

# **Appendices**

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*Healthy Alaskans 2010 Volume I: Targets for Improved Health*

- Appendix A:** *Healthy Alaskans Partnership Council*
- Appendix B:** *Chapters and Main Authors*
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## Appendix A: Healthy Alaskans Partnership Council

Bill Allen	Cordova Center
Donna Bacon	U.S. Air Force, 3AMDS/SGPM
Mike Conway, Kristin Ryan*, Bill Stokes*	Alaska Department of Environmental Conservation
Kathy Craft, Jean Becker*, Cecile Lardon	Fairbanks Turning Point Partnership
Kathrine Davey	Alaska Health Education Consortium
Laraine Derr	Alaska State Hospital & Nursing Home
Traci Davis, Robert Ruffner*, Stan Steadman*	Central Kenai Peninsula Turning Point Partnership
Joan Domnick (through July 2001)	Alaska Native Tribal Health Directors
Fred Dyson, Johnny Ellis	Alaska State Legislature
Mark Hamilton, Karen Perdue	University of Alaska
Lisa Sadleir-Hart, Auriella Hughes* Cindy Baldwin-Kitka*, Laura Wertz-Stein*	Sitka Turning Point Partnership
Jeff Jesse, Delisa Culpepper* Mary Elizabeth Rider*	Alaska Mental Health Trust
Walter Majoros	Division of Mental Health & Developmental Disabilities
Jewel Jones, Nancy Merriman*	Municipality of Anchorage, Health & Social Services
Peter Nakamura	Technical Advisor on Alaska Health Issues and Systems
James Jordan	Alaska State Medical Association
Cheryl Kilgore	Interior Neighborhood Health Clinic
Carmen Rosa D.C. Mallipudi	Hispanic Organized Leaders of Alaska
Christopher Mandregan, Ken Glifort	Alaska Area Native Health Service
Bonnie McMahon, Diane MacMillan*	Charter North, Residential Treatment Center
Cynthia Navarrette	Alaska Native Health Board
Brenda Norton	Anchorage Health & Human Services Commission
Karen Pearson	Division of Public Health, Alaska DHSS
Jay Livey	Alaska Department of Health & Social Services
Janet Clarke	Division of Administrative Services, Alaska DHSS
Kay Klose	Alaska Mental Health Board
Rhonda Richtsmeier	Alaska Public Health Association
Brian Saylor	University of Alaska, Anchorage Institute for Circumpolar Health Studies
Paul Sherry, Tom Lefebvre*	Alaska Native Tribal Health Consortium
Ernie Turner, Susan Soule*	Division of Alcoholism and Drug Abuse, DHSS
Peter Wallis	Alaska Environmental Health Association
Pam Watts	Governor's Advisory Board on Alcoholism and Drug Abuse
<i>*Alternates; meetings are open meetings</i>	

## Appendix B: Chapters and Main Authors

	Healthy Alaskan Chapter	Main Author	State of Alaska Affiliation
1	Physical Activity and Fitness	Garry Lowry	DHSS, DPH, CHEMS
2	Nutrition and Overweight	Diane Peck	DHSS, DPH, MCFH
3	Tobacco Use	Wayne Coolidge	DHSS, DPH, CHEMS
4	Substance Abuse	Pam Watts Marilee Fletcher Lynn Hutton	DHSS, Governor's Advisory Board on Alcoholism and Drug Abuse DHSS, DMHDD
5	Mental Health	Kathryn Cohen	DHSS, DAS, Facilities and Planning
6	Educational and Community-based Programs	Jayne Andreen Delisa Culpepper	DHSS, DPH, CHEMS Department of Revenue, Mental Health Trust Authority
7	Health Communication	Patty Owen	DHSS, DPH, CHEMS
8	Injury Prevention	Martha Moore	DHSS, DPH, CHEMS
9	Violence and Abuse Prevention	Martha Moore Susan Keady	DHSS, DPH, CHEMS DHSS, DPH, DEU
10	Occupational Safety and Health	Deborah Choromanski	DHSS, DPH, Epidemiology
11	Environmental Health	Kristin Ryan Sandy Smith	DEC, Environmental Health DEC, Statewide Public Service
12	Food Safety	Kristin Ryan Sandy Smith	DEC, Environmental Health DEC, Statewide Public Service
13	Oral Health	Brad Whistler	DHSS, DPH, Directors Office
14	Vision and Hearing	Barb Sylvester-Pellet	DHSS, DPH, Nursing
		Diane DeMay	DHSS, DPH, Nursing
15	Access to Quality Health Care	Pat Carr Anthony Zenk Shelley Owens Kay Branch	DHSS, DPH, CHEMS
16	Maternal, Infant and Child Health	Janine Schoellhorn	DHSS, DPH, MCFH
17	Immunizations and Infectious Diseases	Beth Funk	DHSS, DPH, Epidemiology
18	Family Planning	Janine Schoellhorn Mary Diven	DHSS, DPH, MCFH
19	HIV Infection and Sexually Transmitted Diseases	Wendy Craytor	DHSS, DPH, Epidemiology
20	Arthritis and Osteoporosis	Paige Lucas	DHSS, DPH, Epidemiology
21	Heart Disease and Stroke	Patty Owen	DHSS, DPH, CHEMS
22	Cancer	Jeanne Roche	DHSS, DPH, Epidemiology
23	Diabetes	Judy Sberna	DHSS, DPH, Epidemiology
24	Respiratory Diseases	Susan Keady	DHSS, DPH, DEU
25	Disability and Secondary Conditions	Millie Ryan	DHSS, Governor's Council on Disabilities and Special Education
26	Public Health Infrastructure	Deb Erickson	DHSS, DPH, Directors Office

## Appendix C. Abbreviations used in Healthy Alaskans 2010

<b>ABVS</b>	Alaska Bureau of Vital Statistics
<b>ACoA</b>	Alaska Commission on Aging
<b>ACR</b>	Alaska Cancer Registry
<b>ADA</b>	Alaska Division of Alcoholism and Drug Abuse
<b>AFHCAN</b>	Alaska Federal Health Care Access Network
<b>AIPC</b>	Alaska Injury Prevention Center Observation Study
<b>AKPCA</b>	Alaska Primary Care Association
<b>AMHB</b>	Alaska Mental Health Board
<b>AMIMR</b>	Alaska Maternal Infant Mortality Review
<b>ANHB</b>	Alaska Native Health Board
<b>ANTHC</b>	Alaska Native Tribal Health Consortium
<b>ARORA</b>	Mental health database
<b>ASHNHA</b>	Alaska State Hospital and Nursing Home Association
<b>ASMA</b>	Alaska State Medical Association
<b>ASOII</b>	Annual Survey of Occupational Injuries and Illnesses, DOL
<b>ASSE</b>	American Society of Safety Engineers
<b>ATR</b>	Alaska Trauma Registry
<b>BMI</b>	Body Mass Index=weight (kg)/(height (meters)) <sup>2</sup>
<b>BRFSS</b>	Alaska Behavioral Risk Factor Surveillance System
<b>CDC</b>	Centers for Disease Control and Prevention
<b>CHEMS</b>	Community Health and Emergency Medical Services
<b>DCED</b>	Alaska Department of Community and Economic Development
<b>DEC</b>	Alaska Department of Environmental Conservation
<b>DEED</b>	Alaska Department of Education and Early Development
<b>DFYS</b>	Alaska Division of Family and Youth Services
<b>DHSS</b>	Alaska Department of Health and Social Services
<b>DJJ</b>	Alaska Division of Juvenile Justice
<b>DMA</b>	Division of Medical Assistance
<b>DMHDD</b>	Alaska Division of Mental Health and Developmental Disabilities
<b>DOC</b>	Alaska Department of Corrections
<b>DOL</b>	Alaska Department of Labor and Workforce Development
<b>DOT&amp;PF</b>	Alaska Department of Transportation and Public Facilities
<b>DOT&amp;PF</b>	Department of Transportation and Public Facilities
<b>DOT, NHTSA</b>	Department of Transportation, National Highway Traffic Safety Administration
<b>DPH</b>	Alaska Division of Public Health

<b>EHDI</b>	Early Hearing Detection and Intervention Program Network
<b>EMS</b>	Emergency Medical Services
<b>EMT</b>	Emergency Medical Technician
<b>EPA</b>	Environmental Protection Agency
<b>EPSTD</b>	Early and Periodic Screening, Diagnosis and Treatment
<b>FANR</b>	Food Assistance and Nutrition Research
<b>FARS</b>	Fatality Analysis Reporting System
<b>FAS</b>	Fetal Alcohol Syndrome
<b>MEPS</b>	Medical Expenditure Panel Survey
<b>MHSIP</b>	Mental Health Statistics Improvement Program
<b>MOA</b>	Municipality of Anchorage
<b>NCHS</b>	National Center for Health Statistics
<b>NHANES</b>	National Health and Nutrition Examination Survey
<b>NHDS</b>	National Hospital Discharge Survey
<b>NHIS</b>	National Health Interview Survey
<b>NHSDA</b>	National Survey on Drug Abuse
<b>NIOSH</b>	National Institute of Occupational Safety and Health
<b>NSB</b>	North Slope Borough
<b>NSFG</b>	National Survey of Family Growth
<b>NTIA</b>	National Telecommunications and Information Administration
<b>NVSS</b>	National Vital Statistics System
<b>PedNSS</b>	Pediatric Nutrition Surveillance System
<b>PNSS</b>	Pregnancy Nutrition Surveillance System
<b>PRAMS</b>	Alaska Pregnancy Risk Assessment Monitoring System
<b>RPMS</b>	Resource Patient Management System
<b>RSV</b>	Respiratory Syncytial Virus
<b>SAMHSA</b>	Substance Abuse and Mental Health Services Administration
<b>SDWA</b>	Safe Drinking Water Act
<b>SNF</b>	Skilled Nursing Facility
<b>UCR</b>	Uniform Crime Report, Federal Bureau of Investigation
<b>USDA</b>	United States Department of Agriculture
<b>USDOL/BLS</b>	United States Department of Labor, Bureau of Labor Statistics
<b>WIC-</b>	Women, Infants and Children
<b>YRBS</b>	Alaska Youth Risk Behavior Survey

## Appendix D. Technical Notes

### Age Adjustment

In *Healthy Alaskans 2010* all vital statistics data is age adjusted to the standard United States (million) 2000 population. Age-adjusted rates are calculated so comparisons can be made between populations that have different age distributions. For example, since Alaska has a lower proportion of people over 65 than the United States, it will experience a lower crude death rate. Many chronic disease indicators, such as cancer and diabetes, are strongly associated with age, and accurate comparisons can be made only with age adjustment.

### Behavioral Risk Factor Surveillance System (BRFSS)

Many Healthy Alaskans 2010 indicators are tracked through the Behavioral Risk Factor Surveillance System (BRFSS) system. This data collection process was implemented in Alaska as an ongoing surveillance system in 1991. Alaska adults, age 18 years old and older, are interviewed regarding their health and day-to-day living habits. Households with a telephone are selected by a scientifically designed and conducted random telephone survey. The survey is designed to report population prevalence at the regional or state level.

Alaska's BRFSS uses five geographic regions: Anchorage and vicinity, Gulf Coast, Southeast, Rural, and Fairbanks and vicinity. The United States baseline values represent the national median, and are age-adjusted to the standard million population. Alaska BRFSS data is not age-adjusted to the United States standard million because of the added complexity of this step for within state analysis. Trends can be observed between the national and state data without age adjustment.

### Youth Risk Behavior Survey (YRBS)

Many Healthy Alaskans 2010 indicators are tracked by questions asked in the Youth Risk Behavior Survey (YRBS). Results from the YRBS are intended to help detect changes in youth risk behaviors over time. The results can identify differences among ages, grades, and sex. Alaska first implemented its YRBS in 1995 using all school districts within the State. A second YRBS was conducted in 1999 and included all school

district with the notable exception of the Anchorage school district. The prevalence percents shown are the best available estimate of risk behaviors in the school age population.

High school (grades 9 – 12) results are weighted and provide estimates of the prevalence of risk behaviors in students enrolled in eligible schools. Eligible schools are those outside the Anchorage school district excluding correspondence, home study, alternative, and correctional schools. Youth who dropped out of school are not included.

Middle school (grades 7 and 8) results are not weighted to the general student population because of a low overall participation rate. However, these results are useful in determining the prevalence of risk behaviors in a large number of Alaska's seventh and eighth grade students in 1999 and will give users insight into the needs and behaviors of students in this age group.

Age adjusting the YRBS rates is unnecessary because Alaska's high school students are generally the same age as students in other parts of the nation.

### Vital Statistics Cause of Death Coding

Causes of death are classified by the Tenth Revision International Classification of Disease (ICD-10). The Tenth Revision replaced the Ninth Revision (ICD-9) in 1999. The change from ICD-9 to ICD-10 results in discontinuities between selected causes of death by introducing new causes of death titles and their corresponding cause of death codes.

Caution is necessary in comparing mortality rates before 1999 with current rates. Nationally, only 7 of the 15 leading causes of death titles using ICD-9 remain the same under ICD-10 coding. The break in comparability results from changes in category titles, changes in structure and content of the classification, and from changes in the coding rules used to select the underlying cause of death. Mortality statistics are generally based on underlying cause of death, which is defined as "the disease or injury which initiated the train of morbid events leading directly to death, or the circumstances of the accident or violence which produced the fatal injury." The process for identifying the leading causes of death is published in the NCHS Instruction Manual, Part 9, ICD-10 Cause of Death Lists for Tabulating Mortality Statistics, Effective 1999.

Ratios of comparability between ICD-9 and ICD-10 have been studied by the dual classification of mortality records at the national level<sup>1</sup>. A comparability ratio of 1.00 indicates that the same number of deaths was assigned to a particular cause or combination of causes whether ICD-9 or ICD-10 was used. This does not necessarily indicate that the cause was unaffected by changes in classification and coding procedures but merely that there was no net change in the number assigned. A ratio less than 1.00 indicates that fewer deaths are assigned to the cause of death under ICD-10 than with ICD-9. A ratio greater than 1.00 results from an increase in deaths assigned to a cause in ICD-10 compared with the comparable ICD-9 cause.

The change to ICD-10 increases the number of deaths attributed to Alzheimer's disease, septicemia, unintentional injuries, Sudden Infant Death Syndrome (SIDS), and several other common causes of death. The number of deaths attributed to heart disease, asthma, pneumonia, and congenital anomalies decreases under ICD-10 (Table 9).

Whenever possible, Healthy Alaskans 2010 uses 1999 mortality rates to set baselines. Since the 1999 rates are coded with ICD-10, changes can be tracked across the decade.

### Issues of small numbers

Many health indicators for Alaska are based on a small number of events. The 15 leading causes of death in Alaska in 1998, for example, included seven deaths from hypertension, 11 from atherosclerosis, and 12 from kidney disease. When health events are sub-divided by borough/census area, race, sex, or age, the number that results lacks statistical significance and may inadvertently identify an individual.

Confidentiality issues are likely to arise with small denominators, small numerators, or rare events. Confidentiality is protected by withholding events with counts less than four, or by aggregating data over time or over larger geographical areas to produce a larger cell size.

**Table 9**

ICD-10/ICD-9 Comparability Ratios for Selected Causes of Death			
Cause of Death	ICD-10 Codes	ICD-9 Codes	Comparability Ratio
<b>Number of deaths attributed to these causes may be reduced after 1998.</b>			
Pneumonia	J12-J18	480-486	0.70
Tuberculosis	A16-A19	010-018	0.85
Congenital malformations	Q00-Q99	740-759	0.85
Asthma	J45-J46	493	0.89
Diseases of the heart	I00-I09,I11 I13, I20-I51	390-398,402, 404,410-429	0.99
<b>Number of deaths attributed to these causes may be increased after 1998.</b>			
Diabetes mellitus	E10-E14	250	1.01
Unintentional injuries	V01-X59 Y85-Y86	E800-E869 E880-E929	1.03
Sudden infant death syndrome	R95	798	1.04
Cerebrovascular disease	I60-169	430-434 436-438	1.06
Malignant neoplasms	C00-C97	140-208	1.10
Septicemia	A40-A41	O38	1.19
Alzheimer's disease	G30	331	1.55

*Source: Bureau of Health Information, Division of Health Care Financing, Department of Health and Family Services. The comparability ratio for each cause of death is from the National Center for Health Statistics, December 5, 2000.*

Concerns about the reliability and stability of the data arise with small numerators that represent rare or infrequent events. Twenty events is the usual threshold for reliability for estimating age-adjusted rates. Rates based on fewer than 20 events have relative standard errors of 23 percent or more. Throughout Healthy Alaskans 2010 we have attempted to increase numerator size by combining multiple years of data, collapsing data categories, and/or expanding the geographic area under consideration. When rates are calculated for numerators less than 20, a footnote is added: “Rates calculated from < 20 cases may be unreliable.” Rates are not calculated for counts under four.

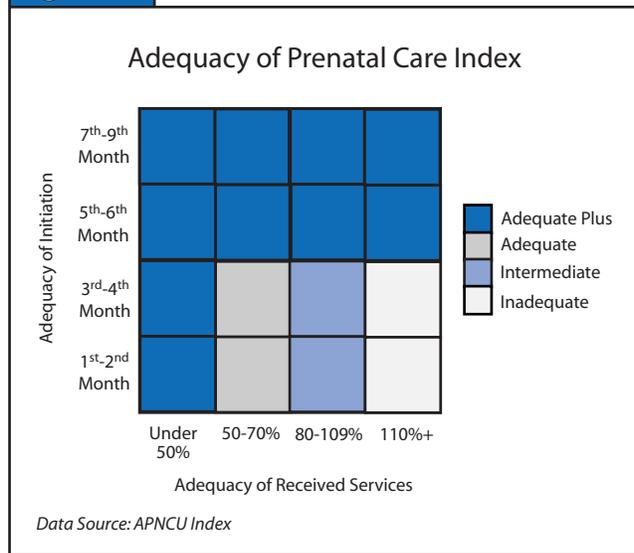
### Bridge Series for Census 2000 Comparable Race Categories to 1990 Major Groups

The Census Bureau followed the guidelines of the U.S. Office of Management and Budget (OMB) in conducting the 2000 census. All race and ethnicity was self-reported by the respondent and represented each individual’s interpretation of the choices presented. In addition to the race and ethnic categories recognized by OMB, the census allowed people to define themselves as “some other race” and to write in their race. The Census Bureau has so far provided race and ethnicity tabulations in the following forms for 2000 data:

1. One race alone or two or more races.
2. Race alone or in combination.
3. 63 race categories.

A national Academy of Sciences panel studied a series of possible ways to combine the 2000 race data to produce race data comparable to the 1990 and earlier definitions of race. These tabulations are referred to as “bridge” estimates, because they allow comparison of two sets of incompatible data. Of the possible ways of combining the new race data to create tabulations that are comparable to earlier data, the method easiest to understand is what is generally referred to as the “equal proportion or equal fractions.” The principle of “equal proportion” involves weighting the multi-race responses on the assumption that they are equal shares of each race. For example, the category of “Alaska Native and White” would be weighted 0.5 Alaska Native and 0.5 White. After all the multi-races are proportionately weighted, the race fractions are summed and rounded to the nearest whole person to obtain the estimated number of persons equivalent to the single race responses of earlier censuses. This procedure has been used at the “place” level (small geographic areas) so that the aggregate figures for census areas or boroughs, or the state as a whole, will be consistent with the place-specific figures.<sup>2</sup>

**Figure 16**



### Measuring Prenatal Care: The Adequacy of Prenatal Care Utilization (APNCU) Index

The APNCU index, also called the Kotelchuck Index, uses two crucial elements obtained from birth certificate data - when prenatal care began (initiation) and the number of prenatal visits from when prenatal care began until delivery (received services). The APNCU index classifies the adequacy of initiation as follows: pregnancy months 1 and 2, months 3 and 4, months 5 and 6, and months 7 to 9. To classify the adequacy of received services, the number of prenatal visits is compared to the expected number of visits for the period between when care began and the delivery date. The expected number of visits is based on the American College of Obstetricians and Gynecologists prenatal care standards for uncomplicated pregnancies and is adjusted for the gestational when care began and for the gestational age at delivery.

A ratio of observed to expected visits is calculated and grouped into four categories—Inadequate (received less than 50% of expected visits), Intermediate (50%-79%), Adequate (80%-109%), and Adequate Plus (110%). The final APNCU index measure combines these two dimensions into a single summary score. The chart below summarizes the two dimensions of the APNCU index.

Healthy Alaskans 2010 defines adequate prenatal care as a score of 80% or greater on the APNCU Index, or the sum of the Adequate and Adequate Plus categories.

The APNCU Index does not measure the quality of prenatal care. It also depends on the accuracy of the patient or health care provider's recall of the timing of the first visit and the number of subsequent visits. The APNCU Index uses recommendations for low-risk pregnancies, and may not measure the adequacy of care for high-risk women. The APNCU Index is preferable to other indices because it includes a category for women who receive more than the recommended amount of care (adequate plus, or intensive utilization).

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## Endnotes

<sup>1</sup> National Vital Statistics Report. Comparability of cause of death between ICD-9 and ICD-10: Preliminary estimates. 2001: (49)2. Technical reports for the National Vital Statistics system are available on-line at: [www.cdc.gov/nchs/products/pubs](http://www.cdc.gov/nchs/products/pubs)

<sup>2</sup> Williams G., Race and ethnicity in Alaska. Alaska Economic Trends, October 2001

## References:

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# *Chapter Notes*

