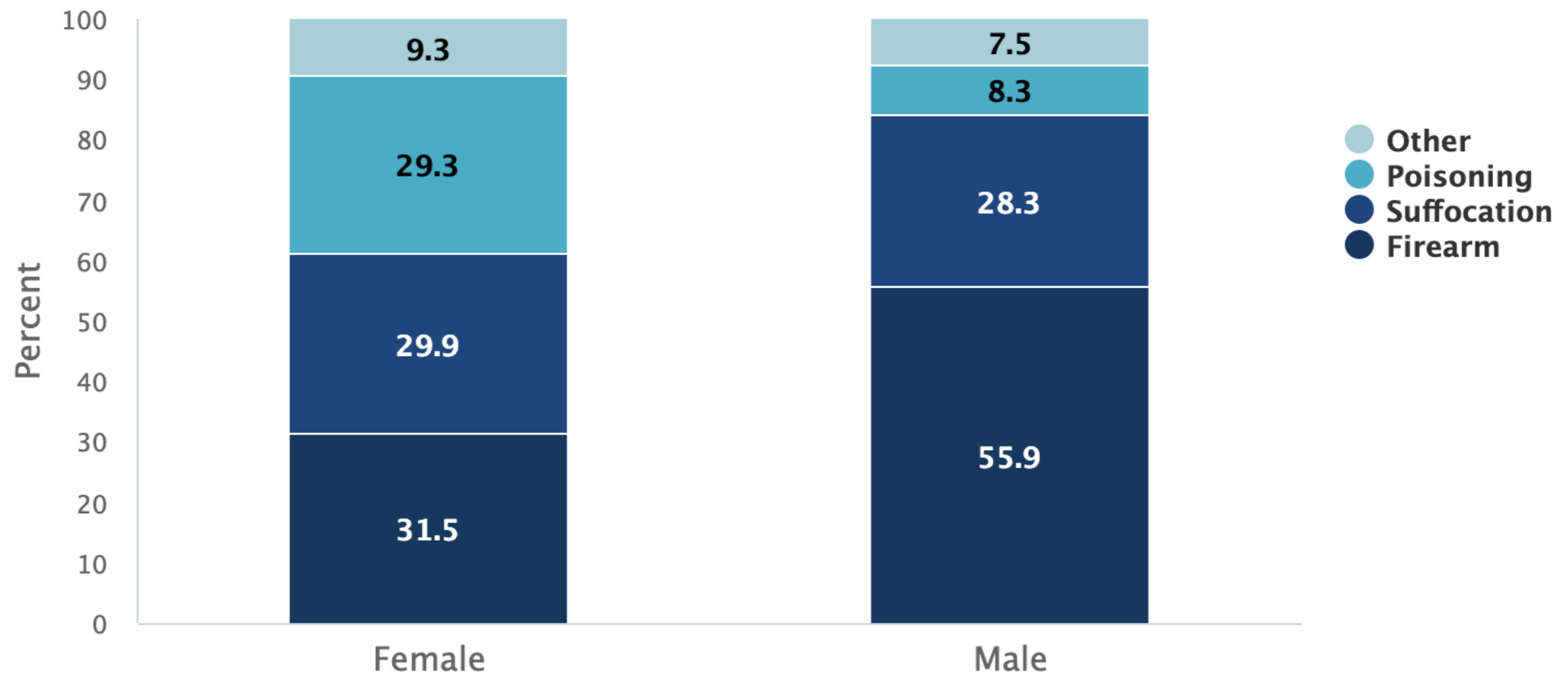
Figure 5 shows the percentages of suicide deaths by method among males and females in 2018. Among males, the most common methods of suicide were firearm (55.9%) followed by suffocation (28.3%). Among females, the most common methods of suicide were firearm (31.5%), suffocation (29.9%), and poisoning (29.3%).

Figure 5

### Percentage of Suicide Deaths by Method in the United States (2018)



Data Courtesy of CDC



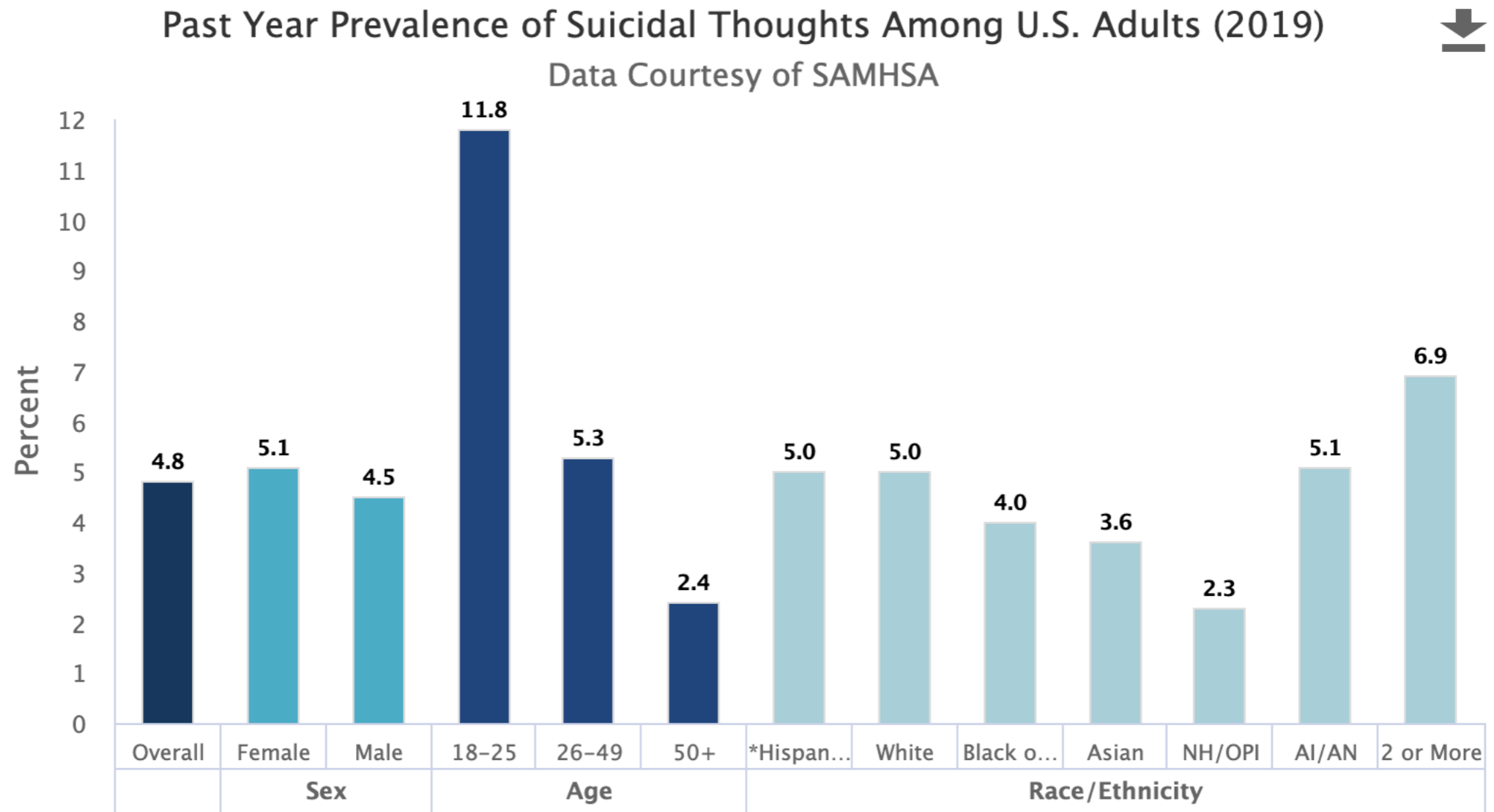
## Suicidal Thoughts and Behaviors Among U.S. Adults

Data in Figure 6, Figure 7, and Figure 8 are based on data from the [2019 National Survey on Drug Use and Health \(NSDUH\)](#)<sup>1</sup> by the [Substance Abuse and Mental Health Services Administration \(SAMHSA\)](#).

Figure 6 shows that 4.8% of adults age 18 and older in the United States had serious thoughts about suicide in 2019. Among adults across all age groups, the prevalence of serious suicidal thoughts was highest among young adults aged 18-25 (11.8%).

The prevalence of serious suicidal thoughts was highest among adults age 18 and older who report having multiple (two or more) races (6.9%).

**Figure 6**



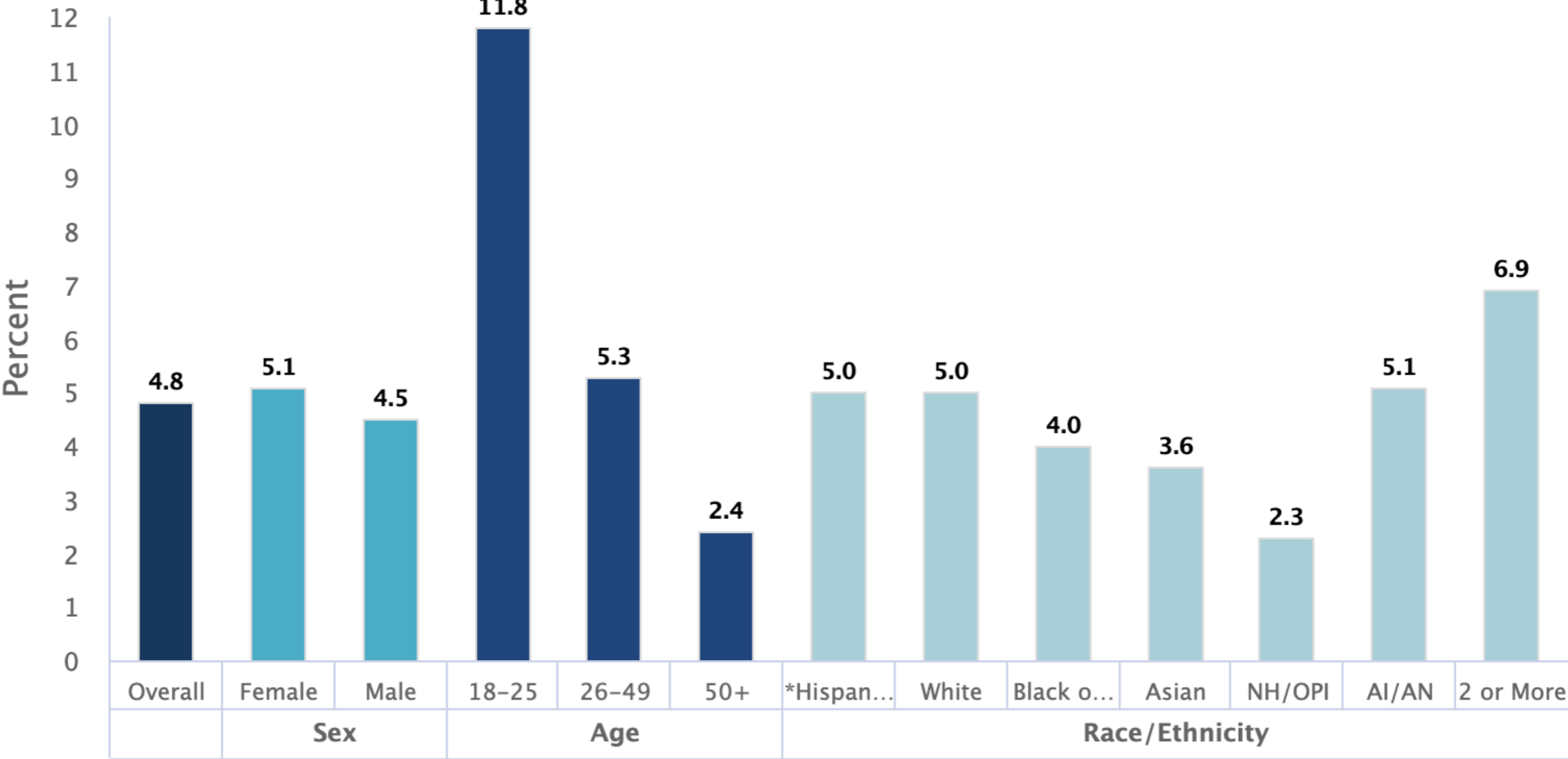
\* Persons of Hispanic origin may be of any race; all other racial/ethnic groups are non-Hispanic  
 NH/OPI = Native Hawaiian / Other Pacific Islander / AI/AN = American Indian / Alaskan Native

**Figure 6**

**Past Year Prevalence of Suicidal Thoughts Among U.S. Adults (2019)**



Data Courtesy of SAMHSA



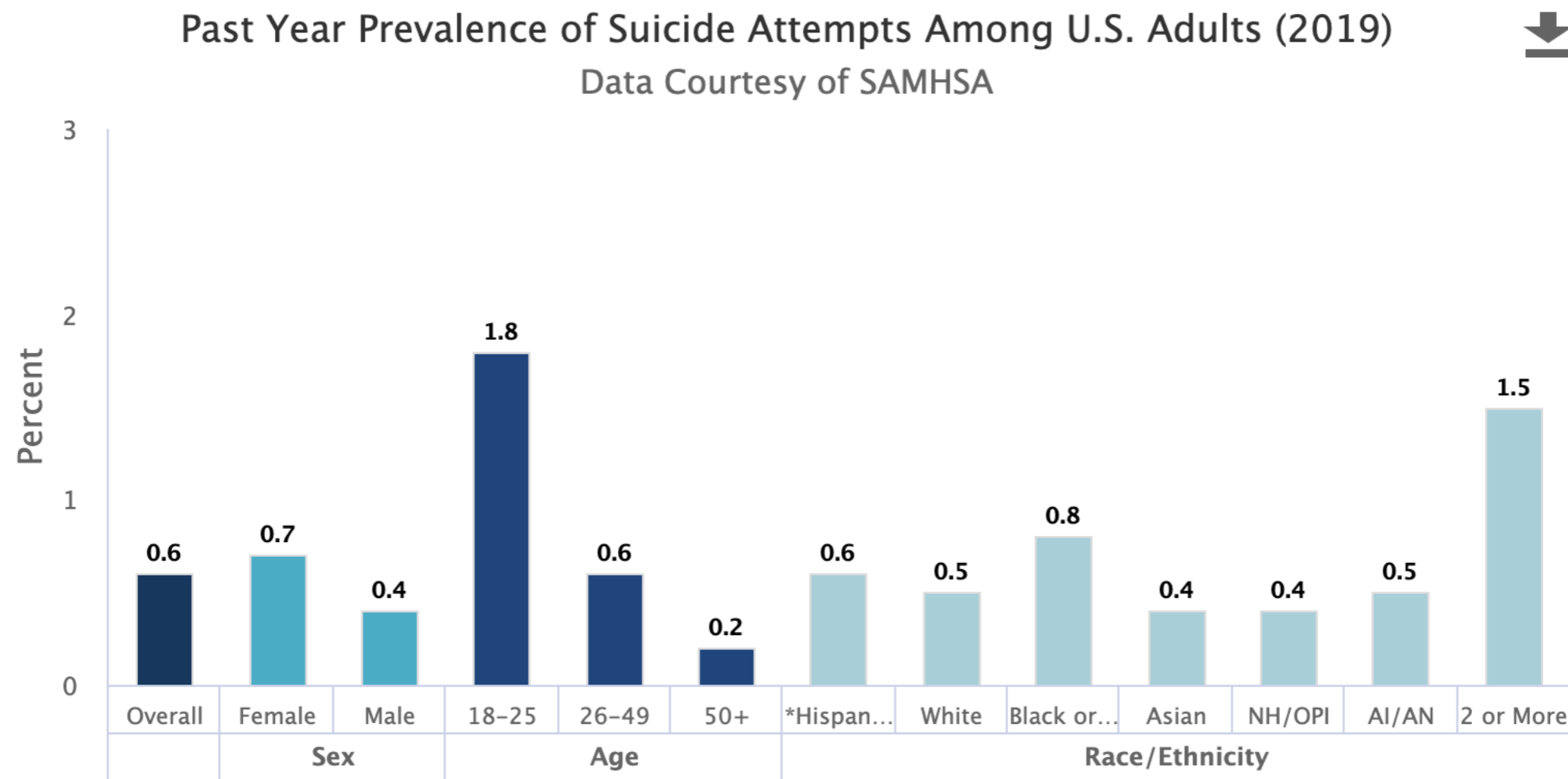
\* Persons of Hispanic origin may be of any race; all other racial/ethnic groups are non-Hispanic  
 NH/OPI = Native Hawaiian / Other Pacific Islander / AI/AN = American Indian / Alaskan Native

Figure 7 shows that in 2019, 0.6% of adults age 18 and older in the United States report they attempted suicide in the past year.

Among adults across all age groups, the prevalence of suicide attempt in the past year was highest among young adults 18-25 years old (1.8%).

Among adults age 18 and older, the prevalence of suicide attempts in the past year was highest among those who report having multiple (two or more) races (1.5%).

**Figure 7**

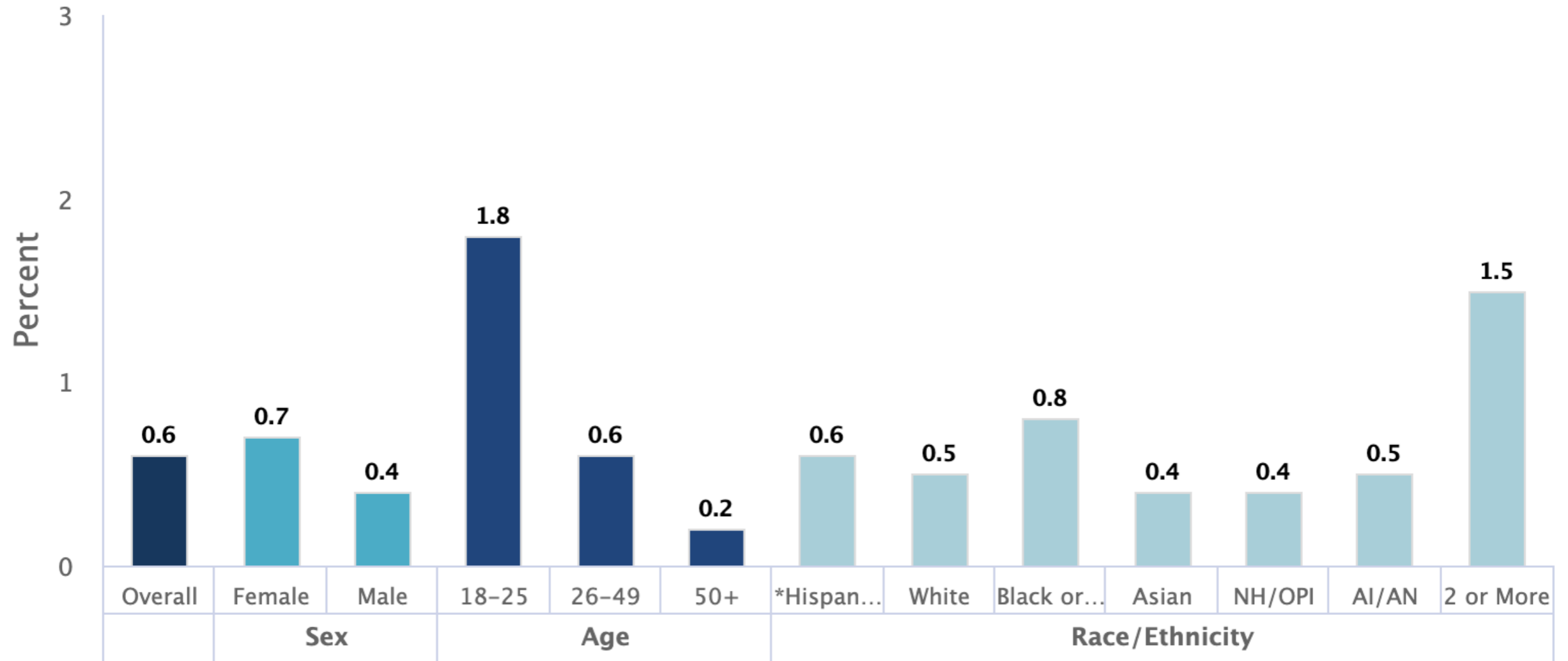


\* Persons of Hispanic origin may be of any race; all other racial/ethnic groups are non-Hispanic.  
 NH/OPI = Native Hawaiian / Other Pacific Islander / AI/AN = American Indian / Alaskan Native

Figure 7

### Past Year Prevalence of Suicide Attempts Among U.S. Adults (2019)

Data Courtesy of SAMHSA



\* Persons of Hispanic origin may be of any race; all other racial/ethnic groups are non-Hispanic.  
NH/OPI = Native Hawaiian / Other Pacific Islander / AI/AN = American Indian / Alaskan Native

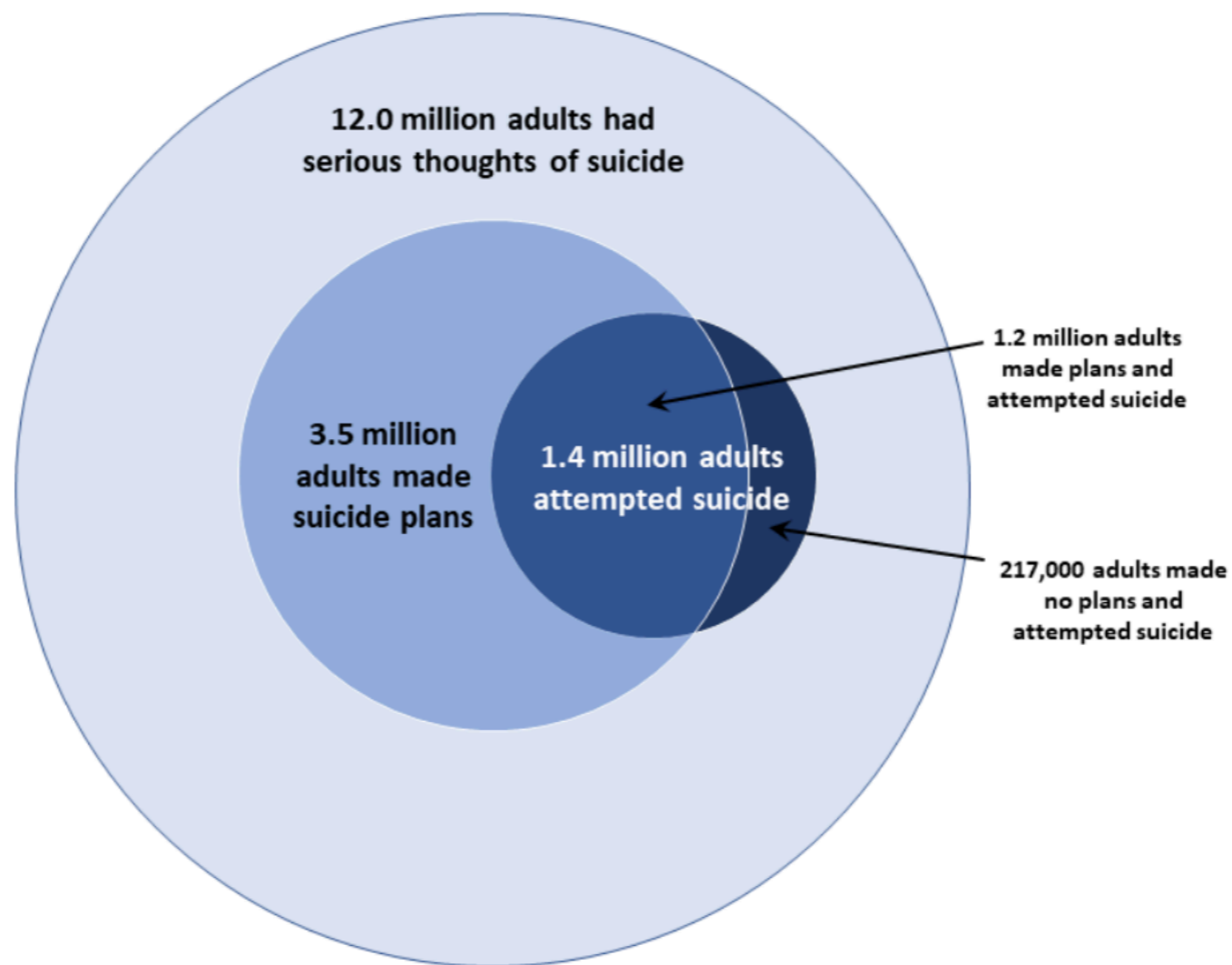


- Figure 8 shows that in 2019, 12.0 million adults aged 18 or older reported having serious thoughts of suicide, and 1.4 million adults attempted suicide during the past year.

## Figure 8

### Past Year Suicidal Thoughts and Behaviors Among U.S. Adults (2019)

Data Courtesy of SAMHSA



# If You are in Crisis

If you are in crisis, call the toll-free [National Suicide Prevention Lifeline](https://www.suicidepreventionlifeline.org) (NSPL) at **1-800-273-TALK (8255)**, available 24 hours a day, 7 days a week. The service is available to anyone. All calls are confidential.



## Additional Resources

[National Suicide Prevention Lifeline](#)

[Veterans Crisis Line](#)

[National Action Alliance for Suicide Prevention](#)

[National Library of Medicine - Suicide](#)

[National Strategy for Suicide Prevention](#)

[NIMH Multimedia on Suicide Prevention](#)

[NIMH Suicide Prevention](#)

[Take 5 To Save Lives](#)

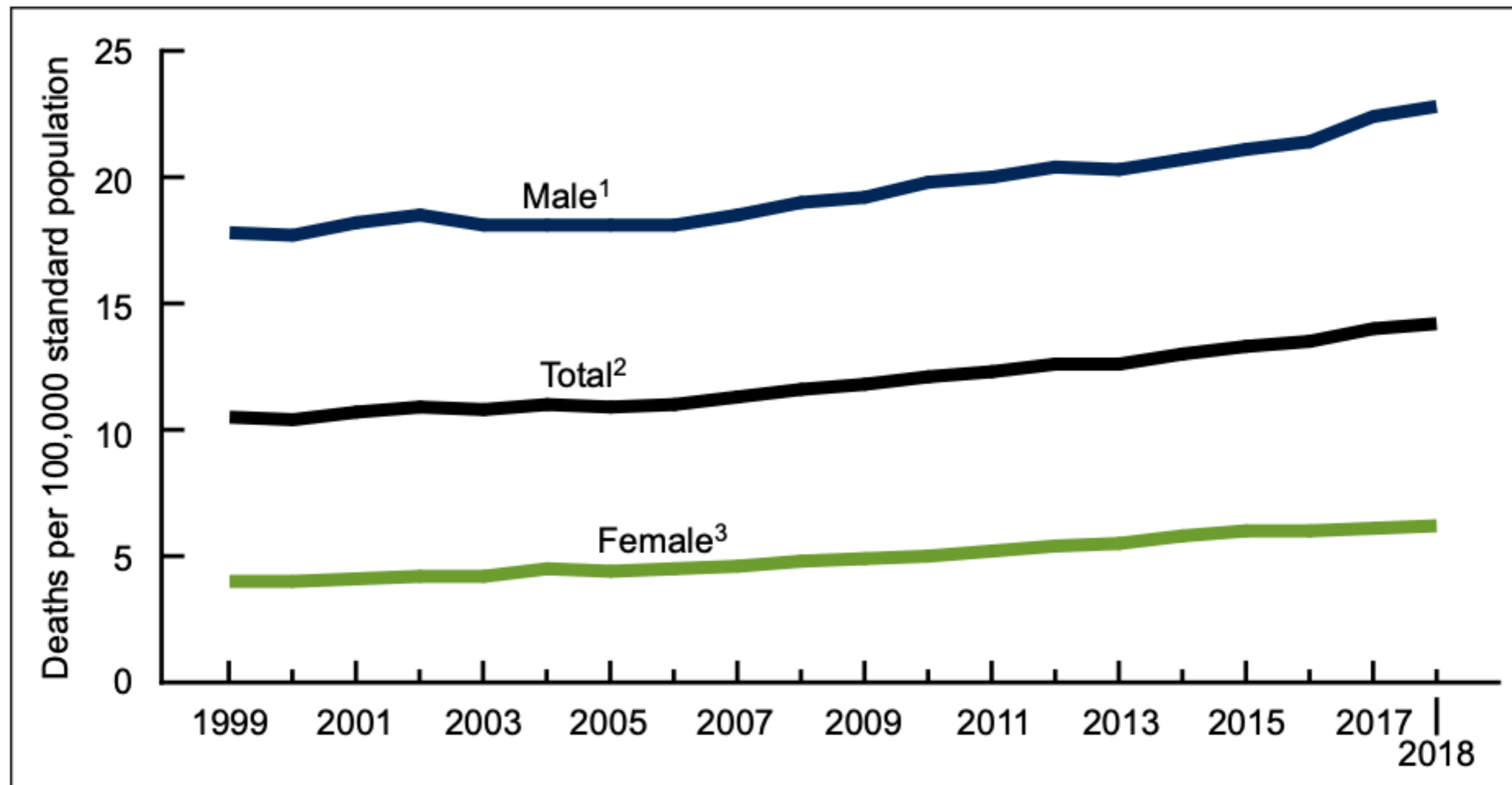
[StopBullying.gov](#)

# NCHS Data Brief - No.362 April 2020

## **Key findings Data from the National Vital Statistics System, Mortality**

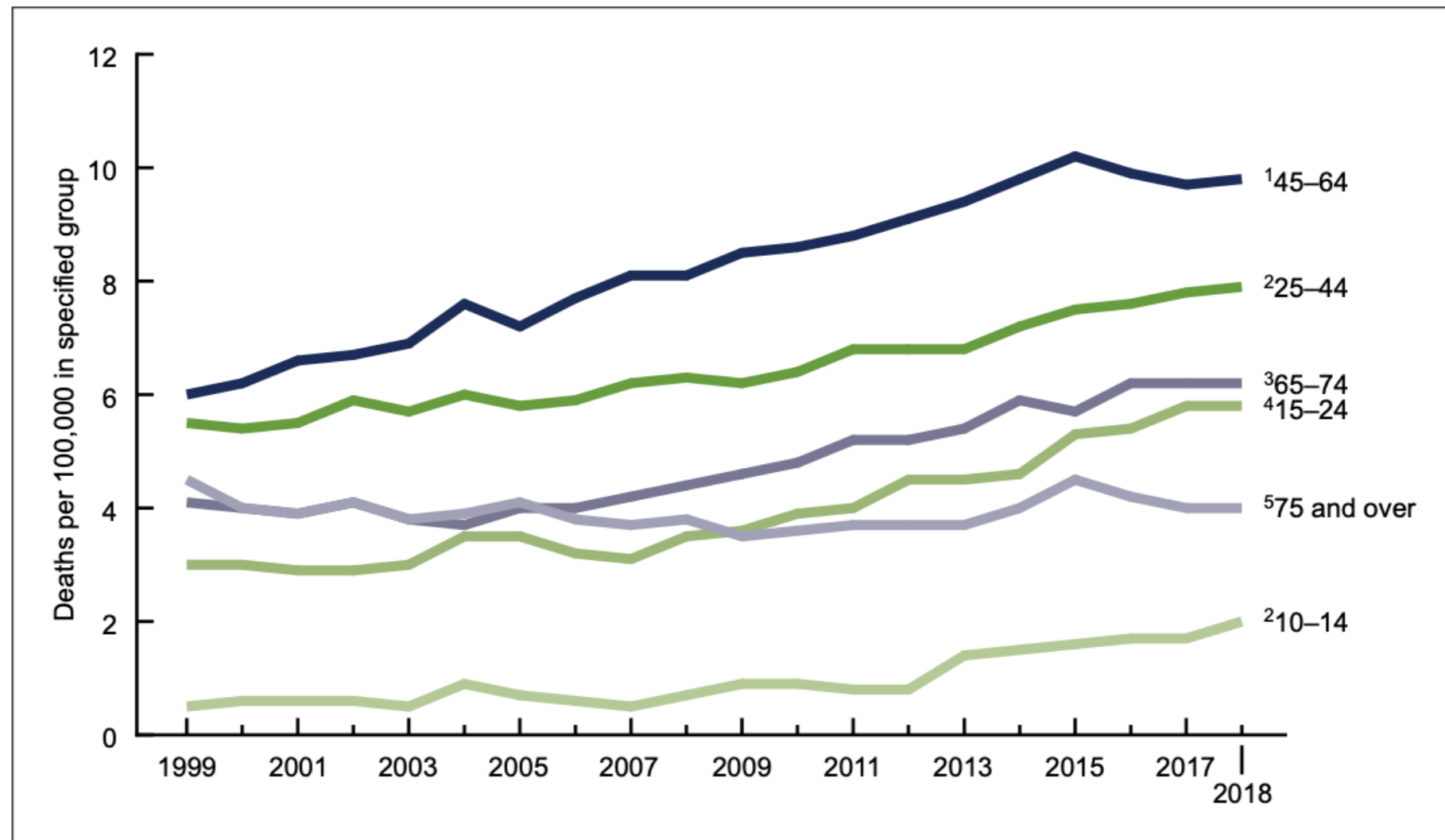
- From 1999 through 2018, the suicide rate increased 35%, from 10.5 per 100,000 to 14.2.  
The rate increased on average approximately 1% per year from 1999 to 2006 and by 2% per year from 2006 through 2018.
- In 2018, the suicide rate for males was 3.7 times the rate for females (22.8 and 6.2, respectively).
- From 1999 through 2018, suicide rates among females were highest for those aged 45–64; among males, the rates were highest for those aged 75 and over.
- In 2018, suicide rates were higher in the most rural counties compared with the most urban counties for both males and females.

Figure 1. Age-adjusted suicide rates, by sex: United States, 1999–2018



Among females, suicide rates were highest for those aged 45–64 and lowest for those aged 10–14 from 1999 through 2018. Suicide rates among females generally increased between 1999 and 2018 for all age groups, except women aged 75 and over, although patterns of increase varied by age with different rates of change over time (Figure 2).

Figure 2. Suicide rates for females, by age group: United States, 1999–2018



<sup>1</sup>Significant increasing trend from 1999 to 2015; stable trend from 2015 through 2018,  $p < 0.05$ .

<sup>2</sup>Significant increasing trend from 1999 through 2018, with different rates of change over time,  $p < 0.05$ .

<sup>3</sup>Stable trend from 1999 to 2004; significant increasing trend from 2004 to 2016; stable trend from 2016 through 2018,  $p < 0.05$ .

<sup>4</sup>Stable trend from 1999 to 2007; significant increasing trend from 2007 through 2018,  $p < 0.05$ .

<sup>5</sup>Significant decreasing trend from 1999 to 2012; stable trend from 2012 through 2018,  $p < 0.05$ .

NOTES: Suicides are identified using *International Classification of Diseases, 10th Revision* underlying cause-of-death codes U03, X60–X84, and Y87.0.

Access data for Figure 2 at: <https://www.cdc.gov/nchs/data/databriefs/db362-tables-508.pdf#2>.

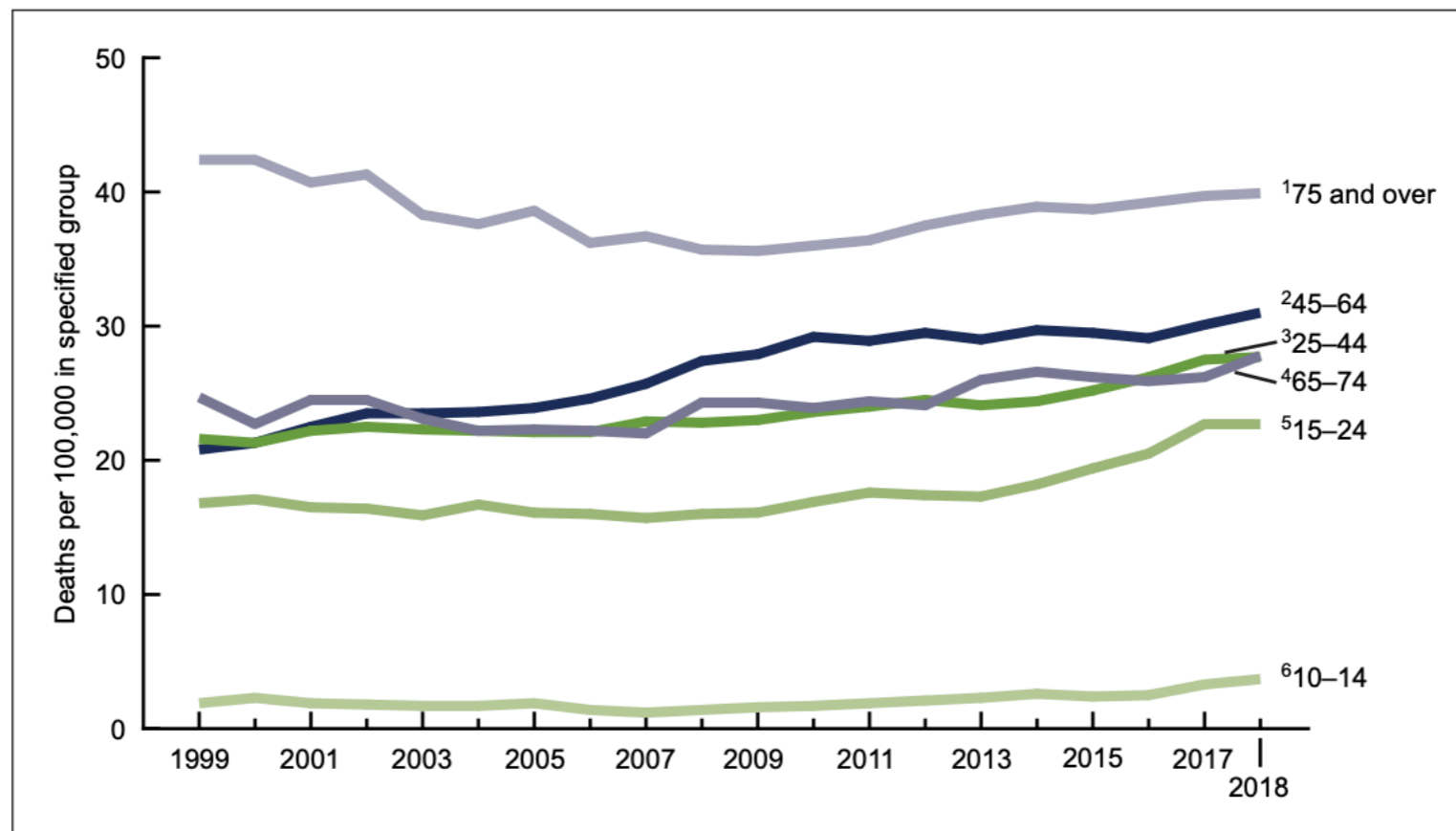
SOURCE: NCHS, National Vital Statistics System, Mortality (NVSS-M).

Among males, suicide rates were highest for those aged 75 and over and lowest for those aged 10–14 from 1999 through 2018.

Among males under age 75, suicide rates generally increased over the period (Figure 3).

Suicide rates among males were highest for those aged 75 and over, decreasing from 42.4 per 100,000 in 1999 to 35.6 in 2009, then increasing to 39.9 in 2018. • Suicide rates among males were lowest for those aged 10–14, decreasing from 1.9 in 1999 to 1.2 in 2007 and then increasing to 3.7 in 2018.

Figure 3. Suicide rates for males, by age group: United States, 1999–2018



<sup>1</sup>Significant decreasing trend from 1999 to 2008, then increasing trend from 2008 through 2018,  $p < 0.05$ .

<sup>2</sup>Significant increasing trend from 1999 to 2010 with different rates of change over time; stable trend from 2010 through 2018,  $p < 0.05$ .

<sup>3</sup>Significant increasing trend from 1999 through 2018, with different rates of change over time,  $p < 0.05$ .

<sup>4</sup>Stable trend from 1999 to 2005; significant increasing trend from 2005 through 2018,  $p < 0.05$ .

<sup>5</sup>Significant decreasing trend from 1999 to 2007, then increasing trend from 2007 through 2018 with different rates of change over time,  $p < 0.05$ .

<sup>6</sup>Significant decreasing trend from 1999 to 2008, then increasing trend from 2008 through 2018,  $p < 0.05$ .

NOTES: Suicides are identified using *International Classification of Diseases, 10th Revision* underlying cause-of-death codes U03, X60–X84, and Y87.0.

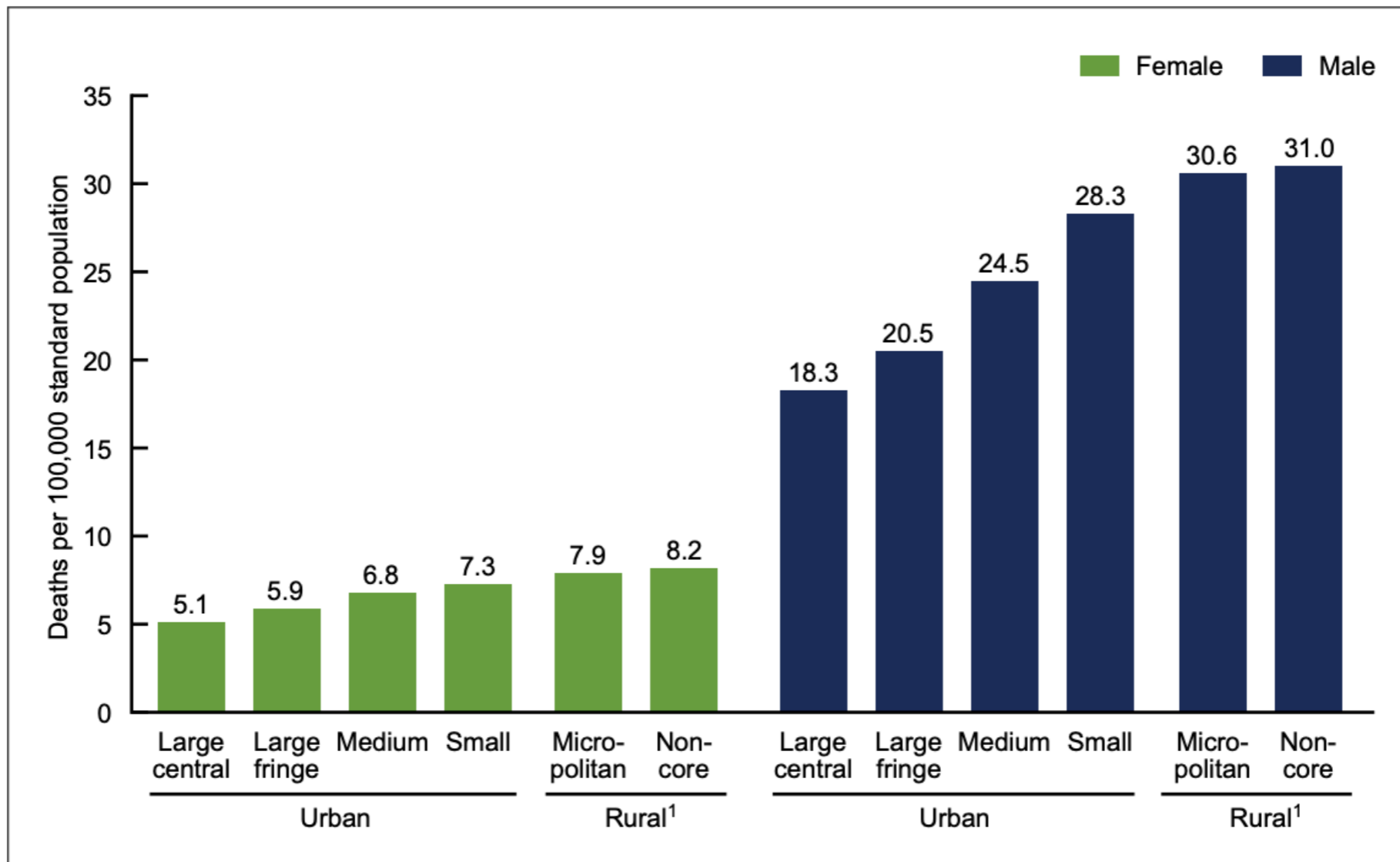
Access data for Figure 3 at: <https://www.cdc.gov/nchs/data/databriefs/db362-tables-508.pdf#3>.

SOURCE: NCHS, National Vital Statistics System, Mortality (NVSS-M).

**For both males and females, suicide rates in 2018 were higher in rural than in urban counties.**

- In 2018, suicide rates for females ranged from 5.1 in the most urban counties (large central) to 8.2 in the most rural counties (noncore). For males, the rates ranged from 18.3 to 31.0 (Figure 4).
- For both males and females, rates were higher in rural counties than in urban counties.
- For all levels of urbanicity, suicide rates for males were 3.5–3.9 times the rate for females.

Figure 4. Age-adjusted suicide rates, by sex and urbanicity of county of residence: United States, 2018



<sup>1</sup>Rates for rural county groups are higher than for urban county groups,  $p < 0.05$ .

NOTES: Suicides are identified using *International Classification of Diseases, 10th Revision* underlying cause-of-death codes U03, X60–X84, and Y87.0. Age-adjusted death rates were calculated using the direct method and the 2000 U.S. standard population. Counties were classified using the 2013 National Center for Health Statistics Urban–Rural Classification Scheme for Counties available from: [https://www.cdc.gov/nchs/data/series/sr\\_02/sr02\\_166.pdf](https://www.cdc.gov/nchs/data/series/sr_02/sr02_166.pdf). Access data for Figure 4 at: <https://www.cdc.gov/nchs/data/databriefs/db362-tables-508.pdf#4>.

SOURCE: NCHS, National Vital Statistics System, Mortality (NVSS-M).



**Summary:** This report highlights trends in suicide rates from 1999 through 2018. During this period, the **age-adjusted suicide rate increased 35%, from 10.5 per 100,000 U.S. standard population in 1999 to 14.2 in 2018.** The average annual percentage increase in the national suicide rate increased from approximately 1% per year from 1999 to 2006 to 2% per year from 2006 through 2018. The age-adjusted suicide rate among females increased 55%, from 4.0 in 1999 to 6.2 in 2018, while the rate for males increased 28%, from 17.8 to 22.8. Suicide rates were consistently higher for males compared with females over the entire time period. Suicide rates in 2018 were higher than in 1999 for males and females in all age groups under age 75. Among females, suicide rates from 1999 through 2018 were highest for those aged 45–64 and lowest for those aged 10–14. Among males, suicide rates were highest for those aged 75 and over and lowest for those aged 10–14. After years of increase, the suicide rates for several demographic groups have stabilized in recent years. These include females aged 45–64, 65–74, and 75 and over, and males aged 45–64. Females aged 10–44, males aged 10–44, and males 65 and over continue to experience increasing trends in suicide rates. In 2018, the suicide rate for females in the most rural counties (noncore) was 1.6 times the rate in the most urban counties (large central), 8.2 and 5.1 per 100,000, respectively. A similar pattern was seen for males where the suicide rate in the most rural counties (31.0) was 1.7 times the rate in the most urban counties (18.3). For all levels of urbanicity, suicide rates were higher for males than for females.

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