Health Risks in Alaska Among Adults

Alaska Behavioral Risk Factor Survey

1998 Annual Report

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August 2000

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Funded by:

The Centers for Disease Control and Prevention, Cooperative Agreement No. U58/CCUO10659 and the Preventive Health and Health Services Block Grant, National Center for Chronic Disease Prevention and Health Promotion, Division of Adult and Community Health.

Acknowledgments

The program staff would like to acknowledge the technical support provided by John Middaugh, M.D., Chief, Section of Epidemiology, Alaska Division of Public Health; Al Zangri, Chief, Bureau of Vital Statistics, Alaska Division of Public Health; and Greg Williams Ph.D., State Demographer, Alaska Department of Labor.

The staff also wishes to thank Diane Ingle and Phillip Mitchell, Alaska Division of Public Health; Alexandra Hill of the Institute of Social and Economic Research; Craig Leutzinger, William Garvin and Peter Mariolis from the Centers for Disease Control and Prevention for technical assistance.

Finally, a special thanks goes to the people of Alaska who participated in this survey.

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Introduction

In recent years, both health professionals and the general public have shown increased interest in how behavioral changes can reduce a person's risk for developing health problems. This interest results from growing evidence that lifestyle strongly influences health. Behaviors linked to health problems are referred to as behavioral risk factors, and they include such things as cigarette smoking, being overweight, alcohol use, having a sedentary lifestyle, poor diet and more.

Behavioral risk factors are associated with the ten leading causes of death in the United States and Alaska. Many chronic diseases (such as heart disease, cancer and diabetes) and premature deaths could be prevented through better control of these behavioral risk factors.

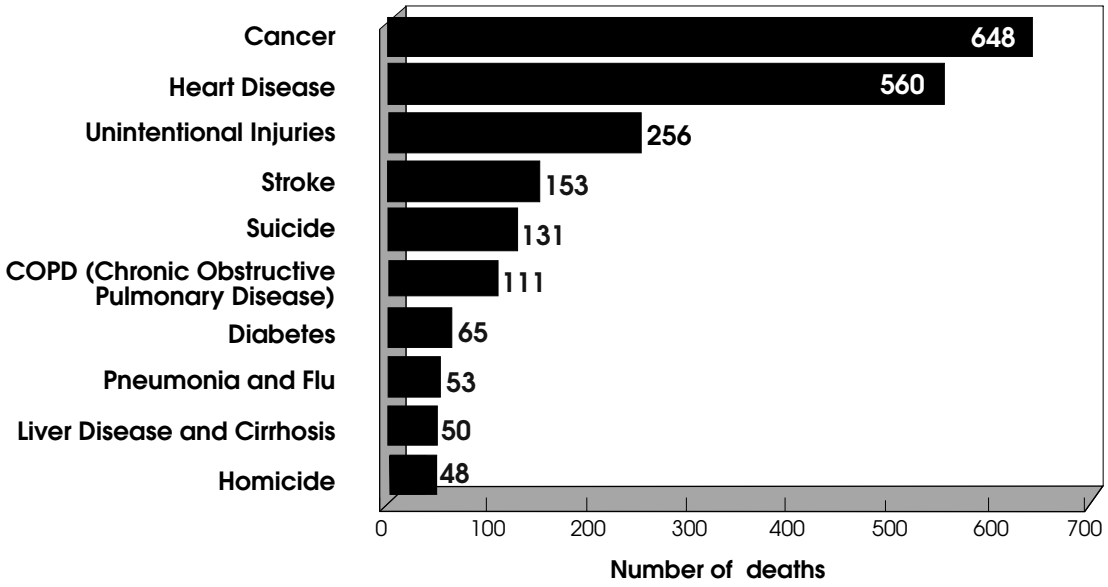
Data on behavioral risk factors are necessary for formulating intervention strategies, justifying resources to support these strategies, and proposing new policies or legislation. Surveillance of behavioral risk factors allows us to monitor trends in health behavior and particularly enables us to measure progress toward reaching the "Healthy People 2000, Health Promotion and Disease Prevention Objectives" for the nation. It can also provide the basis for launching and evaluating programs designed to reduce the prevalence of unhealthy behaviors and attain Year 2000 health goals.

Since 1981, the Centers for Disease Control and Prevention (CDC) has helped states survey adults about their health behaviors, by conducting one time telephone surveys. In 1984, CDC initiated the Behavioral Risk Factor Surveillance System (BRFSS), by which 17 states began collecting behavioral risk data through monthly telephone surveys.

The Behavioral Risk Factor Surveillance System was implemented in Alaska in the fall of 1990, when a Point-in-Time Survey of 400 residents was conducted. In 1991, the Alaska Behavioral Risk Factor Surveillance System became part of an ongoing surveillance system, conducting telephone surveys monthly. Each month, 165 adults, aged 18 and older are interviewed regarding their health and day-to-day living habits.

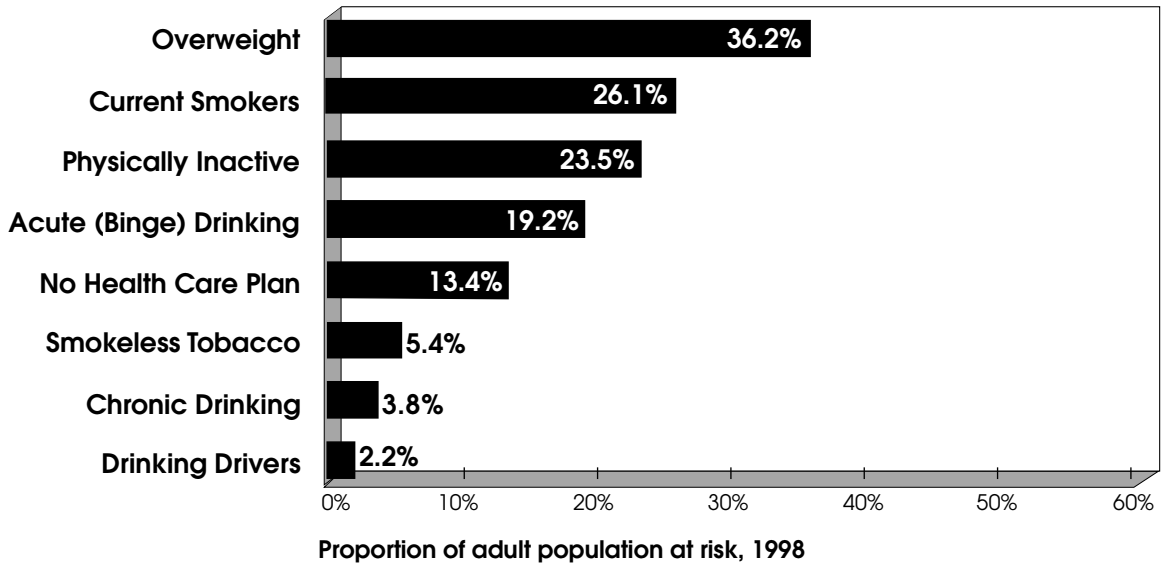
This report contains the 1998 survey results. These surveys were conducted from January through December 1998, for a total sample size of 1,989 interviews. The Division of Public Health, BRFSS continues to conduct monthly telephone surveys each year.

Leading Causes of Death in Alaska



Source: Alaska Bureau of Vital Statistics
1998 Annual Report

Behavioral Risk Factor Prevalence in Alaska



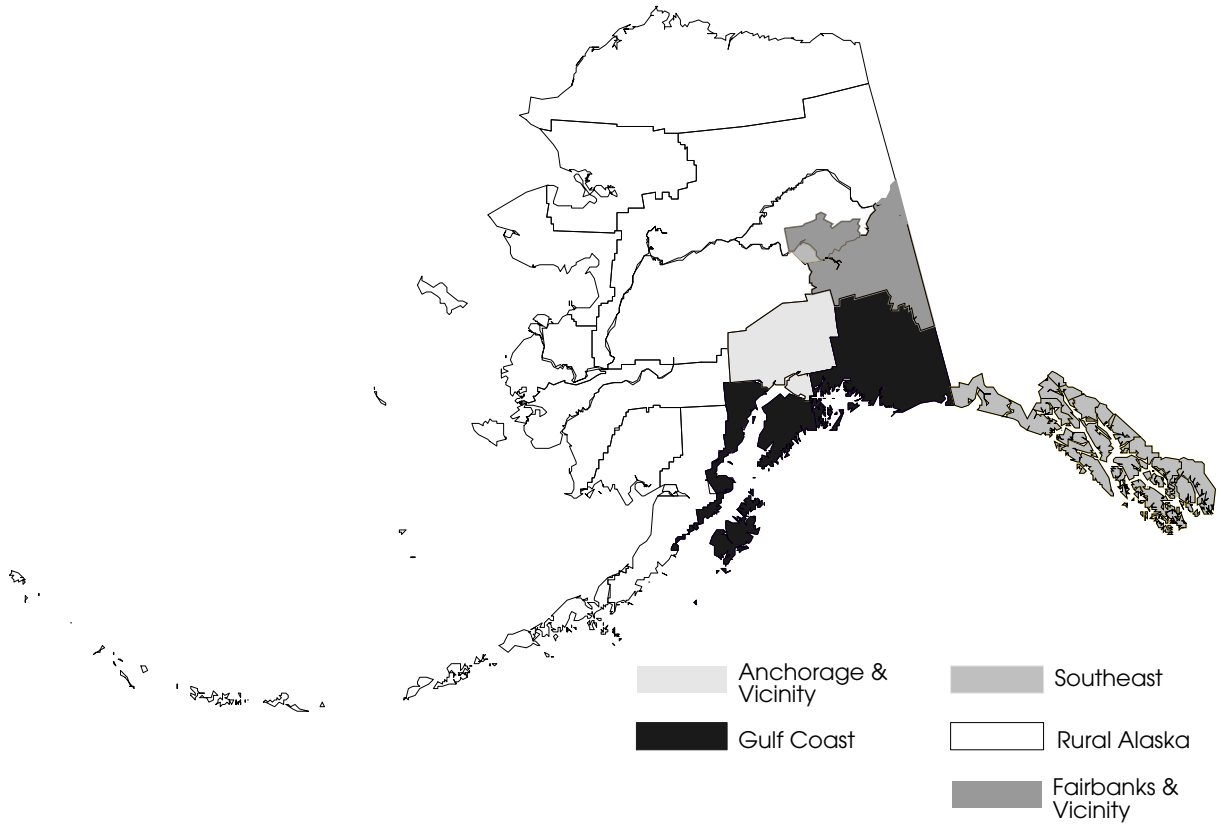
At Risk for Specific Risk Factors, 1998

Behavioral Risk Factor ◆	Proportion of Population at Risk (Prevalence)	Estimated Adults at Risk ◆◆
Overweight	36.2	154,287
Cigarette Smoking	26.1	111,204
Physically Inactive	23.5	100,159
Acute Drinking	19.2	81,832
No Health Care Plan	13.4	57,112
Smokeless Tobacco	5.4	23,015
Chronic Drinking	3.8	16,196
Drinking and Driving	2.2	9,377

◆ See Appendix A for Behavioral Risk Factor definitions.

◆◆ Based on 1998 intercensal population estimates of 426,207 adults 18 years and older in Alaska (Claritas).

1998 BRFSS Sampling Regions



The Alaska sample was stratified into five regions based on common demographics:

	Population 18 years and older ◆	Number of interviews expected
Anchorage and Vicinity (Region 1)	214,729	396
Anchorage & vicinity		
Gulf Coast (Region 2)	51,578	396
Kenai, Kodiak, Valdez, Cordova & vicinity		
Southeast (Region 3)	52,898	396
All of Southeast Alaska		
Rural (Region 4)	43,920	396
All other nonurban areas of Alaska		
Fairbanks and Vicinity (Region 5)	63,082	396
Fairbanks & vicinity		
STATEWIDE TOTAL	**426,207**	**1,980**

◆ Claritas. 1998 Race by Age by Sex Report for All Counties Nationwide. Ithaca, New York.

Methodology

The Behavioral Risk Factor Surveillance System is conducted by the Alaska Division of Public Health in cooperation with the National Centers for Disease Control and Prevention (CDC). It is a monthly telephone survey that utilizes a standard protocol and interviewing methods developed by the CDC.

Sample Design

Although the main purpose of the BRFSS is to estimate the prevalence of behavioral risk factors in the general population, interviewing each person is not economically feasible. Thus, a probability (or random) sample is selected in which all persons have a known chance of selection. The BRFSS in Alaska uses a stratified random sampling design. The Alaska sample is stratified into five regions based on common demographics. An equal number of interviews are conducted from each region, which purposely oversamples the nonurban areas of Alaska (see Appendix B).

Sample Size

Each month 165 Alaska residents age 18 and older are interviewed over the telephone regarding their health practices and day to day living habits, to reach an annual sample size of 1,980 (396 per region). The data in this report were collected from January through December, 1998, and are based on a sample size of 1,989 interviews.

Sampling Process

Since 1990, the telephone sample has been generated by the University of Alaska Anchorage, Institute of Social and Economic Research (ISER). In 1998, the Institute of Social and Economic Research used a method of computer random generation using the RANDY method (see Appendix H).

Survey Instrument

The BRFSS instrument is a standardized questionnaire which consists of three sections:

- the core (which includes demographics),
- a set of optional modules and
- state specific questions.

The 1998 questionnaire covered the topics of Health Status, Health Care Access, Nutrition, Physical Activity, Diabetes, Tobacco Use (including Smokeless Tobacco), Alcohol Use, Demographics, Women's Health, Family Planning, and HIV/AIDS Awareness.

Participation is random, anonymous and confidential. Respondents are randomly selected from among the adult members of the household. Only those living in households are surveyed. Those living in institutions (i.e., nursing homes and dormitories) are not surveyed.

Data Collection

In 1998, interviews were conducted by trained college interns. The interviews were conducted primarily in the evenings and on weekends, during the two weeks of every month specified by the CDC for all states.

Data was collected via computer using Ci3 CATI (Computer Assisted Telephone Interviewing) software. Monthly data files were sent to the Centers for Disease Control and Prevention.

Data Analysis

The Behavioral Risk Factor Surveillance System (BRFSS) data contains information on Alaskan adults only (aged 18 and above).

Data collected by BRFSS were edited using PCEdits software produced by the CDC. Edit reports were produced monthly and corrections made. Corrected data files and edit reports were sent to the CDC monthly. At the end of each survey year, data are compiled and weighted by CDC, and cross tabulations and prevalence reports are prepared.

Weighting: Unweighted data are the actual responses of each survey respondent. The data are weighted or adjusted to compensate for the overrepresentation or under-representation of persons in various subgroups. The data are further weighted to adjust the distribution of the sample data so that it reflects the total population of the sampled area. In 1998, survey results were weighted using 1998 intercensal population estimates for Alaska obtained from Claritas (See Appendix J).

Reporting

This report provides standard tables describing survey results based on sex, race (Native and Non-native), state total, age, education, income, marital status and employment.

Prevalence estimates for the sex, race and state total table reflect the total number of respondents, excluding those who did not respond to the question. Tables for other subgroups (age, education, income, marital status, and employment) reflect the total number of respondents including those responses that are unknown or refused for a total sample size of 1,989. All prevalence estimates in this report are based on analysis produced by the CDC with the exception of health care coverage.

Reporting on Health Care Coverage: Health care coverage results for this report were based on a special analysis produced by the Alaska Division of Public Health, Bureau of Vital Statistics. This analysis adjusted for survey respondents who first reported that they had no health care coverage and then in a follow up question reported to be covered by a health care plan. This explains the reason that these prevalence estimates may not match the estimates published by the CDC.

Reporting on Overweight: Overweight results for this report were based on the BRFSS standard definition based on a body mass index [weight in kilograms divided by height in meters squared (W/H**2)] for females >= 27.3 and males >= 27.8. This is consistent with reporting for prior years. New standards from the National Heart, Lung, and Blood Institute defines overweight as a body mass index of 25.0 -29.9 and obesity as a body mass index of >=30.0 for both males and females.

Comparisons: All prevalence comparisons made to the National BRFSS Ranges and the National BRFSS Median are comparisons made to the 52 participating programs (50 states, Puerto Rico and the District of Columbia) in the Behavioral Risk Factor Surveillance System in 1998. These comparisons were taken from the 1998 BRFSS Summary Prevalence Report produced by the CDC. State prevalence estimates used to calculate national range and median in the 1998 BRFSS Summary Prevalence Report are based on denominators which exclude missing and unknown responses.

Limitations

The BRFSS uses telephone interviewing for several reasons. Telephone interviews are faster and less expensive than face to face interviews. Calls are made from one central location (Juneau) and are monitored for quality control.

The one main limitation of any telephone survey is that those people without phones cannot be reached and are not represented. In Alaska, about 92% of households have phones (about 93% of all U.S. households have phones). The percentage of households with a telephone varies by region in Alaska (see Appendix G). In general, persons of low socioeconomic status are less likely than persons of higher socioeconomic status to have phones and are undersampled. However, national BRFSS results correspond well with findings from other surveys conducted in person.

Some inaccuracy is expected from any survey based on self-reported information and the potential for bias must be kept in mind when interpreting results.

Survey response rates may also affect the potential for bias in the data, however, in general the Alaska survey response rates were favorable (see Appendix I).

The reliability of a prevalence estimate depends on the actual, unweighted number of respondents in a category or demographic subgroup (not a weighted number). Interpreting and reporting weighted numbers that are based on a small, unweighted number of respondents can be misleading. The degree of precision increases if the sample size is larger and decreases if the sample size is smaller. In this report, prevalence estimates are not reported for those categories in which there were less than 50 respondents and are rounded to the nearest whole percent when the denominator is less than 500. Confidence intervals are reported for the prevalence estimates for state totals, gender and race.

Table 1 on the following page describes the sample population and should be used as a basis for understanding the tables in this report. Due to rounding, the weighted numbers in this table do not add exactly to the 1998 population estimates cited in this report.

Table 1

Survey Population by Selected Demographics

Alaska BRFSS 1998

	n	%	Weighted N
Gender			
Male	924	52.3	222,864
Female	1,065	47.7	203,343
Age			
18-24	205	13.0	55,445
25-34	425	23.1	98,252
35-44	540	26.8	114,048
45-54	447	18.3	77,833
55-64	190	10.4	44,307
65+	172	8.0	34,286
Unknown/Refused	10	0.5	2,036
Education			
Less than High School Graduate	163	7.3	31,090
High School Graduate or GED	654	33.1	140,965
Some College or Technical School	615	31.8	135,482
College Graduate	552	27.5	117,186
Unknown/Refused	5	0.3	1,484
Income			
< $15,000	204	9.2	39,357
$15,000-24,999	329	16.0	68,134
$25,000-49,999	635	31.1	132,551
$50,000-74,999	331	16.7	71,306
> $75,000	325	19.2	81,622
Unknown/Refused	165	7.8	33,237

	n	%	Weighted N
Race			
Native	363	13.3	56,768
Non-Native	1,596	85.0	362,150
Unknown/Refused	30	1.7	7,289
Marital Status			
Married	1,100	61.3	261,452
Unmarried	885	38.6	164,520
Unknown/Refused	4	0.1	235
Employment			
Employed	1,413	73.0	311,164
Not Employed	152	6.3	26,647
Homemaker or Student	166	9.0	38,469
Retired or unable to work	254	11.6	49,276
Unknown	4	0.2	652
TOTAL	**1,989**	**100**	**426,207**

N = Number of survey respondents in this demographic subgroup. Total sample size = 1,989.

% = This is a weighted (adjusted) percentage of the state population (adult) in this demographic subgroup, based on the survey data.

Weighted N = Weighted sample number, generalized to 1998 intercensal population estimates for Alaska (Claritas).

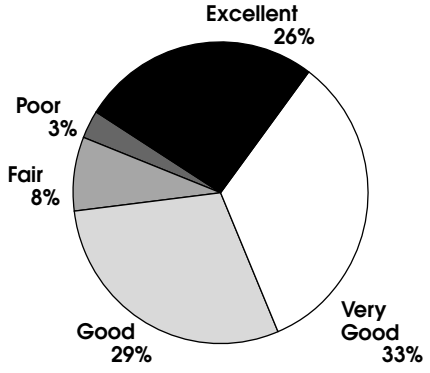
Quality of Life

A fundamental goal of the Year 2000 national health objectives is to increase the span of healthy life for all persons in the United States. Although the average life expectancy of Americans has increased to 75 years, for some persons, increased life expectancy includes periods of diminished health and functions (lowered health-related quality of life). In general, population based information on good health has been limited. In recent years, questions to assess the health-related quality of life have been added to the BRFSS.

Self Reported Health Status of Alaskans

General Health Status: In 1998, 55.4% of Alaskan adults rated their own health as excellent or good. Only 10.9% of Alaskans rated their health as fair or poor. (National BRFSS Range 9.9 to 32.1%, National BRFSS Median 12.7%). Of those surveyed, 26.1% rated their health excellent, 33.3% as very good, 29.3% as good, 7.9% as fair and 3.0% as poor.

How Alaskans Rate Their Own Health



Recent Physical Health: Alaskan adults reported an average of 2.8 days out of the past 30 days when their physical health was not good (National BRFSS Range 1.1 to 4.2 days, National BRFSS Median 3.1 days). Alaskan males reported an average of 2.6 days during the past month when their physical health was not good. Alaskan females reported an average of 3.0 days during the past month when their physical health was not good.

Recent Mental Health: Alaskan adults reported an average of 2.3 days out of the past 30 days when their mental health was not good (National BRFSS Range 0.8 to 4.5 days, National BRFSS Median 3.0 days). Alaskan males reported an average of 1.7 days during the past month when their mental health was not good. Alaskan females reported an average of 3.0 days during the past month when their mental health was not good.

Recent Activity Limitations: Alaskan adults reported an average of 2.8 days during the past 30 days when their usual activities were limited due to their physical or mental health (National BRFSS Range 2.8 to 6.8 days, National BRFSS Median 3.7 days). Alaskan males reported an average of 3.1 days when their activities were limited during the past month and Alaskan females reported an average of 2.6 days when their activities were limited during the past month.

Year 2000 National Health Objective

Increase years of healthy life to at least 65 years. (Objective 8.1)

Risk Factors

Alcohol Use

Health Risk

Alcohol is implicated in nearly half of all deaths caused by motor vehicle crashes and a substantial portion of deaths from fires, drowning, homicide and suicide. From 1992-1994, alcohol accounted for 11.2% of the deaths in Alaska.

Medical problems due to alcohol dependence include alcohol withdrawal syndrome, psychosis, hepatitis, cirrhosis, pancreatitis, thiamine deficiency, neuropathy, dementia and cardiomyopathy.

Excessive alcohol use during pregnancy is a leading preventable cause of birth defects and mental retardation.

Alcohol Use in Alaska

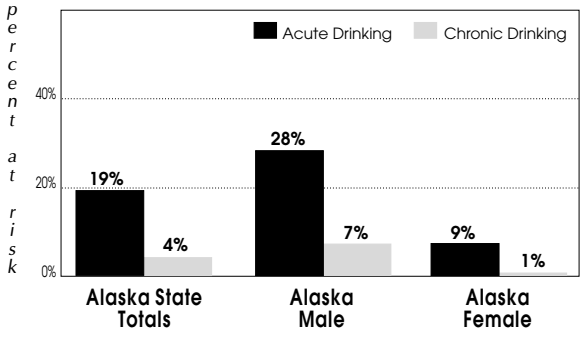
Definitions used in this survey:

Acute (Binge) Drinking: *Respondents who report having five or more drinks on an occasion, one or more times in the past month.*

Chronic Drinking: *Respondents who report an average of 60 or more alcoholic drinks a month.*

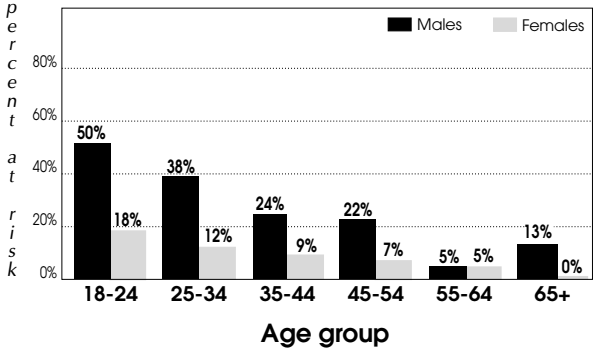
Drinking and Driving: *Respondents who report having driven after having too much to drink, one or more times in the past month.*

Comparison of Risk Prevalence for Alcohol Use



At Risk for Acute Drinking in Alaska

By age and gender



(Data not shown)

In 1998, 61.8% of those surveyed, reported drinking alcohol in the past month. Among males, 69.0% reported drinking alcohol in the past month, and among females, 53.8% reported drinking alcohol in the past month.

An estimated 19.2% of Alaskan adults engaged in acute (binge) drinking. Of the males, 28.2% engaged in binge drinking and of the females 9.3% engaged in binge drinking. Men are more likely than women to engage in binge drinking in every age group over 18.

An estimated 3.8% of Alaskan adults were at risk for chronic drinking. Of males, 6.6% had more than 60 drinks during the past month and of females, <1% had more than 60 drinks during the past month.

An estimated 2.2% of Alaskan adults engaged in drinking and driving during the past month. Of men, 3.5% reported drinking and driving during the past month and of women, 0.8% reported the same thing.

Year 2000 National Health Objectives

The Year 2000 Health Objectives relate to health status, risk reduction, and service and protection to reduce alcohol and other drug problems. The health objectives do not relate to alcohol consumption as defined by the 1998 BRFSS.

Table 2

Prevalence of Acute (Binge) Drinking by Selected Demographics

Alaska BRFSS 1998

	n	%	N	95% CI
Gender				
Male	259	28.2	896	24.2 – 32.3%
Female	97	9.3	1,044	6.9 – 11.7%
Race				
Native	76	21	342	15.9 – 26.5%
Non-Native	276	19	1,569	16.2 – 21.6%
TOTAL	**356**	**19.2**	**1,940**	**16.7 – 21.6%**

	n	%	N
Age			
18-24	65	35	205
25-34	102	26	425
35-44	96	17	540
45-54	69	15	447
55-64	14	5	190
65+	10	6	172
Unknown/Refused	—	—	10

	n	%	N
Education			
Less than High School Graduate	31	20	163
High School Graduate or GED	147	24	654
Some College or Technical School	112	20	615
College Graduate	66	11	552
Unknown/Refused	—	—	5
Income			
< $15,000	29	12	204
$15,000-24,999	75	22	329
$25,000-49,999	119	20	635
$50,000-74,999	68	21	331
> $75,000	48	18	325
Unknown/Refused	17	12	165

n = Number of respondents who have had five or more drinks on an occasion, one or more times in the past month.

% = This is a weighted (adjusted) percentage of the state population (adult) at risk in this demographic subgroup, based on the survey data.

N = Total number of respondents in this subgroup.

95% CI = 95% Confidence Interval; the range of values within which the true value of a prevalence estimate would be expected to fall within, 95% of the time.

Table 3

Prevalence of Chronic Drinking by Selected Demographics

Alaska BRFSS 1998

	n	%	N	95% CI
Gender				
Male	60	6.6	896	4.4 – 8.8%
Female	10	0.7	1,037	0.1 – 1.2%
Race				
Native	10	3	343	0.6 – 4.5%
Non-Native	59	4	1,561	2.5 – 5.2%
TOTAL	**70**	**3.8**	**1,933**	**2.6 – 5.0%**

	n	%	N
Age			
18-24	13	6	205
25-34	15	3	425
35-44	19	4	540
45-54	14	3	447
55-64	3	.1	190
65+	6	5	172
Unknown/Refused	—	—	10

	n	%	N
Education			
Less than High School Graduate	7	3	163
High School Graduate or GED	26	4	654
Some College or Technical School	26	5	615
College Graduate	11	2	552
Unknown/Refused	—	—	5
Income			
< $15,000	9	3	204
$15,000-24,999	14	5	329
$25,000-49,999	24	3	635
$50,000-74,999	16	5	331
> $75,000	6	4	325
Unknown/Refused	1	1	165

n = Number of respondents who have had an average of 60 or more alcoholic drinks during the past month.

% = This is a weighted (adjusted) percentage of the state population (adult) at risk in this demographic subgroup, based on the survey data.

N = Total number of respondents in this subgroup.

95% CI = 95% Confidence Interval; the range of values within which the true value of a prevalence estimate would be expected to fall within, 95% of the time.

Table 4

Prevalence of Drinking and Driving by Selected Demographics

Alaska BRFSS 1998

	n	%	N	95% CI
Gender				
Male	38	3.5	903	1.9 – 5.1%
Female	7	0.8	1,048	0.1 – 1.6%
Race				
Native	8	3	348	0.5 – 4.8%
Non-Native	36	2	1,574	1.2 – 3.2%
TOTAL	**45**	**2.2**	**1,951**	**1.3 – 3.2%**

	n	%	N
Age			
18-24	6	3	205
25-34	18	5	425
35-44	8	2	540
45-54	12	2	447
55-64	1	<1	190
65+	—	—	172
Unknown/Refused	—	—	10

	n	%	N
Education			
Less than High School Graduate	1	<1	163
High School Graduate or GED	19	3	654
Some College or Technical School	12	2	615
College Graduate	13	1	552
Unknown/Refused	—	—	5
Income			
< $15,000	6	6	204
$15,000-24,999	8	2	329
$25,000-49,999	21	2	635
$50,000-74,999	6	1	331
> $75,000	3	2	325
Unknown/Refused	1	<1	165

n = Number of respondents who report having driven after having too much to drink, one or more times in the past month.

% = This is a weighted (adjusted) percentage of the state population (adult) at risk in this demographic subgroup, based on the survey data.

N = Total number of respondents in this subgroup.

95% CI = 95% Confidence Interval; the range of values within which the true value of a prevalence estimate would be expected to fall within, 95% of the time.

Diabetes Awareness

Health Risk

Diabetes is a chronic and potentially disabling condition characterized by elevated blood glucose levels. Diabetes is classified into two main types: Type 1 and Type 2. The most common type is Type 2, which affects 90% of those with diabetes and usually appears after the age of 40. Type 1 diabetes affects less than 10% of those with diabetes. Although this type of diabetes can occur at any age, it most often appears in childhood or the teen years.

An estimated 14,200 adult Alaskans had been diagnosed with diabetes. In 1998, diabetes was the seventh leading cause of death in Alaska. Individuals with diabetes are at increased risk for

- heart disease
- blindness
- kidney failure, and
- lower extremity amputations

Diabetes and its complications occur among Americans of all ages and racial and ethnic groups. The burden of this disease is heavier among elderly Americans and certain racial and ethnic populations, including African Americans, Hispanics/Latinos, and American Indians.

Diabetes imposes a heavy economic burden upon the nation each year. In 1997, an estimated $98 billion in direct and indirect costs were spent on diabetes. In Alaska, the medical care costs related to diabetes treatment were estimated to be $141 million.

Much of the burden of diabetes can be prevented with early detection, improved delivery of care, and diabetes self-management education.

Diabetes in Alaska

Among Alaskan adults, 3% reported being told by a doctor that they had diabetes. Among men, 3.3% reported being told that they had diabetes and among women 2.6% reported being told that they had diabetes. Among women, 1.3% reported being told they had diabetes during pregnancy.

Table 5

Prevalence of Diabetes Awareness by Selected Demographics

Alaska BRFSS 1998

	n	%	N	95% CI
Gender				
Male	39	3.3	923	1.7 – 4.9%
Female	36	2.6	1,065	1.5 – 3.7%
Race				
Native	14	3	363	1.2 – 5.1%
Non-Native	60	3	1,595	1.9 – 4.1%
TOTAL	**75**	**3.0**	**1,988**	**2.0 – 3.9%**

	n	%	N
Age			
18-24	1	3	205
25-34	4	1	425
35-44	9	2	540
45-54	17	3	447
55-64	22	6	190
65+	22	11	172
Unknown/Refused	—	—	10
Education			
Less than High School Graduate	11	5	163
High School Graduate or GED	27	3	654
Some College or Technical School	14	2	615
College Graduate	23	3	552
Unknown/Refused	—	—	5

	n	%	N
Income			
< $15,000	15	9	204
$15,000-24,999	8	2	329
$25,000-49,999	19	2	635
$50,000-74,999	12	4	331
> $75,000	13	3	325
Unknown/Refused	8	3	165
Marital Status			
Married	38	3	1,100
Unmarried	37	4	885
Unknown/Refused	—	—	4
Employment			
Employed	39	2	1,413
Not Employed	5	2	152
Homemaker or Student	4	5	166
Retired or unable to work	27	9	254
Unknown	—	—	4

n = Number of respondents who report ever told by a doctor that they have diabetes.

% = This is a weighted (adjusted) percentage of the state population (adult) at risk in this demographic subgroup, based on the survey data.

N = Total number of respondents in this subgroup.

95% CI = 95% Confidence Interval; the range of values within which the true value of a prevalence estimate would be expected to fall within, 95% of the time.

Overweight

Health Risk

Overweight is associated with high blood cholesterol, high blood pressure, and diabetes and is an independent risk factor for heart disease. Overweight also increases the risk for gall bladder disease and certain types of cancers.

Studies reveal that reduction in body weight can lower blood pressure and improve blood cholesterol levels in overweight individuals and in individuals who have high blood pressure or blood cholesterol.

Overweight in Alaska

Definition used in this survey:

Overweight: *Females with body mass index [weight in kilograms divided by height in meters squared (w/h **2)] ≥ 27.3 and males with body mass index ≥ 27.8.*

According to this definition, based on body mass index, 36.2% of Alaskans were overweight (National BRFSS Range 22.5 to 37.8%, National BRFSS Median 32.4%). Among men, 38.8% were overweight and among women, 33.3% were overweight. This is higher than the Year 2000 goal of 20%.

Weight Control in Alaska

During 1998, 37.8% of Alaskan adults reported they were trying to lose weight. Among men, 32.2% were trying to lose weight and among women, 43.9% were trying to lose weight.

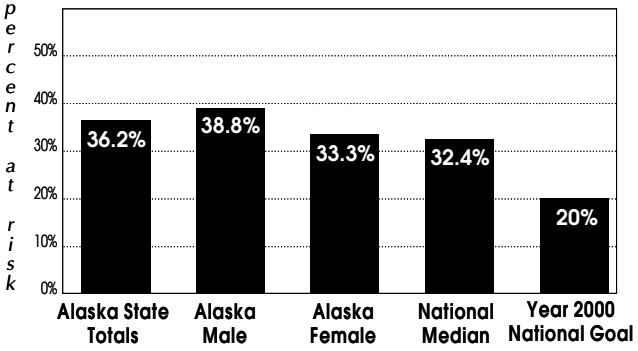
Of those trying to lose weight or maintain their current weight, 11.5% were eating fewer calories, 33.6% were eating less fat and 24.8% were eating fewer calories and less fat. Of those trying to lose weight or maintain their current weight, 64.9% were using physical activity or exercise to lose or maintain their weight.

Of those not trying to lose weight, 51.2% were trying to keep from gaining weight (maintaining current weight).

Of those trying to lose or maintain their weight, 18.9% felt that their weight was desirable, 24.9% felt that they were 1-10 pounds over their desired weight, 21.4% felt that they were 11-20 pounds over their desired weight and 31.3% felt that they were more that 20 pounds over what they would like their weight to be.

Of the people surveyed who were overweight based on body mass index, 43.4% were not eating fewer calories and/or less fat and exercising to lose weight (National BRFSS Range 43.4 to 70.3%, National BRFSS Median 52.4%).

Comparison of Risk Prevalence for Overweight



National BRFSS Range 22.5 - 37.8%, Median 32.4%

Of those surveyed, 9.4% reported being advised by a health professional in the past twelve months to lose weight. Of those surveyed, 3.6% reported taking weight loss pills in the past 2 years and nearly 1% (0.7%) reported currently taking weight loss pills.

Year 2000 National Health Objective

Reduce overweight to a prevalence of no more than 20% among people aged 20 and older, and no more than 15% among adolescents aged 12 to 19 (based on body mass index). (Objective 2.3)

Table 6

Prevalence of Overweight by Selected Demographics

Alaska BRFSS 1998

	n	%	N	95% CI
Gender				
Male	330	38.8	904	34.2 – 43.4%
Female	351	33.3	1,008	29.5 – 37.2%
Race				
Native	155	46	347	38.8 – 52.3%
Non-Native	517	35	1,536	31.6 – 38.4%
TOTAL	**681**	**36.2**	**1,912**	**33.2 – 39.3%**

	n	%	N
Age			
18-24	52	26	205
25-34	128	32	425
35-44	176	35	540
45-54	173	41	447
55-64	89	46	190
65+	62	31	172
Unknown/Refused	1	◆◆	10
Education			
Less than High School Graduate	67	34	163
High School Graduate or GED	221	33	654
Some College or Technical School	210	35	615
College Graduate	181	38	552
Unknown/Refused	2	◆◆	5
Income			
< $15,000	86	38	204
$15,000-24,999	113	35	329
$25,000-49,999	207	34	635
$50,000-74,999	110	36	331
> $75,000	118	38	325
Unknown/Refused	47	27	165
Marital Status			
Married	377	37	1,100
Unmarried	303	33	885
Unknown/Refused	1	◆◆	4
Employment			
Employed	465	34	1,413
Not Employed	54	35	152
Homemaker or Student	56	36	166
Retired or unable to work	106	40	254
Unknown	—	—	4

◆◆ = Not Reported

n = Number of respondents who are overweight based on Body Mass Index (BMI).

% = This is a weighted (adjusted) percentage of the state population (adult) at risk in this demographic subgroup, based on the survey data.

N = Total number of respondents in this subgroup.

95% CI = 95% Confidence Interval; the range of values within which the true value of a prevalence estimate would be expected to fall within, 95% of the time.

Nutrition

Health Risk

Dietary factors are associated with five of the ten leading causes of death, including coronary heart disease, some types of cancer, stroke, noninsulin-dependent diabetes mellitus and atherosclerosis.

The Dietary Guidelines for Americans (1995) recommend that one should do the following to stay healthy:

- eat a variety of foods,
- balance the food you eat with physical activity-maintain or improve your current weight,
- choose a diet with plenty of grain products, vegetables, and fruits,
- choose a diet low in fat, saturated fat, and cholesterol,
- choose a diet moderate in sugars, salt and sodium, and
- if you drink, do so in moderation.

Consumption of fruits and vegetables may reduce the risk of chronic diseases including some types of cancer, heart disease and stroke.

Fruit and Vegetable Consumption in Alaska

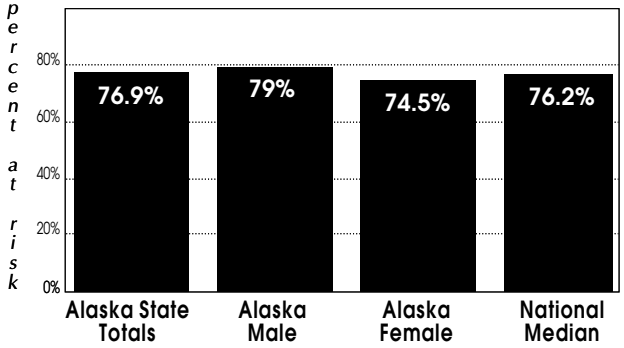
In 1998, 76.9% of Alaskan adults did not consume five or more servings of fruits and vegetables per day (National BRFSS Range 68.1 to 91.7%, National BRFSS Median 76.2%). Among Alaskan adults, 4% ate less than one serving of fruits and vegetables a day, 33.1% ate one to two servings daily, 39.7% ate three to four servings daily, and 23.2% ate five or more servings per day. Among males, 21% ate five or more servings a day, and among females 25.5% ate five or more servings a day.

Year 2000 National Health Objectives

Reduce dietary fat intake to an average of 30% of calories or less and average saturated fat intake to less than 10% of calories among people aged two and older. (Objective 2.5)

Increase complex carbohydrate and fiber containing foods in the diets of adults to five or more daily servings for fruits and vegetables, and to six or more daily servings for grain products. (Objective 2.6)

Comparison of Risk Prevalence for Fruit & Vegetable Consumption



National BRFSS Range 68.1 - 91.7%, Median 76.2%

Physical Activity

Health Risk

According to the Surgeon General, significant health benefits can be obtained by including a moderate amount of physical activity on most, if not all, days of the week.

Regular physical activity reduces the risk of premature death in general and in particular greatly reduces the risk of dying from coronary heart disease, the second leading cause of death in Alaska. Physical activity also reduces the risk of developing diabetes, hypertension, and colon cancer. In addition, physical activity enhances mental health, fosters healthy muscles, bones and joints and helps maintain function and preserve independence in older adults.

Physical Activity in Alaska

Definitions for this survey:

Physically Inactive: *Respondents who report no leisure time physical activity during the past month.*

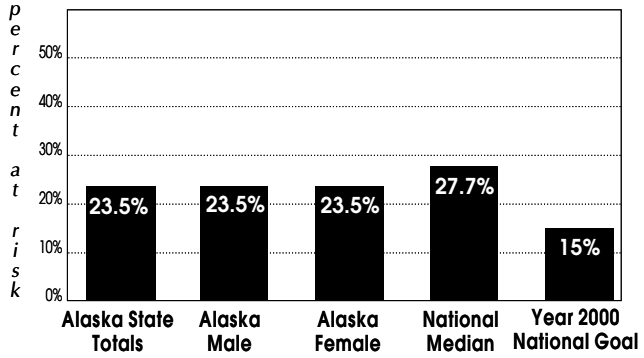
Sedentary Lifestyle: *Respondents who report no leisure time physical activity or activity less than 20 minutes and fewer than three times a week.*

Regular and Sustained Physical Activity: *Respondents who report physical activity five or more sessions per week, 30 or more minutes per session, regardless of intensity.*

Regular and Vigorous Physical Activity: *Respondents who report physical activity or pair of activities for 3 or more sessions per week, 20 minutes or more per session, at 50% or more capacity.*

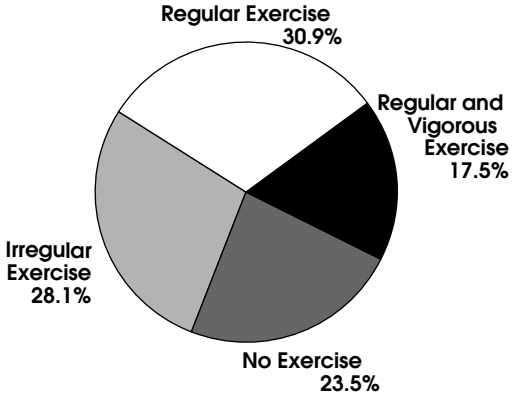
In 1998, the proportion of adults that reported no leisure time physical activity was 23.5% (National BRFSS Range 17.1 to 60.6%, National BRFSS Median 27.7%). Of males, 23.5% reported being physically inactive and 23.5% of females reported being physically inactive.

Comparison of Risk Prevalence for Physically Inactive



National BRFSS Range 17.1 - 60.6%, Median 27.7%

Physical Activity Levels of Alaskan Adults



In total, 51.6% of Alaskan adults reported a sedentary lifestyle. Of males, 51.1% were sedentary and of females, 52.1% were sedentary.

The proportion of adults that reported engaging in no regular and sustained exercise was 75.2% (National BRFSS Range 69.7 to 87.0%, National BRFSS Median 79.6%). Of males, 74.0% engaged in no regular and sustained exercise and 76.6% of females engaged in no regular and sustained exercise.

The proportion of adults that engaged in no regular and vigorous exercise was 82.5% (National BRFSS Range 82.3 to 92.9%, National BRFSS Median 86.7%).

Year 2000 National Health Objectives

Increase to at least 30% the proportion of people aged six and older who engage regularly, preferably daily, in light to moderate physical activity for at least 30 minutes a day. (Objective 1.3)

Increase to at least 20% the proportion of people aged 18 and older and to at least 75% the proportion of children and adolescents aged 6–17 who engage in vigorous physical activity that promotes the development of cardiorespiratory fitness 3 or more days per week for 20 or more minutes per occasion. (Objective 1.4)

Reduce to no more than 15% the proportion of people aged six and older who engage in no leisure time physical activity. (Objective 1.5)

Table 7

Prevalence of Physically Inactive by Selected Demographics

Alaska BRFSS 1998

	n	%	N	95% CI
Gender				
Male	230	23.5	924	19.7 – 27.3%
Female	248	23.5	1,064	20.0 – 27.0%
Race				
Native	121	32	362	26.0 – 38.2%
Non-Native	353	22	1,596	19.4 – 25.1%
TOTAL	**478**	**23.5**	**1,988**	**20.9 – 26.1%**

	n	%	N
Age			
18-24	43	17	205
25-34	84	21	425
35-44	126	23	540
45-54	100	24	447
55-64	59	33	190
65+	63	32	172
Unknown or Refused	3	◆◆	10
Education			
Less than High School Graduate	66	38	163
High School Graduate or GED	198	30	654
Some College or Technical School	144	21	615
College Graduate	68	15	552
Unknown/Refused	2	◆◆	5
Income			
< $15,000	72	33	204
$15,000-24,999	102	28	329
$25,000-49,999	133	21	635
$50,000-74,999	73	25	331
> $75,000	58	17	325
Unknown/Refused	40	26	165
Marital Status			
Married	261	24	1,100
Unmarried	216	23	885
Unknown/Refused	1	◆◆	4
Employment			
Employed	312	22	1,413
Not Employed	51	37	152
Homemaker or Student	29	17	166
Retired or unable to work	86	32	254
Unknown	—	—	4

◆◆ = Not Reported

n = Number of respondents who report no leisure time physical activity.

% = This is a weighted percentage of the state population (adult) at risk in this demographic subgroup, based on the survey data.

N = Total number of respondents in this subgroup.

95% CI = 95% Confidence Interval; the range of values within which the true value of a prevalence estimate would be expected to fall within, 95% of the time.

Smoking

Health Risk

Tobacco use is the most important single preventable cause of death and disease in our society. Tobacco use is a major risk factor for diseases of the heart and blood vessels; chronic bronchitis and emphysema; cancers of the lung, larynx, pharynx, oral cavity, esophagus, pancreas, and bladder; and other problems such as respiratory infections and stomach ulcers. Cigarette smoking accounts for about 430,000 deaths in the United States each year. Smoking accounts for 21% of all coronary heart disease deaths, 87% of lung cancer deaths, and 82% of deaths from chronic obstructive pulmonary disease. Cigarette smoking during pregnancy accounts for 17-26% of low birth weight babies, up to 14% of preterm deliveries, and about 10% of all infant deaths.

From 1992 to 1994, smoking accounted for 19.8% of the deaths in Alaska.

Smoking In Alaska

Current smoking *definition used in this survey: Respondents who have smoked at least 100 cigarettes in their entire life and smoke now (regularly and irregularly).*

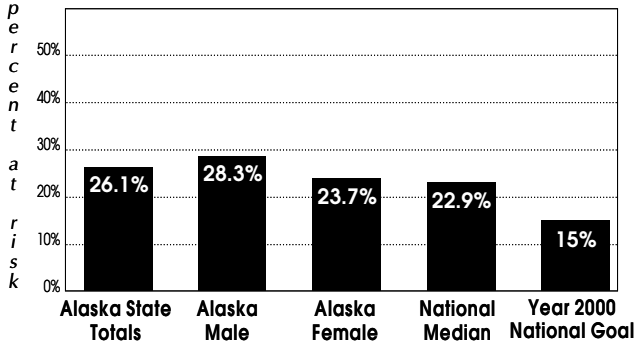
Among Alaskan adults, 26.1% currently smoked cigarettes (National BRFSS Range 14.2 to 30.8%, National BRFSS Median 22.9%). The prevalence was higher among males (28.3%) than females (23.7%).

Over half of all the people surveyed (51.6%) had smoked at least 100 cigarettes in their lifetime. Of all the people who had smoked during their lifetime 49.3% had quit. Many (56.9%) former smokers quit smoking more than five years ago. Of the current smokers, 57.3% had quit smoking for one day or longer within the last year.

Cigar Smoking In Alaska

Among Alaskan adults, 51.9% reported ever smoking a cigar. Of persons who had smoked a cigar, 11.9% reported smoking cigars within the last month, 15.2% within the past one to six months, 12% within the past six to twelve months, 19.8% within the past one to five years, and 39.5% more than five years ago.

Comparison of Risk Prevalence for Cigarette Smoking



National BRFSS Range 14.2 - 30.8%, Median 22.9%

Year 2000 National Health Objectives

Reduce cigarette smoking to a prevalence of no more than 15% among people aged 20 and older. (Objective 3.4)

Increase to at least 50% the proportion of cigarette smokers aged 18 and older who stopped smoking cigarettes for at least one day during the preceding year. (Objective 3.6)

Table 8

Prevalence of Cigarette Smoking by Selected Demographics

Alaska BRFSS 1998

	n	%	N	95% CI
Gender				
Male	273	28.3	922	24.4 – 32.2%
Female	276	23.7	1,064	20.4 – 27.1%
Race				
Native	155	40	361	33.5 – 46.1%
Non-Native	387	24	1,595	21.0 – 26.7%
TOTAL	**549**	**26.1**	**1,986**	**23.5 – 28.7%**

	n	%	N
Age			
18-24	83	32	205
25-34	119	28	425
35-44	164	29	540
45-54	100	22	447
55-64	49	24	190
65-74	20	15	106
75+	8	10	66
Unknown/Refused	6	◆◆	10
Education			
Less than High School Graduate	69	47	163
High School Graduate or GED	251	36	654
Some College or Technical School	158	23	615
College Graduate	68	12	552
Unknown/Refused	3	◆◆	5

	n	%	N
Income			
< $15,000	88	36	204
$15,000-24,999	120	33	329
$25,000-49,999	176	28	635
$50,000-74,999	71	19	331
> $75,000	47	19	325
Unknown/Refused	47	29	165
Marital Status			
Married	232	20	1,100
Unmarried	315	35	885
Unknown/Refused	2	◆◆	4
Employment			
Employed	376	26	1,413
Not Employed	69	39	152
Homemaker or Student	41	22	166
Retired or unable to work	61	22	254
Unknown	2	◆◆	4

◆◆ = Not Reported

n = Number of respondents who are current regular and irregular smokers.

% = This is a weighted (adjusted) percentage of the state population (adult) at risk in this demographic subgroup, based on the survey data.

N = Total number of respondents in this subgroup.

95% CI = 95% Confidence Interval; the range of values within which the true value of a prevalence estimate would be expected to fall within, 95% of the time.

Smokeless Tobacco Use

Health Risk

Oral cancer has been shown to occur several times more frequently among smokeless tobacco users than among nonusers and may be 50 times as frequent among long-term snuff users.

Smokeless tobacco, especially moist snuff, contains high levels of potent carcinogens. About one third of users develop leukoplakia, a white wrinkled patch on the gums and inside the mouth, which is a premalignant condition.

All smokeless tobacco products contain substantial amounts of nicotine; their use can support nicotine dependence and may lead to cigarette use.

The consumption of smokeless tobacco in the United States increased 40% between 1970 and 1986. Most new users of smokeless tobacco products are adolescent males. In 1988, 6.6% of males aged 12 through 17 had used some form of smokeless tobacco in the preceding month.

In rural Alaskan communities, smokeless tobacco use is not uncommon among five year olds. Nationally, the average age to start smokeless tobacco is twelve years.

Smokeless Tobacco Use in Alaska

Of all Alaskan adults, 24.7% reported to have ever used or tried chewing tobacco or snuff or both. Of men, 41.4% had used or tried such products, and 6.5% of women.

Among Alaskan adults, 5.4% were current smokeless tobacco users. The prevalence of smokeless tobacco use was higher among males (8.6%) than females (1.9%).

Among young adults (18-24 years of age) 8.9% currently used smokeless tobacco. Among the 18 to 24 year old males, 46.7% ever used smokeless tobacco and among the 18 to 24 year old females, 12.3% ever used smokeless tobacco.

Year 2000 National Health Objective

Reduce smokeless tobacco use by males aged 12 to 24 to a prevalence of no more than 4%. (Objective 3.9)

Secondhand Smoke

In the past 30 days has anyone, including yourself, smoked cigarettes, cigars, or pipes anywhere inside your home?

Yes 25.2%
No 73.2%
Unknown/Refused 1.6%

While working at your job, are you indoors most of the time?

Yes 75.3%
No 23.3%
Unknown/Refused 1.5%

Which of the following best describes your place of work's official smoking policy for indoor public or common areas?

Not allowed in any public areas 76.3%
Allowed in some public areas 13.8%
Allowed in all public areas 1.2%
No official policy 8.0%
Unknown/Refused 0.7%

Which of the following best describes your place of work's official smoking policy for work areas?

Not allowed in any work areas 83.3%
Allowed in some work areas 7.6%
Allowed in all work areas 1.0%
No official policy 7.3%
Unknown/Refused 0.7%

In restaurants, do you think that smoking should be allowed in all areas, some areas, or not allowed at all?

All areas 2.9%
Some areas 41.0%
Not allowed 52.9%
Unknown/Refused 3.3%

In schools, do you think that smoking should be allowed in all areas, some areas, or not allowed at all?

All areas 0.5%
Some areas 5.1%
Not allowed 92.2%
Unknown/Refused 2.2%

In day care centers, do you think that smoking should be allowed in all areas, some areas, or not allowed at all?

All areas 0.6%
Some areas 2.4%
Not allowed 94.8%
Unknown/Refused 2.3%

In indoor work areas, do you think that smoking should be allowed in all areas, some areas, or not allowed at all?

All areas 1.3%
Some areas 26.7%
Not allowed 68.7%
Unknown/Refused 3.3%

Preventive Health Care Practices

Overview

The effectiveness of preventive services in reducing disease and premature death is now well documented. There have been dramatic declines for stroke mortality, cervical cancer mortality, and childhood infectious diseases because of the widespread application of such preventive services as high blood pressure detection and control, pap tests, and childhood immunizations. Other preventive services such as mammography have also been shown to be effective.

Many Americans lack access to an ongoing source of primary care, and therefore, to essential clinical preventive services as well as to other health care. Millions of Americans are without any form of health insurance and many more are underinsured. For a variety of reasons, in many areas, access to primary care is limited by an inadequate supply of primary care providers.

Even when access to primary care is not an issue, many preventive services are not offered by health care providers at regular intervals and few preventive services are covered under existing insurance plans despite their proven effectiveness in improving health.

Health Care Coverage and Health Checkups in Alaska

It was estimated that 86.4% of Alaskan adults had some kind of health care plan. According to this survey, 13.4% of Alaskan adults did not.

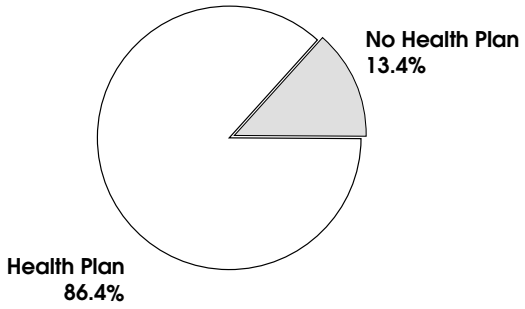
In total, 13.8% of Alaskan adults reported needing to see a doctor in the last year, but could not due to the cost. Of Alaskan females, 17.2% reported not being able to see a doctor due to the cost compared to 10.7% of Alaskan males.

In total, 68.9% of Alaskan adults had visited a doctor within the last year for a routine checkup. Of Alaskan males, 61.6% had visited a doctor for a routine checkup in the last year compared to 77% of females.

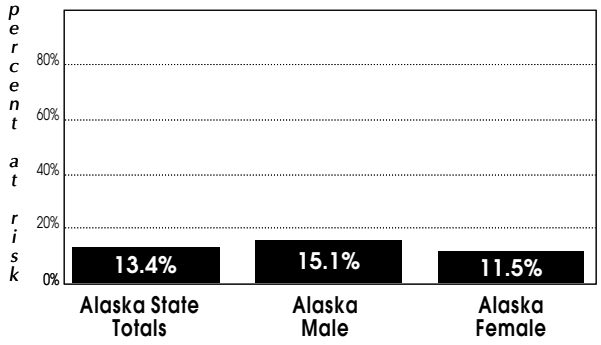
Year 2000 National Health Objective

Increase to at least 95 percent the proportion of people who have a specific source of ongoing primary care for coordination of their preventive and episodic health care. (Objective 21.3)

Alaskan Adults with No Health Care Plan



Comparison of Risk Prevalence for No Health Care Plan



Routine Checkup by a Doctor within the Past Year

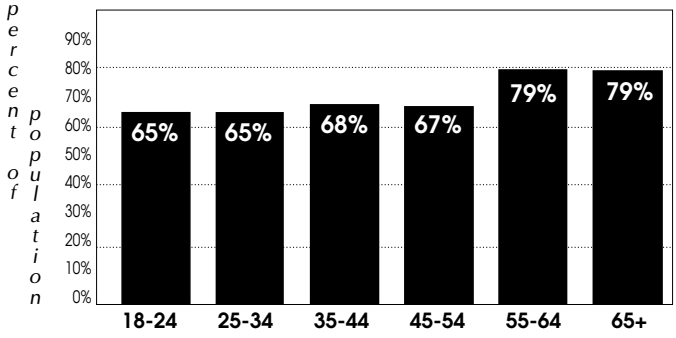


Table 9

Prevalence of No Health Care Plan by Selected Demographics

Alaska BRFSS 1998

	n	%	N	95% CI
Gender				
Male	130	15.1	919	11.8 - 18.6%
Female	110	11.2	821	9.1 - 13.9%
Race				
Native	38	10.4	358	6.2 - 14.6%
Non-Native	220	13.5	1,594	11.2 - 15.8%
TOTAL	**265**	**13.4**	**1,989**	**11.3 - 15.5%**
Age				
18-24	44	25	205	
25-34	73	17	425	
35-44	67	11	540	
45-54	49	9	447	
55-64	28	13	190	
65+	4	4	172	
Unknown/Refused	—	—	—	
Education				
Less than High School Graduate	32	20	163	
High School Graduate or GED	107	18	654	
Some College or Technical School	86	13	615	
College Graduate	39	6	552	
Unknown/Refused	1	◆◆	5	

	n	%	N
Income			
< $15,000	48	27	204
$15,000-24,999	83	26	329
$25,000-49,999	76	13	635
$50,000-74,999	26	5	331
> $75,000	9	4	325
Unknown/Refused	23	11	165
Marital Status			
Married	111	9	1100
Unmarried	154	◆◆	885
Unknown/Refused	—	—	4
Employment			
Employed	178	13	1413
Not Employed	41	25	152
Student/Homemaker	31	20	166
Retired or unable to work	15	6	254
Unknown	—	—	4

◆◆ = Not Reported

n = Number of persons who report having no kind of health care plan.

% = This is a weighted (adjusted) percentage of the state population (adult) at risk in this demographic subgroup, based on the survey data.

N = Total number of respondents in this subgroup.

95% CI = 95% Confidence Interval; the range of values within which the true value of a prevalence estimate would be expected to fall within, 95% of the time.

Breast Cancer Screening

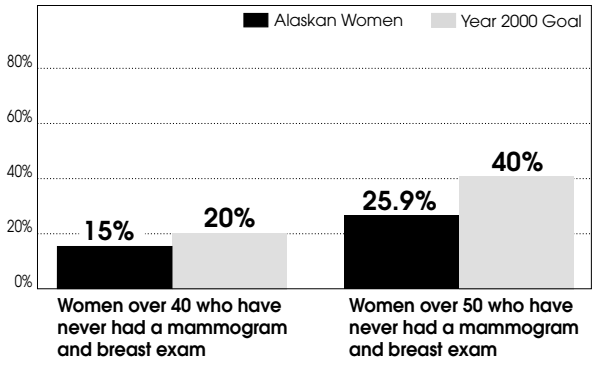
Health Risk

Breast cancer is the second leading cause of cancer death among Alaskan women and is the most commonly diagnosed cancer among Alaskan women. The risk of breast cancer increases with age.

There is general consensus among experts that routine screening every year with mammography and clinical breast examination can reduce breast cancer mortality by about one third for women ages 50 and older.

The Alaska Breast and Cervical Cancer Early Detection Program recommends that women ages 50 and older receive an annual mammogram; women aged 40-49 years should receive a mammogram every 1-2 years based on provider/ patient counseling A clinical breast exam is recommended every 1-3 years for women aged 20-29, and annually for women aged 30 and older.

Mammograms and Breast Exams



Breast Cancer Screening in Alaska

Definitions used in this survey:

Clinical Breast Exams: *A clinical breast exam is when the breast is felt for lumps by a doctor or other medical professional.* Of women aged 18 and older, 90.9% had ever had a clinical breast exam. Of those women who had ever had a breast exam, 80.3% had one within the past year and an additional 9.5% had one in the previous year.

Mammography: *A mammogram is a x-ray of the breast to look for cancer.* Of all the women 18 and older, 55.4% had ever had a mammogram. Of those women 18 and older who ever had a mammogram, 86.8% reported their last one was done as part of a routine checkup, 8.4% reported it was done because of a breast problem and 2.7% because they had breast cancer.

Of women aged 40 and older, 10.6% never had ever had a mammogram (National BRFSS Range 8.3 to 27.5%, National BRFSS Median 15.3%).

In 1998, 15% of women 40 and older, never had both a mammogram and a breast exam (National BRFSS Range 11.6 to 32.9%, National BRFSS Median 21.2%). Of the women 50 and older, 25.9% never had a mammogram and a breast exam in the past two years (National BRFSS Range 14.8 to 50.9%, National BRFSS Median 32.3%).

Year 2000 National Health Objective

Increase to at least 80% the proportion of women aged 40 and older who have ever received a clinical breast exam and a mammogram, and to at least 60% those aged 50 and older who have received them within the preceding one to two years. (Objective 16.11)

Cervical Cancer Screening

Health Risk

Cervical cancer now kills an estimated 4,800 women annually in the United States, and about 12,800 new cases of cervical cancer are expected in 1999. Cervical cancer is the fifth commonly diagnosed cancer among Alaskan women.

The incidence of invasive cervical cancer has steadily decreased over the years. Cervical carcinoma in situ, (a precancerous condition) is now more frequent than invasive cancer, especially in women under 50.

The pap test is highly effective in detecting early cancer of the uterine cervix and greatly reduces the risk of mortality from invasive cervical cancer.

The Alaska Breast and Cervical Cancer Early Detection Program recommends a pelvic examination with a pap test for all women every 1-3 years beginning at age 18 or at the onset of sexual activity.

Cervical Cancer Screening in Alaska

Definition used in this survey: Females with intact cervix-uteri who report they have had a pap smear within the past three years.

Of Alaskan females aged 18 and older (with intact cervix-uteri), 3.3% never had a pap test (National BRFSS Range 2.7 to 19.7%, National BRFSS Median 5.6%). According to this definition, 10.5% of women aged 18 and older (with intact cervix-uteri) never had a pap test within the past three years (National BRFSS Range 6.1 to 32.4%, National BRFSS Median 15.1%).

Of the women aged 18 and older who had ever had a pap test, 78.3% were in the last year, 10.9% in the last one to two years, 6.2% within the past two to five years and 3.7% were more than five years ago.

Year 2000 National Health Objective

Increase to at least 95% the proportion of women aged 18 and older with uterine cervix who have ever received a pap test, and to at least 85% those who received a pap test within the preceding one to three years. (Objective 16.12)

Family Planning

Have you ever been pregnant in the last 5 years?

(Denominator is women aged 18-44 and were not currently pregnant = 605 respondents)

Yes	36.4%
No	62.7%
Unknown/Refused	1.0%

Thinking back to your last pregnancy, just before you got pregnant how did you feel about becoming pregnant?

(Denominator is women who were pregnant in the last 5 years = 225 respondents)

Wanted to be pregnant sooner	12.3%
Wanted to be pregnant later	9.3%
Wanted to pregnant then	60.5%
Did not want to be pregnant	9.6%
Unknown/Refused	8.3%

Thinking back to just before you got pregnant with your current pregnancy, how did you feel about becoming pregnant?

(Results not reported due to low number of respondents to this question)

Are you or your partner using any kind of birth control now?

(Denominator is women aged 18-44 = 572 respondents)

Yes	70.6%
No	21.4%
Not sexually active	6.9%
Unknown/ Refused	1.1%

What kinds of birth control are you or your partner using now?

(Denominator is women aged 18-44 using birth control = 393 respondents)

Tubes tied	22.8%
Pill	20.5%
Condoms	19.3%
Vasectomy	19.0%
Shots	6.0%
Norplant	1.3%
Withdrawal	0.6%
Foam, jelly, cream	0.4%
Diaphragm	0.3%
Other	8.4%
Unknown/ Refused	1.5%

What are your reasons for not using any birth control now?

(Denominator is women aged 18-44 not using birth control = 122 respondents)

No sex	17.0%
Want to get pregnant	18.0%
Do not think can get pregnant	15.7%
Do not want to use	3.9%
Other	35.2%
Unknown/ Refused	10.2%

Where is your usual source of services for female health concerns?

(Denominator is women aged 18-44 = 647 respondents)

Private GYN	34.3%
General or family doctor	31.8%
Family planning clinic	9.9%
Community Health center	9.9%
Health Department clinic	5.6%
Other place	5.0%
Unknown/ Refused	3.7%

Have you ever used the services at a family planning clinic?

(Denominator is women aged 18-44 = 647 respondents)

Yes	28.6%
No	60.7%
Unknown/ Refused	10.7%

How long has it been since you used the services at a family planning clinic?

(Denominator is women aged 18-44 who have used the services at a family planning clinic = 199 respondents)

1 to 12 months	15.2%
1 to 2 years	7.9%
2 to 3 years	5.6%
3 to 5 years	6.8%
5 or more years	64.0%
Unknown/ Refused	0.6%

HIV/AIDS Beliefs and Opinions

Over 600,000 people in the United States have been diagnosed with acquired immunodeficiency syndrome (AIDS) since the disease was first recognized. It is estimated that 650,000 - 900,000 Americans are presently infected with human immunodeficiency virus (HIV, the virus that causes AIDS). In 1997, AIDS ranked as the 14th leading cause of death in the United States.

From January 1, 1982 through August 31, 1999, a cumulative total of 692 cases of HIV infection were reported among individuals in Alaska. Of the 692 cases of HIV infection, 500 individuals had AIDS and 238 are known to have died.

AIDS information and education programs have increased public knowledge and influenced attitudes about HIV and AIDS, although some misinformation about HIV transmission persists. Identification of newly infected persons is important to understanding disease transmission and to targeting prevention activities.

A critical step in reducing new HIV infections is for people to understand and use information about how HIV is transmitted to assess their own risks for exposure. When people recognize their risks, they can learn ways to change their behaviors to reduce their risk of becoming infected. Individuals at high risk should seek HIV counseling and testing. Infected individuals may seek medical care to preserve their health, and may alter those behaviors likely to transmit HIV infection to others.

Behavioral Risk Factor Survey

In 1998, only survey respondents aged 18-64 were asked the HIV and AIDS questions (1,817 respondents).

Many (61.2%) Alaskan adults believed their chance of getting infected with HIV were none, 31.0% thought their chances were low, 3.6% thought their chances were medium and 1.9% thought their chances were high.

Among Alaskan adults who had not donated blood, 51.7% had been tested for HIV. The most common reasons for being tested were to see if infected, due to pregnancy, as part of a routine check up and for military service. The most common places of HIV testing were private doctor, military site and hospital or emergency room.

Among Alaska adults, 72.4% reported that if they had a child in school, AIDS education should begin in school between kindergarten and the sixth grade.

Most (86.2%) adults said that if they had a sexually active teenager, they would encourage him or her to use a condom.

Alaskan Beliefs and Opinions About AIDS ◆

What are your chances of getting the AIDS virus?

High	1.9%
Medium	3.6%
Low	31.0%
None	61.2%
Unknown/Refused	2.3%

Have you been tested for HIV ?

(of 1,428 respondents who had not donated blood)

Yes	35.7%
No	62.5%
Unknown/Refused	1.7%

Except for tests you may have had as part of blood donating, have you been tested for AIDS?

(of 348 respondents who had donated blood since March 1985)

Yes	59.9%
No	37.3%
Unknown/Refused	2.8%

What was the main reason you had your last AIDS blood test?

(of 920 respondents tested)

Routine checkup	7.0%
Military	7.0%
To see if infected	5.3%
Pregnancy test	4.9%
Employment	3.3%
Occupational exposure	2.1%
Referred by sex partner	0.9%
Blood donation process	0.8%
Life Insurance	0.6%
Hospitalization	0.5%
Marriage license	0.3%
Referred by Doctor	0.2%
Health Insurance	0.1%
Illness	0.1%
Other	3.6%
Unknown/Refused	63.4%

Where did you have your last blood test for the AIDS virus?

(of 920 respondents tested)

Military site	9.1%
Private doctor	8.0%
Hospital or emergency room	7.4%
Community health clinic	3.9%
Health department or public clinic	1.2%
Family planning	0.8%
Other public clinic	0.8%
AIDS or STD clinic (test site)	0.5%
Company clinic/Industry	0.5%
Insurance company clinic	0.3%
In jail or prison	0.2%
At home/health worker	0.1%
Blood bank	0.1%
Prenatal clinic	0.1%
Other	2.7%
Unknown/Refused	64.5%

Did you receive the results of your last HIV test?

(of 920 respondents tested)

Yes	31.2%
No	4.8%
Unknown/Refused	64.1%

Did you receive counseling after getting the results of your last test?

(of 274 respondents who were tested and received their results)

Yes	26.0%
No	73.7%
Unknown/Refused	0.3%

If you had a child in school, in what grade do you think he or she should begin AIDS education?

Kindergarten	6.3%
1st - 3rd grade	20.8%
4th - 6th grade	45.3%
7th - 9th grade	15.1%
10th - 12th grade	1.1%
Never	2.8%
Don't know or refused	8.5%

If you had a sexually active teenager, would you encourage him or her to use a condom?

Yes	86.2%
No	2.1%
Would give other advice	7.8%
Unknown/Refused	3.9%

Risks by Region

This section provides summary tables of the prevalence of behavioral health risks for each of the five BRFSS regions in Alaska (see Appendix B). This section also provides a comparison of risk factors by region.

Please note the following:

- Prevalence estimates for each region are weighted to the 18 and older population of the respective region (see Appendix D).
- Prevalence estimates are based on denominators of less than 500 (approximately 396) and are therefore rounded to the nearest whole percent.
- It is important to consider the confidence intervals when comparing prevalence estimates. Generally speaking, the smaller the sample size, the wider the range of values within which the true prevalence is believed to be.

Definitions for Tables 10 – 21

n = Number of respondents at risk.

% = This is a weighted (adjusted) percentage of the population at risk in this region, in this demographic subgroup, based on the survey data.

N = Total number of respondents in this subgroup, in this region.

95% C.I. = 95% Confidence Interval. The range of values within which the true value of a prevalence estimate would be expected to fall within, 95% of the time.

1998 BRFSS Sampling Regions

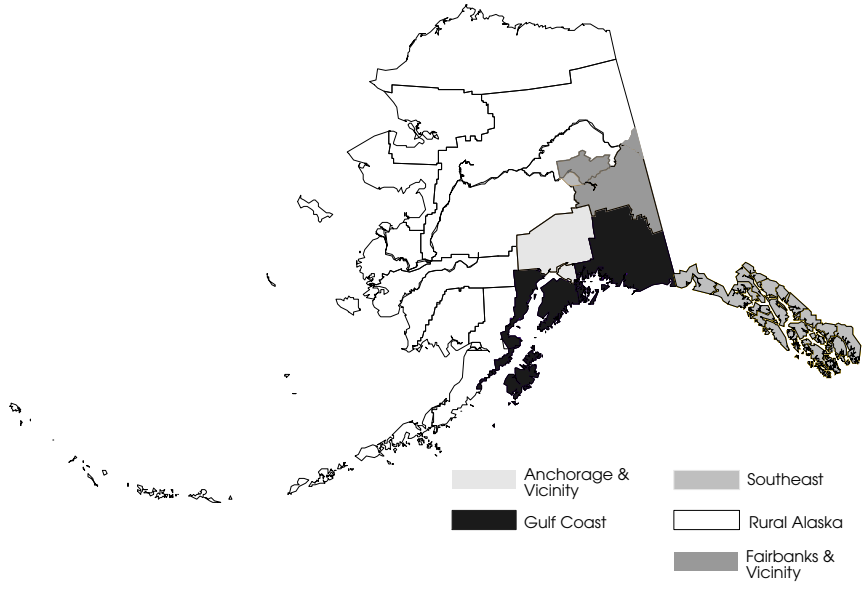


Table 10

Regional Summary
Prevalence of Select Risk Factors
Anchorage & Vicinity (Region 1)

Risk Factor	n	%	N	95% C.I.
Acute (Binge) Drinking				
Male	46	26	165	18.3 - 32.6
Female	21	10	228	5.6 - 14.0
Total	67	18	393	13.5 - 22.0
Chronic Drinking				
Male	11	6	166	2.1 - 9.7
Female	1	<1	226	0.0 - 1.3
Total	12	3	392	1.2 - 5.2
Overweight				
Male	69	44	166	35.5 - 52.2
Female	71	30	221	24.0 - 36.9
Total	140	37	387	31.9 - 42.7
Fruits and Vegetables (5 or more per day)				
Male	136	76	170	68.8 - 83.7
Female	174	74	233	68.3 - 80.5
Total	310	75	403	70.5 - 80.2
Physically Inactive				
Male	37	22	170	14.7 - 28.2
Female	54	24	233	17.9 - 30.0
Total	91	23	403	18.1 - 27.2
Current Smoking				
Male	49	26	170	18.7 - 32.5
Female	49	21	233	15.3 - 26.7
Total	98	23	403	18.9 - 27.8
No Health Care Plan				
Male	26	16	170	9.7 - 22.0
Female	20	8	233	4.6 - 12.2
Total	46	12	403	8.5 - 15.9

Table 11

Regional Summary
Prevalence of Select Risk Factors
Gulf Coast (Region 2)

Risk Factor	n	%	N	95% C.I.
Acute (Binge) Drinking				
Male	49	31	180	22.3 - 39.7
Female	17	7	221	3.3 - 10.0
Total	66	20	401	14.3 - 24.7
Chronic Drinking				
Male	10	7	181	2.0- 12.4
Female	1	<1	219	0.0 - 1.0
Total	11	4	400	1.1 - 6.7
Overweight				
Male	67	35	185	27.0 - 43.6
Female	73	36	213	29.1 - 43.3
Total	140	36	398	30.1 - 41.2
Fruits and Vegetables (5 or more per day)				
Male	151	78	190	71.3 - 85.3
Female	162	75	224	68.7 - 80.6
Total	313	77	414	71.9 - 81.3
Physically Inactive				
Male	52	31	190	22.5 - 39.5
Female	54	24	224	17.9 - 30.0
Total	106	28	414	22.3 - 33.1
Current Smoking				
Male	59	35	190	26.3 - 43.5
Female	60	24	224	18.1- 30.0
Total	119	30	414	24.3 - 35.3
No Health Care Plan				
Male	40	23	189	15.6 - 30.0
Female	50	23	224	17.2 - 29.6
Total	90	23	413	18.3 - 27.9

Table 12

Regional Summary
Prevalence of Select Risk Factors
Southeast (Region 3)

Risk Factor	n	%	N	95% C.I.
Acute (Binge) Drinking				
Male	41	25	182	17.6 - 31.5
Female	21	11	210	6.0 - 16.2
Total	62	18	392	13.7 - 22.6
Chronic Drinking				
Male	11	7	182	2.8 - 11.9
Female	4	2	210	0.0 - 3.2
Total	15	5	392	2.0 - 7.2
Overweight				
Male	67	35	180	27.3 - 42.2
Female	70	37	202	29.2 - 44.4
Total	137	36	382	30.4 - 41.1
Fruits and Vegetables (5 or more per day)				
Male	139	76	183	71.1 - 83.9
Female	154	72	214	65.7 - 78.8
Total	293	75	397	70.4 - 79.6
Physically Inactive				
Male	35	19	183	12.4 - 24.6
Female	33	14	213	9.1 - 18.9
Total	68	16	396	12.4 - 20.3
Current Smoking				
Male	41	24	183	17.4 - 31.4
Female	49	24	214	17.9 - 30.8
Total	90	24	397	19.6 - 29.2
No Health Care Plan				
Male	21	13	183	7.3 - 18.6
Female	21	13	214	7.2 - 18.9
Total	42	13	397	8.9 - 17.0

Table 13

Regional Summary
Prevalence of Select Risk Factors
Rural (Region 4)

Risk Factor	n	%	N	95% C.I.
Acute (Binge) Drinking				
Male	59	36	177	27.6 - 43.8
Female	23	11	192	6.2 - 15.8
Total	82	25	368	19.5 - 30.0
Chronic Drinking				
Male	14	8	176	3.1 - 11.8
Female	2	1	192	0.0 - 1.8
Total	16	5	368	2.0 - 7.0
Overweight				
Male	68	37	181	28.5 - 44.5
Female	80	40	189	31.8 - 47.6
Total	148	38	370	32.2 - 43.6
Fruits and Vegetables (5 or more per day)				
Male	160	86	188	80.5 - 91.3
Female	148	75	198	68.4 - 82.2
Total	308	81	386	76.9 - 85.6
Physically Inactive				
Male	59	32	188	24.3 - 39.3
Female	65	35	198	27.0 - 42.6
Total	124	33	386	27.7 - 38.5
Current Smoking				
Male	73	42	187	33.5 - 49.6
Female	61	32	197	24.1 - 39.3
Total	134	37	384	31.6 - 42.9
No Health Care Plan				
Male	24	11	185	6.8 - 16.0
Female	22	12	196	6.4 - 17.3
Total	46	12	381	8.1 - 15.1

Table 14

Regional Summary
Prevalence of Select Risk Factors
Fairbanks & Vicinity (Region 5)

Risk Factor	n	%	N	95% C.I.
Acute (Binge) Drinking				
Male	64	33	192	25.4 - 39.9
Female	15	7	193	3.6 - 10.9
Total	79	21	385	16.4 - 25.3
Chronic Drinking				
Male	14	7	191	3.2 - 11.1
Female	2	1	190	0.0 - 2.3
Total	16	4	381	2.0 - 6.5
Overweight				
Male	59	30	192	23.2 - 37.5
Female	57	34	183	26.1 - 42.1
Total	116	32	375	26.7 - 37.4
Fruits and Vegetables (5 or more per day)				
Male	164	85	193	78.8 - 90.2
Female	149	76	196	70.0 - 82.7
Total	313	81	389	76.4 - 85.0
Physically Inactive				
Male	47	22	193	15.8 - 28.3
Female	42	23	196	15.8 - 29.3
Total	89	22	389	17.7 - 26.9
Current Smoking				
Male	51	25	192	18.7 - 32.0
Female	57	27	196	20.7 - 34.0
Total	108	26	388	21.6 - 31.0
No Health Care Plan				
Male	19	11	192	6.0 - 16.4
Female	22	11	196	6.6 - 15.9
Total	41	11	388	7.7 - 14.7

Table 15

Acute (Binge) Drinking by Region

Region	n	%	N	95% C.I.
Urban (Region 1)				
Male	46	26	165	18.3 - 32.6
Female	21	10	228	5.6 - 14.0
Total	67	18	393	13.5 - 22.0
Gulf Coast (Region 2)				
Male	49	31	180	22.3 - 39.7
Female	17	7	221	3.3 - 10.0
Total	66	20	401	14.3 - 24.7
Southeast (Region 3)				
Male	41	25	182	17.6 - 31.5
Female	21	11	210	6.0 - 16.2
Total	62	18	392	13.7 - 22.6
Rural (Region 4)				
Male	59	36	177	27.6 - 43.8
Female	23	11	192	6.2 - 15.8
Total	82	25	368	19.5 - 30.0
Fairbanks & Vicinity (Region 5)				
Male	64	33	192	25.4 - 39.9
Female	15	7	193	3.6 - 10.9
Total	79	21	385	16.4 - 25.3

Comparison of Risk Prevalence for Acute (Binge) Drinking

by Region

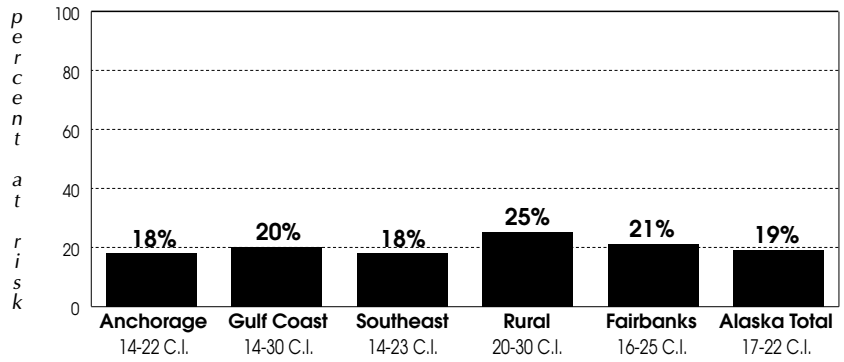


Table 16

Chronic Drinking by Region

Region	n	%	N	95% C.I.
Anchorage & Vicinity (Region 1)				
Male	11	6	166	2.1 - 9.7
Female	1	<1	226	0.0 - 1.3
Total	12	3	392	1.2 - 5.2
Gulf Coast (Region 2)				
Male	10	7	181	2.0- 12.4
Female	1	<1	219	0.0 - 0.7
Total	11	4	400	1.1 - 6.7
Southeast (Region 3)				
Male	11	7	182	2.8 - 11.9
Female	4	2	210	0.0 - 3.2
Total	15	5	392	2.0 - 7.2
Rural (Region 4)				
Male	14	8	176	3.1 - 11.8
Female	2	1	192	0.0 - 1.8
Total	16	5	368	2.0 - 7.0
Fairbanks & Vicinity (Region 5)				
Male	14	7	191	3.2 - 11.1
Female	2	1	190	0.0 - 2.3
Total	16	4	381	2.0 - 6.5

Comparison of Risk Prevalence for Chronic Drinking

by Region

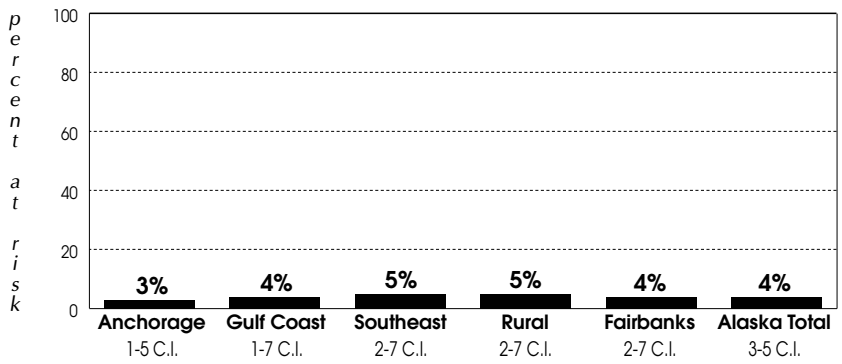


Table 17

Overweight by Region

Region	n	%	N	95% C.I.
Anchorage & Vicinity (Region 1)				
Male	69	44	166	35.5 - 52.2
Female	71	30	221	24.0 - 36.9
Total	140	37	387	31.9 - 42.7
Gulf Coast (Region 2)				
Male	67	35	185	27.0 - 43.6
Female	73	36	213	29.1 - 43.3
Total	140	36	398	30.1 - 41.2
Southeast (Region 3)				
Male	67	35	180	27.3 - 42.2
Female	70	37	202	29.2 - 44.4
Total	137	36	382	30.4 - 41.1
Rural (Region 4)				
Male	68	37	181	28.5 - 44.5
Female	80	40	189	31.8 - 47.6
Total	148	38	370	32.2 - 43.6
Fairbanks & Vicinity (Region 5)				
Male	59	30	192	23.2 - 37.5
Female	57	34	183	26.1 - 42.1
Total	116	32	375	26.7 - 37.4

Comparison of Risk Prevalence for Overweight

by Region

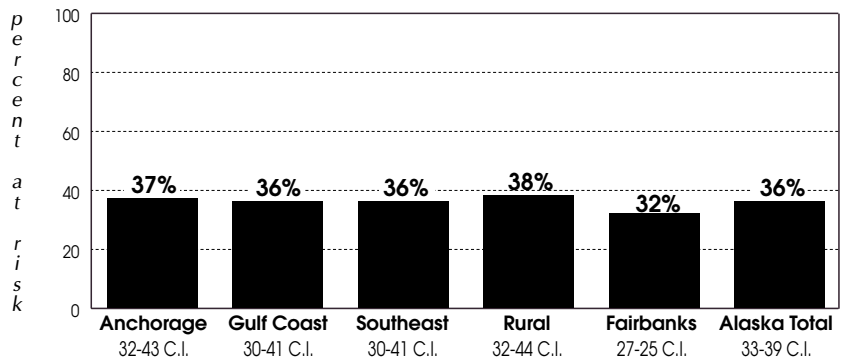


Table 18

Fruits and Vegetables by Region

Region	n	%	N	95% C.I.
Anchorage & Vicinity (Region 1)				
Male	136	76	170	68.8- 83.7
Female	174	74	233	68.3- 80.5
Total	310	75	403	70.5 - 80.2
Gulf Coast (Region 2)				
Male	151	78	190	71.3 - 85.3
Female	162	75	224	68.7 - 80.6
Total	313	77	414	71.9 - 81.3
Southeast (Region 3)				
Male	139	76	183	71.1 - 83.9
Female	154	72	214	65.7 - 78.8
Total	293	75	397	70.4 - 79.6
Rural (Region 4)				
Male	160	86	188	80.5 - 91.3
Female	148	75	198	68.4 - 82.2
Total	308	81	386	76.9 - 85.6
Fairbanks & Vicinity (Region 5)				
Male	164	85	193	78.8 - 90.2
Female	149	76	196	70.0 - 82.7
Total	313	81	389	76.4 - 85.0

Comparison of Risk Prevalence for Lack of Fruit & Vegetable Consumption

by Region

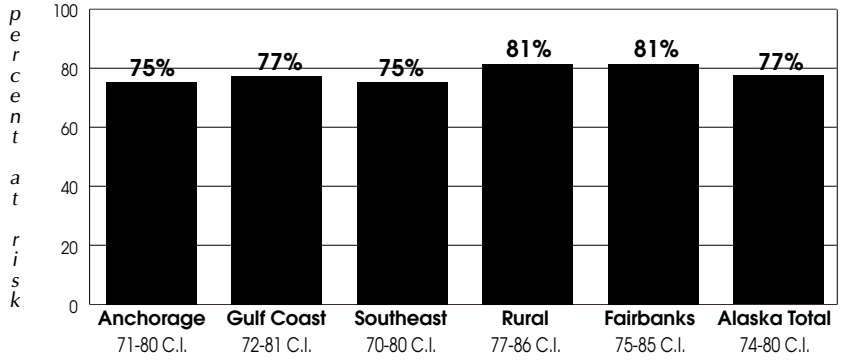


Table 19

Physically Inactive

Region	n	%	N	95% C.I.
Anchorage & Vicinity (Region 1)				
Male	37	22	170	14.7 - 28.2
Female	54	24	233	17.9 - 30.0
Total	91	23	403	18.1- 27.2
Gulf Coast (Region 2)				
Male	52	31	190	22.5 - 39.5
Female	54	24	224	17.9 - 30.0
Total	106	28	414	22.3 - 33.1
Southeast (Region 3)				
Male	35	19	183	12.4 - 24.6
Female	33	14	213	9.1 - 18.9
Total	68	16	396	12.4 - 20.3
Rural (Region 4)				
Male	59	32	188	24.3 - 39.3
Female	65	35	198	27.0 - 42.6
Total	124	33	386	27.7 - 38.5
Fairbanks & Vicinity (Region 5)				
Male	47	22	193	15.8 - 28.3
Female	42	23	196	15.8 - 29.3
Total	89	22	389	17.7 - 26.9

Comparison of Risk Prevalence for Physically Inactive

by Region

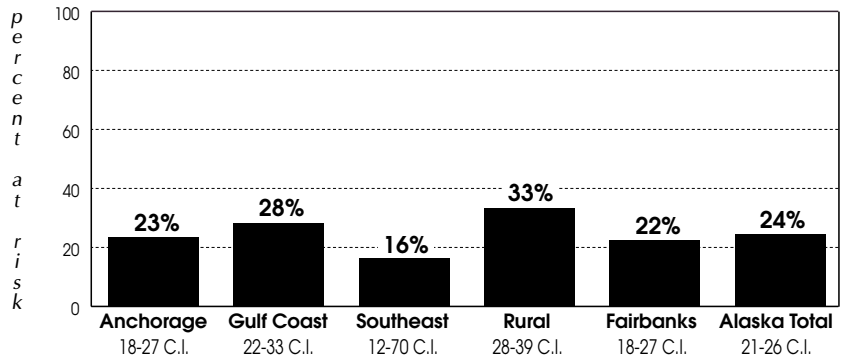


Table 20

Current Smoking by Region

Region	n	%	N	95% C.I.
Anchorage & Vicinity (Region 1)				
Male	49	26	170	18.7- 32.5
Female	49	21	233	15.3- 26.7
Total	98	23	403	18.9 - 27.8
Gulf Coast (Region 2)				
Male	59	35	190	26.3 - 43.5
Female	60	24	224	18.1- 30.0
Total	119	30	414	24.3 - 35.3
Southeast (Region 3)				
Male	41	24	183	17.4 - 31.4
Female	49	24	214	17.9 - 30.8
Total	90	24	397	19.6 - 29.2
Rural (Region 4)				
Male	73	42	187	33.5 - 49.6
Female	61	32	197	24.1 - 39.3
Total	134	37	384	31.6 - 42.9
Fairbanks & Vicinity (Region 5)				
Male	51	25	192	18.7 - 32.0
Female	57	27	196	20.7 - 34.0
Total	108	26	388	21.6 - 31.0

Comparison of Risk Prevalence for Current Smoking

by Region

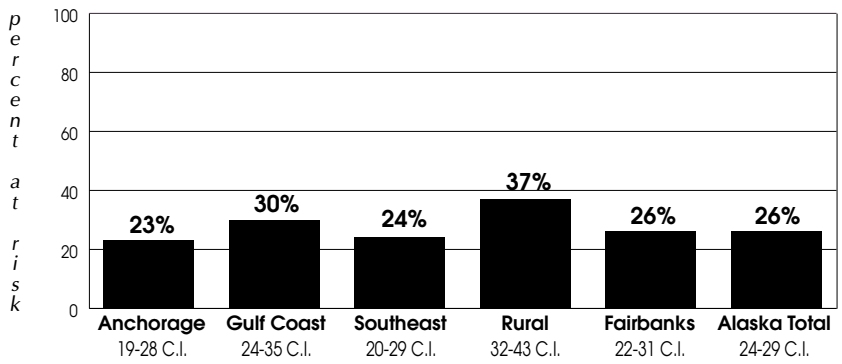


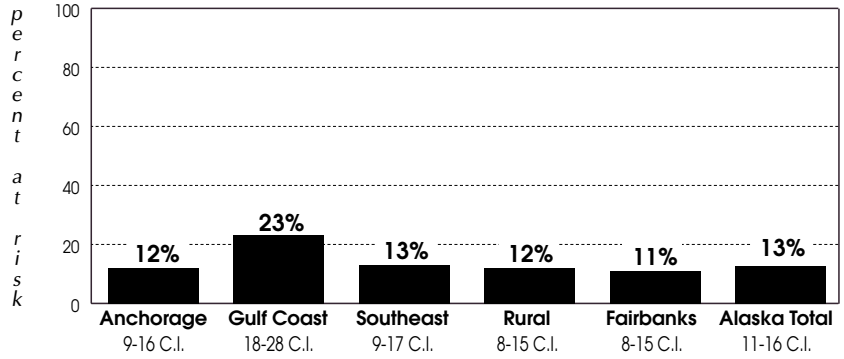
Table 21

No Health Care Plan by Region

Region	n	%	N	95% C.I.
Anchorage & Vicinity (Region 1)				
Male	26	16	170	9.7 - 22.0
Female	20	8	233	4.6 - 12.2
Total	46	12	403	8.5 - 15.9
Gulf Coast (Region 2)				
Male	40	23	189	15.6 - 30.0
Female	50	23	224	17.2 - 29.6
Total	90	23	413	18.3 - 27.9
Southeast (Region 3)				
Male	21	13	183	7.3 - 18.6
Female	21	13	214	7.2 - 18.9
Total	42	13	397	8.9 - 17.0
Rural (Region 4)				
Male	24	11	185	6.8 - 16.0
Female	22	12	196	6.4 - 17.3
Total	46	12	381	8.1 - 15.1
Fairbanks & Vicinity (Region 5)				
Male	19	11	192	6.0 - 16.4
Female	22	11	196	6.6 - 15.9
Total	41	11	388	7.7 - 14.7

Comparison of Risk Prevalence for No Health Care Plan

by Region



Appendix A: BRFSS Definitions

Acute (Binge) Drinking Respondents who report having five or more drinks on an occasion, one or more times in the past month.

Chronic Drinking Respondents who report an average of 60 or more alcoholic drinks a month.

Current Smoking Respondents who report ever smoking 100 cigarettes and smoke now (regularly and irregularly).

Diabetes Awareness Respondents who report they were told by a doctor that they have diabetes.

Drinking and Driving Respondents who report having driven after having too much to drink, one or more times in the past month.

Mammogram Females 40 and older who report they have never had a mammogram.

Mammogram (2) Females 50 and older who report they have not had a mammogram within the past two years.

Mammogram and Clinical Breast Exam Females 40 and older who report that they have never had a mammogram and a breast exam.

Mammogram and Clinical Breast Exam (2) Females 50 and older who report they have not had a mammogram and a breast exam within the past year.

Overweight Females with body mass index [weight in kilograms divided by height in meters squared (W/H**2)]>=27.3 and males with body mass index >= 27.8.

Pap Test Females with intact cervix-uteri who report they have never had a pap smear test.

Pap Test (3) Females with intact cervix-uteri who report they have not had a pap smear test within the past three years.

Physical Activity

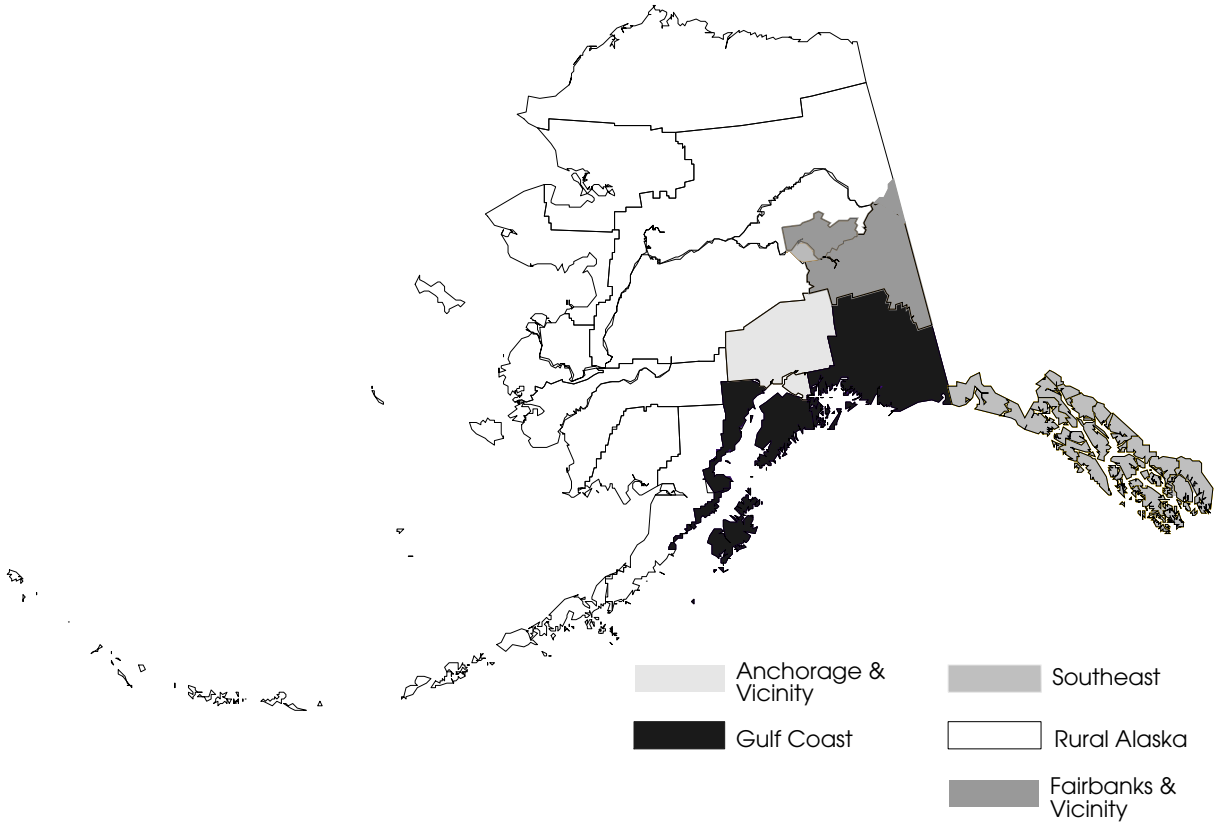
Physically Inactive Respondents who report no leisure time physical activity during the past month.

Regular and Sustained Physical Activity Respondents who report physical activity 5 or more sessions per week, 30 or more minutes per session, regardless of intensity.

Regular and Vigorous Physical Activity Respondents who report physical activity or pair of activities for 3 or more sessions per week, 20 minutes or more per session, at 50% or more capacity.

Sedentary Lifestyle Respondents who report no activity or a physical activity or pair of activities that were done for 20 minutes or less, fewer than three times per week.

Appendix B: 1998 BRFSS Sampling Regions



The Alaska sample was stratified into five regions based on common demographics:

	Population 18 years and older ◆	Number of interviews conducted
Anchorage and Vicinity (Region 1)	214,729	403
Anchorage & vicinity		
Gulf Coast (Region 2)	51,578	414
Kenai, Kodiak, Valdez, Cordova & vicinity		
Southeast (Region 3)	52,898	397
All of Southeast Alaska		
Rural (Region 4)	43,920	386
All other nonurban areas of Alaska		
Fairbanks and Vicinity (Region 5)	63,082	389
Fairbanks & vicinity		
STATEWIDE TOTAL	**426,207**	**1,989**

◆ Claritas. 1998 Race by Age by Sex Report for All Counties Nationwide. Ithaca, New York.

Appendix C: Alaska BRFSS Sample Design ◆

	18 years and older
Anchorage and Vicinity (Region 1)	
Municipality of Anchorage	177,703
Matanuska-Susitna Borough	37,026
TOTAL	**214,729**
Gulf Coast (Region 2)	
Kenai Peninsula Borough	33,423
Kodiak Island	10,726
Valdez Cordova	7,429
TOTAL	**51,578**
Southeast (Region 3)	
Haines Borough	1,580
Juneau Borough	21,773
Ketchikan Gateway Borough	10,424
Prince of Wales	5,080
Sitka Borough	5,876
Skagway, Angoon,Yakutat	3,331
Wrangell, Petersburg	4,834
TOTAL	**52,898**
Rural (Region 4)	
Aleutians East Borough	1,729
Aleutians West	3,905
Bethel	10,095
Bristol Bay Borough	962
Dillingham	2,820
Lake and Peninsula Borough	1,056
Nome	5,711
North Slope Borough	4,639
Northwest Arctic Borough	3,870
Wade Hampton	3,909
Yukon-Koyukuk	5,224
TOTAL	**43,920**
Fairbanks and Vicinity (Region 5)	
Fairbanks-Northstar Borough	59,324
Southeast Fairbanks	3,758
TOTAL	**63,082**
STATEWIDE TOTAL	**426,207**

◆ Claritas. 1998 Race by Age by Sex Report for All Counties Nationwide. Ithaca, New York.

Appendix D: Alaska BRFSS Region Description ◆

Age	Male	Female	Total Population
Anchorage and Vicinity (Region 1)			
18-24	14,113	12,110	26,223
25-34	25,379	24,597	49,976
35-44	30,371	28,462	58,833
45-54	20,331	19,694	40,025
55-64	11,313	11,005	22,318
65+	8,079	9,275	17,354
TOTAL	**109,586**	**105,143**	**214,729**
Gulf Coast (Region 2)			
18-34	9,045	7,624	36,784
35-44	8,002	6,703	73,958
45-54	5,207	4,777	79,216
55-64	2,930	2,543	50,457
65+	2,370	2,377	29,509
TOTAL	**27,554**	**24,024**	**51,578**
Southeast (Region 3)			
18-24	3,103	2,631	5,734
25-34	5,847	5,259	11,106
35-44	7,743	6,980	14,723
45-54	5,467	4841	10,308
55-64	2,942	2,717	5,659
65+	2,510	2,858	5,368
TOTAL	**27,612**	**25,286**	**52,898**
Rural (Region 4)			
8-24	4,086	3,103	7,189
25-34	6,534	4,770	11,304
35-44	6,123	4,795	10,918
45-54	3,740	2,997	6,737
55+	4,048	3,724	7,772
TOTAL	**24,531**	**19,389**	**43,920**
Fairbanks and Vicinity (Region 5)			
18-24	5,795	4,101	9,896
25-34	8,265	7,406	15,671
35-44	8,827	7,735	16,562
45-54	5,628	5,423	11,051
55+	5,066	4,836	9,902
TOTAL	**33,581**	**29,501**	**63,082**

◆ Claritas. 1998 Race by Age by Sex Report for All Counties Nationwide. Ithaca, New York.

Appendix E: Alaska BRFSS 1998 Survey Population

by Age and Gender

Age	Male	Female	Total
Anchorage and Vicinity (Region 1)			
18-24	22	23	45
25-34	39	60	99
35-44	49	54	103
45-54	35	57	92
55-64	12	17	29
65+	13	20	33
Unknown	0	2	2
TOTAL	**170**	**233**	**403**
Gulf Coast (Region 2)			
18-24	9	18	27
25-34	27	38	65
35-44	51	66	117
45-54	53	52	105
55-64	26	25	51
65+	23	23	46
Unknown	1	2	3
TOTAL	**190**	**224**	**414**
Southeast (Region 3)			
18-24	13	12	25
25-34	33	43	76
35-44	53	65	118
45-54	47	45	92
55-64	19	19	38
65+	18	30	48
Unknown	0	0	0
TOTAL	**183**	**214**	**397**
Rural (Region 4)			
18-24	18	19	37
25-34	44	46	90
35-44	46	64	110
45-54	41	40	81
55-64	29	15	44
65+	9	12	21
Unknown	1	2	3
TOTAL	**188**	**198**	**386**
Fairbanks and Vicinity (Region 5)			
18-24	37	34	71
25-34	37	58	95
35-44	45	47	192
45-54	47	30	77
55-64	12	16	28
65+	15	9	24
Unknown	0	2	2
TOTAL	**193**	**196**	**389**

Appendix F: Alaska BRFSS 1998 Survey Population

by Age and Race

Age	Non-Native	Native	Unknown	Total
Anchorage and Vicinity (Region 1)				
18-24	40	3	2	45
25-34	90	7	2	99
35-44	94	7	2	103
45-54	89	1	2	92
55-64	25	4	0	29
65+	30	2	1	33
Unknown	1	1	0	2
TOTAL	**369**	**25**	**9**	**403**
Gulf Coast (Region 2)				
18-24	24	3	0	27
25-34	56	6	3	65
35-44	110	7	0	117
45-54	99	6	0	105
55-64	47	3	1	51
65+	39	7	0	46
Unknown	2	1	0	3
TOTAL	**377**	**33**	**4**	**414**
Southeast (Region 3)				
18-24	17	6	2	25
25-34	67	9	0	76
35-44	107	11	0	118
45-54	83	8	1	92
55-64	29	9	0	38
65+	41	6	1	48
Unknown	0	0	0	0
TOTAL	**344**	**49**	**4**	**397**
Rural (Region 4)				
18-24	8	29	0	37
25-34	24	63	3	90
35-44	45	64	1	110
45-54	50	30	1	81
55-64	17	27	0	44
65+	5	14	2	21
Unknown	0	2	1	3
TOTAL	**149**	**229**	**8**	**386**
Fairbanks and Vicinity (Region 5)				
18-24	63	6	2	71
25-34	89	6	0	95
35-44	82	9	1	92
45-54	75	1	1	77
55-64	25	3	0	28
65+	23	1	0	24
Unknown	0	1	1	2
TOTAL	**357**	**27**	**5**	**389**

Appendix G: Telephone Coverage in Alaska ◆

	Occupied Housing	Number with Phones	Percent Total
Anchorage and Vicinity (Region 1)			
Municipality of Anchorage	82,702	79,890	96.59
Matanuska-SusitnaBorough	13,394	12,357	92.25
TOTAL	**96,096**	**92,247**	**95.99**
Gulf Coast (Region 2)			
Kenai PeninsulaBorough	14,250	12,858	90.23
Kodiak Island	4,083	3,752	91.89
Valdez Cordova	3,425	2,834	82.74
TOTAL	**21,758**	**19,444**	**89.36**
Southeast (Region 3)			
Haines Borough	791	589	74.46
Juneau Borough	9,902	9,422	95.15
Ketchikan GatewayBorough	5,030	4,720	93.83
Prince of Wales	2,061	1,404	68.12
Sitka	2,939	2,720	92.54
Skagway, Yakutat, Angoon	1,422	1,117	78.55
Wrangell, Petersburg	2,514	2,172	86.39
TOTAL	**24,659**	**22,144**	**89.80**
Rural (Region 4)			
Aleutians EastBorough	533	469	87.99
Aleutian Islands	1,845	1,674	90.73
Bethel	3,605	2,507	69.54
Bristol Bay Borough	407	366	89.92
Dillingham	1,215	1,006	82.79
Lake and Peninsula Borough	509	342	67.19
Nome	2,371	1,727	72.83
North Slope Borough	1,673	1,342	80.21
Northwest ArcticBorough	1,526	1,031	67.56
Wade Hampton	1,368	722	52.77
Yukon-Koyukuk	2,748	1,683	61.24
TOTAL	**17,800**	**12,869**	**72.30**
Fairbanks and Vicinity (Region 5)			
Fairbanks-NorthstarBorough	26,693	24,960	93.50
Southeast Fairbanks	1,909	1,521	79.67
TOTAL	**28,602**	**26,481**	**92.58**
STATEWIDE TOTAL	**188,915**	**173,185**	**91.67**

◆ Census of Population and Housing, 1990: Summary Tape File 2 (Alaska).

Appendix H: Alaska BRFSS Telephone Sample Generation

In 1998, the statewide sample was stratified into five regions for the study. Within each region's sample, the proportion of interviews in each prefix is the same as the proportion of active residential lines in that prefix relative to all the active residential lines in the region.

The Institute of Social and Economic Research, University of Alaska Anchorage (ISER) generated the statewide random telephone number sample using a random digit dial sample generated by random telephone number generation program (RANDY) developed by Jim Kerr for Professor Jack Kruse. Input data for the program was developed using information from telephone companies, from commercially published CD-ROM data and published telephone books.

These data were used in the RANDY program to generate a random sample of numbers on each telephone prefix. This list assisted random number generation has several advantages:

- unlisted as well as listed numbers are included in the sample;
- it is relatively inexpensive to generate;
- using the listed numbers to exclude blocks of numbers in small exchanges increases the efficiency of the sample.

A list of active prefixes and the number of active residential lines in each prefix was provided by the telephone utilities. This information was read into the RANDY program, which calculated the proportion of working residential lines in each prefix to working residential lines in the region. Each proportion was expressed as a decimal between 0 and 1.

Information from CD-ROMS and telephone books was analyzed for 100-number blocks within each prefix. Every prefix has 100 possible 100-number blocks, from 00xx to 99xx. Using published information, it was determined for each 100-number block, whether it had no listed telephone numbers (zero bank) or one or more listed telephone numbers (plus one bank). The 100-number blocks that had no listed telephone numbers in a given prefix from the sample frame for that prefix were then excluded.

For prefixes with 2000 or more active residential lines (and for some smaller prefixes as well) this meant that no 100-number blocks were eliminated, because all of them had at least one listed residential telephone number. For most of Alaska's small prefixes, however, more than half of the possible numbers were eliminated, making random generation of the sample feasible. Because so many of Alaska's rural prefixes are very small (almost half of telephone exchanges outside of the Anchorage and Fairbanks areas have fewer than 50 residential lines) this was justified. Many communities have all their listed telephone numbers in one 100-block. Unlike larger prefixes, where there are likely to be some new or unlisted numbers in 100-blocks with no listed numbers, it was known that there were no active numbers in most of the very small prefixes. Although a few households with unlisted numbers in blocks that were eliminated may have

been excluded, this method improved greatly on earlier telephone samples that chose randomly from among listed numbers only.

RANDY generates the sample, using prefix and block information, in an iterative process. Each iteration involves the following steps:

- A prefix is selected at random;
- RANDY selects a random number between 0 and 1, and compares it to the proportion calculated above for the selected prefix;
- If the random number is less than or equal to the prefix's proportion, the prefix is selected;
- If the random number is greater than the prefix's proportion, the prefix is dropped and the iteration starts over;
- Once a prefix is selected, RANDY generates random 4-digit suffixes, filtering out those that are known not to work, until it has generated 96 suffixes;
- The process is repeated until the desired sample is generated.

After RANDY has generated all the needed numbers, it uses a heap sort algorithm to index all the 7-digit telephone numbers, compare the numbers to each other and the second and subsequent occurrences of any repeating numbers. These deleted numbers are not replaced.

RANDY finally truncates each list of <prefix plus 96 or fewer suffixes> to <prefix plus exactly 48 suffixes>.

Each line of prefix-plus 48 suffixes represents one interview. Generating 48 non-duplicated suffixes assures that even in the smallest prefixes, the line contains at least one working, residential number with residents willing to be interviewed.

Finally, in order to increase the efficiency of the survey (increase the hit rate), the survey sample was prescreened each month using the ID services purchased from GENESYS Sampling Systems (Philadelphia, Pennsylvania) which used telephone technology to dial and identify non-working and business phone numbers ahead of time.

Appendix I: 1998 BRFSS Response Rates

Indicator	BRFSS Objective	BRFSS Median	Alaska Achieved
CASRO Response Rate	≥ 75	59.2	50.1
Upper Bound Rate	≥ 90	73.4	68.2
Percent Refusals	≤ 10	8.0	6.2

Response Rates

The response rate measures the extent to which interviews were completed from among the telephone numbers selected for the sample. The higher the response rate, the lower the potential will be for bias in the data. The two estimates that are used for BRFSS provide a combination of monitoring information that is useful for program management. The formulas are described as follows:

CASRO Response Rate

The response rate developed by the Council of American Survey Research Organizations (CASRO), apportions dispositions with unknown eligibility status (ring no answer and busy) to dispositions representing eligible respondents in the same proportion as exists among calls of known status (all other BRFSS call dispositions). The resulting estimate reflects telephone sampling efficiency and the degree of cooperation among eligibles contacted.

Upper Bound Response Rate

The most liberal of response rates formulas, the upper bound calculation includes only refusals, terminations and completed interviews. The resulting estimates reflects the cooperation of eligibles contacted and is not affected by differences in telephone sampling efficiency.

Refusals

The percentage of refusals of total dispositions in a given interviewing period is an indicator of both interviewer performance and degree of potential bias in the survey data. Ten percent or less is a generally acceptable standard.

Appendix J: Weighting

By weighting the data, the responses of persons in various subgroups are adjusted to compensate for the over-representation or underrepresentation of these persons in the survey sample. Factors that are adjusted for include the following:

- The number of telephone numbers per household;
- The number of adults in a household;
- The geographic distribution of the sample; and
- The demographic distribution of the sample.

The first three factors address the problem of unequal selection probability, which could result in a biased sample that doesn't really represent the population. For example, an interviewee in a one-adult household has four times the chance of being selected for an interview as does an adult in a four-adult household. A household with two telephone numbers has twice the chance of being dialed as a household with one telephone number. The first two factors are combined to compute a raw (or unadjusted) weight. The third factor then adjusts for the differential sampling of telephone numbers in different geographic regions of the state.

Data are then further weighted. Poststratification is the method used to adjust the distribution of the sample data so that it reflects the total population of the sampled area. The poststratification factor is calculated by computing the ratio of the age, race, and sex distribution of the state population divided by that of the survey sample. This procedure is repeated for each of five regions of Alaska.

The poststratification factor is then multiplied by the raw weight to compute an adjusted, or final-weight, variable. Data from all regions are combined to form the total state's data for Alaska.

Thus, this weighting adjusts not only for variation in selection and sampling probability, but also for demographic characteristics in each region of the state. If the data were not weighted, projections could not be made from the sample to the region or to the general population.

In 1998, survey results were weighted using population estimates obtained from Claritas, 1998 Race by Age by Sex Report for All Counties Nationwide, Ithaca, New York.

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