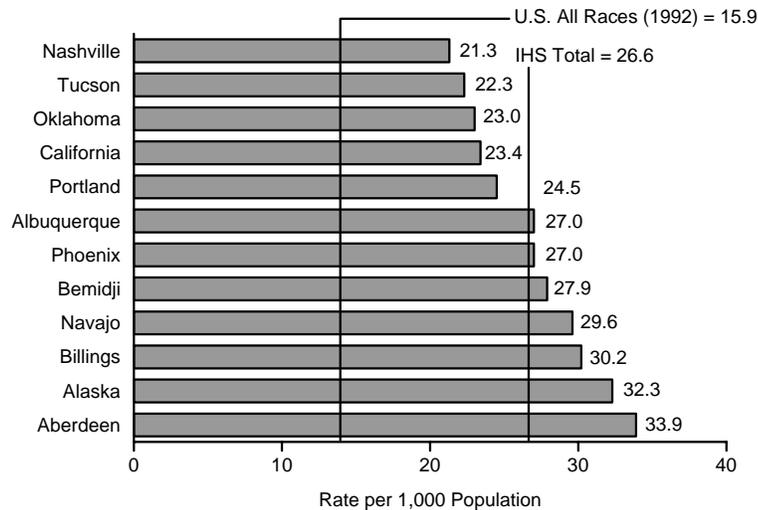


# PART III—Natality and Infant/Maternal Mortality Statistics

## Chart 3.1 Birth Rates

Calendar Years 1991–1993

The birth rate for the IHS service area population in 1991-1993 was 1.7 times the rate for the U.S. All Races population in 1992, i.e., 26.6 compared to 15.9. Even the IHS Area with the lowest birth rate (Nashville, 21.3) had a rate considerably greater than the U.S. rate (34 percent greater).



## Table 3.1 Number and Rate of Live Births

Calendar Years 1991–1993

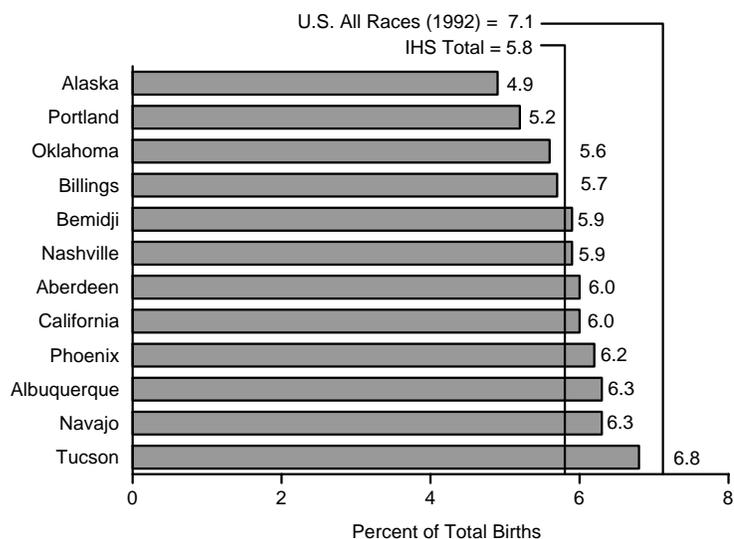
	Number	Rate <sup>1</sup>
<b>U.S. All Races (1992)</b>	<b>4,065,014</b>	<b>15.9</b>
<b>All IHS Areas</b>	<b>101,406</b>	<b>26.6</b>
Aberdeen	8,465	33.9
Alaska	8,807	32.3
Albuquerque	5,707	27.0
Bemidji	5,355	27.9
Billings	4,467	30.2
California	7,700	23.4
Nashville	3,528	21.3
Navajo	16,887	29.6
Oklahoma	18,809	23.0
Phoenix	10,197	27.0
Portland	9,783	24.5
Tucson	1,701	22.3

<sup>1</sup> Rate per 1,000 population.

## Chart 3.2 Low Weight Births

Calendar Years 1991–1993

For 1991-1993, 5.8 percent of all Indian births in the IHS service area were low weight (less than 2,500 grams) births. This was better than the figure for the U.S. All Races population, i.e., 7.1 percent in 1992. All IHS Areas had relatively fewer low weight births than occurred in the general population.



## Table 3.2 Births of Low Weight as a Percent of Total Live Births

Calendar Years 1991–1993

	Total live births <sup>1</sup>	Number low weight <sup>2</sup>	Percent low weight <sup>3</sup>
<b>U.S. All Races (1992)</b>	<b>4,065,014</b>	<b>287,493</b>	<b>7.1</b>
<b>All IHS Areas</b>	<b>101,406</b>	<b>5,911</b>	<b>5.8</b>
Aberdeen	8,465	508	6.0
Alaska	8,807	430	4.9
Albuquerque	5,707	357	6.3
Bemidji	5,355	315	5.9
Billings	4,467	255	5.7
California	7,700	464	6.0
Nashville	3,528	209	5.9
Navajo	16,887	1,056	6.3
Oklahoma	18,809	1,058	5.6
Phoenix	10,197	631	6.2
Portland	9,783	513	5.2
Tucson	1,701	115	6.8

<sup>1</sup> Includes 4,483 U.S. All Races live births and 180 American Indian/Alaska Native live births with birth weight not stated.

<sup>2</sup> Births of less than 2,500 grams.

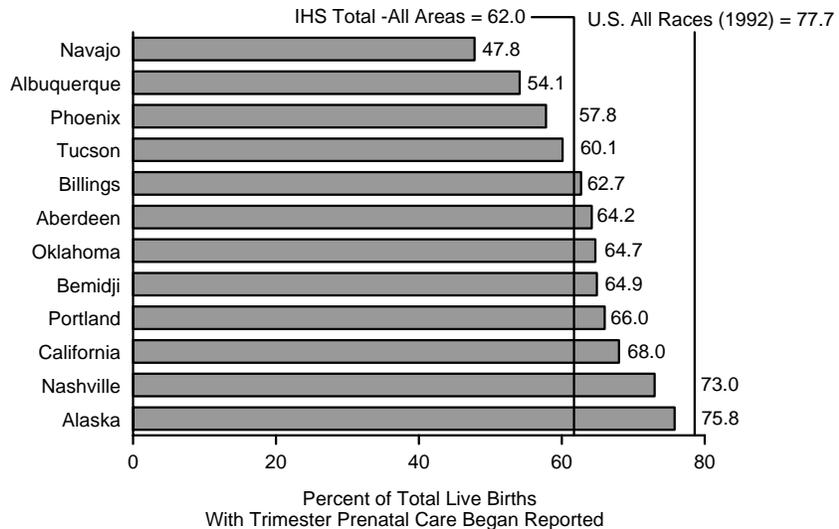
<sup>3</sup> Percent low weight based on live births with a birth weight reported.

### Chart 3.3

## Live Births With Prenatal Care Beginning in First Trimester

Calendar Years 1991–1993

In 1991-1993, prenatal care began in the first trimester for 62.0 percent of Indian live births for the IHS service area population. This compared to 77.7 percent for the U.S. All Races population in 1992. The percentages varied widely among IHS Areas, ranging from 47.8 for Navajo to 75.8 for Alaska.



### Table 3.3

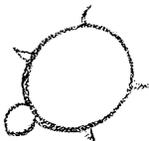
## Live Births With Prenatal Care Beginning in First Trimester

Calendar Years 1991–1993

	Total live births <sup>1</sup>	Live births with trimester prenatal care began reported	Live births with prenatal care beginning in the first trimester <sup>2</sup>	
			Number	Percent
<b>U.S. All Races (1992)</b>	<b>4,065,014</b>	<b>3,976,509</b>	<b>3,091,543</b>	<b>77.7</b>
<b>All IHS Areas</b>	<b>101,406</b>	<b>99,064</b>	<b>61,453</b>	<b>62.0</b>
Aberdeen	8,465	8,374	5,376	64.2
Alaska	8,807	8,679	6,576	75.8
Albuquerque	5,707	5,492	2,973	54.1
Bemidji	5,355	5,244	3,401	64.9
Billings	4,467	4,438	2,781	62.7
California	7,700	7,630	5,192	68.0
Nashville	3,528	3,469	2,533	73.0
Navajo	16,887	16,626	7,947	47.8
Oklahoma	18,809	18,114	11,728	64.7
Phoenix	10,197	9,874	5,705	57.8
Portland	9,783	9,433	6,225	66.0
Tucson	1,701	1,691	1,016	60.1

<sup>1</sup> Includes 88,505 U.S. All Races live births and 2,342 American Indian/Alaska Native live births for which trimester of pregnancy that prenatal care began was not reported on the State birth certificate.

<sup>2</sup> Percent based on live births with this information reported.

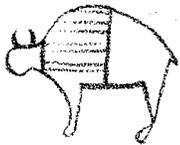
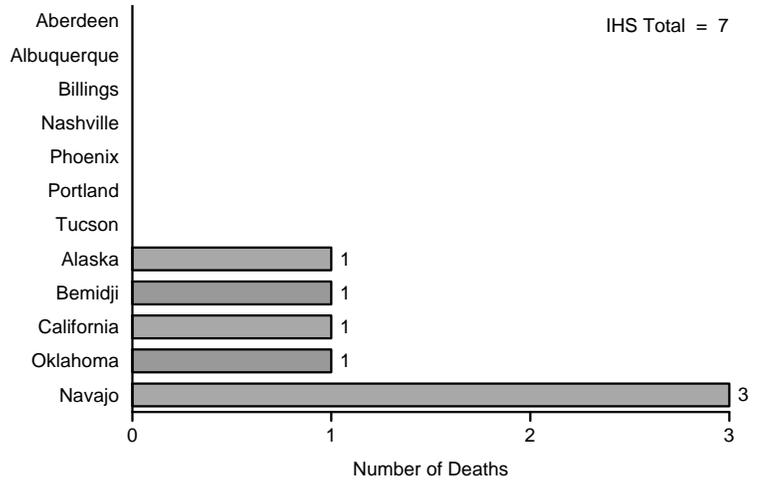


### Chart 3.4

# Maternal Deaths

Calendar Years 1991–1993

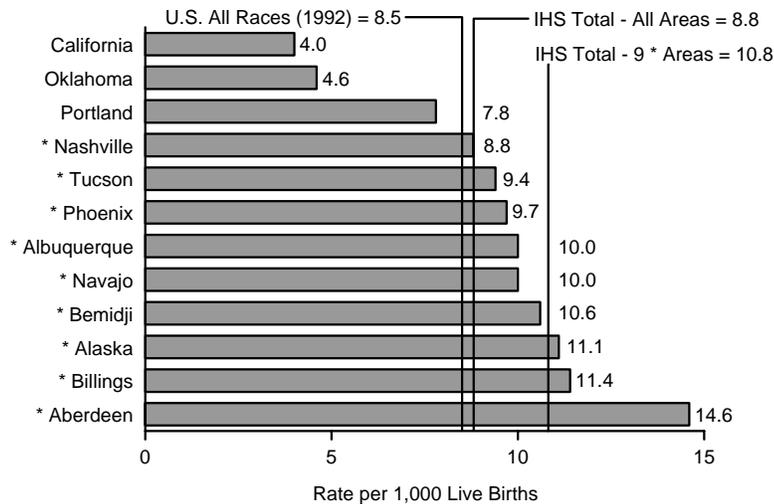
There were 7 maternal deaths in the IHS service area population in 1991-1993. Only the Navajo Area (3 deaths) had more than 1 maternal death.



## Chart 3.5 Infant Mortality Rates

Calendar Years 1991–1993

The infant mortality rate for the IHS service area population in 1991-1993 was 8.8. When the 3 IHS Areas with apparent problems in underreporting of Indian race on death certificates are excluded, the rate is 10.8. This is 27 percent higher than the U.S. All Races rate of 8.5 for 1992. The Aberdeen and Billings Areas had the highest rates, 14.6 and 11.4, respectively.



## Table 3.5 Infant Mortality Rates (Under 1 Year)

Calendar Years 1991–1993

	Live births	Infant deaths	Rate <sup>1</sup>
<b>U.S. All Races (1992)</b>	<b>4,065,014</b>	<b>34,628</b>	<b>8.5</b>
<b>All IHS Areas</b>	<b>101,406</b>	<b>895</b>	<b>8.8</b>
9* Areas <sup>2</sup>	65,114	702	10.8
Aberdeen*	8,465	124	14.6
Alaska*	8,807	98	11.1
Albuquerque*	5,707	57	10.0
Bemidji*	5,355	57	10.6
Billings*	4,467	51	11.4
California	7,700	31	4.0
Nashville*	3,528	31	8.8
Navajo*	16,887	169	10.0
Oklahoma	18,809	86	4.6
Phoenix*	10,197	99	9.7
Portland	9,783	76	7.8
Tucson*	1,701	16	9.4

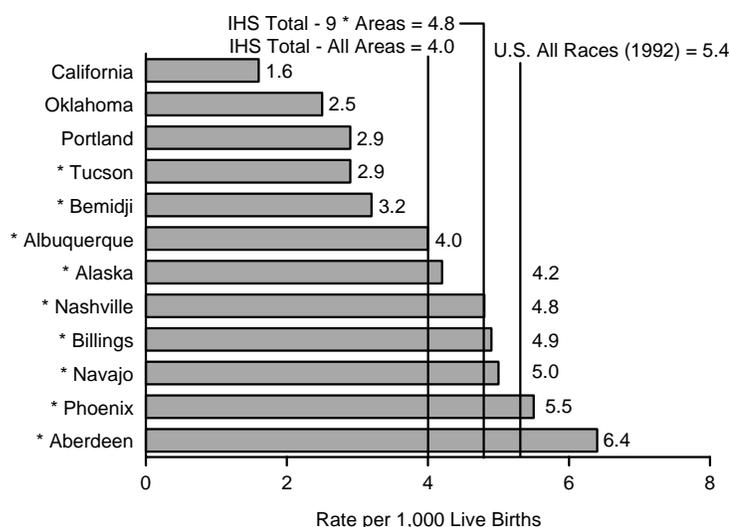
<sup>1</sup> Rate per 1,000 live births.

<sup>2</sup> The 3 IHS Areas that do not have an asterisk (California, Oklahoma, and Portland) appear to have a problem with underreporting of Indian race on death certificates. Therefore a separate IHS rate was calculated excluding these 3 Areas.

## Chart 3.6 Neonatal Mortality Rates

Calendar Years 1991–1993

The neonatal mortality rate for the IHS service area population in 1991-1993 was 4.0. When the 3 IHS Areas with apparent problems in underreporting of Indian race on death certificates are excluded, the rate is 4.8. This still less than the U.S. All Races rate of 5.4 for 1992. The Aberdeen Area had the highest rate at 6.4.



## Table 3.6 Neonatal Mortality Rates (Under 28 Days)

Calendar Years 1991–1993



	Live births	Infant deaths	Rate <sup>1</sup>
<b>U.S. All Races (1992)</b>	<b>4,065,014</b>	<b>21,849</b>	<b>5.4</b>
<b>All IHS Areas</b>	<b>101,406</b>	<b>402</b>	<b>4.0</b>
9* Areas <sup>2</sup>	65,114	315	4.8
Aberdeen*	8,465	54	6.4
Alaska*	8,807	37	4.2
Albuquerque*	5,707	23	4.0
Bemidji*	5,355	17	3.2
Billings*	4,467	22	4.9
California	7,700	12	1.6
Nashville*	3,528	17	4.8
Navajo*	16,887	84	5.0
Oklahoma	18,809	47	2.5
Phoenix*	10,197	56	5.5
Portland	9,783	28	2.9
Tucson*	1,701	5	2.9

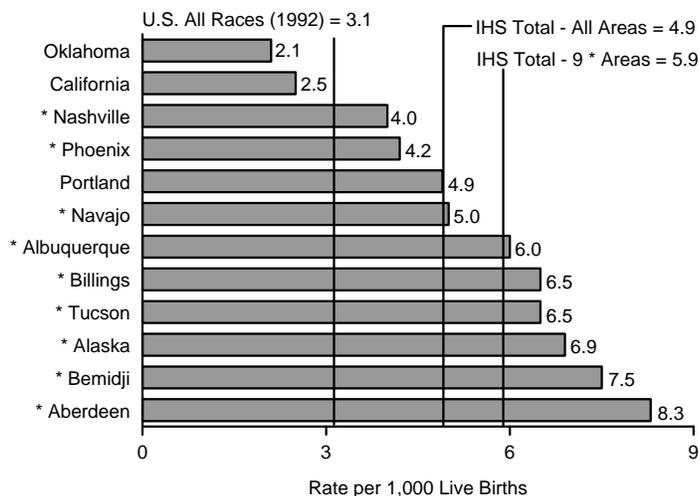
<sup>1</sup> Rate per 1,000 live births.

<sup>2</sup> The 3 IHS Areas that do not have an asterisk (California, Oklahoma, and Portland) appear to have a problem with underreporting of Indian race on death certificates. Therefore a separate IHS rate was calculated excluding these 3 Areas.

## Chart 3.7 Postneonatal Mortality Rates

Calendar Years 1991–1993

The postneonatal mortality rate for the IHS service area population in 1991-1993 was 4.9. When the 3 IHS Areas with apparent problems in underreporting of Indian race on death certificates are excluded, the rate is 5.9. This is 1.9 times the U.S. All Races rate of 3.1 for 1992. The Aberdeen and Bemidji Areas had the highest rates, 8.3 and 7.5, respectively.



## Table 3.7 Postneonatal Mortality Rates (28 Days to Under 1 Year)

Calendar Years 1991–1993

	Live births	Infant deaths	Rate <sup>1</sup>
<b>U.S. All Races (1992)</b>	<b>4,065,014</b>	<b>12,779</b>	<b>3.1</b>
<b>All IHS Areas</b>	<b>101,406</b>	<b>493</b>	<b>4.9</b>
9* Areas <sup>2</sup>	65,114	387	5.9
Aberdeen*	8,465	70	8.3
Alaska*	8,807	61	6.9
Albuquerque*	5,707	34	6.0
Bemidji*	5,355	40	7.5
Billings*	4,467	29	6.5
California	7,700	19	2.5
Nashville*	3,528	14	4.0
Navajo*	16,887	85	5.0
Oklahoma	18,809	39	2.1
Phoenix*	10,197	43	4.2
Portland	9,783	48	4.9
Tucson*	1,701	11	6.5



<sup>1</sup> Rate per 1,000 live births.

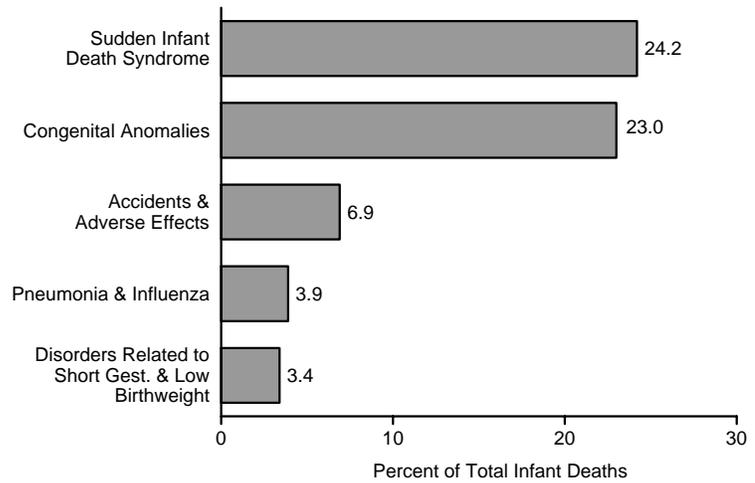
<sup>2</sup> The 3 IHS Areas that do not have an asterisk (California, Oklahoma, and Portland) appear to have a problem with underreporting of Indian race on death certificates. Therefore a separate IHS rate was calculated excluding these 3 Areas.

### Chart 3.8

## Leading Causes of Infant Deaths

All IHS Areas, Calendar Years 1991–1993

In 1991-1993, 24.2 percent of all infant deaths in the IHS service area were caused by sudden infant death syndrome. This was followed by congenital anomalies at 23.0 percent.

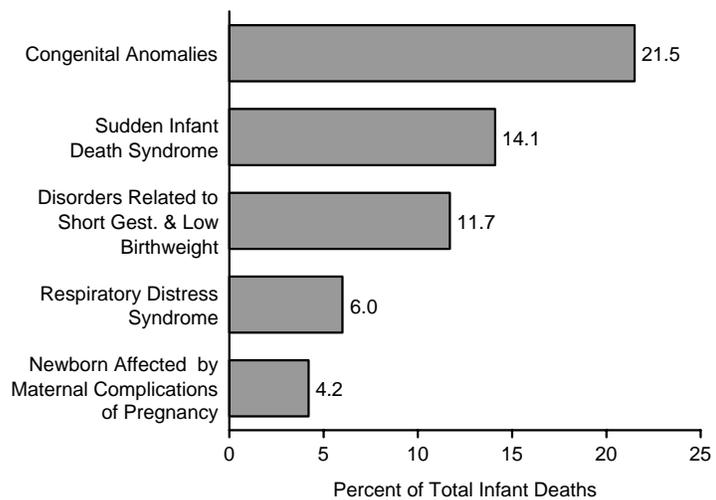


### Chart 3.9

## Leading Causes of Infant Deaths

U.S. All Races, 1992

In 1992, 21.5 percent of all infant deaths in the U.S. were caused by congenital anomalies. This was followed by sudden infant death syndrome at 14.1 percent.

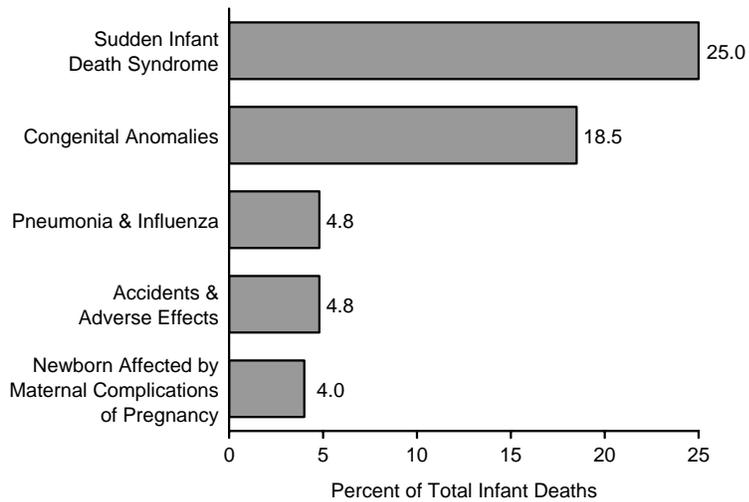


### Chart 3.10

## Leading Causes of Infant Deaths

Aberdeen Area, Calendar Years 1991–1993

In 1991-1993, 25.0 percent of all infant deaths in the Aberdeen Area were caused by sudden infant death syndrome. This was followed by congenital anomalies at 18.5 percent.

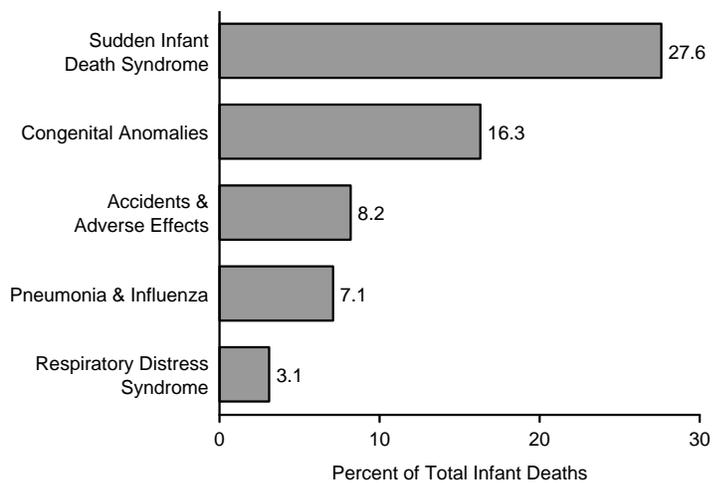


### Chart 3.11

## Leading Causes of Infant Deaths

Alaska Area, Calendar Years 1991–1993

In 1991-1993, 27.6 percent of all infant deaths in the Alaska Area were caused by sudden infant death syndrome. This was followed by congenital anomalies at 16.3 percent.

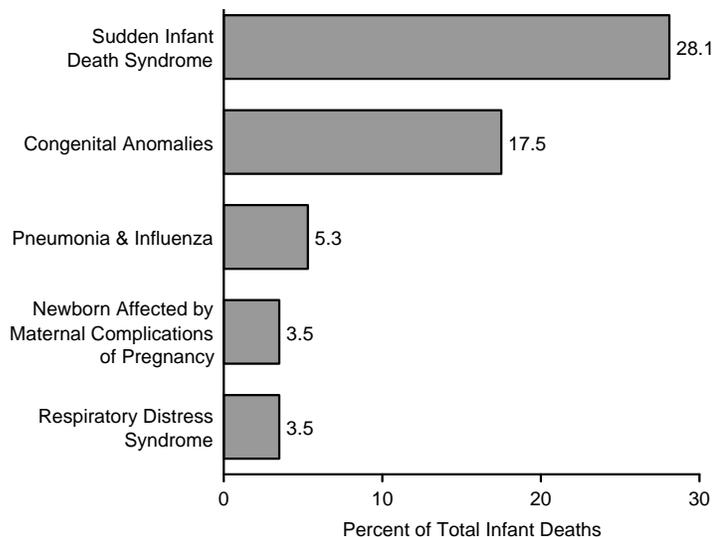


### Chart 3.12

## Leading Causes of Infant Deaths

Albuquerque Area, Calendar Years 1991–1993

In 1991-1993, 28.1 percent of all infant deaths in the Albuquerque Area were caused by sudden infant death syndrome. This was followed by congenital anomalies at 17.5 percent.

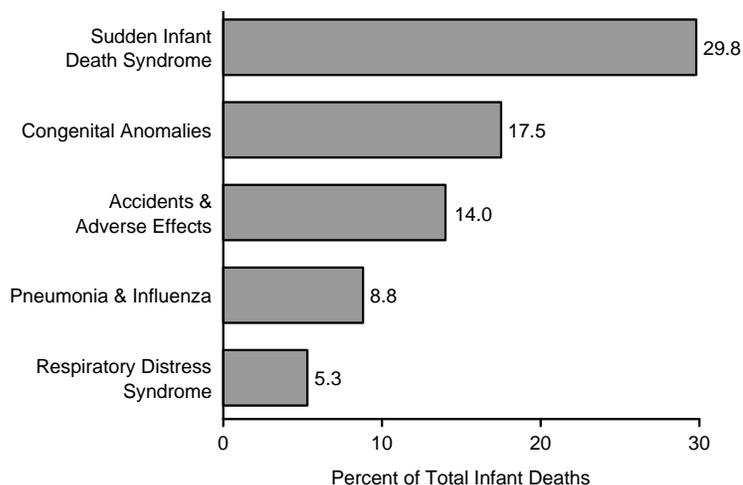


### Chart 3.13

## Leading Causes of Infant Deaths

Bemidji Area, Calendar Years 1991–1993

In 1991-1993, 29.8 percent of all infant deaths in the Bemidji Area were caused by sudden infant death syndrome. This was followed by congenital anomalies at 17.5 percent.

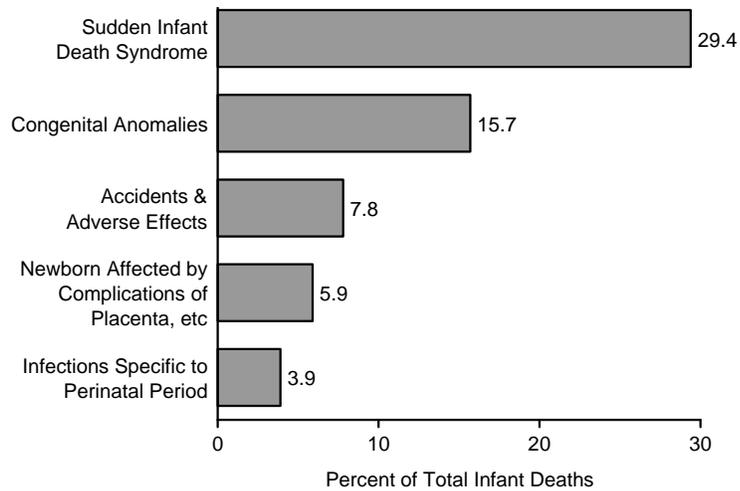


### Chart 3.14

## Leading Causes of Infant Deaths

Billings Area, Calendar Years 1991–1993

In 1991-1993, 29.4 percent of all infant deaths in the Billings Area were caused by sudden infant death syndrome. This was followed by congenital anomalies at 15.7 percent.

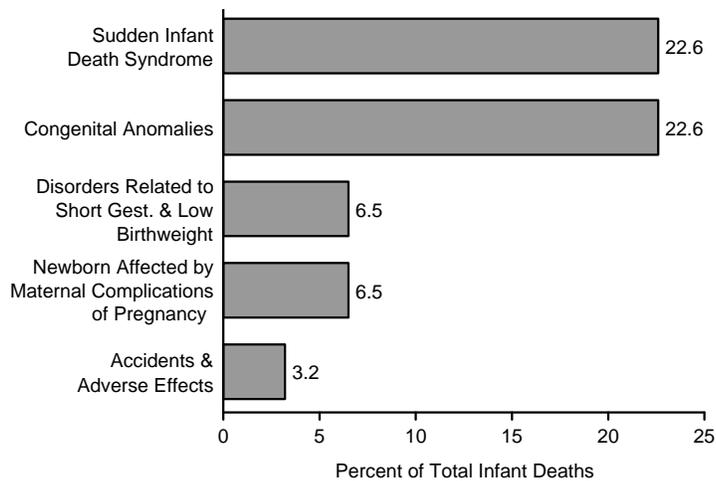


### Chart 3.15

## Leading Causes of Infant Deaths

California Area, Calendar Years 1991–1993

In 1991-1993, 22.6 percent of all infant deaths in the California Area were caused by sudden infant death syndrome. Congenital anomalies was also at this percentage level.

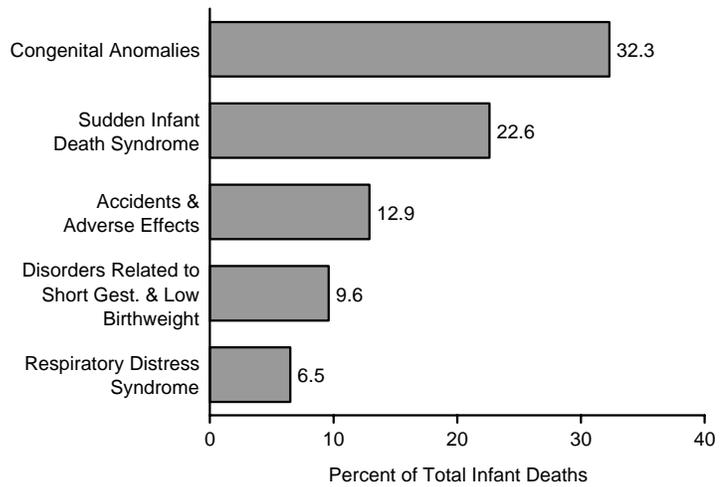


### Chart 3.16

## Leading Causes of Infant Deaths

Nashville Area, Calendar Years 1991–1993

In 1991-1993, 32.3 percent of all infant deaths in the Nashville Area were caused by congenital anomalies. This was followed by sudden infant death syndrome at 22.6 percent.



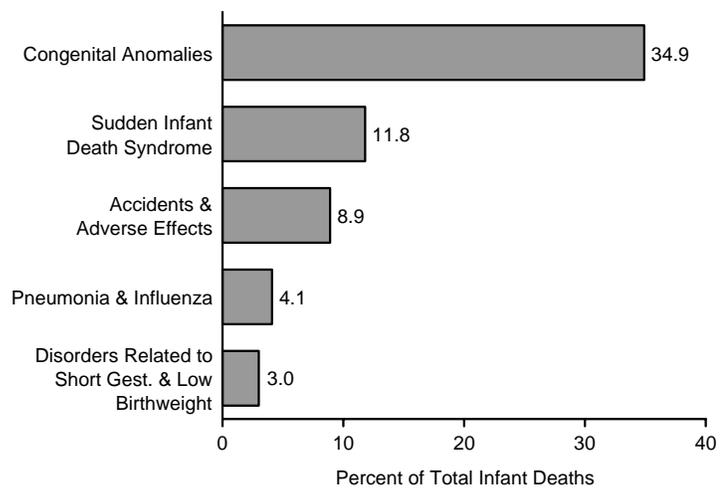

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### Chart 3.17

## Leading Causes of Infant Deaths

Navajo Area, Calendar Years 1991–1993

In 1991-1993, 34.9 percent of all infant deaths in the Navajo Area were caused by congenital anomalies. This was followed by sudden infant death syndrome at 11.8 percent.

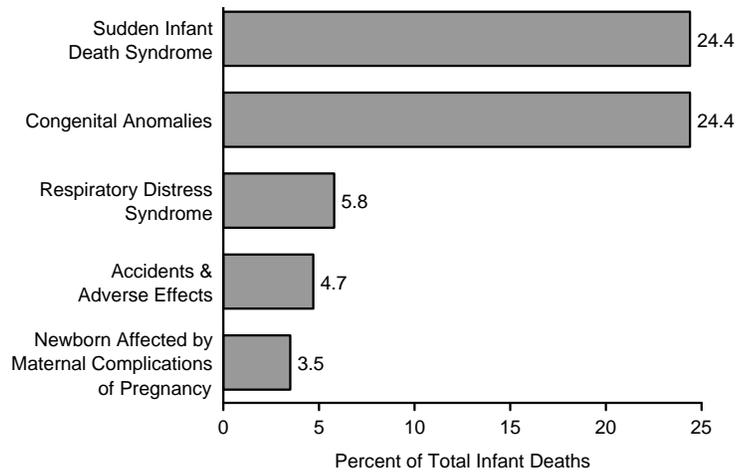


### Chart 3.18

## Leading Causes of Infant Deaths

Oklahoma Area, Calendar Years 1991–1993

In 1991-1993, 24.4 percent of all infant deaths in the Oklahoma Area were caused by sudden infant death syndrome. Congenital anomalies was also at this percentage level.

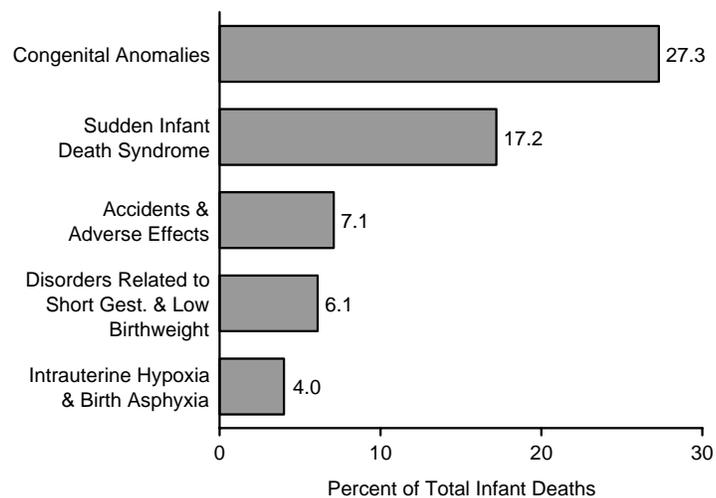


### Chart 3.19

## Leading Causes of Infant Deaths

Phoenix Area, Calendar Years 1991–1993

In 1991-1993, 27.3 percent of all infant deaths in the Phoenix Area were caused by congenital anomalies. This was followed by sudden infant death syndrome at 17.2 percent.

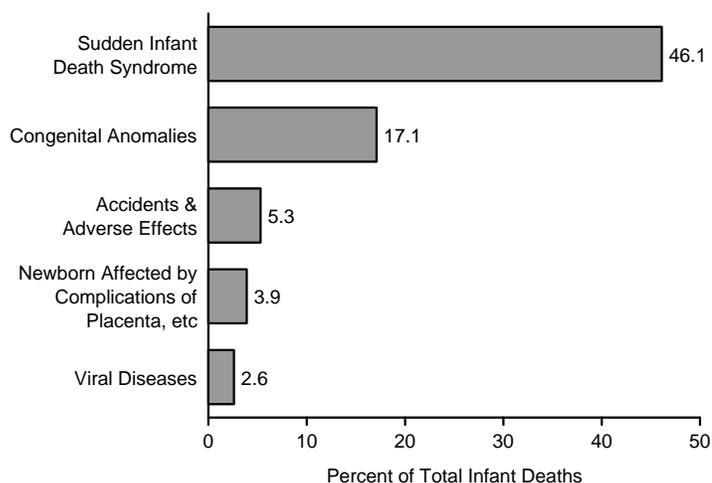


### Chart 3.20

## Leading Causes of Infant Deaths

Portland Area, Calendar Years 1991–1993

In 1991-1993, 46.1 percent of all infant deaths in the Portland Area were caused by sudden infant death syndrome. This was followed by congenital anomalies at 17.1 percent.

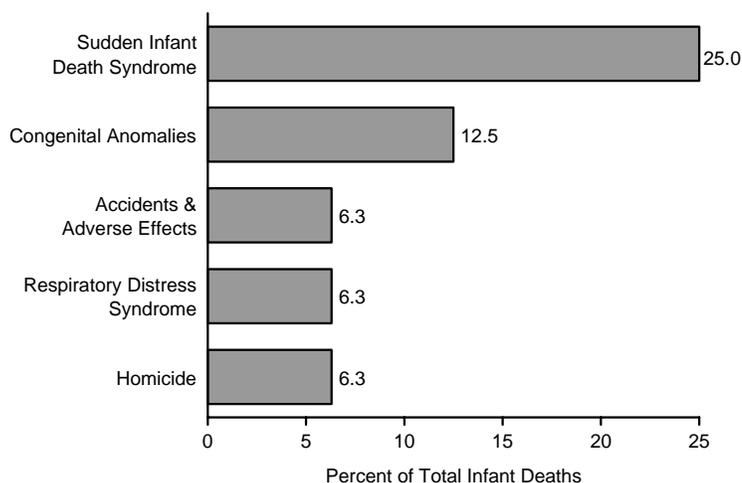


### Chart 3.21

## Leading Causes of Infant Deaths

Tucson Area, Calendar Years 1991–1993

In 1991-1993, 25.0 percent of all infant deaths in the Tucson Area were caused by sudden infant death syndrome. This was followed by congenital anomalies at 12.5 percent.

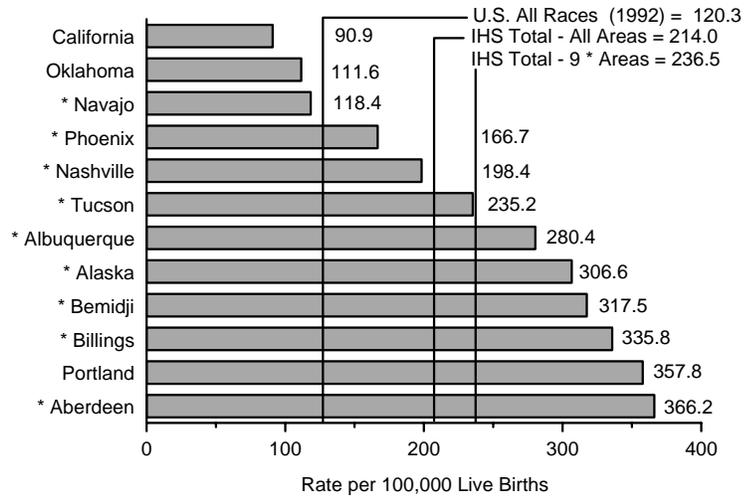


### Chart 3.22

## Sudden Infant Death Syndrome Rates

Calendar Years 1991–1993

In 1991-1993, the mortality rate for sudden infant death syndrome (SIDS) for the IHS service area population was nearly double the rate for the U.S. All Races population in 1992, 214.0 compared to 120.3. When the 3 IHS Areas with apparent problems in underreporting of Indian race on death certificates are excluded, the IHS rate in this instance only increases 11 percent to 236.5 because of the problem with SIDS in the Portland Area. In the Portland Area, 46.1 percent of infant deaths were because of SIDS.



**Table 3.22**  
**Sudden Infant Death Syndrome Rates**  
 Calendar Years 1991–1993

	Live births	Infant deaths	Rate <sup>1</sup>
<b>U.S. All Races (1992)</b>	<b>4,065,014</b>	<b>4,891</b>	<b>120.3</b>
<b>All IHS Areas</b>	<b>101,406</b>	<b>217</b>	<b>214.0</b>
9* Areas <sup>2</sup>	65,114	154	236.5
Aberdeen*	8,465	31	366.2
Alaska*	8,807	27	306.6
Albuquerque*	5,707	16	280.4
Bemidji*	5,355	17	317.5
Billings*	4,467	15	335.8
California	7,700	7	90.9
Nashville*	3,528	7	198.4
Navajo*	16,887	20	118.4
Oklahoma	18,809	21	111.6
Phoenix*	10,197	17	166.7
Portland	9,783	35	357.8
Tucson*	1,701	4	235.2



<sup>1</sup> Rate per 100,000 live births.

<sup>2</sup> The 3 IHS Areas that do not have an asterisk (California, Oklahoma, and Portland) appear to have a problem with underreporting of Indian race on death certificates. Therefore a separate IHS rate was calculated excluding these 3 Areas.

