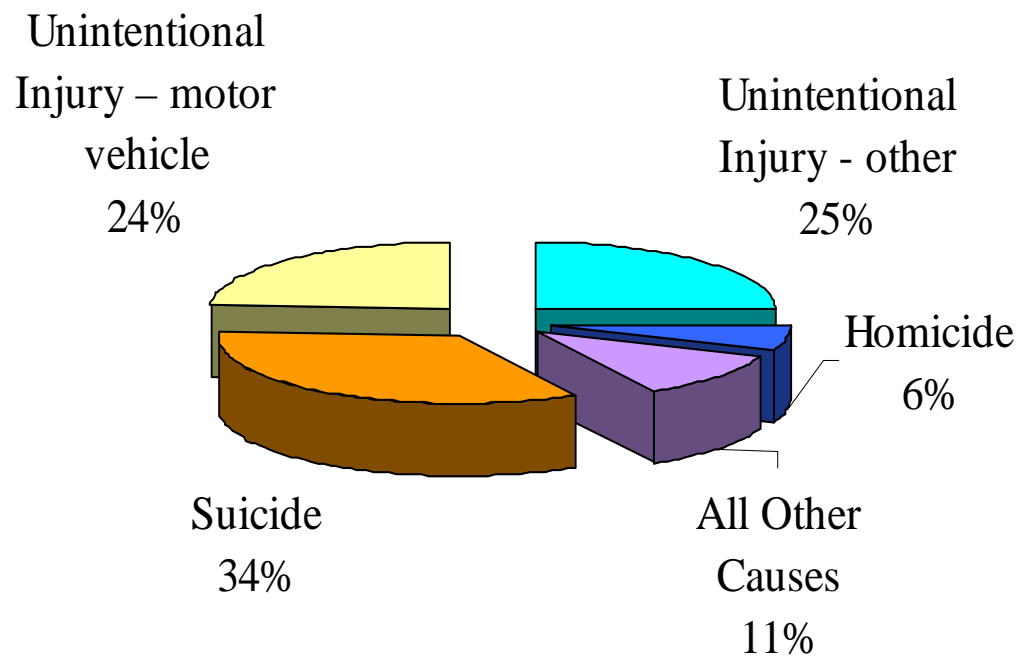
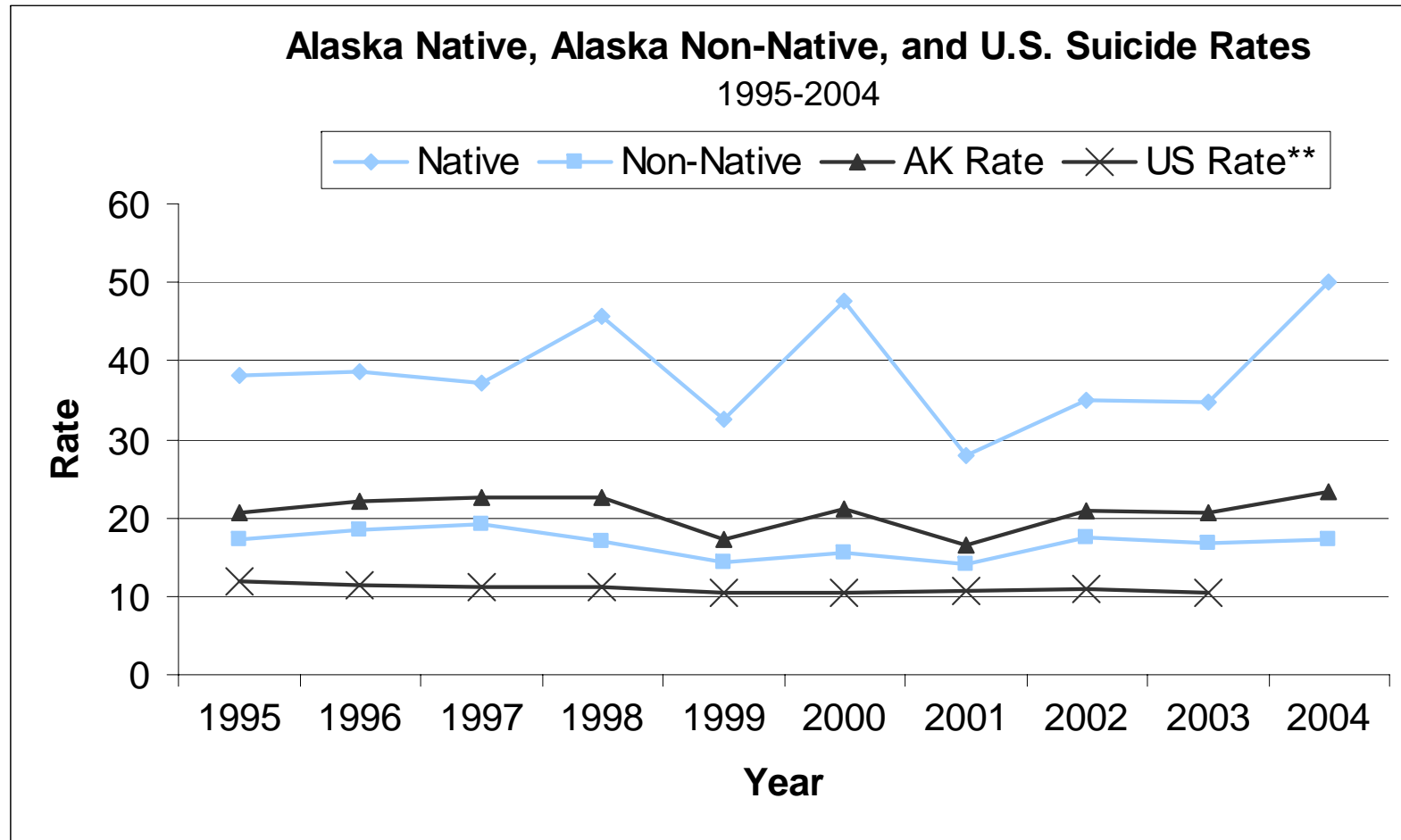

Serious Behavioral Health Conditions and Social Loss

Christy Willer
Division of Behavioral Health
August, 2006

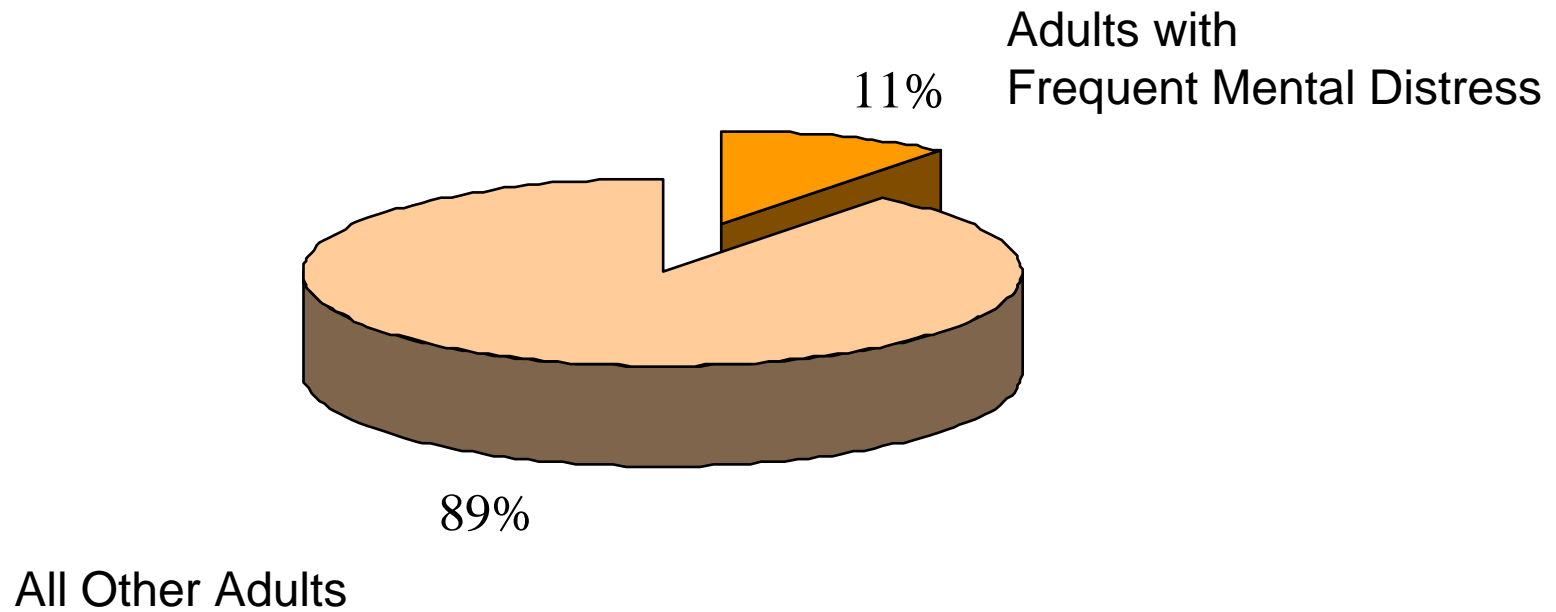
Percentage of Deaths by Cause Among Alaskans Aged 14-19 Years 1999-2001 (N=177)



Suicide Rates

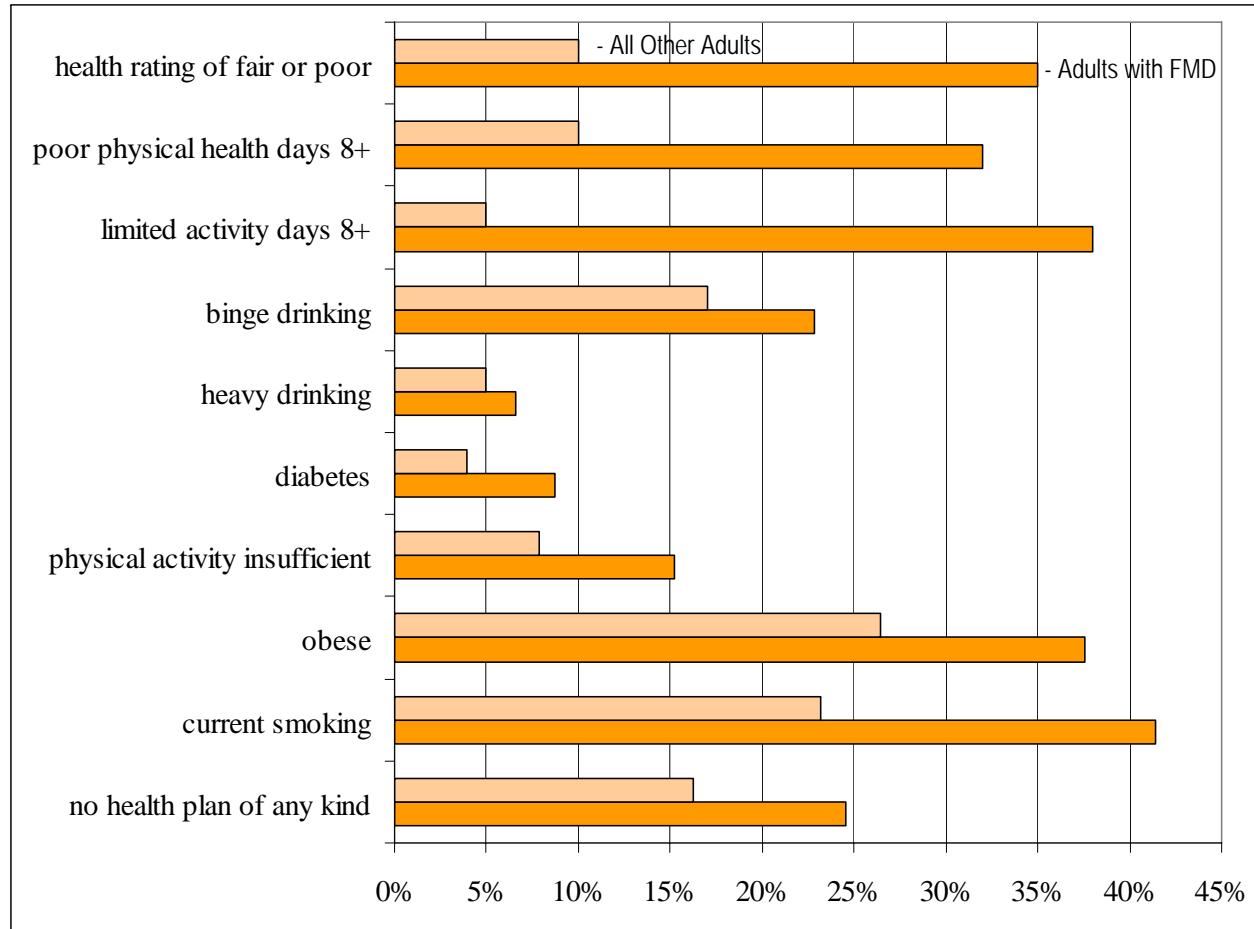


Comparing the Health Risk Behavior of Adults With Frequent Mental Distress vs All Other Adults

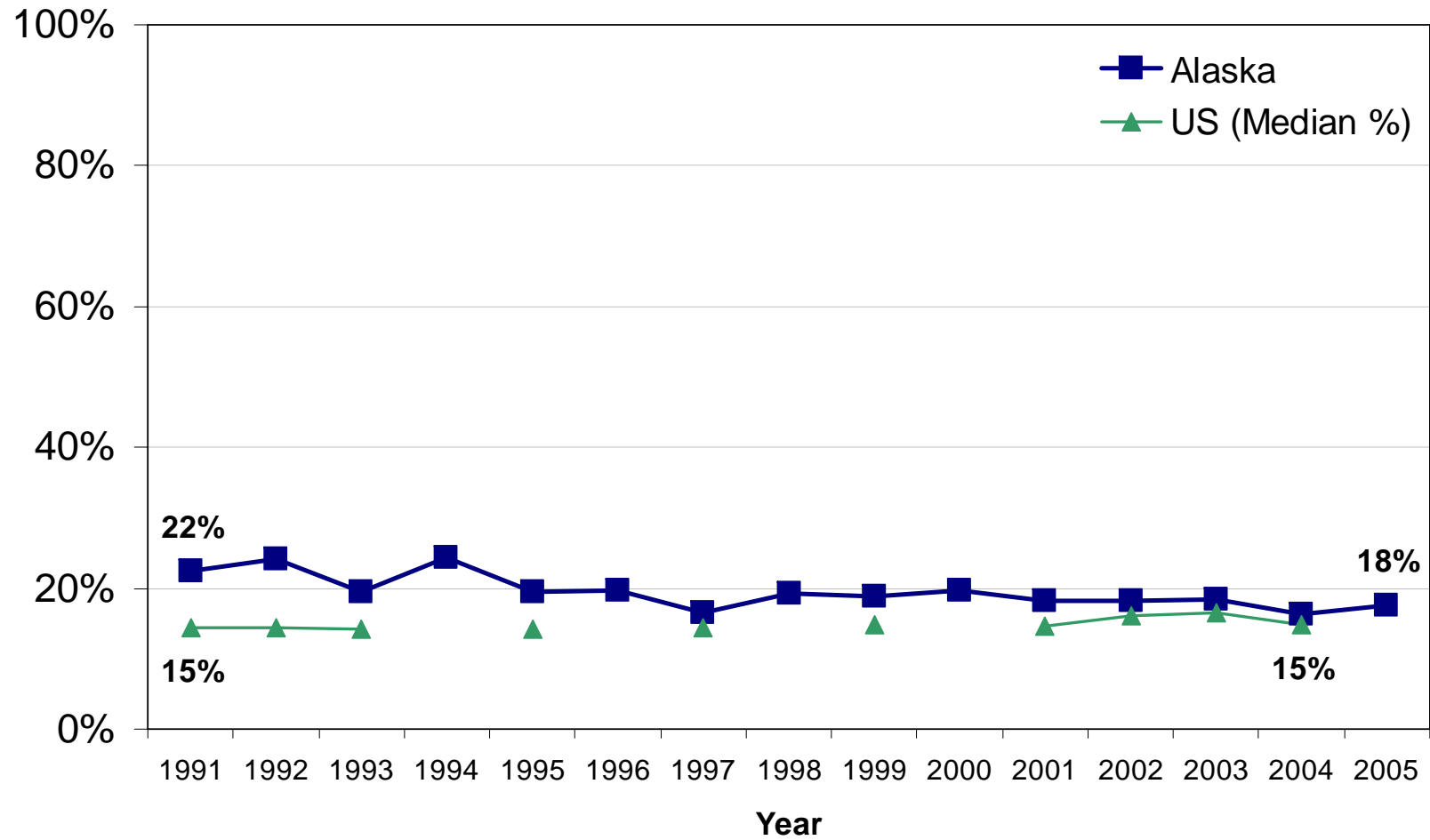


Comparing the Health Risk Behavior of Adults With Frequent Mental Distress vs All Other Adults

Percent of Adults with:



Binge Drinking: Alaska vs. Nationwide

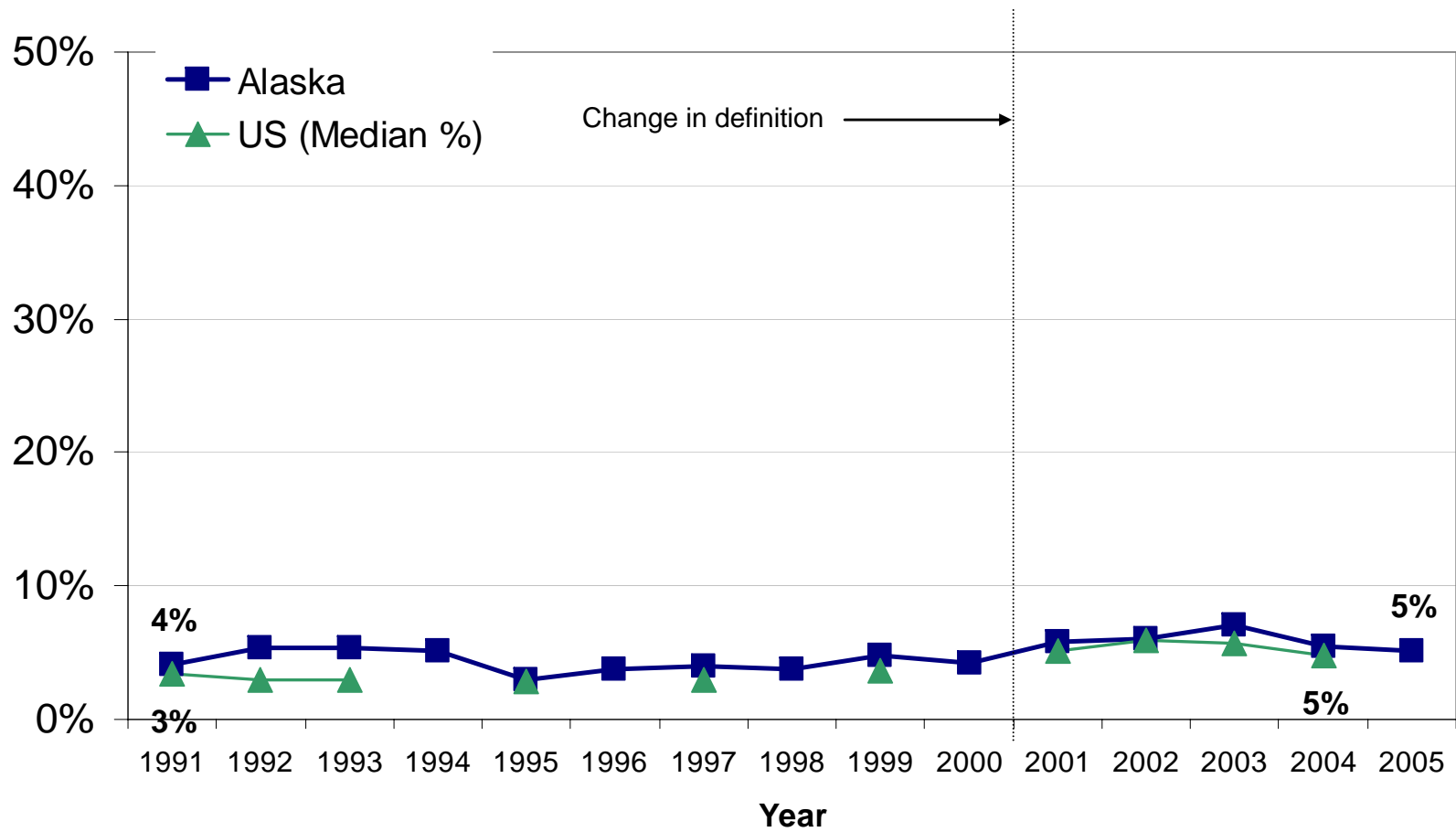


Indicator of Wildlife in Alaska

Fin of Humpback Whale



Heavy/Chronic Drinking: Alaska vs. Nationwide



State of Alaska Behavioral Health Prevalence Framework

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Prevalence data may be used in many ways and may address many populations. This presentation describes a presentation by the Alaska Division of Behavioral Health to a State Senate Committee. The intent was to provide prevalence estimates and show social costs for individuals with serious disorders. Data from multiple sources were used including the Behavioral Health Risk Factor Surveillance System (BRFSS).

Serious disorders included mental health and substance use. One might question the focus on the population with serious disorders. The intent was not to exclude other components of public health including health promotion, prevention and early intervention, and other disorders but to focus on the more severe conditions with the most apparent social costs. These were viewed as being of most interest to the legislators. Five populations were targeted for the report, individuals with:

- 1) serious mental conditions
- 2) substance use disorders
- 3) hospital emergency departments use
- 4) Fetal Alcohol Syndrome Disorders at birth
- 5) Traumatic Brain Injury

The performance indicators in this handout were a reference document for the actual presentation to the Senate Committee in August, 2006. The actual presentation was limited to six key data points by Cristy Willer, the Director of the Division at the time. These six indicators comprise the overheads for the presentation. Legislators (and now you) can reference the written document as interested.

Collecting performance data for this report was part of a larger project. The Division had integrated two Divisions (Mental Health and Substance Abuse) and was ready to develop performance indicators. The new Division of Behavioral Health contracted with WICHE to support the project. The first few months entailed gathering information including special studies conducted in the State and prevalence data available. Performance indicators in this handout came from that information.

The handout starts by providing data on the proportion of individuals with serious disorders for each of the population targeted. It focuses on the household population with little prevalence data specifically on other populations, such as homelessness. Both absolute and relative figures are presented. Some prevalence data are better for absolute counts and others are better for providing relative counts. For example, findings from the

national epidemiology studies are the gold standard for absolute figures on individuals with disorders in the household population, while figures from the BRFSS and the NSDUH are (arguably) more useful for making relative comparisons and showing trends.

The report goes on to paint a picture of social costs with broad brush-strokes. Data were taken from multiple sources showing indicators of social loss around productivity loss, health care, criminal justice and protective services, traffic crashes and public assistance. (References not listed directly in the document are shown on the last page.)

Indicators from the BRFSS are of particular interest in associating targeted populations with chronic health problems and health risk behaviors. Adults with 14 or more mentally unhealthy days are categorized as having Frequent Mental Distress (FMD). Adults with FMD rate their health dramatically poorer than all other adults. They also report more chronic health problems (e.g., diabetes) and health risk behaviors (e.g., current smoking).

As an aside it may be of interest that questions from the BRFSS have been included in MHSIP consumer surveys in two states including a question on physically unhealthy days and a question on mentally unhealthy days. Adult consumers indicated more than twice as many physically unhealthy days and more than three times as many mentally unhealthy days as adults in the general population.¹ Healthy days were positively correlated with MHSIP domain scores, especially the outcome domain, and with no longer receiving services.

The prevalence data reported to the Senate Committee have been incorporated into subsequent planning for the Division and presented to an advisory board in this context:

Existing Need: Indicators of serious behavioral health conditions and social loss and cost
State of Alaska's response to these problems
Outcomes of doing business well
Division of Behavioral Health: 07 Priorities

The Division is planning on using more specific prevalence estimates for use in planning. Synthetic prevalence estimates will allow generation of penetration rates and estimates of (un)met need within the state. Synthetic prevalence rates for individuals with serious mental disorders have been generated by an epidemiologist for several years.² Synthetic rates apply rates from national epidemiologic surveys to current Census data. These rates have been used by 8 of the 15 western states.³ The new set includes rates for substance use disorders and the overlap with serious mental disorders. The rates are useful in providing estimates for geographic and demographic groups within the state. The State of Alaska is working with the epidemiologist to consider adjusting synthetic rates with prevalence rates generated within state.

¹ McGee, C., Press, A., Smith, M. Consumer Health Related Quality of Life of Life (HRQOL). Presentation at the 2003 National Conference on Mental Health Statistics.

South Dakota Mental Health Statistics Improvement Program. Year 2004 Report: What Do Consumers Say About Mental Health Services.

² Holzer, C. University of Texas Medical Branch. http://psy.utmb.edu/estimation/index.htm/us_index.htm

³ McGee, C. Benefits of Using Prevalence Estimates in Penetration Rates. Presented at the National MHSIP Conference, May 29, 2002.

Serious Behavioral Health Conditions and Social Loss

The prevalence of serious behavioral health conditions is shown in the table below. Figures in bold were from the most rigorous study conducted specifically for the purpose. Other figures were from special studies or routine surveys whose design included some measure approximating a serious behavioral health condition. They are useful to make relative comparisons with the general population and the U.S.

| | U.S. | AK |
|--|-------------|-------------|
| A. Adults with serious mental conditions in a year ⁴ | 5.4% | 5.9% |
| Youths with serious emotional disturbances in a year | 5%-9% | 7.2% |
| Frequent Mental Distress (percent of population ages 18+) ⁵ | 10.4% | 10.9% |
| Serious psychological distress (ages 12+) ⁶ | 9.6% | 8.8% |
| Adolescent suicide attempts requiring medical attention | 2.6% | 2.7% |
| Adolescent suicide attempts Alaskan Native | | 4.1% |
| <i>Suicide rate (deaths per 100,000 population)</i> US 10.6; AK 17.2 | | |
| <i>Suicide rate</i> Alaskan Native | | 32.6 |
| B. Adults with substance use disorders ⁷ | 6.4% | |
| Dependence on or Abuse of Any Illicit Drug or Alcohol (ages 12+) ⁸ | 9.2% | 9.7% |
| <i>Drug induced deaths (per 100,000)</i> US 6.8 AK 7.5 | | |
| <i>Drug induced deaths</i> Alaskan Native | | 9.4 |
| <i>Cirrhosis deaths (deaths per 100,000 persons)</i> US 9.6 AK 10.3 | | |
| <i>Cirrhosis deaths</i> Alaskan Native | | 18.7 |
| C. The psychiatric rate in hospital emergency departments in the U.S. is approximately 3%. | | |
| D. Fetal Alcohol Syndrome Disorders are estimated at 10 cases per 1,000 live births nationally. Alcohol related effects closely associated with FASD in Alaska occurred in 16.3 cases per 1,000 live births. (Note the indirect comparison). | | |
| E. Traumatic Brain Injury results in inability to perform activities of daily living in about 2% of the U.S. population. There were 459 nonfatal TBI hospitalization cases in Alaska 1998. | | |

People are resilient and those with serious behavioral health conditions can and do recover, however the quality of life for all of them, their families and friends is harmed in ways that are impossible to assess. Additional social loss includes productivity loss, health care, criminal justice and protective services, traffic crashes and public assistance. The following sections document some social costs for individuals with serious behavioral health conditions.

⁴ National Comorbidity Survey (NCS) for U.S. data. Mental Health U.S. Kessler et al., 1996.

⁵ Behavioral Risk Factor Surveillance System. <http://apps.nccd.cdc.gov/HRQOL/>

⁶ 2004 National Survey of Drug Use and Health (NSDUH). <http://oas.samhsa.gov/2k4State/AppB.htm>

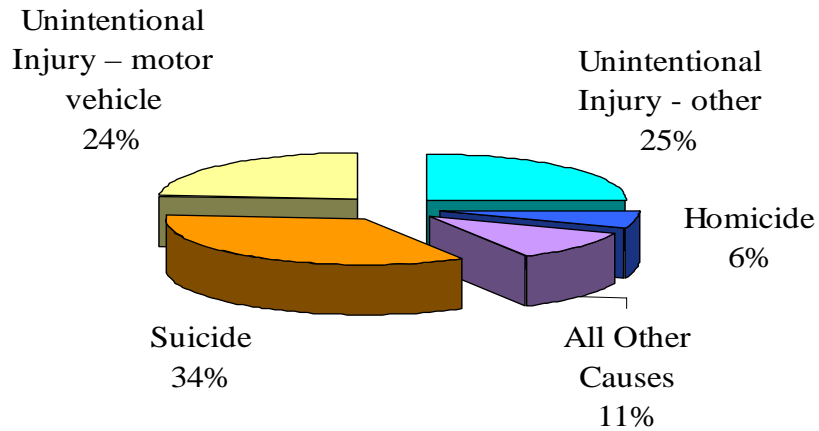
⁷ NCS

⁸ NSDUH

A. Several indicators document social losses for individuals with serious mental conditions: youths with major depression; suicide; health risk behaviors for adults with frequent mental distress; and short engagements with the criminal justice system for non-violent offenses.

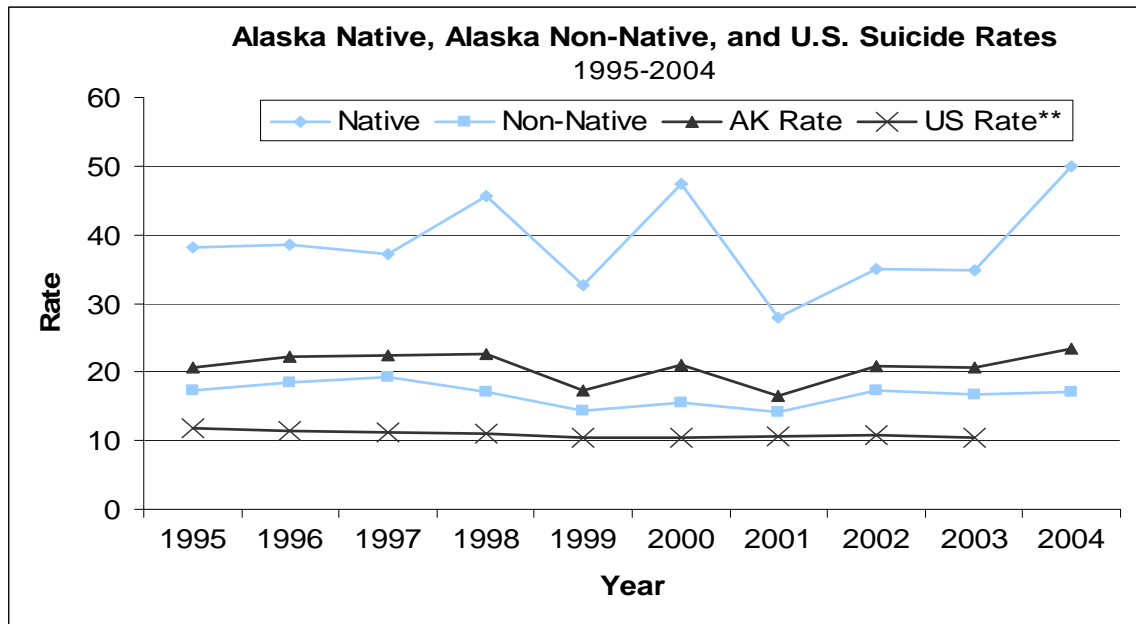
Among youths aged 12 to 17 nationwide, about 9 percent had experienced a major depressive episode in their lifetime and thought, during their worst or most recent episode, that it would be better if they were dead. Over 7 percent, an estimated 1.8 million youths, thought about killing themselves at the time of their worst or most recent episode. Some of them succeeded.

Percentage of Deaths by Cause Alaskans Aged 14-19 Years 1999-2001 (N=177)

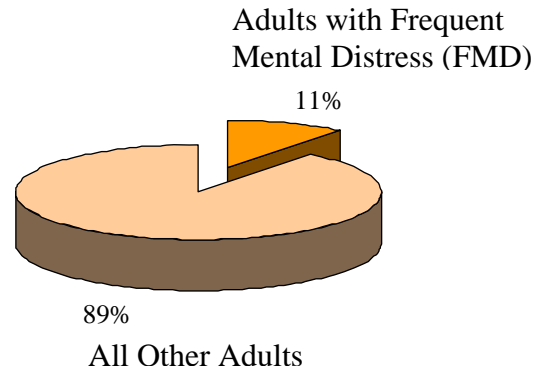


Source: National Center for Health Statistics (NCHS), Vital Statistics System

The suicide rate for all Alaskans has been higher than the U.S. rate for a decade. The rate for Alaska Natives is particularly high. The following chart compares the suicide rates for these groups.

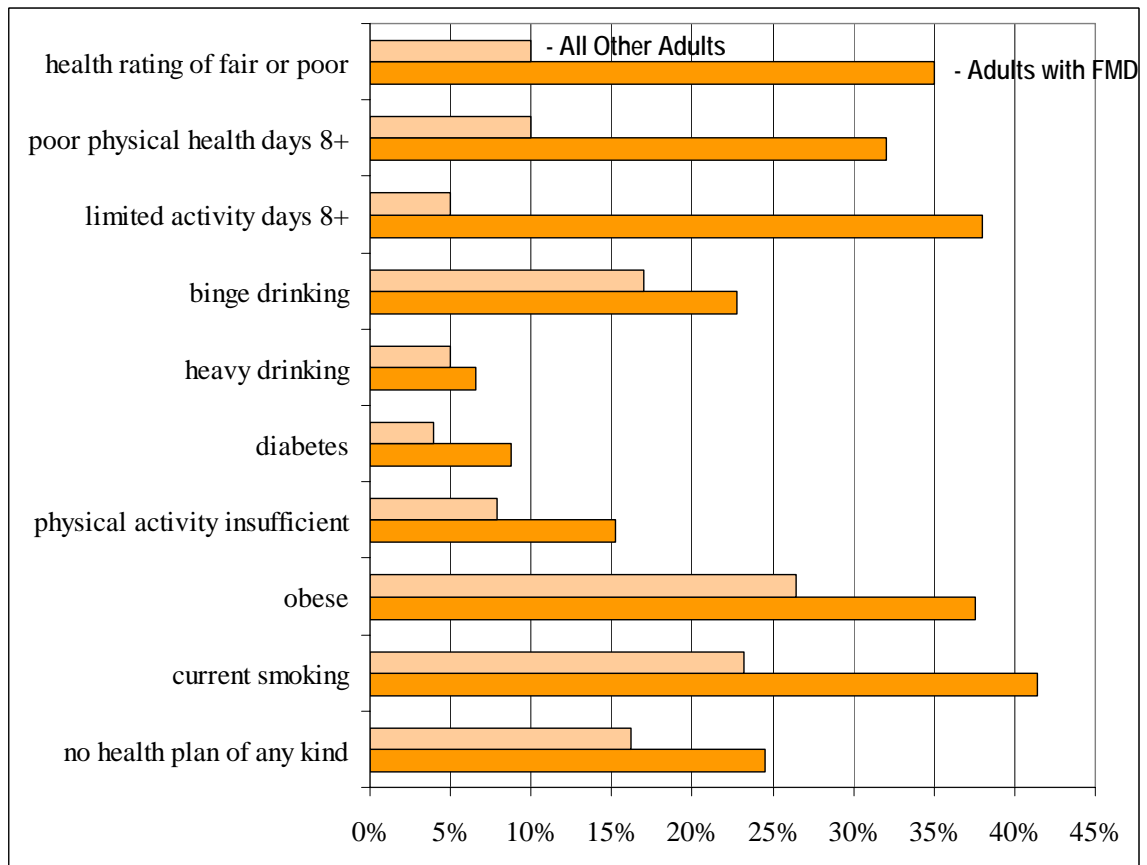


Alaskan adults with Frequent Mental Distress (14 or more mentally unhealthy days in the past 30 days) have dramatically poorer health and more health risk behaviors than other adults. The poor health leads to high health costs for these adults who have less health care coverage of any kind. American Indians and Alaskan Natives have higher rates of Frequent Mental Distress than Whites.



Comparing the Health Risk Behavior of Adults With Frequent Mental Distress vs All Other Adults

Percent of Adults with:



Frequent Mental Distress is defined as adults with 14 or more mentally unhealthy days in the past 30. Data were taken from the 2004 Behavioral Risk Factor Survey (N = 2,769)

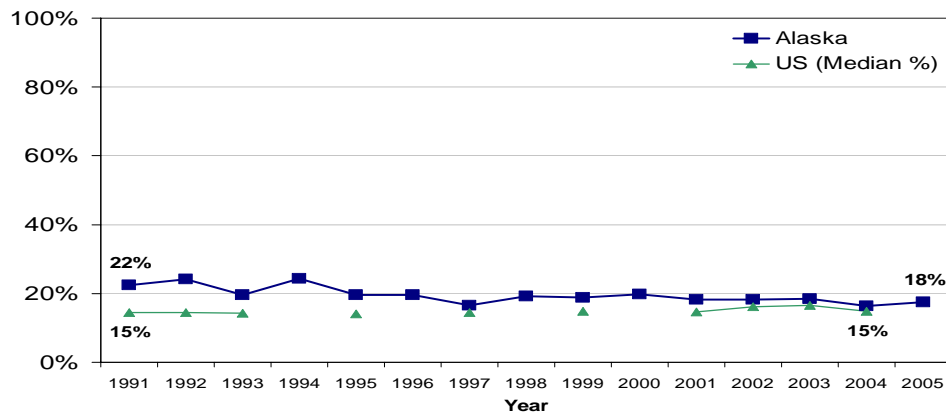
The correctional system in Alaska admitted 2,664 persons with a mental health record in 2004. This represented 11.5% of all persons admitted. National studies indicate from 10% to 16% of jail admissions as individuals with mental illness. Most mentally ill offenders were admitted for non-violent offenses and did not stay long in the system.

- B. Four indicators document social losses for individuals with substance use disorders: marijuana use among Alaska Natives; deaths related to alcohol; economic costs of alcohol and other drugs; and protective holds in the correctional system.

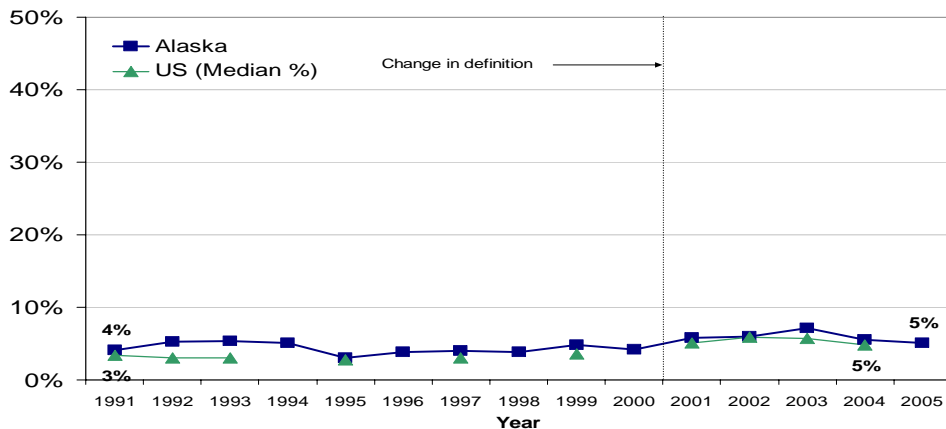
Alaska Native High School Students had a significantly higher rate of lifetime marijuana use compared with Non-Alaska Natives (70% vs 42% in 2003 YRBS).

Excessive alcohol intake is related to 4 of the 10 leading causes of death in the United States - liver cirrhosis, motor vehicle deaths and other accidents, suicides and homicides. Indicators of excessive alcohol intake include binge and heavy drinking. The nationwide prevalence of binge drinking has remained below Alaska's rate throughout the 1991-2005 reporting period.

Binge Drinking: Alaska vs. Nationwide



Heavy/Chronic Drinking: Alaska vs. Nationwide



The economic costs of alcohol and other drug abuse in Alaska have been thoroughly documented in a 2005 McDowell Group report:

- \$367 million from productivity losses
- \$154 million from criminal justice and protective services
- \$178 million from health care
- \$35 million from traffic crashes
- \$4 million from public assistance

The correctional system in Alaska admitted 1,700 persons under a Title 47 Hold in 2004 (7.3% of persons admitted). These are admissions for persons with non-criminal protective holds, primarily persons in danger from alcohol, from whom no effective diversion alternative exists. Almost 9% of these admissions were admitted four or more times during 2004; the great majority were Native Alaskan.

- C. Individuals needing emergency psychiatric services are among Division priority populations for services. Many have acute instead of serious mental conditions. One of the most costly services involves hospital emergency departments.
- D. Fetal Alcohol Spectrum Disorders are caused by prenatal exposure to alcohol. This exposure can cause specific birth defects which may include physical, mental, behavioral, and learning disabilities. Many children with fetal alcohol disorders are not identified until they reach school age or later. Individuals with alcohol-related effects may have difficulties with attention, memory, and problem solving. Heart, liver, and kidney defects are also common, as well as vision and hearing problems.
- E. Traumatic Brain Injury (TBI) contributes to a substantial number of deaths and cases of permanent disability annually. Each year, an estimated 1.5 million Americans sustain a TBI; 50,000 die from these injuries; and 80,000 to 90,000 experience onset of long-term disability. An estimated 5.3 million Americans live with a permanent TBI-related disability today.

Even mild traumatic brain injury is a public health problem of large magnitude. Many people with mild traumatic brain injury have difficulty returning to routine, daily activities and may be unable to return to work for many weeks or months

| | | |
|---------------------------------------|-------|-------|
| | USA | AK |
| Any Tobacco Product Use in Past Month | 29.5% | 29.6% |

Source for data not otherwise documented:

Page 1.

- A. Youths with serious emotional disturbances in a year:
 - Prevalence of Serious Emotional Disturbance in Children and Adolescents. Friedman et al. In Mental Health United States 1996.
 - Suicide attempts and rates:
 - Healthy Alaskans 2005. Chapter 5 Mental Health, page 2.
- B. *Drug induced deaths; cirrhosis deaths:*
 - Healthy Alaskans 2005. Chapter Substance Abuse, page 2.
- C. The psychiatric rate in hospital emergency departments:
 - McCaig, L. F., & Ly, N. (2002). Published in the Journal of Consulting and Clinical Psychology. 2005, 73(1) pages 116–126. Race Disparities in Psychiatric Rates in Emergency Departments. Kunen et al. <http://www.apa.org/journals/releases/ccp731116.pdf>
- D. Fetal Alcohol Syndrome Disorders estimates:
 - McDowell Group, Economic Costs of Alcohol and Other Drug Abuse in Alaska, 2005 Update. December 2005. Page 36.
- E. Traumatic Brain Injury estimates:
 - National Center for Injury Prevention and Control. CDC website Overview, August 23, 2006 <http://www.cdc.gov/ncipc/tbi/Overview.htm>

Pages 2-6

- A. Youths with major depressive episodes:
 - Results from the 2004 National Survey on Drug Use and Health: National Findings REVISIONS AS OF 9/8/2005
<http://www.oas.samhsa.gov/NSDUH/2k4NSDUH/2k4results/2k4results.htm#7.1>
 - Suicide rate for Alaskans:
 - Annual Report to the Legislature: 2006. Statewide Suicide Prevention Council.
www.hss.state.ak.us/suicideprevention
 - Frequent Mental Distress:
 - 2004 Behavioral Risk Factor Survey. State of Alaska, Department of Health and Social Services. Special analysis from the BRFSS Coordinator conducted August, 2006.
 - Correctional data
 - Analysis of Alaska Department of Corrections Databases to Identify Mentally Ill Offenders. Technical Assistance Team, Dr. Tony Fabelo, Angie Gunter. The JFA Institute, Austin, Texas Office. May 2005
- B. Student marijuana usage:
 - Alaska Youth Risk Behavior Survey, 2003. State of Alaska, Department of Health and Social Services. A Joint Project Between the DHHS and the Alaska Department of Education & Early Development
 - Alcohol related to leading causes of death
 - Behavioral Risk Factor Survey, State of Alaska, Department of Health and Social Services, Chronic Disease Prevention website
<http://www.hss.state.ak.us/dph/chronic/hsl/brfss/risks/alcohol.htm>
 - Binge Drinking and Heavy Drinking charts
 - Behavioral Risk Factor Survey, 2004/2005 Annual Report
 - Economic costs of alcohol and other drug abuse:
 - McDowell Group report, 2005 *ibid*
 - Correctional system:
 - Analysis of Alaska Department of Corrections Databases, 2005 *ibid*.
- D. Fetal Alcohol Spectrum Disorders: Economic Costs of Alcohol and, 2005 *ibid*.
- E. Traumatic Brain Injury: CDC National Center for Injury Prevention and Control website
<http://www.cdc.gov/ncipc/tbi/Overview.htm>