TRENDS OVER TIME

Highlights


- Alaska Native unintentional injury mortality rates declined 43% between the 1980-1983 time period and the most recent five year period, 2009-2013. U.S. White rates declined 4%.

- Alaska Native suicide rates have decreased by 3% between the 1980-1983 time period and the most recent five year period, 2009-2013. U.S. White rates increased 5% between 1980-1983 and 2009-2013.


Overview
Table 9 in this section reports changes in mortality rates over the twenty-nine year period, 1980 to 2013. Mantel-Haenszel Chi-square tests for trend stratified by age group were used to test for a significant trend over time.

Percentage change between the 1980 to 1983 time period and the 2009 to 2013 time period was calculated by subtracting the rate for the first time period from the rate for the most recent time period and dividing by the rate for the first time period. Rates over time were reported for both Alaska Native people and U. S. Whites.

Figures 61-71 show line graphs of the rates of death for leading causes by five year time periods for both Alaska Native people and U. S. Whites. Data for these figures comes from Table 9.
### TABLE 9.

#### Age-Adjusted<sup>a</sup> Mortality Rates for Leading Causes of Death


<table>
<thead>
<tr>
<th>Time Period</th>
<th>Cancer</th>
<th>Heart Disease</th>
<th>Unintentional Injury</th>
<th>Suicide</th>
<th>COPD</th>
<th>Cerebrovascular Disease</th>
<th>Chronic Liver Disease</th>
<th>Pneumonia &amp; Influenza</th>
<th>Diabetes Mellitus</th>
<th>Alcohol Abuse</th>
<th>All-Cause</th>
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</thead>
<tbody>
<tr>
<td>1980-1983&lt;sup&gt;b&lt;/sup&gt;</td>
<td>224.3</td>
<td>270.9</td>
<td>184.1</td>
<td>41.8</td>
<td>26.2</td>
<td>64.5</td>
<td>28.1</td>
<td>52.2</td>
<td>5.3</td>
<td>28.8</td>
<td>1234.0</td>
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<tr>
<td>1984-1988</td>
<td>243.3</td>
<td>288.1</td>
<td>174.0</td>
<td>49.5</td>
<td>44.5</td>
<td>65.1</td>
<td>20.4</td>
<td>60.5</td>
<td>10.6</td>
<td>23.2</td>
<td>1226.5</td>
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<tr>
<td>1989-1993</td>
<td>245.4</td>
<td>271.9</td>
<td>133.1</td>
<td>46.8</td>
<td>58.4</td>
<td>67.5</td>
<td>26.8</td>
<td>56.2</td>
<td>23.9</td>
<td>20.6</td>
<td>1202.1</td>
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<tr>
<td>1994-1998</td>
<td>248.9</td>
<td>252.0</td>
<td>111.7</td>
<td>42.8</td>
<td>68.3</td>
<td>84.1</td>
<td>18.3</td>
<td>39.6</td>
<td>19.9</td>
<td>31.7</td>
<td>1151.6</td>
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<tr>
<td>1999-2003</td>
<td>239.5</td>
<td>211.6</td>
<td>107.4</td>
<td>34.7</td>
<td>63.0</td>
<td>66.5</td>
<td>19.4</td>
<td>35.8</td>
<td>19.9</td>
<td>40.9</td>
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<tr>
<td>2004-2008</td>
<td>226.3</td>
<td>169.0</td>
<td>97.7</td>
<td>42.3</td>
<td>57.3</td>
<td>56.7</td>
<td>18.0</td>
<td>25.5</td>
<td>15.1</td>
<td>38.7</td>
<td>1033.3</td>
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<tr>
<td>2009-2013</td>
<td>234.6</td>
<td>190.3</td>
<td>104.8</td>
<td>40.6</td>
<td>65.6</td>
<td>54.7</td>
<td>24.0</td>
<td>26.1</td>
<td>21.3</td>
<td>14.2</td>
<td>1076.7</td>
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<table>
<thead>
<tr>
<th>% Change&lt;sup&gt;c&lt;/sup&gt;</th>
<th>5%</th>
<th>-30%</th>
<th>-43%</th>
<th>-3%</th>
<th>150%</th>
<th>-15%</th>
<th>-15%</th>
<th>-50%</th>
<th>302%</th>
<th>-51%</th>
<th>-13%</th>
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<tr>
<td>1980-1983&lt;sup&gt;b&lt;/sup&gt;</td>
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<td>2009-2013</td>
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</table>

% Change = (Rate of 2009-2013 - Rate of 1980-1983)/Rate of 1980-1983

<sup>a</sup> Age-adjusted to the US 2000 Standard population

<sup>b</sup> 1980-1983 time period contains only four years

<sup>c</sup> A value for % change is given only when a Chi-square test for trend had significance at p<0.05.

<sup>d</sup> NS means that there was no significant difference at p<0.05

Data Source: Table 9.

FIGURE 44. Age-Adjusted Mortality Rates for Alcohol Abuse Alaska Natives (1980-2013) vs U.S. Whites (1980-2013) by Five Year Intervals

Data Source: Table 9.
FIGURE 45. Age-Adjusted Mortality Rates for Cancer
by Five Year Intervals

Data Source: Table 9.

FIGURE 46. Age-Adjusted Mortality Rates for Cerebrovascular Disease
by Five Year Intervals

Data Source: Table 9.
FIGURE 47. Age-Adjusted Mortality Rates for Chronic Liver Disease
by Five Year Intervals

FIGURE 48. Age-Adjusted Mortality Rates for COPD
by Five Year Intervals
FIGURE 49. Age-Adjusted Mortality Rates for Diabetes Mellitus
by Five Year Intervals
Data Source: Table 9.

FIGURE 50. Age-Adjusted Mortality Rates for Heart Disease
by Five Year Intervals
Data Source: Table 9.
FIGURE 51. Age-Adjusted Mortality Rates for Pneumonia & Influenza
by Five Year Intervals

FIGURE 52. Age-Adjusted Mortality Rates for Suicide
by Five Year Intervals

Data Source: Table 9.