

CHAPTER 3

HEALTH STATUS

INTRODUCTION

Health Status: Health status is, in general terms, the state of health of a specified individual, group, or population (such as Alaskans, teen-agers, a group of employees, etc.). It is as difficult to describe or measure as the health of an individual and may be measured with people's subjective assessment of their health, or with one or more indicators of mortality and morbidity in the population, such as longevity, maternal and infant mortality, and the incidence or prevalence of major diseases. These are measures of disease status, but have to be used as proxies in the absence of measures of either objective or subjective health in the positive sense.

This health status chapter is designed to present information regarding the health of the population of Alaska, to identify the major health problems of the state, and to describe the health problems of specific population groups within Alaska.

Health is defined by the World Health Organization as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity."

Another useful definition of health is developed by Henrick L. Blum:

...Health consists of (1) the capacity of the organism to maintain a balance appropriate to its age and social needs, in which it is reasonably free of gross dissatisfaction, discomfort, disease, or disability; and (2) to behave in ways which promote the survival of the species as well as the self-fulfillment or enjoyment of the individual.¹

These definitions encompass the physical as well as the psychological and social health of the population. Health status can thus be viewed as a result of the interaction of BIOLOGICAL factors, the HEALTH CARE SYSTEM, ENVIRONMENTAL conditions, and the LIFESTYLE or behavior of the population. This framework sets the stage for including all factors influencing health in planning and analytical perspective.

The relationship between health status and causal/contributing factors is a critical link in planning for health; therefore, each health status problem should be evaluated to identify the possible causal factors in the environment, lifestyle, and biology of the

population, and the availability of personal health services. The next step is to identify actions by the health care system that can improve the environment and the lifestyle/ behavior of the public or can improve the medical services needed to respond to the problem.

For example, accidents are an identified health problem. Contributing factors include extreme climate and harsh terrain, consumption of alcohol, and hazardous recreational activities; therefore, the health care system can conduct public education about precautionary measures that people can take against the extreme climate and the chance of being isolated in a harsh terrain. Measures such as alcohol education, restricted advertising of alcoholic beverages, and restricted open hours on liquor establishments can be initiated to reduce consumption of alcohol. These health promotion measures to influence the behavior of the public may influence the health status of the population regarding the problem.

In addition, personal health services such as qualified emergency care in every community will improve health status through improving the responses of the health care system to accidents which occur. Figure 3-1 graphically identifies these variables.

Figure 3-1

HEALTH STATUS PROBLEM	ENVIRONMENTAL, LIFESTYLE AND BIOLOGICAL CAUSAL FACTORS	SUGGESTED HEALTH CARE SYSTEM RESPONSES
<p>ACCIDENTS</p>	<p>Consumption of alcohol</p> <p>Harsh climate and natural environment, remoteness of many communities</p> <p>Hazardous recreational and occupational activities, careless driving/piloting, failure to wear seat belts/flotation jackets.</p> <p>Poor home and business maintenance, fire hazards</p>	<p>alcohol safety education</p> <p>Measures to reduce alcohol consumption</p> <p>Promotion of better safety measures</p> <p>Recreational and occupational safety education</p> <p>Enforcement of safety laws such as boating, FAA, & driving regulations</p> <p>Enforcement of speed limits and DWI laws</p> <p>Promotion of use of safety equipment (seat belts, helmets, survival suits, emergency kits</p> <p>Promotion of home safety (fire inspections, cleaning of furnaces, smoke detectors, poison labels).</p> <p>Occupation safety practices</p> <p>Emergency Medical Services</p> <p>Trained emergency care in each community</p> <p>First aid training in schools and to general public</p> <p>Poison control services</p> <p>911 Emergency number</p> <p>Improved transportation, communication networks, equipment & services</p>

If one considers the broad definition of health in relation to the measurement of health status, one would be charged with measuring the extent of internal satisfaction, self-fulfillment, and mental and social well-being as well as the extent or lack of disease, discomfort, injury or death. Certainly, such concepts as self-fulfillment and social well-being would be difficult to define, let alone to measure quantitatively. Generally, the extent of poor physical and behavioral health, rather than the existence of good health, must be measured. The reality of a somewhat limited resource of health status data is restrictive. Information resources, such as an index of nutritional health, measures of dental health, wellness surveys, and perceived needs analyses, remain goals which have not been accomplished in Alaska. Three general categories of health status indicators are used to measure health problems or the outcome of health problems: mortality (death), morbidity (illness and injury), and disability (restricted activity).

P.L. 93-641 states that the planning agencies should rely, to the maximum extent practical, on existing data systems within the State. Because of planning agencies' dependence on primary data sources, it is particularly important that they be involved in decisions regarding the maintenance of existing data systems, changes in data systems, and the development of new data systems. The Inter-Agency Data Committee was created to address these issues and to coordinate data activities. The committee consists of the Data Managers of each Health Systems Agency and the State Health Planning and Development Agency. The major activity for the Inter-Agency Data Committee this last year has been the collaboration on the Data Appendix, which emphasized regionally aggregated health status and system information.

Health Problem Analysis: Descriptive epidemiology relates to the study of the amount and distribution of a disease in a population in order to identify populations at risk. As a science discipline, epidemiology provides a systematic approach for analyzing health status problems and postulating causal factors. Once causes are known or implicated, a strategy for intervention to disrupt the pattern of causation may be developed. In this chapter, the conventional approach to epidemiological analysis is turned around. Starting with the population groups described by the classical risk factors of age, sex and race, the health status problems for which each of these groups are at elevated risk are enumerated. This permits an assessment of health status problems common to a particular risk group that might further elucidate the underlying causal/contributing factors. In Chapter 4, each of the health status problems are examined individually in order to 1) establish a context for an assessment of the relative significance of the problem and 2) to identify those risk factors whose presence increases the likelihood of the disease.

Due to the unavailability of more direct, population based indicators, utilization data are frequently cited as an index of health status. A word of caution should be sounded at this point. Since utilization statistics are a measure of demand for services for problems, as opposed to the problem itself, they imperfectly represent the problem's real distribution in the population. Factors that might distort the image include availability and accessibility of services, seriousness of the problem, and sociocultural characteristics of the service population. Similarly, a trend of increasing utilization may indicate a growing awareness of the problem by the population instead of a real increase. A good case in point is gonorrhoea. It is likely that the actual incidence of gonorrhoea is more accurately reflected in case reports of men than those of women. Gonorrhoea in men more often causes acute symptomatic disease which requires them to seek treatment. Other possible factors include changes in the sexual activity of specific age groups or in diagnostic or reporting practices.

Leading Causes of Mortality: Figures 3-2 and 3-3 are tables of the leading causes of mortality in Alaska in 1980. Figure 3-2 presents crude mortality rates and Figure 3-3 shows the rates that emerge upon adjusting the rates for the age profiles of the population. The three leading causes of death in Alaska as indicated by the crude mortality rate are accidents, diseases of the heart, and malignant neoplasms (cancer). Alaskan accidental mortality is over twice the rate for the nation as a whole. However, the U.S. death rate for diseases of the heart is almost four times that for the state. The U.S. rate for cancer is over twice the Alaskan rate.

When the crude mortality rates are age adjusted, the leading causes of death in Alaska are in a different ranking. The first three are, in this order, diseases of the heart, cancer, and accidents. The Alaskan and U.S. death rates for heart disease and cancer are closer together in magnitude than for the crude rates. The age-adjusted mortality rate for Alaska, however, is over twice as high as for the nation.

Figure 3-2

Crude Mortality for Alaska
Ten Leading Causes of Death, 1980 by HSA

Rank	Cause of Death	RATE: # Cases/ 100,000 population											
		Alaska		SE HSA		SC HSA		MO HSA		U.S.			
		Frequency	Rate	Frequency	Rate	Frequency	Rate	Frequency	Rate	Frequency	Rate	Frequency	Rate
1	Accidents	416	103.5	50	92.9	271	99.8	95	124.1				47.9
2	Diseases of the Heart	361	89.8	72	133.8	221	84.1	68	88.8				343.0
3	Malignant Neoplasms	279	69.4	38	70.6	196	72.2	45	58.8				186.0
4	Suicide	72	17.9	13	24.2	51	18.8	8	10.4				12.7
5	Cerebrovascular Diseases	64	15.9	22	40.9	32	11.8	10	13.1				76.6
5	ILL Defined	64	15.9	13	24.2	30	11.0	21	27.4				12.7
6	Diseases of Early Infancy	43	10.7	11	20.4	26	9.8	6	7.8				10.1
7	Cirrhosis of the Liver	36	9.0	7	13.0	24	8.8	5	6.5				14.1
8	Homicide	33	8.2	2	3.7	22	8.1	9	11.8				11.3
9	Congenital Anomalies	23	5.7	3	3.7	14	5.2	6	7.8				6.2

Source: Alaska Department of Health and Social Services, Alaska Vital Statistics Annual Report, 1980; Alaska Department of Labor, Alaska Population Overview, 1981; U.S. Department of Health and Human Services, Monthly Vital Statistics Annual Report, Provisional Statistics, Annual Summary of Births, Deaths, Marriages and Divorces, United States, 1980.

Figure 3-3

Age Adjusted Mortality for Alaska
Leading Causes of Death, 1980, by HSA

Rank	Cause of Death	RATE: # CASES/100,000 Pop.				
		Alaska	SE HSA	SC HSA	NO HSA	U.S.
1	All Accidents	97.5	108.1	102.9	98.6	43.4
	-Motor Vehicle	21.4	18.4	25.4	24.1	23.7
	-Drown- Non Trans.	11.2	15.3	10.8	8.2	
	-Aircraft	10.3	14.8	17.6	14.3	
	-Water Trans - Drown	9.1	15.9	10.4	6.8	
	-Firearms	6.9	5.0	4.8	7.1	
	-All Other Accidents	39.3	38.8	33.4	39.2	
2	Diseases of the Heart	173.4	177.5	158.7	176.5	205.3
3	Malignant Neoplasms	128.8	113.3	135.7	111.9	134.2
4	Suicide	17.7	20.9	17.2	13.4	12.2
5	Cerebrovascular Disease	31.5	47.9	31.1	32.1	41.5
7	Cirrhosis of the Liver	12.5	18.4	12.8	15.1	12.6
7	Influenza and Pneumonia	16.0	10.9	19.0	26.5	12.6
8	Homicide	7.2	7.2	10.6	18.2	11.4

Notes: 1) Alaska mortality for 1980; HSA mortality for 1978-1980; U.S. mortality for 1980.

2) Diseases of Early Infancy and Ill Defined have been removed.

Sources: 1) Office of Information Systems, DHSS, HSA Mortality Reports, 1978, 1979, and 1980.

2) U.S. DHHS, Vital Statistics Report, Annual Summary for the U.S.; 1980.

3) Alaska Dept. of Labor, Alaska Population Overview, 1981.

AGE GROUPS

Age: Age is an extremely important factor to consider in characterizing the health status of a population and defining its need for health services. Age can also be a summary health status indicator as with the life expectancy of the Alaska population. In 1980 the life expectancy of a newborn Alaskan was 72.78 years (68.67 males, 80.14 females). This is an improvement over the life expectancy in 1970 which was 70.56 years (66.93 males, 76.44 females).

Figure 3-4

LEADING CAUSE OF DEATH BY AGE GROUP						
1976-1980						
(Rate per 100,000)						
<u>AGE GROUP</u>	<u>CAUSE OF DEATH</u>	<u>ALASKA</u>	<u>SE HSA</u>	<u>SC HSA</u>	<u>NO HSA</u>	<u>U.S. (1980)</u>
0-1	Diseases of Early Infancy	479.0*	441.0*	700.0*	566.2	691.9
1-4	Accidents	47.8*	42.9	44.2	43.8	18.2
5-14	Accidents	30.4*	28.0	31.5	27.1	18.2
15-24	Accidents	136.9*	140.3	139.4	141.6	62.7
25-34	Accidents	148.6*	139.6	110.4	102.2	49.0
35-44	Accidents	120.9*	96.7	92.1	118.0	36.0
45-54	Diseases of the Heart	N/A	164.3	135.2	150.6	181.9
55-64	Diseases of the Heart	314.6*	397.1	404.8	408.5	510.8
65+	Diseases of the Heart	1680.0*	1883.4	1477.5	1706.9	N/A

*For the period 1977-79

Source: State of Alaska, Department of Health and Social Services, Office of Information Systems; rate denominators - Southeast Alaska Health System Agency; U.S. Department of Health and Human Services, Provisional Data from the National Center for Health Statistics, Monthly Vital Statistics Report, Vol. 29, No. 13.

Age 0-1: The age of 0-1 is a precarious time in the life of a person. More than for other mammals, the newborn child is helpless, requiring constant attention. The infant mortality rate is the deaths under 1 year of age per 1,000 live births. The infant mortality rate for Alaska is down from 23.4 in 1970 to 12.7 in 1981, a decline of 45.7% (Figure 3-5). The infant mortality rate for Alaska has been higher than the rate for the U.S. since 1976, except for the year 1980 when it was virtually the same.

Figure 3-5

Infant Mortality
1970-1981

Number and Rate per 1,000 Live Births

	1970		1971		1972		1973		1974		1975		1976		1977		1978		1979		1980		1981		
	deaths births	rate	deaths births	rate	deaths births	rate	deaths births	rate	deaths births	rate	deaths births	rate	deaths births	rate											
U.S.	---	20.0	---	19.1	---	17.7	---	16.7	---	16.1	---	15.2	---	14.1	---	13.8	---	13.0	---	12.5	---	---	---	---	11.7
Alaska	177	23.4	134	18.3	118	17.0	127	18.1	7006	14.3	107	14.3	7912	16.1	124	14.6	8049	16.1	147	118	118	12.4	12.4	10081	12.7
Native	49	28.5	48	28.0	32	19.9	42	27.6	47	18.9	33	18.9	49	28.1	33	17.8	35	26.2	53	45	45	21.0	35	18.8	
Non-Native	128	21.9	86	15.4	86	16.1	80	15.1	80	13.0	74	13.0	781	12.6	90	13.9	92	13.3	92	73	73	11.0	89	10.9	
White	5482	15.3	5341	15.3	4991	15.0	4935	14.2	5291	12.7	5705	12.7	6170 ²	5715	5961	14.1	6270	13.4	7071	6351	62	62	9.5	7442	10.2

Note: Unless footnoted otherwise Non-Native includes all categories of race except the Native categories and not stated.
(Native includes: Eskimo, Aleut, Indian, Non-Ak Indian, Other Native)

- 1. Includes white, other not stated
- 2. Includes White, Black, other not stated

Source: Alaska Dept. of Health and Social Services, Office of Information Systems, Alaska Vital Statistics, 1974, 75, 76, 78, 79.

Alaska Dept. of Health and Social Services, Unpublished data, 1970, 71, 72, 73, 80, 81.
U.S. Dept. of Health and Social Services, National Center for Health Statistics, Monthly Vital Statistics Report, Vol. 29, No. 13; Vol. 30, No. 12.

Both white and Native infant mortality rates improved between 1970 and 1981. White infant mortality improved the most, dropping 52.1% from 21.3 to 10.2, with a low of 9.5 in 1980. Native mortality was down 34.0%, from 28.5 in 1970 to 18.8 in 1981.

The neonatal mortality rate is defined as number of deaths 28 days of age per 1,000 live births. The Alaskan neonatal mortality rate dropped from 15.3 in 1970 to 8.1 in 1981, with a low of 6.5 in 1980, a drop of 47.1%. This is still higher than the U.S. rate of 7.8 in 1981. The postnatal mortality rate is defined as the number of deaths from 28 days of age to 12 months of age per 1,000 live births. The Alaskan rate dropped from 8.1 in 1970 to 4.6 in 1981, a decrease of 43.2%. Throughout that 12-year period, the U.S. rate has been consistently below Alaska's. The 1981 U.S. rate was 3.9 (Figure 3-6).

Figure 3-6

INFANT MORTALITY						
Alaska and U.S.						
1970-1981						
	Neonatal Mortality Rate (deaths under 28 days per 1,000 live births)		Postnatal Mortality Rate (deaths 28 days-12 months per 1,000 live births)		Total Infant Mortality Rate (deaths under 1 year per 1,000 live births)	
	<u>Alaska</u>	<u>U.S.</u>	<u>Alaska</u>	<u>U.S.</u>	<u>Alaska</u>	<u>U.S.</u>
1970	15.3	15.1	8.1	4.9	23.4	20.0
1971	12.6	14.2	5.7	4.9	18.3	19.1
1972	11.1	13.6	5.9	4.8	17.0	18.5
1973	13.3	13.0	6.5	4.8	19.8	17.7
1974	12.4	12.3	5.8	4.4	18.2	16.7
1975	9.4	11.6	5.0	4.5	14.3	16.1
1976	9.2	10.9	6.8	4.3	16.1	15.2
1977	8.2	9.9	6.6	4.2	14.8	14.1
1978	9.6	9.5	5.0	4.3	14.6	13.6
1979	9.9	8.7	6.2	4.2	16.1	13.0
1980	6.5	8.4	5.8	4.2	12.3	12.5
1981	8.1	7.8	4.6	3.9	12.7	11.7

Source: Alaska Department of Health and Social Services; Office of Information Systems, Alaska Vital Statistics, 1975, 1976, 1977, and Unpublished data, 1979 and earlier

U.S. Dept. of Health and Human Services, National Center for Health Statistics, Monthly Vital Statistics Report, Annual Summary, 1979; Vol. 29, No. 13; Vol. 30, No. 12.

Because the incidence of low birth weight infants (babies weighing less than 2500 grams) is correlated with infant survival, it is possible to examine that indicator as an index of newborn health. The number of low birth weight births as a percentage of total births declined from 6.3% in 1970 to 5.7% in 1979 in Alaska (Figure 3-7).

Figure 3-7

BIRTHS OF LOW BIRTHWEIGHT*									
ALASKA 1970-1979									
Number and Percent of Low Birth Weight Births as a Percent of All Births									
	SOUTHEAST HSA		SOUTHCENTRAL HSA		NORTHERN HSA		TOTAL STATEWIDE		
	#	%	#	%	#	%	#	%	
1970	51	5.5	296	6.1	129	7.3	476	6.3	
1971	37	4.3	274	5.8	107	6.2	418	5.7	
1972	45	5.4	262	5.8	100	6.4	407	5.9	
1973	43	5.3	245	5.7	92	6.1	380	5.7	
1974	37	4.2	234	5.0	94	6.2	365	5.2	
1975	49	5.2	237	4.9	84	5.1	370	5.0	
1976	44	5.0	265	5.1	89	5.0	398	5.0	
1977	45	4.8	286	5.0	87	5.0	418	5.0	
1978	44	4.5	309	5.2	117	6.1	470	5.3	
1979	60	5.3	334	5.4	128	6.9	522	5.7	

*Low Birthweight equals 5½ pounds or less.

Source: Office of Information Systems, Alaska Department of Health and Social Services, Alaska Vita Statistics, 1976 and Unpublished data 1977-1979.

Prenatal care, nutrition, and cigarette and alcohol consumption are all risk factors bearing on the health of the newborn child. From 1978 to 1981 the proportion of mothers receiving prenatal care in the first trimester increased from 71.2% to 75.7%. At the same time, the percentage of mothers either starting care in the third trimester or never receiving prenatal care dropped from 5.2% to 4.1% (Figure 3-8).

Figure 3-8

Trimester of Initial Prenatal Care Visit									
Statewide Totals, 1978-1981									
	FIRST		SECOND		THIRD		TOTAL STATED	No Care	
	No.	%	No.	%	No.	%		No.	%
1978	5985	71.2	1927	23.0	378	4.5	8412	61	.73
1979	6564	74.9	1804	20.6	400	4.6	8768	N/A	-
1980	6863	75.3	1843	20.2	360	4.0	9115	49	.54
1981	7213	75.7	1922	20.2	391	4.1	9526	0	-

Source: Dept. of Health and Social Services, Division of Public Health, and Office of Information Systems and Family Health Section, Unpublished data, 1982.

Cigarette consumption for the statewide population, as expressed by packages sold per capita for the population 15 years and older, has remained fairly constant over the period 1976 to 1980; however, the U.S. rate declined 3.6% over the same period and Alaska consumed 13.0% more packages per capita than the U.S. overall (Figure 3-9).

Figure 3-9

CIGARETTES SOLD, ALASKA, U.S., 1976-1980

YEAR	# CIGARETTE PACKAGES SOLD PER CAPITA		% DIFFERENCE
	ALASKA	U.S.	
1976	191	175	9.1
1977	193	175	10.3
1978	190	172	10.5
1979	183	171	7.0
1980	191	169	13.0
% Change 1976-1980	-0-	-3.6	

Note: Per capita rates are figured on a population figure of 15 years old and above as a more accurate reflection of population possibly smoking.

- Sources:
- 1) Tobacco Tax Council, Richmond, Virginia
 - 2) Population figures for Alaska derived using current estimates provided by Alaska Department of Labor and U.S. Census.
 - 3) U.S. Population figures are from U.S. Census Bureau

The statewide consumption of alcohol, as expressed in gallons of absolute alcohol for persons 19 years of age and over, has decreased slightly from 4.64 to 4.58 gallons per capita from 1975 to 1982, after dropping to a low of 3.72 gallons in 1979. In 1979, the most recent year for which comparable U.S. data are available, Alaska's sales (or "apparent consumption") was 30.1% greater than the U.S. rate (Figure 3-10).

Figure 3-10

Per Capita Sale of Legal Alcohol Beverages,
By Beverage Class in Gallons of Absolute Alcohol, for Persons 19 Yrs of Age & Older

FY	Distilled spirits	Wine	Beer	Total	Statewide 19 + Pop.
1975	2.42	.54	1.68	4.64	216,226
1976	1.99	.42	1.53	3.44	263,876
1977	1.90	.44	1.53	3.87	271,546
1978	1.80	.45	1.54	3.79	269,570
1979	1.71	.47	1.54	3.72	271,439
1980	1.75	.51	1.67	3.93	264,991
1981	1.99	.60	1.89	4.48	259,806
1982	1.98	.63	1.97	4.58	272,796
US 1979	1.19	.38	1.29	2.86	

Note: U.S. Consumption figure based on 1979 U.S. Population of individuals 18 years of age and older.

Source: State of Alaska, Dept. of Revenue, Div. of Admin., Services (Unpublished tables) Alcohol Beverages Shipped into Alaska plus Direct Shipment to Retailers and Military, FY 75, 76, 77, 78, 79, 80, 81, 82.

Alaska Office of Alcoholism & Drug Abuse, DHSS, The Alaska State Alcoholism & Drug Abuse Plan 1980-1983, 1981.

State Health Planning and Development, DHSS, Unpublished table, Population by Age, Statewide, 1970-1980, 1981.

Alaska Department of Labor, Alaska Population Overview 1981. Series A projections.

Age 1-4: The population group less than 5 years of age accounted for 9.7% of Alaska's population in 1980 (Figure 3-11). The leading cause of mortality in 1980 for the 1-4 year old cohort was accidents, which occurred at a rate of 47.8 per 100,000 population (Figure 3-4).

Age 5-14: In all, 17.2% of Alaska's population in 1980 was between 5 and 14 years of age, compared to 15.5% of the U.S. population in the same year. Like the 1-4 age cohort, the leading cause of mortality for this age group was accidents, at a rate of 30.4 (Figure 3-4). This rate is down 33.7% from the 1970 rate of 39.2, and is 31.0% less than the average rate of 37.7 for the eleven year period 1970-1980 (Figure 3-11). The accidental mortality rate of 30.4 for the 5-14 year olds in Alaska for this period is one and one half times greater than the U.S. rate of 18.2 for 1980 (Figure 3-4).

Figure 3-11

ALASKA POPULATION DISTRIBUTION			
BY AGE AND SEX			
1980			
	TOTAL	MALE	FEMALE
TOTAL NUMBER	400,481	212,321	188,160
TOTAL PERCENT	100.0	100.0	100.0
Under 5 years	9.7	9.4	10.0
5 to 9 years	8.7	8.4	9.0
10 to 14 years	8.5	8.3	8.8
15 to 19 years	9.2	9.3	9.2
20 to 24 years	11.3	11.4	11.1
25 to 29 years	12.1	12.0	12.2
30 to 34 years	10.5	10.6	10.3
35 to 39 years	7.8	8.0	7.5
40 to 44 years	5.6	5.8	5.4
45 to 49 years	4.6	4.7	4.5
50 to 54 years	4.0	4.1	3.8
55 to 59 years	3.1	3.2	3.1
60 to 64 years	2.0	2.0	2.0
65 to 69 years	1.3	1.3	1.3
70 to 74 years	0.8	0.7	0.8
75 years and older	0.8	0.7	0.9

Source: 1980 Census.

Figure 3-12

ACCIDENTAL DEATH RATES* BY AGE, STATE OF ALASKA,
1970 - 1980

AGE GROUP	ACCIDENTAL DEATH RATE* BY YEAR										
	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
<5	99.0	88.6	53.8	68.0	83.0	48.8	75.4	49.4	31.6	46.8	28.2
5-14	39.2	53.7	34.0	33.0	65.3	39.2	31.8	26.0	39.8	27.2	26.0
15-24	148.1	154.4	151.0	142.0	149.5	157.0	138.7	129.8	170.0	129.1	133.7
25-34	132.9	161.1	126.6	122.3	123.1	104.9	113.7	94.9	125.5	92.5	135.4
35-44	127.9	154.0	113.8	126.8	142.8	96.4	83.3	79.9	122.9	98.1	107.4
45-54	151.1	159.2	126.7	152.1	123.6	176.5	167.8	112.9	187.2	83.1	87.6
55-64	172.1	193.8	138.6	127.4	174.3	153.1	185.4	107.4	117.3	133.7	96.3
65+	288.6	192.4	245.7	234.4	182.1	264.5	166.2	156.7	110.7	178.2	164.7
TOTAL ALL AGES	116.7	129.1	105.4	108.0	119.2	109.2	105.5	97.8	114.6	88.7	96.8

*Rate = Deaths per 100,000 population

Source: Office of Information Systems. Department of Health and Social Services, 1970-1980.

Age 15-24: The age group between 15 and 24 represented 20.5% of the Alaska population and 18.7% of the U.S. population in 1980. This age group is at high risk for a lengthy list of health status problems. The mortality rate due to accidents for this age group of 136.9/100,000 is the fifth highest of all age cohorts and the leading cause of mortality for the age group. This rate is 2.2 times the U.S. mortality rate for this age group (Figure 3-4). The 1980 accident mortality rate of 133.7 declined 9.7% from the 1970 rate of 148.1 and is 8.3% less than the 11 year average rate of 145.8 (Figure 3-12). The data in Figure 3-13 reveal that 39.9% of all licensed drivers are between the ages of 15 and 29. Yet this age group accounted for 58.4% of all the accidents in which alcohol was present in the driver.

Figure 3-13

ACCIDENTS IN WHICH ALCOHOL WAS PRESENT IN DRIVER			
ALASKA, 1980			
Age Group*	Number	Percentage**	Percentage of all Licensed Drivers
15-18	220	11.3%	3.4%
19-29	922	47.1	36.5
30-39	407	20.9	27.8
40-49	238	12.2	15.2
50-59	134	6.9	10.3
60+	31	1.6	5.3
Total	1,952	100.0	

*Age not specified in 164 accidents

**Percentage of all accidents in which alcohol was present.

Source: Highway Safety Planning Agency, Department of Public Safety, Highway Safety Plan, 1981.

The 15-24 year olds represent 20.5% of the population (Figure 3-11). In Figure 3-14, the data reveal that 18-25 year olds represent 26.7% of the alcohol treatment clients in the state for the period October 1982 to August 1983.

Figure 3-14

ALCOHOL CLIENTS RECEIVING TREATMENT		
ALASKA		
October, 1982 to August, 1983		
Client Characteristics	Number	Percent
Sex		
Male	8935	74.1
Female	3130	25.9
Total	12065	100.0
Client Age at Admission		
17 and under	542	4.5
18-25	3190	26.7
26-40	5373	45.0
41-60	2478	20.8
61 and older	358	3.0
Total	11941	100.0
Race/Ethnicity		
White	5195	43.1
Black	164	1.4
Native	6479	53.6
Hispanic	80	0.7
Asian	18	0.1
Other	128	2.1
Total	12064	100.0
Years of Education		
9 or less	2815	20.6
10-11 years	2515	18.4
12 years	4333	31.8
13-14 years	1314	9.6
15 years or more	645	4.7
GED equivalent	2037	14.9
Total	13653	100.0
Marital Status		
Married	2904	24.0
Living as Married	365	3.0
Widowed	341	2.8
Divorced	2114	17.5
Separated	670	5.5
Single (Never Married)	5568	46.1
Unknown	131	1.1
Total	12093	100.0
Size of Household		
1 person	4106	40.2
2 persons	1868	18.3
3-4 persons	2506	24.6
5-6 persons	999	9.8
7 or more	728	7.1
Total	10207	100.0

Source: State Office of Alcoholism and Drug Abuse, 1983.

In 1980, persons 19 years of age and under represented 36.1% of the total Alaska population (Figure 3-11). However, of all arrests for drug abuse in the state in 1980, 56% were under 18 years of age. Of all arrests for liquor law violations, 50% were under 18 years of age. These figures changed slightly in 1981, to 52% and 56% respectively.

In 1980, 20-24 year olds represented 11.3% of the total Alaska population. However, of all arrests for drug abuse in the state in 1980, 24% were 18-24 year olds. Also, 28% of arrests for driving under the influence of alcohol were of 18-24 year olds, as were 29% of those arrested for liquor law violations. In 1981, 18-24 year olds represented 27% of all drug abuse arrests, 29% of all DWI arrests, 28% of all arrests for violations of liquor laws, and 22% of all drunkenness arrests (Figure 3-15).

Figure 3-15

Alcohol and Drug Related Arrests, by Age
Alaska, 1979-1981

Frequency Row %	1979				1980				1981			
	<18	18-24	25+	Total	<18	18-24	25+	Total	<18	18-24	25+	Total
Offense	438 59	181 25	121 16	740 100	296 56	130 24	107 20	533 100	352 52	180 27	140 21	672 100
Drug Abuse	84 3	869 29	2053 68	3006 100	91 4	732 28	1752 68	2575 100	97 3	1022 29	2362 68	3481 100
Driving Under Influence	950 39	686 28	793 33	2429 100	1175 50	677 29	494 21	2346 100	1409 56	718 28	409 16	2536 100
Liquor Laws	44 7	186 32	355 61	585 100	N/A	N/A	N/A	N/A	14 10	30 22	95 68	139 100
Drunkenness	5697 31	5664 30	7337 39	18698 100	5569 35	4634 29	5899 37	16102 100	6128 33	5427 29	7270 38	18825 100
Total Offenses												

Source: State of Alaska, Dept. of Law, Criminal Justice Planning Agency, Crime in Alaska, 1979, 1980, 1981.

A disproportionate number of drug abuse clients, likewise, are 18-30 years of age. In all, 61.4% of all drug abuse clients receiving treatment in Alaska in 1980 were 18-30 years of age (Figure 3-16). This compares with 23.4% of the total Alaska population in 1980 who were 20-29 years of age (Figure 3-11).

Figure 3-16

Drug Abuse Clients Receiving Treatment, Age By Drug Type,
Statewide, 1980

AGE	Count Row PCT Col PCT	None or Unknown	Heroin	Other Opiates	Alcohol	Barbitu rates	Oth.Sed or Hyp.	Ampheta mines	Cocaine	Mari- huana	Halluci nogens	Inhal- ant	Over the Counter	Tranqui lizers	Row Total
Under 18	5 5.3 33.3	0 0.0 0.0	0 0.0 0.0	0 0.0 0.0	21 22.1 65.6	0 0.0 0.0	0 0.0 0.0	4 4.2 26.7	2 2.1 2.3	60 63.2 51.7	1 1.1 33.3	2 2.1 66.7	0 0.0 0.0	0 0.0 0.0	95 26.2
18 to 20	2 3.8 13.3	0 0.0 0.0	1 1.9 2.6	4 7.7 12.5	0 0.0 0.0	1 1.9 20.0	3 5.8 20.0	8 15.4 9.3	31 59.6 26.7	0 0.0 0.0	0 0.0 0.0	0 0.0 0.0	2 3.8 18.2	52 14.3	
21 to 25	2 2.4 13.3	9 10.8 28.1	16 19.3 41.0	0 0.0 0.0	2 2.4 40.0	1 1.2 20.0	4 4.8 26.7	32 38.6 37.2	11 13.3 9.5	1 1.2 33.3	1 1.2 33.3	1 1.2 100.0	3 3.6 27.3	83 22.9	
26 to 30	2 2.3 13.3	18 20.5 56.3	11 12.5 28.2	2 2.3 6.3	3 3.4 60.0	1 1.1 20.0	3 3.4 20.0	33 37.5 38.4	11 12.5 9.5	1 1.1 33.3	0 0.0 0.0	0 0.0 0.0	3 3.4 27.3	88 24.2	
31 to 44	2 5.6 13.3	4 11.1 12.5	8 22.2 20.5	4 11.1 12.5	0 0.0 0.0	1 2.8 20.0	1 2.8 6.7	10 27.8 11.6	3 8.3 11.6	0 0.0 0.0	0 0.0 0.0	0 0.0 0.0	3 8.3 27.3	36 9.9	
Over 44	2 22.2 13.3	1 11.1 3.1	3 33.3 7.7	1 11.1 3.1	0 0.0 0.0	1 11.1 20.0	0 0.0 0.0	1 11.1 1.2	0 0.0 0.0	0 0.0 0.0	0 0.0 0.0	0 0.0 0.0	0 0.0 0.0	9 2.5	
Column Total	15 4.1	32 8.8	39 10.7	32 8.8	5 1.4	5 1.4	15 4.1	86 23.7	116 32.0	3 0.8	3 0.8	1 0.3	11 3.0	363 100.0	

Source: US DHEW: NIDA, State Statistics 1980, Data from the Client Oriented Data Acquisition Process (CODAD)

It is noteworthy that 75.7% of the victims and 69.2% of the assailants in the sexual assault contacts of domestic violence programs were between 16 and 35. Likewise, 84.3% of the victims and 68.5% of the assailants in their domestic violence contacts were in this age group (Figures 3-17, 3-18, 3-19, and 3-20).

Figure 3-17

Sample Distribution of Domestic Violence Statistics From Reporting Centers
Sexual Assault Contacts, 7/1/80-6/30/81*

ASSAILANTS

AGE	RACE						#	Total %	Adj %
	Native	Black	Caucasian	Filipino	Other	Unknown			
0-15	0	0	3	0	0	0	3	1.4	3.8
16-35	17	0	30	1	0	6	54	24.4	69.2
36-50	3	0	17	0	0	0	20	9.0	25.6
50+	0	0	1	0	0	0	1	0.5	1.3
Unknown	13	8	47	5	0	70	143	64.7	-
Total	33	8	98	6	0	76	221	100.0	100.0
%	14.9	3.6	44.3	2.7	0.0	34.4	100.0		
Adj %	22.8	5.5	67.6	4.1	0.0	-	100.0		

Source: Kodiak Women's Resource Center, Women in Crisis - Counseling Assistance, Women in Safe Homes, Valley Women's Resource Center, Aiding Women Against Rape Emergencies (Annualized), 1981

*or other 12 month period

Figure 3-18

Sample Distribution of Domestic Violence Statistics From Reporting Centers
Sexual Assault Contacts, 7/1/80-6/30/81*

VICTIMS

AGE	RACE						#	Total %	Adj %
	Native	Black	Caucasian	Filipino	Other	Unknown			
0-15	11	0	13	0	0	4	27	10.8	18.8
16-35	19	0	89	1	0	0	109	43.6	75.7
36-50	0	0	6	0	0	0	6	2.4	4.2
50+	1	0	0	0	0	0	0	0.4	0.0
Unknown	16	1	31	0	2	56	106	42.4	-
Total	47	1	139	1	2	60	250	100.0	100.0
%	18.8	0.4	55.6	0.4	0.8	24.0	100.0		
Adj %	24.7	0.5	73.2	0.5	1.1	-	100.0		

Source: Kodiak Women's Resource Center, Women in Crisis - Counseling Assistance, Valley Women's Resource Center, Aiding Women Against Rape Emergencies (Annualized), South Peninsula Women's Services (Annualized), Women in Safe Homes, 1981

*or other 12 month period

Figure 3-19

Sample Distribution of Domestic Violence Statistics From Reporting Centers
Domestic Violence Contacts, 7/1/80-6/30/81*

ASSAILANTS

AGE	RACE							Total 1	WICCA	Total 2	%	Adj. %
	Native	Black	Caucasian	Filipino	Other	Unknown						
0-15	0	0	0	0	0	0	0	0	0	0	0	0
16-35	61	2	94	5	9	20	191	161	352	45.2	0.0	
36-50	18	1	52	0	0	16	87	61	148	19.0	28.8	
50+	1	0	4	0	0	5	10	4	14	1.8	2.7	
Unknown	20	0	9	0	8	122	159	106	265	34.0	-	
Total 1	100	3	158	5	17	163	447	332	779	100.0	100.0	
WICCA	46	18	150	0	4	121	332					
Total 2	146	21	308	5	21	284	779					
%	18.7	2.7	39.5	0.6	2.7	36.5	100.0					
Adj %	29.5	4.2	62.2	1.0	4.2	-	100.0					

Source: Valley Women's Resource Center, Women in Crisis - Counseling Assistance, Kodiak Women's Resource Center, Aiding Women Against Rape Emergencies (Annualized), Women in Safe Homes, 1981

*or other 12 month period

Figure 3-20

Sample Distribution of Domestic Violence Statistics From Reporting Centers
Domestic Violence Contacts, 7/1/80-6/30/81*

VICTIMS

AGE	RACE							Total 1	WICCA	Total 2	%	Adj. %
	Native	Black	Caucasian	Filipino	Other	Unknown						
0-15	0	0	2	0	0	0	2	3	5	0.3	0.6	
16-35	193	1	211	8	19	12	444	252	696	43.4	84.3	
36-50	10	0	52	0	1	0	63	39	102	6.4	12.3	
50+	3	0	15	0	1	0	19	4	23	1.4	2.8	
Unknown	15	1	16	2	1	709	744	34	778	48.5	-	
Total 1	221	2	296	10	22	721	1272	332	1604	100.0	100.0	
WICCA	70	20	186	0	13	43	332					
Total 2	291	22	482	10	35	764	1604					
%	18.1	1.4	30.0	0.6	2.2	47.6	100.0					
Adj %	34.6	2.6	57.4	1.2	4.2	-	100.0					

Source: Valley Women's Resource Center, Women in Crisis - Counseling Assistance, Women in Safe Homes, Kodiak Women's Resource Center, Aiding Women Against Rape Emergencies (Annualized), South Peninsula Women's Services (Annualized), 1981

*or other 12 month period

The highest incidence of gonorrhea is in the 15-24 age group. The rate is 2736.9 cases per 100,000 population in 1981. This rate is a 2% increase from 1973, but is 12% less than the accumulated average for the period 1973-82 for this age group (Figure 3-21).

Figure 3-21

Civilian Gonorrhea Incidence
by Age Group, 3 Year Averages, Alaska, 1972-1982
(Cases per 100,000 Population)

AGE GROUP	1973		1974		1975		1976		1977		1978		1979		1980		1981		1972-1982	
	#	rate	#	rate	#	rate	#	rate	#	rate	#	rate	#	rate	#	rate	#	rate	#	rate
0-14	97	31.2	110	35.7	128	41.4	141	45.1	136	43.2	133	42.2	107	33.7	109	33.7	86	26.1	404	34.8
15-24	4394	2683.4	5395	2979.4	6336	3187.2	7583	3481.5	8129	3660.2	8085	3705.0	7177	3354.4	6547	3102.1	5793	2736.9	22923	3109.2
25-34	2319	1398.5	2785	1476.3	3304	1429.2	3991	1535.1	4554	1701.2	4914	1862.3	4799	1850.5	4499	1753.4	4069	1584.4	13732	1602.3
35-44	706	453.7	790	582.4	846	542.5	1027	602.0	1223	714.1	1460	886.5	1432	906.9	1344	870.5	1120	708.0	3879	655.4
45+	333	214.4	383	241.5	425	259.3	506	296.2	717	402.0	809	441.2	769	407.0	607	309.7	503	248.0	1939	297.3
TOTAL	7849	824.6	9463	965.3	11039	1058.9	13248	1170.2	14759	1278.7	15801	1344.6	14284	1255.6	13106	1148.0	11571	998.0	42877	1071.7

NOTE 1: Year shown is central year of 3 year period.

NOTE 2: Denominator represents total population minus active duty military; unknown cases have been assigned to age groups according to distribution of cases by age group among known cases.

SOURCE: 1) Alaska Department of Health and Social Services, Venereal Disease Grant Applications, FY 1974-1982

2) Alaska Department of Labor, Alaska Population Overview, 1981

3) SHPDA estimates of age for total population.

4) U.S. Department of Commerce, Bureau of Census, Detailed Characteristics, Alaska, 1970 Census of Population, PC(1)-03

The 15-24 year-old age group represented 20.5% of the 1980 Alaska population (refer to Figure 3-11). The 18-24 year-old age group figures prominently in Community Mental Health Centers (CMHCs) and Alaska Psychiatric Institute (API) utilization. Clients between the ages of 18 and 24 accounted for 18.72% of all admissions at CMHCs and 31.84% of all admissions at API from 1977 to 1980 (Figures 3-22 and 3-23). There is an evident declining trend in the utilization of CMHCs by this age group over the period, dropping from 19.64% of CMHC admissions in 1977 to 17.39% in 1980. This trend is not evident in API utilization data (see Figures 3-23 and 3-24).

Figure 3-22

Community Mental Health Center Admissions by Age, Race and Sex by HSA and Statewide, 1977-1980

HSA	<10								10-17								18-24							
	Native				Non-Native				Native				Non-Native				Native				Non-Native			
	Male		Female		Male		Female		Male		Female		Male		Female		Male		Female		Male		Female	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
NO	27	1.30	18	.87	72	3.46	37	1.78	94	4.52	91	4.38	108	5.20	88	4.23	83	3.99	104	5.00	89	4.28	135	6.50
	2.17				5.25				8.90				9.43				9.00				10.78			
	7.41								18.33								19.78							

SC	23	.31	23	.31	200	2.72	112	1.52	134	1.82	97	1.32	512	6.96	439	5.97	183	2.49	159	2.16	421	5.72	602	8.18
	.62				4.24				3.14				12.92				4.65				13.90			
	4.86								16.06								18.55							

SE	17	.72	10	.42	64	2.72	35	1.49	38	1.61	43	1.81	136	5.77	118	5.01	47	2.00	38	1.61	130	5.52	217	9.21
	1.15				4.20				3.44				10.79				3.61				14.73			
	5.35								14.23								18.34							

AK	67	.57	51	.43	336	2.85	184	1.56	266	2.26	231	1.96	756	6.41	645	5.47	313	2.65	301	2.55	640	5.43	954	8.09
	1.00				4.41				4.21				11.88				5.21				13.52			
	5.41								16.10								18.72							

HSA	25-34								35-44								45-54							
	Native				Non-Native				Native				Non-Native				Native				Non-Native			
	Male		Female		Male		Female		Male		Female		Male		Female		Male		Female		Male		Female	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
NO	77	3.71	131	6.30	195	9.38	270	12.99	32	1.54	51	2.45	74	3.56	132	6.35	12	.58	30	1.44	19	.91	34	1.64
	10.01				22.38				3.99				9.91				2.02				2.55			
	32.39								13.91								4.57							

SC	199	2.70	190	2.58	754	10.25	1,383	18.79	86	1.17	107	1.45	414	5.63	581	7.90	31	.42	36	.49	139	1.89	216	2.89
	5.29				29.04				2.62				12.66				.91				4.74			
	34.33								15.29								5.65							

SE	33	1.40	53	2.25	266	11.30	450	19.11	13	.55	26	1.10	128	5.44	224	9.51	7	.30	7	.30	58	2.46	96	4.08
	3.65				30.40				1.66				14.95				.59				5.54			
	34.06								16.60								7.13							

AK	369	2.62	374	3.17	1,215	10.50	2,103	17.83	131	1.11	184	1.56	616	5.22	937	7.95	50	.42	73	.62	216	1.83	340	2.88
	5.79				28.14				2.67				13.17				1.04				4.72			
	33.93								15.84								5.76							

Source: State of Alaska, Dept. of Health and Social Services, Office of Information Systems, Computer printout, October 26, 1981

Figure 3-22 Continued

Community Mental Health Center Admissions by Age, Race and Sex by HSA and Statewide, 1977-1980

HSA	55-64								65+								SUB-TOTAL								TOTAL
	Native				Non-Native				Native				Non-Native				Native				Non-Native				
	Male		Female		Male		Female		Male		Female		Male		Female		Male		Female		Male		Female		
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	
NO	7	.34	16	.77	8	.38	18	.87	3	.14	7	.34	5	.24	11	.53	335	16.12	448	21.56	570	27.43	725	34.89	2,078
	1.11				1.25				.48				.77				37.68				62.32				
	2.36								1.25								100.0								
SC	22	.30	21	.29	59	.80	77	1.05	9	.12	15	.20	40	.54	81	1.10	687	9.34	648	8.81	2,539	34.50	34.85	47.36	7,359
	.58				1.85				.33				1.64				18.14				81.86				
	2.43								1.97								100.0								
SE	6	.25	8	.34	16	.68	28	1.19	2	.08	3	.13	15	.64	23	.98	163	6.92	188	7.98	813	34.52	1,191	50.57	2,355
	.59				1.87				.21				1.61				14.90				85.10				
	2.46								1.83								100.0								
AK	35	.30	45	.38	83	.70	123	1.04	14	.12	25	.21	60	.51	115	.98	1,185	10.05	1,284	10.89	3,922	33.26	5401	45.80	11,792
	.68				1.75				.33				1.48				20.94				79.06				
	2.43								1.81								100.0								

Figure 3-23

Alaska Psychiatric Institute Admissions by Age, Race and Sex by HSA and Statewide, 1977-1980

HSA	<10								10-17								18-24							
	Native				Non-Native				Native				Non-Native				Native				Non-Native			
	Male		Female		Male		Female		Male		Female		Male		Female		Male		Female		Male		Female	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
NO	0	.00	0	.00	0	.00	0	.00	18	4.04	13	2.92	19	4.27	2	.45	68	15.28	22	4.94	53	11.91	9	2.02
	.00				.00				6.97				4.72				20.22				13.94			
	.00								11.69								34.16							
SC	1	.04	0	.00	22	.78	2	.07	53	1.89	35	1.25	105	3.74	65	2.35	220	7.84	68	2.42	441	15.71	141	5.02
	.04				.86				3.14				6.06				10.26				20.73			
	.89								9.19								30.99							
SE	0	.00	0	.00	0	.00	0	.00	4	1.60	8	3.20	4	1.60	5	2.00	40	16.00	5	2.00	36	14.40	12	4.80
	.00				.00				4.80				3.60				18.00				19.20			
	.00								8.40								37.20							
AK	1	.03	0	.00	22	.63	2	.06	75	2.14	56	1.60	18	3.66	72	2.06	328	9.37	95	2.71	530	15.13	162	4.63
	.03				.69				3.74				5.71				12.08				19.76			
	.71								9.45								31.84							

Figure 3-23 Continued

Alaska Psychiatric Institute Admissions by Age, Race
and Sex by HSA and Statewide, 1977-1980

HSA	25-34								35-44								45-54							
	Native				Non-Native				Native				Non-Native				Native				Non-Native			
	Male		Female		Male		Female		Male		Female		Male		Female		Male		Female		Male		Female	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
NO	31	6.97	16	3.60	60	13.48	19	4.27	14	3.15	9	2.02	26	5.84	12	2.70	5	1.12	10	2.25	10	2.25	3	.67
	10.56				17.75				5.17				8.54				3.37				2.92			
	28.31								13.71								6.29							
SC	158	5.63	78	2.78	439	15.64	194	6.91	70	2.49	48	1.71	221	7.87	121	4.31	32	1.14	11	.39	56	2.00	81	2.89
	8.41				22.55				4.20				12.18				1.53				4.88			
	30.96								16.39								6.41							
SE	29	11.60	7	2.80	38	15.20	12	4.80	2	.80	1	.40	9	3.60	8	3.20	1	.40	1	.40	12	4.80	6	2.40
	14.40				20.00				1.20				6.80				.80				7.20			
	34.40								8.00								8.00							
AK	218	6.23	101	2.88	537	15.33	225	6.42	86	2.46	58	1.66	256	7.31	141	4.03	38	1.09	23	.66	78	2.23	90	2.57
	9.11				21.76				4.11				11.34				1.74				4.80			
	30.87								15.45								6.54							

HSA	55-64								65+								SUB-TOTAL								TOTAL
	Native				Non-Native				Native				Non-Native				Native				Non-Native				
	Male		Female		Male		Female		Male		Female		Male		Female		Male		Female		Male		Female		
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	
NO	4	.50	2	.45	6	1.35	8	1.80	0	.00	3	.67	3	.67	0	.00	140	31.46	75	16.85	177	39.78	53	11.91	445
	1.35				3.15				.67				.67				48.31				51.68				
	4.49								1.35								100.00								

HSA	55-64								65+								SUB-TOTAL								TOTAL
	Native				Non-Native				Native				Non-Native				Native				Non-Native				
	Male		Female		Male		Female		Male		Female		Male		Female		Male		Female		Male		Female		
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	
SC	10	.36	5	.18	44	1.57	39	1.39	5	.18	1	.04	32	1.14	9	.32	549	19.56	246	8.76	1360	48.45	652	23.23	2,807
	.53				2.96				.21				1.46				28.32				71.68				
	3.49								1.67								100.00								

HSA	55-64								65+								SUB-TOTAL								TOTAL
	Native				Non-Native				Native				Non-Native				Native				Non-Native				
	Male		Female		Male		Female		Male		Female		Male		Female		Male		Female		Male		Female		
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	
SE	2	.80	0	.00	3	1.20	2	.80	0	.00	0	.00	2	.80	1	.40	78	31.20	22	8.80	104	41.60	46	18.40	250
	.80				2.00				.00				1.20				40.00				60.00				
	2.80								1.20								100.00								

HSA	55-64								65+								SUB-TOTAL								TOTAL
	Native				Non-Native				Native				Non-Native				Native				Non-Native				
	Male		Female		Male		Female		Male		Female		Male		Female		Male		Female		Male		Female		
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	
AK	16	.46	7	.20	53	1.51	49	1.40	5	.14	4	.11	37	1.06	10	.29	767	21.90	343	9.79	1641	46.86	751	21.44	3,502
	.66				2.91				.26				1.34				31.70				68.30				
	3.57								1.60								100.00								

Source: State of Alaska, Dept. of Health and Social Services, Office of Information Systems, Computer printout, October 26, 1981

Figure 3-24

Community Mental Health Center Admissions by Age,
HSA and Statewide, 1977-1980

1977

HSA	<10		10-17		18-24		25-34		35-44		45-54		55-64		65+		TOTAL
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	
NO	61	9.31	164	25.04	135	20.61	174	26.56	76	11.60	22	3.36	15	2.29	8	1.22	655
SC	48	3.22	221	14.82	292	19.58	527	35.35	248	16.63	104	6.98	34	2.28	17	1.14	1,491
SE	29	4.85	112	18.73	112	18.73	197	32.94	84	14.05	36	6.02	16	2.68	12	2.01	598
AK	138	5.03	497	18.11	539	19.64	898	32.73	408	14.87	162	5.90	65	2.37	37	1.35	2,744

1978

HSA	<10		10-17		18-24		25-34		35-44		45-54		55-64		65+		TOTAL
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	
NO	21	6.50	58	17.96	66	20.43	106	32.82	43	13.31	21	6.50	3	.93	5	1.55	323
SC	81	4.58	306	17.29	336	18.98	593	33.50	282	15.93	110	6.21	35	1.98	27	1.53	1,770
SE	41	6.35	95	14.71	122	18.89	202	31.27	120	18.58	42	6.50	10	1.55	14	2.17	646
AK	143	5.22	459	16.76	524	19.13	901	32.90	445	16.25	173	6.32	48	1.75	46	1.68	2,739

1979

HSA	<10		10-17		18-24		25-34		35-44		45-54		55-64		65+		TOTAL
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	
NO	37	6.99	73	13.80	102	19.28	203	38.37	74	13.99	22	4.16	10	1.89	8	1.51	529
SC	111	5.97	299	16.09	345	18.57	629	33.85	280	15.07	104	5.60	46	2.48	44	2.37	1,858
SE	24	4.22	53	9.31	115	20.21	208	36.56	95	16.70	48	8.44	17	2.99	9	1.58	569
AK	172	5.82	425	14.38	562	19.01	1040	35.18	449	15.19	174	5.89	73	2.47	61	2.06	2,956

Figure 3-24 Continued

Community Mental Health Center Admissions by Age,
HSA and Statewide, 1977-1980

1980

HSA	<10		10-17		18-24		25-34		35-44		45-54		55-64		65+		TOTAL
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	
NO	35	6.13	86	15.06	108	18.91	190	33.27	96	16.81	30	5.25	21	3.68	5	.88	571
SC	118	5.27	356	15.89	392	17.50	777	34.69	378	16.88	98	4.38	64	2.86	57	2.54	2,240
SE	32	5.90	75	13.84	83	15.31	195	35.98	92	16.97	42	7.75	15	2.77	8	1.48	542
AK	185	5.52	517	15.42	583	17.39	1162	34.66	566	16.88	170	5.07	100	2.98	70	2.09	3,353

Source: State of Alaska, Dept. Health and Social Services, Office of Information Systems, Computer printout, October 26, 1981

Figure 3-25

Alaska Psychiatric Institute Admissions by Age,
HSA and Statewide, 1977-1980

1977

HSA	<10		10-17		18-24		25-34		35-44		45-54		55-64		65+		TOTAL
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	
NO	0	.00	14	13.59	33	32.04	32	31.07	14	13.59	4	3.88	6	5.83	0	.00	103
SC	4	.70	54	9.41	177	30.84	190	33.10	77	13.41	35	6.10	26	4.53	11	1.92	574
SE	0	.00	3	5.08	27	45.76	21	35.59	3	5.08	4	6.78	1	1.69	0	.00	59
AK	4	.54	71	9.65	237	32.20	243	33.02	94	12.77	43	5.84	33	4.48	11	1.49	736

1978

HSA	<10		10-17		18-24		25-34		35-44		45-54		55-64		65+		TOTAL
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	
NO	0	.00	13	10.92	39	32.77	25	21.01	20	16.81	17	14.29	3	2.52	2	1.68	119
SC	8	1.12	69	9.62	230	32.08	213	29.71	119	16.60	43	6.00	23	3.21	12	1.67	717
SE	0	.00	5	9.26	20	37.04	15	27.78	4	7.41	4	7.41	5	9.26	1	1.85	54
AK	8	.90	87	9.78	289	32.47	253	28.43	143	16.07	64	7.19	31	3.48	15	1.69	890

Figure 3-25 Continued

Alaska Psychiatric Institute Admissions by Age,
HSA and Statewide, 1977-1980

1979

HSA	<10		10-17		18-24		25-34		35-44		45-54		55-64		65+		TOTAL
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	
NO	0	.00	14	11.86	41	34.75	40	33.90	15	12.71	3	2.54	4	3.39	1	.85	118
SC	5	.69	64	8.86	240	33.24	195	27.01	145	20.08	42	5.82	18	2.49	13	1.80	722
SE	0	.00	9	17.65	15	29.41	19	37.25	5	9.80	2	3.92	1	1.96	0	.00	51
AK	5	.56	87	9.76	296	33.22	254	28.51	165	18.52	47	5.27	23	2.58	14	1.57	891

1980

HSA	<10		10-17		18-24		25-34		35-44		45-54		55-64		65+		TOTAL
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	
NO	0	.00	11	10.48	39	37.14	29	27.62	12	11.43	4	3.81	7	6.67	3	2.86	105
SC	8	1.01	71	8.94	223	28.09	271	34.13	119	14.99	60	7.56	31	3.90	11	1.39	794
SE	0	.00	4	4.65	31	36.05	31	36.05	8	9.30	10	11.63	0	.00	2	2.33	86
AK	8	.81	86	8.73	293	29.75	331	33.60	139	14.11	74	7.51	38	3.86	16	1.62	985

Source: State of Alaska, Dept. of Health and Social Services, Office of Information Systems, Computer printout, October 26, 1981

The age group 15-24 in Alaska appears to be at high risk for accidents, alcohol and drug abuse, violence, venereal disease, mental illness, and emotional disorders. Of particular interest is the fact that the rate of gonorrhea may be on the decline for this age group.

Age 25-34: The age cohort 25-34 represented 22.6% of the Alaska population in 1980 as compared to 16.4% of the U.S. population (see Figure 3-11). This age group, like the 15-24 group, is at increased risk for a number of health status problems. Their problems are, in fact, very much alike. For example, the leading cause of mortality for this age group, as with the 15-24 cohort, is accidents. The rate of accidents in 1980 for this age group was 135.4 per 100,000 (see Figure 3-12). The 1980 accident rate for this age cohort is up 2% from the 1970 rate, after experiencing a low rate of 92.5 in 1979. The 1980 rate is also up 11.2% from the average for the 1970-80 period. A part of this age group is represented in the statistic, cited earlier, indicating that a disproportionate percentage of drivers in motor vehicle accidents in which alcohol was present were between

the ages of 15 and 29 in 1979 (Figure 3-13). "Driving While Under the Influence of Alcohol" was the leading cause of alcohol- or-drug related arrests for the age group 25+ in 1978-1980, accounting for 28% the first two years and 30% in 1980 of total arrests (Figure 3-15). The 20-39 age group represented 41.7% of the total state population in 1980, yet accounted for 61.0% of the utilizers of alcohol treatment in Alaska in the same year (see Figure 3-14). Similarly, the age group 26-30 accounts for 24.2% of all clients receiving treatment for drug abuse statewide in 1980 while the 25 to 29 year old age cohort represented only 12.1% of the total state population in the same year. The data on utilization of domestic violence services relates to this age group, as 75.7% of the victims in sexual assault contacts and 69.2% of the assailants were between the ages of 16 and 35 in the period of 1980-81. Also 84.3% of the victims in domestic violence contacts and 68.5% of the assailants were also between 16 and 35 during this period (Figures 3-17, 3-18, 3-19 and 3-20).

This age group was second to the 15-24 age group in the incidence of gonorrhea infections. The rate for the 25-34 year olds was 1584.4 per 100,000 in 1981. This was an increase of 13.3% since 1973; the 1981 rate was smaller than the accumulated average for the period 1972-1982 for this age group (see Figure 3-21).

Evidence would suggest that this age group is at risk for mental illness and emotional disorders. Over the period 1977 to 1980 this age group accounted for 33.93% of all CMHC admissions and 30.9% of all API admissions, while representing only 22.6% of the population during the period (Figures 3-22, 3-23).

The health status problems significant to this group are accidents, alcohol and drug abuse, violence, venereal disease, and mental illness. Like the 15-24 age group, accidents appear to be on the decline; unlike that group, venereal disease is increasing alcohol and drug abuse, violence, venereal disease, and mental illness.

Age 35-44: The age group 35-44 represented 13.4% of the Alaska population in 1980 as compared to 11.4% of the U.S. population. The leading cause of mortality in this group is accidents, which at a rate of 107.4 in 1980 is 2.9 times the U.S. cohort rate of 1979 (see Figures 3-4, 3-12). This 1980 rate is 16.0% lower than the 1970 rate of 127.9 and 5.7% lower than the average rate for the 11 year period 1970-80. The age group 40-49 accounts for a disproportionate number of alcohol treatment utilizers, 16.4% in 1980, as compared to an estimated 10.2% in the 1980 Alaska population (Figure 3-11 and 3-15).

Age 45-54: In 1980, the age group 45-54 represented 8.6% of the Alaska population and 10.4% of the U.S. population. The leading cause of mortality for this age group is diseases of the heart. The rate per 100,000 population for each of the three Health Systems Agencies is considerably below the U.S. rate of 181.9 in 1980 (Figure 3-4). This age group shows a utilization of alcoholic treatment services that is disproportional to their share of the population: 24.8% of clients in 1980 were between 40-59 while representing only 17.3% of the 1980 population (Figure 3-14).

Age 55-64: The 55-64 age group represented 5.1% of the Alaska population in 1980 and 9.6% of the U.S. population. The outstanding health status problem for this age group is disease of the heart. The Alaska rate in 1980 of 314.6 compares very favorably to the U.S. rate in 1980 of 510.8 per 100.000 population.

Age 65+: The 65 and over age group represented 2.9% of the Alaska population and 11.3% of the U.S. in 1980. The leading cause of mortality for this age group is diseases of the heart. The 1979 rate was 1680.0, which is more than 5 times the Alaska 55-64 age group rate (see Figure 3-4).

This age group, as would be expected, heavily utilizes health care services. Data from the 1981 Annual Hospital Survey underscores this fact. Medicare, a Federally administered health care insurance program, for disabled individuals, persons with end stage renal disease, and those over 65, was the source of payment for 8.7% of discharges from facilities reporting source of payment data. Adjusting this percentage, by a factor representing that part of total Medicare expenditures in 1979 spent by the elderly in Alaska, lowers this percentage to 7.3%, which is still 2.5 times what would be expected by this age group's proportion compared to the total population.

RACE GROUPS

Alaska's population is conventionally broken down into two major racial or ethnic groups, Native and non-Native. According to the 1980 Census, 16.0% of the Alaska population is Native, and 84.0% is non-Native. Included in the non-Native classification are, by percentage of total non-Native, white--90.7%, black--4.0%, and Asian and Pacific Islander--2.4%. Persons describing themselves as American Indian, Eskimo or Aleut are combined into the Native category.

Native: Alaska's Native population is at elevated risk for a number of health status problems relative to the non-Native section of the population or the U.S. total population.

An examination of public assistance utilization statistics as a proxy indicator for socioeconomic status reveals that the Native population is disproportionately represented, accounting for 47.3% of all public assistance cases in the month of September 1980 (Figure 3-25). Poor socioeconomic status is known to be a risk factor for a number of health status problems and may be important here.

Figure 3-26

Public Assistance Cases by
Race and by Type of Assistance in Alaska
September 1980

Assistance		RACE				Total	%
		White	Native	Black	Other		
OAA	#	631	1564	55	74	2418	14.8
	\$	72063	216319	7322	14638	319546	12.4
ABL	#	15	44	2	0	62	0.4
	\$	2705	13620	392	0	10608	0.4
APD	#	875	1607	81	64	2338	14.3
	\$	137375	177033	14656	8766	348455	13.6
AFDC	#	2203	1912	365	112	4799	29.4
	\$	858748	768469	148095	44474	1890081	73.6
GRM	#	3308	94	232	128	4488	27.5
	\$	-----	-----	-----	-----	-----	0
GRA	#	1753	266	212	77	2261	13.9
	\$	80	0	80	0	160	0.0
TOTAL	#	8786	5286	947	455	15474	16302 (100.0)
	%	56.8	34.2	6.1	2.9	(100.0)	2568850 (100.0)
	\$	1070971	1175441	170545	68078	2485035	(100.0)
	%	43.1	47.3	6.9	2.7	(100.0)	

Note for all Public Assistance tables: Unknown race data is not illustrated, however, it is included in the vertical total column. Dashed lines indicates data is not provided. AFDC refers to Adult Included cases only.

Source for all Public Assistance Tables: State of Alaska Dept. of Health and Social Services Office of Information Systems, Public Assistance Recipient and Expenditures Study, Semiannual Report, Vol. 5, Oct. 1980.

Likewise, data from the 1980 Census indicate that the Native population is younger than the non-Native population which would contribute to the increased incidence of many health status problems. By way of illustration, 42.7% of the Native population is 17 years of age or younger compared to 30.6% of the non-Native population.

The leading cause of mortality for Natives is accidents which, at a rate of 206.1 per 100,000 population in 1980, is 2.7 times the non-Native rate and exceeds by 4.2 times the U.S. rate for all races in 1978. From 1970 to 1980 the accidental death rates for Natives has increased 5.2%. Over the same period the non-Native rate dropped 25.3% (Figures 3-27 and 3-28). The second leading cause of mortality is heart disease and hypertension. Here, the rate of 95.3 during the period 1977-79 is higher than the non-Native rate of 78.3 but a little more than a quarter of the U.S. rate of 333.9. Malignant neoplasms (cancer) placed third at a rate of 89.7. This was greater than the non-Native rate of 62.4, yet about one half of the U.S. rate of 181.6.

Figure 3-27

LEADING CAUSE OF DEATH - THREE YEAR AVERAGE

1977 - 79

Native

(Rate Per 100,000)

<u>Cause</u>	<u>Alaska</u>	<u>SCHPD</u>	<u>SEAHSA</u>	<u>NAHPA</u>	<u>U.S. (All Races 1978)</u>
1. Accidents	188.2	205.6	161.0	170.6	49.5
2. Heart Disease & Hypertension	95.3	84.1	178.9	76.2	333.9
3. Malignant Neoplasms	89.7	102.3	93.0	66.2	181.6
4. Alcoholism & Cirrhosis of Liver	36.3	38.2	57.2	23.2	13.7
5. Ill-Defined	36.3	33.5	32.2	14.9	--
6. Flu & Pneumonia	30.1	30.6	32.2	28.2	26.7
7. Homicide	26.4	25.8	21.5	29.8	9.7
8. Suicide	25.9	21.0	39.3	28.2	12.6
9. Disease of Early Infancy	23.3	29.6	10.7	18.2	10.1
10. CNS Vascular Lesions	21.8	17.2	35.8	23.2	79.1

LEADING CAUSE OF DEATH - THREE YEAR AVERAGE

1977 - 79

Non - Native

(Rate Per 100,000)

<u>Cause</u>	<u>Alaska</u>	<u>SCHPD</u>	<u>SEAHSA</u>	<u>NAHRA</u>	<u>U.S. (All Races 1978)</u>
1. Accidents	81.9	83.1	88.8	71.9	49.5
2. Heart Disease & Hypertension	78.3	69.9	123.7	92.7	333.9
3. Malignant Neoplasms	62.4	60.1	94.3	45.7	181.6
4. CNS Vascular Lesions	14.7	12.7	32.5	8.9	79.1
5. Suicide	14.5	16.7	15.1	5.3	12.6
6. Disease of Early Infancy	11.1	10.3	14.3	11.9	10.1
7. Ill-Defined	10.9	10.0	11.9	13.7	--
8. Alcoholism & Cirrhosis of Liver	9.4	7.0	16.6	13.7	13.7
9. Homicide	8.1	8.0	3.2	11.9	9.7
10. Other Degenerative Diseases	7.9	8.0	14.3	2.4	--

Source: State of Alaska, Department of Health and Social Services, Office of Information Systems, computer printouts; rate denominators - Southeast Alaska Health Systems Agency. U.S. DHEW, NCHS, Monthly Vital Statistics Provisional Statistics, 1978

Figure 3-28

ACCIDENTAL DEATH RATES*, NATIVE AND NON-NATIVE, STATE OF ALASKA,
1970-1980

RACE	ACCIDENTAL DEATH RATE* BY YEAR										
	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
NATIVE	195.9	217.7	228.5	241.4	215.9	235.8	219.6	168.8	196.0	205.4	206.1
NON-NATIVE	101.1	110.0	81.0	81.1	99.3	87.3	84.5	73.6	102.0	65.7	75.5
TOTAL	116.7	129.1	105.4	108.0	119.2	109.2	105.5	87.8	114.6	88.7	96.8

*Rate = Deaths per 100,000 population.

SOURCE: Office of Information Systems, Department of Health and Social Services. Computer printouts for accidental deaths by HSA subareas, 1970-1980, Juneau, 1983.

In a more detailed analysis of Alaska Native cancer mortality and morbidity, it was reported that "...in comparison to U.S. whites the risk of cancer in Alaska Natives was significantly high for certain sites: nasopharynx in males and females; liver in males; and salivary gland, gall bladder, kidney and thyroid in females."²

Alcohol and cirrhosis of the liver are the fourth leading cause of death at a rate of 36.3, which is almost 4 times the non-Native rate of 7.4, and almost three times the U.S. rate of 13.7 (Figure 3-27).

Native infant mortality has declined 34.0% from 28.5 in 1970 to 18.8 in 1981. The non-Native rate has likewise dropped. Consequently, the Native rate still exceeds the non-Native rate substantially (18.8 compared to 10.9 in 1980) (Figure 3-5).

Gonorrhea incidence among the Native population has risen 14.6% from 1973 to 1981 (the actual breakdown is white/non-white - see Figure 3-19). Since utilization is the index of morbidity here, part of this increase might be explained by greater availability and perhaps accessibility of services. The 1981 non-white rate of 2547.4 is considerably less than the average of 2982.4 for the 9 year period. The 1981 non-white rate is almost 5 times the white rate of 542.9.

Figure 3-29

Civilian Gonorrhea Incidence
by Race, 3 Year Averages, Alaska, 1972-1982
(Cases per 100,000 Population)

RACE	1973		1974		1975		1976		1977		1978		1979		1980		1981		1972-1982	
	#	rate	#	rate	#	rate	#	rate	#	rate	#	rate	#	rate	#	rate	#	rate	#	rate
WHITE	3256	460.5	3982	525.4	4600	559.5	5276	602.4	5688	637.2	5577	629.8	5069	577.1	5072	575.2	4856	542.9	17016	555.6
NON-WHITE	4591	2222.8	5481	2475.7	6439	2679.8	7963	3107.1	8970	3428.4	9725	3741.6	9126	3537.0	8036	3093.0	6715	2547.4	25760	2863.0
TOTAL	7847	824.6	9463	965.3	11039	1058.9	13239	1169.4	14658	1269.9	15302	1336.0	14195	1249.1	13108	1148.2	11571	998.0	42776	1079.6

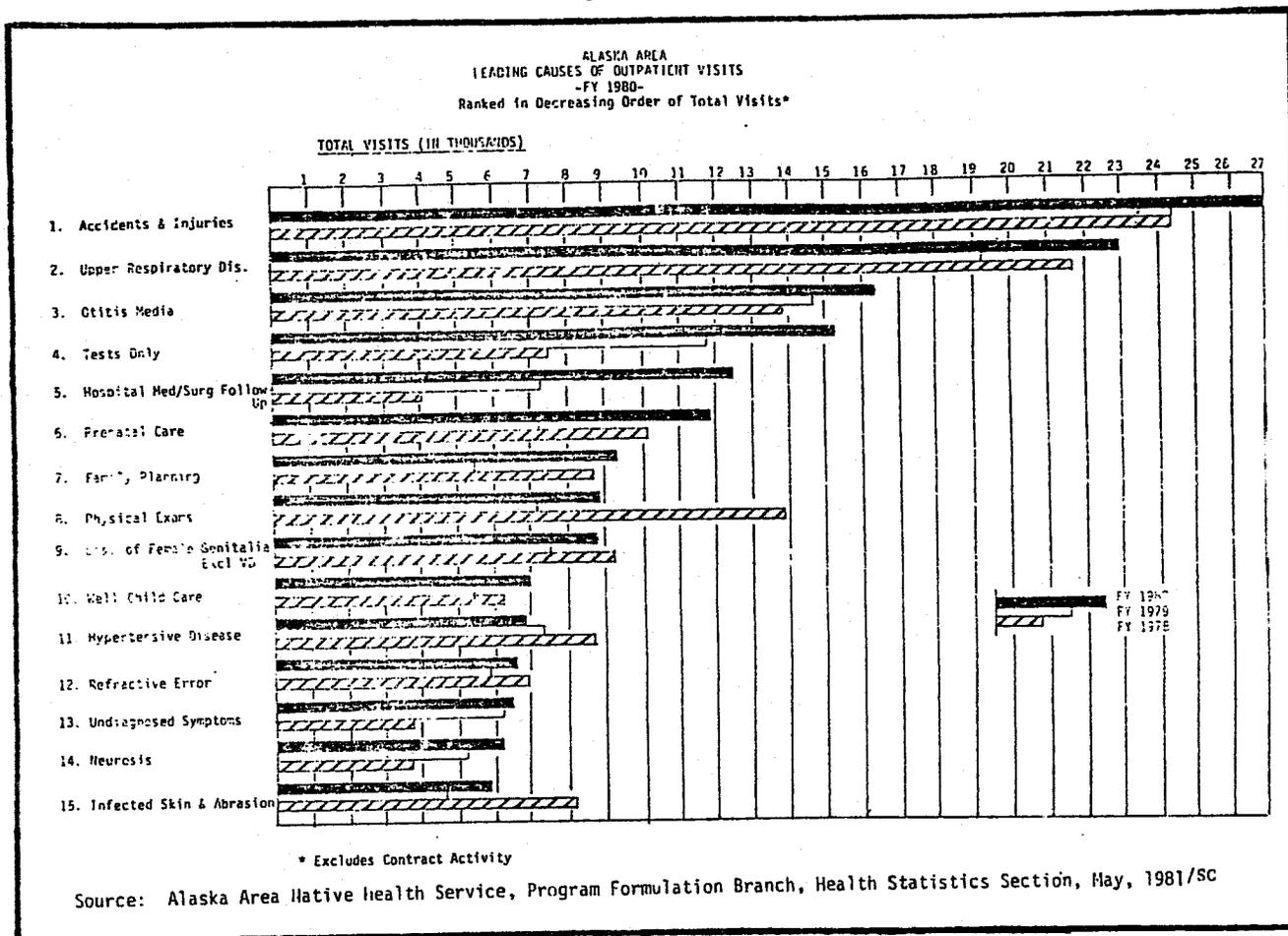
NOTE 1: Year shown is central year of 3 year period.

Note 2: Denominator represents total population minus active duty military; unknown cases have been assigned to race group according to distribution of cases by race group among known cases.

- SOURCE: 1) Alaska Department of Health and Social Services, Venereal Disease Grant Applications, FY 1974-1982
 2) Alaska Department of Labor, Alaska Population Overview, 1981
 3) SHPDA estimates of race for total population.
 4) U.S. Department of Commerce, Bureau of Census, Detailed Characteristics, Alaska, 1970 Census of Population, PC(1)-03

The leading causes of utilization of AANHS ambulatory care services are (1) accidents and injuries, accounting for 27,103 total visits in FY 1980, up 11.15% from FY 1979 and 11.48% from FY 1978; (2) upper respiratory conditions, accounting for 22,916 visits in FY 1980, up 19.8% from FY 1979 and 5.43% from FY 1978; (3) otitis media, accounting for 16,172 total visits in FY 1980, up 9.17% from FY 1979 and 15.75% from FY 1978 (Figure 3-30).

Figure 3-30



Judging from the utilization of treatment services, the Native population appears to be at increased risk for mental illness. Between 1977 and 1980, Natives accounted for 20.94% of all CMHC admissions and 31.7% of all API admissions, yet represented only 15.25% of the statewide population over the period (Figures 3-22, 3-23). Interestingly, the proportion of Native utilizers has been declining in CMHCs since 1977, from 24.02% in 1977 to 16.25 in 1980. On the other hand, the proportion has increased at API from 28.53% in 1977 to 33.10% in 1980 (Figures 3-31, 3-32).

Figure 3-31

Community Mental Health Center Admissions by Race,
HSA and Statewide, 1977-1980

HSA	1977				1978				1979				1980			
	Native		Non-Nat		Native		Non-Nat		Native		Non-Nat		Native		Non-Nat	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
NO	244	37.25	411	62.75	124	38.39	199	61.61	211	39.89	318	60.11	204	35.73	367	64.27
SC	292	19.58	1,199	80.42	405	22.88	1,365	77.12	350	18.84	1,508	81.16	286	12.86	1,952	87.14
SE	123	20.57	475	79.43	102	15.79	544	84.21	73	12.83	496	87.17	53	9.78	489	90.22
ALASKA	659	24.02	2,085	75.98	631	23.04	2,108	76.96	634	21.45	2,322	78.55	545	16.25	2,808	83.75

Source: State of Alaska, Dept. Health and Social Services, Office of Information Systems, Computer printout, October 26, 1981

Figure 3-32

Alaska Psychiatric Institute Admissions by Race,
HSA and Statewide, 1977-1980

HSA	1977				1978				1979				1980			
	Native		Non-Natives		Native		Non-Native		Native		Non-Native		Native		Non-Native	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
NO	36	34.95	67	65.05	56	47.06	63	52.94	60	50.85	58	49.15	63	60.00	42	40.00
SC	156	27.18	418	72.82	218	30.40	499	69.60	200	27.70	522	72.30	221	27.83	573	72.17
SE	18	30.51	41	69.49	18	33.33	36	66.67	22	43.14	29	56.86	42	48.84	44	51.16
ALASKA	210	28.53	526	71.47	292	32.81	598	67.19	282	31.65	609	68.35	326	33.10	659	66.90

Source: State of Alaska, Dept. of Health and Social Services, Office of Information Systems, Computer printout, October 26, 1981

Natives are disproportionately represented in alcohol treatment services: 54.2% of utilizers in 1980 were Native (Figure 3-14). While representing 16% of the Alaska population in 1980, Natives accounted for 26% of liquor laws violations in 1978, 23% in 1979, and 57% in 1980. Also, Natives accounted for 37% of arrests for drunkenness in 1978, and 32% in 1979 (Figure 3-33).

Figure 3-33

Alcohol and Drug Related Arrests, by Race
Statewide, 1978-1980

No. of Arrests Row #	1978					1979					1980				
	White	Black	Native	Other	Total	White	Black	Native	Other	Total	White	Black	Native	Other	Total
Offense	710	39	103	32	884	588	38	70	44	740	440	18	75	0	533
Drug Abuse	80	4	12	4	100	80	5	9	6	100	83	3	14	0	100
Driving Under Influence	2560	90	386	229	3265	2421	73	335	177	3006	1997	55	515	8	2575
	78	3	12	7	100	81	2	11	6	100	78	2	20	*	100
Liquor Laws	721	10	546	825	2102	855	9	544	1021	2429	993	9	1342	2	2346
	34	1	26	39	100	35	*	23	42	100	42	*	57	*	100
Drunkennes	95	9	226	286	616	77	2	183	323	585	N/A	N/A	N/A	N/A	N/A
	15	1	37	47	100	13	*	32	55	100					
Total Offenses	13055	840	4260	2654	20809	11251	730	3779	2938	18698	9693	579	5797	33	15102
	63	4	20	13	100	60	4	20	16	100	60	4	36	*	100

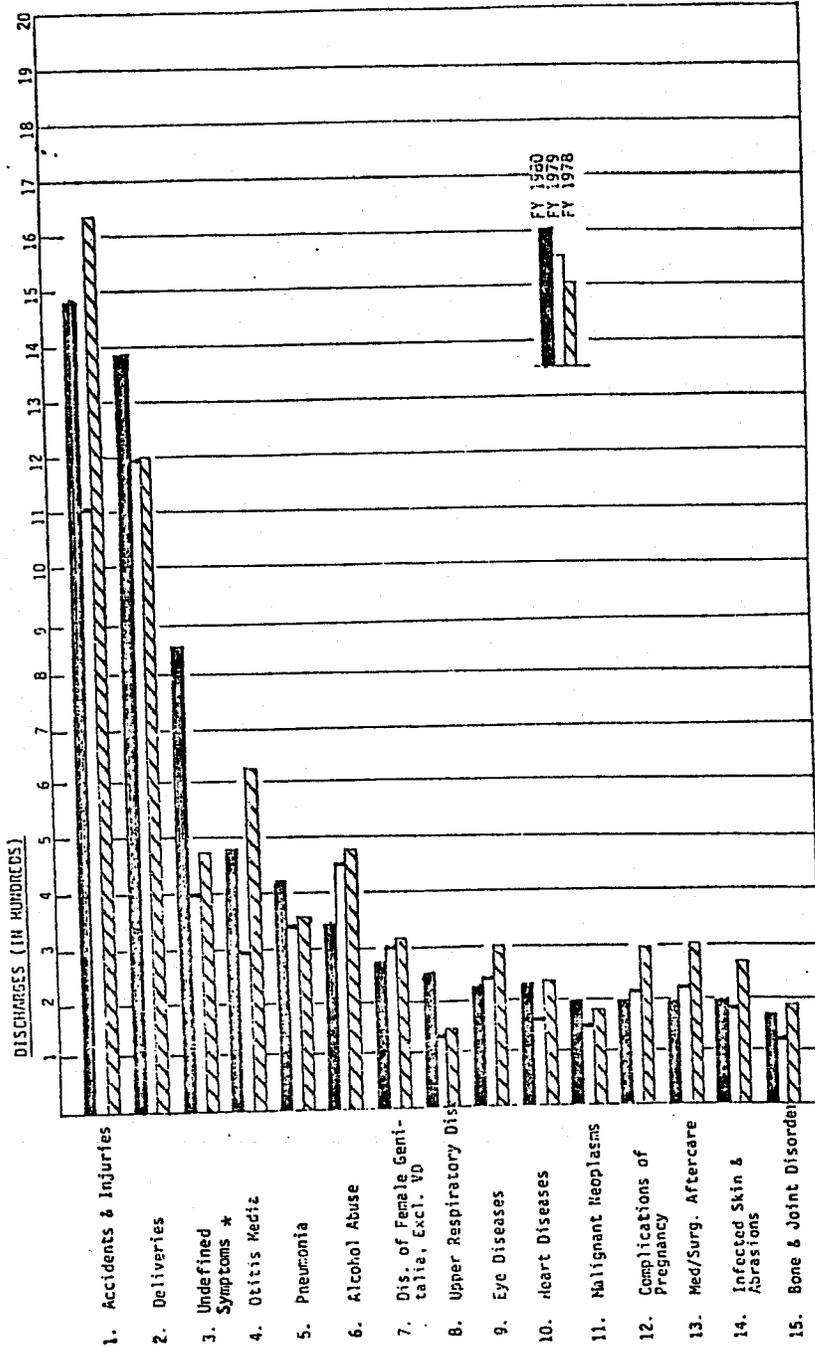
Source: State of Alaska, Dept. of Law, Criminal Justice Planning Agency, Crime in Alaska, 1978, 1979, 1980

In all, 24.7% of the victims and 22.8% of the assailants in sexual assault contacts reported by programs in the Alaska Network on Domestic Violence were Native, as were 34.6% of the victims and 29.5% of assailants in domestic violence contacts (Figures 3-17, 3-18, 3-19, and 3-10).

The two leading causes of AANHS acute care utilization for both patient days and discharges were accidents and injuries, and deliveries. Accidents and injuries represented 13.9% of all discharges and 15.9% of all patient days in FY 1980. Both discharges and patient days were up from FY 1979, 34.4% and 17.64% respectively, but down 9.54% and 23.13% from FY 1978. Alcohol abuse was the fourth leading cause of patient days in FY 1980, at 4.5% of all patient days, followed by malignant neoplasms, also at 4.5% of all patient days. Otitis media placed fourth in discharges, accounting for 4.4%. This number was 64.24% greater than the preceding year but 23.71% less than the high in 1978. Pneumonia was fifth place in discharges at 3.8% of total discharges, up 26.48% and 20.12% from the preceding 2 years (Figures 3-34, 3-35).

Figure 3-34

ALASKA AREA NATIVE HEALTH SERVICE
LEADING CAUSES OF HOSPITALIZATION
FY 1980
Ranked by Decreasing Order of Discharges*

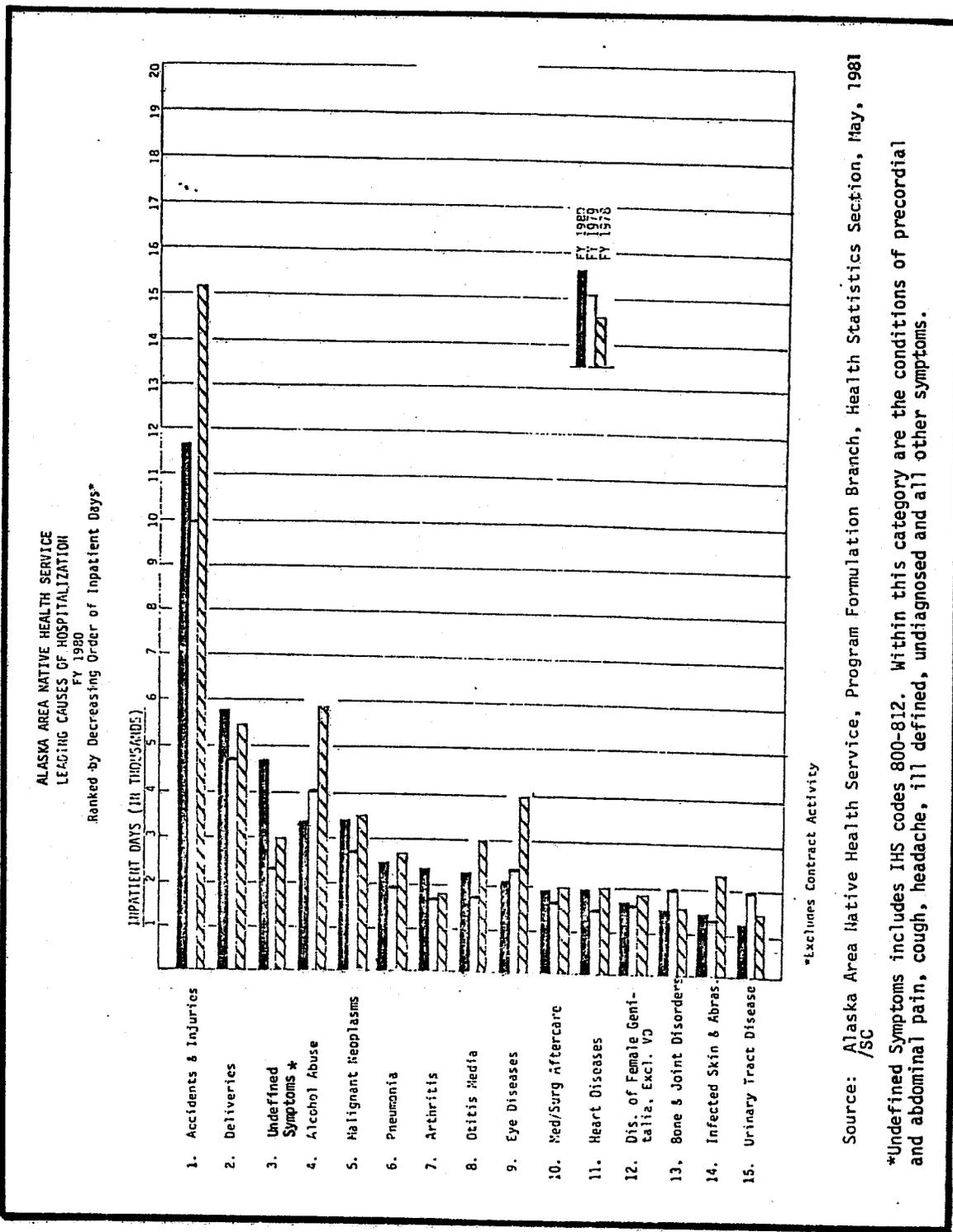


* Excludes Contract Activity

Source: Alaska Area Native Health Service, Program Formulation Branch, Health Statistics Section, May 1981/SC

*Undefined Symptoms includes IHS codes 800-812. Within this category are the conditions of precordial and abdominal pain, cough, headache, ill defined, undiagnosed and all other symptoms.

Figure 3-35



Accidents, venereal disease, mental illness, alcohol abuse, and otitis media rank as the priority health status problems of the Native population. These problems are exacerbated by poverty and a changing sociocultural milieu.

Non-Native: The health status problems of Alaska's non-Native population are overshadowed by the magnitude of the Natives' problems. Perhaps the best illustration of this is the mortality statistics. For each of the 6 leading causes of death among the non-Native population during the period 1977-1979, the rate among the Native population was greater (Figure 3-27). Nevertheless, accident mortality, the leading cause of death among non-Natives at a 1980 rate of 75.5 per 100,000 population, is 52.5% greater than the U.S. rate of 49.5 for all races in 1979. This rate is lower than the 1970 rate of 101.1 by over 25%, and is 14% lower than the average mortality rate for the 11 year period 1970-1980 (Figure 3-28).

Examination of age/sex/race specific utilization data for CMHCs from 1977 to 1980 reveals that female non-Natives between the ages of 25 and 34 account for the greatest proportion of services (17.83%) (Figure 3-22). Although comparative population data are not available at that level of detail for 1980, it is evident from the fact that the 25-34 age group for both sexes and races represented only 22.6% of the statewide population that this group probably is over-represented in the data. Review of utilization for API over the same period finds 25-34 year old non-Native males at 15.33%, followed closely by 18-24 year old non-Native males at 15.13%, accounting for the greatest proportion of utilizers (Figure 3-23). The same argument offered before presumably would have merit here, as the 15-24 age group represented only 20.5% of the statewide 1980 population. It must be acknowledged that, given the type of data available, conclusions at this level of detail should not be hastily drawn.

Non-Natives, or more specifically blacks and whites, accounted for a disproportionate number of drug abuse treatment clients in 1980; 9.4% of the clients were black, compared to 3.4% in the 1980 population, and 80.4% were white, compared to 77.01% of the population (Figure 3-36). This is compatible with drug arrest data which indicate that whites represented a disproportionate share of drug abuse violations, 80% in 1978 and 1979; 83% in 1980. Comparing drug abuse arrests to all other substance abuse offenses, it is evident that whites represent a greater proportion of drug arrests than in all other categories (Figure 3-33).

Figure 3-36

Drug Abuse Clients Receiving Treatment, Race by Drug Type, Statewide, 1980

Count Row PCT Col PCT	None or Unknown	Heroin	Other Opiates	Alcohol	Barbitu rates	Oth.Sed or Hyp.	Ampheta mines	Cocaine	Mari- huana	Halluci nogens	Inhal- ant	Over the Counter	Tranqui lizers	Row Total
GROUP	10	27	33	24	4	4	12	65	97	3	2	1	10	292
White	3.4 66.7	9.2 84.4	11.3 84.6	8.2 75.0	1.4 80.0	1.4 80.0	4.1 80.0	22.3 75.6	33.2 83.6	1.0 100.0	0.7 66.7	0.3 100.0	3.4 90.9	80.4
Black	2	4	4	3	0	1	0	13	6	0	1	0	0	34
American Indian	5.9 13.3	11.8 12.5	11.8 10.3	8.8 9.4	0.0 0.0	2.9 20.0	0.0 0.0	38.2 15.1	17.6 5.2	0.0 0.0	2.9 33.3	0.0 0.0	0.0 0.0	9.4
Alaska Native	0.0 0.0	0.0 0.0	25.0 2.6	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	3 2.6	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	4 1.1
Asian or PAC. Is.	3	1	1	3	1	0	2	4	10	0	0	0	1	26
Hispanic Mexican	11.5 20.0	3.8 3.1	3.8 2.6	11.5 9.4	3.8 20.0	0.0 0.0	7.7 13.3	15.4 4.7	38.5 8.6	0.0 0.0	0.0 0.0	0.0 0.0	3.8 9.1	7.2
Hispanic P.R.	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0
Hispanic Other	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	1 1.2	0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0
Column Total	15 4.1	32 8.8	39 10.7	32 8.8	5 1.4	5 1.4	15 4.1	86 23.7	116 32.0	3 0.8	3 0.8	1 0.3	11 3.0	363 100.0

Source: US DHEW: NIDA, State Statistics 1980, Data from the Client Oriented Data Acquisition Process (CODAP)

Accidents continue to be the most evident health status problem for non-Natives; however, indicators are that this problem may be on the decline. Drug abuse and presumably mental illness and emotional disorders among males 25-34 years old stand out as heirs apparent to the distinction of being the major health status problems of this population.

SEX GROUPS

Unlike the nation at large, where the females slightly outnumber the males by a ratio of 1.06:1 (51.4%:48.6%), in Alaska the males outnumber the females by a ratio of 1.12:1 (53.0%:47.0%). Due, perhaps, to an increased in-migration of females in the last decade, the ratio of males to females has declined since 1970 when it stood at 1.19:1. The age profiles of males and females are practically identical. This rules out the possibility of attributing differences in health status to differences in the age distribution of the two groups.

Males: The leading causes of mortality among males in Alaska include accidents, heart disease and hypertension, malignant neoplasms (cancer), suicide, and diseases of early infancy. Accidents, the leading cause of death, at a rate of 150.2 per 100,000 population in 1980, is over 3 times the 1979 U.S. accident death rate for both sexes and is over 4 times the female rate in the state. The male rate in 1980 was 10% less than the rate in 1970 and about 1% less than the average rate for the 11 year period 1970-1980 (Figure 3-37, Figure 3-38). The rate of both heart disease and hypertension, the second leading cause of mortality, and malignant neoplasms, the third leading cause of mortality, are each less than half the U.S. rate for both sexes (1979); however, the rate of heart disease and hypertension among males, at 118.9 is 2.4 times the female rate in Alaska, and similarly, the rate of malignant neoplasms at 8.20 is 1.4 times the female rate. Suicide among males, the fourth leading cause of death at 29.3 is 2.3 times the U.S. rate for both sexes of 12.6 and is 4.7 times the female mortality rate. Likewise, the male mortality rate for the fifth leading cause of mortality, diseases of early infancy, at 19.2 is 1.9 times the U.S. rate for both sexes and 2.0 times the female mortality (Figure 3-37).

Figure 3-37

CAUSE OF DEATH
 Three Year Average
 1977-79
 Male
 (Rate Per 100,000)

CAUSE	ALASKA	SCHPD	SFAHSA	NAHRA	US*
1. Accidents	170.2	155.6	168.2	171.2	47.9
2. Heart Disease and Hyper-tension	118.9	105.9	173.2	119.9	331.3
3. Malignant Neoplasms	82.0	78.6	112.6	68.6	183.5
4. Suicide	29.3	31.6	30.9	19.2	12.6
5. Diseases of Early Infancy	19.2	18.6	19.8	20.1	10.4
6. CNS Vascular Lesions	18.5	15.1	27.2	22.9	76.9
7. Alcoholism and Cirrhosis of Liver	18.5	14.6	29.7	22.9	N/A
8. Homicide	17.8	15.9	9.9	29.3	10.5
9. Ill-Defined	17.8	15.1	18.6	27.5	N/A
10. Flu/Pneumonia	13.8	11.2	16.1	21.1	20.0

CAUSE OF DEATH
 Three Year Average
 1977-79
 Female
 (Rate Per 100,000)

CAUSE	U.S.*	ALASKA	SCHPD	SFAHSA	NAHRA
1. Neoplasms	183.5	57.8	59.1	77.8	43.6
2. Heart Disease and Hyper-tension	331.3	50.1	44.9	101.0	37.4
3. Accidents	47.9	40.0	41.6	32.8	41.8
4. CNS Vascular Lesions	76.9	16.7	13.7	42.3	11.6
5. Ill-Defined	N/A	13.6	12.1	13.6	19.6
6. Alcoholism and Cirrhosis of Liver	N/A	13.3	12.4	17.7	11.6
7. Diseases of Early Infancy	10.2	9.7	10.3	8.2	8.9
8. Homicide	10.5	7.6	8.5	2.7	8.0
9. Suicide	12.6	6.2	6.8	6.8	7.1
10. Flu/Pneumonia	20.0	5.2	6.5	6.8	8.9

Source: State of Alaska, Department of Health and Social Services, Office of Information Systems, computer printouts; rate denominators - Southeast Alaska Health Systems Agency.

*Rates for both sexes 1979

Figure 3-38

**ACCIDENTAL DEATH RATES* BY SEX, STATE OF ALASKA,
1970-1980**

ACCIDENTAL DEATH RATE* BY YEAR											
SEX	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Male	167.2	184.1	146.7	155.3	180.6	142.4	122.3	118.1	165.2	136.7	150.2
Female	57.9	63.0	57.6	51.1	47.1	63.2	77.4	45.4	51.9	32.5	36.5
Total	116.7	129.1	105.4	108.0	119.2	109.2	105.5	87.8	114.6	88.7	96.8

*Rate = Deaths per 100,000 population

SOURCE: Office of Information Systems, Department of Health and Social Services. Computer printouts for accidental deaths by HSA subareas, 1970-1981, Juneau, 1983.

Figure 3-39

**Civilian Gonorrhoea Incidence
by Sex Group, 3 Year Averages, Alaska, 1972-1982
(Cases per 100,000 Population)**

SEX	1973		1974		1975		1976		1977		1978		1979		1980		1981		1972-1982	
	#	rate	#	rate	#	rate	#	rate	#	rate	#	rate	#	rate	#	rate	#	rate	#	rate
Male	4766	1031.7	5670	1091.3	6560	1114.1	7730	1208.5	8443	1316.2	8794	1419.8	8029	1347.7	7317	1251.1	6363	1083.0	24670	1178.6
Female	3081	682.3	3793	825.1	4479	945.6	5509	1118.7	6215	1212.0	6508	1237.2	6166	1140.4	5791	1040.1	5208	910.6	18106	968.7
TOTAL	7847	824.6	9463	965.3	11039	1059.9	13239	1169.4	14658	1269.9	15302	1336.0	14195	1249.1	13108	1148.2	11571	998.0	42776	1079.6

NOTE 1: Year shown is central year of 3 year period.

Note 2: Denominator represents total population minus active duty military; unknown cases have been assigned to sex groups according to distribution of cases by sex group among known cases.

SOURCE: 1) Alaska Department of Health and Social Services, Venereal Disease Grant Applications, FY 1974-1982
 2) Alaska Department of Labor, Alaska Population Overview, 1981
 3) SHPDA estimates of sex for total population.
 4) U.S. Department of Commerce, Bureau of Census, Detailed Characteristics, Alaska, 1970 Census of Population, PC(1)-03

Gonorrhea morbidity among males increased 5% from a rate of 1031.7 cases per 100,000 population in 1973 to 1083.0 in 1981. The 1981 rate, however, was 10.3% less than the nine year average rate of 1207.0. The rate among males in 1981 was 1.2 times the female rate (Figure 3-39).

Given the high incidence of accidents, heart disease and hypertension, and suicide among males relative to females, it is not surprising that males account for a disproportionate share of alcohol treatment utilizers, 80.2% of the clients in 1980 compared to 53.0% of the population (Figure 3-14). Males account for a disproportionate share of all alcohol related offenses. Over the period 1978-1980, males represented 88% of DWI offenses; 78% of liquor laws violations; and 84% of drunkenness violations. Meanwhile, males constituted 53.0% of the population (Figure 3-40).

Figure 3-40

Alcohol and Drug Related Arrests, by Sex
Statewide, 1978-1980

No. of Arrests Row %	1978			1979			1980		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Drug Abuse	747 85	137 15	884 100	620 84	120 16	740 100	461 86	72 14	533 100
Driving Under Influence	2876 88	389 12	3265 100	2599 86	407 14	3006 100	2240 87	335 13	2575 100
Liquor Laws	1632 78	470 22	2102 100	1967 81	462 19	2429 100	1745 74	601 26	2346 100
Drunkennes	519 84	97 16	616 100	453 77	132 23	585 100	N/A	N/A	N/A
Total Offenses	17202 83	3607 17	20809 100	15501 83	3197 17	18698 100	13213 82	2889 18	16102 100

Source: State of Alaska, Dept. of Law, Criminal Justice Planning Agency, Crime in Alaska, 1978, 1979, 1980

Likewise, males account for 64.7% of drug abuse treatment utilization (Figure 3-41).

Figure 3-41

Drug Abuse Clients Receiving Treatment, Sex by Drug Type, Statewide, 1980

SEX	Count Row PCT Col PCT	None or Unknown	Heroin	Other Opiates	Alcohol	Barbitu rates	Oth.Sed or Hyp.	Ampheta mines	Cocaine	Mari- huana	Halluci nogens	Inhal- ant	Over the Counter	Tranqui lizers	Row Total
	10 4.3 66.7	19 8.1 59.4	22 9.4 56.4	13 7.7 56.3	5 2.1 100.0	2 0.9 40.0	9 3.8 60.0	59 25.1 68.6	83 35.3 71.6	2 0.9 66.7	3 1.3 100.0	0 0.0 0.0	3 1.3 27.3	235 64.7	
Male	5 3.9 33.3	13 10.2 40.6	17 13.3 43.6	14 10.9 43.8	1 0.0 0.0	3 2.3 60.0	6 4.7 40.0	27 21.1 31.4	33 25.8 28.4	1 0.8 33.3	0 0.0 0.0	1 0.8 100.0	9 6.3 72.7	128 35.3	
Female	15 4.1	32 8.8	39 10.7	32 8.8	5 1.4	5 1.4	15 4.1	86 23.7	116 32.0	3 0.8	3 0.8	1 0.3	11 3.0	363 100.0	

Source: US DHEW: NIDA, State Statistics 1980, Data from the Client Oriented Data Acquisition Process (CODAD)

Between 1978 and 1980 males have represented 84-86% of all drug abuse violations (Figure 3-40). Males utilize a disproportionate share of API services but, interestingly, not CMHC services. Over the period 1977-1980, males represented 68.76% of all admissions at API but only 43.3% of CMHC admissions (Figures 3-22, 3-23). The proportion of males at API has increased since 1977. In 1977, 65.76% of the clients were male; in 1980, males represented 70.05% (Figure 3-42).

Figure 3-42

Alaska Psychiatric Institute Admissions by Sex, HSA and Statewide, 1977-1980

HSA	1977				1978				1979				1980			
	Males		Females		Males		Females		Males		Females		Males		Females	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
NO	70	67.96	33	32.04	79	66.39	40	33.61	89	75.42	29	24.58	79	75.24	26	24.76
SC	369	64.29	205	35.71	509	70.99	208	29.01	484	67.04	238	32.96	547	68.89	247	31.11
SE	45	76.27	14	23.73	39	72.22	15	27.78	34	66.67	17	33.33	64	74.42	22	25.58
ALASKA	484	65.76	252	34.24	627	70.45	263	29.55	607	68.13	284	31.87	690	70.05	295	29.95

Source: State of Alaska, Dept. of Health and Social Services, Office of Information Systems, Computer printout, October 26, 1981

Accidents, diseases of the heart, cancer, venereal disease, mental illness, alcohol and drug abuse, and diseases of early infancy are the apparent major health status problems among males. With the exception of cancer, diseases of early infancy, and venereal disease, stress would appear to be a common denominator. The number and magnitude of the health status problems among males relative to females give insight into the reasons for their lower life expectancy and higher age specific mortality rates.

Females: The leading causes of mortality among females include cancer, heart disease and hypertension, accidents, stroke, and alcoholism/cirrhosis of the liver; however, it would be difficult to build a case for increased risk among females for any of these health status problems, given that the mortality rates for these problems are, in every instance, less than both the rates for their male counterparts and for the U.S. rate for both sexes (Figure 3-37).

With regard to female morbidity, gonorrhea incidence, although less than for males, has increased 33.5% from 682.3 per 100,000 population in 1973 to 910.6 in 1981. This 1981 rate is 22.3% less than the 9 year average of 1113.6 (Figure 3-39). Reported rape has increased 69.9% from 38.5 in 1976 to 65.4 in 1980. The 1979 rate exceeded the U.S. rate of 34 by more than 2 times (Figure 3-43).

Figure 3-43

Reported Rapes by Health Service Area										
1976-1980										
# and rate per 100,000 each year										
AREA	1976		1977		1978		1979		1980	
	#	rate								
SE HSA	8	15.6	7	13.2	17	31.6	28	54.6	28	52.0
SC HSA	63	22.7	103	36.3	113	40.5	215	77.3	153	56.7
NO HSA	16	19.0	17	23.0	15	19.3	50	64.9	29	37.8
Unknown	72	-	84	-	77	-	-	-	52	-
Alaska	159	38.5	211	51.3	222	54.1	293	72.1	262	65.4
U.S.	-	26	-	29	-	31	-	34	-	-

Source: 1) Criminal Justice Planning Agency, 1981
 2) Alaska Department of Labor, Alaska Population Overview, December 1979; Population Release, memorandum of July 2, 1980

As alluded to in the discussion of male health status problems, females account for a disproportionate share of utilization of CMHCs services for the period 1977-1980, but not at API. Females represented 56.59% of CMHCs admissions during that period while accounting for only 43% of the Alaska population in 1980. Not only are females over-represented during the 4 year period, but their proportion has increased each year, from 54.70% in 1977 to 58.57% in 1980 (Figure 3-44).

Figure 3-44

Community Mental Health Center Admissions by Sex,
HSA and Statewide, 1977-1980

HSA	1977				1978				1979				1980			
	Males		Females		Males		Females		Males		Females		Males		Females	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
NO	324	49.47	331	50.53	141	43.65	182	56.35	218	41.21	311	58.79	222	38.88	349	61.12
SC	652	43.73	839	56.27	799	45.14	971	54.86	810	43.60	1,048	56.40	965	43.08	1,275	56.92
SE	267	44.65	331	55.35	270	41.80	376	58.20	237	41.65	332	58.35	202	37.27	340	62.73
ALASKA	1,243	45.30	1,501	54.70	1,210	44.18	1,529	55.82	1,265	42.79	1,691	57.21	1,389	41.43	1,964	58.57

Source: State of Alaska, Dept. of Health and Social Services, Office of Information Systems, Computer printout, October 26, 1981

When considering female utilization of health services, it is important to consider pregnancy as well as health status problems. The birthrate statewide in 1981 was 23.9 live births per 1,000 population, 47.5% greater than the U.S. birthrate in 1980. After dropping from 25.0 in 1970 to 18.5 in 1975, the birthrate increased each year through 1979, then declined slightly in 1980 (Figure 3-45).

Figure 3-45

RESIDENT BIRTHS BY HSA				
ALASKA 1970-1981				
BIRTHS				
	SE HSA	SC HSA	NO HSA	TOTAL STATEWIDE
1970	922	4867	1770	7560
1971	851	4739	1720	7312
1972	827	4555	1566	6948
1973	804	4308	1499	6611
1974	872	4689	1516	7077
1975	938	4883	1649	7470
1976	886	5241	1785	7912
1977	943	5685	1750	8378
1978	973	5945	1921	8849
1979	1136	6141	1852	9129
1980	1214	6289	1983	9490
1981	1213	6763	2104	10081

BIRTH RATES (live births per 1,000 population)					
	SE HSA	SC HSA	NO HSA	TOTAL STATEWIDE	U.S.
1970	21.7	24.9	27.4	25.0	18.4
1971	19.6	23.0	27.0	23.4	17.2
1972	18.5	21.2	24.1	21.4	15.6
1973	17.3	19.6	23.2	20.0	14.9
1974	17.4	20.5	20.9	20.2	14.9
1975	18.6	18.5	18.2	18.5	14.8
1976	17.3	18.9	21.2	19.1	N/A
1977	17.7	19.8	24.6	20.4	15.4
1978	17.9	21.3	23.5	21.3	15.3
1979	21.6	23.4	24.7	24.2	15.8
1980	22.6	23.2	25.9	23.6	16.2
1981	21.7	23.9	25.1	23.9	N/A

Source: Alaska Dept. of Health and Social Services, Office of Information Systems, Alaska Vital Statistics 1975 and 1976, and Unpublished data, 1977-1980; U.S. Dept. of Health and Human Services, NCHS, Monthly Vital Statistics Report, Provisional Statistics, Annual Summary for the United States, 1979 and Annual Summary of Births, Deaths, Marriages, and Divorces: U.S., 1980.

Illustrative of these vital statistics are the following utilization data. Deliveries were the second leading cause of patient days and discharges in AANHS acute care facilities in 1980, totaling nearly 1400 discharges and approximately 5,750 inpatient days (Figures 3-34 and 3-35). The 1983 Acute Care Facility Survey revealed that deliveries were the leading cause of discharges, at 19.0% of all discharges and a rate of 283.54 per 10,000 population, compared to the 1978 U.S. rate of 198.94. Likewise, deliveries were a significant portion of patient days, representing 10.05% of all patient days, the fourth leading cause of patient days (Figures 3-46, 3-47, 3-48).

ACUTE CARE UTILIZATION

Figures 3-46 through 3-48 detail acute care utilization by diagnostic category from the 1983 Acute Care Facility Survey. These data are referenced in Chapters 3 and 4 and provide another perspective on the health status problem categories. In many cases it may be the only source of information available regarding the frequency of the diseases. Please note that the data on pages 3-58 through 3-64 are for the year 1982.

Figure 3-46

1983 ANNUAL HOSPITAL SURVEY ACUTE CARE FACILITIES DISCHARGES BY ICD-9 DIAGNOSTIC GROUP ABSOLUTE AND RELATIVE FREQUENCIES, HSA AND STATEWIDE

ICD-9 MAJOR CATEGORIES	ICD-9 DETAIL	TOTAL SE HSA	% OF TOTAL SE HSA	TOTAL SC HSA	% OF TOTAL SC HSA	TOTAL N HSA	% OF TOTAL N HSA	TOTAL STATE-WIDE	% OF TOTAL STATE-WIDE
INFECTIVE-PARASITIC									
	INFECTIVE-PARASITIC	97	1.90	718	2.95	305	1.72	1270	2.50
TOTAL		97	1.90	718	2.95	305	1.72	1270	2.60
NEOPLASMS									
	MALIGNANT NEOPLASMS	87	1.71	237	2.44	610	2.73	1204	2.42
	BENIGN NEOPLASMS	42	.82	125	.88	171	1.41	487	.93
TOTAL		129	2.53	372	3.33	781	4.14	1691	3.41
ENDOCRINE-NUTR-METAB									
	DIABETES MELLITUS	44	.86	162	.87	139	.59	403	.81
	OTHER ENDOCRINE-NUTR	55	1.03	215	1.14	182	.64	515	1.04
TOTAL		99	1.94	377	2.01	321	1.22	918	1.85
BLOOD&BLOOD-FORMING									
	BLOOD&BLOOD-FORMING	40	.79	111	.68	124	.28	303	.61
TOTAL		40	.79	111	.68	124	.28	303	.61
MENTAL DISORDERS									
	ALCOHOL ABUSE	257	5.05	289	1.34	175	2.12	931	1.87
	DRUG ABUSE	15	.29	34	.12	9	.34	92	.19
	OTHER MENTAL DISORD.	126	2.47	557	3.06	504	3.52	1535	3.09
TOTAL		398	7.81	880	4.52	688	5.99	2558	5.15
NERVOUS-SENSORY									
	EAR&MASTOID PROCESS	156	3.06	356	1.38	121	2.26	856	1.72
	OTHER NERV-SENSORY	121	2.33	477	2.55	407	2.93	1295	2.61
TOTAL		277	5.44	833	3.93	528	5.19	2151	4.33
CIRCULATORY SYSTEM									
	HEART-HYPERTENSIVE	273	5.36	535	4.92	1172	2.99	2276	4.59
	CEREBROVASCULAR DIS.	42	.82	73	.78	199	1.00	413	.83
	OTHER CIRCULATORY	55	1.03	173	1.27	268	1.33	603	1.21
TOTAL		370	7.26	781	6.98	1639	5.08	3292	6.63

Figure 3-46, Continued

1983 ANNUAL HOSPITAL SURVEY ACUTE CARE FACILITIES DISCHARGES BY ICD-9 DIAGNOSTIC GROUP ABSOLUTE AND RELATIVE FREQUENCIES, HSA AND STATEWIDE									
ICD-9 MAJOR CATEGORIES	ICD-9 DETAIL	TOTAL SE HSA	% OF TOTAL SE HSA	TOTAL SC HSA	% OF TOTAL SC HSA	TOTAL N HSA	% OF TOTAL N HSA	TOTAL STATE-WIDE	% OF TOTAL STATE-WIDE
RESPIRATORY SYSTEM									
	ACUTE RESPIRATORY	61	1.20	449	1.70	139	1.38	785	1.58
	INFLUENZA-PNEUMONIA	122	2.39	265	1.98	420	3.24	1127	2.27
	OTHER RESPIRATORY	294	5.77	583	4.24	888	5.92	2350	4.73
	TOTAL	477	9.36	1297	7.91	1447	10.53	4262	8.58
DIGESTIVE SYSTEM									
	DIGESTIVE SYSTEM	402	7.89	1798	10.19	1737	8.32	4760	9.59
	TOTAL	402	7.89	1798	10.19	1737	8.32	4760	9.59
GENITOURINARY SYSTEM									
	URINARY SYSTEM	92	1.81	292	1.69	294	1.93	869	1.75
	MALE GENITAL ORGANS	13	.35	188	.85	108	.84	397	.80
	FEMALE GENITAL ORGANS	223	4.40	751	3.95	620	3.88	1933	3.79
	TOTAL	338	6.64	1231	6.50	1022	6.66	3249	6.54
PREGNANCY-CHILDBIRTH									
	NORMAL DELIVERY	199	3.91	716	5.19	1082	5.55	2546	5.13
	COMPLIC. OF PREGNANCY	820	16.10	2139	13.21	2440	14.93	6600	13.26
	TOTAL	1019	20.00	2855	18.39	3522	20.53	9426	18.98
SKIN & SUBCUTANEOUS									
	SKIN&SUBCUTANEOUS	92	1.81	260	1.64	309	1.64	823	1.66
	TOTAL	92	1.81	260	1.64	309	1.64	823	1.66
MUSCULOSKELETAL									
	MUSCULOSKEL-CONNECT.	220	4.32	832	5.73	1156	5.76	2777	5.59
	TOTAL	220	4.32	832	5.73	1156	5.76	2777	5.59
CONGENITAL ANOMALIES									
	CONGENITAL ANOMALIES	36	.71	159	.98	181	.95	470	.95
	TOTAL	36	.71	159	.98	181	.95	470	.95
PERINATAL MORBIDITY									
	PERINATAL MORBIDITY	39	.77	350	1.38	130	.58	576	1.16
	TOTAL	39	.77	350	1.38	130	.58	576	1.16
SYMPTOMS&ILL-DEFINED									
	SYMPTOMS&ILL-DEFINED	317	6.22	742	4.94	971	6.56	2679	5.40
	TOTAL	317	6.22	742	4.94	971	6.56	2679	5.40

Figure 3-46, Continued

1983 ANNUAL HOSPITAL SURVEY
ACUTE CARE FACILITIES
DISCHARGES BY ICD-9 DIAGNOSTIC GROUP
ABSOLUTE AND RELATIVE FREQUENCIES, HSA AND STATEWIDE

ICD-9 MAJOR CATEGORIES	ICD-9 DETAIL	TOTAL SE HSA	% OF TOTAL SE HSA	TOTAL SC HSA	% OF TOTAL SC HSA	TOTAL N HSA	% OF TOTAL N HSA	TOTAL STATE-WIDE	% OF TOTAL STATE-WIDE
EXTERNAL CAUSES									
	FRACTURES	268	5.26	623	3.39	553	5.01	1939	3.90
	DISLOCATIONS	23	.45	80	.55	111	1.34	376	.70
	SPRAINS-STRAINS	57	1.12	168	1.05	195	1.24	543	1.09
	INTRACRANIAL INJURY	43	.04	84	.62	131	.59	316	.64
	INTERNAL INJURY	11	.22	44	.30	61	.29	145	.29
	OPEN WOUNDS	94	1.85	253	1.43	242	1.98	725	1.50
	BURNS	20	.39	39	.42	106	.46	210	.42
	POISONING	71	1.39	97	.65	127	.94	308	.78
	TOXIC EFFECTS	14	.27	24	.16	33	.24	65	.13
	COMPLIC. OF MEDICAL C	20	.39	95	.72	153	1.02	369	.74
	OTHER INJURIES	123	2.41	277	1.55	262	1.74	634	1.26
TOTAL		744	14.61	1784	10.84	1974	14.05	5970	12.02
OTHER CAUSES									
	V CODES	0	0.0	40	6.76	2304	0.0	2344	4.72
	UNCLASSIFIED	0	0.0	40	.33	76	0.0	116	.23
TOTAL		0	0.0	80	7.09	2380	0.0	2460	4.95
TOTAL	TOTAL	5094	100.00	15460	100.00	19215	100.00	49655	100.00

NOTE: EXPLANATORY NOTES TO ALL TABLES FOLLOW TABLE 94.

Source: State of Alaska, Department of Health and Social Services,
Division of Planning, Policy, and Program Evaluation,
Annual Hospital Survey, 1983.

Figure 3-47

1983 ANNUAL HOSPITAL SURVEY
ACUTE CARE FACILITIES
DISCHARGES BY ICD-9 DIAGNOSTIC GROUP
RATE PER 10000 POPULATION (ADJUSTED)
HSA AND STATEWIDE

ICD-9 MAJOR CATEGORIES	ICD-9 DETAIL	RATE PER 10000 POPULATION SE HSA	RATE PER 10000 POPULATION SC HSA	RATE PER 10000 POPULATION H HSA	RATE PER 10000 POPULATION STATEWIDE	Rate per 10000 pop. US (1978)
INFECTIVE-PARASITIC						
	INFECTIVE-PARASITIC	20.74	47.64	23.97	39.81	
TOTAL		20.74	47.64	23.97	39.81	39.48
NEOPLASMS						
	MALIGNANT NEOPLASMS	18.60	39.45	38.08	26.02	
	BENIGN NEOPLASMS	8.93	14.25	19.60	14.05	
TOTAL		27.53	53.70	57.68	50.07	118.24
ENDOCRINE-NUTR-METAB						
	DIABETES MELLITUS	9.41	14.02	8.18	12.12	
	OTHER ENDOCRINE-NUTR	11.76	18.49	8.03	15.44	
TOTAL		21.17	32.51	17.06	27.62	44.92
BLOOD&BLOOD-FORMING						
	BLOOD&BLOOD-FORMING	8.55	10.94	3.95	9.12	
TOTAL		8.55	10.94	3.95	9.12	13.03
MENTAL DISORDERS						
	ALCOHOL ABUSE	54.95	21.61	29.61	23.01	
	DRUG ABUSE	3.21	2.00	4.73	2.77	
	OTHER MENTAL DISORD.	26.94	49.41	49.07	44.18	
TOTAL		85.10	73.03	83.48	76.96	80.89
NERVOUS-SENSORY						
	EAR&MASTOID PROCESS	33.36	22.22	31.45	25.75	
	OTHER NERV-SENSORY	25.87	41.17	40.90	33.96	
TOTAL		59.23	63.39	72.34	64.71	72.18
CIRCULATORY SYSTEM						
	HEART-HYPERTENSIVE	58.37	79.50	41.74	62.47	
	CEREBROVASCULAR DIS.	8.53	12.67	13.95	12.42	
	OTHER CIRCULATORY	11.76	20.54	15.09	18.14	
TOTAL		79.11	112.71	70.79	99.04	222.86
RESPIRATORY SYSTEM						
	ACUTE RESPIRATORY	13.04	27.38	19.18	23.62	
	INFLUENZA-PNEUMONIA	26.09	31.90	45.13	33.91	
	OTHER RESPIRATORY	62.86	68.51	82.50	70.70	
TOTAL		101.99	127.00	146.80	123.22	164.51
DIGESTIVE SYSTEM						
	DIGESTIVE SYSTEM	85.95	164.64	116.06	143.20	
TOTAL		85.95	164.64	116.06	143.20	194.98
GENITOURINARY SYSTEM						
	URINARY SYSTEM	19.67	27.29	25.93	25.14	
	MALE GENITAL ORGANS	3.25	13.77	11.70	11.94	
	FEMALE GENITAL ORGANS	43.75	63.85	54.15	59.65	
TOTAL		72.27	104.93	92.79	97.74	157.60

Figure 3-47, Continued

1983 ANNUAL HOSPITAL SURVEY
ACUTE CARE FACILITIES
DISCHARGES BY ICD-9 DIAGNOSTIC GROUP
RATE PER 10000 POPULATION (ADJUSTED)
HSA AND STATEWIDE

ICD-9 MAJOR CATEGORIES	ICD-9 DETAIL	RATE PER 10000 POPULATION: SE HSA	RATE PER 10000 POPULATION: SC HSA	RATE PER 10000 POPULATION: N HSA	RATE PER 10000 POPULATION: STATEWIDE	Rate per 10000 pop. US (1978)
PREGNANCY-CHILDBIRTH						
	NORMAL DELIVERY	42.55	83.74	77.42	76.60	
	COMPLIC. OF PREGNANCY	175.33	213.26	268.85	206.93	
TOTAL		217.88	297.00	266.27	283.58	198.94
SKIN & SUBCUTANEOUS						
	SKIN&SUBCUTANEOUS	19.67	26.50	22.85	24.76	26.51
TOTAL		19.67	26.50	22.85	24.76	
MUSCULOSKELETAL						
	MUSCULOSKEL-CONNECT.	47.04	92.59	80.24	83.54	85.23
TOTAL		47.04	92.59	80.24	83.54	
CONGENITAL ANOMALIES						
	CONGENITAL ANOMALIES	7.70	15.83	13.26	14.14	
TOTAL		7.70	15.83	13.26	14.14	15.75
PERINATAL MORBIDITY						
	PERINATAL MORBIDITY	8.34	22.36	8.04	17.33	
TOTAL		8.34	22.36	8.04	17.33	2.12
SYMPTOMS&ILL-DEFINED						
	SYMPTOMS&ILL-DEFINED	67.78	79.78	91.52	80.60	
TOTAL		67.78	79.78	91.52	80.60	32.73
EXTERNAL CAUSES						
	FRACTURES	57.30	54.77	69.00	58.33	
	DISLOCATIONS	4.92	8.99	18.61	10.41	
	SPRAINS-STRAINS	12.19	16.91	17.35	16.34	
	INTRACRANIAL INJURY	9.19	10.01	8.18	9.51	
	INTERNAL INJURY	2.35	4.09	4.09	4.25	
	OPEN WOUNDS	20.10	23.05	27.64	23.62	
	BURNS	4.28	6.75	6.35	6.32	
	POISONING	15.18	10.43	13.11	11.67	
	TOXIC EFFECTS	2.99	2.65	3.38	2.65	
	COMPLIC. OF MEDICAL C	4.23	11.55	14.24	11.10	
	OTHER INJURIES	26.30	25.10	24.26	25.07	
TOTAL		159.08	175.02	207.02	179.60	174.8
OTHER CAUSES						
	V CODES	0.0	109.17	0.0	70.52	
	UNCLASSIFIED	0.0	5.40	0.0	3.49	
TOTAL		0.0	114.57	0.0	74.01	
TOTAL	TOTAL	1039.10	1614.92	1394.12	1493.85	1665.3

Source: State of Alaska, Department of Health and Social Services, Division of Planning, Policy, and Program Evaluation, Annual Hospital Survey, 1983.
U.S. - U.S. DHHS, NCHS, Detailed Diagnosis and Surgical Procedures for Patients Discharged from Short-stay Hospitals, U.S., 1978, September, 1980.

Figure 3-48

1983 ANNUAL HOSPITAL SURVEY ACUTE CARE FACILITIES PATIENT DAYS, BY ICD-9 DIAGNOSTIC GROUP RELATIVE AND ABSOLUTE FREQUENCIES BY HSA AND STATEWIDE									
ICD-9 DIAGNOSTIC GROUPS	ICD-9 DETAIL	TOTAL SE HSA	% OF TOTAL SE HSA	TOTAL SC HSA	% OF SC HSA	TOTAL N HSA	% OF TOTAL N HSA	TOTAL STATE-WIDE	% OF TOTAL STATE
INFECTIVE-PARASITIC									
	INFECTIVE-PAPASITIC	433	1.60	2427	1.90	1246	1.61	4859	1.62
TOTAL		433	1.60	2427	1.90	1246	1.61	4859	1.62
NEOPLASMS									
	MALIGNANT NEOPLASMS	739	2.73	3611	5.05	6123	5.56	13079	4.90
	BENIGN NEOPLASMS	151	.55	912	1.01	1038	1.24	2684	1.01
TOTAL		890	3.29	4523	6.06	7161	6.80	15763	5.91
ENDOCRINE-NUTR-METAB									
	DIABETES MELLITUS	348	1.29	1791	1.36	841	1.08	3405	1.31
	OTHER ENDOCRINE-NUTR	289	1.07	2307	1.79	1143	.75	4091	1.52
TOTAL		637	2.35	4098	3.15	1984	1.83	7576	2.84
BLOOD&BLOOD-FORMING									
	BLOOD&BLOOD-FORMING	252	.93	1035	.79	495	.27	1908	.72
TOTAL		252	.93	1035	.79	495	.27	1908	.72
MENTAL DISORDERS									
	ALCOHOL ABUSE	4175	15.43	1398	1.18	893	2.04	7412	2.76
	DRUG ABUSE	50	.18	106	.09	57	.23	322	.12
	OTHER MENTAL DISORD.	594	2.19	3577	3.72	3599	4.08	9683	3.63
TOTAL		4819	17.81	5071	4.99	4549	6.35	17417	6.52
NERVOUS-SENSORY									
	EAR&MASTOID PROCESS	304	1.12	1435	.90	298	.86	2440	.91
	OTHER NERV-SENSORY	613	2.27	4328	3.42	2264	2.95	8591	3.22
TOTAL		917	3.39	5763	4.32	2562	3.01	11031	4.13
CIRCULATORY SYSTEM									
	HEART-HYPERTENSIVE	1647	6.09	3835	6.21	8137	5.07	16373	6.01
	CEREBROVASCULAR DIS.	327	1.21	815	1.46	2044	2.02	4175	1.56
	OTHER CIRCULATORY	491	1.81	1227	1.32	2274	1.55	5653	2.11
TOTAL		2465	9.11	5877	9.51	12455	8.97	26201	9.67
RESPIRATORY SYSTEM									
	ACUTE RESPIRATORY	182	.67	1333	.93	464	.79	2359	.89
	INFLUENZA-PNEUMONIA	559	2.07	1542	1.76	2054	3.64	8561	2.12
	OTHER RESPIRATORY	1123	4.15	2915	3.53	3981	5.14	10453	3.91
TOTAL		1864	6.89	5590	6.27	6499	9.57	18441	6.91
DIGESTIVE SYSTEM									
	DIGESTIVE SYSTEM	2643	9.77	11449	10.77	9311	10.14	29160	10.55
TOTAL		2643	9.77	11449	10.77	9311	10.14	29160	10.55
GENITOURINARY SYSTEM									
	URINARY SYSTEM	426	1.57	2268	1.92	1437	1.72	4938	1.85
	MALE GENITAL ORGANS	62	.23	1124	.84	501	.61	2537	.95
	FEMALE GENITAL ORGANS	768	2.84	3705	3.70	3343	3.19	7371	2.82
TOTAL		1256	4.64	7177	6.46	5281	5.72	16390	6.15

Figure 3-48, Continued

1983 ANNUAL HOSPITAL SURVEY
ACUTE CARE FACILITIES
PATIENT DAYS, BY ICD-9 DIAGNOSTIC GROUP
RELATIVE AND ABSOLUTE FREQUENCIES
BY HSA AND STATEWIDE

ICD-9 DIAGNOSTIC GROUPS	ICD-9 DETAIL	TOTAL SE HSA	% OF TOTAL SE HSA	TOTAL SC HSA	% OF SC HSA	TOTAL H HSA	% OF TOTAL H HSA	TOTAL STATE-WIDE	% OF TOTAL STATE
PREGNANCY-CHILDBIRTH									
	NORMAL DELIVERY	435	1.61	2012	2.26	2344	2.48	5355	2.23
	COMPLIC.OF PREGNANCY	2659	9.62	8105	8.10	7515	9.15	22570	3.46
	TOTAL	3094	11.43	10117	10.36	9859	11.63	27925	10.69
SKIN & SUBCUTANEOUS									
	SKIN&SUBCUTANEOUS	629	2.32	2390	2.18	1813	2.06	5799	2.17
	TOTAL	629	2.32	2390	2.18	1813	2.06	5799	2.17
MUSCULOSKELETAL									
	MUSCULOSKEL-CORRECT.	1406	5.20	5503	6.99	7983	7.92	18603	6.97
	TOTAL	1406	5.20	5503	6.99	7983	7.92	18603	6.97
CONGENITAL ANOMALIES									
	CONGENITAL ANOMALIES	173	.64	973	.95	854	1.07	2502	.94
	TOTAL	173	.64	973	.95	854	1.07	2502	.94
PERINATAL MORBIDITY									
	PERINATAL MORBIDITY	92	.34	2550	1.59	508	.39	3332	1.25
	TOTAL	92	.34	2550	1.59	508	.39	3332	1.25
SYMPTOMS&ILL-DEFINED									
	SYMPTOMS&ILL-DEFINED	1025	3.79	3465	3.64	3559	5.62	10686	4.01
	TOTAL	1025	3.79	3465	3.64	3559	5.62	10686	4.01
EXTERNAL CAUSES									
	FRACTURES	2075	7.67	5755	6.33	6460	6.85	17506	6.56
	DISLOCATIONS	81	.30	513	.45	364	1.10	1475	.55
	SPPAINS-STRAINS	292	1.05	754	.83	646	1.29	2497	.94
	INTRACRANIAL INJURY	375	1.39	277	.50	685	.62	1630	.61
	INTRERPHAL INJURY	150	.58	550	.60	605	.42	1518	.57
	OPEN WOUNDS	450	1.66	1745	1.44	1032	1.57	3255	1.49
	BURNS	166	.61	575	.96	1272	1.25	2593	.97
	POISONING	240	.89	320	.44	525	.46	1299	.49
	TOXIC EFFECTS	20	.07	55	.09	111	.12	240	.09
	COMPLIC.OF MEDICAL C	145	.54	870	1.17	1303	1.11	2926	1.10
	OTHER INJURIES	467	1.73	1500	1.53	1460	1.45	4106	1.54
	TOTAL	4469	16.51	12932	14.35	14743	16.24	39760	14.90
OTHER CAUSES									
	V CODES	0	0.0	4	5.17	9361	0.0	7365	2.77
	UNCLASSIFIED	0	0.0	4	.55	1056	0.0	1073	.40
	TOTAL	0	0.0	8	5.72	11027	0.0	11075	4.14
	TOTAL TOTAL	27064	100.00	90949	100.00	101339	100.00	266006	100.00

Source: State of Alaska, Department of Health and Social Services,
Division of Planning, Policy, and Program Evaluation,
Annual Hospital Survey, 1983.

SUMMARY

Summary of Analytical Process: In this chapter the leading health status problems occurring in each age, sex and race group have been analyzed using the following direct and indirect indicators:

Alaska cause-specific crude and age adjusted mortality in comparison to the national norm

Alaska age/sex/race cause specific rates of mortality for leading causes of death in comparison to the national norm

Alaska age/sex/race specific rates of accident mortality over time and in comparison to the national norm

Alaska age/sex/race specific rates of venereal disease over time and in comparison to the national norm

Alaska frequency of low birth weight births

Alaska age/sex/race frequency of utilization of drug abuse services

Alaska age/sex/race frequency of utilization of alcohol abuse treatment services

Alaska age/sex/race frequency of utilization of Community Mental Health Centers

Alaska age/sex/race frequency of utilization of the Alaska Psychiatric Institute

Utilization of Domestic Violence programs specified by age/sex/race

Alaska age specific frequency of alcohol related motor vehicle accidents

Alaska frequency of morbidity based upon Alaska Area Native Health Service inpatient and outpatient utilization statistics

Alaska race specific frequency of utilization of public assistance services

Alaska violent crime statistics

Alaska frequency and rates of morbidity based upon data collected through the 1981 Acute Care Facility Survey

Findings: The data analysis has identified the following health status problems by age, race and sex:

AGE GROUPS

0-1 --diseases of early infancy

1-4 --accidents

5-14 --accidents

15-24 --accidents
alcohol abuse
drug abuse
mental and emotional disorders
venereal disease
violence

25-34 --accidents
alcohol abuse
drug abuse
mental and emotional disorders
venereal disease
violence

35-44 --accidents
alcohol abuse

45-54 --alcohol abuse
malignant neoplasms

55-64 --heart disease and hypertension

65+ --heart disease and hypertension

RACE GROUPS

Native --accidents
alcohol abuse
mental and emotional disorders
otitis media
venereal disease

Non-Native --accidents
alcohol abuse
drug abuse
mental and emotional disorders

SEX GROUPS

Males --accidents
 alcohol abuse
 cancer
 diseases of early infancy
 drug abuse
 diseases of the heart
 mental and emotional disorders
 venereal disease

Females --mental and emotional disorders
 pregnancy and delivery
 rape/violence
 venereal disease

Not all health status problems can be thoroughly addressed, given the data currently available in the state. Detailed and quantitative information is not available regarding the interrelationship of health problems, such as the effect of poor nutrition upon heart disease and the consumption of alcohol upon Alaska suicides.

FOOTNOTES:

1. Henrick L. Blum, Planning for Health, Human Sciences Press, 1974, p. 93.
2. Anne Lanier, Thomas R. Bender, William J. Blot, Joseph F. Fraumeni, Jr. and Ward B. Hurlburt, "Cancer Incidence in Alaska Natives," International Journal of Cancer, 1976, Vol. 18, pp. 409-412.

