

Infant Health



Breastfeeding Initiation

National survey data indicate that in-hospital breastfeeding rates for 2001 are the highest recorded since national breastfeeding data have been collected.¹ According to the Mothers Survey conducted by the Ross Products Division of Abbott Laboratories, the overall in-hospital rate for 2001 was 69.5% – with Hawaii (88.5%), Alaska (88.3%), and Oregon (88.1%) as the highest in the nation.² Data from PRAMS show similar breastfeeding rates for Alaska.

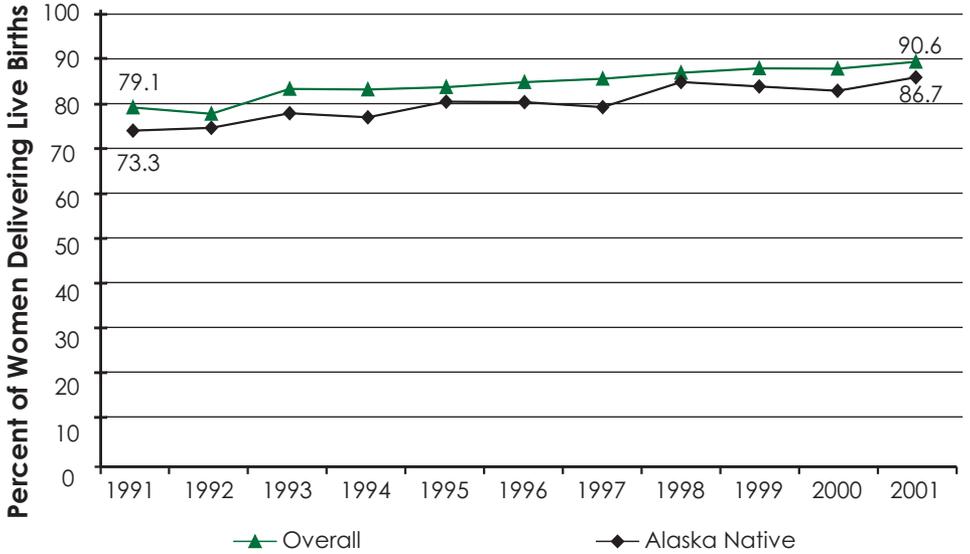
- Alaska was one of 14 states to achieve the Healthy People 2010 target of increasing breastfeeding initiation to at least 75%.³
- Over the last decade, the trend for breastfeeding initiation has significantly increased – more than 18% for Alaska Natives and 14% for Alaskan mothers overall.
- Regional data for 1999-2001 showed that the prevalence of breastfeeding initiation ranged from 82.7% (Northern) to 94.1% (Gulf Coast). Despite there being significant differences between regions, all regions of Alaska have achieved the Healthy People 2010 target.
- The Gulf Coast (94.1%) and Southeast (93.8%) regions had significantly higher breastfeeding initiation rates than the Northern (82.7%), Interior (86.2%), and Southwest (86.1%) regions.

¹ US Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau, Women's Health USA 2003. Rockville, Maryland: U.S. Department of Health and Human Services. 2003. <http://www.hrsa.gov/womenshealth>.

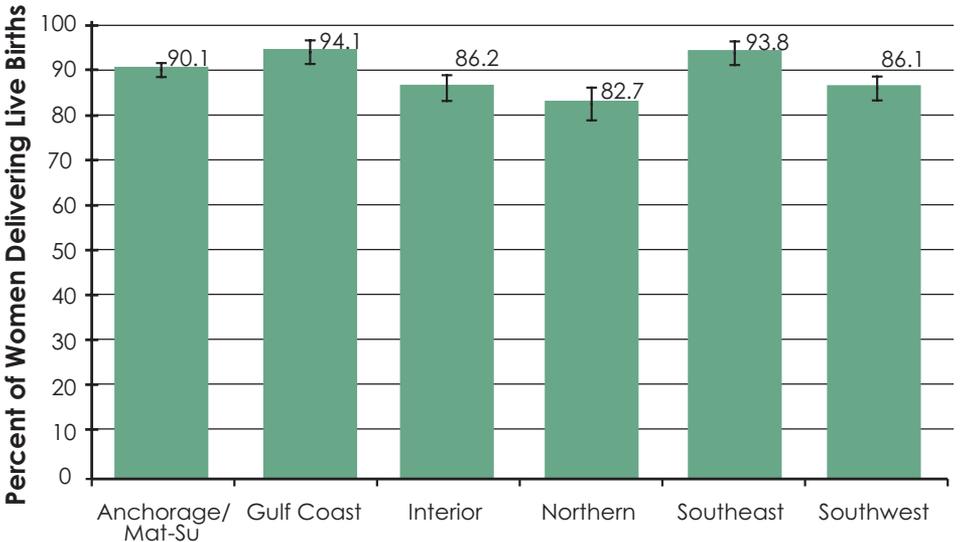
² Ross Products Division, Abbott Laboratories. Breastfeeding Trends – 2002. Mothers Survey 2002. 2003. http://www.ross.com/images/library/bf_trends_2002.pdf.

³ National Immunization Survey 2003. (See References for full citation)

Breastfeeding Initiation by Race and Year of Birth Alaska, 1991-2001



Breastfeeding Initiation by Region Alaska, 1999-2001



Breastfeeding Initiation

Breast milk is widely acknowledged to be the most complete form of nutrition for infants and the benefits for infants' health, growth, immunity, and development are well documented.¹ According to a national survey, as maternal age and education level increase, mothers are significantly more likely to breastfeed their newborn.² Data from PRAMS support the findings related to education level.

- The prevalence of overall breastfeeding initiation in Alaska was nearly 1.3 times higher than that reported by the 2003 National Immunization Survey – nationwide, 70.9% of mothers responded that they had ever breastfed their infant.³
- Although, white mothers in Alaska had a significantly higher prevalence of breastfeeding initiation than Alaska Native mothers, all race groups have achieved the Healthy People 2010 target of increasing breastfeeding initiation rates to at least 75%.
- In Alaska, breastfeeding initiation rates were not significantly different between age groups. All age groups had significantly higher rates than national rates. Compared to the nation, the prevalence among Alaskan teen mothers (86.4%) was nearly 1.6 times higher than teens in the U.S. (54.5%).⁴
- As maternal education level increased, Alaskan women were more likely to initiate breastfeeding. Women with at least some college education were significantly more likely to ever breastfeed than women with either less than a high school education or a high school education only.
- Alaskan women with at least some prenatal care services paid by Medicaid had a 6.6% lower prevalence of breastfeeding initiation than women that did not use Medicaid.

¹ Healthy People 2010. (See References for full citation)

² National Immunization Survey 2003. (See References for full citation)

³ National Immunization Survey 2003. (See References for full citation)

⁴ National Immunization Survey 2003. (See References for full citation)

Prevalence of Breastfeeding Initiation by Selected Demographics Alaska, 2001

	Percent	Weighted n	Standard Error	95% CI
Maternal Race				
White	92.8	5415	1.1	(90.6 - 94.9)
Alaska Native	86.7	1884	1.2	(84.3 - 89.1)
Black	92.5 *	378	4.2	(84.2 - 100)
Asian or Pacific Islander	80.3	435	5.6	(69.4 - 91.1)
Maternal Ethnicity				
Hispanic	80.6	431	5.6	(69.6 - 91.6)
Non-Hispanic	91.3	7135	0.9	(89.6 - 93.0)
Maternal Age				
15-19 years	86.4	774	3.0	(80.5 - 92.2)
20-24 years	90.8	2304	1.6	(87.7 - 94.0)
25-34 years	90.7	4131	1.2	(88.3 - 93.1)
35 years or older	93.3	1020	2.0	(89.4 - 97.3)
Maternal Education				
<12 years	85.2	852	2.7	(80.0 - 90.4)
12 years	86.4	3362	1.6	(83.4 - 89.4)
>12 years	95.5	3696	1.0	(93.6 - 97.5)
Prenatal Medicaid Status				
Medicaid	87.1	3185	1.5	(84.2 - 90.0)
Non-Medicaid	93.3	4958	1.0	(91.3 - 95.3)
OVERALL	90.6	8231	0.9	(88.9 - 92.3)

% Missing = 3.6

Core: Q49

* Data may be unreliable. Number of respondents was at least 30 but less than 60.

Breastfeeding, 4 Weeks Postpartum

The benefits to infant health from breastfeeding are numerous and well documented. The American Academy of Pediatrics recommends breastfeeding for reduced risk of infection in infants and for the prevention of childhood obesity.¹

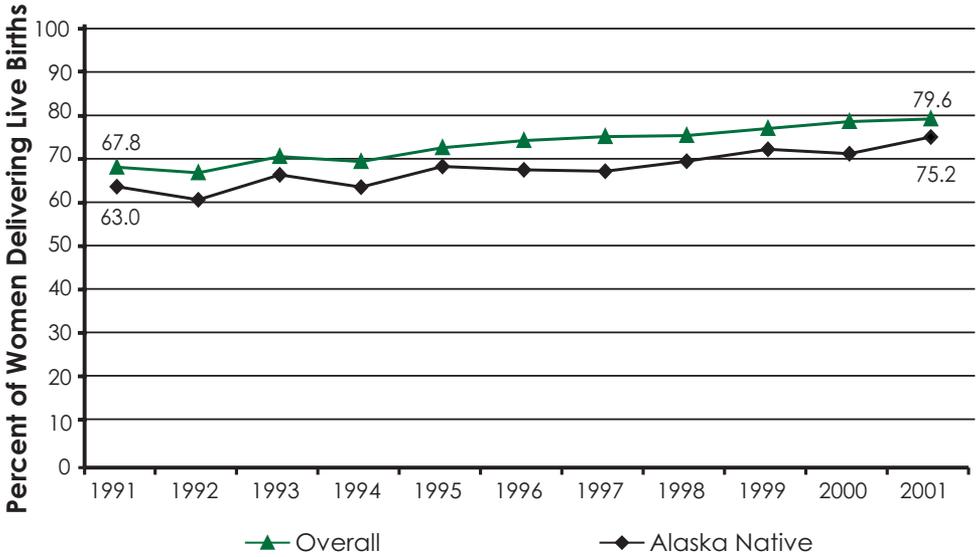
- In Alaska, the trend for breastfeeding at 4 weeks postpartum has significantly increased over the last decade. Since 1991, the prevalence has increased nearly 20% for both Alaska Native mothers and Alaskan mothers overall.
- Breastfeeding at 4 weeks postpartum was nearly 1.3 times higher among Alaskan women compared to the U.S. rate. Nationwide, 62.3% of women were still nursing when their infants were four weeks old.²
- During 1999-2001, regional prevalence of breastfeeding at 4 weeks after delivery ranged from 69.5% (Northern) to 86.0% (Southeast). Although the prevalence in the Northern region was significantly lower than the overall prevalence for the State, it was significantly higher than the national rate.
- With the exception of the Gulf Coast region (82.9%), women from the Southeast region (86.0%) were more likely to continue nursing their infant through the first month than all other regions.

¹ American Academy of Pediatrics. Policy Statement. Prevention of Pediatric Overweight and Obesity. Committee on Nutrition. *Pediatrics*; 112(2):424-430. Aug 2003.

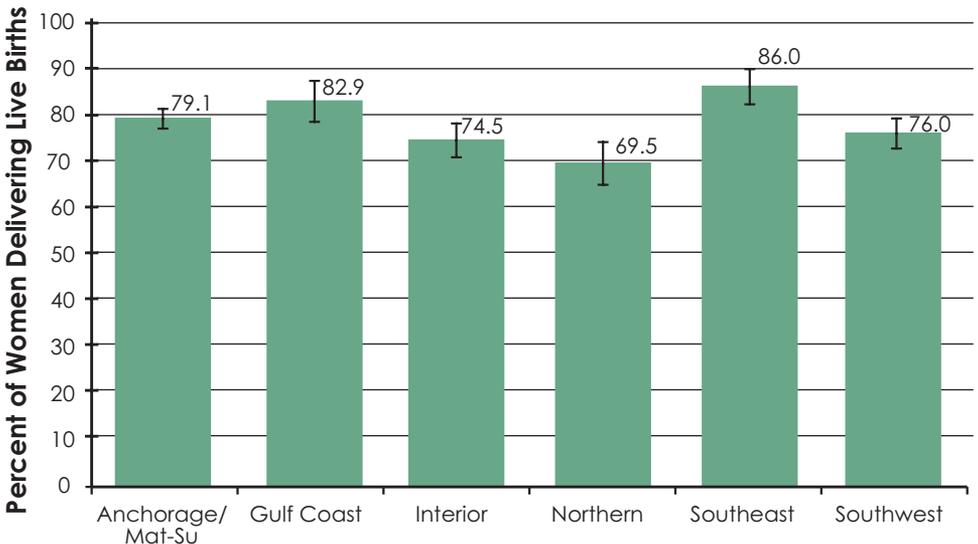
² National Immunization Survey 2003. (See References for full citation)

Infant Health

Breastfeeding, 4 Weeks Postpartum by Race and Year of Birth Alaska, 1991-2001



Breastfeeding, 4 Weeks Postpartum by Region Alaska, 1999-2001



Breastfeeding, 4 Weeks Postpartum

During 1993-1999, Alaska was one of eight PRAMS states to experience a significant increase in the prevalence of breastfeeding for at least 4 weeks postpartum. In 1999, breastfeeding during this early postpartum period ranged from 34.9% to 78.1% among PRAMS states.¹ Consistent with data from other states participating in PRAMS, Alaska data indicate maternal age, education level, and Medicaid status are associated with the prevalence of breastfeeding in the early postpartum period.²

- Compared to Alaska Native and Asian or Pacific Islander mothers, white mothers were more likely to nurse their babies through the first month after delivery.
- Alaskan women ages 35 years or older had the highest prevalence of breastfeeding through the first month (87.3%). They were significantly more likely to breastfeed at least 4 weeks postpartum than women less than 25 years of age.
- As maternal education level increased, Alaskan women were more likely to continue breastfeeding through the first month after delivery.
- Women with at least some college education had the highest prevalence of breastfeeding at 4 weeks after delivery (87.5%). They were significantly more likely to continue breastfeeding at this time than women with a high school education or less.
- Alaskan women with prenatal care services paid by Medicaid were less likely to breastfeed at least 4 weeks after delivery than women who did not use Medicaid.

¹ PRAMS 1999 Surveillance Report. (See References for full citation)

² Beck LF, Morrow B, Lipscomb LE, et al. Prevalence of Selected Maternal Behaviors and Experiences, Pregnancy Risk Assessment Monitoring System (PRAMS), 1999. *MMWR*; 51(SS02):1-26. Apr 2002.

Prevalence of Breastfeeding, 4 Weeks Postpartum by Selected Demographics Alaska, 2001

	Percent	Weighted n	Standard Error	95% CI
Maternal Race				
White	82.8	4777	1.6	(79.7 - 85.9)
Alaska Native	75.2	1622	1.6	(72.1 - 78.2)
Black	78.5 *	321	6.8	(65.3 - 91.7)
Asian or Pacific Islander	61.6	328	6.8	(48.2 - 75.0)
Maternal Ethnicity				
Hispanic	71.8	371	6.5	(59.1 - 84.4)
Non-Hispanic	80.1	6200	1.3	(77.6 - 82.6)
Maternal Age				
15-19 years	68.0	600	4.1	(59.9 - 76.1)
20-24 years	76.2	1920	2.4	(71.5 - 80.8)
25-34 years	82.0	3691	1.7	(78.7 - 85.3)
35 years or older	87.3	939	2.8	(81.9 - 92.8)
Maternal Education				
<12 years	64.5	634	3.7	(57.2 - 71.7)
12 years	75.0	2888	2.0	(71.1 - 78.8)
>12 years	87.5	3355	1.6	(84.3 - 90.7)
Prenatal Medicaid Status				
Medicaid	74.8	2696	2.0	(70.9 - 78.7)
Non-Medicaid	83.3	4380	1.5	(80.3 - 86.3)
OVERALL	79.6	7149	1.2	(77.2 - 82.0)

% Missing = 4.6

Core; Q50, Q51

* Data may be unreliable. Number of respondents was at least 30 but less than 60.

Infant Sleep Position

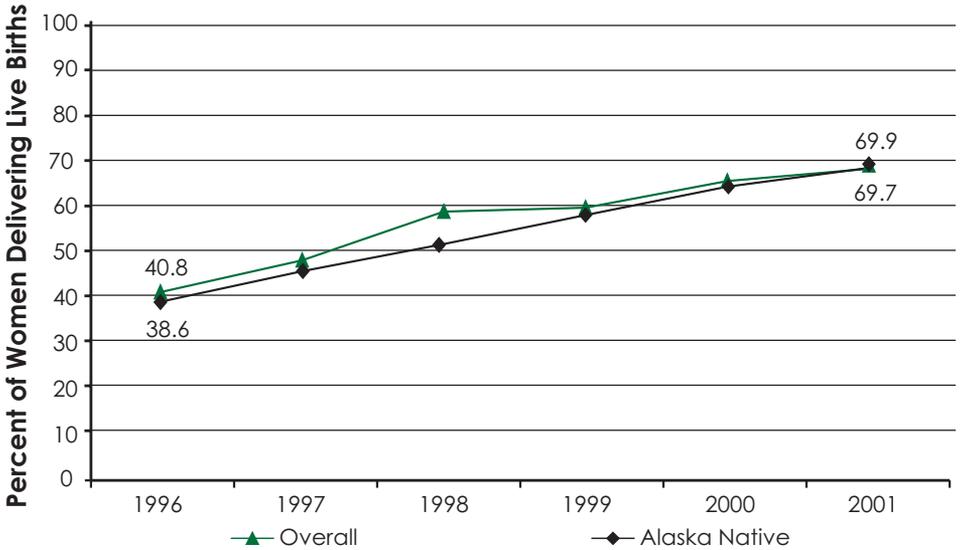
In 1996, the “Back to Sleep” awareness campaign was initiated in Alaska to educate parents about reducing the risk of Sudden Infant Death Syndrome (SIDS) by placing their infants to sleep on their backs.¹ Nationwide, the Healthy People 2010 objective is to increase the percentage of full-term infants who are put to sleep on their backs to at least 70% by the year 2010 – Alaska has made significant progress in achieving this goal.²

- From 1996-2001, the prevalence of putting infants to sleep on their backs has significantly increased among Alaskan mothers. In 2001, the overall prevalence for Alaska was 1.7 times higher compared to 1996.
- The prevalence among Alaska Native mothers has increased more than 80% from 1996 to 2001 – with nearly 70% of Alaska Native mothers routinely putting their infants to sleep on their backs, compared to less than 40% in 1996.
- Data for 2001 indicated that Alaskan mothers were significantly more likely to put their babies to sleep on their backs (69.7%) than on their sides (17.6%) or stomachs (12.7%).
- Regional prevalences for putting infants to sleep on their backs ranged from 57.2% (Southwest) to 70.2% (Southeast). Women from the Southwest region were less likely than women from the Southeast and Anchorage/Mat-Su regions to routinely put their babies to sleep on their backs.

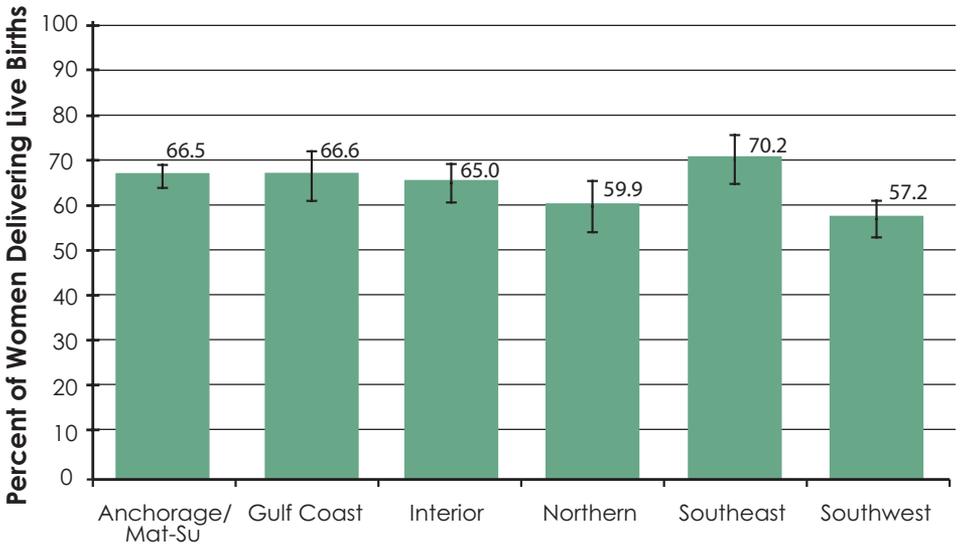
¹ Alaska MCH Data Book 2003, p 78. (See References for full citation)

² Healthy People 2010. (See References for full citation)

Placing Infants to Sleep on Their Backs by Race and Year Alaska, 1996-2001



Placing Infants to Sleep on Their Backs by Region Alaska, 1999-2001



Infant Sleep Position

Placing infants to sleep on their backs is a modifiable behavior that has been shown to reduce the risk of Sudden Infant Death Syndrome (SIDS). Concurrent with the Alaska “Back to Sleep” campaign, rates of SIDS or asphyxia of unknown etiology declined 45% between 1992-1996 and 1997.¹

- Alaskan mothers were more likely to put their infants to sleep on their backs than any other position, regardless of race group. White and Alaska Native mothers had the highest prevalence for 2001, but they were not significantly more likely to place their infants to sleep on their backs than other race groups.
- Although the highest prevalence was among mothers ages 35 or older (78.3%) and the lowest was among mothers ages 20-24 (66.3%), Alaskan mothers did not differ significantly in routinely placing their infants to sleep on their backs, regardless of age group.
- Regardless of maternal education level, Alaskan mothers did not differ in the manner they placed their infants to sleep. There was no significant association between education level and routinely placing infants to sleep on their backs.
- There was no difference in use of the back sleep position between women that had prenatal care paid by Medicaid (70%) and those that do not use Medicaid to pay for prenatal care (69.2%).

¹ Gessner BD. Findings of the Alaska Maternal-Infant Mortality Review, 1999. Family Health Dataline. State of Alaska, Department of Health and Social Services, Section of Maternal, Child and Family Health. 6(2). Dec 2000.

Prevalence of Placing Infants to Sleep on Their Backs by Selected Demographics Alaska, 2001

	Percent	Weighted n	Standard Error	95% CI
Maternal Race				
White	71.8	4110	1.9	(68.1 - 75.5)
Alaska Native	69.9	1370	1.8	(66.4 - 73.3)
Black	50.8 *	200	8.5	(34.2 - 67.5)
Asian or Pacific Islander	60.0	316	6.9	(46.6 - 73.4)
Maternal Ethnicity				
Hispanic	62.5	316	6.9	(49.1 - 76.0)
Non-Hispanic	70.9	5344	1.5	(67.9 - 73.9)
Maternal Age				
15-19 years	72.8	605	4.1	(64.8 - 80.8)
20-24 years	66.3	1565	2.8	(60.8 - 71.8)
25-34 years	68.8	3062	2.1	(64.7 - 72.8)
35 years or older	78.3	839	3.6	(71.2 - 85.4)
Maternal Education				
<12 years	64.7	556	4.0	(56.9 - 72.6)
12 years	66.5	2471	2.2	(62.2 - 70.9)
>12 years	74.6	2864	2.2	(70.3 - 78.8)
Prenatal Medicaid Status				
Medicaid	70.0	2333	2.2	(65.7 - 74.2)
Non-Medicaid	69.2	3653	1.9	(65.5 - 73.0)
OVERALL	69.7	6075	1.4	(66.8 - 72.5)

% Missing = 7.3

Core; Q54

* Data may be unreliable. Number of respondents was at least 30 but less than 60.

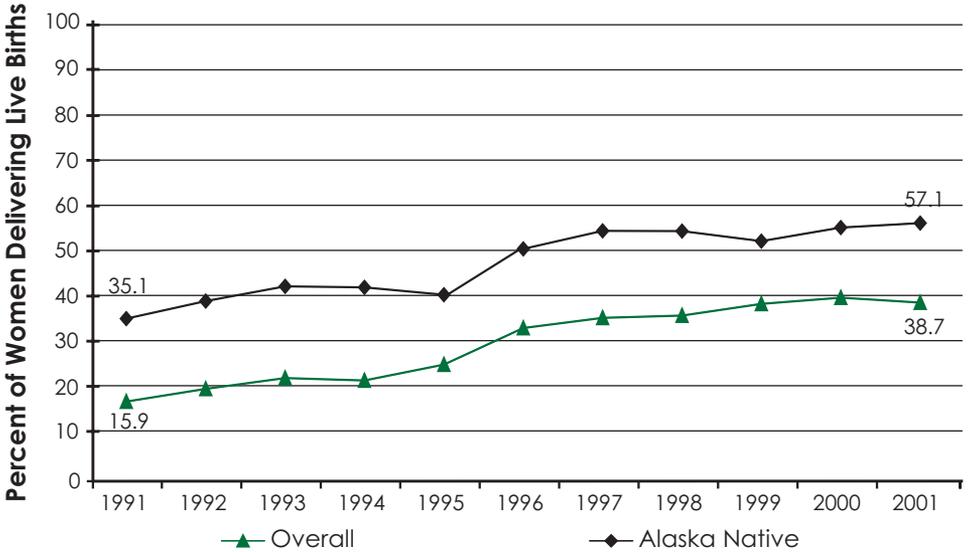
Co-Sleeping

Co-sleeping refers to the practice of children sharing the same bed with parents or other children. Some studies suggest that the risk for Sudden Infant Death Syndrome (SIDS) increases when an infant co-sleeps, especially when the other party is an impaired individual. Population-based data on the co-sleeping habits of parents or other persons with infants are lacking nationwide. In Alaska, the PRAMS survey has collected co-sleeping data since 1991.

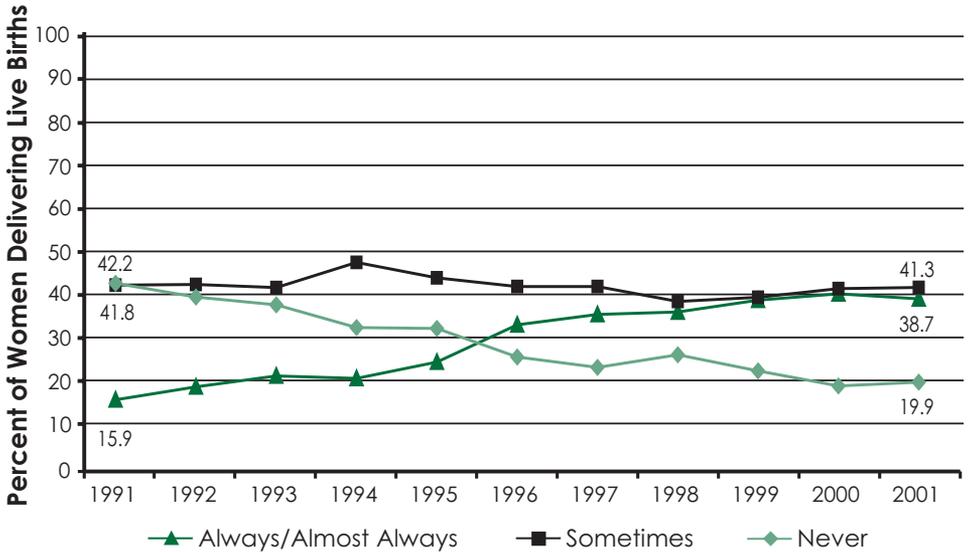
- The prevalence of mothers of newborns always or almost always co-sleeping with their infants has been steadily increasing over the years, though it shows a plateau effect for the 2000s. The most recent estimate of 38.7% in 2001 was nearly 2.5 times greater than what it was in 1991 (15.9%).
- Non-white women are more likely than whites to co-sleep with their infants.¹ Since 1991, Alaska Native co-sleeping prevalence has always been higher than the overall population of mothers of newborns, though the gap has narrowed over the years. In 2001, over 50% of Alaska Native mothers indicated they co-sleep with their newborn.
- In 2001, only 19.9% of the population said they never co-sleep. The percent of women who “sometimes” co-sleep with their infant has remained fairly consistent, around 40%, so it appears that the trend is moving from “Never” to “Ever” co-sleeping.

¹ Alaska MCH Data Book 2003, p 80. (See References for full citation)

Mother-Infant Always/Almost Always Co-Sleeping by Race and Year of Birth, Alaska, 1991-2001



Mother-Infant Co-Sleeping by Year of Birth Alaska, 1991-2001



Co-Sleeping

Studies in Alaska have found an association between co-sleeping and infant death only in cases where the infant was sleeping with an alcohol or drug-impaired adult.¹ While prenatal use of alcohol is not significantly different by region, prenatal use of marijuana or tobacco products does differ significantly by region and the regions that show these higher risk behaviors during pregnancy also indicate high co-sleeping rates. Health care providers could use these facts to help target education efforts.

- The Northern and Southwest regions of Alaska showed the highest co-sleeping prevalence for 1999-2001 with 64.7% and 58.9%, respectively. These rates were significantly higher than all other regions of the State.
- The Interior region had the lowest always or almost always co-sleeping prevalence with 28.6%.

To reduce the risk of Sudden Infant Death Syndrome (SIDS):

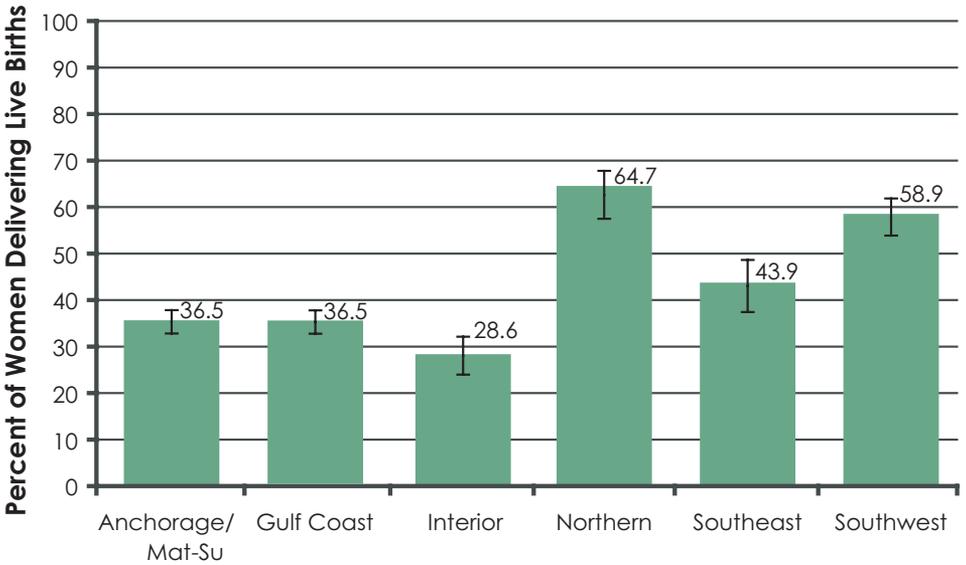
Healthy infants younger than 6 months of age should be placed to sleep on their back and should sleep either in an infant crib or with a nonsmoking, unimpaired caregiver on an adult non-water mattress.

Caretakers of preterm and low birth weight infants and infants with other substantial health problems should consult their doctor for advice.

¹ Gessner BD, Ives GC, Perham-Hester KA. Association Between Sudden Infant Death Syndrome and Prone Sleep Position, Bed Sharing, and Sleeping Outside an Infant Crib in Alaska. *Pediatrics*; 108(4): 923-927. Oct 2001.

Infant Health

Mother-Infant Always/Almost Always Co-Sleeping by Region Alaska, 1999-2001



Co-Sleeping

Current literature on co-sleeping spans many cultures and countries. Most of these studies focus on co-sleeping's relationship as a risk factor in Sudden Infant Death Syndrome (SIDS), how it relates to breastfeeding habits, or how it affects sleeping patterns. Alaska PRAMS gives a complimentary look at the population-based prevalence of this practice among mothers of newborns who reside in Alaska. For the years 1991-1999, the question focused on mother-infant co-sleeping habits. Starting in 2000, the question was expanded to include anyone else the infant slept with in the bed.

- Alaska Native and Asian or Pacific Islander mothers were significantly more likely to indicate that they or someone else always or almost always co-sleeps with their infant compared with white or black mothers in 2001.
- Hispanic mothers showed a higher prevalence of their infant co-sleeping than for non-Hispanics, although this was not statistically significant.
- Co-sleeping was more common among infants born to teenage mothers than older mothers. Half of all teen mothers indicated their infant shares a bed. The prevalence of infant co-sleeping was similar for mothers ages 20 or older (a little over one-third) regardless of age category.
- Nearly 60% of mothers with less than a high school education indicated their infant co-sleeps, compared with less than 40% of mothers with at least a high school education.
- Mothers who used Medicaid for prenatal care expenses indicated a significantly higher prevalence of co-sleeping for their infant than non-Medicaid recipients.

Prevalence of Mother-Infant Always/Almost Always Co-Sleeping by Selected Demographics Alaska, 2001

	Percent	Weighted n	Standard Error	95% CI
Maternal Race				
White	30.6	1808	1.9	(26.8 - 34.3)
Alaska Native	57.1	1253	1.8	(53.5 - 60.6)
Black	29.3*	123	7.6	(14.5 - 44.1)
Asian or Pacific Islander	61.5	342	6.7	(48.4 - 74.6)
Maternal Ethnicity				
Hispanic	46.0	247	6.8	(32.7 - 59.2)
Non-Hispanic	37.8	2996	1.6	(34.8 - 40.9)
Maternal Age				
15-19 years	50.1	449	4.3	(41.6 - 58.5)
20-24 years	37.6	964	2.6	(32.4 - 42.7)
25-34 years	38.3	1779	2.1	(34.2 - 42.4)
35 years or older	34.3	378	4.0	(26.4 - 42.2)
Maternal Education				
<12 years	57.1	569	3.8	(49.7 - 64.6)
12 years	38.2	1496	2.1	(34.1 - 42.4)
>12 years	34.5	1374	2.3	(30.0 - 39.0)
Prenatal Medicaid Status				
Medicaid	44.9	1640	2.2	(40.5 - 49.3)
Non-Medicaid	34.6	1888	1.9	(30.9 - 38.3)
OVERALL	38.7	3570	1.4	(36.0 - 41.5)

% Missing = 2.3

State-specific; Q72

* Data may be unreliable. Number of respondents was at least 30 but less than 60.

Infant Exposure to Tobacco Smoke

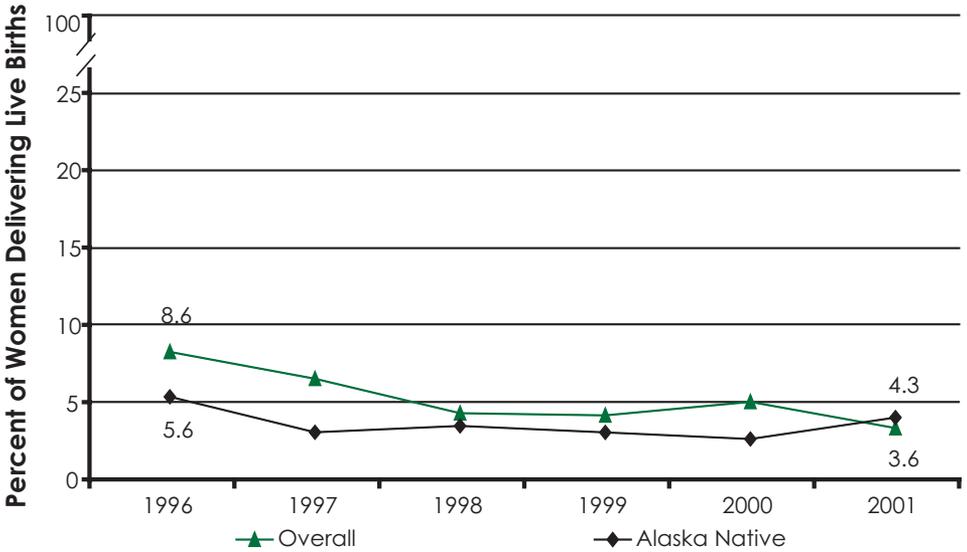
Secondhand smoke currently kills an estimated 120 Alaskans each year.¹ Children exposed to secondhand smoke have an increased risk of middle ear infections and a variety of respiratory conditions, including acute exacerbation of asthma resulting in hospitalization, and an increased risk for Sudden Infant Death Syndrome (SIDS). Data from the 2003 Adult Tobacco Survey reveal that smoking is allowed in at least a limited fashion in the homes of 17% of Alaskan adults, with smokers (44%) being much more likely than non-smokers (10%) to report that smoking is allowed in their home.²

- The trend for any infant secondhand smoke exposure continues to decline. Since 1996 (8.6%), the prevalence has dropped 58% to 3.6% overall.
- Alaska Native mothers consistently reported lower levels of infant exposure to secondhand smoke than the overall prevalence during 1996-2000. However, in 2001 the prevalence of infant exposure to secondhand smoke was slightly higher among Alaska Natives.
- The region with the highest reported infant exposure to secondhand tobacco smoke was the Gulf Coast region at 7.0%, the lowest was for the Southwest region.
- In the Northern region where postpartum tobacco use was nearly twice that of all other regions, the prevalence of infant exposure to secondhand smoke (4.1%) was not statistically different from other regions.

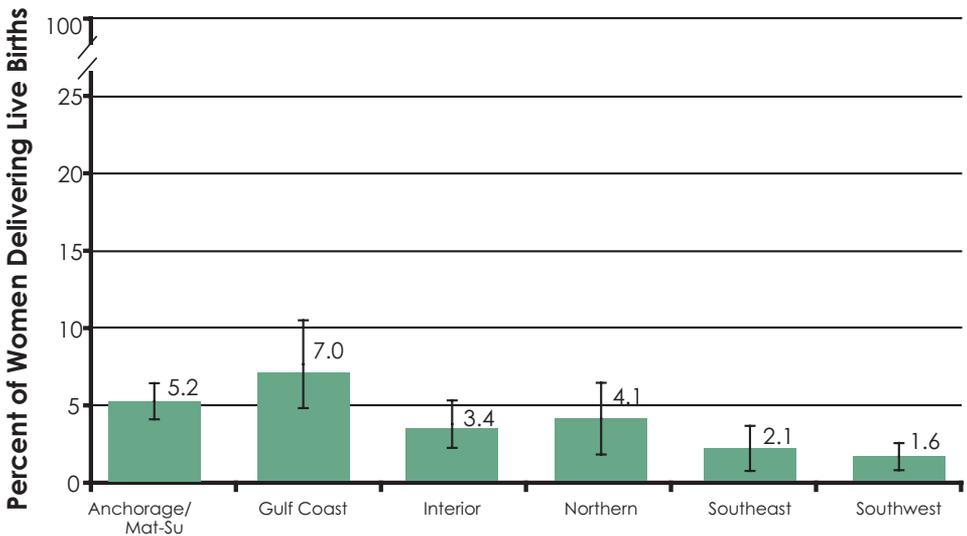
¹ Tobacco in the Great Land, p 146. (See References for full citation)

² Tobacco in the Great Land, p 133-4. (See References for full citation)

Infant Exposure to Secondhand Smoke by Race and Year Alaska, 1996-2001



Infant Exposure to Secondhand Smoke by Region Alaska, 1999-2001



Infant Exposure to Tobacco Smoke

Although most Alaskan adults and adolescents are aware that exposure to secondhand smoke is harmful, most underestimate the extent of the risks associated with it.¹ While the majority of both smokers and non-smokers surveyed on the Adult Tobacco Survey (ATS) correctly agreed that environmental tobacco smoke (ETS) exposure was linked with child respiratory problems (over 80%), roughly 30% knew that Sudden Infant Death Syndrome (SIDS) was a possible consequence of ETS exposure. ATS data from 2003 show that 13% of adults who had children under age 5 living with them reported that someone had smoked in their home on at least one day during the past week. Nine percent of adults living with children under age 5 reported ETS in their home every day during the previous week.²

- Around 4% of Alaska Native and white mothers of newborns indicated that their newborn had been exposed to ETS. Less than 1% of Asian or Pacific Islander mothers indicated this.
- Although there appeared to be no significant pattern in infant ETS exposure by maternal age, the age group with the highest prevalence of infant secondhand smoke exposure was 20-24 year olds.
- Neither maternal education nor prenatal Medicaid status were correlated with reported infant ETS exposure.

¹ State of Alaska, Department of Health and Social Services, Division of Public Health. Environmental Tobacco Smoke in Alaska. State of Alaska Epidemiology Bulletin: Recommendations and Reports; 8(6). Sep 2004.

² Tobacco in the Great Land, p 122. (See References for full citation)

Prevalence of Infant Exposure to Secondhand Smoke by Selected Demographics Alaska, 2001

	Percent	Weighted n	Standard Error	95% CI
Maternal Race				
White	3.6	211	0.8	(2.1 - 5.1)
Alaska Native	4.3	92	0.7	(2.8 - 5.7)
Black	3.2 *	13	3.0	(0.0 - 9.2)
Asian or Pacific Islander	0.6	3	0.3	(0.1 - 1.1)
Maternal Ethnicity				
Hispanic	3.6	19	2.5	(0.0 - 8.4)
Non-Hispanic	3.8	293	0.6	(2.6 - 4.9)
Maternal Age				
15-19 years	3.3	30	1.6	(0.3 - 6.4)
20-24 years	4.9	124	1.3	(2.4 - 7.3)
25-34 years	2.9	132	0.7	(1.5 - 4.3)
35 years or older	3.3	36	1.2	(1.0 - 5.6)
Maternal Education				
<12 years	3.9	38	1.0	(1.9 - 5.8)
12 years	4.4	172	1.0	(2.6 - 6.3)
>12 years	2.5	97	0.7	(1.1 - 3.9)
Prenatal Medicaid Status				
Medicaid	4.6	168	1.0	(2.7 - 6.6)
Non-Medicaid	2.7	141	0.6	(1.5 - 3.8)
OVERALL	3.6	322	0.5	(2.5 - 4.6)

% Missing = 3.8

Core; Q53

* Data may be unreliable. Number of respondents was at least 30 but less than 60.