

JAMA Infographic

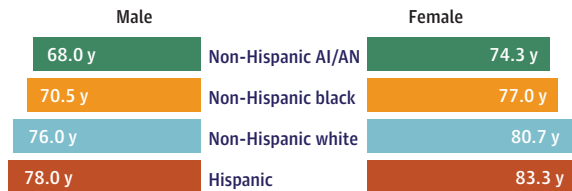
# Mortality Among American Indians and Alaska Natives

In 1990-2009, all-cause mortality among American Indian and Alaska Native (AI/AN) persons residing in Contract Health Services Delivery Area (CHSDA) counties was approximately 46% greater than among white persons (AI/ANs, 1166 per 100 000 vs whites, 799 per 100 000).

Disparities in all-cause mortality between AI/ANs compared with whites occurred primarily among those aged 25 to 44 years.

**Life Expectancy at Birth** The non-Hispanic AI/AN population in CHSDA counties, 2007-2009, had the lowest life expectancy compared with other US racial/ethnic groups, 2008.

Life expectancy at birth

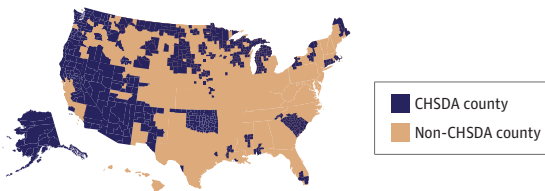


**Leading Causes of Death, 1999-2009** Regardless of sex, AI/ANs were more likely to die of diabetes, chronic liver disease, accidents, and suicide than whites.

AI/AN	Male	White	AI/AN	Female	White
1	Heart disease	1	1	Cancer	2
2	Cancer	2	2	Heart disease	1
3	Accidents	4	3	Accidents	6
4	Diabetes mellitus	6	4	Diabetes mellitus	8
5	Chronic liver disease	10	5	Stroke	3
6	Suicide	7	6	Chronic liver disease	12
7	CLRD	3	7	CLRD	4
8	Stroke	5	8	Influenza & pneumonia	7
9	Assault (homicide)	19	9	Kidney disease	9
10	Influenza & pneumonia	8	10	Septicemia	10
11	Kidney disease	11	11	Alzheimer disease	5
12	Septicemia	13	12	Suicide	16

Abbreviation: CLRD, chronic lower respiratory diseases.

## What Are CHSDA Counties?

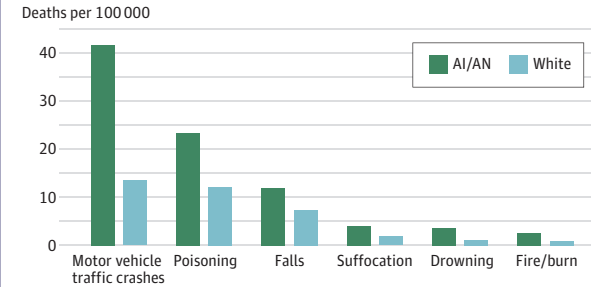


Contract Health Services Delivery Area counties generally contain tribe reservations or are adjacent to them. Racial classification of AI/ANs was considered more reliable in CHSDA counties than in national databases. Of the 3141 counties in the United States in 2009, 637 were CHSDA counties. These counties included 64% of the US non-Hispanic AI/AN population.

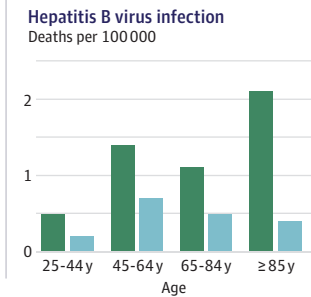
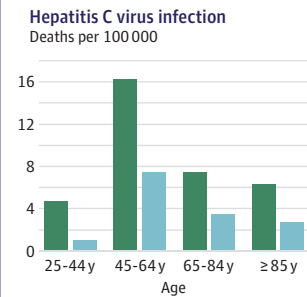
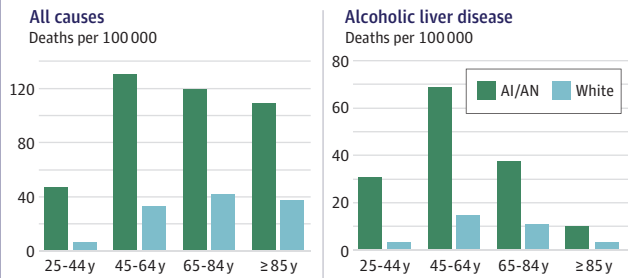
Notes: Analyses were based on the most recent data sets (1990-2009) that link Indian Health Services registration records to death certificate data. Linking these 2 data sources substantially increased the reported all-cause death rate of AI/ANs, providing a more accurate accounting of mortality trends.

Right panels: Analyses were limited to AI/ANs and whites of non-Hispanic origin in CHSDA counties. Death rates were age adjusted to the 2000 US standard population.

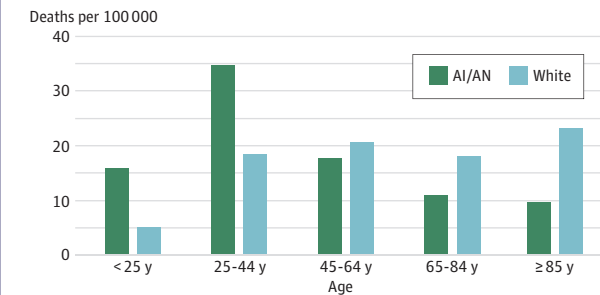
**Unintentional Injury Mortality, 2005-2009** Unintentional injury was ranked as the third cause of death among AI/ANs. Death rates were higher among AI/ANs than among whites across all of the leading causes of unintentional injury death.



**Cirrhosis-Related Mortality, 1999-2009** The leading cause of cirrhosis-related deaths for both AI/ANs and whites was alcoholic liver disease. Disparity in these death rates was greatest among those aged 25 to 44 years.



**Suicide Mortality, 1999-2009** Suicide death rates were greater among AI/ANs than among whites in the younger age groups.



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