## Suicide

Suicide is a major public health concern. Suicide is among the leading causes of death in the United States. Based on recent mortality data, suicide in some populations is on the rise.

## **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 self-directed, potentially injurious behavior with intent to die as a result of the behavior. A suicide attempt might not result in death or injury.
- Suicidal ideation refers to thinking about, considering, or planning suicide.

Additional information about suicide can be found on the <u>NIMH health topics page on</u> Suicide Prevention.

# Suicide is One of the Leading Causes of Death in the United States

- According to the Centers for Disease Control and Prevention (CDC) WISQARS Leading Causes of Death Reports ☑, in 2022:
  - Suicide was the eleventh leading cause of death overall in the United States,
     claiming the lives of over 49,400 people.
  - Suicide was the second leading cause of death among individuals between the ages of 10-14 and 25-34, the third leading cause of death among individuals between the ages of 15-24, and the fourth leading cause of death among individuals between the ages of 35 and 44.
  - There were nearly two times as many suicides (49,476) in the United States as there were homicides (24,849).

Table 1 shows the eleven leading causes of death in the United States, and the number of deaths attributed to each cause. Data are shown for all ages and select age groups where suicide was one of the leading eleven causes of death in 2022. The data are based on death certificate information compiled by the CDC.

Table 1

Leading Causes of Death in the United States for Select Age Groups (2022)  Data Courtesy of CDC							≡	
	Ages							
Rank	5-9	10-14	15-24	25-34	35-44	45-54	55-64	All Ages
1	Unintentional Injury 726	Unintentional Injury 926	Unintentional Injury 14,669	Unintentional Injury 33,058	Unintentional Injury 36,972	Malignant Neoplasms 33,363	Malignant Neoplasms 105,133	Heart Disease 702,880
2	Malignant Neoplasms 393	Suicide 493	Homicide 6,262	Suicide 8,663	Heart Disease 12,258	Heart Disease 32,298	Heart Disease 85,733	Malignant Neoplasms 608,371
3	Congenital Anomalies 241	Malignant Neoplasms 442	Suicide 6,040	Homicide 6,712	Malignant Neoplasms 11,177	Malignant Neoplasms 31,394	Unintentional Injury 34,017	Unintentional Injury 227,039

	Ages							
Rank	5-9	10-14	15-24	25-34	35-44	45-54	55-64	All Ages
4	Homicide 180	Homicide 366	Malignant Neoplasms 1,421	Heart Disease 3,789	Suicide 8,185	COVID-19 9,678	COVID-19 24,252	COVID-19 186,552
5	Influenza & Pneumonia 77	Congenital Anomalies 205	Heart Disease 848	Malignant Neoplasms 3,641	Liver Disease 5,501	Liver Disease 9,401	Diabetes Mellitus 17,410	Cerebro- vascular 165,393
6	Heart Disease 73	Heart Disease 145	COVID-19 447	Liver Disease 1,786	Homicide 4,765	Suicide 7,781	CLRD 17,138	CLRD 147,382
7	COVID-19 62	COVID-19 69	Congenital Anomalies 412	COVID-19 1,640	COVID-19 3,841	Diabetes Mellituse 7,364	Liver Disease 16,484	Alzheimer's Disease 120,122
8	CLRD 48	CLRD 58	Diabetes Mellitus 324	Diabetes Mellitus 1,188	Diabetes Mellitus 2,879	Cerebro- vascular 5,563	Cerebro- vascular 14,173	Diabetes Mellitus 101,209
9	Cerebrovascular 45	Cerebrovascular 55	CLRD 197	Cerebrovascular 599	Cerebro- vascular 2,150	CLRD 2,987	Suicide 7,864	Nephritis 57,937
10	Septicemia 33	Influenza & Pneumonia 54	Influenza & Pneumonia 168	Complicated Pregnancy 591	Nephritis 1,029	Homicide 2,740	Nephritis 6,668	Liver Disease 54,803
11	Anemias 20*	Benign Neoplasms 35	Complicated Pregnancy 164	Congenital Anomalies 490	Septicemia 1,024	Nephritis 2,679	Septicemia 6,167	Suicide 49,476

CLRD: Chronic Lower Respiratory Disease

COVID-19: Coronavirus disease 2019 caused by severe acute respiratory syndrome coronavirus 2

\*Unstable values (for more information, see the <u>WISQARS Glossary</u> entry on Suppressed Notations)

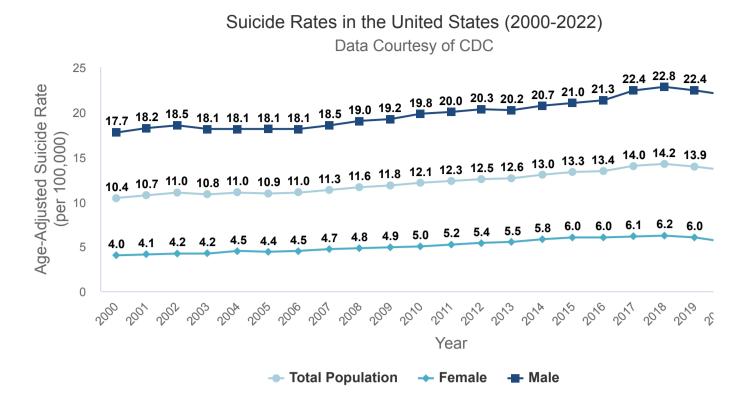
Note: Suicide is not among the eleven leading causes of death among children in the 0-4 year age group nor in adults in the age group 65 years and older (data not shown).

## **Suicide Rates**

#### **Trends over Time**

- Suicide rates are based on the number of people who have died by suicide per 100,000 population. The use of 'age-adjusted' rates allows for comparison of differences in population age distributions and changes in population size over time, including from one year to another year.
- Figure 1 shows age-adjusted suicide rates in the United States for each year from 2000 through 2022 for the total population, and for males and females separately.
  - The total age-adjusted suicide rate in the United States increased 35.2% from 10.4 per 100,000 in 2000 to 14.2 per 100,000 in 2018, before declining to 13.9 per 100,000 in 2019 and declining again to 13.5 per 100,000 in 2020. The total age-adjusted suicide rate in the United States increased to 14.0 per 100,000 in 2021 and then increased again to 14.2 per 100,000 in 2022.
  - o In 2022, the suicide rate among males was 4 times higher (22.9 per 100,000) than among females (5.9 per 100,000).

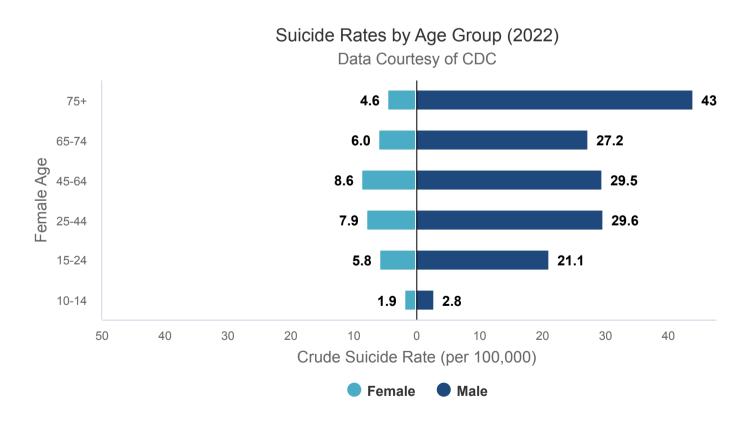
Figure 1



#### **Demographics**

- Crude suicide rate calculations take into account population size within subgroups in any given year or timeframe. 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 2022.
  - Among females, the suicide rate was highest for those age 45-64 (8.6 per 100,000).
  - Among males, the suicide rate was highest for those age 75 and older (43.9 per 100,000).

Figure 2

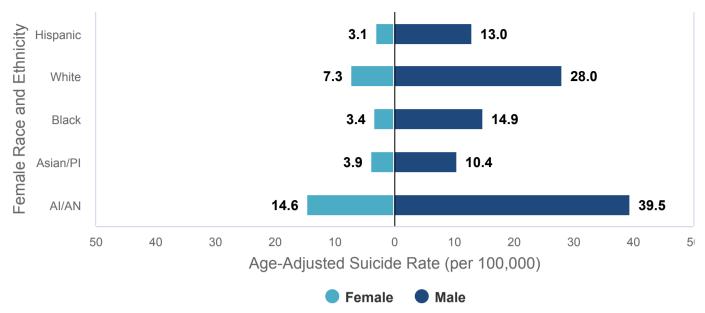


- Figure 3 shows the age-adjusted rates of suicide for race and ethnicity groups in 2022 based on data from the CDC's WISQARS Fatal Injury Data Visualization Tool ...
- The rates of suicide were highest for American Indian/Alaskan Native, Non-Hispanic males (39.5 per 100,000), followed by White, Non-Hispanic males (28.0 per 100,000). Among females, the rates of suicide were highest for American Indian/Alaskan Native, Non-Hispanic females (14.6 per 100,000) and White, Non-Hispanic females (7.3 per 100,000).

Figure 3

#### Suicide Rates by Race and Ethnicity (2022)

Data Courtesy of CDC



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

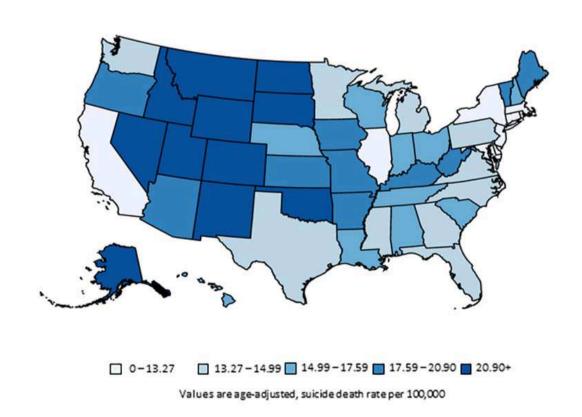
## Suicide Rates by State

• Just as state population numbers and age distributions vary, suicide rates can vary widely from state to state. Based on data from the CDC WISQARS Fatal Injury Data Visualization Tool , Figure 4 shows a map of the United States with each state's ageadjusted suicide rate in 2022 indicated by color. This age adjustment of suicide rates allows for the comparison of states in a way that the age distribution differences between states do not affect the suicide rate.

Figure 4

## Suicide Rates by State (2022)

Data Courtesy of CDC



# Suicide by Method

Data in Table 2 and Figure 5 are courtesy of the CDC WISQARS Fatal Injury Reports 2.

## Number of Suicide Deaths by Method

• Table 2 includes information on the total number of suicide deaths for the most

- common methods.
- In 2022, firearms were the most common method used in suicide deaths in the United States, accounting for over half of all suicide deaths (27,032).

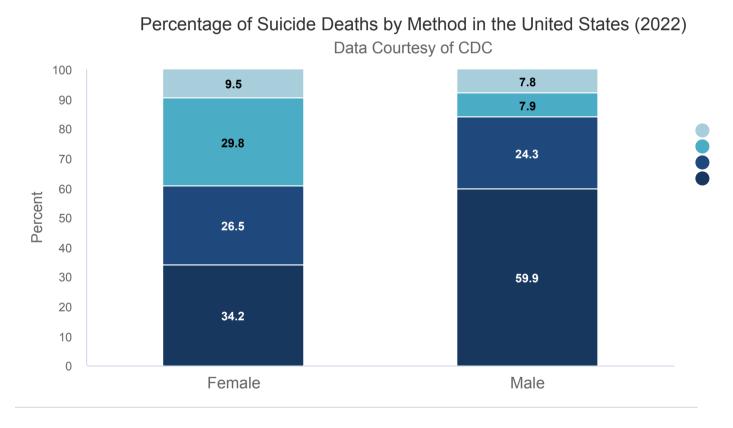
Table 2

Suicide by Method (2022)  Data Courtesy of CDC					
Suicide Method	Number of Deaths				
Total	49,476				
Firearm	27,032				
Suffocation	12,247				
Poisoning	6,150				
Other	4,047				

#### Percent of Suicide Deaths by Method

• Figure 5 shows the percentages of suicide deaths by method among females and males in 2022. Among females, the most common methods of suicide were firearm (34.2%), poisoning (29.8%), and suffocation (26.5%). Among males, the most common methods of suicide were firearm (59.9%) followed by suffocation (24.3%).

Figure 5



# Suicide Thoughts and Behaviors Among U.S. Adults

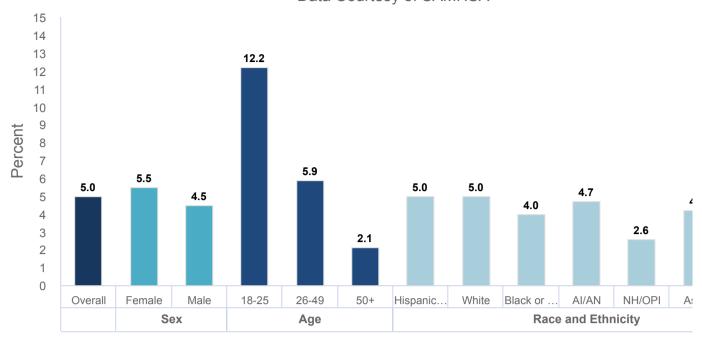
Data in Figure 6, Figure 7, and Figure 8 are based on data from the 2023 National Survey on Drug Use and Health (NSDUH)<sup>1</sup> by the Substance Abuse and Mental Health Services Administration (SAMHSA).

- Figure 6 shows that 5.0% of adults age 18 and older in the United States had thoughts about suicide in 2023.
  - Among adults across all age groups, the prevalence of suicide thoughts was highest among young adults age 18-25 (12.2%).
  - Among adults age 18 and older, the prevalence of suicide thoughts was highest among adults who identify with two or more races (12.0%).

Figure 6

Past Year Prevalence of Suicidal Thoughts Among U.S. Adults (2023)

Data Courtesy of SAMHSA



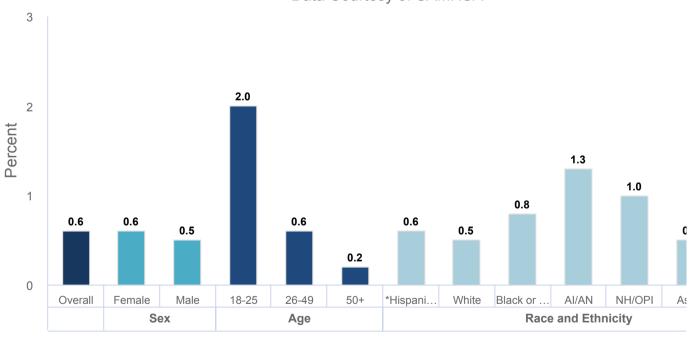
- \* Persons of Hispanic origin may be of any race; all other racial and ethnic groups are non-Hispanic.

  NH/OPI = Native Hawaiian / Other Pacific Islander | AI/AN = American Indian / Alaskan Native
- Figure 7 shows that in 2023, 0.6% of adults age 18 and older in the United States report they attempted suicide in in the past year.
  - Among adults across all age groups, the prevalence of suicide attempt in the past year was highest among young adults age 18-25 years old (2.0%).
  - Among adults age 18 and older, the prevalence of suicide attempts in the past year was highest among American Indian / Alaskan Native adults and adults who identify with two or more races (both 1.3%).

Figure 7

Past Year Prevalence of Suicide Attempts Among U.S. Adults (2023)

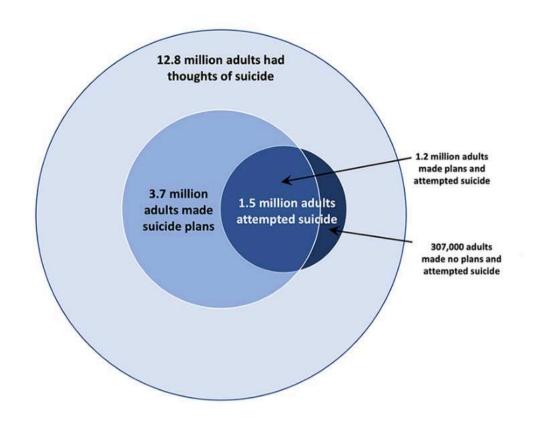
Data Courtesy of SAMHSA



- \* Persons of Hispanic origin may be of any race; all other racial and ethnic groups are non-Hispanic. NH/OPI = Native Hawaiian / Other Pacific Islander | Al/AN = American Indian / Alaskan Native
- Figure 8 shows that in 2023, 12.8 million adults age 18 or older reported having thoughts of suicide, and 1.5 million adults attempted suicide during the past year.

Past Year Suicide Thoughts and Behaviors Among U.S. Adults (2023)

Data Courtesy of SAMHSA



#### **Data Sources**

Figure 8

Centers for Disease Control and Prevention. (2024). Web-based Injury Statistics Query and Reporting System (WISQARS). Atlanta, GA: National Centers for Injury Prevention and Control, Centers for Disease Control and Prevention. Retrieved from https://www.cdc.gov/injury/wisqars/index.html 2.

Substance Abuse and Mental Health Services Administration. (2024). Key substance use and mental health indicators in the United States: Results from the 2023 National Survey on Drug Use and Health (HHS Publication No. PEP24-07-021, NSDUH Series H-59). Rockville, MD: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration. Retrieved from <a href="https://www.samhsa.gov/data/report/2023-nsduh-annual-national-report">https://www.samhsa.gov/data/report/2023-nsduh-annual-national-report</a>.

#### Statistical Methods and Measurement Caveats

### National Survey on Drug Use and Health (NSDUH)

#### Population:

- NSDUH participants are representative of the civilian, non-institutionalized population age 12 years old or older residing within the United States.
- The survey covers residents of households (persons living in houses/townhouses, apartments, condominiums; civilians living in housing on military bases, etc.) and persons in non-institutional group quarters (for example: shelters, rooming/boarding houses, college dormitories, migratory workers' camps, and halfway houses).
- The survey does not cover persons who, for the entire year, had no fixed address (for example: persons experiencing homelessness and/or transient persons not in shelters); were on active military duty; or who resided in institutional group quarters (for example: correctional facilities and hospitals). The survey also does not include persons who are unable to complete the survey in either English or Spanish or persons who are not physically or mentally capable of completing the interview.
- A new self-administered demographics section is included at the beginning of the questionnaire. Questions about sex, Hispanic origin, and race (that are used to create estimates for reports and tables) were moved to this new section, and the question

about respondents' sex was revised to ask about sex assigned at birth instead of asking whether respondents were male or female.

#### Interview Response and Completion:

- In 2023, 49.1% of the selected NSDUH sample of people 18 or older did not complete the interview. This rate of non-response is lower than in 2021 and 2022, but higher than in years 2020 and earlier. Please see the Background on the 2023 NSDUH and the COVID-19 Pandemic section below for more information.
- Reasons for non-response to interviewing include the following: refusal to participate (26.1%); respondent unavailable, never at home, or did not respond to the web survey (18.3%); and other reasons such as partially completed but unusable interviews, physically/mentally incapable or language barriers (4.7%).
- People with suicide behavior may disproportionately fall into these non-response categories. While NSDUH weighting includes non-response adjustments to reduce bias, these adjustments may not fully account for differential non-response by suicide behavior status. Prior to the 2020 NSDUH, this bias was deemed small and inconsequential due to low rates of item nonresponse and low prevalence estimates for outcomes imputed using the zero-fill method. With the increase in break-offs among adults in 2020 who completed the questionnaire via the web, the potential bias of this approach for handling missing data became of greater concern. Therefore, missing values in the variables associated with multiple outcomes, including for suicide thoughts and behaviors, were statistically imputed beginning in 2021.

#### Data Suppression:

• For some groups, data are not reported due to low precision. Data may be suppressed in the above charts if the data do not meet acceptable ranges for prevalence estimates, standard error estimates, and sample size.

#### Background on the 2023 NSDUH and the COVID-19 Pandemic:

• Data collection methods for the 2023 NSDUH changed in several ways because of the COVID-19 pandemic: the 2023 NSDUH continued the use of multimode data collection procedures (both in-person and virtual data collection) that were first implemented in the fourth quarter of the 2020 NSDUH. Overall, 36.1% of interviews were completed via the web, and 63.9% were completed in person. For comparison, more than half of interviews in 2021 (54.6%) were completed via the web, and more than half of interviews in 2022 (57.6%) were completed in person. In 2023, the weighted response rates for household screening and for interviewing were 24.4% and 50.5%, respectively, for an overall response rate of 12.3% for people age 12 or older. Given the use of multimode data collection procedures through the entirety of the collection year and the rate of non-response, comparison of estimates from the 2023 NSDUH with those from prior years must be made with caution.

Please see the 2023 National Survey on Drug Use and Health Methodological Summary and Definitions report 2 for further information on how these data were collected and calculated.

Last Updated: March 2025