# 2017 Montana State Health Assessment Initial Findings

American Indian Health Leaders Meeting

May 15, 2017

Helena, MT

Presented by Laura Williamson, State Epidemiologist



## Update to 2013 State Health Assessment

The State of the State's Health

A Report on the Health of Montanans



- Qualitative & quantitative data
- Assess trends





A Plan to Improve the Health of Montanans



- Data-driven
- Identify 5 to 10
   priority health issues
- Identify HOW to make progress

Public Health and Safety Division

Strategic Plan

Version 2.0

### Strategic Plan

- Unique to each organization
- Describe organization's objectives & activities to make progress on priority health issues



### State Health Assessment Outline

- Social Determinants of Health & Access to Care
- Mortality
- Chronic Disease
- Injury Prevention
- Behavioral Health
- Maternal & Child Health
- Immunization & Communicable Disease
- Environmental Health



### Data sources

#### **Data available from DPHHS**

- Birth records
- Death records
- Montana Hospital Discharge Data system
- Cancer data
- Infectious disease reporting
- Behavioral Risk Factor Surveillance System
- Pregnancy Risk Assessment Monitoring
   System
- Youth Risk Behavior Survey

#### Data available from local sources

- Indian Health Services billing data
- Community surveys
- Tribal BRFSS (Fort Peck, others?)



### **LEADING HEALTH CONCERNS** identified by Montana

**Community Health Assessments** 

- 1 Alcohol & Substance abuse
  - 2 Cancer



- 3 Overweight & Obesity
  - 4 Mental Health

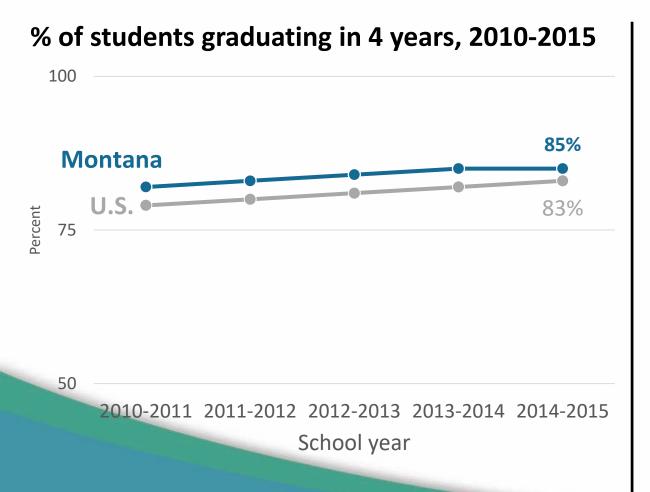


## SOCIAL DETERMINANTS OF HEALTH & ACCESS TO HEALTH CARE

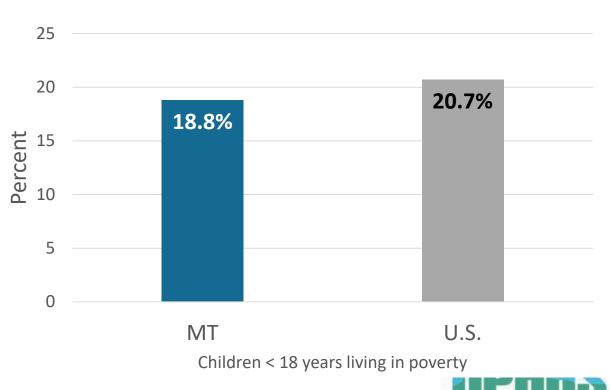


### Education & poverty are indicators of socio-economic status

85% of Montana students graduate high school in 4 years; nearly 1 in 5 children live in poverty



### % of children living in poverty, 2015

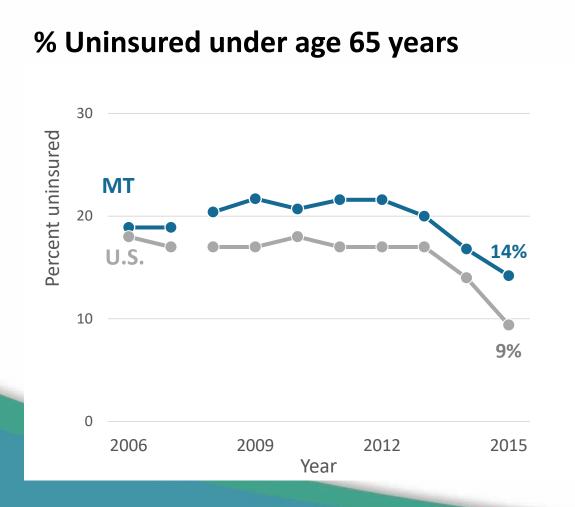


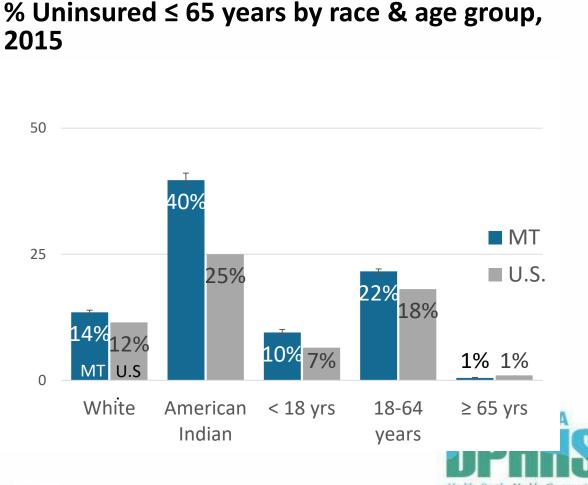
Measure: Percentage of ninth-grade cohort that graduates in four years

Data source: U.S. Department of Education, ED Facts; U.S. Census Bureau, American Community Survey, 2015

### In 2015 14% of Montanans had no health insurance

The % of uninsured Montanans has declined since 2006 with further declines in uninsured expected due to Medicaid expansion





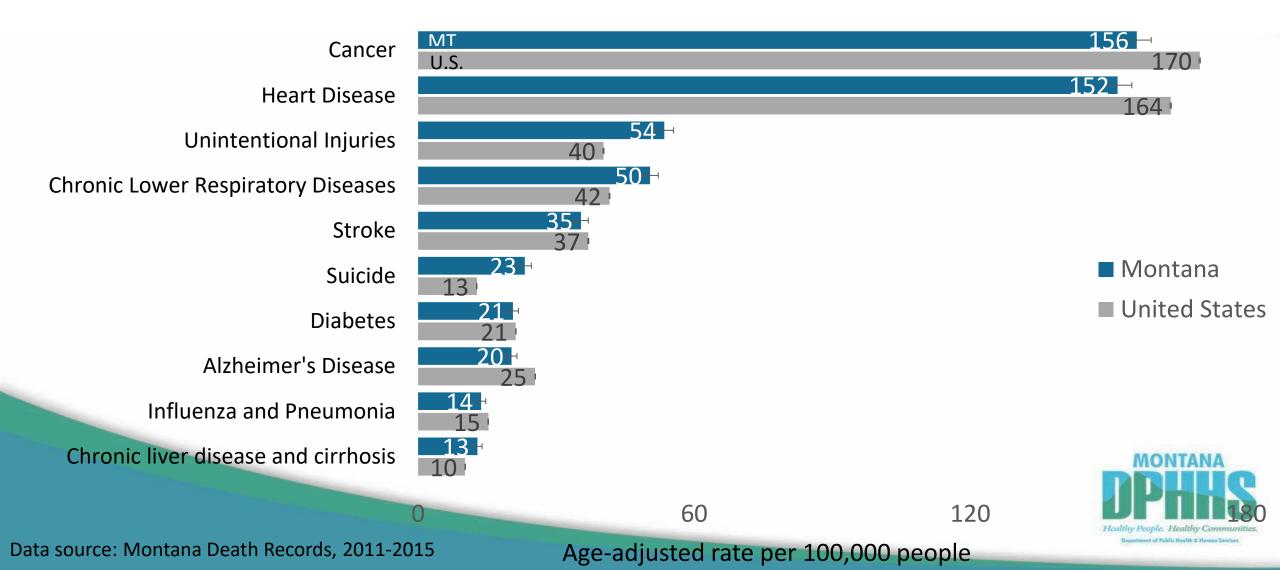
Measure: Percentage of population under age 65 years without health insurance
Data source: U.S. Census Bureau, American Community Survey, 2008-2015; Current Population Survey, 2006-2007

### **LEADING CAUSE OF DEATH**



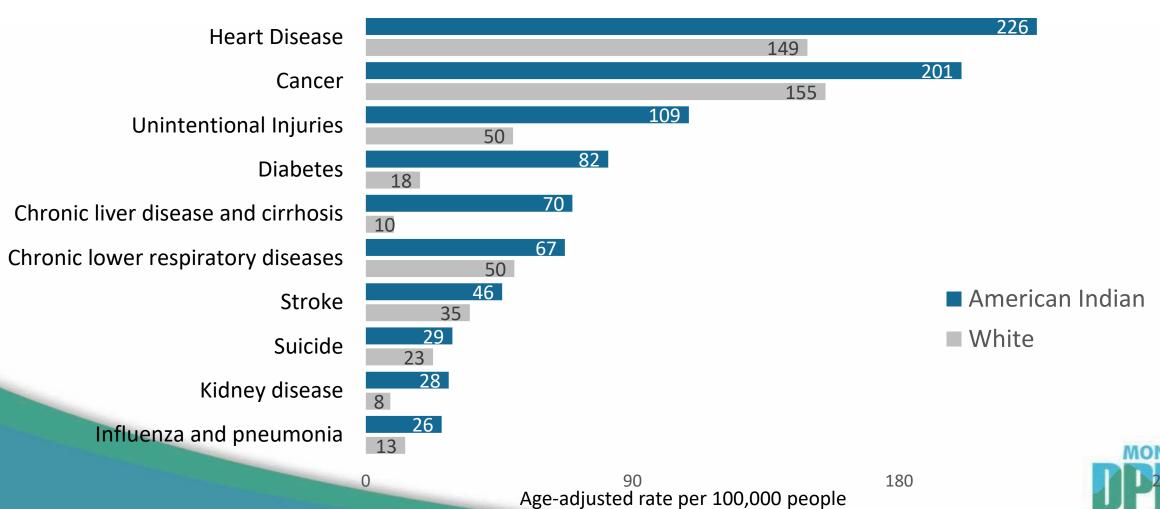
### Top 10 leading causes of death in MT and U.S.

MT had LOWER mortality rate due to cancer & heart disease; HIGHER mortality rate due to unintentional injury, CLRD, & suicide



## Top 3 leading cause of death are the same by race

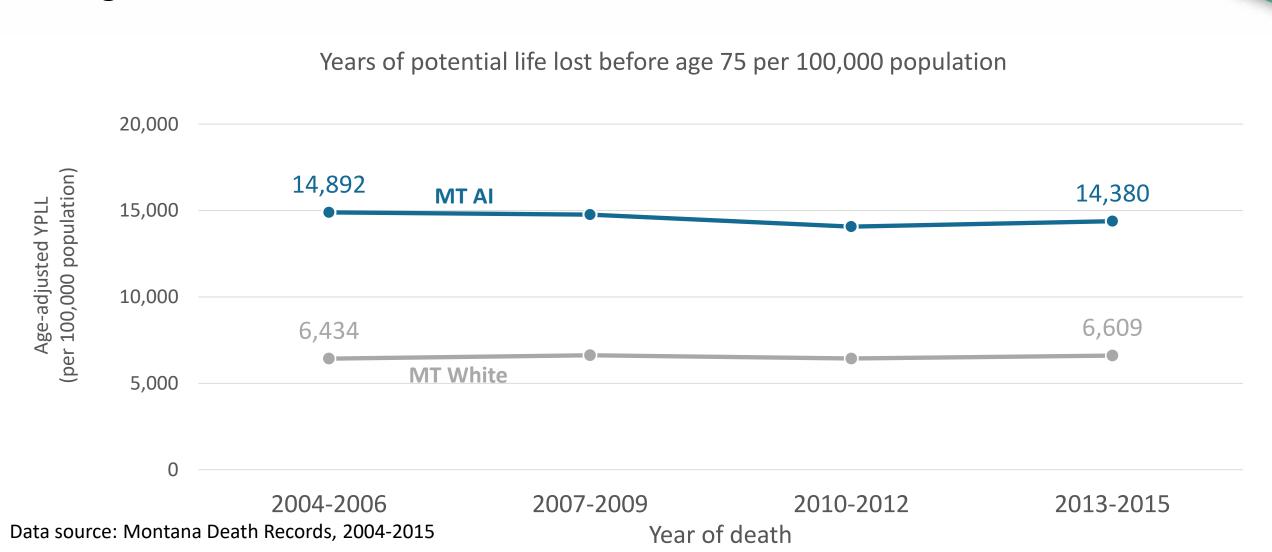
From 2011-2015 the mortality rate for chronic disease & unintentional injury was greater among AI residents





### Premature death before age 75– Years of Potential Life Lost

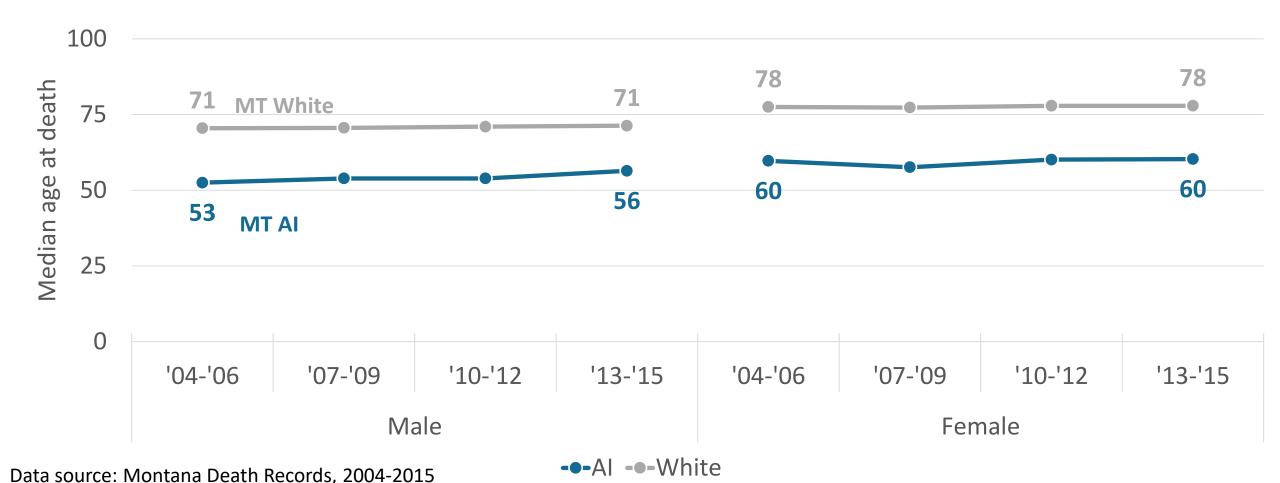
Premature death among MT American Indians was two times greater than among MT Whites



# Average age at death over the past decade has INCREASED among American Indian Men

However, it has remained the same for women and Whites

Median age at death (in years) by race by sex, 2004-2015

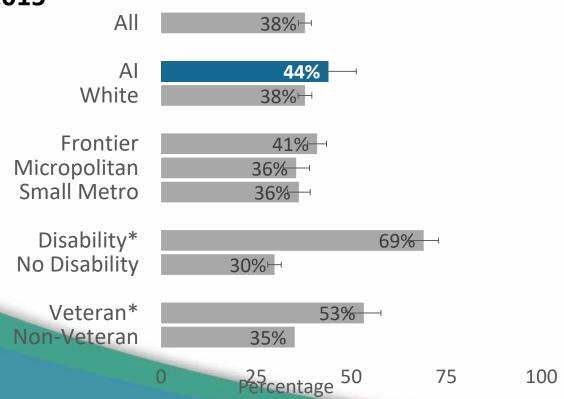


### **CHRONIC DISEASE**



# Over 2 in 5 Montana American Indian adults report having 2 or more chronic conditions

## % of adults with 2 or more chronic conditions, 2015



## % of Montana American Indian Adults with self-reported chronic condition, 2015

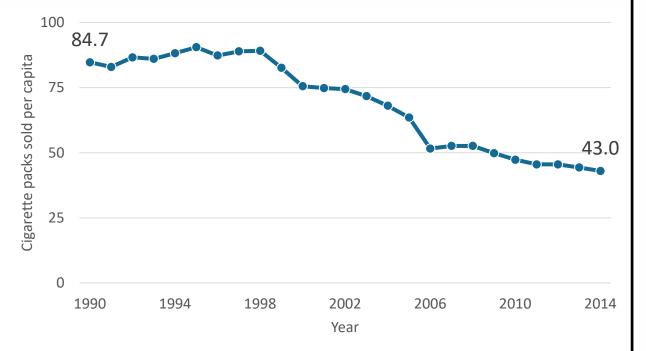
<b>Chronic Condition</b>	
1. High blood pressure	34.9%
2. Arthritis	32.6%
3. High blood cholesterol	28.4%
4. Diabetes	19.2%
5. Asthma	13.3%
6. COPD	9.5%
7. Stroke	8.0%
8. Chronic kidney disease	7.8% <b>DUIL</b>

<sup>\*</sup> Statistically significant difference Data source: Montana BRFSS, 2015

## 1,600 tobacco related deaths each year

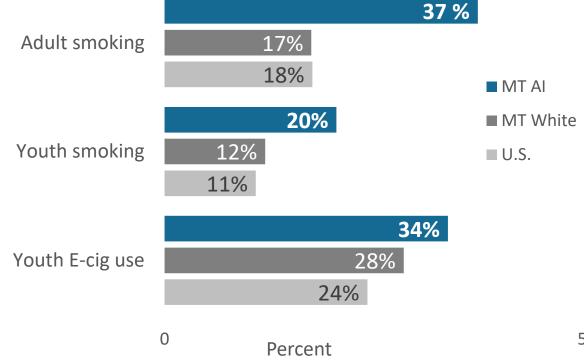
In 2015, 37% of American Indian adults and 20% of American Indian students were current smokers. Too many students are using new tobacco products.

### Cigarette packs sold per capita, 1990-2014



Data source: Orzechowski W, Walker R. The tax burden on tobacco. Historical Compilation, Volume 49. Arlington (VA): Orzechowski and Walker Economic Consulting Firm; 2014.

## % current smokers and E-cig use among adults and youth, 2015

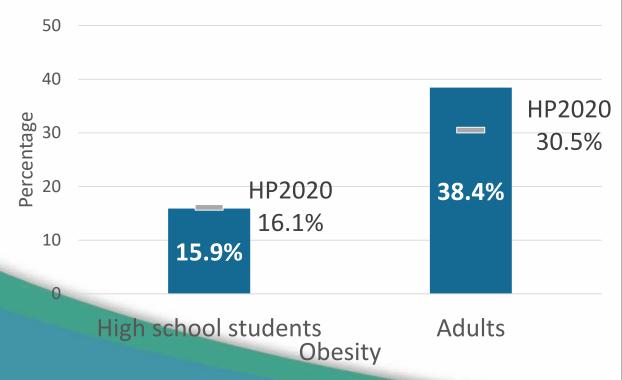


Data source: MT BRBSS, 2015; MT YRBS, 2015

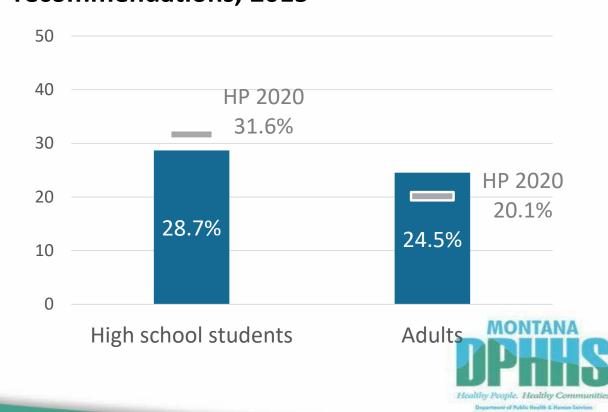
## Nearly 1 in 6 Al students & 2 in 5 Al adults were obese

And too many Montanans do not meet physical activity recommendations

## % of MT American Indian adults & high school students who were obese, 2015



% of MT American Indian adults & high school students that met physical activity recommendations, 2015



\* Statistically significant difference Data source: Montana BRFSS, 2015; MT YRBS, 2015

### **CHRONIC DISEASE**

### The data also show...

#### Health areas to work on

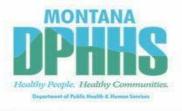
- Colorectal cancer screening
- Diabetes prevention & control
- Asthma control
- Blood pressure control
- Access to stroke care
- Oral health

### **Populations to target**

- Low SES Montanans (e.g., Medicaid)
- American Indian communities
- Persons with disabilities
- Veterans
- Frontier counties



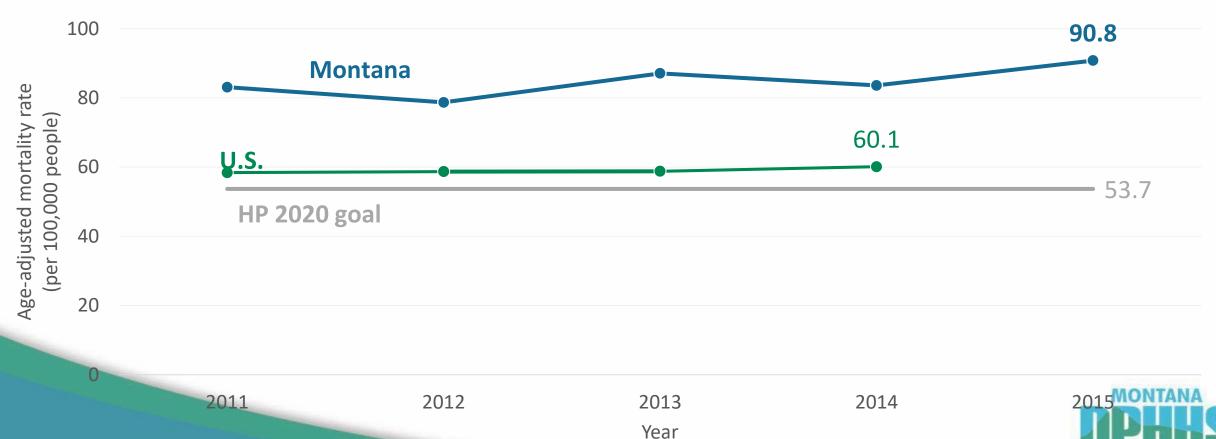
## **INJURY**



## 900 deaths from injury and violence each year in MT

Approx. 4,300 hospitalizations & 55,000 admitted to the ED each year

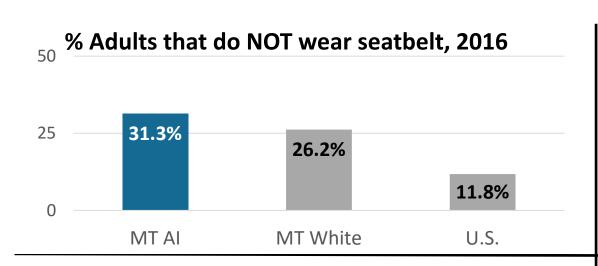
#### Mortality rate of injury in violence, 2011-2015

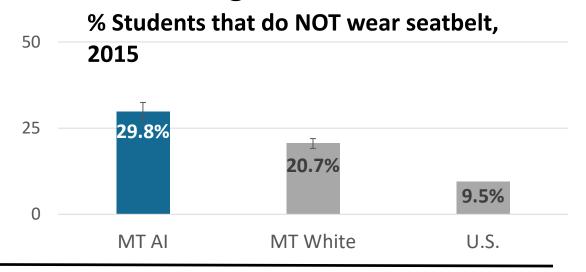


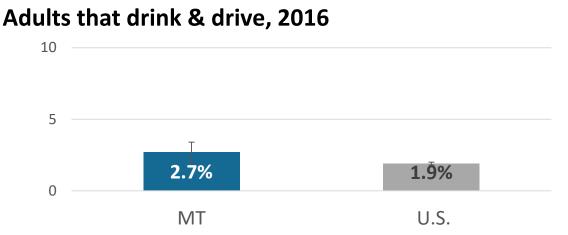


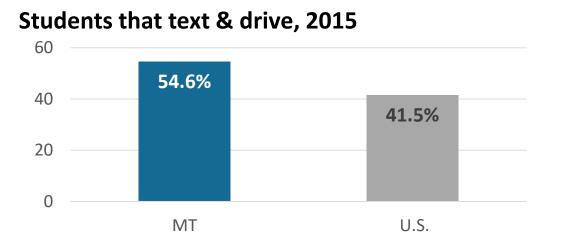
## 200 fatalities from motor vehicle accidents each year

Unsafe driving practices HIGH among Montanans. 1 in 3 MT American Indians do not wear a seat belt; 1 in 2 students text while driving





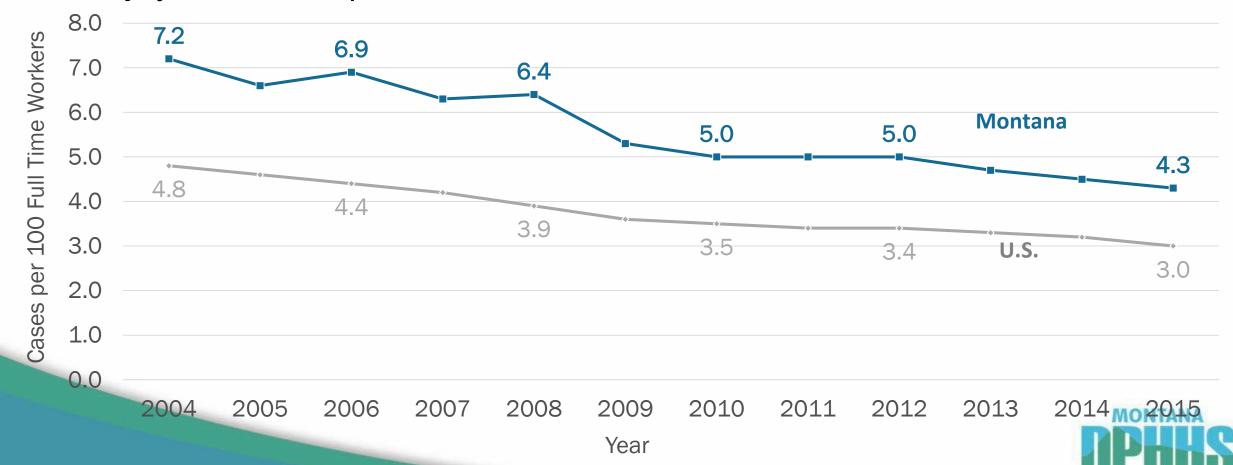




Data source: Montana BRFSS, 2015; MT YRBS, 2015

# High incidence of work-related injury and illness MT 4<sup>th</sup> highest rate in the country in 2015

Non-fatal injury & illness cases per 100 full time workers, 2004-2015



### **INJURY**

### The data also show...

#### Health areas to work on

- Unsafe driving practices
- Falls
- Suicide
- Unintentional poisonings

### **Populations to target**

- Children
- Older adults
- Particular occupations
- American Indian communities



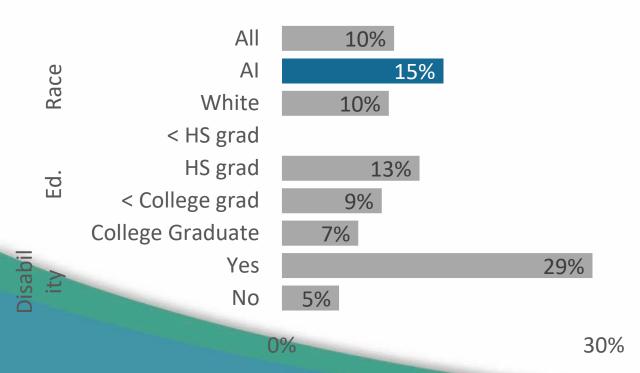
## **BEHAVIORAL HEALTH**



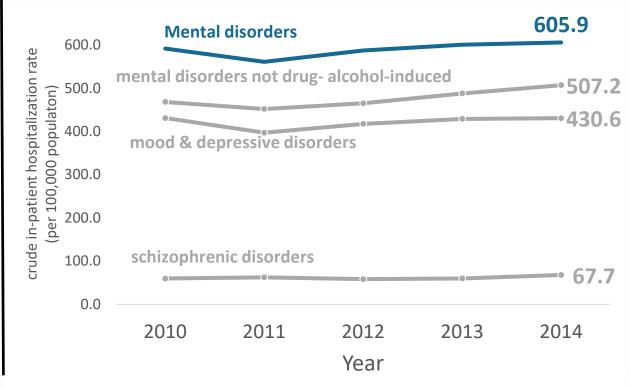
## 1 in 10 Montana adults report frequent mental distress

In 2014, 6,200 admissions for mental disorders

% self-report frequent mental distress among adults (≥ 14 of 30 days poor mental health), 2016



## Rate of hospital admissions for mental disorders, 2010-2014





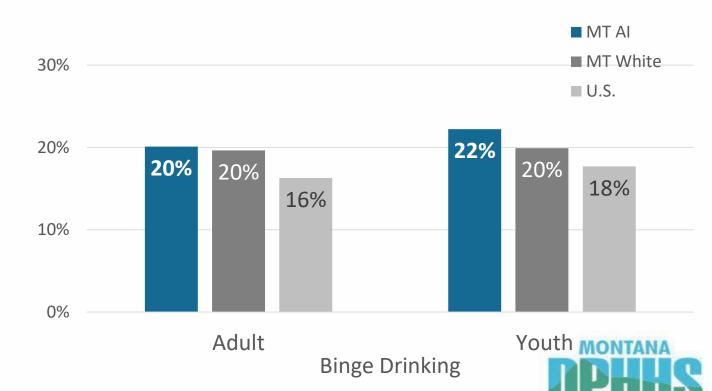
## Illicit drug use or abuse in MT was similar to U.S.

Alcohol use was **HIGH** in MT compared to U.S.

### Illicit drug use, 2014-2015

	Aged 12-17 years	Aged 18+ years
Past year marijuana use	14.6%	15.5%
Past year cocaine use	0.6%	1.6%
Past year heroin use	0.2%	0.2%

## % of adults & students that binge drink, 2016 & 2015

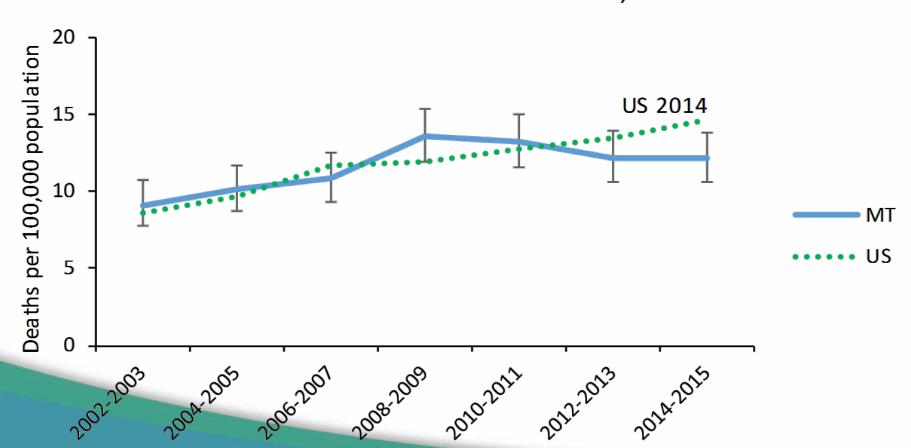


Data Source: National Survey on Drug Use & Health, 204-2015; MT BRFSS 2016; MT YRBS 2015

\*U.S. estimates for 2015; Binge drinking among adults defined as  $\geq$  5 drinks for males &  $\geq$  4 drinks for females in one sitting. Binge drinking among students is defined as  $\geq$  5 drinks within a couple of hours within last 30 days

## Fatalities for drug over dose LOWER in MT compared to U.S.

United States and Montana Drug Posioning
Age-adjusted Death Rates
US and Montana Resident Occurrences, 2002-2015



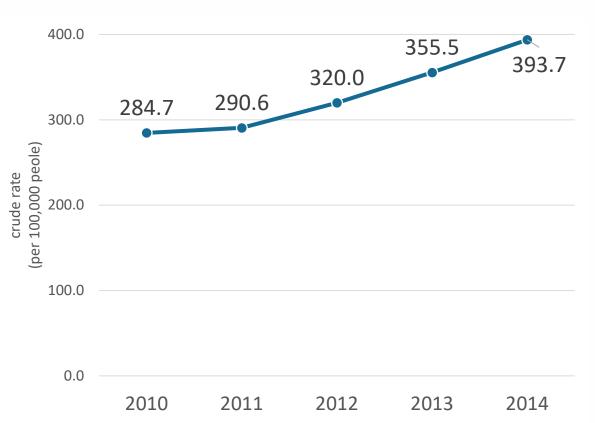


Data source: Montana death records, 2002-1025

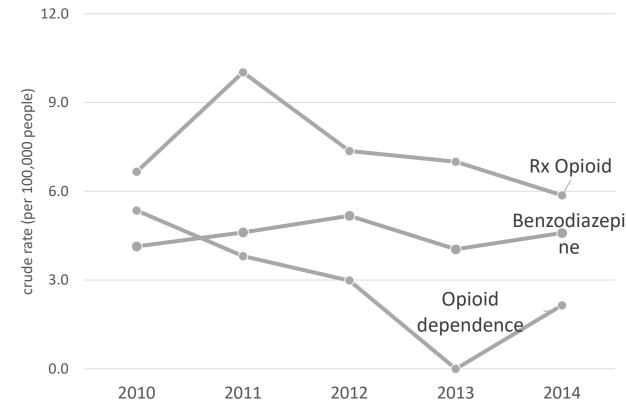
## Hospital admissions for drug use have increased

3,300 admissions per year, on average, between 2010-2014

## Rate of hospital admissions for all drugs, 2010-2014



## Rate of hospital admissions for select drugs, 2010-2014





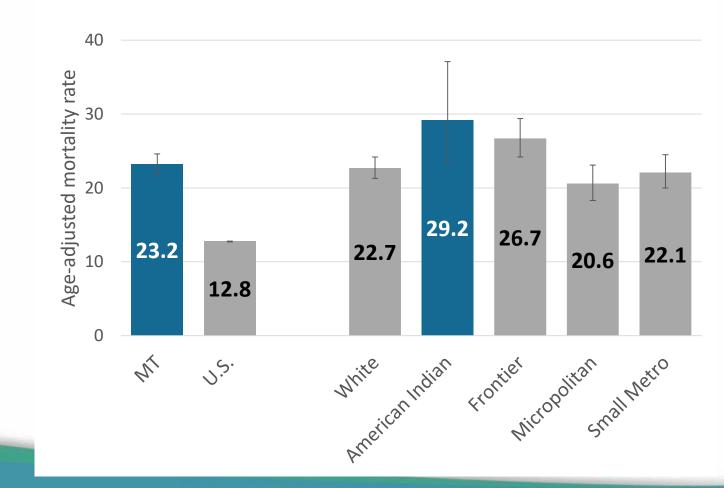
## Suicide among Montanans too HIGH

Over 240 suicides each year and over 1,000 admissions to the ED for self harm

### **Populations at risk**

- Increasing among women
- Veterans
- Young adults
- Middle aged men

### Suicide rate by demographics, 2011-2015



### **BEHAVIORAL HEALTH**

### The data also show...

#### Health areas to work on

- Prescription drug abuse
- Alcohol use
- Access to mental health care & substance abuse treatment
- Methamphetamine & heroin

### **Populations to target**

- Statewide
- Young adults



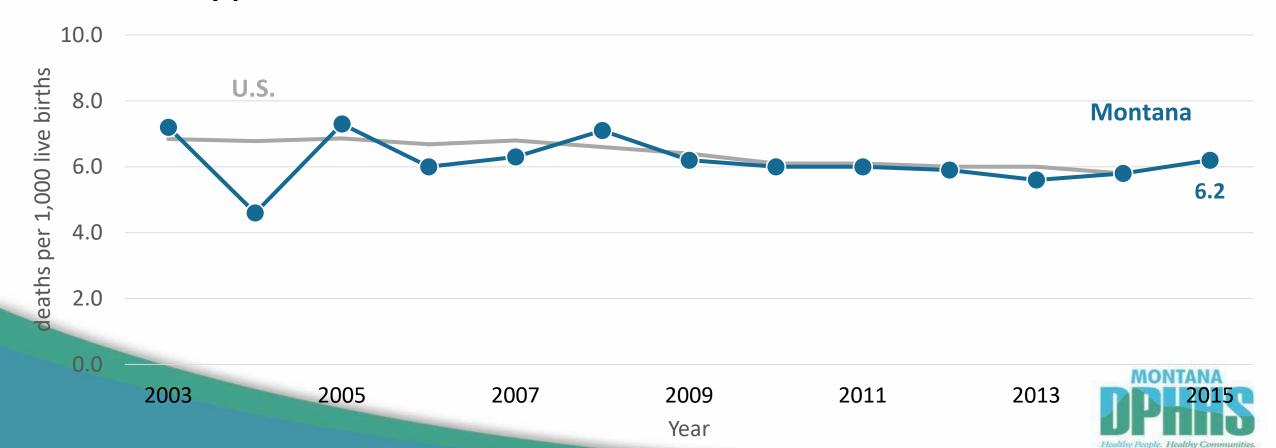
### MATERNAL & CHILD HEALTH



## Infant mortality in MT is similar to U.S.

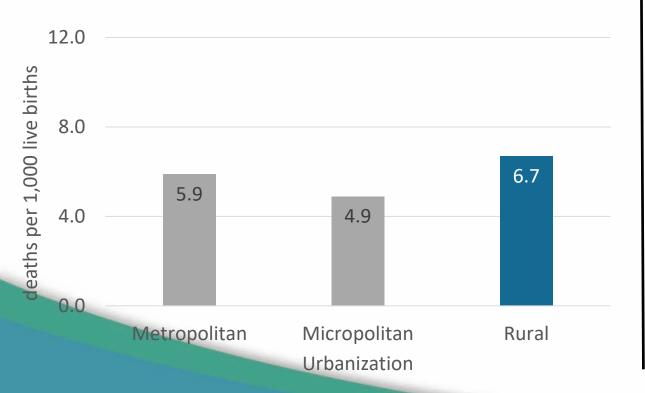
From 2011-2015, 71 infants died, on average in first year of life per year.

#### Infant mortality per 1,000 live births

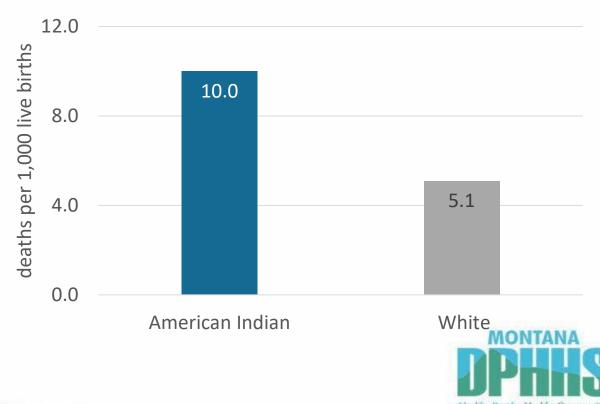


## Infant mortality rate in MT HIGHER among Rural and American Indian residents

## Infant mortality rate by Rural/urban county of residence, 2011-2015



### Infant mortality rate by race, 2011-2015

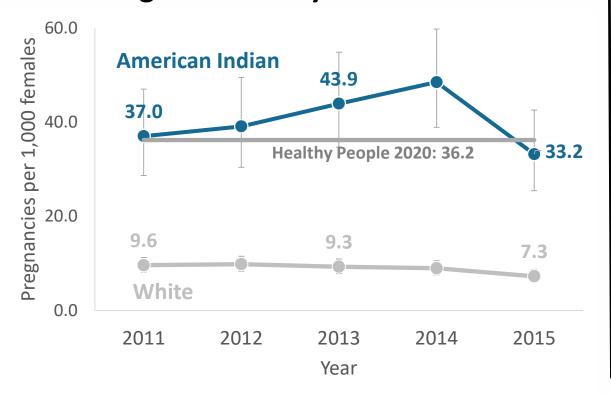


Data Source: Montana Birth Certificates and Death records, 2011-2015

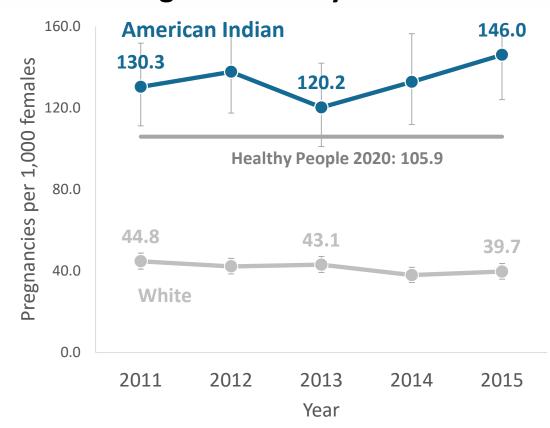
### Teen pregnancy a CDC-winnable battle

Teen pregnancy among American Indian females above Healthy People 2020 target while White females meet target

### Females aged 15 to 17 years



#### Females aged 18 to 19 years



Data Source: Montana Birth Certificates, 2011-2015

### **MATERNAL & CHILD HEALTH**

### The data also show...

#### Health areas to work on

- Prenatal care
- Drug use & smoking during pregnancy
- Breastfeeding
- Family planning, including contraception
- Unintentional injuries among children

### **Populations to target**

- Low SES (e.g., Medicaid)
- American Indian

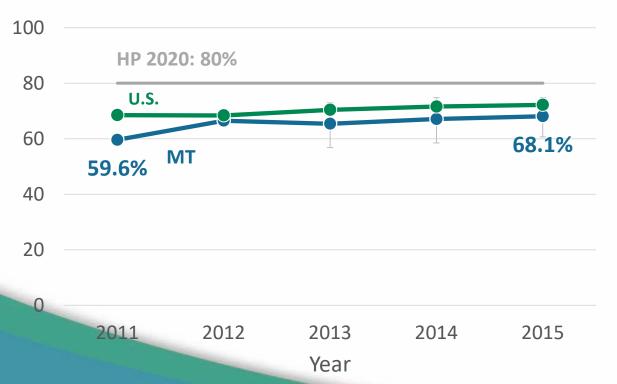


## IMMUNIZATION & COMMUNICABLE DISEASE

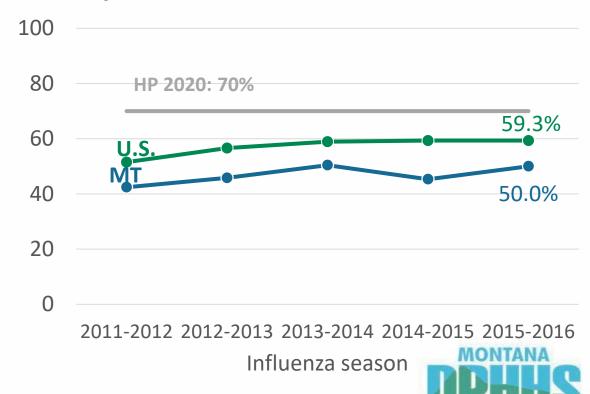


## Since 2011 childhood immunization has **IMPROVED** in MT

## % of 19-35 months with complete combined 7-vaccine series, 2011-2015



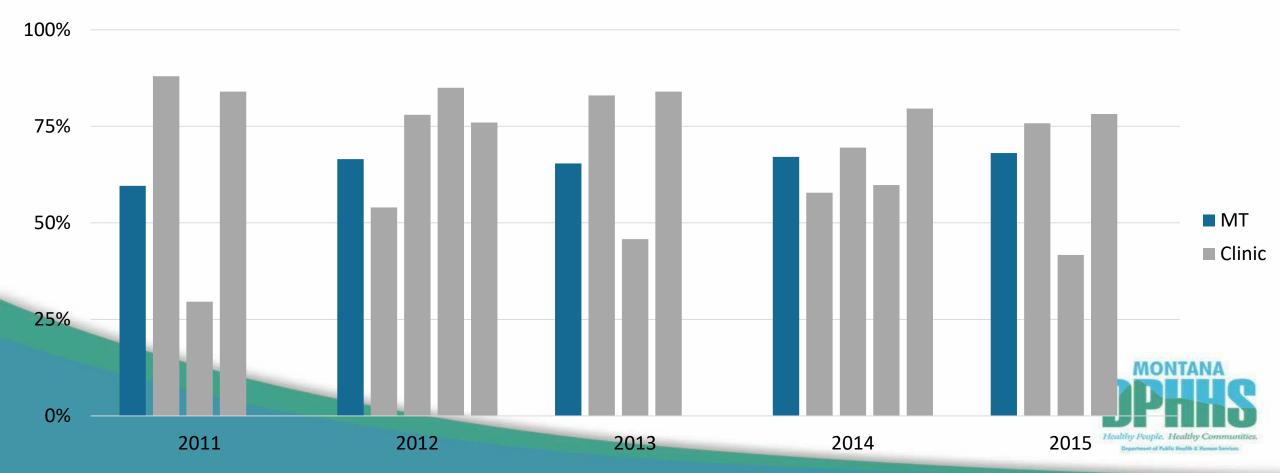
## % Influenza vaccination among 6 months to 17 years, 2011-2016 flu seasons



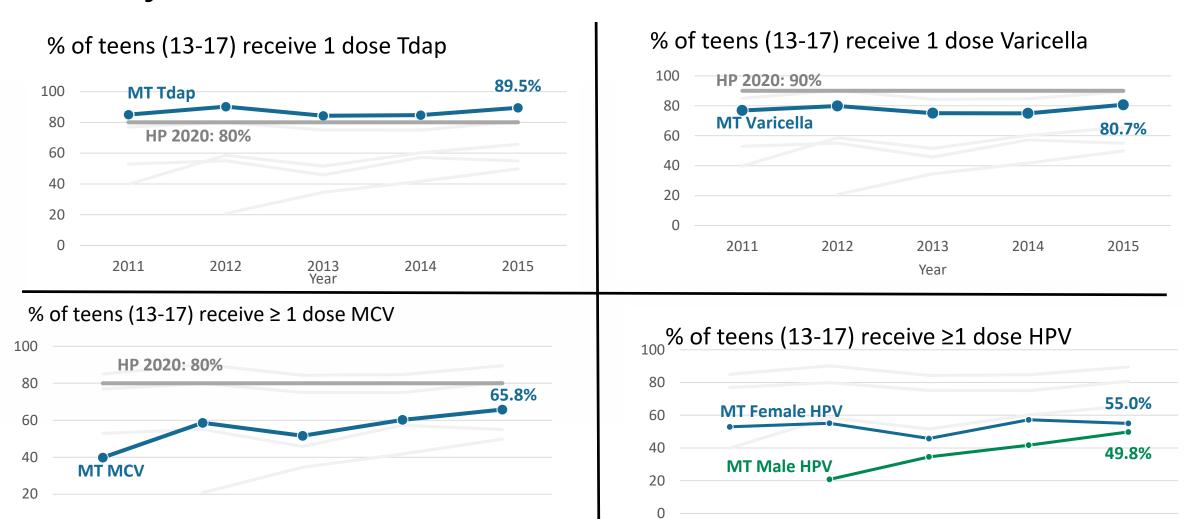
Data Source: National Immunization Survey, 2011-2015

# Many tribal clinics do better with childhood immunizations compared to MT

% of charts reviewed at tribal clinics up-to-date with childhood immunizations



## Immunization for Tdap among teens (13-17 years) exceed HP 2020 objective

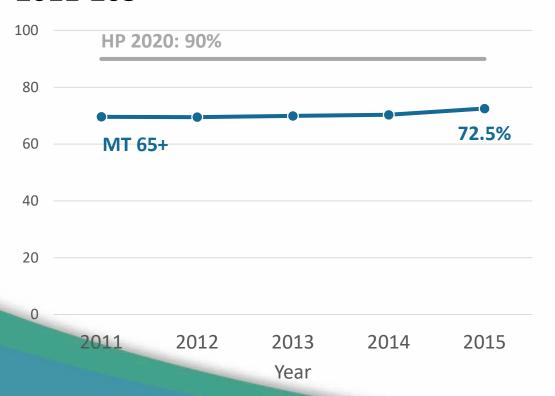


Year

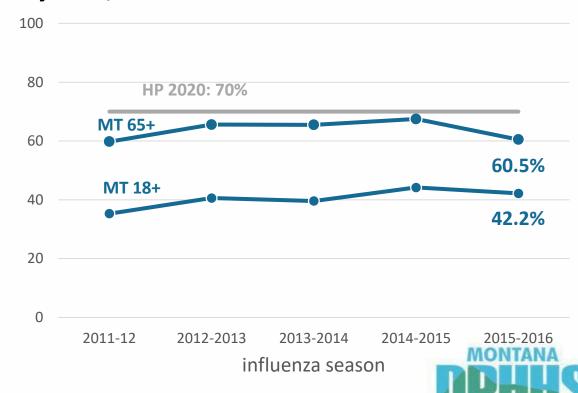
Data Source: National Immunization Survey, 2011-2015

# MT Adult immunization for pneumococcal & influenza LOWER than HP 2020 objective

## Pneumococcal among adults 65+ years, 2011-205



## Influenza among adults 18+ & 65+ years, 2011-2015



Data Source: MT BRFSS, 2011-2015

## IMMUNIZATION & COMMUNICABLE DISEASE

### The data also show...

#### Health areas to work on

- Vaccine preventable disease
- Sexually transmitted infections
- Chronic Hepatitis C

### **Populations to target**

- Low SES
- American Indian communities
- Men who have sex with men (MSM)

