

## Leading Causes of Death in Michigan, Minnesota and Wisconsin

### Why are mortality data important?

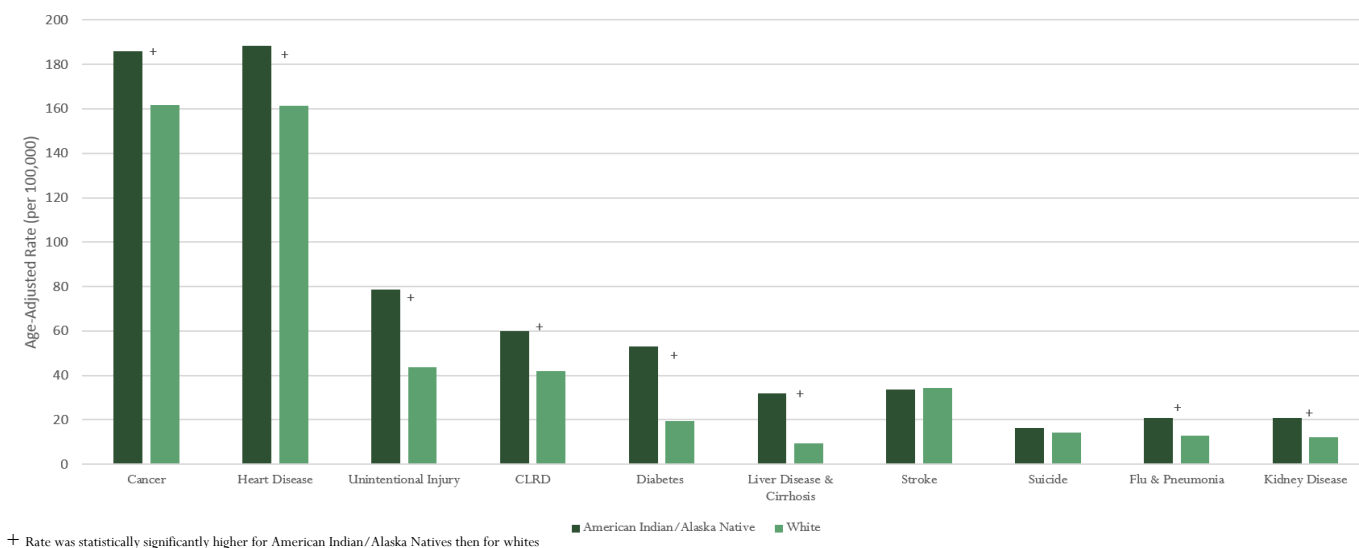
Professor Prabhat Jha said the following during an interview with the World Health Organization: “We can save lives by counting the dead.”<sup>1</sup> In public health, mortality data are used to identify health disparities, assess the effectiveness of interventions, determine populations at risk of disease, and more. Mortality data also allow governments to answer important resource allocation questions. It is extremely important that mortality data are collected accurately and disseminated in a timely manner.

Unfortunately, for many minority groups—especially American Indian/Alaska Natives—deceased persons are often racially misclassified on death certificates, which skews the data and results in an undercount. According to one study, 14% of American Indian/Alaska Natives were incorrectly identified as some other race on the death certificate.<sup>2</sup> This misidentification results in inaccurate data that masks disparities.

### Leading Causes of Death in Michigan, Minnesota, and Wisconsin

Cancer was the leading cause of death for American Indian/Alaska Natives in the three-state area. From 2012-2016, cancer, heart disease, unintentional injury, chronic lower respiratory disease (CLRD), diabetes, liver disease and cirrhosis, flu and pneumonia, and kidney disease were eight of the ten leading causes of death for American Indian/Alaska Natives and were statistically-significantly higher for American Indian/Alaska Natives.

**Figure 1.1** Age-Adjusted Rates (per 100,000) of Ten Leading Causes of Death for American Indian/Alaska Natives and Whites in Michigan, Minnesota, and Wisconsin Aggregated, 2012-2016



The Great Lakes Inter-Tribal Epidemiology Center (GLITEC)’s *Native Health in the Bemidji Area* fact sheet series presents data on various health-related topics for communities in the Bemidji Indian Health Service Area (Michigan, Minnesota, Wisconsin and Chicago). GLITEC welcomes discussion with Bemidji Area communities’ health staff in the use of this fact sheet to support assessment, planning, and evaluation functions. Please contact us to discuss how we may support your community.



**Table 1.1** Ten Leading Causes of Death of American Indian/Alaska Natives and Whites in Michigan, Minnesota, and Wisconsin Aggregated, 2012-2016

Cause of Death	American Indian/Alaska Native			White			Disparity Ratio
	Rank	Number of	Age-Adjusted Rate	Rank	Number of	Age-Adjusted Rate	
Cancer <sup>+</sup>	1	1,475	186.1	2	187,746	161.8	1.2
Heart Disease <sup>+</sup>	2	1,395	188.3	1	193,487	161.2	1.2
Unintentional	3	843	78.8	4	44,472	43.8	1.8
CLRD <sup>+</sup>	4	434	60.1	3	49,231	42.0	1.4
Diabetes <sup>+</sup>	5	419	53.0	6	22,624	19.4	2.7
Liver Disease	6	333	32.0	11*	10,430	9.4	3.4
Stroke	7	235	33.6	5	41,421	34.5	1.0
Suicide	8	199	16.5	10	13,107	14.1	1.2
Flu &	9	155	21.0	7	15,615	13.0	1.6
Kidney	10	148	20.8	9	14,477	12.2	1.7
All Causes <sup>+</sup>	—	7,503	932.1	—	829,197	713.2	1.3

\*Cause of Death was not one of the ten leading causes of death for the white population but it was for the American Indian/Alaska Native population.

+ Rate was statistically significantly higher for American Indian/Alaska Natives than for whites

**Table 2.1** Ten Leading Causes of Death of American Indian/Alaska Natives and Whites in United States of America, 2012-2016

Cause of Death	American Indian/Alaska Native			White			Disparity Ratio
	Rank	Number of	Age-Adjusted Rate	Rank	Number of	Age-Adjusted Rate	
Heart Disease	1	16,348	118.5	1	2,641,789	167.1	0.7
Cancer	2	16,048	107.7	2	2,509,518	161.6	0.7
Unintentional	3	10,094	50.2	4	603,805	44.6	1.1
Diabetes <sup>+</sup>	4	5,101	34.1	7	300,344	19.4	1.8
Liver Disease	5	4,955	25.5	11*	167,096	11.1	2.3
CLRD	6	4,024	30.2	3	685,540	43.9	0.7
Stroke	7	3,164	24.7	5	561,502	35.7	0.7
Suicide	8	2,701	11.9	9	192,443	14.7	0.8
Flu &	9	1,812	13.6	8	232,197	14.7	0.9
Kidney Disease	10	1,645	12.0	10	189,395	12.1	1.0
All Causes	—	90,311	593.4	—	11,260,116	730.4	0.8

\*Cause of Death was not one of the ten leading causes of death for the white population but it was for the American Indian/Alaska Native population.

+ Rate was statistically significantly higher for American Indian/Alaska Natives than for whites

**Data Notes:** Data retrieved from CDC WONDER <https://wonder.cdc.gov/controller/saved/D76/D32F521>

**References:** 1) Braun P. Understanding Death Can Improve Health – Making Mortality Reporting More Timely and Useful. *Office of the Chief Technology Officer, Innovation, Design, Entrepreneurship, Action Blog*. 2018. Available at: <https://www.hhs.gov/idealab/2015/03/04/understanding-death-can-improve-health-making-mortality-reporting-timely-useful/>. Accessed March 6, 2018. 2) Jim, M., Arias, E., Seneca, D., et al. Racial Misclassification of American Indians and Alaska Natives by Indian Health Service Contract Health Service Delivery Area | *AJPH* | Vol. 104 Issue S3. *Aphaphublications.org*. 2014. Available at: [http://ajph.aphaphublications.org/doi/abs/10.2105/AJPH.2014.301933?url\\_ver=Z39.88-2003&rft\\_id=ori%3Arid%3Acrossref&rft\\_dat=cr\\_pub%3Dpubmed](http://ajph.aphaphublications.org/doi/abs/10.2105/AJPH.2014.301933?url_ver=Z39.88-2003&rft_id=ori%3Arid%3Acrossref&rft_dat=cr_pub%3Dpubmed). Accessed March 6, 2018.