## Part III—Natality and Infant/Maternal Mortality Statistics

#### Chart 3.1 **Birth Rates**

Calendar Years 1989-1991

The birth rate for the IHS service area population in 1989-1991 was 1.7 times the rate for the U.S. All Races population in 1990, i.e., 28.1 compared to 16.7. Even the IHS Area with the lowest birth rate (Nashville, 21.9) had a rate considerably greater than the U.S. rate (31 percent greater).

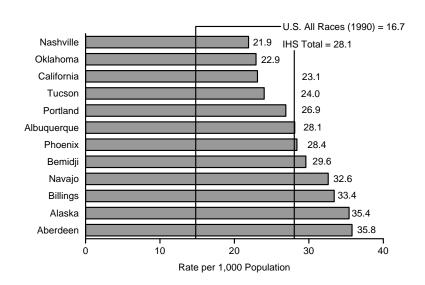


Table 3.1 **Number and Rate of Live Births** 

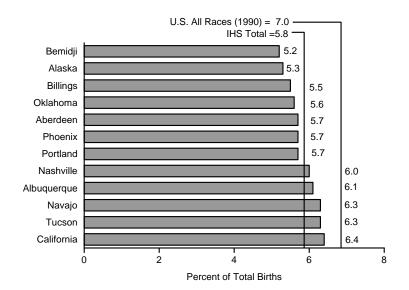
	Number	Rate 1
U.S. All Races (1990)	4,158,212	16.7
All IHS Areas	101,780	28.1
Aberdeen	8,222	35.8
Alaska	9,176	35.4
Albuquerque	5,659	28.1
Bemidji	5,433	29.6
Billings	4,716	33.4
California	7,231	23.1
Nashville	3,313	21.9
Navajo	17,788	32.6
Oklahoma	17,956	22.9
Phoenix	10,241	28.4
Portland	10,278	26.9
Tucson	1,767	24.0

<sup>&</sup>lt;sup>1</sup> Rate per 1,000 population.

### Chart 3.2 **Low Weight Births**

Calendar Years 1989-1991

For 1989-1991, 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., 7.0 percent in 1990. 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

	Total live births <sup>1</sup>	Number low weight <sup>2</sup>	Percent low weight <sup>3</sup>
U.S. All Races (1990)	4,158,212	289,418	7.0
All IHS Areas	101,780	5,897	5.8
Aberdeen	8,222	467	5.7
Alaska	9,176	487	5.3
Albuquerque	5,659	347	6.1
Bemidji	5,433	282	5.2
Billings	4,716	261	5.5
California	7,231	464	6.4
Nashville	3,313	198	6.0
Navajo	17,788	1,116	6.3
Oklahoma	17,956	1,002	5.6
Phoenix	10,241	579	5.7
Portland	10,278	583	5.7
Tucson	1,767	111	6.3

<sup>&</sup>lt;sup>1</sup> Includes 5,304 U.S. All Races live births and 202 American Indian/Alaska Native live births with birth weight not stated.

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

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

Live births with prenatal care

# **Chart 3.3 Live Births With Prenatal Care Beginning in First Trimester**

Calendar Years 1989-1991

In 1989-1991, prenatal care began in the first trimester for 58.6 percent of Indian live births for the IHS service area population. This compared to 75.8 percent for the U.S. All Races population in 1990. The percentages varied widely among IHS Areas, ranging from 47.2 for Navajo to 73.1 for Alaska.

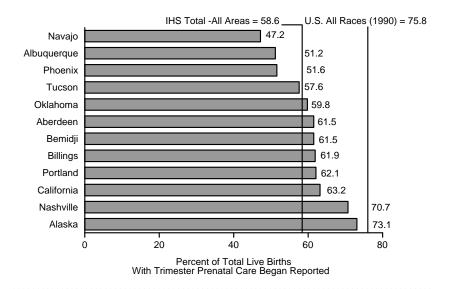


Table 3.3 Live Births With Prenatal Care Beginning in First Trimester

	Total live	Live births with trimester prenatal care began reported	beginning in the first trimester	
	births 1		Number	Percent
U.S. All Races (1990)	4,158,212	4,068,409	3,084,950	75.8
All IHS Areas	101,780	99,226	58,166	58.6
Aberdeen	8,222	8,122	4,992	61.5
Alaska	9,176	9,008	6,581	73.1
Albuquerque	5,659	5,257	2,692	51.2
Bemidji	5,433	5,285	3,249	61.5
Billings	4,716	4,685	2,898	61.9
California	7,231	7,179	4,537	63.2
Nashville	3,313	3,251	2,299	70.7
Navajo	17,788	17,494	8,257	47.2
Oklahoma	17,956	17,407	10,407	59.8
Phoenix	10,241	9,926	5,118	51.6
Portland	10,278	9,859	6,126	62.1
Tucson	1,767	1,753	1,010	57.6

<sup>&</sup>lt;sup>1</sup> Includes 89,803 U.S. All Races live births and 2,554 American Indian/Alaska Native live births for which trimester of pregnancy that prenatal care began was not reported on the State birth certificate.

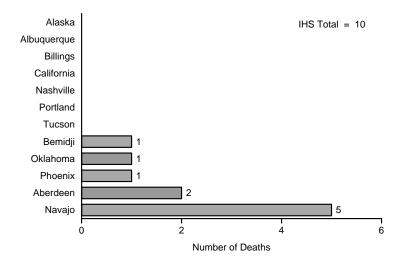


<sup>&</sup>lt;sup>2</sup> Percent based on live births with this information reported.

#### Chart 3.4 **Maternal Deaths**

Calendar Years 1989-1991

There were 10 maternal deaths in the IHS service area population in 1989-1991. Only the Navajo Area (5 deaths) and the Aberdeen Area (2 deaths) had more than 1 maternal death.

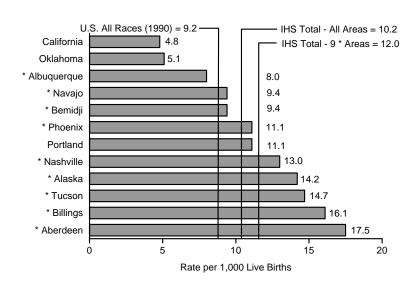




### **Chart 3.5 Infant Mortality Rates**

Calendar Years 1989-1991

The infant mortality rate for the IHS service area population in 1989-1991 was 10.2. When the 3 IHS Areas with apparent problems in underreporting of Indian race on death certificates are excluded, the rate is 12.0. This is 30 percent higher than the U.S. All Races rate of 9.2 for 1990. The Aberdeen and Billings Areas had the highest rates, 17.5 and 16.1, respectively.





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

	Live births	Infant deaths	Rate 1
U.S. All Races (1990)	4,158,212	38,351	9.2
All IHS Areas	101,780	1,038	10.2
9* Areas <sup>2</sup>	66,315	797	12.0
Aberdeen*	8,222	144	17.5
Alaska*	9,176	130	14.2
Albuquerque*	5,659	45	8.0
Bemidji*	5,433	51	9.4
Billings*	4,716	76	16.1
California	7,231	35	4.8
Nashville*	3,313	43	13.0
Navajo*	17,788	168	9.4
Oklahoma	17,956	92	5.1
Phoenix*	10,241	114	11.1
Portland	10,278	114	11.1
Tucson*	1,767	26	14.7

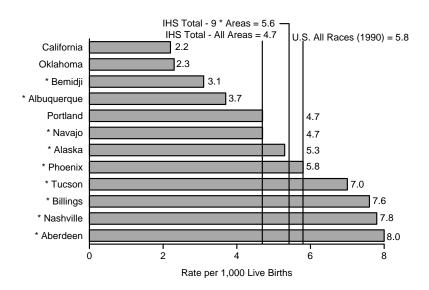
<sup>&</sup>lt;sup>1</sup> Rate per 1,000 live births.

<sup>&</sup>lt;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 1989-1991

The neonatal mortality rate for the IHS service area population in 1989-1991 was 4.7. When the 3 IHS Areas with apparent problems in underreporting of Indian race on death certificates are excluded, the rate is 5.6. This is still less than the U.S. All Races rate of 5.8 for 1990. The Aberdeen Area had the highest rate at 8.0.





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

	Live births	Infant deaths	Rate 1
U.S. All Races (1990)	4,158,212	24,309	5.8
All IHS Areas	101,780	475	4.7
9* Areas <sup>2</sup>	66,315	369	5.6
Aberdeen*	8,222	66	8.0
Alaska*	9,176	49	5.3
Albuquerque*	5,659	21	3.7
Bemidji*	5,433	17	3.1
Billings*	4,716	36	7.6
California	7,231	16	2.2
Nashville*	3,313	26	7.8
Navajo*	17,788	83	4.7
Oklahoma	17,956	42	2.3
Phoenix*	10,241	59	5.8
Portland	10,278	48	4.7
Tucson*	1,767	12	7.0

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

<sup>&</sup>lt;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.

#### **Postneonatal Mortality Rates**

Calendar Years 1989-1991

The postneonatal mortality rate for the IHS service area population in 1989-1991 was 5.5. When the 3 IHS Areas with apparent problems in underreporting of Indian race on death certificates are excluded, the rate is 6.5. This is 1.9 times the U.S. All Races rate of 3.4 for 1990. The Aberdeen and Alaska Areas had the highest rates, 9.5 and 8.8, respectively.

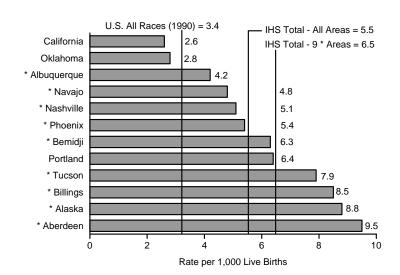


Table 3.7 **Postneonatal Mortality Rates**(28 Days to Under 1 Year)

	Live births	Infant deaths	Rate 1
U.S. All Races (1990)	4,158,212	14,042	3.4
All IHS Areas	101,780	563	5.5
9* Areas <sup>2</sup>	66,315	428	6.5
Aberdeen*	8,222	78	9.5
Alaska*	9,176	81	8.8
Albuquerque*	5,659	24	4.2
Bemidji*	5,433	34	6.3
Billings*	4,716	40	8.5
California	7,231	19	2.6
Nashville*	3,313	17	5.1
Navajo*	17,788	85	4.8
Oklahoma	17,956	50	2.8
Phoenix*	10,241	55	5.4
Portland	10,278	66	6.4
Tucson*	1,767	14	7.9

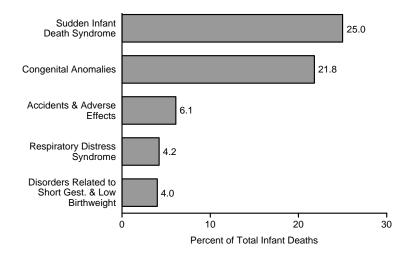
<sup>&</sup>lt;sup>1</sup> Rate per 1,000 live births.

<sup>&</sup>lt;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 1989-1991

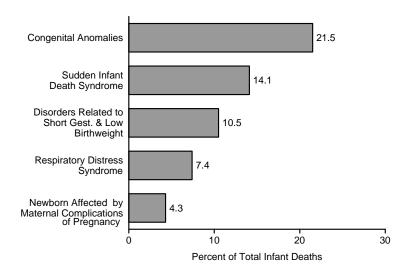
In 1989-1991, 25.0 percent of all infant deaths in the IHS service area were caused by sudden infant death syndrome. This was followed by congenital anomalies at 21.8 percent.



## **Chart 3.9 Leading Causes of Infant Deaths**

U.S. All Races, 1990

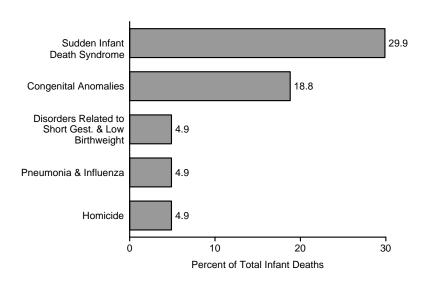
In 1990, 21.5 percent of all infant deaths in the U.S. were caused by congenital anomalies. This was followed by sudden infant death syndrome at 14.1 percent.



### **Chart 3.10 Leading Causes of Infant Deaths**

Aberdeen Area, Calendar Years 1989-1991

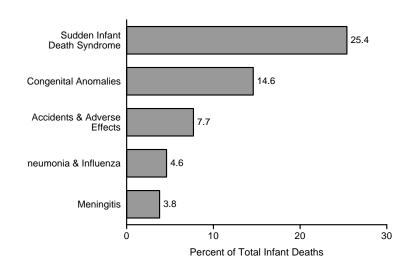
In 1989-1991, 29.9 percent of all infant deaths in the Aberdeen Area were caused by sudden infant death syndrome. This was followed by congenital anomalies at 18.8 percent.



### **Chart 3.11 Leading Causes of Infant Deaths**

Alaska Area, Calendar Years 1989-1991

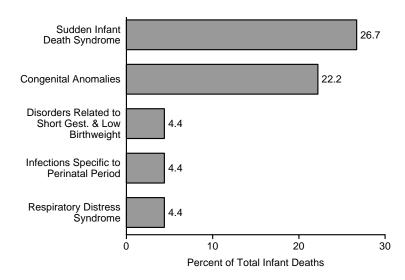
In 1989-1991, 25.4 percent of all infant deaths in the Alaska Area were caused by sudden infant death syndrome. This was followed by congenital anomalies at 14.6 percent.



#### **Chart 3.12 Leading Causes of Infant Deaths**

Albuquerque Area, Calendar Years 1989-1991

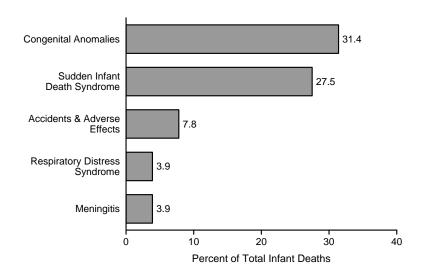
In 1989-1991, 26.7 percent of all infant deaths in the Albuquerque Area were caused by sudden infant death syndrome. This was followed by congenital anomalies at 22.2 percent.



### **Chart 3.13 Leading Causes of Infant Deaths**

Bemidji Area, Calendar Years 1989-1991

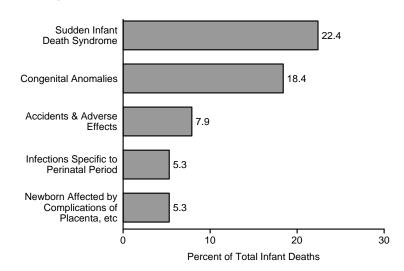
In 1989-1991, 31.4 percent of all infant deaths in the Bemidji Area were caused by congenital anomalies. This was followed by sudden infant death syndrome at 27.5 percent.



### **Chart 3.14 Leading Causes of Infant Deaths**

Billings Area, Calendar Years 1989-1991

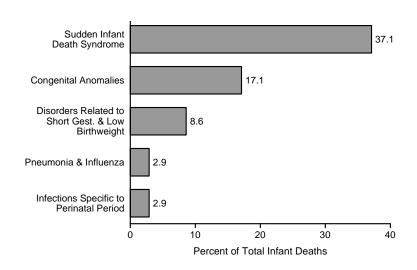
In 1989-1991, 22.4 percent of all infant deaths in the Billings Area were caused by sudden infant death syndrome. This was followed by congenital anomalies at 18.4 percent.



### **Chart 3.15 Leading Causes of Infant Deaths**

California Area, Calendar Years 1989-1991

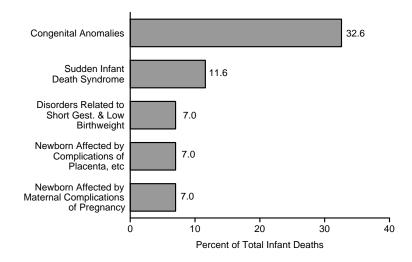
In 1989-1991, 37.1 percent of all infant deaths in the California Area were caused by sudden infant death syndrome. This was followed by congenital anomalies at 17.1 percent.



### **Chart 3.16 Leading Causes of Infant Deaths**

Nashville Area, Calendar Years 1989-1991

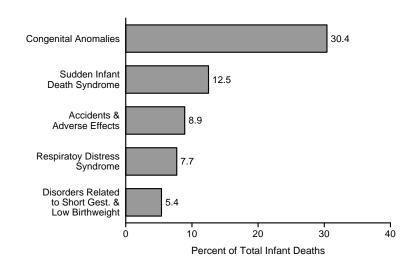
In 1989-1991, 32.6 percent of all infant deaths in the Nashville Area were caused by congenital anomalies. This was followed by sudden infant death syndrome at 11.6 percent.



### **Chart 3.17 Leading Causes of Infant Deaths**

Navajo Area, Calendar Years 1989-1991

In 1989-1991, 30.4 percent of all infant deaths in the Navajo Area were caused by congenital anomalies. This was followed by sudden infant death syndrome at 12.5 percent.

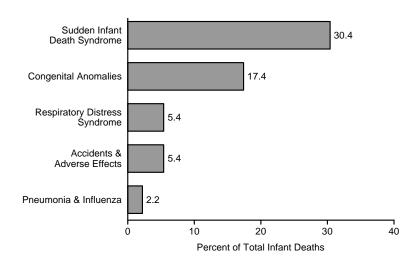




### **Chart 3.18 Leading Causes of Infant Deaths**

Oklahoma Area, Calendar Years 1989-1991

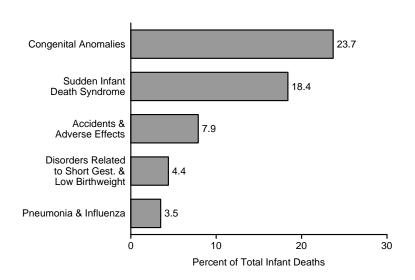
In 1989-1991, 30.4 percent of all infant deaths in the Oklahoma Area were caused by sudden infant death syndrome. This was followed by congenital anomalies at 17.4 percent.



### **Chart 3.19 Leading Causes of Infant Deaths**

Phoenix Area, Calendar Years 1989-1991

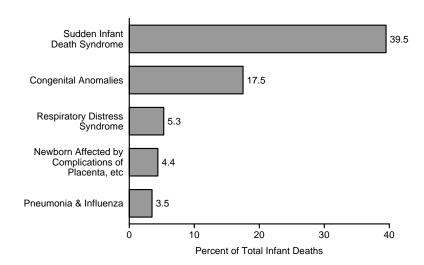
In 1989-1991, 23.7 percent of all infant deaths in the Phoenix Area were caused by congenital anomalies. This was followed by sudden infant death syndrome at 18.4 percent.



### **Chart 3.20 Leading Causes of Infant Deaths**

Portland Area, Calendar Years 1989-1991

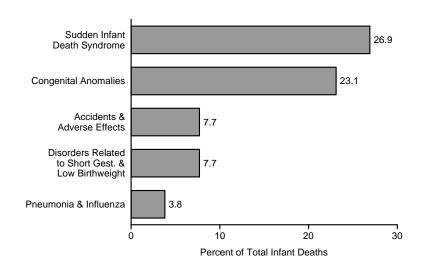
In 1989-1991, 39.5 percent of all infant deaths in the Portland Area were caused by sudden infant death syndrome. This was followed by congenital anomalies at 17.5 percent.



### **Chart 3.21 Leading Causes of Infant Deaths**

Tucson Area, Calendar Years 1989-1991

In 1989-1991, 26.9 percent of all infant deaths in the Tucson Area were caused by sudden infant death syndrome. This was followed by congenital anomalies at 23.1 percent.



### **Sudden Infant Death Syndrome Rates**

Calendar Years 1989–1991

**T**n 1989-1991, the mortality Larate for sudden infant death syndrome (SIDS) for the IHS service area population was nearly 2 times the rate for the U.S. All Races population in 1990, 254.5 compared to 130.3. When the 3 IHS Areas with apparent problems in underreporting of Indian race on death certificates are excluded, the IHS rate in this instance is only slightly higher (260.9) because of the problem with SIDS in the Portland Area. In the Portland Area, 39.5 percent of infant deaths were because of SIDS.

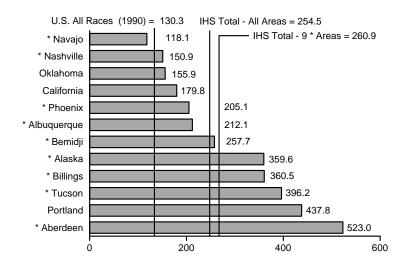


Table 3.22 **Sudden Infant Death Syndrome Rates** 

	Infant deaths	Live births	Rate '
U.S. All Races (1990)	5,417	4,158,212	130.3
All IHS Areas	259	101,780	254.5
9* Areas <sup>2</sup>	173	66,315	260.9
Aberdeen*	43	8,222	523.0
Alaska*	33	9,176	359.6
Albuquerque*	12	5,659	212.1
Bemidji*	14	5,433	257.7
Billings*	17	4,716	360.5
California	13	7,231	179.8
Nashville*	5	3,313	150.9
Navajo*	21	17,788	118.1
Oklahoma	28	17,956	155.9
Phoenix*	21	10,241	205.1
Portland	45	10,278	437.8
Tucson*	7	1,767	396.2
4			

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



<sup>&</sup>lt;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.



