Chapter 7:
Mental and Behavioral Health

Mental health is an integral part of overall health. The World Health Organization defines mental health as "a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community." In many indigenous communities, however, the mental health of the community, rather than the individual, is central to the definition of health.[1]

Mental illness is the second leading cause of disability and premature mortality in the U.S.[2] The burden of disease is enormous, estimated to account for over 15% of the burden of disease in developed countries such as the U.S.—more than the disease burden caused by all cancers.[3] Unlike many chronic illnesses, mental illness tends to begin early in life, resulting in disability during the time when one normally would be the most productive. It is estimated that half of lifetime mental illness cases begin by age 14 years.[4] Like many other diseases, mental illness is strongly associated with socioeconomic factors such as income and education level, with significantly higher prevalence among those with lower education and income levels. It is also an area of health disparity between ethnic and racial groups. Nationally, the prevalence of mental disorders is similar for ethnic and racial minorities and whites; however, minorities are less likely to have access to and receive needed mental health services.[5]

7.1. Mental and Behavioral Health Statistics

7.1.1. Overall Mental Health

Assessing mental health at a population level presents significant challenges. One method of assessing overall mental health in a community is to ask survey respondents about how many days out of the past month their mental health was not good. In 2002–2008, compared with other communities in Alaska, adult NSB residents reported fewer than average mentally unhealthy days. The NSB had the second lowest average number of mentally unhealthy days in the state during this time period.[6] Iñupiaq cultural traditions, however, sometimes prevent open recognition and discussion of emotional suffering[7] and may result in both under-reporting and under-diagnosis. The high rates of suicide, domestic violence, and child maltreatment in the NSB also point to underlying community mental and behavioral health issues and support the likelihood of underreporting of problems such as depression, post-traumatic stress disorder, addiction, and other related mental health conditions perhaps not captured in these statistics.

Table 7.1: Mentally Unhealthy Days: Regional Comparison, 2002–2008: *"Number of days in the last month mental health was not good"*

	Average Number of Mentally Unhealthy Days	Sample Size	Error Margin
Lake and Peninsula	1.2	80	0.5–1.9
North Slope	1.5	231	0.9–2.0
Aleutians West	1.8	151	0.8–2.8
Northwest Arctic	1.9	283	1.2–2.7
Kodiak Island	2	529	1.5–2.4
Denali	2.2	143	1.3–3.2
Wrangell-Petersburg	2.2	271	1.4–3.0
Bristol Bay	2.4	68	1.0–3.9
Skagway-Hoonah-Angoon	2.4	137	1.5–3.3
Dillingham	2.5	223	1.5–3.5
Nome	2.5	390	1.8–3.1
Yukon-Koyukuk	2.5	325	1.8–3.2
Fairbanks North Star	2.8	2,849	2.6–3.1
Juneau	2.8	1,186	2.4–3.2
Bethel	2.9	638	2.1–3.6
Southeast Fairbanks	2.9	200	1.8–4.1
Haines	3	105	1.7–4.3
Anchorage	3.1	2,454	2.7–3.4
Wade Hampton	3.1	238	2.0–4.3
Kenai Peninsula	3.2	2,169	2.8–3.6
Prince of Wales-Outer Ketchikan	3.2	206	2.1–4.3
Sitka	3.2	323	2.3–4.1
Valdez-Cordova	3.3	399	2.4–4.2
Ketchikan Gateway	3.6	601	2.9–4.3
Matanuska-Susitna	3.7	735	2.9–4.6
Yakutat	3.7	69	1.4–6.0
Aleutians East	4.9	59	2.8–7.0

County Health Rankings. Data obtained from CDC BRFSS survey question: "Thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?" Respondents include non-institutionalized residents more than 18 years old with a land-line phone.

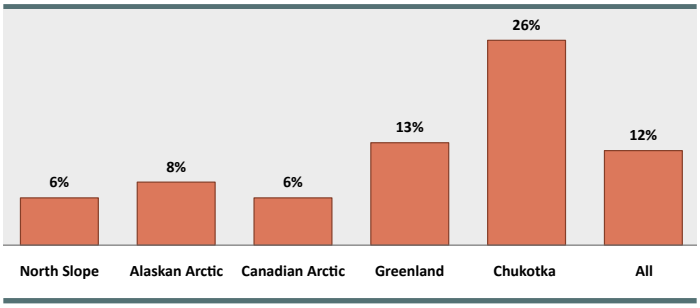
7.1.2. Depression and Anxiety

Depression is a common but complex mental illness, with both biological and environmental causes. Major depressive disorder, the most serious form of depression, is the leading cause of disability in the U.S. for ages 15–44 years. Roughly 14.8 million American adults, or about 6.7% of the U.S. population age 18 years and older, are affected by major depressive disorder in a given year. Depression often co-occurs with anxiety disorders, which affect an estimated 40 million adults, or 18.1% of the U.S. adult population, each year.[4]

7.1.2.1. Depression Among Adults

Limited data are available regarding adult depression in the NSB, and depression was not included in the 2010 NSB Census questionnaire for a variety of reasons. Based on a five-item screening scale used during the Survey of Living Conditions in the Arctic (SLiCA) study, investigators estimated the percentage of adult Iñupiat in the NSB who were most likely depressed at 6%.[8] Comparisons with Alaskan Iñupiat populations and other circumpolar indigenous communities are shown below.

Figure 7.1: Depression Among Circumpolar Indigenous Populations:
Percent of survey respondents with symptoms indicating high risk of depression



Data source: Poppel, 2007, SLICA results (includes Iñupiat/arctic indigenous residents aged 16 years and older).

According to study authors, differences of 10 percentage points or more between groups are likely to be significant.

Alaska region includes North Slope, Northwest Arctic Borough, and Bering Straits regions.

Whereas the questionnaire and survey methodologies vary considerably from Alaska BRFSS, the prevalence estimates from SLiCA are similar to statewide estimates for the prevalence of depression among Alaskan adults. According to the 2006 Alaska BRFSS, an estimated 6.7% of Alaskan adults currently have symptoms consistent with depression, 17.4% have ever been diagnosed with depression, and 12% have ever been diagnosed with anxiety during their lifetime.[9] There were no significant differences in current depression among racial groups; however, Alaska Natives and American Indians had the highest prevalence of current *symptoms* consistent with depression (10%) and the lowest rates of lifetime *diagnosis* of depression (10%), suggesting possible under-diagnosis in this group. Current depression rates did not vary significantly by geographic region, but higher rates of current depression were associated with female gender, household income less than $25,000, low educational level, unemployment and unmarried or divorced status, fair to poor physical health, low levels of social support, lack of leisure time physical activity, current smoking, and asthma. Obese Alaskans had a higher prevalence of anxiety over a lifetime than those who were not obese.[9]

7.1.2.2. Depression Among Youth

Depression symptoms are common during the teenage years. Based on 2005 Youth Risk Behavior Survey (YRBS) data for the NSB School District, more than one in four high school students have experienced symptoms possibly indicating depression during the last year.[10] The percentage of NSB high school students reporting depressive symptoms did not differ significantly from state or national estimates, however.

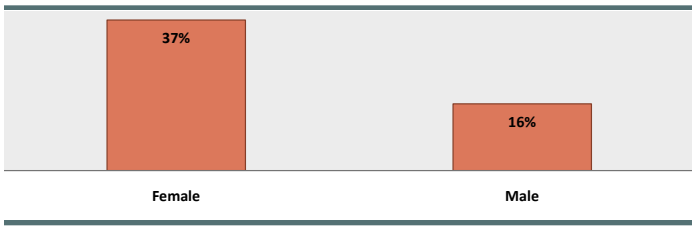
Figure 7.2: Depression Symptoms* Among High School Students

*Percent of students who ever felt so sad or hopeless almost every day for 2 weeks or more in a row that they stopped doing some usual activities during the past 12 months

Data source: 2005 and 2007 YRBS

High school girls reported symptoms of depression more than twice as often as boys. This pattern is similar to that seen statewide and nationally.[10]

Figure 7.3: Depression Symptoms* Among NSB High School Students, by Gender



*Percent of students who ever felt so sad or hopeless almost every day for 2 weeks or more in a row that they stopped doing some usual activities during the past 12 months

Data source: 2005 YRBS

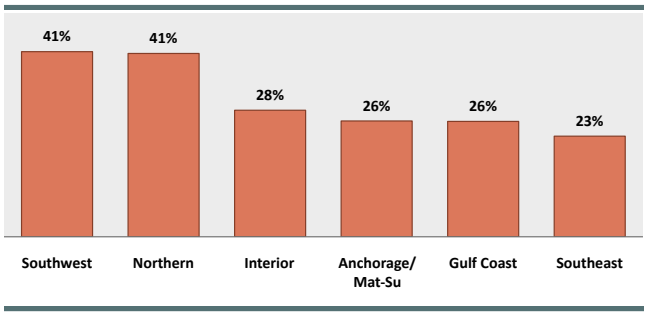
Mental health among Alaskan youth, and Alaska Native youth in particular, is of urgent concern because of the alarmingly high suicide rates in this group. Although reported rates of depression symptoms among Alaska Native high school students are similar to those among white students in Alaska and the U.S., the proportion of Alaska Native students who report actually having attempted suicide was twice the proportion of white Alaskan students in 2009.[10] The percentage of Alaska Native students who seriously considered attempting suicide during the past 12 months was also higher than the percentage of white students (17.2% and 12.5%, respectively), but this difference was not statistically significant.[10] Actual suicide rates among Alaskan youth, and among Alaska Native men in particular, are many times national averages, as discussed in Chapter 3: Injury. Available data on suicide in the NSB and Alaska are also discussed in Chapter 3: Injury.

7.1.2.3. Maternal Depression

Symptoms of depression are especially common during the weeks and months after delivery of an infant, and can range from mild and self-limited to severe and life-threatening. Maternal mental health, both during pregnancy and after delivery, affects families and can have long-term effects on children. For example, children of mothers experiencing mental health problems are at increased risk for attention deficit hyperactivity disorder (ADHD).[11]

In 2004–2008, 35.4% of the 70 NSB mothers participating in the PRAMS survey reported symptoms of postpartum depression. The prevalence of post-partum depression symptoms among NSB mothers was not significantly different from the prevalence among Alaskan mothers overall (27%) during this time period. In 2004–2007 PRAMS surveys, the northern (including the NSB, Northwest Arctic, and Nome regions) and southwest region of Alaska were the areas where post-partum mothers were the most likely to report symptoms of maternal depression.[11]

Figure 7.4: Maternal Depression Symptoms, by Region:
Percent of women (delivering a live infant) who reported symptoms of depression, 2004–2007 PRAMS data



Data source: Maternal Mental Health In Alaska, July 2, 2009 State of Alaska Epidemiology Bulletin analysis of PRAMS data.

Northern Region includes NSB, Northwest Arctic Borough, and Nome census area.

7.1.3. Severe and Persistent Mental Illness

Severe and persistent mental illness (SPMI) is profoundly disabling and resource-intensive. This category of mental illness includes a number of psychotic and non-psychotic mental illnesses that significantly impair an individual's ability to function independently in their community. Individuals with serious mental illness typically require specialized psychiatric services, case management, and frequently hospitalization or even institutional care. Individuals may experience these types of mental illness in combination with alcohol or substance abuse, further complicating their care.

Very few local data exist regarding prevalence of SPMI in small rural populations, particularly in Alaska. Using a statistical technique that applies national data to small local regions, it is estimated that roughly one in 20 (5.39%) NSB adults and one in 14 (7.36%) NSB youth may be in need of specialized mental health services for serious mental illness. These estimates are considered very conservative and likely underestimate the true need.[12] The NSB Integrated Behavioral Health Division recently transitioned to the electronic AKAIMS database and reporting system. This database may become a valuable source of population-level mental health information for the state of Alaska.

7.1.4. Alcohol and Substance Abuse

7.1.4.1. Alcohol and Drugs in the Home and Community

It has long been recognized that alcohol and drug use can have devastating effects on individuals, families, and communities. Alcohol is also implicated in many occurrences of interpersonal violence and injuries, as well as in the disintegration of family structure and well-being. Injuries and violence are particularly associated with "binge," or periodic, heavy drinking.

Drug use has been cited as a community health concern in NSB communities.[7,13] The trafficking and use of illegal drugs is linked to violent and non-violent crime, high-risk sexual behaviors, school failure, lost productivity, and other types of social pathology. Drug use during pregnancy can have particularly devastating effects of pregnancy outcomes.

Major efforts have been made in the NSB to combat the negative effects of alcohol in the community through local option laws banning local alcohol sales in Barrow and banning possession, sale, and importation of alcohol in the other North Slope villages. The NSB Health Department, Mayor's Office Healthy Communities Initiative, and other local organizations have also sponsored drug and alcohol prevention and treatment programs, sobriety walks, barbeques, concerts, and other community events, and by actively supporting a strong Inupiaq culture and value system.

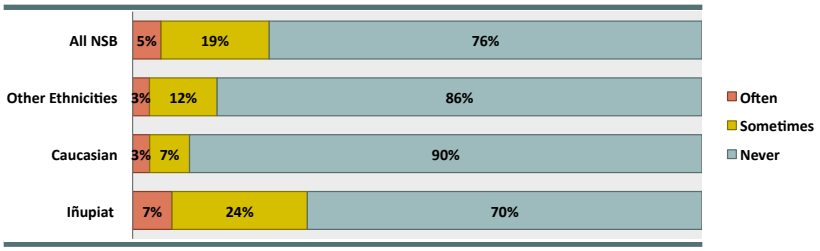
Drug and Alcohol Data from the 2010 NSB Census

In the 2010 NSB Census, household heads were asked about the effect of drugs and alcohol on the health of their household members and their community.

Impacts of Drugs and Alcohol on Household Members

A minority of household heads of all ethnic groups in the NSB thought that someone in their household had been hurt by alcohol or drugs in the past year. The response to this question did not vary significantly by age or gender; however, Iñupiat household heads were three times as likely as Caucasian and twice as likely as those in other ethnic groups to report that a household member had been hurt by alcohol or drugs.[14]

Figure 7.5: Household Impact of Drugs and Alcohol in the NSB, by Ethnic Group: *Percent of NSB household heads reporting that, in the past 12 months, a member of the household has been hurt by drugs or alcohol*



Data source: 2010 NSB Census.

Response to this question varied significantly by the household head's community of residence.

As a whole, compared with their counterparts living in Barrow, Iñupiat household heads in other villages were significantly less likely to believe that a household member had been hurt by alcohol or drugs.[14]

Table 7.2: Iñupiat Household Heads: Household Impact of Drugs and Alcohol, by Village: *Percent who felt that, in the last year, a household member had been hurt by the effects of alcohol or drugs*

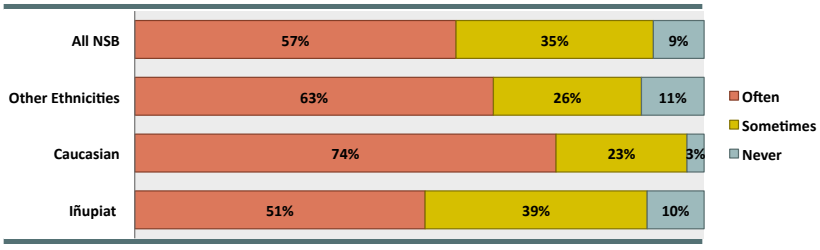
AKP	Atqasuk	Barrow	Kaktovik	Nuiqsut	Point Hope	Point Lay	Wainwright	Villages other than Barrow
24%	31%	35%	44%	28%	24%	16%	15%	25%

Data source: 2010 NSB Census
AKP=Anaktuvuk Pass

Impacts of Drugs and Alcohol on the Community

In the 2010 NSB Census, a large majority of NSB household heads reported believing that drugs or alcohol had affected the health of their community in the last year. About half of Iñupiat household heads thought that the health of their community had been hurt often by alcohol or drugs in the past year, compared with almost three of four Caucasian household heads who thought this was true. Female household heads were more likely than males to believe that drugs or alcohol had affected the health of their community, but the responses did not vary significantly by age.[14]

Figure 7.6: Community Impact of Drugs and Alcohol in the NSB: *Percent of NSB household heads reporting that, in the past 12 months, the health of the community has been hurt by drugs or alcohol*



Data source: 2010 NSB Census.

Among Iñupiat household heads, the response to this question varied significantly across the North Slope villages.

As a whole, those living in communities other than Barrow were significantly less likely than those living in Barrow to believe that the health of their community had "often" been hurt by alcohol or drugs in the past year.[14]

Table 7.3: Iñupiat Household Heads: Community Impact of Drugs and Alcohol, by Village: *Percent who felt that, in the last year, the health of their community had been hurt by alcohol or drugs*

	AKP	Atqasuk	Barrow	Kaktovik	Nuiqsut	Point Hope	Point Lay	Wainwright	Villages other than Barrow
NEVER	3%	28%	8%	14%	5%	11%	11%	13%	12%
SOMETIMES	41%	39%	36%	45%	48%	44%	49%	39%	43%
OFTEN	55%	33%	57%	41%	47%	45%	41%	49%	45%

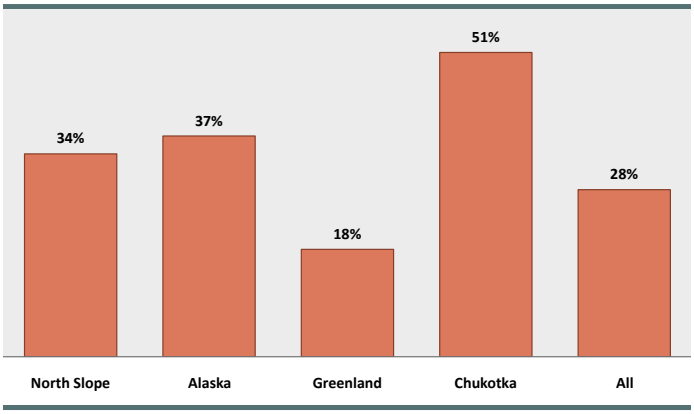
Data source: 2010 NSB Census

AKP=Anaktuvuk Pass

Alcohol or Drug Problems in the Home: Data from SLiCA

In the SLiCA study, indigenous survey participants in Greenland were the least likely to report alcohol or drug problems in the home currently, and those in Chukotka, Russia were the most likely. Iñupiat residents of the North Slope, the Northwest Arctic Borough, and the Bering Straits regions fell in between, with roughly one in three North Slope Iñupiat residents 16 years or older reporting current problems with drugs or alcohol in the home.[8]

Figure 7.7: Alcohol or Drug Problems in the Home: Circumpolar Indigenous Populations: *Percent of survey respondents who reported often or always experiencing alcohol or drug problems in the home today*



Data source: Poppel, 2007, SLICA results (includes Iñupiat/arctic indigenous residents aged 16 years and older).

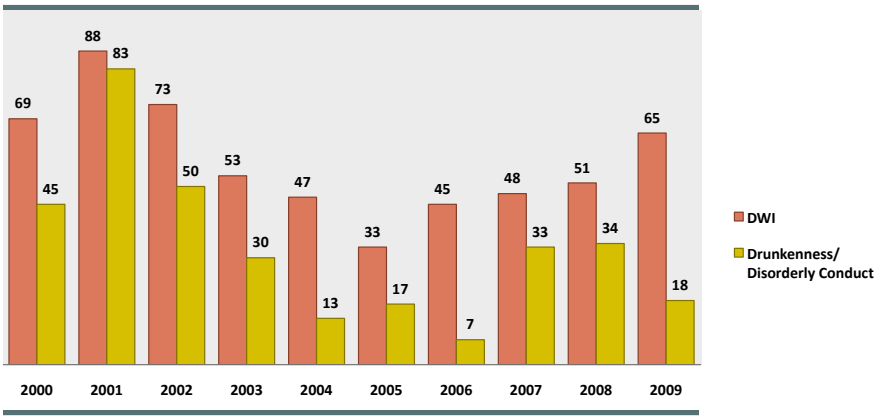
According to study authors, differences of 10 percentage points or more between groups are likely to be significant.

Alaska region includes North Slope, Northwest Arctic Borough, and Bering Straits regions (Iñupiat only). Data were not available for Canada for this question.

Alcohol-Related Arrests

Alcohol-related offenses fluctuate significantly from year to year in the Borough, as seen in Figure 7.8. Alcohol-related arrests are tracked nationally, but arrest-rate comparisons between different communities and regions are problematic because of the potential for many confounding factors.

Figure 7.8: Number of Alcohol-Related Offenses Reported Annually by the NSB Police Department



Public Safety Statewide Services, Crime Reported in Alaska, Annual Reports—Uniform Crime Reporting system.

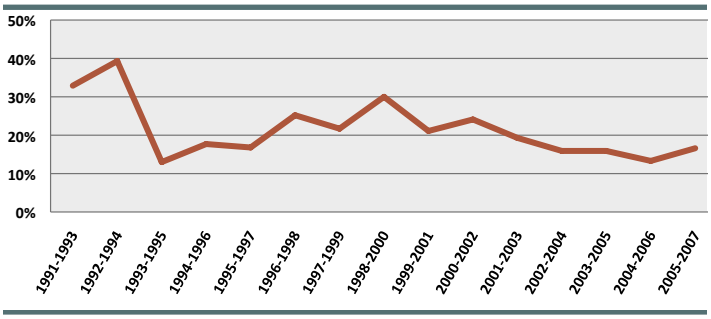
DWI=Driving While Intoxicated

7.1.4.2. Self-Reported Alcohol Consumption and Binge Drinking

Self-Reported Binge Drinking Among Adults

Self-reported binge drinking estimates based on the BRFSS survey fluctuate from year to year because of small sample sizes, but averaged roughly 16% among NSB adults between 2001 and 2007.[16]

Figure 7.9: Self-Reported Binge Drinking*: *Percent of NSB adults reporting binge drinking in the past 30 days, 1991–2007*



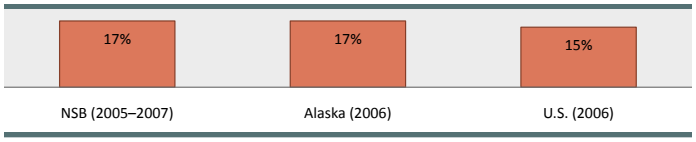
*Binge drinking is defined for men as having five or more drinks on one occasion; for women it is defined as having four or more drinks on one occasion.

NSB data source: Sub-regional analysis of Alaska BRFSS data provided by Alaska Department of Health and Social Services, Chronic Disease Prevention and Health Promotion, Division of Public Health.

NSB results are weighted according to the BRFSS rural region and not post-stratified to the NSB. Results are not age-adjusted.

The estimated rate of self-reported binge drinking among adults in the NSB in 2005–2007 was not significantly different from statewide or national estimates.[16]

Figure 7.10: Self-Reported Binge Drinking* Rate Comparison: *Percent of adults reporting binge drinking in the past 30 days, 2005–2007*



*Binge drinking is defined for men as having five or more drinks on one occasion; for women, it is defined as having four or more drinks on one occasion. U.S. and Alaska data source: Centers for Disease Control and Prevention (CDC) Behavioral Risk Factor Surveillance System (BRFSS).

NSB data source: Sub-regional analysis of Alaska BRFSS data provided by Alaska Department of Health and Social Services, Chronic Disease Prevention and Health Promotion, Division of Public Health.

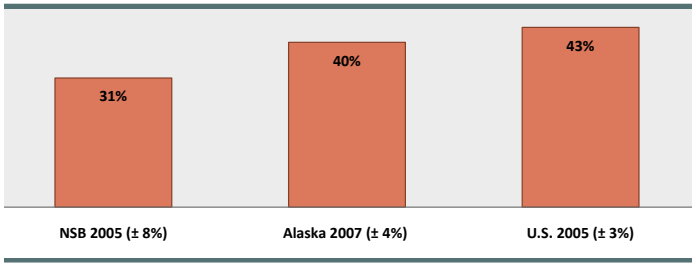
NSB results are weighted according to the BRFSS rural region and not post-stratified to the NSB. Results are not age-adjusted.

Alcohol Use and Binge Drinking Among Youth

Alcohol use is common among youth, both in the NSB and across the country. In 2005, 68% of NSB high school students reported having had at least one drink of alcohol in their lives. This estimate was not significantly different from state (2007) or national estimates (2005). About one-fifth of NSB high school students reported having had their first drink (more than a few sips) before age 13 years, again similar to state and national estimates.[10]

In 2005, slightly fewer than one-third of NSB high school students reported having at least one drink of alcohol in the last 30 days, significantly lower than the national estimate.[10]

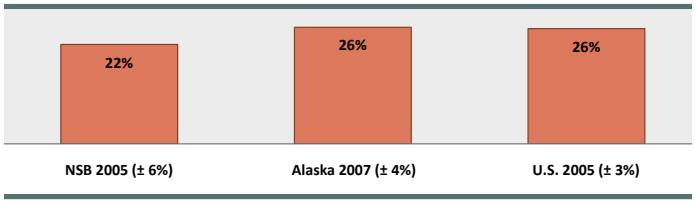
Figure 7.11: Self-Reported Alcohol Use Among High School Students: *Percent of students who had at least one drink of alcohol on one or more of the past 30 days*



Data source: 2005 and 2007 YRBS.

Binge drinking is a particularly dangerous form of alcohol use in adolescence and is a major contributing factor in unintentional injury, suicide, and assault, and unsafe sexual behavior. In 2005, slightly more than one in five NSB high school students reported having five or more drinks in a row in the last 30 days, not significantly different from state or national estimates. In the 2009 YRBS survey, the statewide estimates were not significantly different for Native vs. non-Native respondents, either for reported alcohol use in the last 30 days or for reported binge drinking.[10]

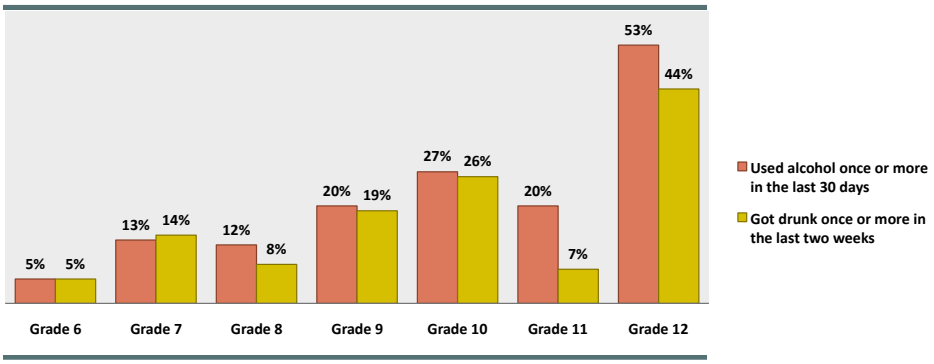
Figure 7.12: Self-Reported Binge Drinking Among High School Students: *Percent of students who had 5 or more drinks of alcohol in a row on one or more of the past 30 days*



Data source: 2005 and 2007 YRBS.

In a separate survey, the 2004 Developmental Youth Assets survey, more than half of high school seniors reporting using alcohol in the last 30 days, and heavy alcohol use, or "getting drunk," accounted for a large proportion of overall use in youth.[17]

Figure 7.13: Self-Reported Alcohol Use Among NSB Youth, by Grade Level



Data source: 2004 NSBSD Developmental Youth Assets survey.

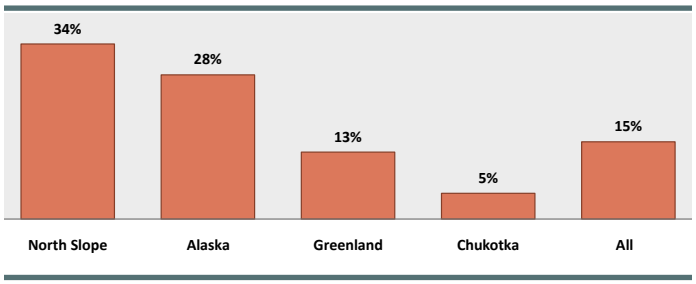
The single most common way that high school students reported obtaining alcohol was having it given to them by a person 18 years old or older. The most common place alcohol was drunk was at the home of another person.[10]

7.1.4.3. Self-Reported Drug Use

Self-Reported Drug Use Among Adults

Relatively few data are available regarding drug use among adults in the North Slope Borough. The 2004 SLiCA survey examined self-reported illegal and/or recreational drug use in the different arctic regions surveyed. In all regions, marijuana was by far the most commonly reported drug used. Fewer than 5% of survey respondents reported use of any other single illegal drug. The rate of self-reported marijuana use among Iñupiat adults in the NSB was roughly twice the overall rate among indigenous residents of the circumpolar regions surveyed.[8]

Figure 7.14: Self-Reported Marijuana Use Among Circumpolar Indigenous Populations



Data source: Poppel, 2007, SLICA Results (includes Inupiat/arctic indigenous residents aged 16 years and older).

According to study authors, differences of 10 percentage points or more between groups are likely to be significant.

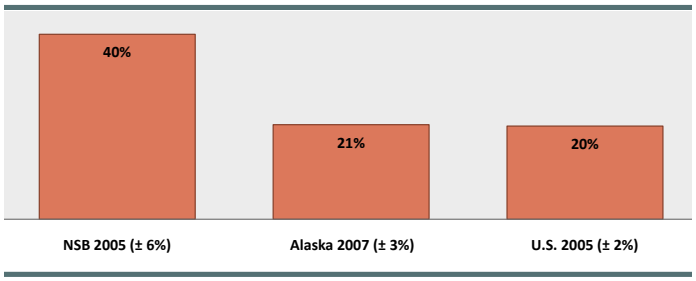
Alaska region includes North Slope, Northwest Arctic Borough, and Bering Straits regions (Iñupiat only). Data for Canada were not available for this question.

Adverse health effects of marijuana include problems with learning and memory as well as some evidence of an increased risk of anxiety and respiratory problems.[18] The illegal sale and non-therapeutic use of certain prescription drugs have also become a major public health concern nationwide. Data on the misuse of prescription drugs are not available for the NSB.

Self-Reported Drug Use Among Youth

Marijuana use is by far the most common illegal and/or recreational drug used by NSB high school students as well. According to the 2005 YRBS survey, reported marijuana use among NSB high school students was significantly higher than estimated use statewide and nationally.[10]

Figure 7.15: Self-Reported Marijuana Use Among High School Students: *Percent of students reporting that they used marijuana one or more times in the past 30 days*

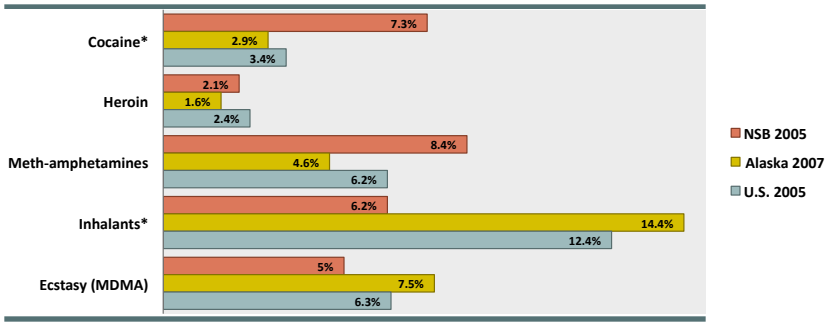


Data source: 2005 and 2007 YRBS.

Statewide, in 2009, a significantly higher proportion of Alaska Native high school students than white high school students (58% vs. 40%, respectively) reported using marijuana one or more times during their life, and this difference was also statistically significant.[10]

Among NSB high school students, reported use of drugs other than marijuana was considerably less common. Other than marijuana, methamphetamines were the most commonly reported illicit drug used by NSB high school students in 2005. Reported cocaine use among NSB high school students was significantly higher than state and national estimates, and reported inhalant use was significantly lower among NSB high school students than among students statewide and nationally.[10]

Figure 7.16: Lifetime Self-Reported Drug Use Among High School Students (Other Than Marijuana): *Percent of students reporting that they ever drugs, by type of drug*

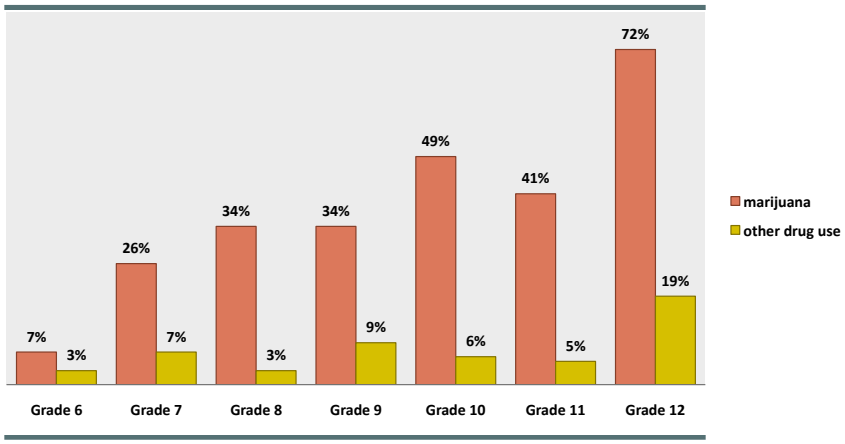


Data source: 2005 and 2007 YRBS.

*Indicates a statistically significant difference between NSB and statewide/national estimates.

Marijuana use increases with grade level but is not uncommon among younger NSB students, according to the 2004 Developmental Youth Assets Survey. Reported use of marijuana and other drugs occurs as young as 6th grade in a small minority of students.[17]

Figure 7.17: Self-Reported Drug Use Among NSB Youth, by Grade Level: *Percent of students reporting using drugs in the past 12 months, by type of drug*



Data source: 2004 NSB Developmental Youth Assets Survey

7.2. Determinants of Mental and Behavioral Health

Like physical health, mental health is determined by a complex interaction of social, psychological, biological, and environmental factors. Although mental illness can affect anyone, the risk of mental illness is higher among socioeconomically disadvantaged individuals, and those experiencing discrimination, violence, or poor physical health.[1]

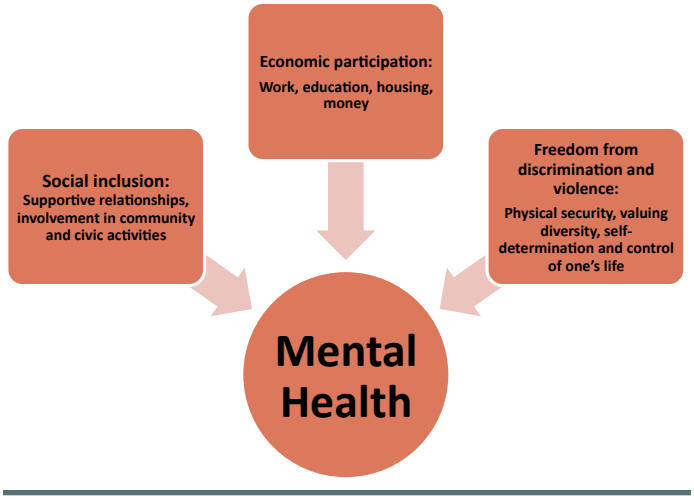
The communities of the North Slope have experienced rapid and significant changes in their social, cultural, economic, and physical environment, many of which are discussed in the Chapter 1: Determinants of Overall Health. These changes have undoubtedly affected mental health in important ways, although research is limited on the effects these changes have had on mental and behavioral health in the region.[19] In his 1998 book, *Circumpolar Inuit—Health of a Population in Transition*, Peter Bjerregaard describes some of the changes experienced by circumpolar Iñuit:

> During the last 40 years children have been brought up with values that were useful for hunters and hunter' wives living in small communities: independence, self-reliance, non-interference with other people's lives, and physical strength. As adolescents and adults they have had to cope with life…in a world that rewards formal education, language skills, and discussion instead of action. The great majority have adjusted admirably to the new situation, but for some the burden was too big. It has been posited…that…[w]hile the women were more or less able to continue their traditional roles as care-givers…the transition from hunter and sole breadwinner to wage-earner in a subordinate position or even unemployed was difficult for the men.[20]

Research in Northern Canadian indigenous regions has demonstrated that suicide rates are lower in communities that have taken active steps to preserve and rehabilitate their own cultures.[21] In the SLiCA study, investigators found that a higher level of participation in subsistence, satisfaction with the amount of fish and game, the sense of local control over the management of natural resources and local environmental problems, an income above poverty level, and full-time work at least part of the year are all associated with higher levels of satisfaction with life. Iñuit adults with higher levels of social support and who do not have alcohol problems in the home were also less likely to be depressed.[22] Strong cultural values, high levels of participation in traditional subsistence activities, a relatively advantageous local economic environment, and a successful history of self-determination may be imparting resiliency to North Slope community members during difficult times. The many local activities that increase social interaction and local laws that restrict access to alcohol are also likely benefiting mental health in the community.

A number of frameworks have been developed to elucidate the many factors that determine mental health, although these are not specific to arctic or indigenous communities. In general, factors that predict good mental health include social inclusion, economic participation, and freedom from discrimination and violence.[1]

Figure 7.18: The Social Determinants of Mental Health



Adapted from the determinants of mental health framework developed by the Victorian Health Promotion Foundation in Australia. [1]

Researchers have attempted to identify, based on the available evidence, the various individual risk and protective factors influencing mental health.[23] These factors are presented in Table 7.4.

Table 7.4: Social, Environmental, and Economic Determinants of Mental Health

Risk Factors	Protective Factors
Access to drugs and alcohol	Empowerment
Isolation and alienation	Ethnic minorities integration
Lack of education, transport, housing	Positive interpersonal interactions
Neighborhood disorganization	Social participation
Peer rejection	Social responsibility and tolerance
Poor social circumstances	Social services
Poor nutrition	Social support and community network
Poverty	
Racial injustice and discrimination	
Violence and delinquency	
War	
Work stress	
Unemployment	
Displacement	

Williams et al., 2005.[23]

Stressful life events are associated with poor mental health, and adverse experiences in childhood have an especially profound effect.[1] Common significant stressful events include such experiences as loss of a loved one, marital or relationship conflict, and financial problems. A personal history of physical or sexual abuse is a particularly strong predictor of mental health problems.[24,25]

The early childhood environment is a crucial determinant of mental health throughout the lifespan. Supportive family, school, and community environments can help individuals build resilience, buffering the effects of economic adversity, loss, discrimination, and other risk factors for poor mental health.[26]

Positive parenting and family functioning can moderate these risks by helping children to develop the underlying skills necessary to regulate emotions and manage problems.

Other factors such as spirituality and religious participation,[27] creative expression, and engagement with the natural world can promote mental health. Interaction with nature and the health of one's surrounding natural environment have been noted as important determinants of mental health.[28–31] Time spent in a natural environment can have both physical and mental health benefits for children in particular.[29] On the other hand, environmental degradation and disasters have significant negative effects on mental health. Communities affected by the Exxon Valdez oil spill were found to have an increased prevalence of anxiety and depressive disorders,[30] and adolescents living through a prolonged drought in Australia had lessened levels of mental well-being.

As with physical health, access to mental and behavioral health treatment services is an important determinant of mental health. In the North Slope, mental and behavioral health services are provided primarily by the NSB Health Department, as described in the Chapter 1: Determinants of Overall Health. Local Integrated Behavioral Health Division management have voiced concerns about a number of unmet behavioral health needs, including such problems as the current lack of an local inpatient alcohol and drug rehabilitation center, lack of sufficient staffing for overnight observation of patients who are at risk to themselves, and the need for a transitional housing and support program for youth returning home from off-slope substance abuse treatment programs. A statewide analysis of mental health prevalence and services in Alaska estimates that Northern communities (including the NSB, NWAB, and Bering Straits regions) have high unmet need for specialized mental health and substance abuse services among both adults and children.[32]

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