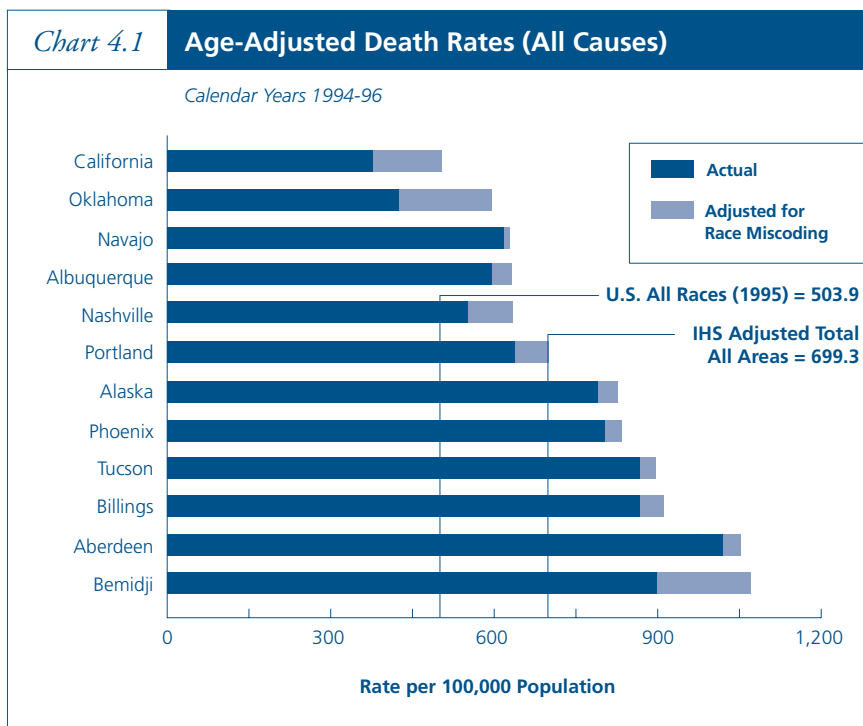


## Part 4: General Mortality Statistics

In 1994-96, the age-adjusted death rate (all causes) for the IHS service area population was 699.3. This is the rate adjusted for miscoding of Indian race on death certificates. The Indian rate is 39 percent higher than the U.S. All Races rate of 503.9 for 1995. The Bemidji (1,074.4) and Aberdeen (1,048.7) rates are more than double the U.S. rate.



**Table 4.1 Age-Adjusted Death Rates (All Causes)**

Calendar Years 1994-96

	Deaths <sup>1</sup>		Rate <sup>2</sup>	
	Actual	Adj <sup>3</sup>	Actual	Adj <sup>3</sup>
U.S. All Races (1995)	2,312,132		503.9	
All IHS Areas	22,143	25,304	609.8	699.3
Aberdeen	2,086	2,139	1,021.5	1,048.7
Alaska	1,765	1,865	739.3	781.5
Albuquerque	1,170	1,237	594.8	630.2
Bemidji	1,665	1,982	900.8	1,074.4
Billings	1,046	1,110	867.2	923.0
California	1,117	1,624	346.8	505.1
Nashville	1,081	1,238	556.4	635.6
Navajo	3,277	3,310	617.0	625.1
Oklahoma	3,835	5,336	412.2	587.1
Phoenix	2,337	2,443	754.4	790.7
Portland	2,178	2,416	640.6	707.8
Tucson	586	604	864.2	891.1

<sup>1</sup> Includes deaths with age not reported (12 deaths IHS-wide; Albuquerque-2 deaths, Billings-1 death, California-1 death, Nashville-1 death, Navajo-2 deaths, Oklahoma-2 deaths, Phoenix-1 death, and Tucson-3 deaths).

<sup>2</sup> Age-adjusted rate per 100,000 population.

<sup>3</sup> Adjusted to compensate for miscoding of Indian race on death certificates.

In 1994-96, the years of potential life lost rate (all causes) for the IHS service area population was 91.5. This is the rate adjusted for miscoding of Indian race on death certificates. This is 70 percent greater than the U.S. All Races rate of 53.7 for 1995. Each IHS Area has a rate greater than the U.S. All Races rate. The lowest Area rate (California, 64.6) is 20 percent greater than the U.S. rate, while the highest Area rate (Aberdeen, 127.6) is 2.4 times the U.S. rate.

Chart 4.2

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

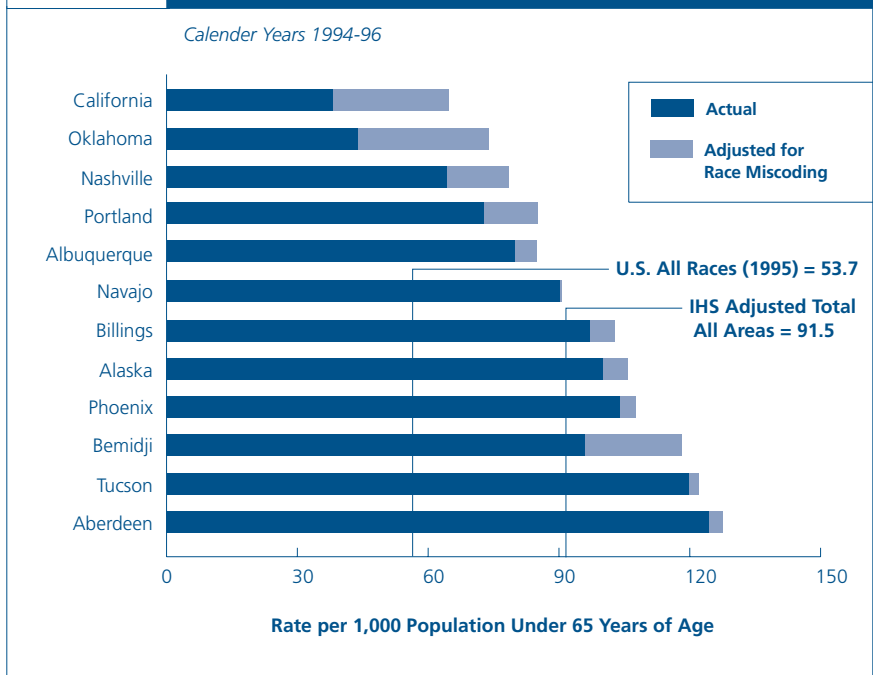


Table 4.2

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

Calendar Years 1994-96

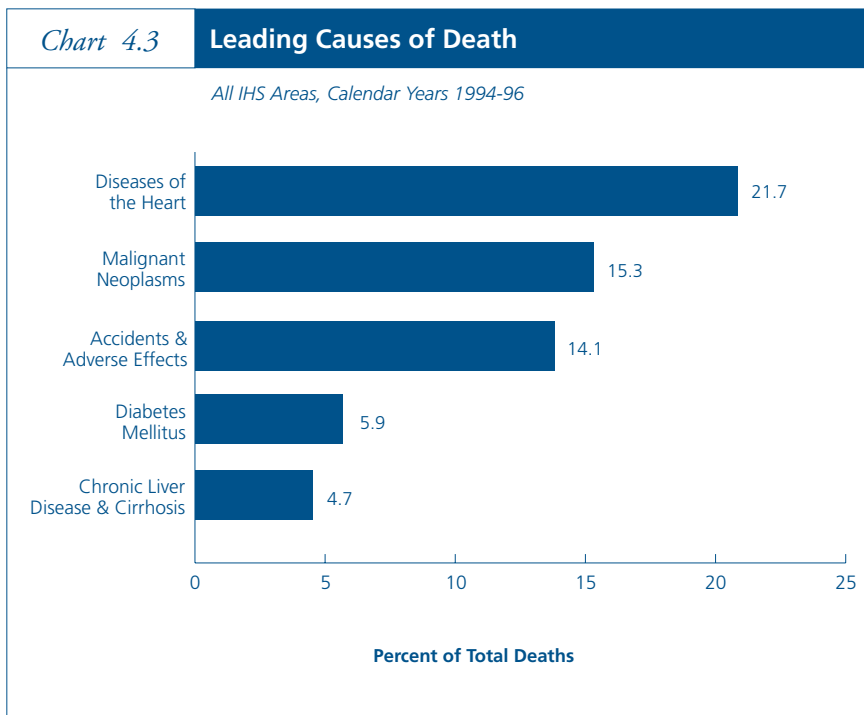
	Number of YPLL <sup>1</sup>		Rate <sup>2</sup>	
	Actual	Adj <sup>3</sup>	Actual	Adj <sup>3</sup>
U.S. All Races (1995)	12,310,582		53.7	
All IHS Areas	302,372	354,248	78.1	91.5
Aberdeen	31,879	32,676	124.5	127.6
Alaska	27,925	29,759	100.2	106.8
Albuquerque	16,938	18,294	79.8	86.2
Bemidji	20,017	24,796	95.9	118.8
Billings	14,632	15,521	97.0	102.9
California	12,864	21,713	38.2	64.6
Nashville	12,752	15,608	64.2	78.6
Navajo	51,999	52,204	90.3	90.6
Oklahoma	34,766	58,544	44.0	74.0
Phoenix	40,000	41,404	104.1	107.8
Portland	29,540	34,468	72.9	85.1
Tucson	9,060	9,261	119.7	122.4

<sup>1</sup> Years of Potential Life Lost (YPLL) is a mortality indicator that 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 midpoint of each of these age groups.

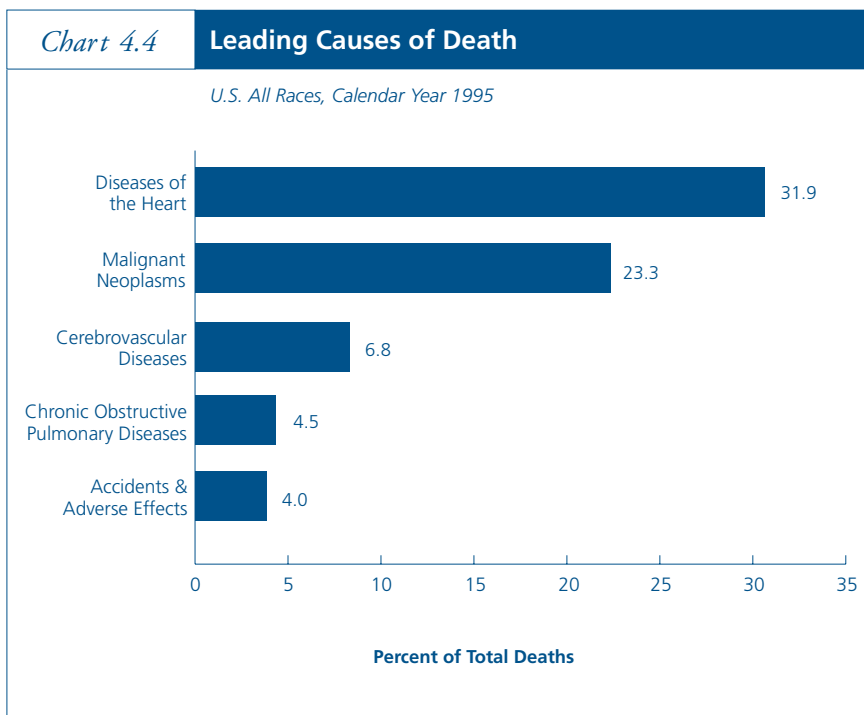
<sup>2</sup> Rate per 1,000 population under 65 years of age.

<sup>3</sup> Adjusted to compensate for miscoding of Indian race on death certificates.

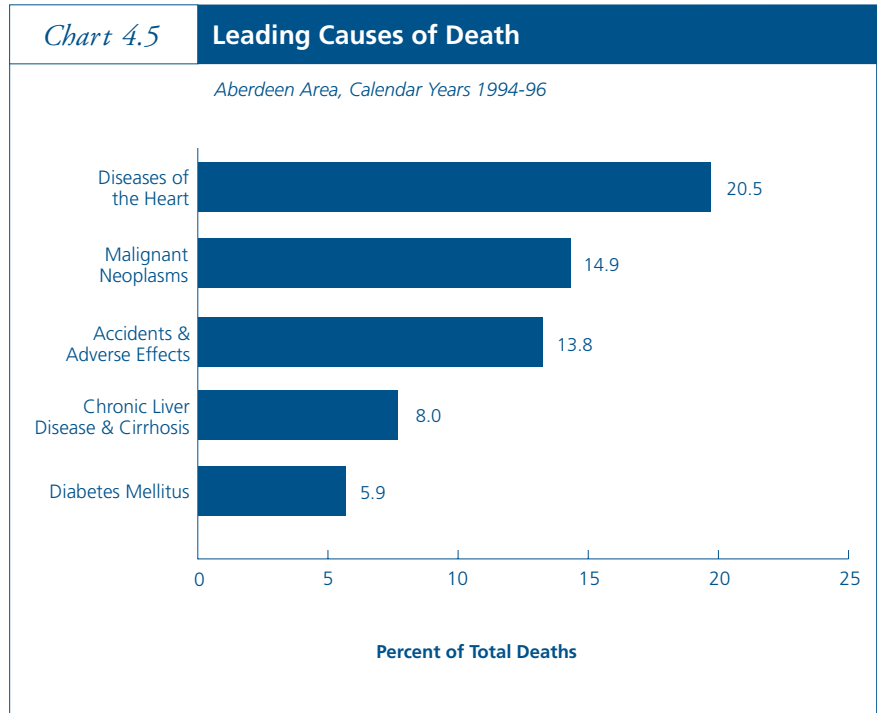
In 1994-96, 21.7 percent of all deaths in the IHS service area were caused by diseases of the heart. This was followed by malignant neoplasms at 15.3 percent.



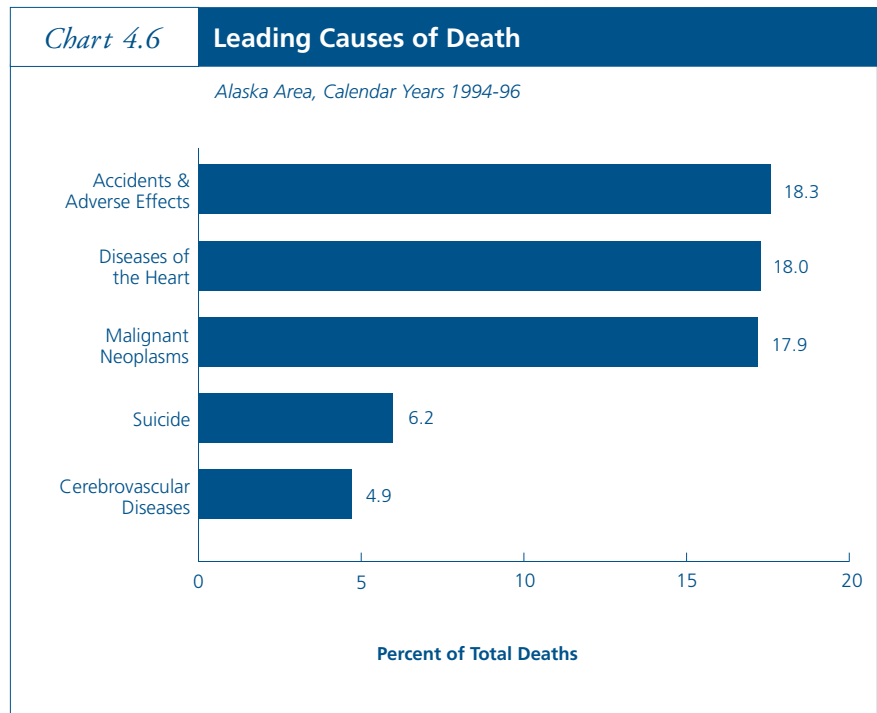
In 1995, 31.9 percent of all deaths in the U.S. were caused by diseases of the heart. This was followed by malignant neoplasms at 23.3 percent.



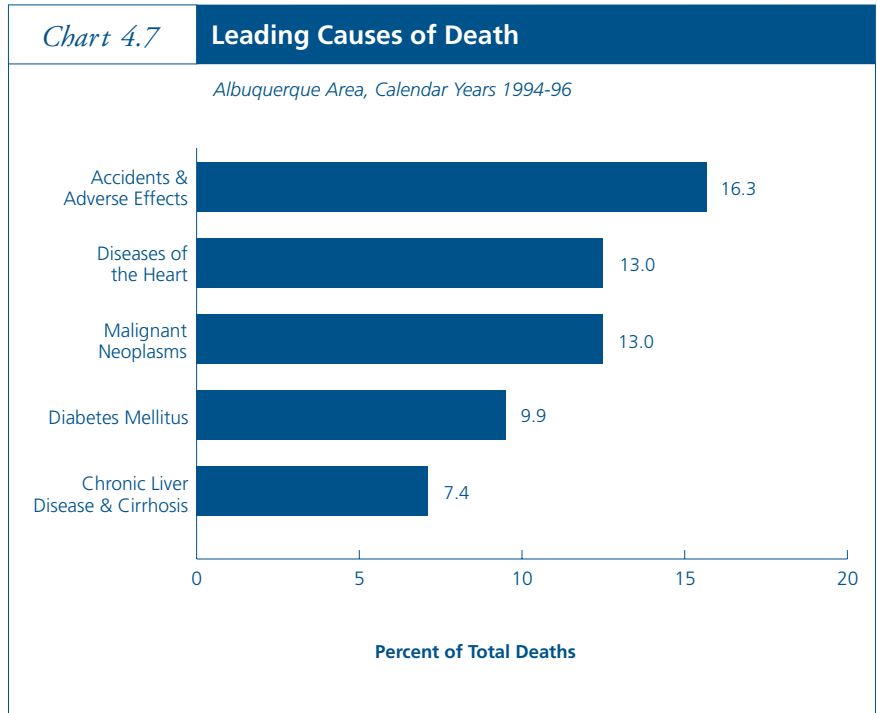
In 1994-96, 20.5 percent of all deaths in the Aberdeen Area were caused by diseases of the heart. This was followed by malignant neoplasms at 14.9 percent.



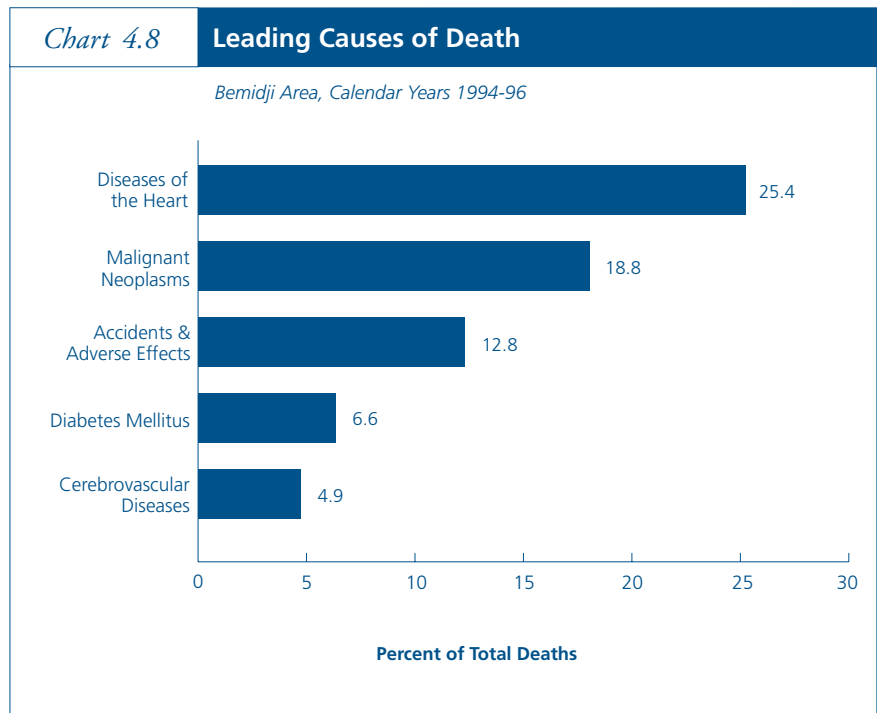
In 1994-96, 18.3 percent of all deaths in the Alaska Area were caused by accidents and adverse effects. This was followed by diseases of the heart at 18.0 percent.



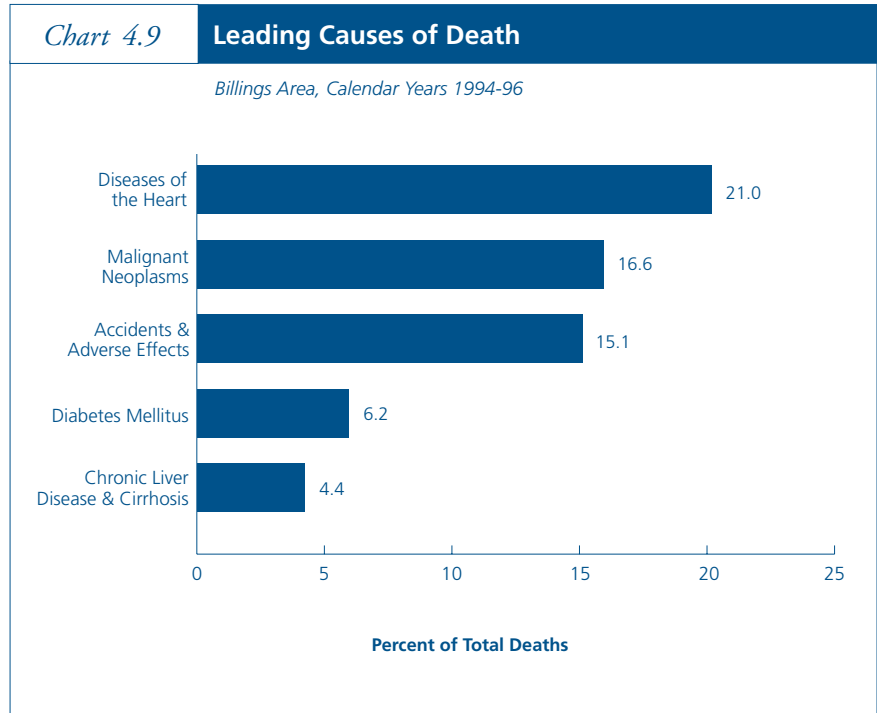
In 1994-96, 16.3 percent of all deaths in the Albuquerque Area were caused by accidents and adverse effects. This was followed by diseases of the heart at 13.0 percent.



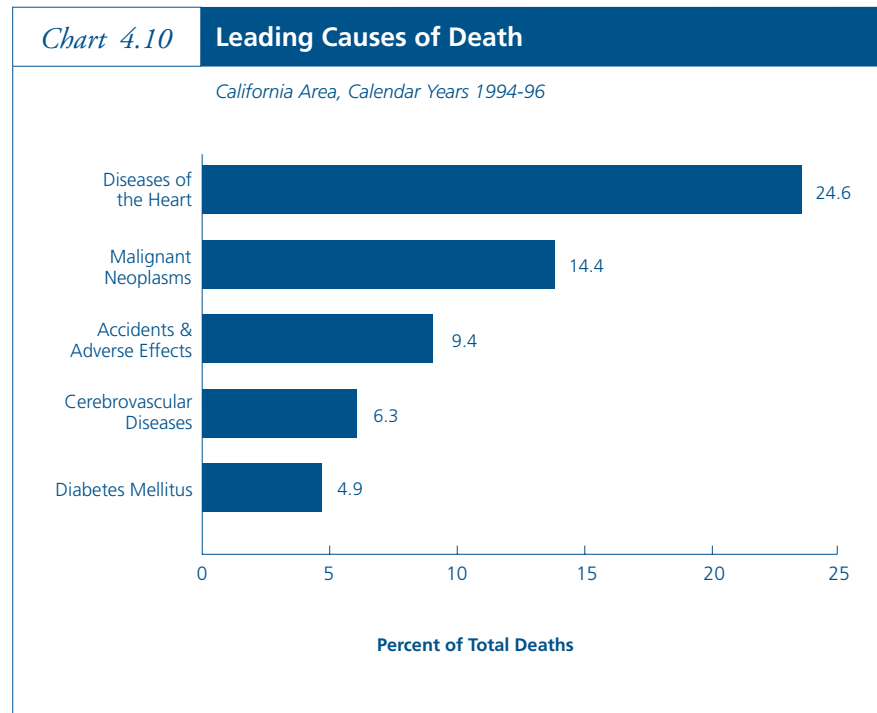
In 1994-96, 25.4 percent of all deaths in the Bemidji Area were caused by diseases of the heart. This was followed by malignant neoplasms at 18.8 percent.



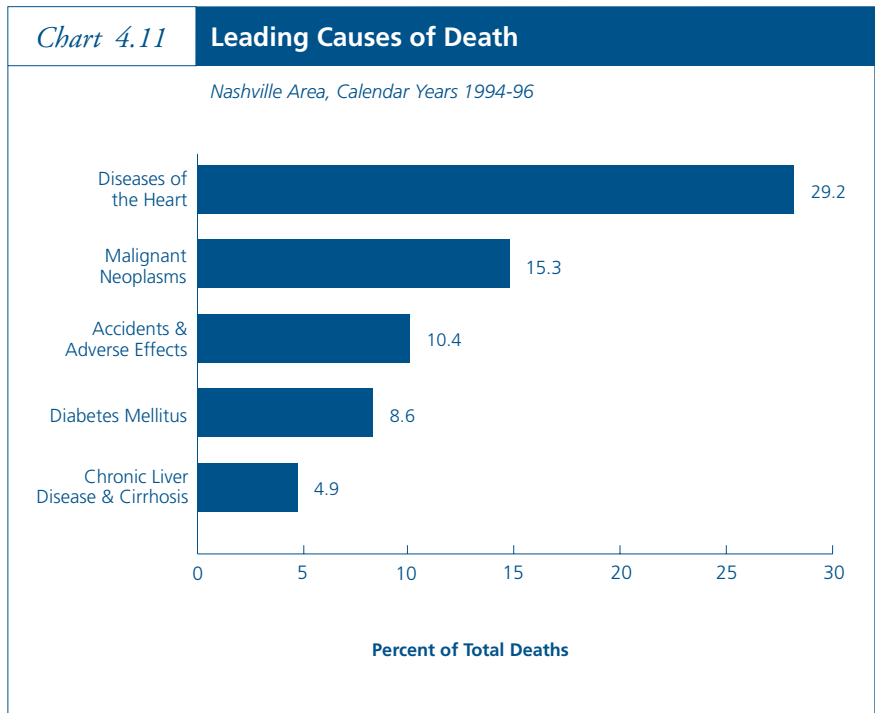
In 1994-96, 21.0 percent of all deaths in the Billings Area were caused by diseases of the heart. This was followed by malignant neoplasms at 16.6 percent.



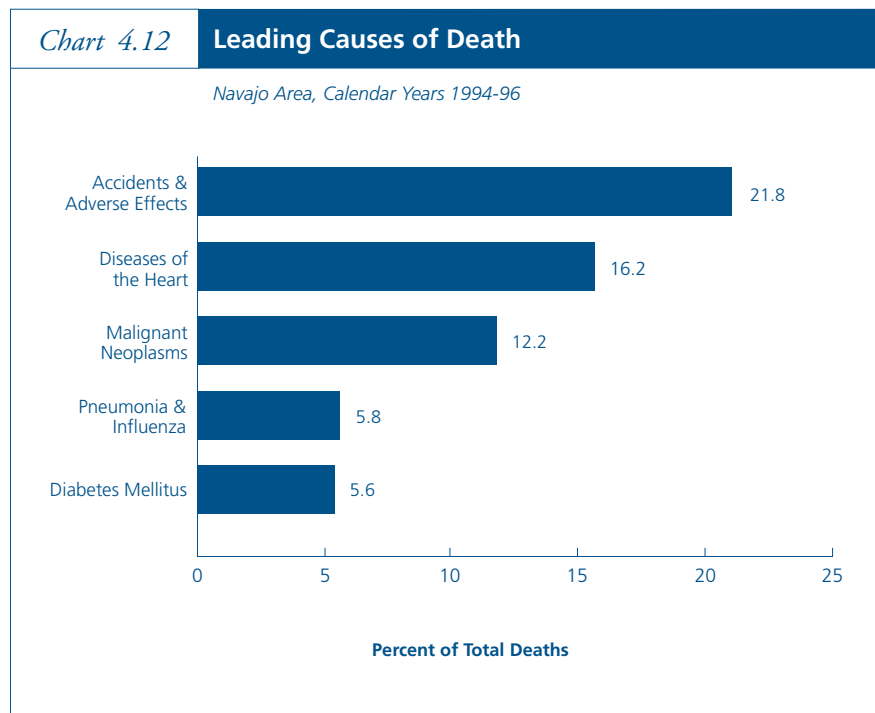
In 1994-96, 24.6 percent of all deaths in the California Area were caused by diseases of the heart. This was followed by malignant neoplasms at 14.4 percent.



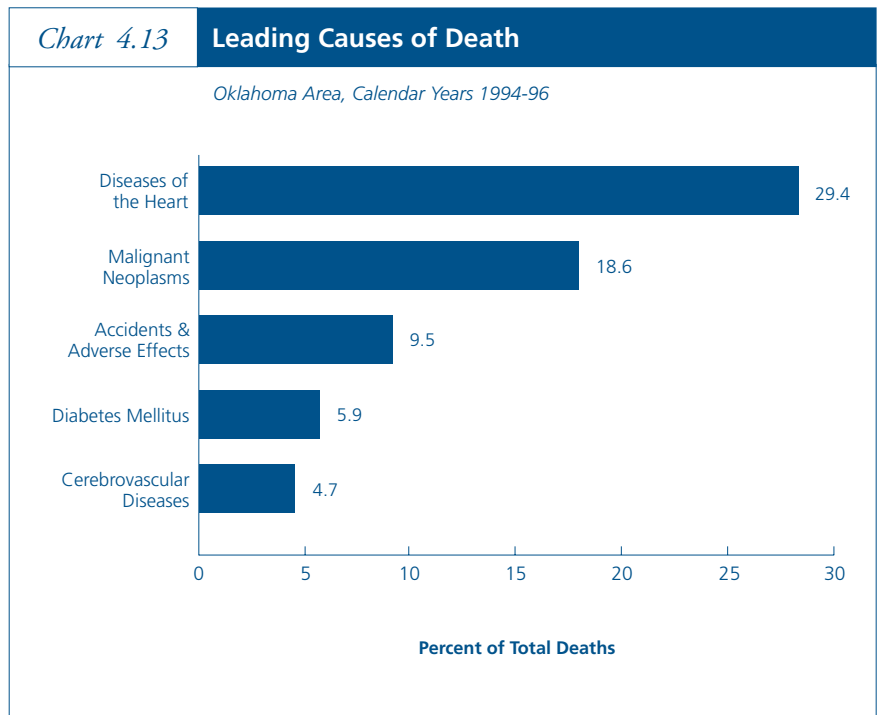
In 1994-96, 29.2 percent of all deaths in the Nashville Area were caused by diseases of the heart. This was followed by malignant neoplasms at 15.3 percent.



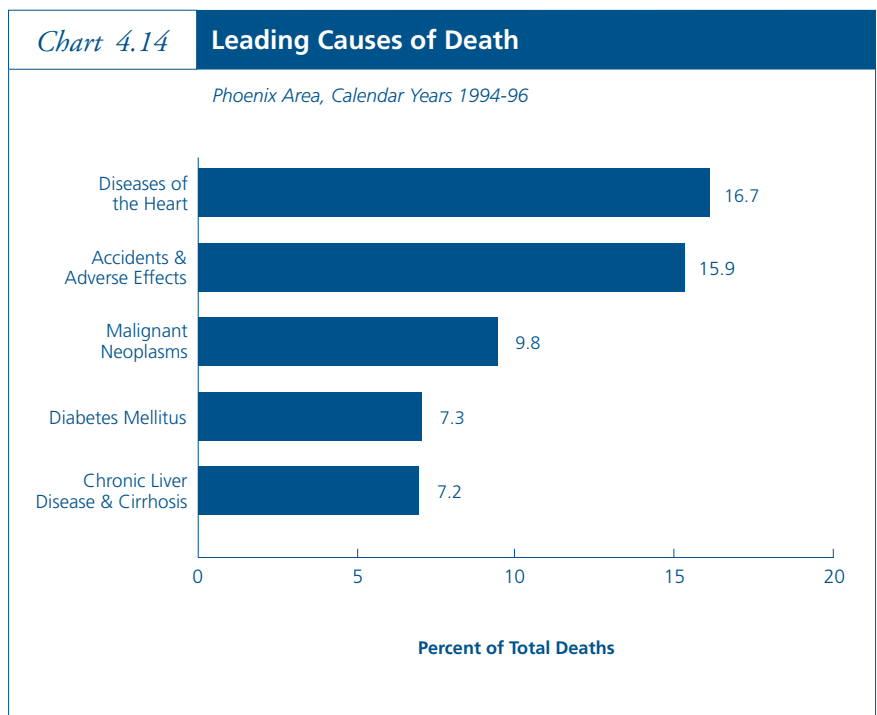
In 1994-96, 21.8 percent of all deaths in the Navajo Area were caused by accidents and adverse effects. This was followed by diseases of the heart at 16.2 percent.



In 1994-96, 29.4 percent of all deaths in the Oklahoma Area were caused by diseases of the heart. This was followed by malignant neoplasms at 18.6 percent.

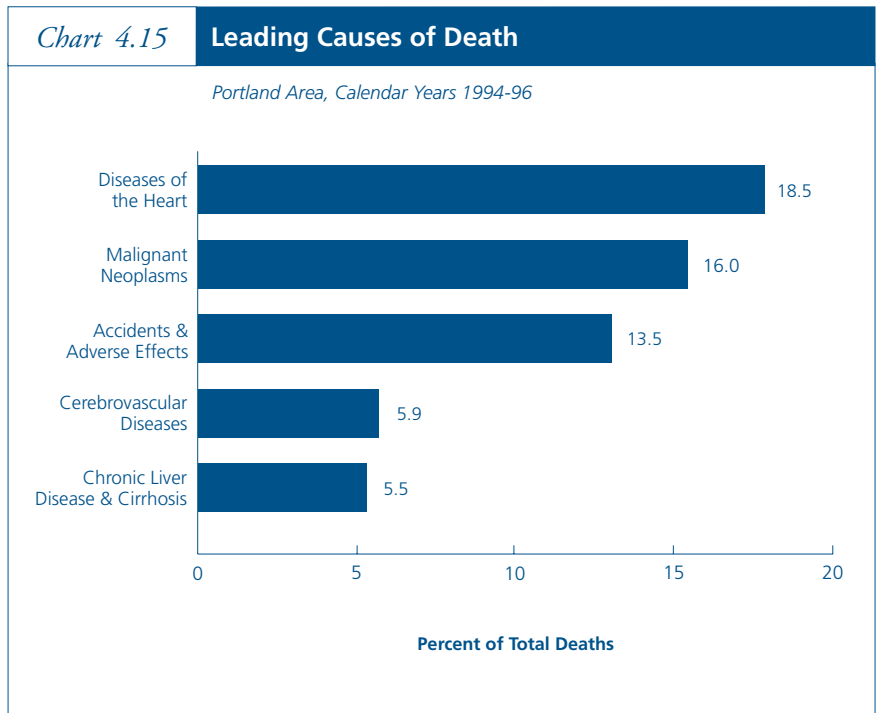


In 1994-96, 16.7 percent of all deaths in the Phoenix Area were caused by diseases of the heart. This was followed by accidents and adverse effects at 15.9 percent.

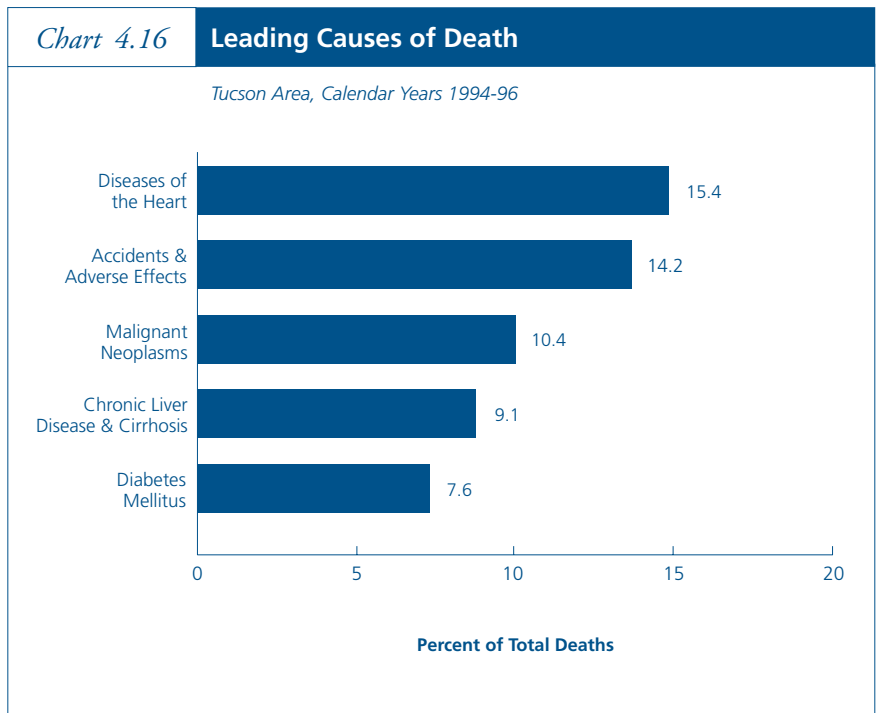




In 1994-96, 18.5 percent of all deaths in the Portland Area were caused by diseases of the heart. This was followed by malignant neoplasms at 16.0 percent.



In 1994-96, 15.4 percent of all deaths in the Tucson Area were caused by diseases of the heart. This was followed by accidents and adverse effects at 14.2 percent.



In 1994-96, the age-adjusted injury and poisoning death rate for the IHS service area population was 129.7. This is the rate adjusted for miscoding of Indian race on death certificates. The Indian rate is 2.5 times the U.S. All Races rate of 52.2 for 1995. The Alaska Area rate (185.1), which is the highest among the Areas, is 3.5 times the U.S. rate. The California Area rate (70.9), which is the lowest, is still 1.4 times the U.S. rate.

Chart 4.17

**Age-Adjusted Injury and Poisoning Death Rates**

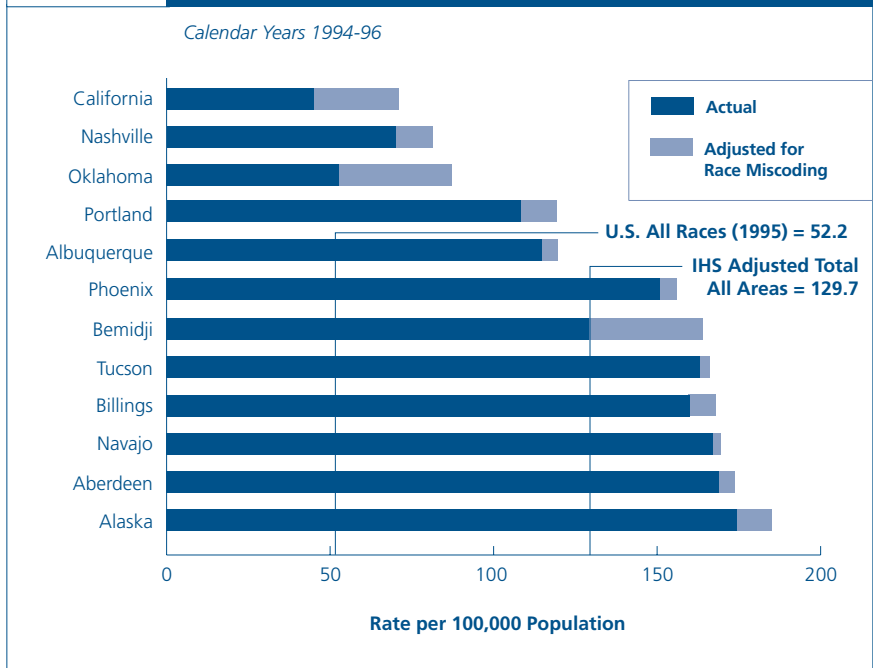


Table 4.17

**Age-Adjusted Injury and Poisoning<sup>1</sup> Death Rates**

Calendar Years 1994-96

	Deaths <sup>2</sup>		Rate <sup>3</sup>	
	Actual	Adj <sup>4</sup>	Actual	Adj <sup>4</sup>
U.S. All Races (1995)	150,809		52.2	
All IHS Areas	4,384	5,020	113.6	129.7
Aberdeen	401	413	169.0	174.0
Alaska	469	498	174.4	185.1
Albuquerque	252	266	114.8	120.6
Bemidji	268	342	129.1	164.1
Billings	227	239	160.1	168.4
California	158	249	45.0	70.9
Nashville	143	168	70.0	81.5
Navajo	908	924	167.0	170.2
Oklahoma	426	716	52.6	87.8
Phoenix	565	586	150.8	156.1
Portland	444	494	108.2	119.5
Tucson	123	125	164.0	166.1

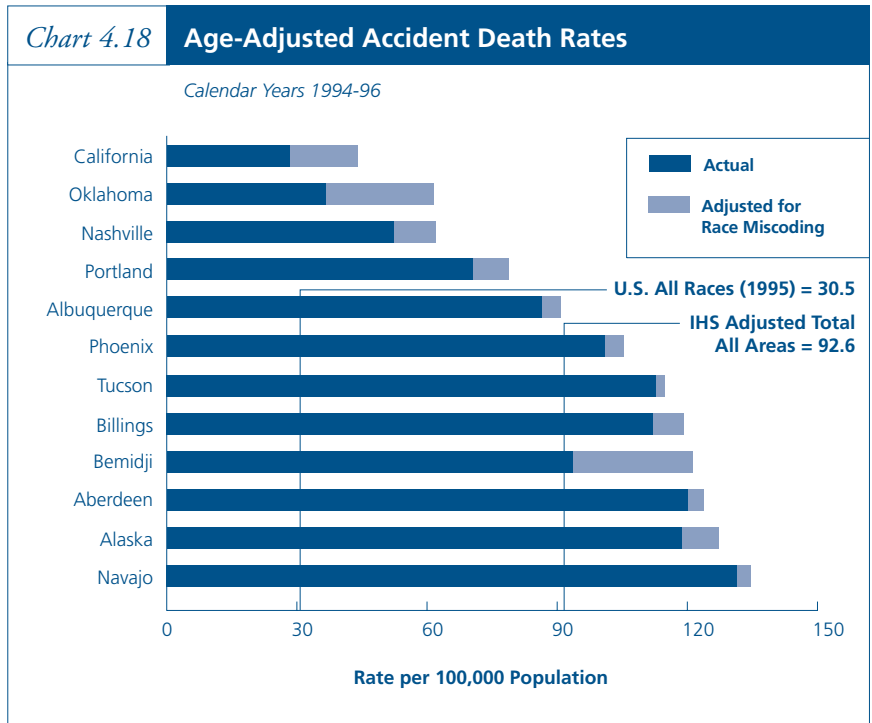
<sup>1</sup> Includes the following ICD-9 cause of death groups combined: Motor vehicle accidents-E810-E825. Other accidents-E800-E807, E826-E949. Suicide-E950-E959. Homicide-E960-E978. Injury undetermined whether accidentally or purposely inflicted-E980-E989. Injury resulting from operations of war-E990-E999.

<sup>2</sup> Includes deaths with age not reported. For IHS, includes Navajo-1 death, Oklahoma-1 death, Phoenix-1 death, and Tucson-2 deaths.

<sup>3</sup> Age-adjusted rate per 100,000 population.

<sup>4</sup> Adjusted to compensate for miscoding of Indian race on death certificates.

In 1994-96, the age-adjusted accident death rate for the IHS service area population was 92.6. This is the rate adjusted for miscoding of Indian race on death certificates. The Indian rate is 204 percent higher than the U.S. All Races rate of 30.5 for 1995. The California Area has the lowest rate among the IHS Areas (44.1), but it is still 45 percent greater than the U.S. rate. The highest Area rate (Navajo, 134.6) is 4.4 times the U.S. rate.



**Table 4.18 Age-Adjusted Accident Death Rates**

Calendar Years 1994-96

	All Accidents				Motor Vehicle Accidents			Other Accidents	
	Deaths		Rate <sup>1</sup>		Totals		Percent of Motor Vehicle Accident Deaths <sup>3</sup>	Rate <sup>1</sup>	
	Actual	Adj <sup>2</sup>	Actual	Adj <sup>2</sup>	Actual	Adj <sup>2</sup>		Actual	Adj <sup>2</sup>
U.S. All Races (1995)	93,320		30.5		16.3			14.2	
All IHS Areas	3,093	3,565	80.6	92.6	45.9	54.0	22.7%	34.7	38.6
Aberdeen	284	295	120.0	124.4	67.9	71.9	17.8%	52.1	52.5
Alaska	318	341	118.7	127.4	27.0	27.7	22.4%	91.7	99.6
Albuquerque	190	202	86.4	91.4	57.1	62.1	30.0%	29.3	29.3
Bemidji	194	253	93.5	121.5	60.6	83.1	17.7%	32.9	38.4
Billings	156	167	112.1	119.8	67.5	74.9	16.3%	44.6	44.9
California	98	153	28.3	44.1	14.8	23.7	19.0%	13.5	20.5
Nashville	107	129	52.4	62.6	33.5	42.0	20.9%	18.9	20.6
Navajo	706	722	131.4	134.6	83.3	85.8	30.7%	48.1	48.8
Oklahoma	298	504	36.6	61.6	22.5	39.0	17.1%	14.1	22.6
Phoenix	370	388	100.9	105.5	61.5	65.1	25.5%	39.3	40.4
Portland	288	325	70.5	79.0	37.3	42.7	18.5%	33.3	36.2
Tucson	84	86	112.8	114.9	68.2	68.2	21.6%	44.6	46.7

<sup>1</sup> Age-adjusted rate per 100,000 population.

<sup>2</sup> Adjusted to compensate for miscoding of Indian race on death certificates.

<sup>3</sup> 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.

In 1994-96, the age-adjusted suicide death rate for the IHS service area population was 19.3. This is the rate adjusted for miscoding of Indian race on death certificates. The Indian rate is 72 percent higher than the U.S. All Races rate of 11.2 for 1995. The Alaska rate (41.9) is 3.7 times the U.S. rate and four Area rates (Aberdeen, Billings, Phoenix, and Portland) are at least double the U.S. rate.

Chart 4.19

Age-Adjusted Suicide Death Rates

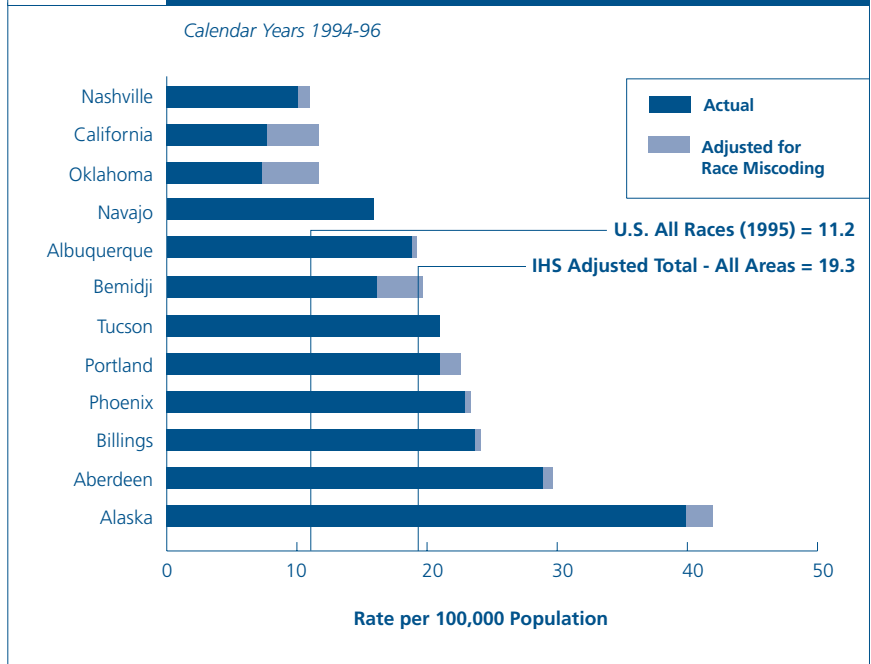


Table 4.19

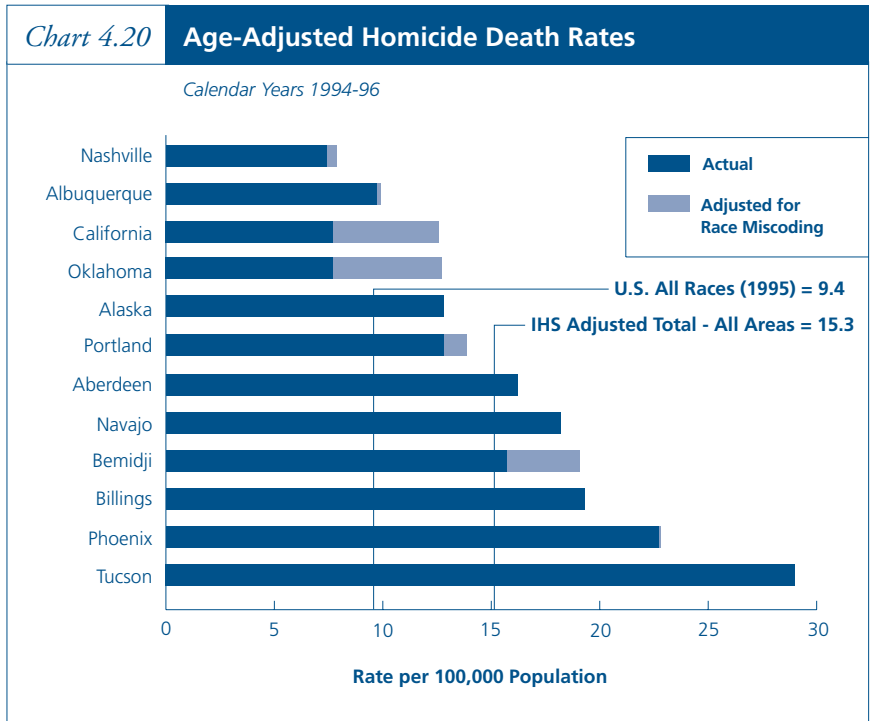
Age-Adjusted Suicide Death Rates

	Deaths		Rate <sup>1</sup>	
	Actual	Adj <sup>2</sup>	Actual	Adj <sup>2</sup>
U.S. All Races (1995)	31,284		11.2	
All IHS Areas	672	753	17.3	19.3
Aberdeen	67	69	28.9	29.7
Alaska	110	116	39.9	41.9
Albuquerque	40	41	18.8	19.2
Bemidji	34	42	16.1	19.7
Billings	34	35	23.7	24.3
California	27	41	7.7	11.7
Nashville	21	23	10.1	11.0
Navajo	89	89	15.9	15.9
Oklahoma	58	95	7.3	11.9
Phoenix	91	93	22.9	23.4
Portland	85	93	21.0	22.8
Tucson	16	16	21.0	21.0

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

<sup>2</sup> Adjusted to compensate for miscoding of Indian race on death certificates.

In 1994-96, the age-adjusted homicide death rate for the IHS service area population was 15.3. This is the rate adjusted for miscoding of Indian race on death certificates. The Indian rate is 63 percent higher than the U.S. All Races rate of 9.4 for 1995. The Tucson rate (29.0) is more than triple the U.S. rate. The Phoenix (22.8), Billings (19.3), and Bemidji (19.1) rates are more than double the U.S. rate, while the Navajo rate (18.2) is nearly double the U.S. rate.



**Table 4.20 Age-Adjusted Homicide Death Rates**

Calendar Years 1994-96

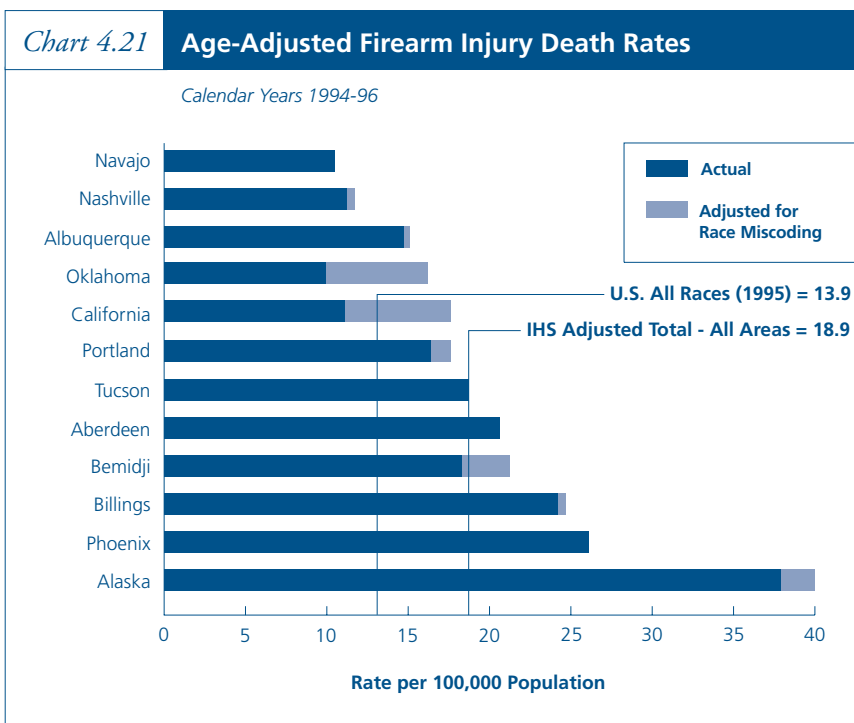
	Deaths		Rate <sup>1</sup>	
	Actual	Adj <sup>2</sup>	Actual	Adj <sup>2</sup>
U.S. All Races (1995)	22,895		9.4	
All IHS Areas	535	610	13.5	15.3
Aberdeen	41	41	16.2	16.2
Alaska	33	33	12.8	12.8
Albuquerque	22	23	9.7	9.9
Bemidji	33	40	15.7	19.1
Billings	30	30	19.3	19.3
California	28	46	7.7	12.7
Nashville	15	16	7.4	7.9
Navajo	104	104	18.2	18.2
Oklahoma	62	104	7.7	12.7
Phoenix	91	92	22.7	22.8
Portland	54	59	12.8	13.9
Tucson	22	22	29.0	29.0

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

<sup>2</sup> Adjusted to compensate for miscoding of Indian race on death certificates.

**Note:** Includes deaths due to homicide and legal intervention.

In 1994-96 for the IHS service area population, the age-adjusted firearm injury death rate was 18.9. This is the rate adjusted for miscoding of Indian race on death certificates. The Indian rate is 1.4 times the U.S. All Races rate of 13.9 for 1995. The Alaska Area rate (40.0) far exceeds the rates of the other Areas. It is 1.5 times the next highest Area rate (Phoenix, 26.1) and 3.8 times the lowest Area rate (Navajo, 10.5).



**Table 4.21 Age-Adjusted Firearm Injury<sup>1</sup> Death Rates**

Calendar Years 1994-96

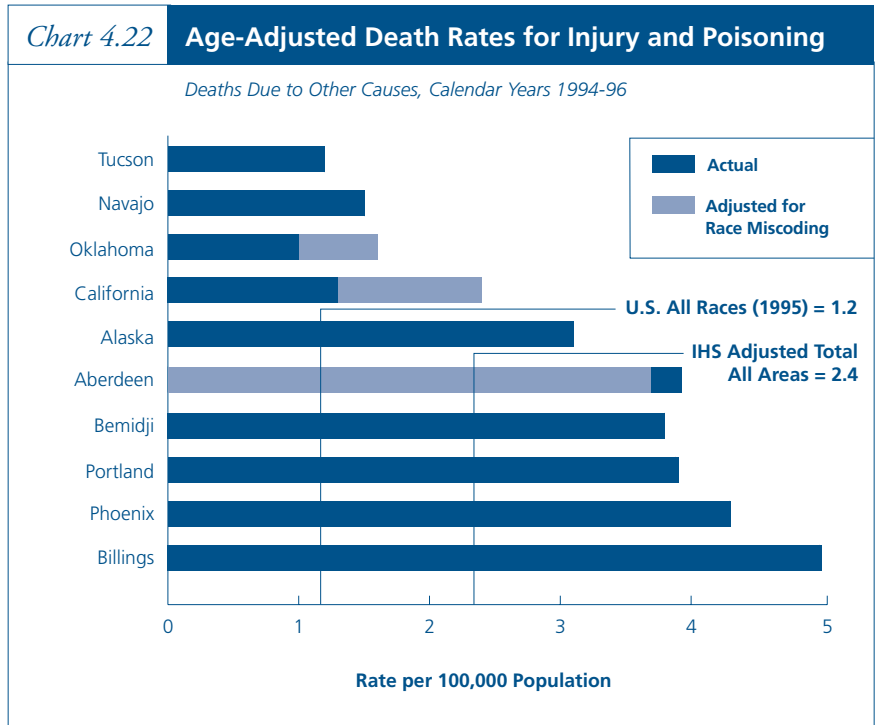
	Deaths		Rate <sup>2</sup>	
	Actual	Adj <sup>3</sup>	Actual	Adj <sup>3</sup>
U.S. All Races (1995)	35,957		13.9	
All IHS Areas	645	739	16.5	18.9
Aberdeen	49	49	20.6	20.6
Alaska	106	112	37.9	40.0
Albuquerque	31	32	14.7	15.1
Bemidji	36	42	18.3	21.3
Billings	35	36	24.2	24.8
California	39	62	11.1	17.6
Nashville	23	24	11.2	11.7
Navajo	62	62	10.5	10.5
Oklahoma	79	130	9.9	16.2
Phoenix	103	103	26.1	26.1
Portland	68	73	16.4	17.6
Tucson <sup>3</sup>	14	14	18.7	18.7

<sup>1</sup> Includes deaths with ICD-9 codes: Accident caused by firearm missile-E922, Suicide and self-inflicted injury by firearms-E955.0-E955.4, Assault by firearms and legal intervention-E965.0-E965.4, E970, and Injury by firearms, undetermined whether accidentally or purposely inflicted-E985.0-E985.4. Injury by firearm causes exclude explosive and other causes indirectly related to firearms.

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

<sup>3</sup> Adjusted to compensate for miscoding of Indian race on death certificates.

In 1994-96 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 double the U.S. All Races rate of 1.2 for 1995. The Area rates should be interpreted with caution because of the small number of deaths involved.



**Table 4.22 Age-Adjusted Death Rates for Injury and Poisoning Deaths Due to Other Causes <sup>1</sup>**

*Calendar Years 1994-96*

	Deaths		Rate <sup>2</sup>	
	Actual	Adj <sup>3</sup>	Actual	Adj <sup>3</sup>
U.S. All Races (1995)	3,310		1.2	
All IHS Areas	84	92	2.2	2.4
Aberdeen	9 <sup>4</sup>	8 <sup>4</sup>	3.9 <sup>4</sup>	3.7 <sup>4</sup>
Alaska	8	8	3.1	3.1
Albuquerque	—	—	—	—
Bemidji	7	7	3.8	3.8
Billings	7	7	5.0	5.0
California	5	9	1.3	2.4
Nashville	—	—	—	—
Navajo	9	9	1.5	1.5
Oklahoma	8	13	1.0	1.6
Phoenix	13	13	4.3	4.3
Portland	17	17	3.9	3.9
Tucson	1	1	1.2	1.2

— Represents zero.

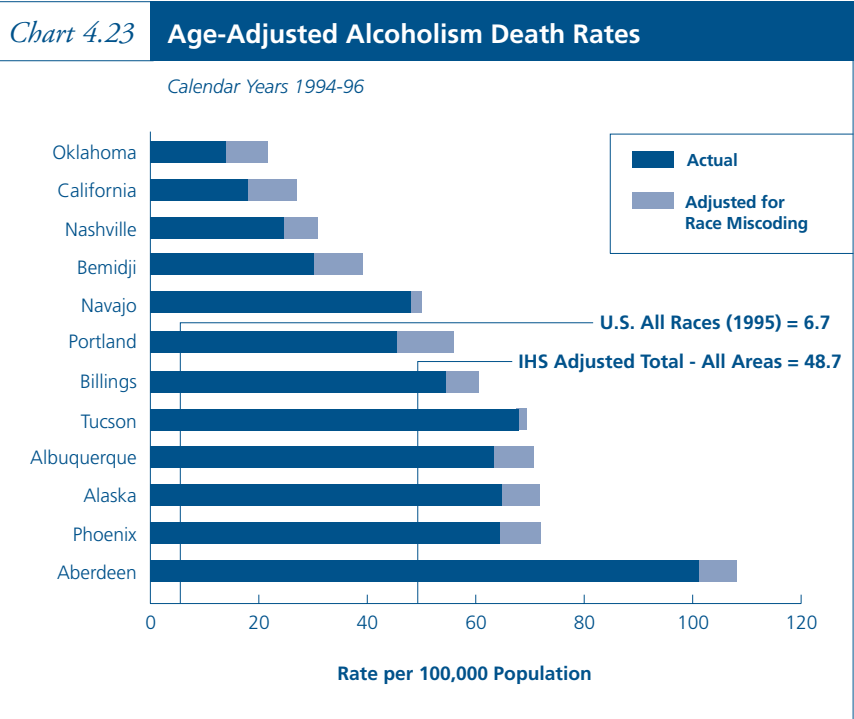
<sup>1</sup> Includes the following ICD-9 cause of death groups combined: Injury undetermined whether accidentally or purposely inflicted-E980-E989. Injury resulting from operations of war-E990-E999. (There were 9 deaths due to this cause for the U.S. All Races during 1995 and 0 deaths for the American Indian and Alaska Native population in the IHS service area, 1994-96).

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

<sup>3</sup> Adjusted to compensate for miscoding of Indian race on death certificates.

<sup>4</sup> The adjusted number and rate (Aberdeen Area) is lower than the unadjusted number and rate because the linked birth/infant death file (used to obtain the adjusted counts for infant deaths) had 1 less death for this cause than did the actual mortality file (1994-96 data).

In 1994-96, the age-adjusted alcoholism death rate for the IHS service area population was 48.7. This is the rate adjusted for miscoding of Indian race on death certificates. The Indian rate is over 7 times the U.S. All Races rate of 6.7 for 1995. The Aberdeen Area rate of 108.7 is over 16 times the U.S. rate and 1.5 times the second highest Area rate, Phoenix at 72.1.



**Table 4.23 Age-Adjusted Alcoholism Death Rates**

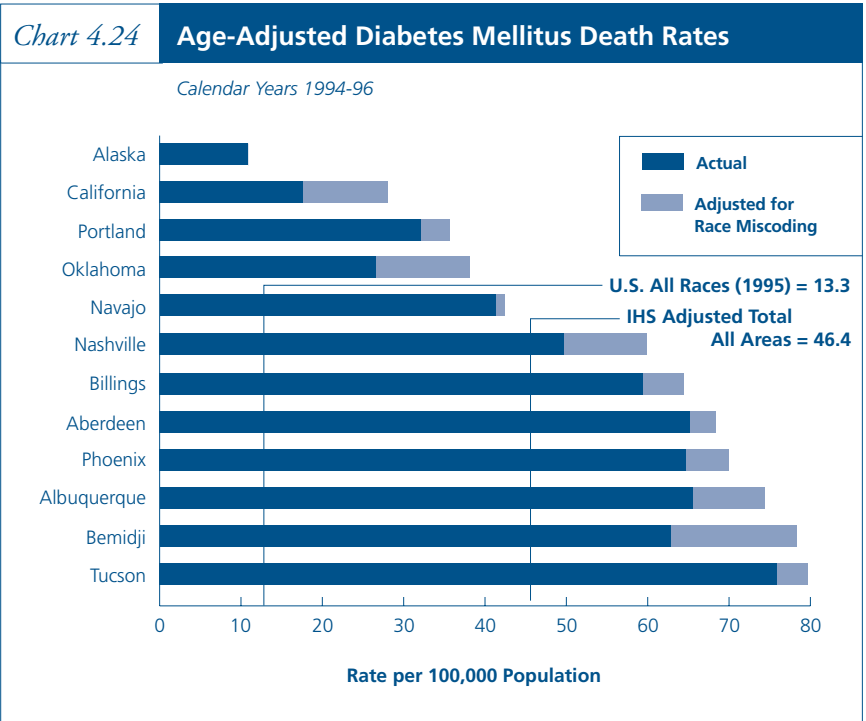
Calendar Years 1994-96

	Deaths		Rate <sup>1</sup>	
	Actual	Adj <sup>2</sup>	Actual	Adj <sup>2</sup>
U.S. All Races (1995)	20,231		6.7	
All IHS Areas	1,343	1,564	41.6	48.7
Aberdeen	181	194	101.2	108.7
Alaska	141	156	64.9	72.1
Albuquerque	111	123	63.3	70.7
Bemidji	50	65	30.1	39.2
Billings	62	69	54.4	60.6
California	53	79	18.0	27.0
Nashville	43	54	24.6	30.8
Navajo	218	227	48.1	50.1
Oklahoma	102	158	14.0	21.7
Phoenix	190	212	64.4	72.1
Portland	149	183	45.5	56.0
Tucson	43	44	68.0	70.0

<sup>1</sup> Age-adjusted rate per 100,000 population.  
<sup>2</sup> Adjusted to compensate for miscoding of Indian race on death certificates.



In 1994-96, the age-adjusted diabetes death rate for the IHS service area population was 46.4. This is the rate adjusted for miscoding of Indian race on death certificates. The Indian rate is 3.5 times the U.S. All Races rate of 13.3 for 1995. The IHS Area rates vary widely, ranging from 10.9 in Alaska (82 percent of the U.S. rate) to 79.7 in Tucson (6.0 times the U.S. rate).



**Table 4.24 Age-Adjusted Diabetes Mellitus Death Rates**

Calendar Years 1994-96

	Deaths		Rate <sup>1</sup>	
	Actual	Adj <sup>2</sup>	Actual	Adj <sup>2</sup>
U.S. All Races (1995)	59,254	-	13.3	-
All IHS Areas	1,274	1,491	39.4	46.4
Aberdeen	121	127	65.2	68.7
Alaska	23	23	10.9	10.9
Albuquerque	109	123	65.5	74.6
Bemidji	105	130	62.8	78.3
Billings	64	69	59.4	64.5
California	50	79	17.6	28.0
Nashville	89	107	49.7	59.9
Navajo	181	186	41.3	42.5
Oklahoma	225	315	26.6	38.1
Phoenix	166	179	64.7	70.0
Portland	97	107	32.1	35.7
Tucson	44	46	75.9	79.7

<sup>1</sup> Age-adjusted rate per 100,000 population.  
<sup>2</sup> Adjusted to compensate for miscoding of Indian race on death certificates.

In 1994-96 for the IHS service area population, the age-adjusted pneumonia and influenza death rate was 22.0. This is the rate adjusted for miscoding of Indian race on death certificates. The Indian rate is 1.7 times the U.S. All Races rate of 12.9 for 1995. The two highest Area rates (Tucson, 38.3 and Aberdeen, 36.7) are more than 2.5 times the lowest Area rate (Oklahoma, 14.2).

Chart 4.25

Age-Adjusted Pneumonia and Influenza Death Rates

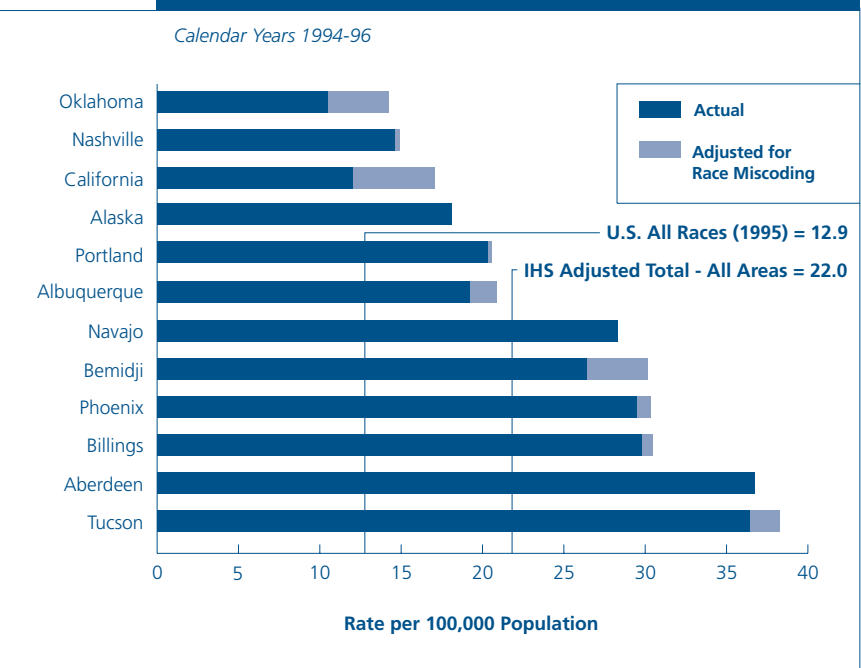


Table 4.25

Age-Adjusted Pneumonia and Influenza Death Rates

Calendar Years 1994-96

	Deaths		Rate <sup>1</sup>	
	Actual	Adj <sup>2</sup>	Actual	Adj <sup>2</sup>
U.S. All Races (1995)	82,923		12.9	
All IHS Areas	840	912	20.2	22.0
Aberdeen	81	81	36.7	36.7
Alaska	44	44	18.1	18.1
Albuquerque	47	49	19.2	20.9
Bemidji	54	63	26.4	30.3
Billings	37	38	29.8	30.6
California	41	59	12.0	17.1
Nashville	33	34	14.6	14.9
Navajo	192	192	28.3	28.3
Oklahoma	121	157	10.5	14.2
Phoenix	94	97	29.5	30.4
Portland	70	71	20.3	20.6
Tucson	26	27	36.4	38.3

<sup>1</sup> Age-adjusted rate per 100,000 population.  
<sup>2</sup> Adjusted to compensate for miscoding of Indian race on death certificates.

In 1994-96, the age-adjusted tuberculosis death rate for the IHS service area population was 1.9. This is the rate adjusted for miscoding of Indian race on death certificates. The Indian rate is more than 6 times the U.S. All Races rate of 0.3 for 1995. The Area rates should be interpreted with caution because of the small number of deaths involved. The Navajo (20 deaths) and Oklahoma (10) Areas had the most deaths over the 3-year period.

Chart 4.26

Age-Adjusted Tuberculosis Death Rates

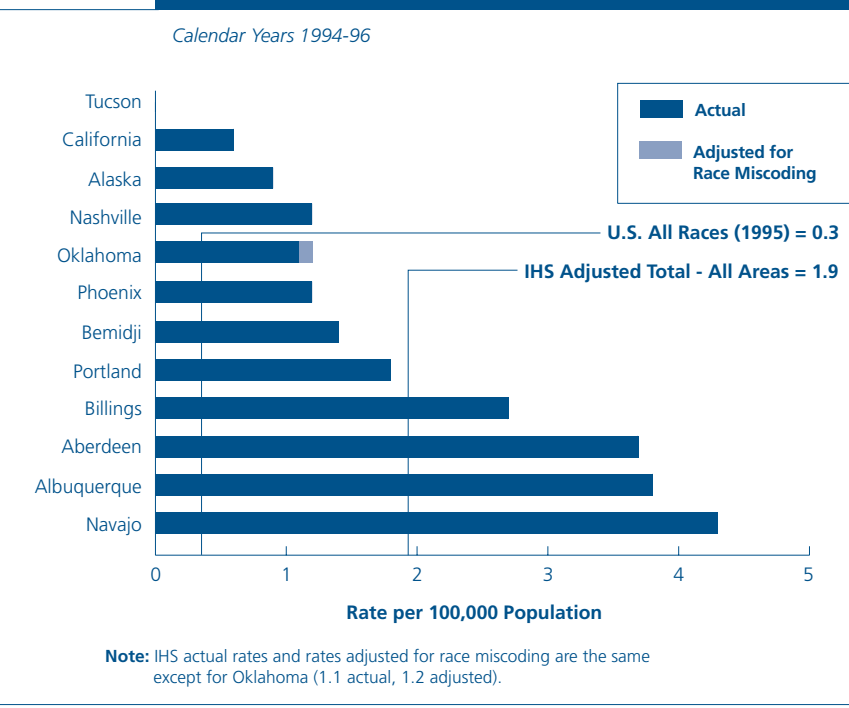


Table 4.26

Age-Adjusted Tuberculosis Death Rates

Calendar Years 1994-96

	Deaths		Rate <sup>1</sup>	
	Actual	Adj <sup>2</sup>	Actual	Adj <sup>2</sup>
U.S. All Races (1995)	1,336		0.3	
All IHS Areas	62	63	1.9	1.9
Aberdeen	6	6	3.7	3.7
Alaska	2	2	0.9	0.9
Albuquerque	6	6	3.8	3.8
Bemidji	3	3	1.4	1.4
Billings	3	3	2.7	2.7
California	2	2	0.6	0.6
Nashville	2	2	1.2	1.2
Navajo	20	20	4.3	4.3
Oklahoma	9	10	1.1	1.2
Phoenix	4	4	1.2	1.2
Portland	5	5	1.8	1.8
Tucson	—	—	—	—

— Represents zero.

<sup>1</sup> Age-Adjusted rate per 100,000 population. Rates based on a small number of deaths should be interpreted with caution.

<sup>2</sup> Adjusted to compensate for miscoding of Indian race on death certificates.

In 1994-96, the age-adjusted gastrointestinal diseases death rate for the IHS service area population was 1.7. This is the rate adjusted for miscoding of Indian race on death certificates. The Indian rate is 42 percent greater than the U.S. All Races rate for 1995 (1.2). The Area rates should be interpreted with caution because of the small number of deaths involved. The most deaths (adjusted for miscoding) over the 3-year period for any one Area was 13.

Chart 4.27

Age-Adjusted Gastrointestinal Diseases Death Rates

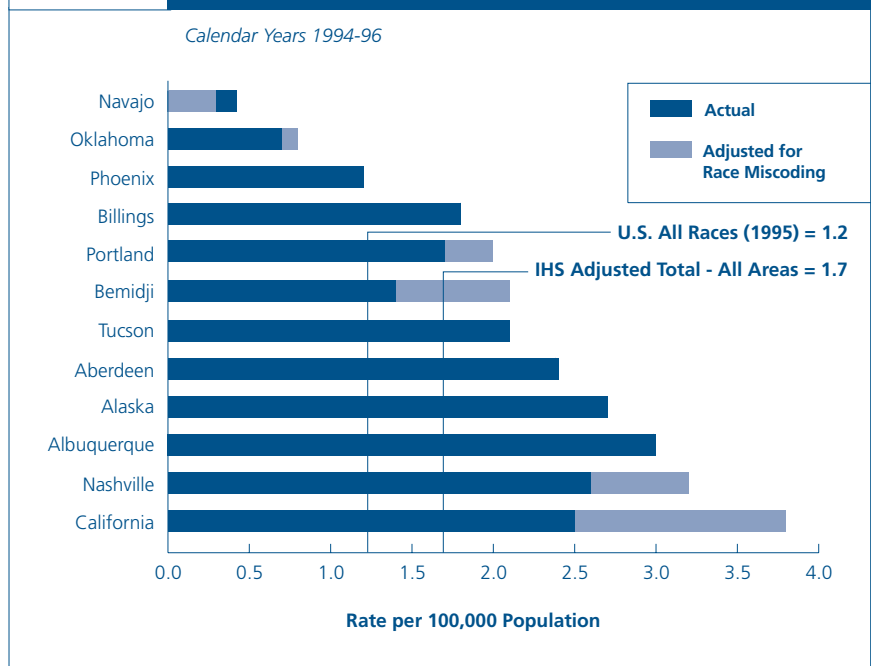


Table 4.27

Age-Adjusted Gastrointestinal Diseases Death Rates

Calendar Years 1994-96

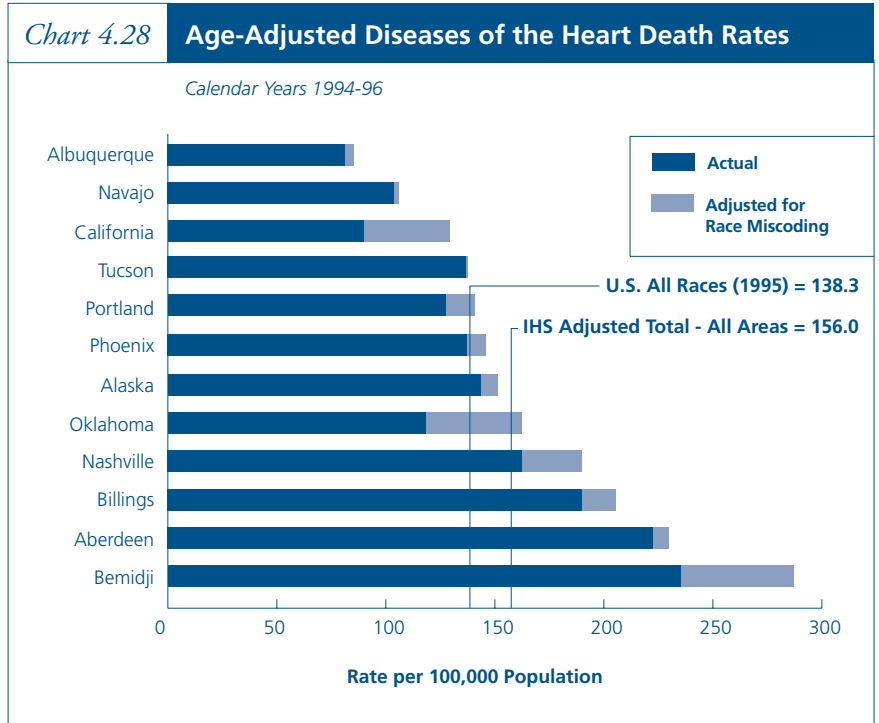
	Deaths		Rate <sup>1</sup>	
	Actual	Adj <sup>2</sup>	Actual	Adj <sup>2</sup>
U.S. All Races (1995)	6,508		1.2	
All IHS Areas	56	64	1.5	1.7
Aberdeen	4	4	2.4	2.4
Alaska	6	6	2.7	2.7
Albuquerque	7	7	3.0	3.0
Bemidji	2	3	1.4	2.1
Billings	2	2	1.8	1.8
California	8	13	2.5	3.8
Nashville	5	6	2.6	3.2
Navajo	4 <sup>3</sup>	3 <sup>3</sup>	0.4 <sup>3</sup>	0.3 <sup>3</sup>
Oklahoma	8	9	0.7	0.8
Phoenix	3	3	1.2	1.2
Portland	5	6	1.7	2.0
Tucson	2	2	2.1	2.1

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

<sup>2</sup> Adjusted to compensate for miscoding of Indian race on death certificates.

<sup>3</sup> The adjusted number and rate (Navajo Area) is lower than the unadjusted number and rate because the linked birth/infant death file (used to obtain the adjusted counts for infant deaths) had 1 less death for this cause than did the actual mortality file (1994-96 data).

In 1994-96, the age-adjusted diseases of the heart death rate for the IHS service area population was 156.0. This is the rate adjusted for miscoding of Indian race on death certificates. The Indian rate is 13 percent higher than the U.S. All Races rate of 138.3 in 1995. The lowest Area rate (Albuquerque, 85.1) is 62 percent of the U.S. rate, while the highest Area rate (Bemidji, 287.0) is more than double the U.S. rate.



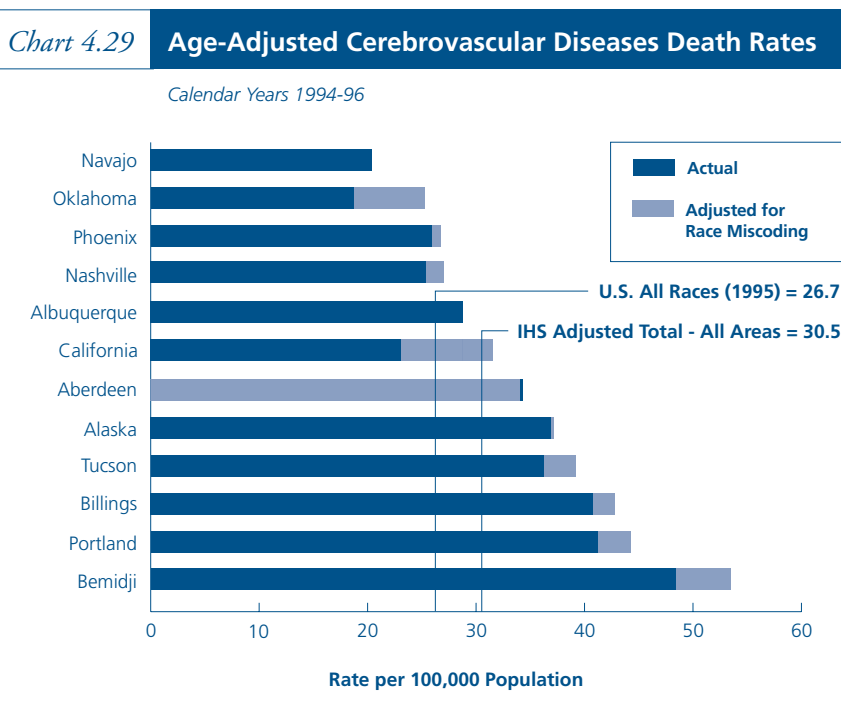
**Table 4.28 Age-Adjusted Diseases of the Heart Death Rates**

Calendar Years 1994-96

	Deaths		Rate <sup>1</sup>	
	Actual	Adj <sup>2</sup>	Actual	Adj <sup>2</sup>
U.S. All Races (1995)	737,563		138.3	
All IHS Areas	4,688	5,482	132.4	156.0
Aberdeen	425	438	222.6	229.7
Alaska	317	335	143.4	151.6
Albuquerque	154	161	81.2	85.1
Bemidji	414	504	235.0	287.0
Billings	216	233	190.0	206.4
California	280	399	89.9	129.3
Nashville	309	361	162.5	190.4
Navajo	528	536	103.8	105.7
Oklahoma	1,164	1,569	118.0	163.6
Phoenix	384	407	137.2	145.9
Portland	405	446	127.3	140.9
Tucson	92	93	136.8	137.5

<sup>1</sup> Age-adjusted rate per 100,000 population.  
<sup>2</sup> Adjusted to compensate for miscoding of Indian race on death certificates.

In 1994-96, the age-adjusted cerebrovascular diseases death rate for the IHS service area population was 30.5. This is the rate adjusted for miscoding of Indian race on death certificates. The Indian rate is 14 percent higher than the U.S. All Races rate of 26.7 for 1995. The IHS Area rates differ considerably; the Bemidji rate of 53.5 is 2.6 times the Navajo rate of 20.4.



**Table 4.29 Age-Adjusted Cerebrovascular Diseases Death Rates**

Calendar Years 1994-96

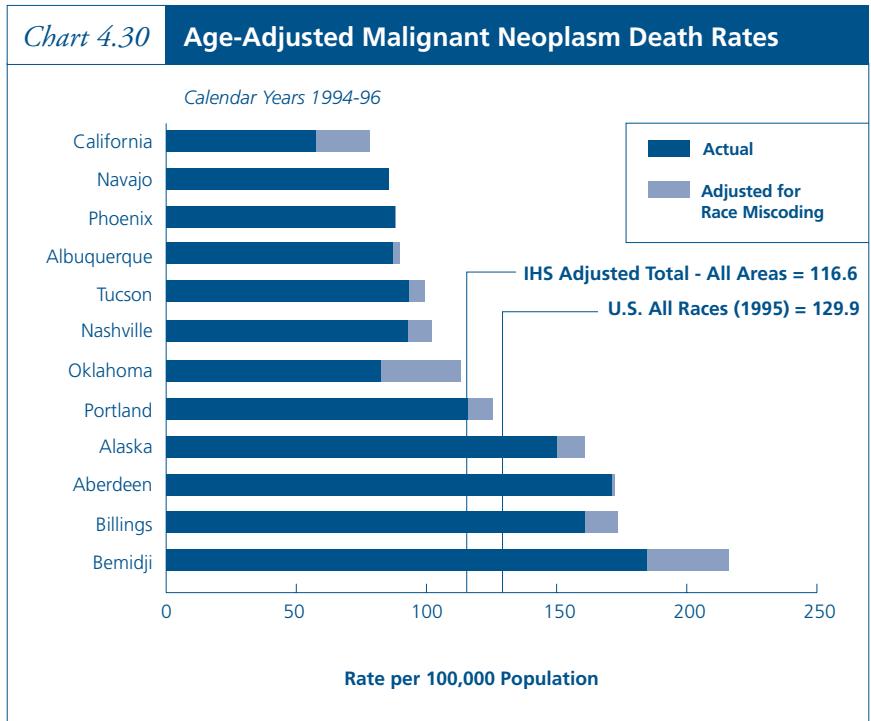
	Deaths		Rate <sup>1</sup>	
	Actual	Adj <sup>2</sup>	Actual	Adj <sup>2</sup>
U.S. All Races (1995)	157,991	-	26.7	-
All IHS Areas	1,029	1,143	27.2	30.5
Aberdeen	71 <sup>3</sup>	70 <sup>3</sup>	34.5 <sup>3</sup>	34.3 <sup>3</sup>
Alaska	91	92	36.9	37.4
Albuquerque	60	60	28.8	28.8
Bemidji	89	98	48.4	53.5
Billings	47	49	40.8	43.0
California	77	102	23.1	31.5
Nashville	51	54	25.4	27.0
Navajo	114	114	20.4	20.4
Oklahoma	193	253	18.7	25.3
Phoenix	78	81	25.9	26.7
Portland	133	143	41.2	44.3
Tucson	25	27	36.2	39.3

<sup>1</sup> Age-adjusted rate per 100,000 population.

<sup>2</sup> Adjusted to compensate for miscoding of Indian race on death certificates.

<sup>3</sup> The adjusted number and rate (Aberdeen Area) is lower than the unadjusted number and rate because the linked birth/infant death file (used to obtain the adjusted counts for infant deaths) had 1 less death for this cause than did the actual mortality file (1994-96 data).

In 1994-96, the age-adjusted malignant neoplasm death rate for the IHS service area population was 116.6. This is the rate adjusted for miscoding of Indian race on death certificates. The Indian rate is 10 percent less than the U.S. All Races rate of 129.9 for 1995. Four IHS Areas have a rate greater the U.S. rate: Bemidji (216.2), Billings (173.3), Aberdeen (172.9), and Alaska (160.9). The Portland Area rate (126.4) is just below the U.S. rate.



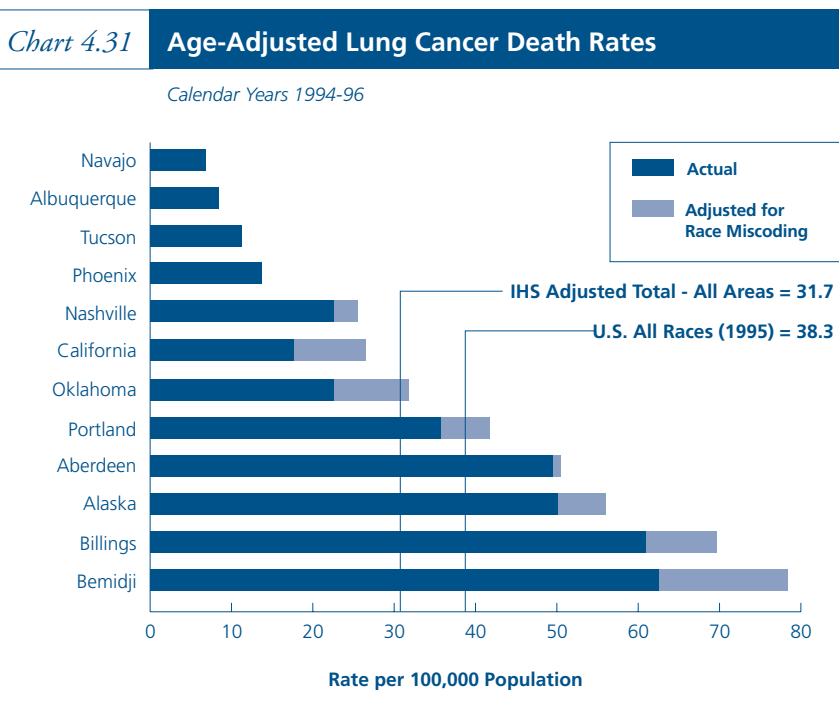
**Table 4.30 Age-Adjusted Malignant Neoplasm Death Rates**

Calendar Years 1994-96

	Deaths		Rate <sup>1</sup>	
	Actual	Adj <sup>2</sup>	Actual	Adj <sup>2</sup>
U.S. All Races (1995)	538,455		129.9	
All IHS Areas	3,413	3,879	102.1	116.6
Aberdeen	316	319	171.3	172.9
Alaska	312	333	150.0	160.9
Albuquerque	156	161	87.0	90.0
Bemidji	320	373	184.7	216.2
Billings	171	184	160.8	173.3
California	174	234	57.5	78.0
Nashville	171	189	92.7	102.2
Navajo	404	404	85.5	85.5
Oklahoma	736	993	82.5	113.3
Phoenix	239	240	87.8	88.2
Portland	355	386	115.8	126.4
Tucson	59	63	93.2	99.4

<sup>1</sup> Age-adjusted rate per 100,000 population.  
<sup>2</sup> Adjusted to compensate for miscoding of Indian race on death certificates.

In 1994-96, the age-adjusted lung (this category has been expanded to also include trachea and bronchus) cancer death rate for the IHS service area population was 31.7. This is the rate adjusted for miscoding of Indian race on death certificates. The Indian rate is 17 percent less than the U.S. All Races rate of 38.3 in 1995. Five IHS Areas (Bemidji, Billings, Alaska, Aberdeen, and Portland) have rates exceeding the U.S. rate.



**Table 4.31 Age-Adjusted Lung Cancer<sup>1</sup> Death Rates**

Calendar Years 1994-96

	Deaths		Rate <sup>2</sup>	
	Actual	Adj <sup>3</sup>	Actual	Adj <sup>3</sup>
U.S. All Races (1995)	151,200		38.3	
All IHS Areas	838	1,012	26.2	31.7
Aberdeen	89	91	49.5	50.6
Alaska	100	112	50.1	56.3
Albuquerque	15	15	8.4	8.4
Bemidji	105	132	62.5	78.4
Billings	63	72	60.9	69.7
California	52	77	17.7	26.5
Nashville	40	45	22.6	25.5
Navajo	30	30	6.8	6.8
Oklahoma	196	272	22.6	31.8
Phoenix	36	36	13.7	13.7
Portland	105	123	35.7	42.1
Tucson	7	7	11.2	11.2

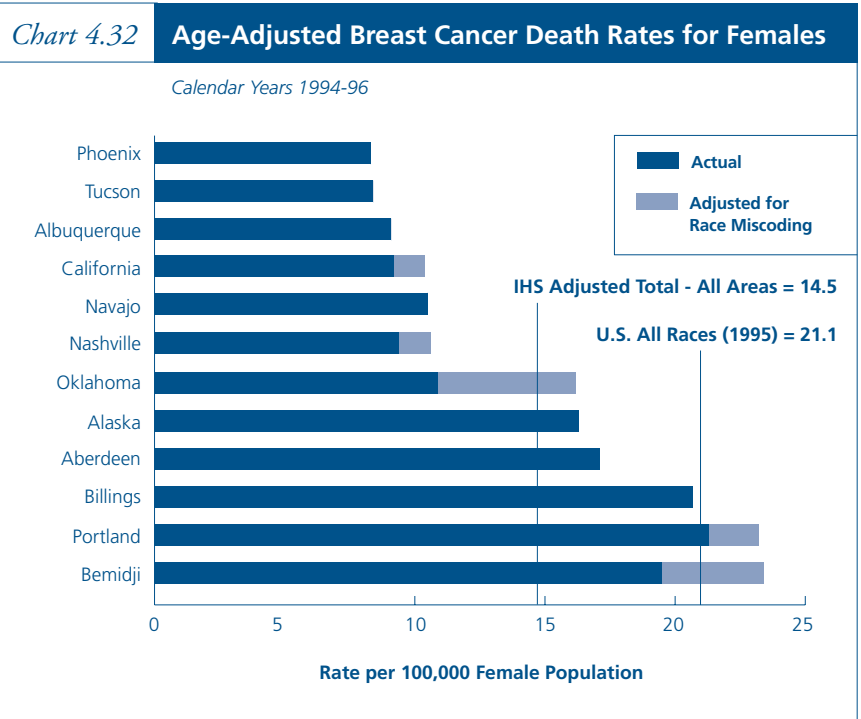
<sup>1</sup> Lung cancer death includes deaths due to cancers of the trachea, bronchus and lung, ICD-9 codes 162.0 to 162.9.

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

<sup>3</sup> Adjusted to compensate for miscoding of Indian race on death certificates.



In 1994-96, the age-adjusted breast cancer death rate for females in the IHS service area population was 14.5. 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 21.1 for 1995. The Bemidji and Portland Areas both have a rate (23.4 and 23.2, respectively) that exceeds the U.S. rate.



**Table 4.32 Age-Adjusted Breast Cancer Death Rates for Females**

Calendar Years 1994-96

	Deaths		Rate <sup>1</sup>	
	Actual	Adj <sup>2</sup>	Actual	Adj <sup>2</sup>
U.S. All Races (1995)	43,877		21.1	
All IHS Areas	222	253	12.7	14.5
Aberdeen	17	17	17.1	17.1
Alaska	19	19	16.3	16.3
Albuquerque	7	7	9.1	9.1
Bemidji	17	20	19.5	23.4
Billings	11	11	20.7	20.7
California	16	18	9.2	10.4
Nashville	9	10	9.4	10.6
Navajo	24	24	10.5	10.5
Oklahoma	51	73	10.9	16.2
Phoenix	13	13	8.3	8.3
Portland	34	37	21.3	23.2
Tucson	4	4	8.4	8.4

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

In 1994-96, the age-adjusted cervical cancer death rate for females in the IHS service area population was 3.8. This is the rate adjusted for miscoding of Indian race on death certificates. The Indian rate is 52 percent greater than the U.S. All Races rate of 2.5 for 1995. The Area rates should be interpreted with caution because of the small number of deaths involved. Only four Areas (Oklahoma, Navajo, Bemidji, and Phoenix) had 10 deaths or more (adjusted for miscoding) during the 3-year period.

Chart 4.33

Age-Adjusted Cervical Cancer Death Rates for Females

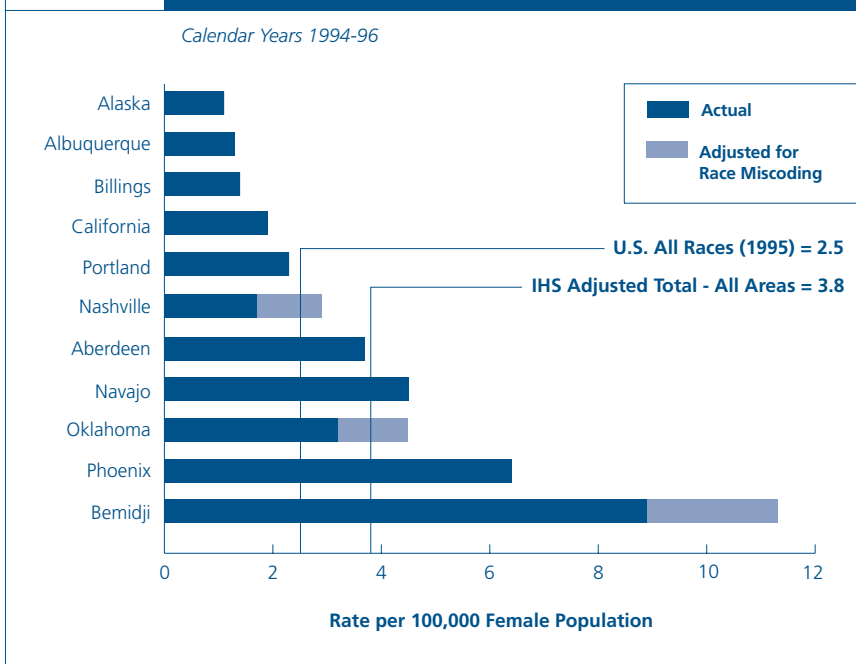


Table 4.33

Age-Adjusted Cervical Cancer Death Rates for Females

Calendar Years 1994-96

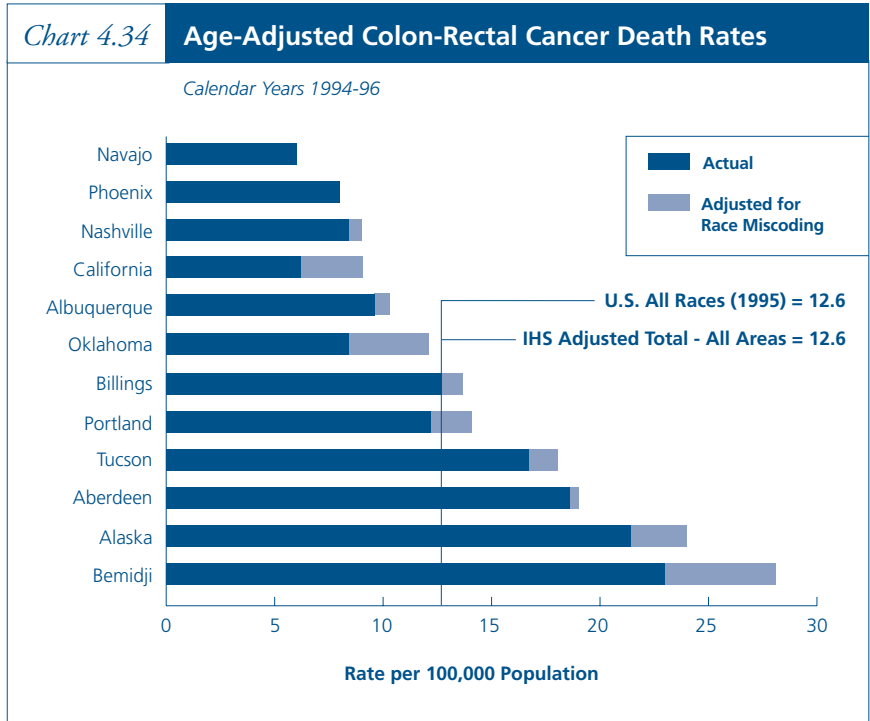
	Deaths		Rate <sup>1</sup>	
	Actual	Adj <sup>2</sup>	Actual	Adj <sup>2</sup>
U.S. All Races (1995)	4,511		2.5	
All IHS Areas	60	69	3.3	3.8
Aberdeen	4	4	3.7	3.7
Alaska	1	1	1.1	1.1
Albuquerque	1	1	1.3	1.3
Bemidji	8	10	8.9	11.3
Billings	1	1	1.4	1.4
California	3	3	1.9	1.9
Nashville	2	3	1.7	2.9
Navajo	11	11	4.5	4.5
Oklahoma	15	21	3.2	4.5
Phoenix	10	10	6.4	6.4
Portland	4	4	2.3	2.3
Tucson	—	—	—	—

— Represents zero.

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

<sup>2</sup> Adjusted to compensate for miscoding of Indian race on death certificates.

In 1994-96, the age-adjusted colon-rectal cancer death rate for the IHS service area population was 12.6. This is the rate adjusted for miscoding of Indian race on death certificates. The Indian rate is the same as the U.S. All Races rate in 1995. The highest IHS Area rate (Bemidji, 28.1) is 2.2 times the IHS average/U.S. rate, while the lowest Area rate (Navajo, 6.0) is less than half the IHS average/U.S. rate.



**Table 4.34 Age-Adjusted Colon-Rectal Cancer Death Rates**

Calendar Years 1994-96

	Deaths		Rate <sup>1</sup>	
	Actual	Adj <sup>2</sup>	Actual	Adj <sup>2</sup>
U.S. All Races (1995)	57,331		12.6	
All IHS Areas	362	426	10.6	12.6
Aberdeen	35	36	18.6	19.1
Alaska	46	51	21.4	24.0
Albuquerque	18	19	9.6	10.3
Bemidji	39	47	23.0	28.1
Billings	14	15	12.7	13.7
California	20	29	6.2	9.1
Nashville	15	16	8.4	9.0
Navajo	29	29	6.0	6.0
Oklahoma	77	108	8.4	12.1
Phoenix	21	21	8.0	8.0
Portland	38	44	12.2	14.2
Tucson	10	11	16.7	18.1

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

<sup>2</sup> Adjusted to compensate for miscoding of Indian race on death certificates.

In 1994-96, the age-adjusted prostate cancer death rate for males in the IHS service area population was 12.9. This is the rate adjusted for miscoding of Indian race on death certificates. The Indian rate is 16 percent less than the U.S. All Races rate of 15.4 in 1995. Three IHS Areas (Aberdeen, Bemidji, and Billings) have a rate that exceeds the U.S. rate. The highest Area rate (Aberdeen, 30.2) is nearly double the U.S. rate.

Chart 4.35

Age-Adjusted Prostate Cancer Death Rates for Males

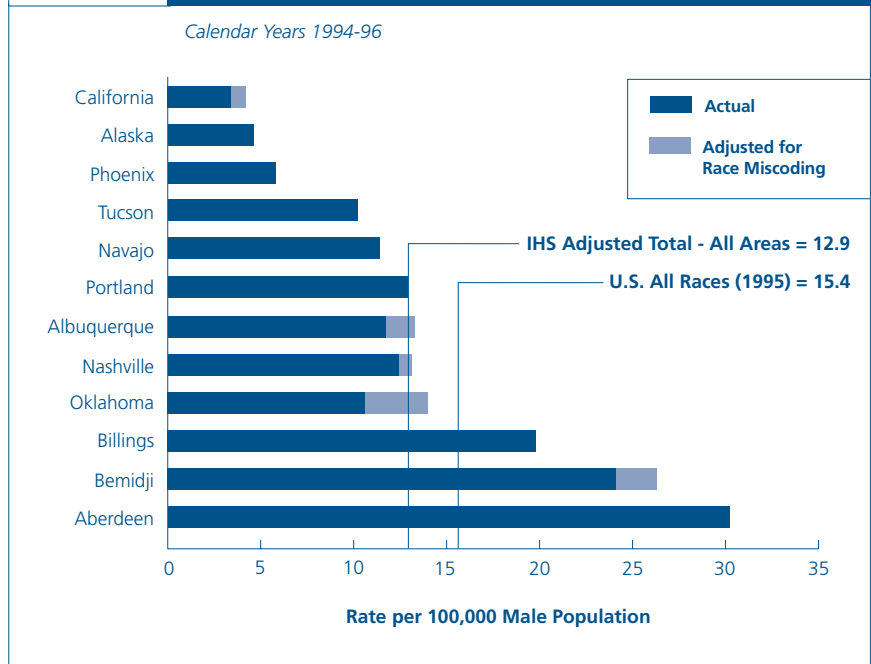


Table 4.35

Age-Adjusted Prostate Cancer Death Rates for Males

	Deaths		Rate <sup>1</sup>	
	Actual	Adj <sup>2</sup>	Actual	Adj <sup>2</sup>
U.S. All Races (1995)	34,497		15.4	
All IHS Areas	184	203	11.7	12.9
Aberdeen	25	25	30.2	30.2
Alaska	5	5	4.6	4.6
Albuquerque	10	11	11.7	13.3
Bemidji	20	22	24.1	26.3
Billings	10	10	19.8	19.8
California	5	6	3.4	4.2
Nashville	10	11	12.4	13.3
Navajo	26	26	11.4	11.4
Oklahoma	47	61	10.6	14.0
Phoenix	7	7	5.8	5.8
Portland	16	16	12.9	12.9
Tucson	3	3	10.2	10.2

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

<sup>2</sup> Adjusted to compensate for miscoding of Indian race on death certificates.

In 1994-96, the age-adjusted human immunodeficiency virus (HIV) infection death rate for the IHS service area population was 6.2. This is the rate adjusted for miscoding of Indian race on death certificates. The Indian rate is 60 percent less than the 1995 U.S. rate of 15.6. Some of the Area rates should be interpreted with caution because of the small number of deaths involved. The highest Area rate (California, 11.0 based on 37 deaths) is 71 percent of the U.S. rate.

Chart 4.36

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

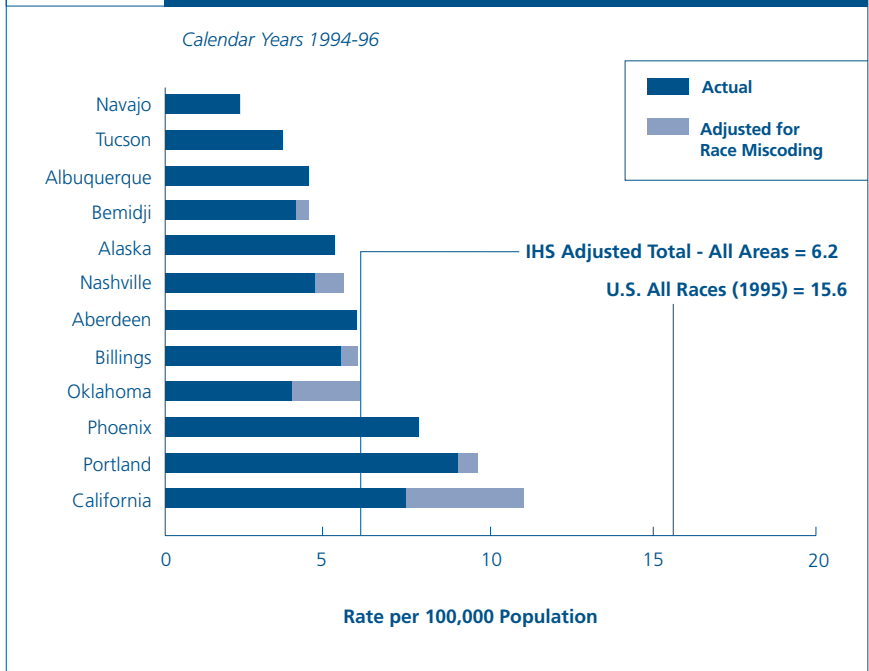


Table 4.36

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

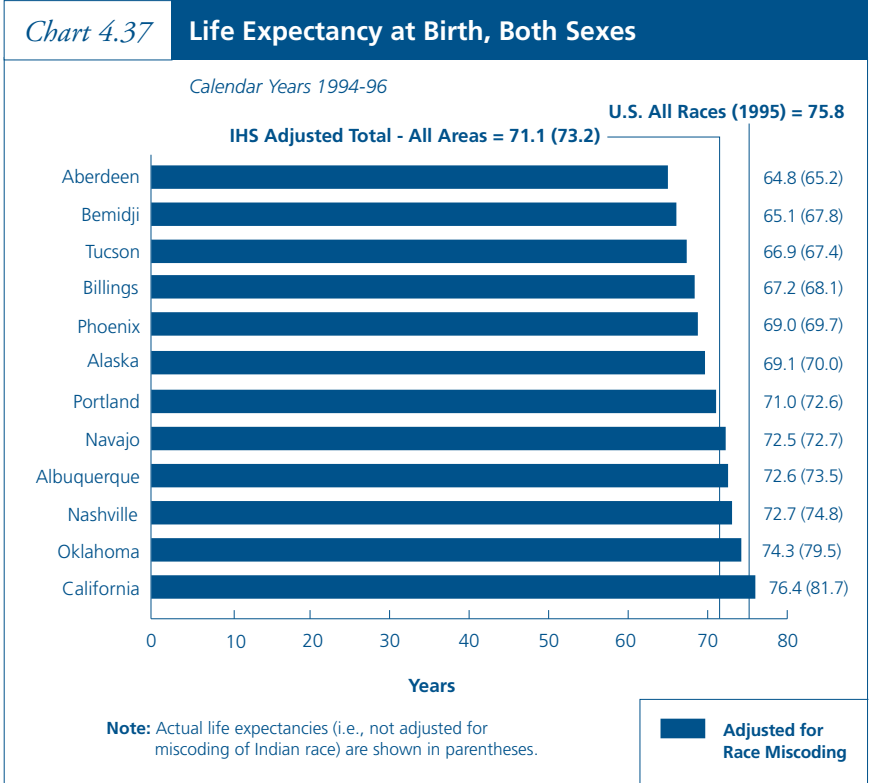
Calendar Years 1994-96

	Deaths		Rate <sup>1</sup>	
	Actual	Adj <sup>2</sup>	Actual	Adj <sup>2</sup>
U.S. All Races (1995)	43,115		15.6	
All IHS Areas	198	234	5.3	6.2
Aberdeen	13	13	5.9	5.9
Alaska	15	15	5.2	5.2
Albuquerque	8	8	4.4	4.4
Bemidji	8	9	4.0	4.4
Billings	7	8	5.4	6.0
California	25	37	7.4	11.0
Nashville	10	12	4.6	5.5
Navajo	12	12	2.3	2.3
Oklahoma	31	48	3.9	6.0
Phoenix	29	29	7.8	7.8
Portland	37	40	9.0	9.6
Tucson	3	3	3.6	3.6

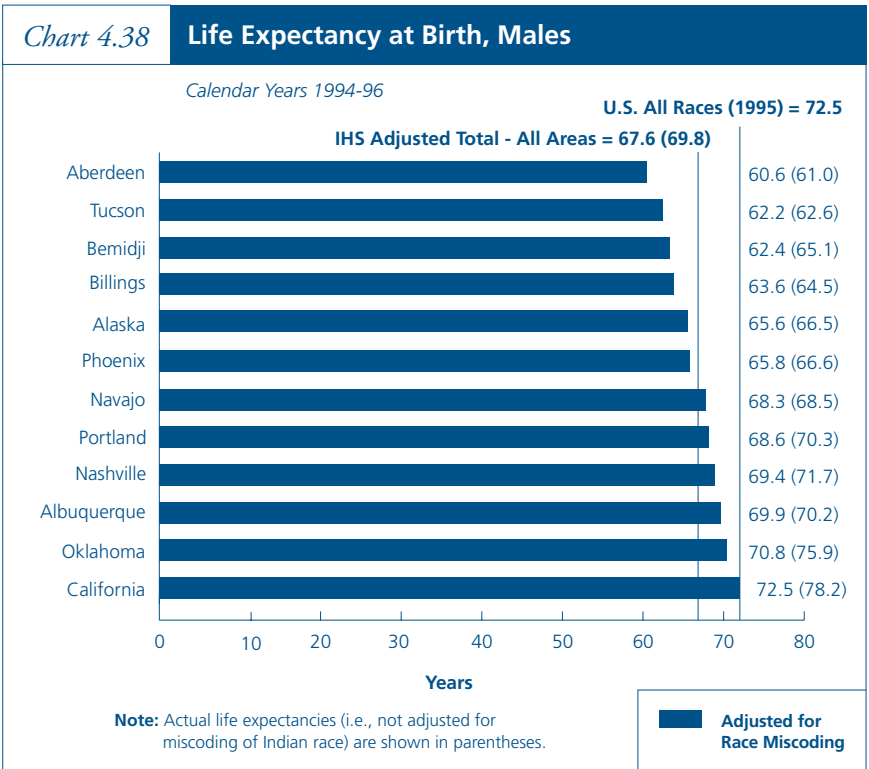
<sup>1</sup> Age-adjusted rate per 100,000 population. Rates based on a small number of deaths should be interpreted with caution.

<sup>2</sup> Adjusted to compensate for miscoding of Indian race on death certificates.

In 1994-96, 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 4.7 years less than the 1995 figure of 75.8 for the U.S. All Races population. One IHS Area has a life expectancy greater than the U.S. figure (California, 76.4). At the other extreme, the Aberdeen Area life expectancy (64.8) is 11.0 years less than that for the U.S.



In 1994-96, the life expectancy at birth for males in the IHS service area population was 67.6 years. This is the life expectancy adjusted for miscoding of Indian race on death certificates. This is 4.9 years less than the 1995 figure of 72.5 years for the U.S. All Races male population. Indian males in the California Area have a life expectancy (72.5) equal to that for U.S. males. On the other hand, Indian males in the Aberdeen Area (60.6) can expect to live from birth 11.9 years less than U.S. males.



In 1994-96, the life expectancy at birth for females in the IHS service area population was 74.7 years. This is the life expectancy adjusted for miscoding of Indian race on death certificates. This is 4.2 years less than the 1995 figure of 78.9 years for the U.S. All Races female population. Indian females in the California Area (80.2) can expect to live from birth 1.3 years longer than their counterparts in the U.S. All Races population. In contrast, females in the Bemidji Area have a life expectancy (67.8) that is 11.1 years less than that of U.S. females.

Chart 4.39

**Life Expectancy at Birth, Females**

