In 1992-1994, the age-adjusted death rate (all causes) for the IHS service area population was 690.4. This is the rate adjusted for miscoding of Indian race on death certificates. The Indian rate is 35 percent higher than the U.S. All Races rate of 513.3 for 1993. The Aberdeen (1,084.4) and Bemidji (1,014.4) rates are about double the U.S. rate.

### Table 4.1

#### Age-Adjusted Death Rates (All Causes)

<table>
<thead>
<tr>
<th>Calendar Years 1992-1994</th>
<th>Deaths¹</th>
<th>Rate²</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Actual</td>
<td>Adj ³</td>
</tr>
<tr>
<td>U.S. All Races (1993)</td>
<td>2,268,553</td>
<td></td>
</tr>
<tr>
<td>All IHS Areas</td>
<td>20,893</td>
<td>23,917</td>
</tr>
<tr>
<td>Aberdeen</td>
<td>2,049</td>
<td>2,104</td>
</tr>
<tr>
<td>Alaska</td>
<td>1,815</td>
<td>1,916</td>
</tr>
<tr>
<td>Albuquerque</td>
<td>1,114</td>
<td>1,179</td>
</tr>
<tr>
<td>Bemidji</td>
<td>1,369</td>
<td>1,662</td>
</tr>
<tr>
<td>Billings</td>
<td>1,011</td>
<td>1,073</td>
</tr>
<tr>
<td>California</td>
<td>1,017</td>
<td>1,505</td>
</tr>
<tr>
<td>Nashville</td>
<td>956</td>
<td>1,091</td>
</tr>
<tr>
<td>Navajo</td>
<td>3,219</td>
<td>3,267</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>3,683</td>
<td>5,122</td>
</tr>
<tr>
<td>Phoenix</td>
<td>2,194</td>
<td>2,289</td>
</tr>
<tr>
<td>Portland</td>
<td>1,959</td>
<td>2,180</td>
</tr>
<tr>
<td>Tucson</td>
<td>507</td>
<td>529</td>
</tr>
</tbody>
</table>

¹ Includes deaths with age not reported (18 deaths IHS-wide; Albuquerque-2 deaths, Nashville-2 deaths, Navajo-5 deaths, Oklahoma-7 deaths and Phoenix-2 deaths).

² Rate per 100,000 population.

³ Adjusted to compensate for miscoding of Indian race on death certificates.
In 1992-1994, the years of potential life lost rate (all causes) for the IHS service area population was 94.6. This is the rate adjusted for miscoding of Indian race on death certificates. This is 73 percent greater than the U.S. All Races rate of 54.8 for 1993. Each IHS Area has a rate greater than U.S. All Races rate. The lowest Area rate (California, 67.5) is 23 percent greater than the U.S. rate, while the highest Area rate (Aberdeen, 131.4) is 2.4 times the U.S. rate.

### Chart 4.2

**Years of Potential Life Lost (YPLL) Rates**

Calendar Years 1992-1994

<table>
<thead>
<tr>
<th>Area</th>
<th>Actual</th>
<th>Adj</th>
<th>U.S. All Races (1993)</th>
<th>Adjusted Total - All Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>California</td>
<td>12,646,092</td>
<td>12,646,092</td>
<td>54.8</td>
<td>94.6</td>
</tr>
<tr>
<td>Alaska</td>
<td>31,190</td>
<td>32,888</td>
<td>117.2</td>
<td>123.6</td>
</tr>
<tr>
<td>Albuquerque</td>
<td>18,633</td>
<td>20,030</td>
<td>91.1</td>
<td>97.9</td>
</tr>
<tr>
<td>Bemidji</td>
<td>16,789</td>
<td>21,956</td>
<td>90.4</td>
<td>118.2</td>
</tr>
<tr>
<td>Billings</td>
<td>15,349</td>
<td>16,151</td>
<td>106.2</td>
<td>111.7</td>
</tr>
<tr>
<td>California</td>
<td>11,892</td>
<td>21,606</td>
<td>37.2</td>
<td>67.5</td>
</tr>
<tr>
<td>Nashville</td>
<td>10,469</td>
<td>12,725</td>
<td>61.9</td>
<td>75.2</td>
</tr>
<tr>
<td>Navajo</td>
<td>53,339</td>
<td>54,516</td>
<td>96.4</td>
<td>98.5</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>34,409</td>
<td>57,291</td>
<td>45.0</td>
<td>75.0</td>
</tr>
<tr>
<td>Phoenix</td>
<td>37,433</td>
<td>38,692</td>
<td>101.5</td>
<td>104.9</td>
</tr>
<tr>
<td>Portland</td>
<td>27,284</td>
<td>32,181</td>
<td>70.2</td>
<td>82.8</td>
</tr>
<tr>
<td>Tucson</td>
<td>7,774</td>
<td>8,300</td>
<td>105.9</td>
<td>113.0</td>
</tr>
</tbody>
</table>

1 Years of Potential Life Lost (YPLL) is a mortality indicator which measures the burden of premature deaths. It is calculated by subtracting the age at death from age 65 and summing the result over all deaths. This calculation was performed through the use of age groups Under 1, 1 to 4 and 5-year age groups through 60 to 64. The age at death was calculated based upon the mid point of each of these age groups.

2 Rate per 1,000 population under 65 years of age.

3 Adjusted to compensate for miscoding of Indian race on death certificates.

### Table 4.2

**Years of Potential Life Lost (YPLL) Rates (All Causes)**

Calendar Years 1992-1994

<table>
<thead>
<tr>
<th>Area</th>
<th>Number of YPLL</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. All Races (1993)</td>
<td>12,646,092</td>
<td>54.8</td>
</tr>
<tr>
<td>All IHS Areas</td>
<td>295,614</td>
<td>80.3</td>
</tr>
<tr>
<td>Aberdeen</td>
<td>31,053</td>
<td>127.5</td>
</tr>
<tr>
<td>Alaska</td>
<td>31,190</td>
<td>117.2</td>
</tr>
<tr>
<td>Albuquerque</td>
<td>18,633</td>
<td>91.1</td>
</tr>
<tr>
<td>Bemidji</td>
<td>16,789</td>
<td>90.4</td>
</tr>
<tr>
<td>Billings</td>
<td>15,349</td>
<td>106.2</td>
</tr>
<tr>
<td>California</td>
<td>11,892</td>
<td>37.2</td>
</tr>
<tr>
<td>Nashville</td>
<td>10,469</td>
<td>61.9</td>
</tr>
<tr>
<td>Navajo</td>
<td>53,339</td>
<td>96.4</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>34,409</td>
<td>45.0</td>
</tr>
<tr>
<td>Phoenix</td>
<td>37,433</td>
<td>101.5</td>
</tr>
<tr>
<td>Portland</td>
<td>27,284</td>
<td>70.2</td>
</tr>
<tr>
<td>Tucson</td>
<td>7,774</td>
<td>105.9</td>
</tr>
</tbody>
</table>

Rate per 1,000 Population Under 65 Years of Age
In 1992-1994, 22.2 percent of all deaths in the IHS service area were caused by diseases of the heart. This was followed by malignant neoplasms at 14.8 percent.

Chart 4.3
Leading Causes of Death

All IHS Areas, Calendar Years 1992-1994

- Diseases of the Heart: 22.2%
- Malignant Neoplasms: 14.8%
- Accidents & Adverse Effects: 14.5%
- Diabetes Mellitus: 5.2%
- Chronic Liver Dis. & Cirrhosis: 4.5%

In 1993, 32.8 percent of all deaths in the U.S. were caused by diseases of the heart. This was followed by malignant neoplasms at 23.4 percent.

Chart 4.4
Leading Causes of Death

U.S. All Races, Calendar Years 1993

- Diseases of the Heart: 32.8%
- Malignant Neoplasms: 23.4%
- Cerebrovascular Diseases: 6.6%
- Chronic Obstructive Pulmonary Diseases: 4.5%
- Accidents & Adverse Effects: 4.0%
In 1992-1994, 20.8 percent of all deaths in the Aberdeen Area were caused by diseases of the heart. This was followed by malignant neoplasms at 14.5 percent.

Chart 4.5
Leading Causes of Death
Aberdeen Area, Calendar Years 1992-1994

- Diseases of the Heart: 20.8%
- Malignant Neoplasms: 14.5%
- Accidents & Adverse Effects: 13.0%
- Chronic Liver Dis. & Cirrhosis: 8.1%
- Diabetes Mellitus: 5.2%

In 1992-1994, 19.6 percent of all deaths in the Alaska Area were caused by accidents and adverse effects. This was followed by malignant neoplasms at 18.0 percent.

Chart 4.6
Leading Causes of Death
Alaska Area, Calendar Years 1992-1994

- Accidents & Adverse Effects: 19.6%
- Malignant Neoplasms: 18.0%
- Diseases of the Heart: 16.2%
- Suicide: 6.0%
- Cerebrovascular Diseases: 4.6%
In 1992-1994, 27.1 percent of all deaths in the Bemidji Area were caused by diseases of the heart. This was followed by malignant neoplasms at 18.8 percent.

In 1992-1994, 16.4 percent of all deaths in the Albuquerque Area were caused by accidents and adverse effects. This was followed by diseases of the heart at 13.1 percent.
In 1992-1994, 19.8 percent of all deaths in the Billings Area were caused by diseases of the heart. This was followed by malignant neoplasms at 15.7 percent.

Chart 4.9
Leading Causes of Death

Billings Area, Calendar Years 1992-1994

<table>
<thead>
<tr>
<th>Cause</th>
<th>Percent of Total Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diseases of the Heart</td>
<td>19.8</td>
</tr>
<tr>
<td>Malignant Neoplasms</td>
<td>15.7</td>
</tr>
<tr>
<td>Accidents &amp; Adverse Effects</td>
<td>14.0</td>
</tr>
<tr>
<td>Diabetes Mellitus</td>
<td>5.3</td>
</tr>
<tr>
<td>Chronic Liver Dis. &amp; Cirrhosis</td>
<td>4.9</td>
</tr>
</tbody>
</table>

In 1992-1994, 23.3 percent of all deaths in the California Area were caused by diseases of the heart. This was followed by malignant neoplasms at 14.8 percent.

Chart 4.10
Leading Causes of Death

California Area, Calendar Years 1992-1994

<table>
<thead>
<tr>
<th>Cause</th>
<th>Percent of Total Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diseases of the Heart</td>
<td>23.3</td>
</tr>
<tr>
<td>Malignant Neoplasms</td>
<td>14.8</td>
</tr>
<tr>
<td>Accidents &amp; Adverse Effects</td>
<td>11.8</td>
</tr>
<tr>
<td>Cerebrovascular Diseases</td>
<td>4.9</td>
</tr>
<tr>
<td>Diabetes Mellitus</td>
<td>4.9</td>
</tr>
</tbody>
</table>
In 1992–1994, 28.1 percent of all deaths in the Nashville Area were caused by diseases of the heart. This was followed by malignant neoplasms at 15.6 percent.

Chart 4.11
Leading Causes of Death

Nashville Area, Calendar Years 1992-1994

<table>
<thead>
<tr>
<th>Category</th>
<th>Percent of Total Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diseases of the Heart</td>
<td>28.1</td>
</tr>
<tr>
<td>Malignant Neoplasms</td>
<td>15.6</td>
</tr>
<tr>
<td>Accidents &amp; Adverse Effects</td>
<td>10.8</td>
</tr>
<tr>
<td>Diabetes Mellitus</td>
<td>8.3</td>
</tr>
<tr>
<td>Cerebrovascular Diseases</td>
<td>4.8</td>
</tr>
</tbody>
</table>

In 1992–1994, 22.6 percent of all deaths in the Navajo Area were caused by accidents and adverse effects. This was followed by diseases of the heart at 16.6 percent.

Chart 4.12
Leading Causes of Death

Navajo Area, Calendar Years 1992-1994

<table>
<thead>
<tr>
<th>Category</th>
<th>Percent of Total Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accidents &amp; Adverse Effects</td>
<td>22.6</td>
</tr>
<tr>
<td>Diseases of the Heart</td>
<td>16.6</td>
</tr>
<tr>
<td>Malignant Neoplasms</td>
<td>10.6</td>
</tr>
<tr>
<td>Pneumonia &amp; Influenza</td>
<td>6.3</td>
</tr>
<tr>
<td>Diabetes Mellitus</td>
<td>4.8</td>
</tr>
</tbody>
</table>
In 1992-1994, 31.1 percent of all deaths in the Oklahoma Area were caused by diseases of the heart. This was followed by malignant neoplasms at 17.4 percent.

---

Chart 4.13

**Leading Causes of Death**

Oklahoma Area, Calendar Years 1992-1994

<table>
<thead>
<tr>
<th>Cause</th>
<th>Percent of Total Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diseases of the Heart</td>
<td>31.1</td>
</tr>
<tr>
<td>Malignant Neoplasms</td>
<td>17.4</td>
</tr>
<tr>
<td>Accidents &amp; Adverse Effects</td>
<td>9.8</td>
</tr>
<tr>
<td>Diabetes Mellitus</td>
<td>5.0</td>
</tr>
<tr>
<td>Cerebrovascular Diseases</td>
<td>4.7</td>
</tr>
</tbody>
</table>

---

In 1992-1994, 17.8 percent of all deaths in the Phoenix Area were caused by diseases of the heart. This was followed by accidents and adverse effects at 15.7 percent.

---

Chart 4.14

**Leading Causes of Death**

Phoenix Area, Calendar Years 1992-1994

<table>
<thead>
<tr>
<th>Cause</th>
<th>Percent of Total Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diseases of the Heart</td>
<td>17.8</td>
</tr>
<tr>
<td>Accidents &amp; Adverse Effects</td>
<td>15.7</td>
</tr>
<tr>
<td>Malignant Neoplasms</td>
<td>9.0</td>
</tr>
<tr>
<td>Diabetes Mellitus</td>
<td>7.6</td>
</tr>
<tr>
<td>Chronic Liver Dis. &amp; Cirrhosis</td>
<td>7.0</td>
</tr>
</tbody>
</table>
In 1992-1994, 20.2 percent of all deaths in the Portland Area were caused by diseases of the heart. This was followed by malignant neoplasms at 17.6 percent.

Chart 4.15
Leading Causes of Death
Portland Area, Calendar Years 1992-1994

<table>
<thead>
<tr>
<th>Cause</th>
<th>Percent of Total Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diseases of the Heart</td>
<td>20.2</td>
</tr>
<tr>
<td>Malignant Neoplasms</td>
<td>17.6</td>
</tr>
<tr>
<td>Accidents &amp; Adverse Effects</td>
<td>12.6</td>
</tr>
<tr>
<td>Cerebrovascular Diseases</td>
<td>5.5</td>
</tr>
<tr>
<td>Chronic Liver Dis. &amp; Cirrhosis</td>
<td>5.1</td>
</tr>
</tbody>
</table>

In 1992-1994, 17.2 percent of all deaths in the Tucson Area were caused by diseases of the heart. This was followed by accidents and adverse effects at 15.3 percent.

Chart 4.16
Leading Causes of Death
Tucson Area, Calendar Years 1992-1994

<table>
<thead>
<tr>
<th>Cause</th>
<th>Percent of Total Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diseases of the Heart</td>
<td>17.2</td>
</tr>
<tr>
<td>Accidents &amp; Adverse Effects</td>
<td>15.3</td>
</tr>
<tr>
<td>Malignant Neoplasms</td>
<td>9.8</td>
</tr>
<tr>
<td>Chronic Liver Dis. &amp; Cirrhosis</td>
<td>8.1</td>
</tr>
<tr>
<td>Diabetes Mellitus</td>
<td>7.0</td>
</tr>
</tbody>
</table>
In 1992-1994, the age-adjusted injury and poisoning death rate for the IHS service area population was 131.1. This is the rate adjusted for miscoding of Indian race on death certificates. The Indian rate is 2.4 times the U.S. All Races rate of 53.8 for 1993. Three Areas (Alaska, Aberdeen, and Navajo) had rates exceeding 180.0.

Chart 4.17
Age-Adjusted Injury and Poisoning Death Rates

Table 4.17
Age-Adjusted Injury and Poisoning 1 Death Rates

<table>
<thead>
<tr>
<th></th>
<th>Deaths 2</th>
<th>Rate 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Actual</td>
<td>Adj 4</td>
</tr>
<tr>
<td>U.S. All Races (1993)</td>
<td>151,755</td>
<td></td>
</tr>
<tr>
<td>All IHS Areas</td>
<td>4,236</td>
<td>4,838</td>
</tr>
<tr>
<td>Aberdeen</td>
<td>391</td>
<td>403</td>
</tr>
<tr>
<td>Alaska</td>
<td>502</td>
<td>530</td>
</tr>
<tr>
<td>Albuquerque</td>
<td>259</td>
<td>272</td>
</tr>
<tr>
<td>Bemidji</td>
<td>224</td>
<td>232</td>
</tr>
<tr>
<td>Billings</td>
<td>213</td>
<td>225</td>
</tr>
<tr>
<td>California</td>
<td>153</td>
<td>245</td>
</tr>
<tr>
<td>Nashville</td>
<td>136</td>
<td>160</td>
</tr>
<tr>
<td>Navajo</td>
<td>912</td>
<td>930</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>415</td>
<td>686</td>
</tr>
<tr>
<td>Phoenix</td>
<td>525</td>
<td>544</td>
</tr>
<tr>
<td>Portland</td>
<td>395</td>
<td>437</td>
</tr>
<tr>
<td>Tucson</td>
<td>111</td>
<td>114</td>
</tr>
</tbody>
</table>


2 Includes deaths with age not reported. For IHS, includes Navajo-3 deaths, Oklahoma-3 deaths, and Phoenix-2 deaths.

3 Age-adjusted rate per 100,000 population.

4 Adjusted to compensate for miscoding of Indian race on death certificates.
In 1992-1994, the age-adjusted accident death rate for the IHS service area population was 94.5. This is the rate adjusted for miscoding of Indian race on death certificates. The Indian rate is 212 percent higher than the U.S. All Races rate of 30.3 for 1993. The California Area has the lowest rate among the IHS Areas (51.9), but it is still 71 percent greater than the U.S. rate. The highest Area rate (Navajo, 145.5) is nearly 5 times the U.S. rate.

### Chart 4.18

**Age-Adjusted Accident Death Rates**

Calendar Years 1992-1994

- **U.S. All Races (1993)** = 30.3
- **IHS Adjusted Total - All Areas** = 94.5

### Table 4.18

**Age-Adjusted Accident Death Rates**

Calendar Years 1992-1994

<table>
<thead>
<tr>
<th>Area</th>
<th>Deaths Actual</th>
<th>Adj 3</th>
<th>Rate 2</th>
<th>Deaths Actual</th>
<th>Adj 3</th>
<th>Rate 2</th>
<th>Percent of Motor Vehicle Accident Deaths Pedestrian-related</th>
<th>Other Accidents Rate 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. All Races (1993)</td>
<td>90,523</td>
<td>30.3</td>
<td></td>
<td>16.0</td>
<td>32.1%</td>
<td></td>
<td>15.3%</td>
<td>14.4</td>
</tr>
<tr>
<td>All IHS Areas</td>
<td>3,006</td>
<td>3,467</td>
<td>82.3</td>
<td>94.5</td>
<td>23.7%</td>
<td>45.5</td>
<td>53.3</td>
<td>36.8 41.2</td>
</tr>
<tr>
<td>Aberdeen</td>
<td>265</td>
<td>274</td>
<td>124.2</td>
<td>128.1</td>
<td>72.2</td>
<td>75.5</td>
<td>21.5%</td>
<td>52.0 52.6</td>
</tr>
<tr>
<td>Alaska</td>
<td>354</td>
<td>376</td>
<td>133.8</td>
<td>142.8</td>
<td>28.4</td>
<td>29.1</td>
<td>32.1%</td>
<td>105.4 113.7</td>
</tr>
<tr>
<td>Albuquerque</td>
<td>182</td>
<td>193</td>
<td>88.2</td>
<td>93.3</td>
<td>59.0</td>
<td>64.1</td>
<td>29.7%</td>
<td>29.2 29.2</td>
</tr>
<tr>
<td>Bemidji</td>
<td>172</td>
<td>225</td>
<td>93.6</td>
<td>121.3</td>
<td>59.3</td>
<td>80.4</td>
<td>17.3%</td>
<td>34.3 40.8</td>
</tr>
<tr>
<td>Billings</td>
<td>138</td>
<td>150</td>
<td>101.0</td>
<td>109.1</td>
<td>63.6</td>
<td>71.1</td>
<td>14.4%</td>
<td>37.4 38.1</td>
</tr>
<tr>
<td>California</td>
<td>113</td>
<td>178</td>
<td>33.2</td>
<td>51.9</td>
<td>18.0</td>
<td>29.5</td>
<td>12.0%</td>
<td>15.2 22.5</td>
</tr>
<tr>
<td>Nashville</td>
<td>99</td>
<td>118</td>
<td>55.0</td>
<td>65.2</td>
<td>34.3</td>
<td>42.4</td>
<td>17.1%</td>
<td>20.7 22.9</td>
</tr>
<tr>
<td>Navajo</td>
<td>720</td>
<td>738</td>
<td>141.9</td>
<td>145.5</td>
<td>84.4</td>
<td>86.6</td>
<td>31.7%</td>
<td>57.6 59.0</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>298</td>
<td>501</td>
<td>37.0</td>
<td>62.2</td>
<td>22.2</td>
<td>38.2</td>
<td>20.5%</td>
<td>14.8 24.0</td>
</tr>
<tr>
<td>Phoenix</td>
<td>343</td>
<td>359</td>
<td>97.7</td>
<td>101.9</td>
<td>56.8</td>
<td>59.4</td>
<td>24.9%</td>
<td>40.9 42.5</td>
</tr>
<tr>
<td>Portland</td>
<td>244</td>
<td>274</td>
<td>63.1</td>
<td>70.1</td>
<td>33.5</td>
<td>38.7</td>
<td>18.4%</td>
<td>29.5 31.5</td>
</tr>
<tr>
<td>Tucson</td>
<td>78</td>
<td>81</td>
<td>114.8</td>
<td>119.0</td>
<td>63.4</td>
<td>63.4</td>
<td>31.1%</td>
<td>51.4 55.5</td>
</tr>
</tbody>
</table>

1 Includes Motor vehicle accidents having ICD-9 codes E810-E825 with a fourth digit code .7. The fourth digit code .7 indicates a pedestrian was the subject decedent as a result of the motor vehicle accident. Percents are based upon adjusted numbers of deaths.

2 Age-adjusted rate per 100,000 population.

3 Adjusted to compensate for miscoding of Indian race on death certificates.
In 1992-1994, the age-adjusted suicide death rate for the IHS service area population was 19.2. This is the rate adjusted for miscoding of Indian race on death certificates. The Indian rate is 70 percent higher than the U.S. All Races rate of 11.3 for 1993. The Alaska rate (43.6) is nearly four times the U.S. rate and four Area rates (Aberdeen, Albuquerque, Phoenix, and Portland) are at least double the U.S. rate.

<table>
<thead>
<tr>
<th>Location</th>
<th>Deaths Actual</th>
<th>Deaths Adj</th>
<th>Rate Actual</th>
<th>Rate Adj</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. All Races (1993)</td>
<td>31,102</td>
<td>708</td>
<td>11.3</td>
<td>19.2</td>
</tr>
<tr>
<td>All IHS Areas</td>
<td>639</td>
<td>114</td>
<td>27.3</td>
<td>28.5</td>
</tr>
<tr>
<td>Aberdeen</td>
<td>108</td>
<td>114</td>
<td>25.3</td>
<td>26.1</td>
</tr>
<tr>
<td>Alaska</td>
<td>52</td>
<td>54</td>
<td>11.9</td>
<td>15.5</td>
</tr>
<tr>
<td>Albuquerque</td>
<td>23</td>
<td>30</td>
<td>22.2</td>
<td>22.2</td>
</tr>
<tr>
<td>Bemidji</td>
<td>31</td>
<td>31</td>
<td>22.2</td>
<td>22.2</td>
</tr>
<tr>
<td>Billings</td>
<td>14</td>
<td>21</td>
<td>4.2</td>
<td>6.3</td>
</tr>
<tr>
<td>California</td>
<td>22</td>
<td>25</td>
<td>12.7</td>
<td>14.2</td>
</tr>
<tr>
<td>Nashville</td>
<td>90</td>
<td>90</td>
<td>16.6</td>
<td>16.6</td>
</tr>
<tr>
<td>Navajo</td>
<td>55</td>
<td>86</td>
<td>7.1</td>
<td>11.1</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>87</td>
<td>89</td>
<td>24.4</td>
<td>24.8</td>
</tr>
<tr>
<td>Phoenix</td>
<td>81</td>
<td>89</td>
<td>20.7</td>
<td>22.6</td>
</tr>
<tr>
<td>Portland</td>
<td>13</td>
<td>13</td>
<td>17.0</td>
<td>17.0</td>
</tr>
</tbody>
</table>

1 Age-adjusted rate per 100,000 population. Rates based on a small number of deaths should be interpreted with caution.
2 Adjusted to compensate for miscoding of Indian race on death certificates.
In 1992-1994, the age-adjusted homicide death rate for the IHS service area population was 15.1. This is the rate adjusted for miscoding of Indian race on death certificates. The Indian rate is 41 percent higher than the U.S. All Races rate of 10.7 for 1993. The Aberdeen (23.4) and Billings (22.6) rates are more than double the U.S. rate, while the Phoenix (21.3) and Tucson (20.6) rates are nearly double the U.S. rate.

**Chart 4.20**

**Age-Adjusted Homicide Death Rates**

Calendar Years 1992-1994

![Chart showing age-adjusted homicide death rates](chart.png)

**Table 4.20**

**Age-Adjusted Homicide Death Rates**

Calendar Years 1992-1994

<table>
<thead>
<tr>
<th></th>
<th>Deaths</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Actual</td>
<td>Adj 2</td>
</tr>
<tr>
<td>U.S. All Races (1993)</td>
<td>26,009</td>
<td>10.7</td>
</tr>
<tr>
<td>All IHS Areas</td>
<td>512</td>
<td>13.4</td>
</tr>
<tr>
<td>Aberdeen</td>
<td>55</td>
<td>23.4</td>
</tr>
<tr>
<td>Alaska</td>
<td>37</td>
<td>13.5</td>
</tr>
<tr>
<td>Albuquerque</td>
<td>23</td>
<td>11.8</td>
</tr>
<tr>
<td>Bemidji</td>
<td>25</td>
<td>13.9</td>
</tr>
<tr>
<td>Billings</td>
<td>35</td>
<td>22.6</td>
</tr>
<tr>
<td>California</td>
<td>23</td>
<td>6.7</td>
</tr>
<tr>
<td>Nashville</td>
<td>13</td>
<td>7.8</td>
</tr>
<tr>
<td>Navajo</td>
<td>83</td>
<td>15.2</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>57</td>
<td>7.3</td>
</tr>
<tr>
<td>Phoenix</td>
<td>83</td>
<td>21.0</td>
</tr>
<tr>
<td>Portland</td>
<td>61</td>
<td>14.4</td>
</tr>
<tr>
<td>Tucson</td>
<td>17</td>
<td>20.6</td>
</tr>
</tbody>
</table>

1 Age-adjusted rate per 100,000 population. Rates based on a small number of deaths should be interpreted with caution.
2 Adjusted to compensate for miscoding of Indian race on death certificates.

NOTE: Includes deaths due to homicide and legal intervention.
In 1992-1994, for the IHS service area population, the age-adjusted death rate for injury and poisoning deaths due to other causes was 2.4. This is the rate adjusted for miscoding of Indian race on death certificates. The Indian rate is 1.8 times the U.S. All Races rate of 1.3 for 1993. The Area rates should be interpreted with caution because of the small number of deaths involved.

**Chart 4.21**

**Age-Adjusted Death Rates for Injury and Poisoning Deaths Due to Other Causes**

<table>
<thead>
<tr>
<th>Calendar Years 1992-1994</th>
<th>U.S. All Races (1993) = 1.3</th>
<th>IHS Adjusted Total - All Areas = 2.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oklahoma</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Albuquerque</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alaska</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nashville</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Portland</td>
<td></td>
<td></td>
</tr>
<tr>
<td>California</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bemidji</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Navajo</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tucson</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phoenix</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aberdeen</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Billings</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 4.21**

**Age-Adjusted Death Rates for Injury and Poisoning Deaths Due to Other Causes**

<table>
<thead>
<tr>
<th>Calendar Years 1992-1994</th>
<th>Deaths</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Actual</td>
<td>Adj</td>
</tr>
<tr>
<td>U.S. All Races (1993)</td>
<td>3,450</td>
<td>1.3</td>
</tr>
<tr>
<td>All IHS Areas</td>
<td>79</td>
<td>87</td>
</tr>
<tr>
<td>Aberdeen</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Alaska</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Albuquerque</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Bemidji</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Billings</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>California</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>Nashville</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Navajo</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>Phoenix</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Portland</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Tucson</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

1 Includes the following ICD-9 cause of death groups combined: Injury undetermined whether accidentally or purposely inflicted-E980-E989. Injury resulting from operations of war-E990-E999. (There were 8 deaths due to this cause for the U.S. All Races during 1993 and 0 deaths for the American Indian and Alaska Native population in the IHS service area, 1992-1994).

2 Age-adjusted rate per 100,000 population. Rates based on a small number of deaths should be interpreted with caution.

3 Adjusted to compensate for miscoding of Indian race on death certificates.
In 1992-1994, the age-adjusted alcoholism death rate for the IHS service area population was 45.5. This is the rate adjusted for miscoding of Indian race on death certificates. The Indian rate is nearly 7 times the U.S. All Races rate of 6.7 for 1993. The Aberdeen Area rate of 112.7 is about 17 times the U.S. rate and 1.5 times the second highest Area rate, Billings at 75.8.

Table 4.22

Age-Adjusted Alcoholism Death Rates

<table>
<thead>
<tr>
<th></th>
<th>Deaths</th>
<th>Rate 1</th>
<th></th>
<th>Deaths</th>
<th>Rate 1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Actual</td>
<td>Adj 2</td>
<td></td>
<td>Actual</td>
<td>Adj 2</td>
</tr>
<tr>
<td>U.S. All Races (1993)</td>
<td>19,557</td>
<td></td>
<td>6.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All IHS Areas</td>
<td>1,224</td>
<td>1,410</td>
<td>39.4</td>
<td>45.5</td>
<td></td>
</tr>
<tr>
<td>Aberdeen</td>
<td>177</td>
<td>190</td>
<td>105.2</td>
<td>112.7</td>
<td></td>
</tr>
<tr>
<td>Alaska</td>
<td>125</td>
<td>134</td>
<td>56.2</td>
<td>60.8</td>
<td></td>
</tr>
<tr>
<td>Albuquerque</td>
<td>107</td>
<td>117</td>
<td>63.0</td>
<td>68.9</td>
<td></td>
</tr>
<tr>
<td>Bemidji</td>
<td>47</td>
<td>60</td>
<td>32.9</td>
<td>42.3</td>
<td></td>
</tr>
<tr>
<td>Billings</td>
<td>77</td>
<td>87</td>
<td>67.0</td>
<td>75.8</td>
<td></td>
</tr>
<tr>
<td>California</td>
<td>47</td>
<td>76</td>
<td>16.4</td>
<td>26.4</td>
<td></td>
</tr>
<tr>
<td>Nashville</td>
<td>35</td>
<td>42</td>
<td>23.1</td>
<td>27.5</td>
<td></td>
</tr>
<tr>
<td>Navajo</td>
<td>208</td>
<td>214</td>
<td>47.8</td>
<td>49.4</td>
<td></td>
</tr>
<tr>
<td>Oklahoma</td>
<td>71</td>
<td>114</td>
<td>10.0</td>
<td>15.9</td>
<td></td>
</tr>
<tr>
<td>Phoenix</td>
<td>161</td>
<td>178</td>
<td>56.7</td>
<td>62.9</td>
<td></td>
</tr>
<tr>
<td>Portland</td>
<td>132</td>
<td>161</td>
<td>40.3</td>
<td>49.4</td>
<td></td>
</tr>
<tr>
<td>Tucson</td>
<td>37</td>
<td>37</td>
<td>58.2</td>
<td>58.2</td>
<td></td>
</tr>
</tbody>
</table>

1 Age-adjusted rate per 100,000 population. The rate computation excludes 0 IHS All Areas and 10 U.S. All Races deaths with age not reported.

2 Adjusted to compensate for miscoding of Indian race on death certificates.
In 1992-1994, the age-adjusted diabetes death rate for the IHS service area population was 41.1. This is the rate adjusted for miscoding of Indian race on death certificates. The Indian rate is 3.3 times the U.S. All Races rate of 12.4 for 1993. The IHS Area rates vary widely, ranging from 16.0 in Alaska (1.3 times the U.S. rate) to 70.3 in Phoenix (5.7 times the U.S. rate).

**Chart 4.23**

**Age-Adjusted Diabetes Mellitus Death Rates**

Calendar Years 1992-1994

<table>
<thead>
<tr>
<th>Location</th>
<th>Actual</th>
<th>Adjusted for Race Miscoding</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. All Races (1993)</td>
<td>53,894</td>
<td>12.4</td>
</tr>
<tr>
<td>All IHS Areas</td>
<td>1,077</td>
<td>1,252</td>
</tr>
<tr>
<td>Aberdeen</td>
<td>105</td>
<td>109</td>
</tr>
<tr>
<td>Alaska</td>
<td>32</td>
<td>32</td>
</tr>
<tr>
<td>Albuquerque</td>
<td>81</td>
<td>94</td>
</tr>
<tr>
<td>Bemidji</td>
<td>65</td>
<td>77</td>
</tr>
<tr>
<td>Billings</td>
<td>52</td>
<td>57</td>
</tr>
<tr>
<td>California</td>
<td>47</td>
<td>74</td>
</tr>
<tr>
<td>Nashville</td>
<td>77</td>
<td>81</td>
</tr>
<tr>
<td>Navajo</td>
<td>154</td>
<td>158</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>189</td>
<td>258</td>
</tr>
<tr>
<td>Phoenix</td>
<td>158</td>
<td>173</td>
</tr>
<tr>
<td>Portland</td>
<td>83</td>
<td>92</td>
</tr>
<tr>
<td>Tucson</td>
<td>34</td>
<td>37</td>
</tr>
</tbody>
</table>

1 Age-adjusted rate per 100,000 population.
2 Adjusted to compensate for miscoding of Indian race on death certificates.
In 1992-1994, the age-adjusted tuberculosis death rate for the IHS service area population was 2.3. This is the rate adjusted for miscoding of Indian race on death certificates. The Indian rate is nearly 6 times the U.S. All Races rate of 0.4 for 1993. The Area rates should be interpreted with caution because of the small number of deaths involved. The Navajo (23 deaths), Aberdeen (10), and Oklahoma (10) Areas had the most deaths over the 3-year period.

Chart 4.24
Age-Adjusted Tuberculosis Death Rates

Calendar Years 1992-1994

<table>
<thead>
<tr>
<th>Area</th>
<th>Actual</th>
<th>Adj ¹</th>
<th>Rate ²</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. All Races (1993)</td>
<td>1,631</td>
<td>0.4</td>
<td></td>
</tr>
<tr>
<td>All IHS Areas</td>
<td>73</td>
<td>73</td>
<td>2.3</td>
</tr>
<tr>
<td>Aberdeen</td>
<td>10</td>
<td>10</td>
<td>6.0</td>
</tr>
<tr>
<td>Alaska</td>
<td>6</td>
<td>6</td>
<td>2.8</td>
</tr>
<tr>
<td>Albuquerque</td>
<td>3</td>
<td>3</td>
<td>2.2</td>
</tr>
<tr>
<td>Bemidji</td>
<td>2</td>
<td>2</td>
<td>1.3</td>
</tr>
<tr>
<td>Billings</td>
<td>3</td>
<td>3</td>
<td>3.1</td>
</tr>
<tr>
<td>California</td>
<td>2</td>
<td>2</td>
<td>0.8</td>
</tr>
<tr>
<td>Nashville</td>
<td>1</td>
<td>1</td>
<td>0.5</td>
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<td>Navajo</td>
<td>23</td>
<td>23</td>
<td>4.8</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>10</td>
<td>10</td>
<td>1.2</td>
</tr>
<tr>
<td>Phoenix</td>
<td>7</td>
<td>7</td>
<td>2.4</td>
</tr>
<tr>
<td>Portland</td>
<td>6</td>
<td>6</td>
<td>2.1</td>
</tr>
<tr>
<td>Tucson</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

— Represents zero.

¹ Rate per 100,000 population. Rates based on a small number of deaths should be interpreted with caution.

² Adjusted to compensate for miscoding of Indian race on death certificates.

Table 4.24
Age-Adjusted Tuberculosis Death Rates

Calendar Years 1992-1994

<table>
<thead>
<tr>
<th>Area</th>
<th>Deaths</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. All Races (1993)</td>
<td>1,631</td>
<td>0.4</td>
</tr>
<tr>
<td>All IHS Areas</td>
<td>73</td>
<td>2.3</td>
</tr>
<tr>
<td>Aberdeen</td>
<td>10</td>
<td>6.0</td>
</tr>
<tr>
<td>Alaska</td>
<td>6</td>
<td>2.8</td>
</tr>
<tr>
<td>Albuquerque</td>
<td>3</td>
<td>2.2</td>
</tr>
<tr>
<td>Bemidji</td>
<td>2</td>
<td>1.3</td>
</tr>
<tr>
<td>Billings</td>
<td>3</td>
<td>3.1</td>
</tr>
<tr>
<td>California</td>
<td>2</td>
<td>0.8</td>
</tr>
<tr>
<td>Nashville</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>Navajo</td>
<td>23</td>
<td>4.8</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>10</td>
<td>1.2</td>
</tr>
<tr>
<td>Phoenix</td>
<td>7</td>
<td>2.4</td>
</tr>
<tr>
<td>Portland</td>
<td>6</td>
<td>2.1</td>
</tr>
<tr>
<td>Tucson</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

— Represents zero.

Chart 4.24: Age-Adjusted Tuberculosis Death Rates

NOTE: IHS actual rates and rates adjusted for race miscoding are the same.
In 1992-1994, the age-adjusted gastrointestinal diseases death rate for the IHS service area population was 1.6. This is the rate adjusted for miscoding of Indian race on death certificates. The Indian rate is 23 percent greater than the U.S. All Races rate for 1993 (1.3). The Area rates should be interpreted with caution because of the small number of deaths involved. The most deaths over the 3-year period for any one Area was 8.

Chart 4.25
Age-Adjusted Gastrointestinal Diseases Death Rates

Table 4.25
Age-Adjusted Gastrointestinal Diseases Death Rates

1 Rate per 100,000 population. Rates based on a small number of deaths should be interpreted with caution.

2 Adjusted to compensate for miscoding of Indian race on death certificates.
In 1992-1994, the age-adjusted diseases of the heart death rate for the IHS service area population was 157.6. This is the rate adjusted for miscoding of Indian race on death certificates. The Indian rate is 8 percent higher than the U.S. All Races rate of 145.3 in 1993. The Albuquerque (84.7), Navajo (112.0), and California (119.5) Area rates are well below the U.S. rate.

### Chart 4.26

**Age-Adjusted Diseases of the Heart Death Rates**

*Calendar Years 1992-1994*

<table>
<thead>
<tr>
<th>Location</th>
<th>Actual</th>
<th>Adj 2</th>
<th>Rate 1</th>
<th>Adj 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. All Races (1993)</td>
<td>743,460</td>
<td></td>
<td>145.3</td>
<td></td>
</tr>
<tr>
<td>All IHS Areas</td>
<td>4,523</td>
<td>5,297</td>
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<td>Aberdeen</td>
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<td>438</td>
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<td>294</td>
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<td>148</td>
<td>154</td>
<td>81.2</td>
<td>84.7</td>
</tr>
<tr>
<td>Bemidji</td>
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<td>450</td>
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<tr>
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<td>247</td>
<td>351</td>
<td>83.0</td>
<td>119.5</td>
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<tr>
<td>Nashville</td>
<td>264</td>
<td>307</td>
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<td>184.8</td>
</tr>
<tr>
<td>Navajo</td>
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<td>88</td>
<td>91</td>
<td>137.8</td>
<td>142.1</td>
</tr>
</tbody>
</table>

1 Rate per 100,000 population. Rates based on a small number of deaths should be interpreted with caution.
2 Adjusted to compensate for miscoding of Indian race on death certificates.
In 1992-1994, the age-adjusted cerebrovascular diseases death rate for the IHS service area population was 27.8. This is the rate adjusted for miscoding of Indian race on death certificates. The Indian rate is 5 percent higher than the U.S. All Races rate of 26.5 for 1993. The IHS Area rates differ considerably; the Alaska rate of 40.4 is more than double the Albuquerque rate of 19.7.

**Table 4.27**

**Age-Adjusted Cerebrovascular Diseases Death Rates**

**Calendar Years 1992-1994**

<table>
<thead>
<tr>
<th></th>
<th>Deaths</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
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<td></td>
<td>Actual</td>
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</tr>
<tr>
<td>All IHS Areas</td>
<td>898</td>
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<td></td>
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<td>43</td>
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<td>19.7</td>
</tr>
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<td>63</td>
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<td></td>
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<td>73</td>
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<tr>
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<tr>
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<td>52</td>
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<tr>
<td></td>
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<td>29.4</td>
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<td>28.2</td>
</tr>
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<td>Portland</td>
<td>110</td>
<td>119</td>
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<tr>
<td></td>
<td>36.0</td>
<td>39.1</td>
</tr>
<tr>
<td>Tucson</td>
<td>16</td>
<td>16</td>
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<tr>
<td></td>
<td>23.7</td>
<td>23.7</td>
</tr>
</tbody>
</table>

1 Rate per 100,000 population.
2 Adjusted to compensate for miscoding of Indian race on death certificates.
In 1992-1994, the age-adjusted malignant neoplasm death rate for the IHS service area population was 112.2. This is the rate adjusted for miscoding of Indian race on death certificates. The Indian rate is 15 percent less than the U.S. All Races rate of 132.6 for 1993. Four IHS Areas have a rate greater the U.S. rate; Bemidji (211.5), Alaska (173.3), Aberdeen (172.0), and Billings (165.4). The Portland Area rate (132.3) is essentially the same as the U.S. rate.

### Chart 4.28
**Age-Adjusted Malignant Neoplasm Death Rates**

**Calendar Years 1992-1994**

<table>
<thead>
<tr>
<th>Area</th>
<th>Deaths Actual</th>
<th>Deaths Adjusted</th>
<th>Rate Actual</th>
<th>Rate Adjusted</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. All Races (1993)</td>
<td>529,904</td>
<td>3,544</td>
<td>132.6</td>
<td>112.2</td>
</tr>
<tr>
<td>All IHS Areas</td>
<td>3,097</td>
<td>3,544</td>
<td>97.5</td>
<td>112.2</td>
</tr>
<tr>
<td>Aberdeen</td>
<td>299</td>
<td>304</td>
<td>169.1</td>
<td>172.0</td>
</tr>
<tr>
<td>Alaska</td>
<td>323</td>
<td>344</td>
<td>161.8</td>
<td>173.3</td>
</tr>
<tr>
<td>Albuquerque</td>
<td>140</td>
<td>145</td>
<td>81.1</td>
<td>84.2</td>
</tr>
<tr>
<td>Bemidji</td>
<td>258</td>
<td>313</td>
<td>173.6</td>
<td>211.5</td>
</tr>
<tr>
<td>Billings</td>
<td>154</td>
<td>169</td>
<td>151.2</td>
<td>165.4</td>
</tr>
<tr>
<td>California</td>
<td>164</td>
<td>222</td>
<td>57.9</td>
<td>79.1</td>
</tr>
<tr>
<td>Nashville</td>
<td>152</td>
<td>170</td>
<td>97.3</td>
<td>108.8</td>
</tr>
<tr>
<td>Navajo</td>
<td>347</td>
<td>347</td>
<td>75.8</td>
<td>75.8</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>659</td>
<td>891</td>
<td>74.9</td>
<td>103.6</td>
</tr>
<tr>
<td>Phoenix</td>
<td>204</td>
<td>205</td>
<td>77.2</td>
<td>77.6</td>
</tr>
<tr>
<td>Portland</td>
<td>348</td>
<td>383</td>
<td>119.7</td>
<td>132.3</td>
</tr>
<tr>
<td>Tucson</td>
<td>49</td>
<td>52</td>
<td>83.1</td>
<td>87.7</td>
</tr>
</tbody>
</table>

1 Rate per 100,000 population.
2 Adjusted to compensate for miscoding of Indian race on death certificates.
In 1992-1994, the age-adjusted lung cancer death rate for the IHS service area population was 30.1. This is the rate adjusted for miscoding of Indian race on death certificates. The Indian rate is 22 percent less than the U.S. All Races rate of 38.6 in 1993. Five IHS Areas (Bemidji, Alaska, Billings, Aberdeen, and Portland) have rates exceeding the U.S. rate.

### Table 4.29

#### Age-Adjusted Lung Cancer Death Rates

<table>
<thead>
<tr>
<th>Calendar Years 1992-1994</th>
<th>Deaths</th>
<th>Rate 1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Actual</td>
<td>Adj²</td>
</tr>
<tr>
<td>U.S. All Races (1993)</td>
<td>148,935</td>
<td>38.6</td>
</tr>
<tr>
<td>All IHS Areas</td>
<td>755</td>
<td>913</td>
</tr>
<tr>
<td>Aberdeen</td>
<td>91</td>
<td>94</td>
</tr>
<tr>
<td>Alaska</td>
<td>97</td>
<td>109</td>
</tr>
<tr>
<td>Albuquerque</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Billings</td>
<td>82</td>
<td>104</td>
</tr>
<tr>
<td>Bemidji</td>
<td>47</td>
<td>55</td>
</tr>
<tr>
<td>California</td>
<td>47</td>
<td>70</td>
</tr>
<tr>
<td>Nashville</td>
<td>44</td>
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<td>Navajo</td>
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<tr>
<td>Oklahoma</td>
<td>173</td>
<td>237</td>
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<tr>
<td>Phoenix</td>
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<tr>
<td>Portland</td>
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<td>127</td>
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<tr>
<td>Tucson</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

1. Age-adjusted rate per 100,000 population. Rates based on a small number of deaths should be interpreted with caution.

2. Adjusted to compensate for miscoding of Indian race on death certificates.
In 1992-1994, the age-adjusted breast cancer death rate for females in the IHS service area population was 14.9. This is the rate adjusted for miscoding of Indian race on death certificates. The Indian rate is 31 percent less than the U.S. All Races rate of 21.5 for 1993. The Bemidji Area has the highest rate (21.3) among the IHS Areas, but the rate is still slightly below the U.S. rate.

**Table 4.30**

**Age-Adjusted Breast Cancer Death Rates For Females**

**Calendar Years 1992-1994**

<table>
<thead>
<tr>
<th>Location</th>
<th>Deaths</th>
<th>Rate 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. All Races</td>
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<td>21.5</td>
</tr>
<tr>
<td>All IHS Areas</td>
<td>204</td>
<td>14.9</td>
</tr>
<tr>
<td>Aberdeen</td>
<td>19</td>
<td>19.3</td>
</tr>
<tr>
<td>Alaska</td>
<td>20</td>
<td>19.6</td>
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<tr>
<td>Albuquerque</td>
<td>6</td>
<td>6.2</td>
</tr>
<tr>
<td>Bemidji</td>
<td>13</td>
<td>17.5</td>
</tr>
<tr>
<td>Billings</td>
<td>9</td>
<td>15.9</td>
</tr>
<tr>
<td>California</td>
<td>11</td>
<td>7.2</td>
</tr>
<tr>
<td>Nashville</td>
<td>14</td>
<td>17.0</td>
</tr>
<tr>
<td>Navajo</td>
<td>17</td>
<td>7.8</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>57</td>
<td>13.4</td>
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<tr>
<td>Phoenix</td>
<td>11</td>
<td>7.8</td>
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<tr>
<td>Portland</td>
<td>26</td>
<td>16.6</td>
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<tr>
<td>Tucson</td>
<td>1</td>
<td>2.5</td>
</tr>
</tbody>
</table>

1 Age-adjusted rate per 100,000 female population. Rates based on a small number of deaths should be interpreted with caution.

2 Adjusted to compensate for miscoding of Indian race on death certificates.
In 1992-1994, the age-adjusted cervical cancer death rate for females in the IHS service area population was 4.1. This is the rate adjusted for miscoding of Indian race on death certificates. The Indian rate is 64 percent greater than the U.S. All Races rate of 2.5 for 1993. The Area rates should be interpreted with caution because of the small number of deaths involved. Only three Areas (Oklahoma, Navajo, and Aberdeen) had over 10 deaths during the 3-year period.

Chart 4.31
Age-Adjusted Cervical Cancer Death Rates For Females

Table 4.31
Age-Adjusted Cervical Cancer Death Rates For Females

<table>
<thead>
<tr>
<th>Calendar Years 1992-1994</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deaths</td>
</tr>
<tr>
<td>Actual</td>
</tr>
<tr>
<td>U.S. All Races (1993)</td>
</tr>
<tr>
<td>All IHS Areas</td>
</tr>
<tr>
<td>Aberdeen</td>
</tr>
<tr>
<td>Alaska</td>
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<tr>
<td>Albuquerque</td>
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<tr>
<td>Bemidji</td>
</tr>
<tr>
<td>Billings</td>
</tr>
<tr>
<td>California</td>
</tr>
<tr>
<td>Nashville</td>
</tr>
<tr>
<td>Oklahoma</td>
</tr>
<tr>
<td>Phoenix</td>
</tr>
<tr>
<td>Portland</td>
</tr>
<tr>
<td>Tucson</td>
</tr>
</tbody>
</table>

1 Age-adjusted rate per 100,000 female population. Rates based on a small number of deaths should be interpreted with caution.

2 Adjusted to compensate for miscoding of Indian race on death certificates.
In 1992-1994, the age-adjusted colon-rectal cancer death rate for the IHS service area population was 10.4. This is the rate adjusted for miscoding of Indian race on death certificates. The Indian rate is 19 percent less than the U.S. All Races rate of 12.9 in 1993. Five IHS Areas (Alaska, Bemidji, Billings, Aberdeen, and Portland) have rates exceeding the U.S. rate.

Table 4.32
Age-Adjusted Colon-Rectal Cancer Death Rates

<table>
<thead>
<tr>
<th>Calendar Years 1992-1994</th>
<th>Deaths</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<tr>
<td>U.S. All Races (1993)</td>
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<td>All IHS Areas</td>
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<td>52</td>
</tr>
<tr>
<td>Albuquerque</td>
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<td>10</td>
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<tr>
<td>Bemidji</td>
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<td>26</td>
</tr>
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<td>Billings</td>
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<tr>
<td>California</td>
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<td>27</td>
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<td>Nashville</td>
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<tr>
<td>Navajo</td>
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<tr>
<td>Tucson</td>
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<td>6</td>
</tr>
</tbody>
</table>

1 Age-adjusted rate per 100,000 population. Rates based on a small number of deaths should be interpreted with caution.

2 Adjusted to compensate for miscoding of Indian race on death certificates.
In 1992-1994, the age-adjusted prostate cancer death rate for males in the IHS service area population was 13.4. This is the rate adjusted for miscoding of Indian race on death certificates. The Indian rate is 18 percent less than the U.S. All Races rate of 16.4 in 1993. Half of the IHS Areas have a rate that exceeds the U.S. rate. The highest Area rate (Billings, 28.2) is 72 percent greater than the U.S. rate.

Table 4.33
Age-Adjusted Prostate Cancer Death Rates For Males

<table>
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<tr>
<th></th>
<th>Deaths</th>
<th>Rate 1</th>
</tr>
</thead>
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<td></td>
<td></td>
</tr>
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<td>U.S. All Races (1993)</td>
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</tr>
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<td>5</td>
</tr>
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<td>Albuquerque</td>
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<tr>
<td>Bemidji</td>
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<td>14</td>
</tr>
<tr>
<td>Billings</td>
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<td>12</td>
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<td>Navajo</td>
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<tr>
<td>Oklahoma</td>
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<td>Phoenix</td>
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<td>Portland</td>
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<tr>
<td>Tucson</td>
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<td>3</td>
</tr>
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</table>

1 Age-adjusted rate per 100,000 male population. Rates based on a small number of deaths should be interpreted with caution.

2 Adjusted to compensate for miscoding of Indian race on death certificates.
In 1992-1994, the age-adjusted human immunodeficiency virus (HIV) infection death rate for the IHS service area population was 3.9. This is the rate adjusted for miscoding of Indian race on death certificates. The Indian rate is 72 percent less than the 1993 U.S. rate of 13.8. Some of the Area rates should be interpreted with caution because of the small number of deaths involved. The highest Area rate (Portland, 7.3 based on 29 deaths) is only about half the U.S. rate.

Chart 4.34
Age-Adjusted Human Immunodeficiency Virus (HIV) Infection Death Rates

<table>
<thead>
<tr>
<th>Area</th>
<th>Deaths Actual</th>
<th>Deaths Adj 2</th>
<th>Rate Actual</th>
<th>Rate Adj 2</th>
</tr>
</thead>
<tbody>
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<td>All IHS Areas</td>
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<td>141</td>
<td>3.3</td>
<td>3.9</td>
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<td>2.0</td>
<td>2.0</td>
</tr>
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<td>10</td>
<td>10</td>
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</tr>
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<td>8</td>
<td>4.0</td>
<td>4.0</td>
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<td>Bemidji</td>
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<td>2.5</td>
</tr>
<tr>
<td>Billings</td>
<td>4</td>
<td>4</td>
<td>2.5</td>
<td>2.5</td>
</tr>
<tr>
<td>California</td>
<td>16</td>
<td>23</td>
<td>4.8</td>
<td>6.9</td>
</tr>
<tr>
<td>Nashville</td>
<td>6</td>
<td>8</td>
<td>3.1</td>
<td>4.1</td>
</tr>
<tr>
<td>Navajo</td>
<td>12</td>
<td>12</td>
<td>2.2</td>
<td>2.2</td>
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<tr>
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<td>18</td>
<td>27</td>
<td>2.4</td>
<td>3.5</td>
</tr>
<tr>
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<td>11</td>
<td>3.1</td>
<td>3.1</td>
</tr>
<tr>
<td>Portland</td>
<td>27</td>
<td>29</td>
<td>6.8</td>
<td>7.3</td>
</tr>
<tr>
<td>Tucson</td>
<td>1</td>
<td>1</td>
<td>1.2</td>
<td>1.2</td>
</tr>
</tbody>
</table>

1 Age-adjusted rate per 100,000 population. Rates based on a small number of deaths should be interpreted with caution.

2 Adjusted to compensate for miscoding of Indian race on death certificates.

Table 4.34
Age-Adjusted Human Immunodeficiency Virus (HIV) Infection Death Rates

In 1992-1994, the age-adjusted human immunodeficiency virus (HIV) infection death rate for the IHS service area population was 3.9. This is the rate adjusted for miscoding of Indian race on death certificates. The Indian rate is 72 percent less than the 1993 U.S. rate of 13.8. Some of the Area rates should be interpreted with caution because of the small number of deaths involved. The highest Area rate (Portland, 7.3 based on 29 deaths) is only about half the U.S. rate.
In 1992-1994, the life expectancy at birth (both sexes) for the IHS service area population was 71.1 years. This is the life expectancy adjusted for miscoding of Indian race on death certificates. This is 4.4 years less than the 1993 figure of 75.5 for the U.S. All Races population. One IHS Area has a life expectancy greater than the U.S. figure (California, 76.3). At the other extreme, the Aberdeen Area life expectancy (64.3) is 11.2 years less than that for the U.S.

Chart 4.35
Life Expectancy at Birth, Both Sexes

Calendar Years 1992-1994

Adjusted for Race Miscoding  IHS Adjusted Total - All Areas

<table>
<thead>
<tr>
<th>Area</th>
<th>U.S. All Races (1993)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aberdeen</td>
<td>64.3 (64.8)</td>
</tr>
<tr>
<td>Bemidji</td>
<td>65.7 (68.7)</td>
</tr>
<tr>
<td>Billings</td>
<td>67.0 (67.9)</td>
</tr>
<tr>
<td>Alaska</td>
<td>68.0 (68.9)</td>
</tr>
<tr>
<td>Tucson</td>
<td>68.4 (69.1)</td>
</tr>
<tr>
<td>Phoenix</td>
<td>69.3 (70.0)</td>
</tr>
<tr>
<td>Portland</td>
<td>71.7 (73.2)</td>
</tr>
<tr>
<td>Navajo</td>
<td>71.9 (72.2)</td>
</tr>
<tr>
<td>Nashville</td>
<td>72.2 (74.1)</td>
</tr>
<tr>
<td>Navajo</td>
<td>72.7 (73.5)</td>
</tr>
<tr>
<td>Albuquerque</td>
<td>74.2 (79.3)</td>
</tr>
<tr>
<td>Okahoma</td>
<td>76.3 (81.6)</td>
</tr>
<tr>
<td>California</td>
<td>73.2 (75.5)</td>
</tr>
</tbody>
</table>

NOTE: Actual life expectancies (i.e., not adjusted for miscoding of Indian race) are shown in parentheses.

In 1992-1994, the life expectancy at birth for males in the IHS service area population was 67.2 years. This is the life expectancy adjusted for miscoding of Indian race on death certificates. This is 5.0 years less than the 1993 figure of 72.2 years for the U.S. All Races male population. Indian males in the California Area have a life expectancy (72.7) exceeding that for U.S. males. On the other hand, Indian males in the Aberdeen Area (60.5) can expect to live from birth 11.7 years less than U.S. males.

Chart 4.36
Life Expectancy at Birth, Males

Calendar Years 1992-1994

Adjusted for Race Miscoding  IHS Adjusted Total - All Areas

<table>
<thead>
<tr>
<th>Area</th>
<th>U.S. All Races (1993)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aberdeen</td>
<td>60.5 (61.0)</td>
</tr>
<tr>
<td>Bemidji</td>
<td>62.4 (65.3)</td>
</tr>
<tr>
<td>Billings</td>
<td>63.3 (64.2)</td>
</tr>
<tr>
<td>Tucson</td>
<td>63.8 (64.3)</td>
</tr>
<tr>
<td>Alaska</td>
<td>64.2 (65.1)</td>
</tr>
<tr>
<td>Phoenix</td>
<td>65.4 (66.2)</td>
</tr>
<tr>
<td>Navajo</td>
<td>67.1 (67.4)</td>
</tr>
<tr>
<td>Nashville</td>
<td>68.2 (70.3)</td>
</tr>
<tr>
<td>Navajo</td>
<td>68.3 (69.2)</td>
</tr>
<tr>
<td>Albuquerque</td>
<td>69.0 (70.7)</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>70.4 (75.5)</td>
</tr>
<tr>
<td>California</td>
<td>72.7 (78.8)</td>
</tr>
</tbody>
</table>

NOTE: Actual life expectancies (i.e., not adjusted for miscoding of Indian race) are shown in parentheses.
In 1992-1994, the life expectancy at birth for females in the IHS service area population was 75.1 years. This is the life expectancy adjusted for miscoding of Indian race on death certificates. This is 3.7 years less than the 1993 figure of 78.8 years for the U.S. All Races female population. Indian females in the California Area (79.8) can expect to live from birth 1.0 year longer than their counterparts in the U.S. All Races population. In contrast, females in the Aberdeen Area have a life expectancy (68.3) that is 10.5 years less than that of U.S. females.

Chart 4.37

Life Expectancy at Birth, Females

Calendar Years 1992-1994

<table>
<thead>
<tr>
<th>Location</th>
<th>Life Expectancy (Adjusted for Race Miscoding)</th>
<th>Life Expectancy (1993)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aberdeen</td>
<td>68.3 (68.7)</td>
<td></td>
</tr>
<tr>
<td>Bemidji</td>
<td>69.4 (72.5)</td>
<td></td>
</tr>
<tr>
<td>Billings</td>
<td>70.8 (71.8)</td>
<td></td>
</tr>
<tr>
<td>Alaska</td>
<td>72.3 (73.0)</td>
<td></td>
</tr>
<tr>
<td>Phoenix</td>
<td>73.3 (73.9)</td>
<td></td>
</tr>
<tr>
<td>Tucson</td>
<td>73.5 (74.3)</td>
<td></td>
</tr>
<tr>
<td>Portland</td>
<td>74.5 (75.8)</td>
<td></td>
</tr>
<tr>
<td>Nashville</td>
<td>76.2 (77.9)</td>
<td></td>
</tr>
<tr>
<td>Albuquerque</td>
<td>76.7 (77.9)</td>
<td></td>
</tr>
<tr>
<td>Navajo</td>
<td>77.0 (77.1)</td>
<td></td>
</tr>
<tr>
<td>Oklahoma</td>
<td>77.7 (82.6)</td>
<td></td>
</tr>
<tr>
<td>California</td>
<td>79.8 (84.2)</td>
<td></td>
</tr>
</tbody>
</table>

NOTE: Actual life expectancies (i.e., not adjusted for miscoding of Indian race) are shown in parentheses.