## **Infant Mortality**





Data Source: Alaska Division of Public Health, Alaska Health Analytics and Vital Records Section Table C-20

### Definition

The infant mortality rate (IMR) is the number of children under one year of age who died divided by the number of live births during the year. It is used to compare and monitor the health and well-being of populations throughout the world.<sup>2</sup> Specifically, this rate may be an indicator of the quality and accessibility of primary health care available to pregnant women and infants as well as reflecting on the impact poverty and substandard living conditions have on maternal and infant health.<sup>3</sup> Infant mortality can be affected by factors such as level of education of the mother, household income, sanitary conditions, prenatal and postnatal care, and other factors.<sup>2,4</sup>

### **Related Objectives**

Reduce the rate of infant deaths to 5.0 infant deaths per 1,000 live births. - *HEALTHY PEOPLE 2030, OBJECTIVE MICH-02* 

### Summary

- » Between 1987 and 2019, the Alaska Native infant mortality rate declined 37.2% to 10.3 infant deaths per 1,000 live births.
- » Alaska Native infants experienced higher mortality in the post-neonatal period (28 days to 1 year of age) than in the neonatal period (<28 days of age).</p>
- » The leading causes of Alaska Native infant deaths during 2005–2019 were perinatal conditions (22.2%), congenital malformations (16.1%), and sudden infant death syndrome (SIDS) (16.1%).
- » During 2015–2019, rates of infant mortality varied by Tribal health region, ranging from 8.5 to 18.2 per 1,000 live births.

# **Infant Mortality**





Data Source: Alaska Division of Public Health, Alaska Health Analytics and Vital Records Section Table C-21



Data Source: Alaska Division of Public Health, Alaska Health Analytics and Vital Records Section Table C-22



Data Source: Alaska Division of Public Health, Alaska Health Analytics and Vital Records Section Table C-23

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### Table C-20: Infant Mortality Rate, 1987-2019

Data Source: Alaska Division of Public Health, Alaska Health Analytics and Vital Records Section

		Alaska Native Infants Statewide		Alaska White Infants Statewide		
	Sta					
	Deaths	Rate per 1,000 Live Births	Deaths	Rate per 1,000 Live Births		
1987	47	16.4	52	6.5		
1988	47	16.2	50	6.7		
1989	47	15.6	47	6.1		
1990	53	17.6	50	6.3		
1991	38	13.0	52	6.6		
1992	31	10.7	53	6.7		
1993	32	12.2	33	4.4		
1994	27	10.7	42	5.8		
1995	28	11.2	34	4.9		
1996	28	10.8	34	5.1		
1997	26	10.0	29	4.5		
1998	18*	6.7	31	4.8		
1999	22	8.2	23	3.7		
2000	29	10.4	30	4.8		
2001	36	12.7	34	5.5		
2002	15*	5.5	23	3.7		
2003	23	8.2	32	5.1		
2004	29	10.0	25	3.9		
2005	23	7.5	28	4.4		
2006	34	11.2	25	3.7		
2007	35	11.3	25	3.7		
2008	34	10.6	18*	2.6		
2009	30	9.0	27	4.0		
2010	13*	4.0	15*	2.2		
2011	15*	4.7	18*	2.6		
2012	22	7.1	28	4.2		
2013	25	8.9	25	3.5		
2014	48	16.1	35	5.4		
2015	43	14.4	31	4.8		
2016	36	11.6	21	3.3		
2017	28	9.9	20	3.4		
2018	34	12.2	18*	3.2		
2019	28	10.3	16*	2.9		

2 Martin. J. A., Kamilton, B. E., Sutton, P.D., Ventura, S.J., Menacker, F., Kirmeyer, S., & Munson, M.L. (2007). Births: Final data for 2005. National Vital Statistics Report, 56(6). Hyattsville, MD: National Center for Health Statistics

3 Alaska Department of Health and Social Services, Women's, Children's, & Family Health Section. (2007). Infant and Fetal Mortality in Alaska. Title V Fact Sheet: Needs Assessment Update. 2:3

4 Hillemeier, M. M., Domino, M. E., Wells, R., Goyal, R. K., Kum, H.-C., Cilenti, D., Timothy Whitmire, J., & Basu, A. (2014). Effects of maternity care coordination on pregnancy outcomes: Propensity-weighted analyses. Maternal and Child Health Journal, 19(1), 121-127

# Infant Mortality



### Table C-21: Alaska Native Neonatal and Postneonatal Deaths, 2006-2019

	Neonatal		Postneonatal		
	Deaths	Rate per 1,000 Live Births	Deaths	Rate per 1,000 Live Births	
2006	13*	4.3	21	6.9	
2007	13*	4.2	22	7.1	
2008	11*	3.4	23	7.2	
2009	11*	3.3	19*	5.7	
2010	N/A	N/A	9*	2.8	
2011	6*	1.9	9*	2.8	
2012	12*	3.9	10*	3.2	
2013	8*	2.8	17*	6.0	
2014	13*	4.4	35	11.7	
2015	19*	6.4	24	8.1	
2016	13*	4.2	23	7.4	
2017	11*	3.9	17*	6.0	
2018	14*	5.0	20	7.2	
2019	9*	3.3	19*	7.0	

### Table C-22: Leading Causes of Alaska Native Infant Mortality, 2005-2019

	Alaska Native Infants Statewide		Alaska White Infants Statewide	
	Number	% of Infant Deaths	Number	% of Infant Deaths
Perinatal Conditions	88	22.2%	125	32.5%
Congenital Malformations	64	16.1%	94	24.4%
SIDS	64	16.1%	44	11.4%
Unintentional Injuries	49	12.3%	34	8.8%
Influenza & Pneumonia	11*	2.8%	N/A	N/A
Other	121	30.5%	86	22.3%
Total	397	100.0%	385	100.0%

## Table C-23: Alaska Native Infant Mortality Rate per 1,000 Live Births by Tribal Health Region, 5-Year Aggregate, 2015-2019

	Number	Rate per 1,000 Live Births
Yukon-Kuskokwim	59	18.2
Northwest Arctic	15	16.5
Arctic Slope	7*	12.8
Interior	18	11.9
Norton Sound	8*	9.8
Anchorage/Mat-Su	42	9.2
Southeast	10*	8.5
Statewide	169	11.7

\*Note: Rates based on fewer than 20 cases are not statistically reliable and should be used with caution. Number and rate not reported for <5 cases. N/A - Not applicable or not available

Data Source: Alaska Division of Public Health, Alaska Health Analytics and Vital Records Section.