



## Epidemiologic Profile of American Indian/Alaska Native Suicide in Three Northwest States

CDR Thomas Weiser, MD, MPH  
Medical Epidemiologist  
Portland Area Indian Health Service  
Suicide Prevention Task Force  
April 14, 2008

### Definition

- **Suicide** is defined by the Institute of Medicine as “a fatal self-inflicted destructive act with explicit or inferred intent to die”
- **Suicide** is classified on death certificates by medical examiners based on investigation of the circumstances of death



## Nationwide

### Age-Adjusted Suicide Rates\* Youth Aged 15-24 United States, 2000–2005

AI/AN	White	Black
18.69	10.65	7.11

\*Rate=deaths/100,000 population per year

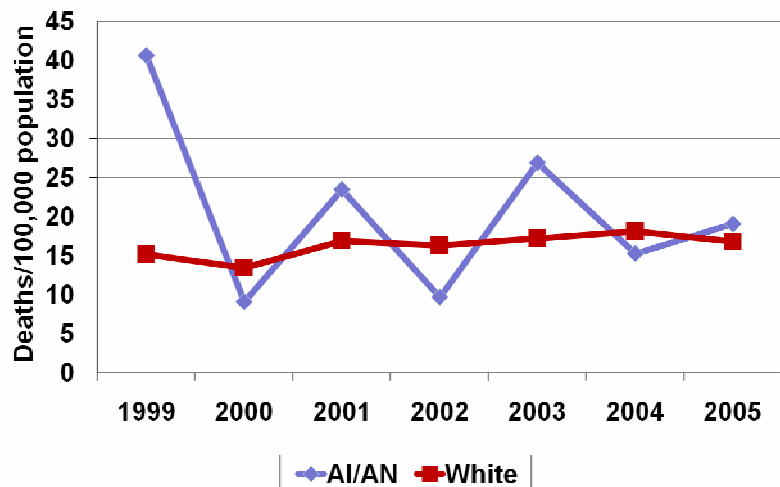
## Nationwide

### 10 Leading Causes of Death for AI/AN Youth Age 15-24, United States, 2005

Rank	Cause
1	Unintentional Injury
2	Suicide
3	Homicide
4	Malignant Neoplasms
5	Heart Disease
6	Diabetes Mellitus
7	Liver Disease
8	Septicemia
9	(Three causes tied)
10	(Three causes tied)

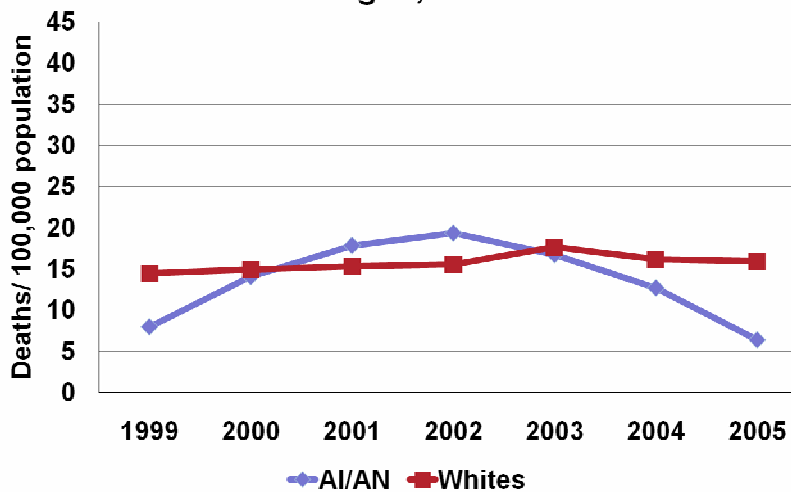
# Idaho

## Age-adjusted Suicide Rates Idaho, 1999-2005



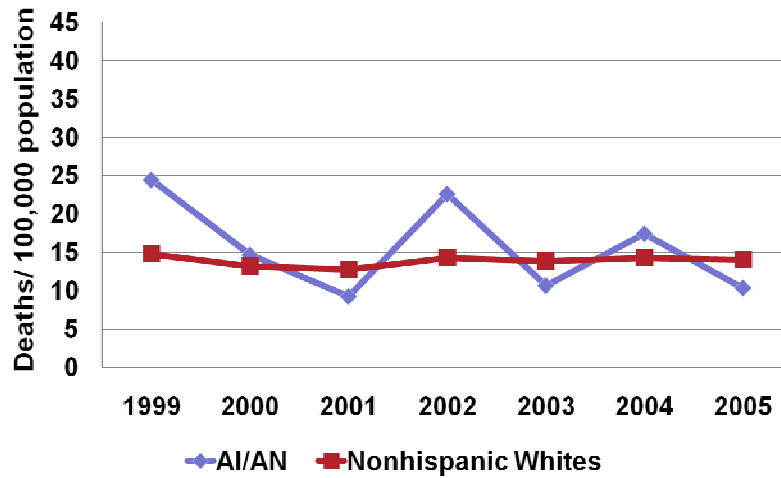
# Oregon

## Age-adjusted Suicide Rates Oregon, 1999-2005



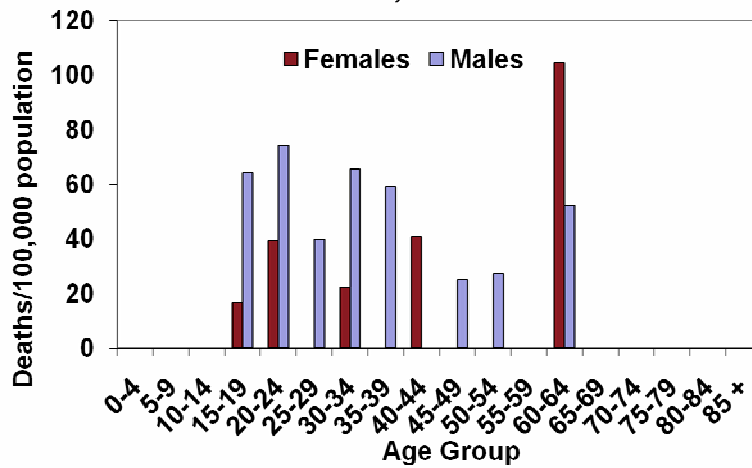
# Washington

Age-adjusted Suicide Rates  
Washington, 1999-2005



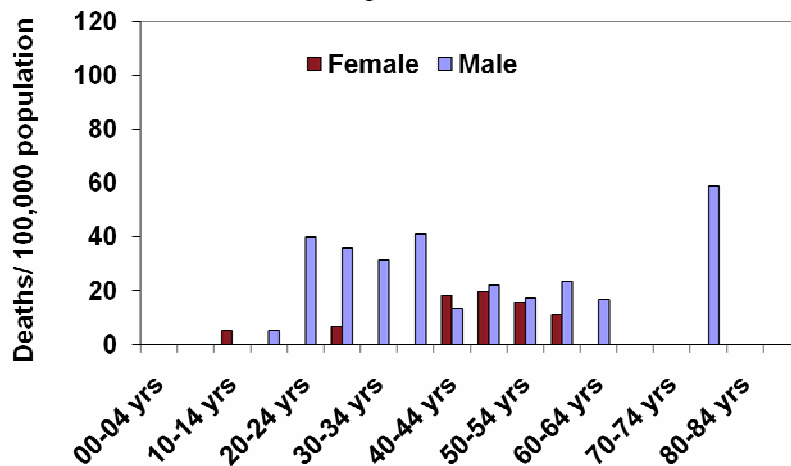
# Idaho

AI/AN Suicide Rates by Age and Sex  
Idaho, 1999-2005



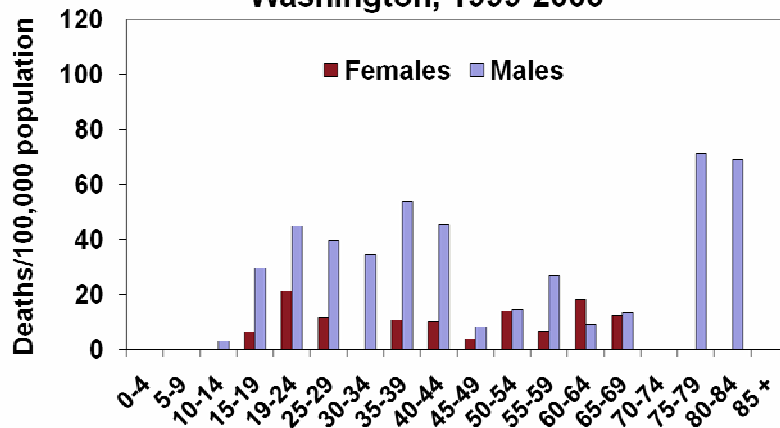
# Oregon

**AI/AN Suicide Rates by Age and Sex  
Oregon, 1999-2005**



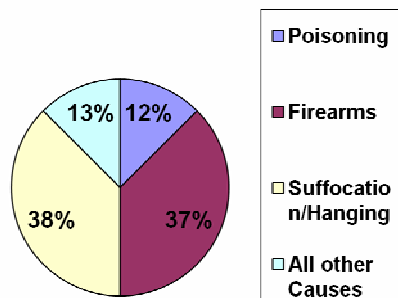
# Washington

**Suicide Rates by Age,  
Washington, 1999-2005**

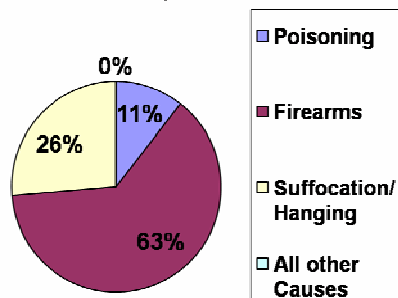


## Idaho

**Mechanism of Suicide,  
AI/AN Females  
Idaho, 1999-2005**

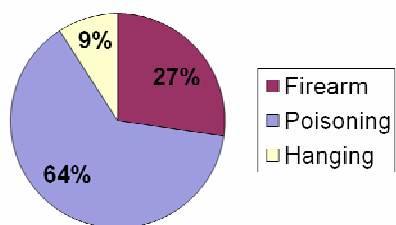


**Mechanism of Suicide,  
AI/AN Males  
Idaho, 1999-2005**

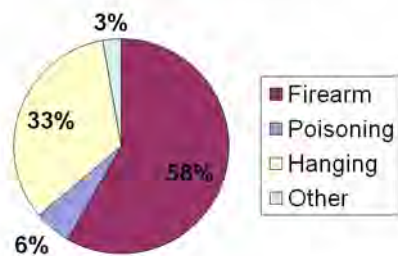


## Oregon

**Mechanism of suicide  
among AI/AN females,  
Oregon, 1999-2005**

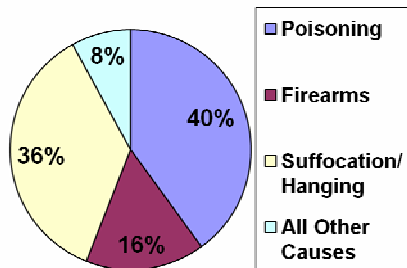


**Mechanism of suicide  
among AI/AN males,  
Oregon, 1999-2005**

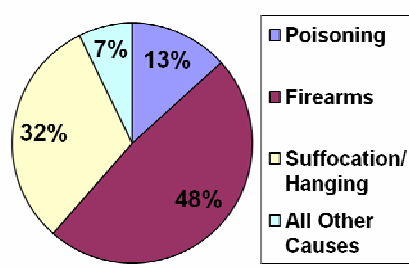


# Washington

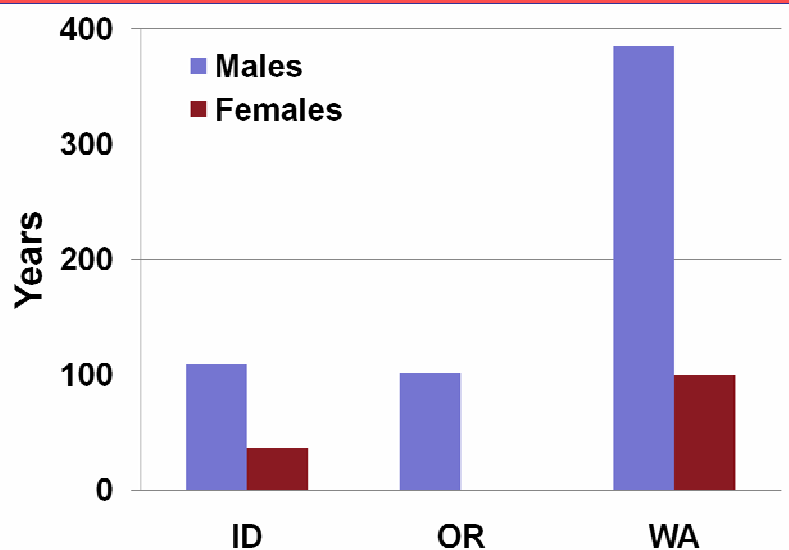
Mechanism of Suicide,  
AI/AN Females  
Washington, 1999-2005



Mechanism of Suicide,  
AI/AN Males  
Washington, 1999-2005



## Years of Potential Life Lost (YPLL) Before Age 70, ID, OR, WA-2005





## Behavioral Risk Factor Surveillance System (BRFSS)

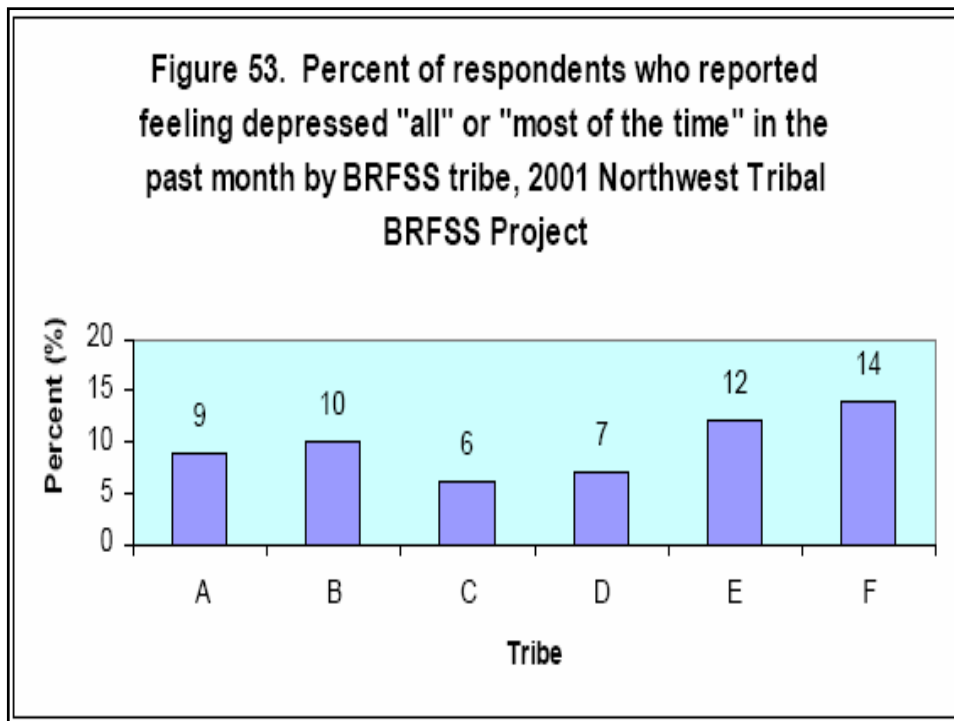
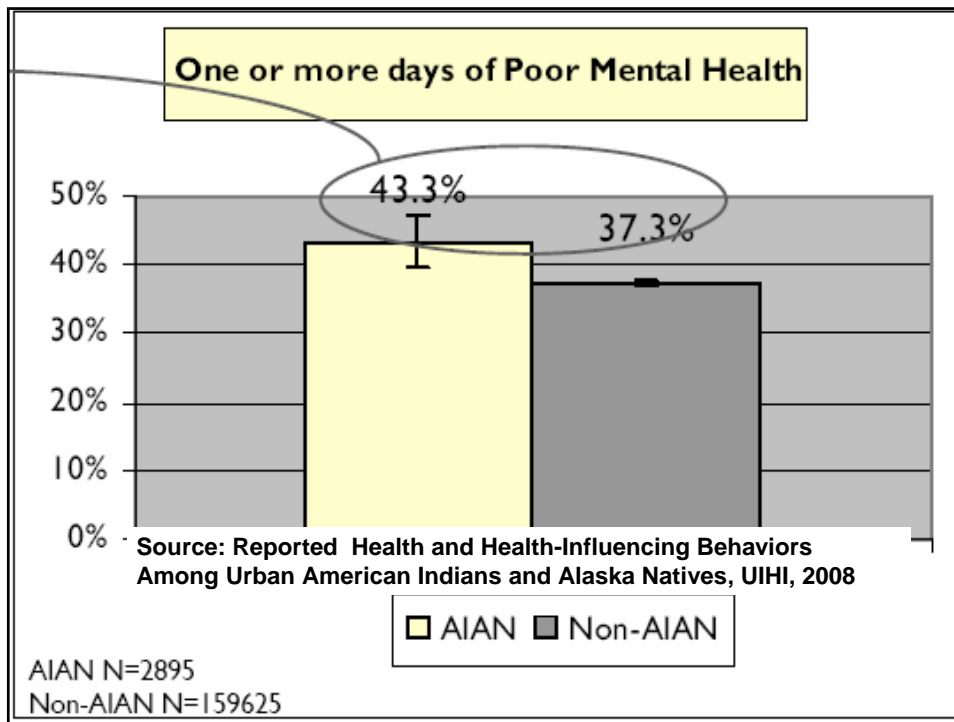
- **Urban Indian Health Institute BRFSS**
  - “Reported Health and Health-Influencing Behaviors Among Urban American Indians and Alaska Natives”, 2008
  - 2001-2005 AI/AN population in counties serviced by Urban Indian Health programs

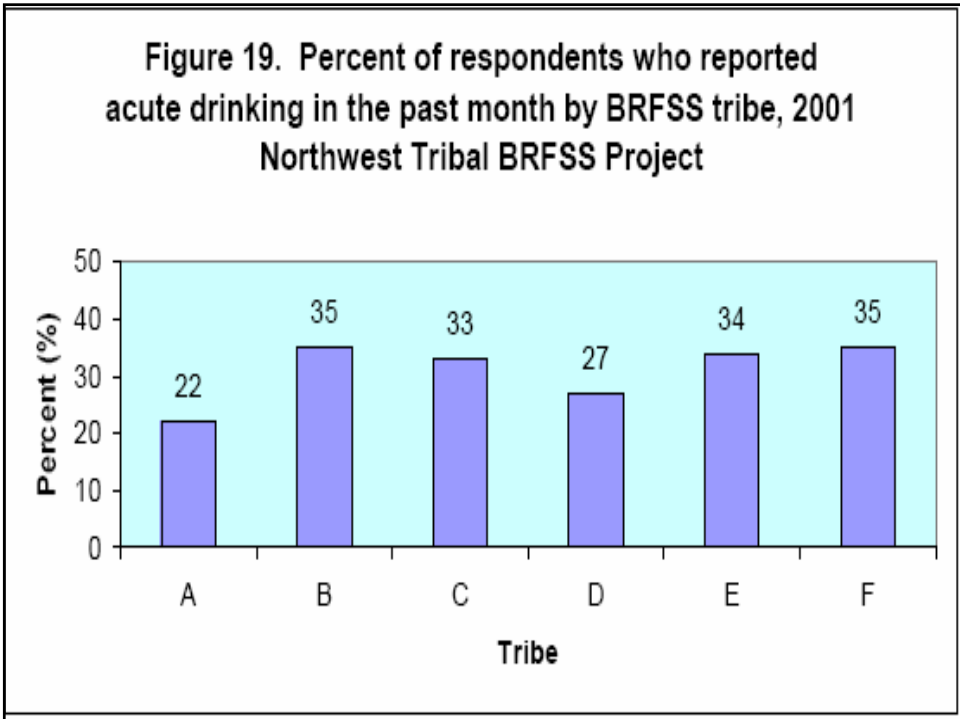
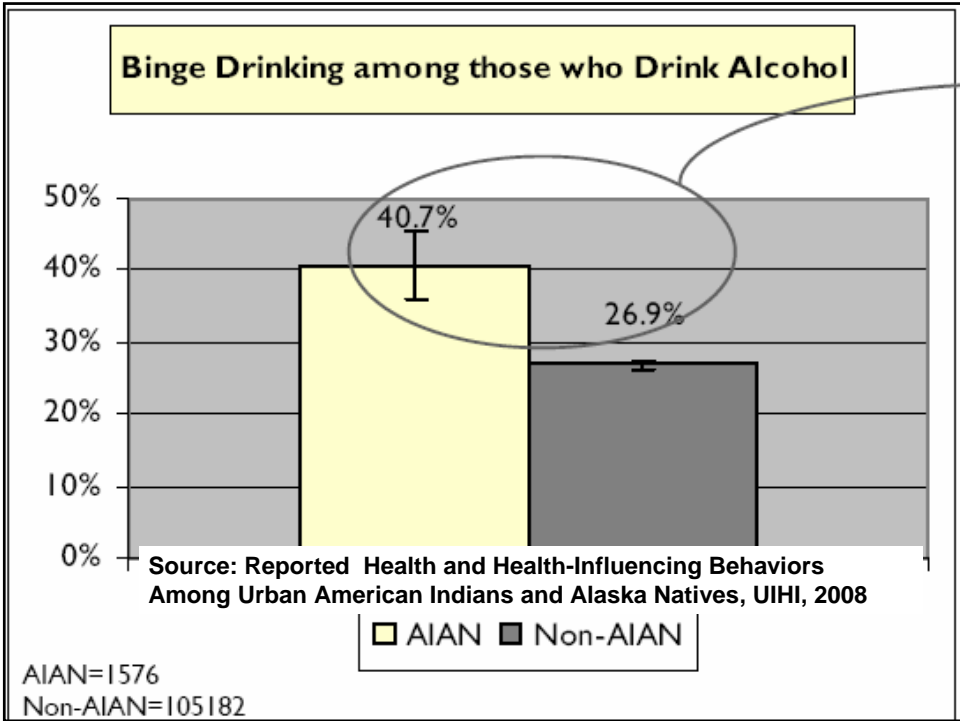


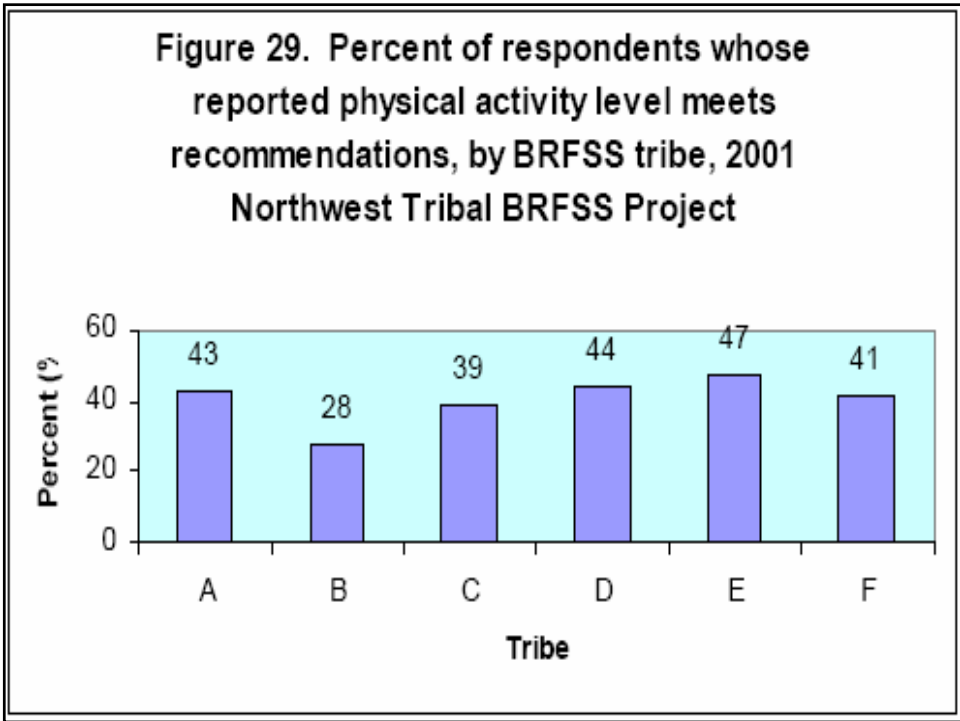
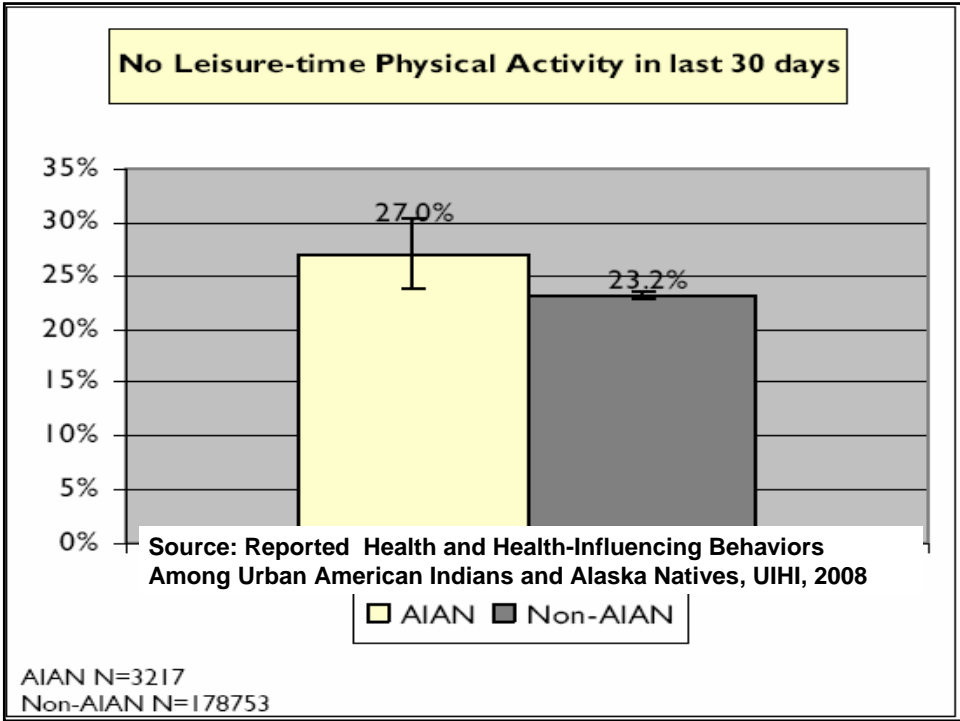
## Behavioral Risk Factor Surveillance System (BRFSS)

- **NPAIHB Tribal BRFSS**
  - “Northwest Tribal Behavioral Risk Factor Surveillance System (BRFSS) Project”, 2003
  - Confederated Tribes of the Umatilla Indian Reservation
  - Klamath Tribes
  - Lummi Nation
  - Makah Tribe
  - Nez Perce Tribe
  - Nisqually Tribe
  - Shoshone-Bannock Tribes









## Youth Risk Behavior Surveillance System (YRBSS) Idaho, 2005

All Races, 9-12 grade

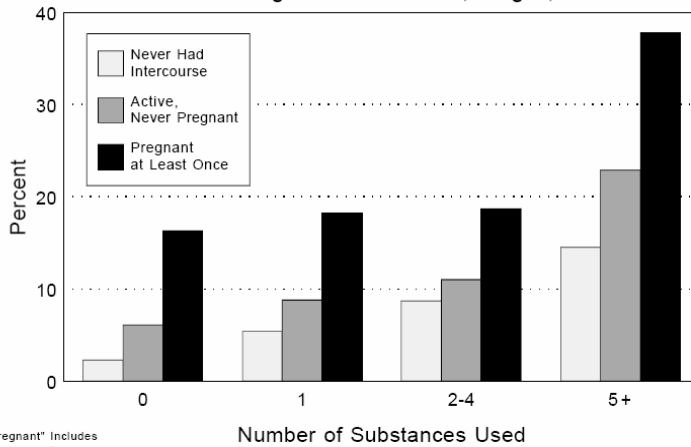
- **Unintentional Injuries and Violence**
  - **24% Carried a weapon during the past month**
  - **32% Were in a physical fight during the past year**
  - **9% Attempted suicide during the past year**
- **Alcohol and Other Drug Use Dietary Behaviors**
  - **40% Drank alcohol during the past month**
  - **28% Episodic heavy drinking during the past month**
  - **16% Smoked cigarettes during the past month**
  - **77% Drank < 3 glasses milk in previous 7 days**
- **Sexual Behaviors**
  - **38% Ever had sexual intercourse**

## Youth Risk Behavior Surveillance System (YRBSS) U.S. 1991–2005

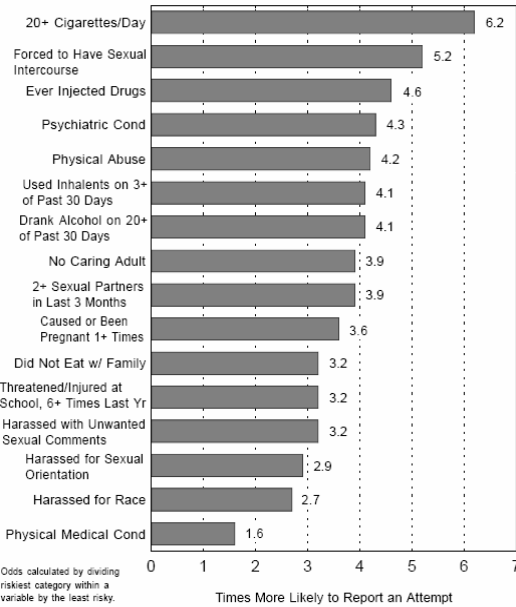
1991	1993	1995	1997	1999	2001	2003	2005
<b>Seriously considered attempting suicide</b> (During the 12 months preceding the survey.)							
29.0 (±1.5) <sup>3</sup>	24.1 (±0.9)	24.1 (±1.1)	20.5 (±2.3)	19.3 (±1.2)	19.0 (±1.4)	16.9 (±0.7)	16.9 (±0.9)
<b>Made a suicide plan</b> (During the 12 months preceding the survey.)							
18.6 (±1.5)	19.0 (±1.1)	17.7 (±1.4)	15.7 (±1.3)	14.5 (±1.4)	14.8 (±1.1)	16.5 (±3.5)	13.0 (±0.9)
<b>Attempted suicide</b> (One or more times during the 12 months preceding the survey.)							
7.3 (±0.9)	8.6 (±0.8)	8.7 (±0.8)	7.7 (±0.9)	8.3 (±1.0)	8.8 (±0.8)	8.5 (±1.1)	8.4 (±0.9)

# Youth Risk Behavior Surveillance System (YRBSS)

**Figure 8. Percentage of High School Students Reporting That They Attempted Suicide, by Sexual History and Number of Mood-altering Substances Used, Oregon, 1999**



**Figure 10. Odds of Reporting Having Made a Suicide Attempt During the Previous 12 Months, by Selected Risk Factors, Oregon High School Students, 1999**





## Next Steps

- **Suicide Prevention Task Force**
- **Detailed Epidemiologic Profile**
  - Develop protocol to use RPMS suicide data
  - Native Youth Risk Behavior Survey?
- **Increased screening for depression**



## Thank You!

### Acknowledgments

Amanda Wright

for permission to use slides/art

Stephanie Craig-Rushing

for invitation to participate