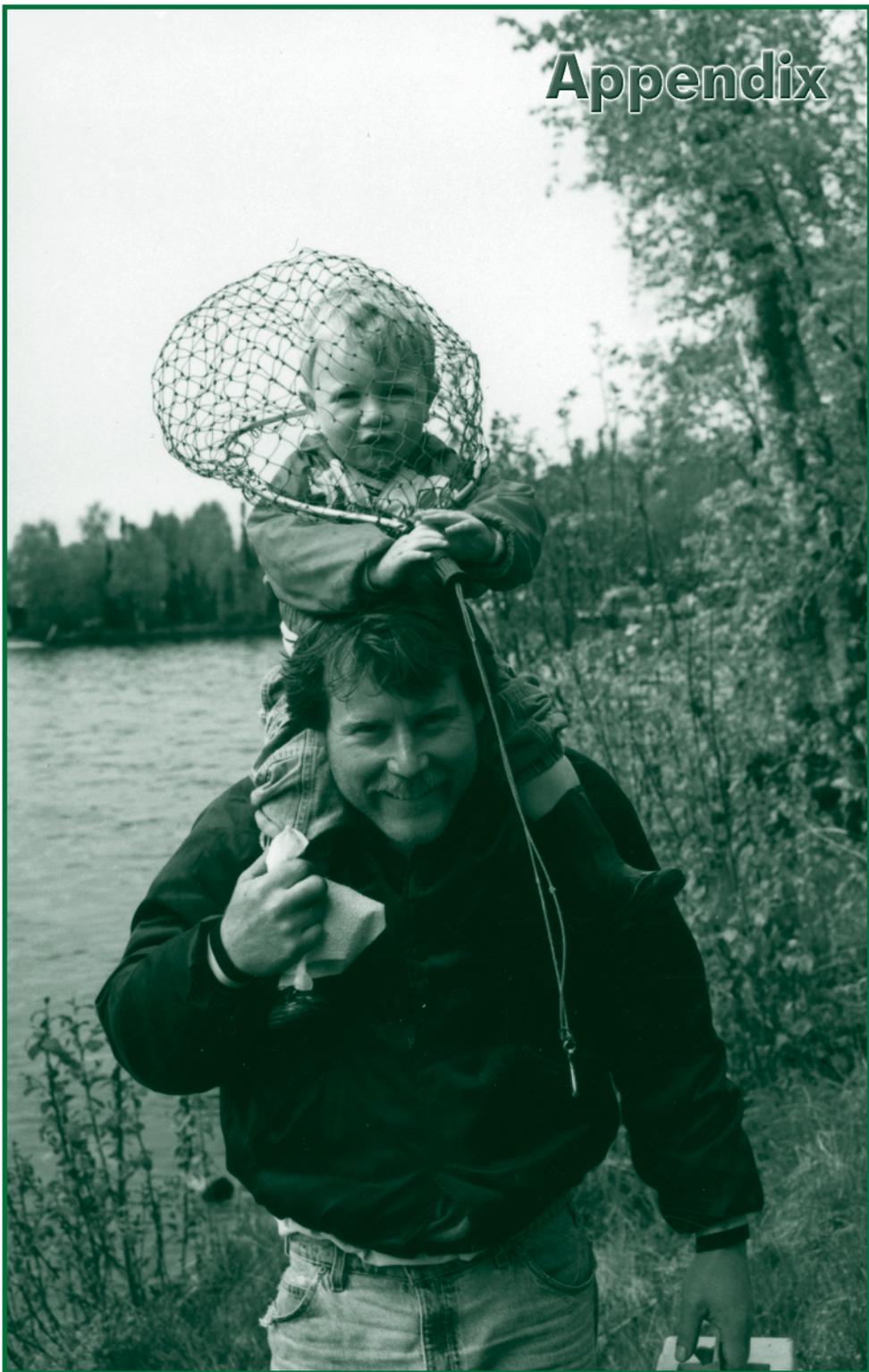


Appendix



Glossary

Alaska Native: This race category includes Alaska Natives and American Indians for purposes of this publication.

Body Mass Index (BMI): Body mass index measures one's height to weight ratio. It is calculated by the person's weight in kilograms divided by the square of the height in meters. Specific classifications are given below.

Underweight	$BMI < 19.8 \text{ kg/m}^2$
Normal weight	$19.8 \leq BMI < 25 \text{ kg/m}^2$
Overweight	$25 \leq BMI < 30 \text{ kg/m}^2$
Obese	$BMI \geq 30 \text{ kg/m}^2$

Childbearing Age: Women who are ages 15 through 44 years.

CI: Confidence Interval

Ethnicity: This category is independent of race. It indicates whether the birth certificate identified the mother as being of Hispanic origin or not.

ETS: Environmental Tobacco Smoke. Also commonly known as exposure to secondhand smoke.

Infant: Age from birth up to one year.

MCH: Maternal and Child Health

Moving Average: Using moving averages helps to smooth out the year to year variability that is often observed when dealing with small numbers. This smoothing technique increases the stability of the rate so that trends can be more easily detected and more meaningful comparisons can be made. An example of a three-year moving average for the year 1991, the rate is comprised of data from 1989-1991; 1992 is comprised of data from 1990-1992, and so forth.

Overweight/ Obesity: Having a body mass index greater than or equal to 25 kg/m^2 (See also Body Mass Index)

Physical abuse: Pushing, hitting, slapping, kicking, or any other way of physically hurting someone. (Definition used for the PRAMS Phase 3 data source during 1996-1999. Data collection during 2000-2001 added the term "choke".)

Population: When used in this publication to describe PRAMS data, it refers to Alaska-resident women delivering a live-born infant during the specified time period.

Postpartum Period: The point in time that the PRAMS respondent answers the questions asked. From two months through six months but usually around 15 weeks.

Pregnancy Risk Assessment Monitoring System (PRAMS): PRAMS is a population-based survey of Alaska-resident women who have recently delivered a live-born infant. It was initiated by the State of Alaska Division of Public Health, Section of Maternal, Child and Family Health in late 1990. PRAMS was developed by the Centers for Disease Control and Prevention (CDC) Division of Reproductive Health to gather information on the health risk behaviors and circumstances of pregnant and postpartum women. It is currently active in 33 states.

A systematic, stratified sampling approach is used to select approximately 160 mothers of newborns each month from the State of Alaska's live birth records for infants between two and six months of age. Questions cover the prenatal and postpartum period. Up to three mailed questionnaires are used to solicit a response. Phone follow-up for women who do not respond by mail was first initiated in 1997. Prevalences reflect statewide estimates for Alaska-resident women delivering a live-born infant during the specified time period. The response rate for the year 2001 was 83.3%.

Prevalence: Prevalence measures the number of people in a specified population that have the given characteristic at a given time.

Rate: A rate is defined as the number of events occurring in a population in a specified time period divided by the number of people in the population in the same specified time period.

WIC: The Special Supplemental Nutrition Program for Women, Infants and Children.

Indicator Definitions

Reproductive Health

Unintended Pregnancies

Percent of women who delivered a live-born infant who had a mistimed or unwanted pregnancy. NOTE: Data for year 2000 have a potential response bias because that survey lacked the lead-in statement which clarified that they should answer for their “new” baby.

Numerator: Number of women who indicated, postpartum, that just before getting pregnant, they wanted to be pregnant either later or never.

Denominator: Total number of Alaska-resident women who delivered a live-born infant.

Data Source: Alaska Pregnancy Risk Assessment Monitoring System (PRAMS), 1991-2001.

Live Births Despite the Use of Birth Control

Percent of women who delivered a live-born infant who indicated that they were doing something to keep from getting pregnant when they got pregnant with their new baby. Methods defined for the respondent were “not having sex at certain times [rhythm], and using birth control methods such as the pill, Norplant®, shots [Depo-Provera®], condoms, diaphragm, foam, IUD, having their tubes tied, or their partner having a vasectomy.”

Numerator: Number of women who indicated they were doing something to keep from getting pregnant when they got pregnant with their new baby.

Denominator: Total number of Alaska-resident women who delivered a live-born infant.

Data Source: Alaska Pregnancy Risk Assessment Monitoring System (PRAMS), 2001.

Prenatal Health

Medicaid Coverage for Prenatal Care

Percent of women who indicated Medicaid paid for a portion of their prenatal care.

Numerator: Number of women who indicated Medicaid paid either in part or in whole for their prenatal care.

Denominator: Total number of Alaska-resident women who delivered a live-born infant.

Data Source: Alaska Pregnancy Risk Assessment Monitoring System (PRAMS), 1991-2001.

Prenatal WIC Participation

Percent of women who participated in the WIC program during their pregnancy.

Numerator: Number of women who indicated that they were on WIC (the special supplemental nutrition program for women, infants, and children) during their pregnancy.

Denominator: Total number of Alaska-resident women who delivered a live-born infant.

Data Source: Alaska Pregnancy Risk Assessment Monitoring System (PRAMS), 1991-2001.

Knowledge of Folic Acid Benefits (Alaska-specific indicator)

Percent of women who had heard or read that taking the vitamin folic acid can help prevent some birth defects.

Numerator: Number of women who indicated they had heard or read that taking the vitamin folic acid can help prevent some birth defects.

Denominator: Total number of Alaska-resident women who delivered a live-born infant.

Data Source: Alaska Pregnancy Risk Assessment Monitoring System (PRAMS), 1996-2001.

Prenatal Physical Abuse by Husband/Partner

Percent of women who were physically abused by their husband or partner during their pregnancy.

Numerator: Number of women who indicated their husband or partner physically abused them (i.e. pushed, hit, slapped, kicked, or otherwise hurt them) during their pregnancy. NOTE: Data collection in 2000-2001 asked the question directly (instead of defining physical abuse in a lead-in statement), added the term “choke”, and asked about the “husband or partner” in its own question. (see also pre-pregnancy physical abuse definition.)

Denominator: Total number of Alaska-resident women who delivered a live-born infant.

Data Source: Alaska Pregnancy Risk Assessment Monitoring System (PRAMS), 1996-2001.

Prenatal Substance Use**Alcohol (Any Use)**

Percent of women who consumed any alcohol during the last 3 months of their pregnancy.

Indicator Definitions

Numerator: Number of women who drank any alcohol during the last 3 months of their pregnancy.

Denominator: Total number of Alaska-resident women who delivered a live-born infant.

Data Source: Alaska Pregnancy Risk Assessment Monitoring System (PRAMS), 1991-2001.

Tobacco

Percent of women who smoked cigarettes during the last 3 months of their pregnancy.

Numerator: Number of women who smoked cigarettes during the last 3 months of their pregnancy. (NOTE: The question was asked of women who had smoked at least 100 cigarettes in their lifetime. Data collection in 2000-2001 changed the timeframe for smoking at least 100 cigarettes from “in your entire life” to “in the past 2 years”.)

Denominator: Total number of Alaska-resident women who delivered a live-born infant.

Data Source: Alaska Pregnancy Risk Assessment Monitoring System (PRAMS), 1991-2001.

Marijuana (Alaska-specific indicator)

Percent of women who smoked marijuana or hash during pregnancy.

Numerator: Number of women who smoked marijuana or hash during pregnancy.

Denominator: Total number of Alaska-resident women who delivered a live-born infant.

Data Source: Alaska Pregnancy Risk Assessment Monitoring System (PRAMS), 1991-2001.

Smokeless Tobacco (Alaska-specific indicator)

Percent of women who used smokeless tobacco (chew or snuff) during pregnancy.

Numerator: Number of women who used smokeless tobacco (chew or snuff) during pregnancy.

Denominator: Total number of Alaska-resident women who delivered a live-born infant.

Data Source: Alaska Pregnancy Risk Assessment Monitoring System (PRAMS), 1996-2001.

Infant Health

Breastfeeding Initiation

Percent of mothers of newborns who indicated that they had ever breastfed their newborn.

Numerator: Number of women who indicated they had ever breastfed their newborn.

Denominator: Total number of Alaska-resident women who delivered a live-born infant.

Data Source: Alaska Pregnancy Risk Assessment Monitoring System (PRAMS), 1991-2001.

Breastfeeding, 4 Weeks Postpartum

Percent of mothers of newborns who indicated that they had breastfed their newborn for at least 4 weeks.

Numerator: Number of women who indicated they had breastfed their newborn for at least 4 weeks.

Denominator: Total number of Alaska-resident women who delivered a live-born infant.

Data Source: Alaska Pregnancy Risk Assessment Monitoring System (PRAMS), 1991-2001.

Back-sleeping Infants

Percent of mothers of newborns who indicated (on average, 3.5 months postpartum) that they most regularly put their infant down on his/her back. NOTE: This only considers maternal responses of side, back, or stomach as valid responses (not combinations thereof).

Numerator: Number of women who indicated they most regularly put their infant down to sleep on his/her back.

Denominator: Total number of Alaska-resident women who delivered a live-born infant.

Data Source: Alaska Pregnancy Risk Assessment Monitoring System (PRAMS), 1996-2001.

Mother-Infant Co-sleeping (Alaska-specific indicator)

Percent of mothers of newborns who indicated that they always or almost always, sometimes or never sleep with their infant in the same bed.

Indicator Definitions

Numerator: Number of women who indicated they sleep with their infant in the same bed. (NOTE: Data collection in 2000-2001 asks how often the mother or anyone else sleeps with the baby).

Denominator: Total number of Alaska-resident women who delivered a live-born infant.

Data Source: Alaska Pregnancy Risk Assessment Monitoring System (PRAMS), 1991-2001.

Infant Exposure to Tobacco Smoke

Percent of mothers of newborns who indicated (on average, 3.5 months postpartum) that their newborn was in the same room with someone who is smoking for any length of time on an average day.

Numerator: Number of women who indicated that their newborn was in the same room with someone who is smoking for any length of time on an average day.

Denominator: Total number of Alaska-resident women who delivered a live-born infant.

Data Source: Alaska Pregnancy Risk Assessment Monitoring System (PRAMS), 1996-2001.

Maternal Health

Pre-pregnancy Overweight/Obesity

Percent of women whose body mass index (as calculated from self-reported weight just before pregnancy and height) was at least 25 kg/m².

Numerator: Number of women whose pre-pregnancy body mass index was 25 kg/m² or greater.

Denominator: Total number of Alaska-resident women who delivered a live-born infant.

Data Source: Alaska Pregnancy Risk Assessment Monitoring System (PRAMS), 1991-2001. (See Glossary for definition of Body Mass Index)

Postpartum Tobacco

Percent of women who currently smoke cigarettes (i.e. at the time of responding to the PRAMS survey).

Numerator: Number of women who indicated they currently smoke cigarettes, on average this was approximately 3.5 months postpartum. (NOTE: The question was asked of women

who had smoked at least 100 cigarettes in their lifetime. Data collection in 2000-2001 changed the timeframe for smoking at least 100 cigarettes from “in your entire life” to “in the past 2 years”.)

Denominator: Total number of Alaska-resident women who delivered a live-born infant.

Data Source: Alaska Pregnancy Risk Assessment Monitoring System (PRAMS), 1991-2001.

Physical Abuse by Anyone 12 Months Before Pregnancy (Pre-pregnancy Physical Abuse)

Percent of women who indicated someone (i.e. husband/partner, a family or household member other than the husband/partner, a friend, or someone else) physically abused them 12 months before pregnancy. Physical abuse was defined as pushing, hitting, slapping, kicking, or any other way of physically hurting someone. NOTE: Data collection in 2000-2001 asked the question directly (instead of defining physical abuse in a lead-in statement), added the term “choke”, and asked about the “husband or partner” and “anyone else” in two separate questions.

Numerator: Number of women who experienced physical abuse by anyone 12 months before pregnancy.

Denominator: Total number of Alaska-resident women who delivered a live-born infant.

Data Source: Alaska Pregnancy Risk Assessment Monitoring System (PRAMS), 1996-2001.

Live Births by Category and Area

Census Area	Unintended Births 1997-2001	Unintended Births 1997-2001	Avg Births 1997-2001 Unmarried 13-19 y.o.	
	n (average annual)	%	n	%
Anchorage	1561	41.7	302	78.4
Fairbanks NSB	547	39.4	98	66.1
Matanuska Susitna	342	47.2	65	81.0
Kenai Peninsula	276	47.4	40	59.5
Bethel	209	52.8	57	93.3
Juneau	148	38.5	24	97.4
Wade Hampton	113	56.6	37	94.6
Nome	96	53.9	35	97.8
Kodiak Island	75	28.7	16	60.2
Northwest Arctic B.	72	45.8	34	94.6
North Slope	70	54.7	31	91.9
Ketchikan Gateway	66	43.3	20	70.4
Dillingham	52	48.2	18	91.7
Valdez-Cordova	51	40.9	11	64.7
Yukon-Koyukuk	48	50.3	20	86.0
Sitka	38	27.9	4	56.1
SE Fairbanks	31	32.2	5	100.0
Wrangell-Petersburg	30	39.6	13	94.1
Prince of Wales	25	41.8	3	78.2
Denali Borough	17	67.0	1	100.0
Aleutians West	16	75.0	1	100.0
Aleutians East	11	33.9	5	100.0
Haines	9	49.1	0	0.0
Lake and Peninsula	8	38.0	5	100.0
Skagway/Hoonah/An	6	28.0	4	100.0
Bristol Bay	3	26.3	2	100.0
Yakutat	3	57.1	0	0.0
Total (Alaska)	3923	42.9	850	79.0

Note: Unintended means the pregnancy was wanted later or not wanted at all.
 * Alaska Bureau of Vital Statistics, 2000 Annual Report, pp. 5-33, crude birth rate, all races. (Most recent data available.)

Avg Births 1997-2001 Married 13-19 y.o.		Avg Births 1997-2001 Unmarried 20+ y.o.		Avg Births 1997-2001	1998-00 Crude Birth Rate*
n	%	n	%	n	per 1,000 pop
83	21.6	986	22.3	3739	16.2
50	33.9	289	17.6	1387	17.6
15	19.0	222	26.0	725	13.4
27	40.6	162	22.9	583	13.0
4	6.7	183	37.4	396	26.3
1	2.6	115	24.4	386	13.2
2	5.4	116	49.2	200	30.5
1	2.2	105	52.9	178	22.0
11	39.8	66	21.2	261	17.9
2	5.4	104	58.3	157	24.8
3	8.1	73	54.8	128	20.2
9	29.6	54	30.2	152	13.7
2	8.3	48	38.9	107	20.4
6	35.3	29	20.7	125	12.3
3	14.0	53	50.3	95	17.6
3	44.0	24	14.8	135	13.6
0	0.0	30	25.1	96	15.4
1	5.9	18	21.2	76	12.1
1	21.8	24	27.7	61	13.3
0	0.0	15	49.2	25	10.1
0	0.0	15	51.9	21	7.1
0	0.0	16	44.9	32	8.9
2	100.0	6	26.0	18	9.0
0	0.0	9	35.8	20	14.7
0	0.0	7	26.9	22	8.3
0	0.0	3	17.4	13	13.9
0	0.0	4	57.1	6	7.8
225	21.0	2775	25.6	9145	16.0

Technical Notes

The complete PRAMS methodology has been described elsewhere.^{1,2} Because PRAMS employs a complex survey design, appropriate statistical methods must be used when analyzing the data. Percentages and standard errors were calculated for the characteristic of interest using PROC CROSSTAB in SURvey DATA ANALYSIS Software, or SUDAAN.³ SUDAAN takes the complex survey design into account, in particular, when standard errors are computed. The 95% confidence intervals (CI) were computed using the formula $CI = \text{percentage} \pm (1.96 \times \text{standard error})$. The weighted *n* is the estimated number of women in the population with the characteristic(s) of interest. All missing (blank and “don’t know”) observations are excluded when calculating the percentages. All tables, except the PRAMS-eligible table on page 15, were produced using weighted PRAMS data.

Regarding the demographic tables for birth year 2001:

- The percentage of missing values for the overall percentage of the indicator of interest is noted.
- Because estimates based on small samples are imprecise and may be biased, estimates for which the number of respondents (not shown) was less than 30 are not reported.
- Estimates based on sample sizes between 30 and 60 are reported but noted because the estimates may be unreliable.

Brief summary of technical results for the demographic tables for birth year 2001:

- All missing percentages for the selected indicators were less than 10%.
- Percentages were reported for every breakdown, i.e. there were at least 30 respondents.
- All percentages of selected indicators for black women who delivered a live-born infant in Alaska during 2001 were flagged because the number of respondents was between 30 and 60.

All statistical analyses were performed at a significance level of $\alpha=.05$. Any mention of a significant trend or significant difference between two groups implies that it is statistically significant at $\alpha=.05$.

Trend Analyses

Tests for linear trend for each indicator were completed using logistic regression. We utilized PROC LOGISTIC in SUDAAN to test for linear trend at the 95% confidence level. *P* Values $\leq .05$ are considered to be statistically significant. *P* Values for all trends are reported in the Detailed Tables section that follows.

Comparison Between Groups

We utilize several methods to make comparisons between groups, such as univariate analyses, rate ratios, and relative percent difference.

Univariate Analysis

We performed univariate analyses for selected demographics (race, ethnicity, maternal age, maternal education, and prenatal Medicaid status) on all indicators for birth year 2001. Using PROC CROSSTAB in SUDAAN, we calculated the standard errors for each subpopulation of interest and constructed 95% confidence intervals. Groups were determined to be significantly different if their respective confidence intervals did not overlap. Note that analyses that control for more than one factor at a time (multivariate analysis) may show statistical significance where the univariate analysis does not.

Rate Ratios

Significant differences between groups have been noted within the narrative and have been examined using rate ratios. Rate ratios, the ratio of two rates, are used to compare rates for two populations – the general formula follows:

$$RR = \frac{(E_1 / P_1) \times 10^n}{(E_2 / P_2) \times 10^n} = \frac{Rate_1}{Rate_2}$$

where E_1 = number of events occurring in population 1
 E_2 = number of events occurring in population 2
 P_1 = number of people in population 1 at risk of an event
 P_2 = number of people in population 2 at risk of an event
 n = base for multiplier
 $Rate_1$ = rate for population 1
 $Rate_2$ = rate for population 2

so $n = 3 \Rightarrow 10^3$ would give a rate per 1,000

Note: The multiplier, 10^n , must be the same for both rates. A rate ratio of 1.0 indicates that there is no difference in the race-specific or age-specific rates for the two populations being compared. It is customary for the group of interest to be labeled as population 1 and the reference group as population 2, so, the group of interest is always in the numerator.

Technical Notes

Relative Percent Difference

We used relative percent difference to compare differences between groups and when comparing Alaska to the United States overall.

$$RPD = \frac{(P_1 - P_2)}{P_2} \times 100 = \left(\frac{P_1}{P_2} - 1 \right) \times 100$$

where P_1 = prevalence of event in population 1

P_2 = prevalence of event in population 2

Note: It is customary for the group of interest to be labeled as population 1 and the reference group as population 2, so, the group of interest is always in the numerator.

Percent Change

Percent change between two time periods is calculated as follows:

$$PC = \frac{(P_n - P_o)}{P_o} \times 100$$

where P_n = later time period

P_o = earlier time period

- ¹ Gilbert BC, Shulman HB, Fischer LA, Rogers MM. The Pregnancy Risk Assessment Monitoring System (PRAMS): Methods and 1996 Response Rates from 11 States. *Maternal Child Health Journal*; 3(4):199-209. Dec 1999.
- ² Adams MM, Shulman HB, Bruce C, Hogue C, Brogan D, the PRAMS Working Group. The Pregnancy Risk Assessment Monitoring System: Design, Questionnaire, Data Collection and Response Rates. *Pediatric and Perinatal Epidemiology*; 5(3):333-46. Jul 1991.
- ³ Shah BV, Barnwell BG, Bieler GS. SUDAAN User's Manual: Software for Analysis of Correlated Data. Release 6.40. Research Triangle Park, NC: Research Triangle Institute. 1995.