



Native Health in the Bemidji Area

Suicide Mortality Among Females and Males 2009-2018

Suicide Mortality and Gender

Suicide disproportionately affects American Indian/Alaska Natives (AI/ANs), with rates of suicide continuing to increase over the past twenty years.¹ Males of all races and ethnicities in the United States face higher rates of suicide than females of all races and ethnicities.² The root causes of the gender gap in suicide rates is still not fully understood, but it is known that while females *attempt* suicide more often than males, males *complete* suicide more frequently than females.³

Nationally, both female and male American Indian/Alaska Natives have experienced statistically significant increases in age-adjusted suicide rates between 1997 and 2017, with American Indian/Alaska Native males and females experiencing the largest increase in suicide rates of all racial and ethnic groups.²

Many historical and systemic factors contribute to American Indian/Alaska Natives experiencing high rates of suicide death compared to other racial and ethnic groups.⁴ This includes forced assimilation and loss of traditional culture, historical trauma, continued underfunding of the Indian Health Services, barriers to accessing mental health services, and disproportionate rates of adverse childhood experiences (ACEs).⁴

Suicide Deaths Among Females and Males in Michigan, Minnesota, and Wisconsin

In the three-state area of Michigan, Minnesota, and Wisconsin, American Indian/Alaska Native females had statistically significantly higher rates of suicide than white females from 2009 to 2018. Within the three-state area, American Indian/Alaska Native males did not have significantly higher rates of suicides than white males. Rates of suicide among American Indian/Alaska Native males in the three-state area were 2.7 times higher than American Indian/Alaska Native females in the three-state area (Table 1).

American Indian/Alaska Native females and males in the three-state area experienced statistically significantly higher rates of suicide compared to American Indian/Alaska Native females and males in the United States overall (1.5 times higher for females and 1.3 times higher for males, Table 1). Trends reveal that over time, the rates of suicide among American Indian/Alaska Native females and males in the three-state area did not increase significantly between 2010-2018 (Figure 1).

These data align with global tendencies of males experiencing higher rates of suicide than females.⁵ The data also highlight the high rates of suicide among American Indian/Alaska Native females and males in the three-state area compared to American/Indian Alaska Natives in the United States overall. Further research and outreach should be done to better understand contributing factors to suicide among American Indians/Alaska Natives in the Bemidji Area.

Figure 1. Suicide Age-Adjusted Mortality Rates (per 100,000) Among American Indian/Alaska Native and White Females and Males in the Three-State Area, 2010-2018

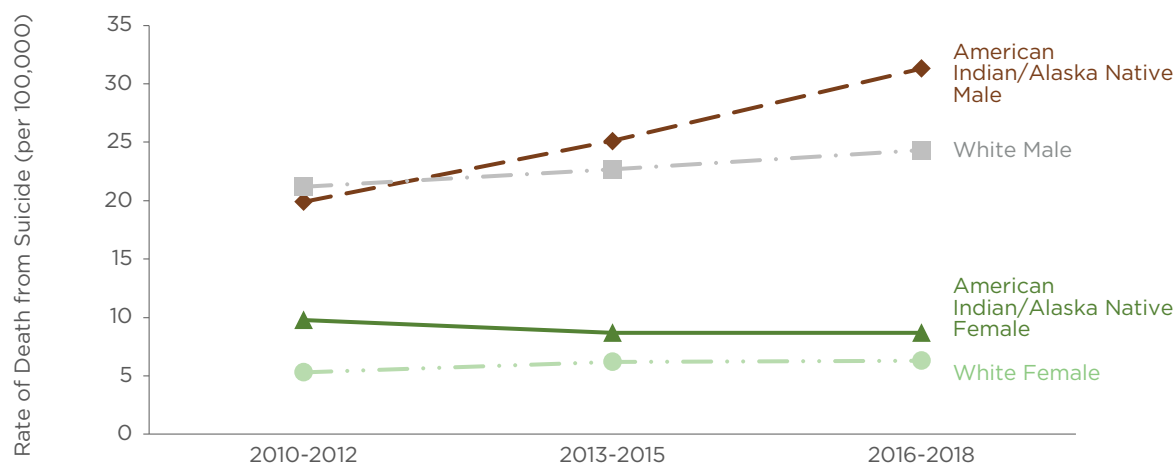


Table 1. Suicide Age-Adjusted Mortality Rates (per 100,000) Among American Indian/Alaska Native and White Females and Males in Michigan, Minnesota, and Wisconsin, Three-State Area, and the United States, 2009-2018

	American Indian/Alaska Native				White			
	Gender	Number of Deaths	Age-Adjusted Rate	95% Confidence Interval	Number of Deaths	Age-Adjusted Rate	95% Confidence Interval	Disparity Ratio
Michigan	Female	27	6.6	(4.3 - 9.6)	2,472	5.9	(5.7 - 6.2)	1.12
	Male	99	24.5	(19.6 - 30.3)	9,558	23.3	(22.8 - 23.8)	1.05
Minnesota	Female*	56	13.4	(10.1 - 17.6)	1,295	5.3	(5.0 - 5.6)	2.53
	Male*	108	27.0	(21.6 - 32.3)	5,000	20.5	(19.9 - 21.1)	1.32
Wisconsin	Female	24	6.8	(4.3 - 10.2)	1,638	6.2	(5.9 - 6.5)	1.10
	Male	75	22.1	(17.2 - 28.0)	6,064	23.0	(22.4 - 23.6)	0.96
Three-State Area	Female*	107	9.0	(7.2 - 10.7)	5,405	5.8	(5.7 - 6.0)	1.55
	Male	282	24.9	(21.8 - 28.1)	20,622	22.4	(22.1 - 22.8)	1.11
United States	Female**	1,311	5.8	(5.4 - 6.1)	83,505	6.4	(6.3 - 6.4)	0.91
	Male**	4,056	18.1	(17.5 - 18.6)	297,722	23.3	(23.2 - 23.3)	0.78

Source: CDC WONDER

*Mortality rate is significantly higher for American Indian/Alaska Natives compared to whites

**Mortality rate is significantly lower for American Indian/Alaska Natives compared to whites

Limitations

The data and findings included in this factsheet are subject to several limitations. First, under-reporting and misclassification of people of American Indian/Alaska Native descent is common on death certificates and could lead to underestimated American Indian/Alaska Native suicide mortality.¹ Second, the way the data are grouped in this factsheet does not reflect the differences in suicide rates among Tribal communities in the US and in the Bemidji Area, so the results of this factsheet should not be generalized to all Tribal communities. Finally, this factsheet does not capture mental health diagnoses and suicide attempts and should therefore not be interpreted as a comprehensive picture of suicidal behavior.

Data Source: Data retrieved from: CDC WONDER. Accessed at <https://wonder.cdc.gov/ucd-icd10.html>. Accessed November 23, 2020.

References:

- Leavitt R, Sheats K, Petrosky E, et al. Suicides Among American Indian/Alaska Natives — National Violent Death Reporting System, 18 States, 2003–2014. *MMWR Morb Mortal Wkly Rep* 2018;67(8):237–242. doi:10.15585
- Curtin A, Hedegaard H. Suicide rates for females and males by race and ethnicity: United States, 1999 and 2017. NCHS Health E-Stat. 2021. https://www.cdc.gov/nchs/data/hestat/suicide/rates_1999_2017.htm
- Freeman A, Mergl R, Kohls E, et al. A cross-national study on gender differences in suicide intent. *BMC Psychiatry*. 2017; 17(1)doi:10.1186/s12888-017-1398-8
- Olson LM, Wahab S. American Indians and Suicide: A Neglected Area of Research. *Trauma, Violence, & Abuse*. 2006/01/01 2006;7(1):19–33. doi:10.1177/1524838005283005
- Naghavi M. Global, regional, and national burden of suicide mortality 1990 to 2016: systematic analysis for the Global Burden of Disease Study 2016. *BMJ*. 2019;364:I94. doi:10.1136/bmj.I94