# Michigan

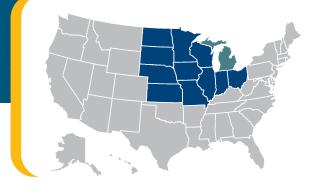
## VETERAN SUICIDE DATA SHEET, 2022

The U.S. Department of Veterans Affairs (VA) is leading efforts to understand suicide risk factors, develop evidence-based prevention programs, and prevent Veteran suicide through a public health approach. As part of its work, VA analyzes data at the national and state levels to guide the design and execution of the most effective strategies to prevent Veteran suicide.

The 2022 state data sheets present the latest findings from VA's ongoing analysis of suicide rates and include the most up-to-date state-level suicide information for the United States.<sup>a</sup> This data sheet includes information about Michigan Veteran suicides by age, sex, and suicide method and compares this with regional and national data.

After accounting for age differences,<sup>b</sup> the Veteran suicide rate in Michigan:

- Was not significantly different from the national Veteran suicide rate
- Was significantly higher than the national general population suicide rate



#### **Midwestern Region**

Michigan

Minnesota

Missouri

Nebraska

- Illinois
- Indiana
- lowa
- Kansas

- Ohio
  - South Dakota
    Wisconsin
    - WISCONSIII

North Dakota

### Michigan Veteran Suicide Deaths, 2022

Sex	Veteran Suicides
Male	160–170
Female	<10
All	170

To protect confidentiality, suicide death counts are presented in ranges when the number of deaths in any one category was lower than 10.

### Michigan, Midwestern Region, and National Veteran Suicide Deaths and Rates by Age Group, 2022<sup>c</sup>

Age Group	Michigan Veteran Suicides	Midwestern Region Veteran Suicides	National Veteran Suicides	Michigan Veteran Suicide Rate per 100,000	Midwestern Region Veteran Suicide Rate per 100,000	National Veteran Suicide Rate per 100,000
18–34	18	178	849	47.4*	50.7	47.6
35-54	59	398	1,670	51.8	44.1	35.5
55-74	52	485	2,263	23.0	31.2	31.2
75+	41	298	1,597	26.5	29.1	33.8
All	170	1,368	6,407	31.9	35.7	34.7

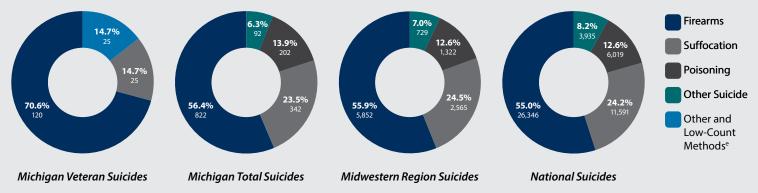
### Michigan Veteran and Total Michigan, Midwestern Region, and National Suicide Deaths and Rates by Age Group, 2022<sup>c</sup>

Age Group	Michigan Veteran Suicides	Michigan Total Suicides	Midwestern Region Total Suicides	National Total Suicides	Michigan Veteran Suicide Rate per 100,000	Michigan Suicide Rate per 100,000	Midwestern Region Suicide Rate per 100,000	National Suicide Rate per 100,000
18-34	18	392	3,084	13,623	47.4*	17.2	19.8	17.7
35-54	59	521	3,619	15,966	51.8	21.6	21.4	19.0
55-74	52	392	2,808	13,260	23.0	15.8	17.4	17.5
75+	41	153	957	5,042	26.5	20.2	19.0	21.0
All	170	1,458	10,468	47,891	31.9	18.4	19.5	18.4

\* Rates calculated from suicide counts lower than 20 are considered unreliable



Michigan Veteran and Total Michigan, Midwestern Region, and National Suicide Deaths by Method,<sup>d</sup> 2022



These 2022 state data sheets are based on a collaborative effort among the U.S. Department of Veterans Affairs (VA), the U.S. Department of Defense (DoD), and the Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS). The statistics presented are derived from multiple data sources, including the VA Office of Enterprise Integration, the VA Serious Mental Illness Treatment Resource and Evaluation Center, VA Health Outcomes Military Exposures (HOME) Program, the VA Center of Excellence for Suicide Prevention, and the DoD Defense Suicide Prevention Office.

These sheets include information on the Veteran population and general U.S. population age 18 and older, with deaths reported in the contiguous United States, Alaska, and Hawaii. The total state, regional, and national counts and rates presented include both Veterans and non-Veterans.

Suicide deaths are identified based on the underlying cause of death indicated on the state death certificate. For Veteran decedents, this information comes from the NCHS National Death Index (NDI) and was obtained from the joint VA/DoD Mortality Data Repository (MDR). Suicide death counts for the general U.S. population were obtained from CDC WONDER (Wide-ranging ONline Data for Epidemiologic Research).<sup>f</sup> Underlying cause of death is defined as (a) the disease or injury that initiated the train of events leading directly to death, or (b) the circumstances of the accident or violence that produced the fatal injury.<sup>g</sup> The ICD-10 (International Classification of Diseases, 10th revision) codes used to define suicide deaths are X60–X84, U03, and Y87.0.

Suicide rates presented are unadjusted rates per 100,000, calculated as the number of suicide deaths in 2022 divided by the estimated population and multiplied by 100,000. Significance statements are based on the ratio of direct age-adjusted rates, using the 2000 projected U.S. population as the standard.<sup>h</sup> Linearly interpolated estimates of the Veteran Population Projection Model 2020 (VetPop2020) were used in calculating rates to estimate the Veteran population for each state and age group.<sup>i</sup> These estimates were calculated to reflect the Veteran population estimate as of July 1st. Based on guidance from the VA Office of Enterprise Integration, the interpolated July 1st Veteran population estimates were generated by calculating the population difference between current and prior year estimates on September 30th provided in VetPop and multiplying by an adjustment factor for the time difference between July 1st and September 30th. NCHS single-race population estimates were used to estimate the general U.S. population.<sup>j</sup>

Veteran age-specific counts may not sum to the total counts because there are a small number of deaths for which age information is unavailable. These deaths are included in overall counts and rates but are not distributed among age groups; therefore, they are not included in age-specific counts, age-specific rates, or age-adjusted rates. Rates are marked with an asterisk (\*) when the rate is calculated from fewer than 20 deaths. Rates based on small numbers of deaths are considered statistically unreliable because a small change in the number of deaths might result in a large change in the rate. Because suicide rates based on fewer than 20 suicide deaths are considered statistically unreliable, any comparisons between age-adjusted rates and underlying age-specific rates based on fewer than 20 suicide deaths should be interpreted with caution.

To protect privacy and to prevent revealing information that may identify specific decedents, counts and rates are suppressed when based on 0–9 individuals. For suicide deaths by method, in cases where the number of deaths in any one of the categories was lower than 10, the categories with the smallest counts were combined until the minimum count of 10 was reached, to maintain confidentiality.

<sup>&</sup>lt;sup>1</sup> CDC, NCHS, Single-race Population Estimates, United States, 2022. July 1st resident population by state, age, sex, single-race, and Hispanic origin, on CDC WONDER Online Database. Vintage 2022 estimates released by U.S. Census Bureau on June 22, 2023. Accessed at http://wonder.cdc.gov/single-race-single-year-v2022.html.



<sup>&</sup>lt;sup>a</sup> The 2022 state data sheets contain suicide information for all 50 states and the District of Columbia.

<sup>&</sup>lt;sup>b</sup> Suicide rates presented in the tables are unadjusted for age. Age-adjusting suicide rates ensures that the differences in rates are not due to differences in the age distributions of the populations being compared. In some cases, the results of comparisons of age-adjusted rates differ from those of unadjusted rates. Comparison of rates is based on the ratio of age-adjusted rates; significance is determined based on a p-value <0.05.

<sup>&</sup>lt;sup>c</sup> Rates presented are unadjusted rates per 100,000. To protect privacy and prevent revealing information that may identify specific individuals, counts and rates are suppressed when based on 0–9 people. Rates calculated with a numerator of less than 20 are considered statistically unreliable, as indicated by an asterisk (\*). Veteran age-specific counts may not sum to the total counts because there are a small number of deaths for which age information is unavailable.

<sup>&</sup>lt;sup>d</sup> Methods are based on ICD-10 codes X72 to X74 for firearms, X60 to X69 for poisoning (including intentional overdose), and X70 for suffocation (including strangulation). "Other Suicide" includes all other intentional self-harm, including cutting/ piercing, drowning, falling, fire/flame, other land transport, being struck by/against, and other specified or unspecified injury.

<sup>\* &</sup>quot;Other Suicide" refers to all methods of suicide death apart from firearms, suffocation, and poisoning. "Low-Count Methods" refers to methods involved in fewer than 10 deaths in a given state or territory. In states or territories with fewer than 10 firearm deaths, suffocation deaths, or poisoning deaths, those data are represented in the "Other and Low-Count Methods" category to protect the privacy of individual suicide decedents.

<sup>&</sup>lt;sup>1</sup> National, regional, and state general population suicide counts are obtained from the CDC WONDER online database. For more information on CDC WONDER, please refer to http://wonder.cdc.gov/ucd-icd10.html.

<sup>&</sup>lt;sup>9</sup> World Health Organization, Nanual of the International Statistical Classification of Diseases, Injuries, and Causes of Death, based on the recommendations of the Ninth Revision Conference, 1975; Geneva, 1977.

h Klein, RJ, and Schoenborn, CA. Age adjustment using the 2000 projected U.S. population. Healthy People Statistical Notes, No. 20. Hyattsville, Maryland: National Center for Health Statistics. January 2001.

Veteran Population Projection Model 2020 (VetPop2020), Predictive Analytics and Actuary, Office of Enterprise Integration, Department of Veterans Affairs.