

# **Accessing and Understanding Tribal-level Health Statistics Using SEER & SEER\*Stat**

Ally Maschino

Rapid City, SD

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# Objectives

**At the end of the workshop, attendees will be able to use SEER\*Stat to do the following:**

1. Access SEER mortality data
2. Produce health statistics describing causes of death within reservation-specific American Indian populations
3. Describe Tribe-specific health disparities and present the magnitude of the disparity using figures

# What is SEER?

## SEER Stands for:

“**S**urveillance **E**pidemiology and **E**nd **R**esults”

### Background

- Began January 1, 1973
- National Cancer Institute (NCI), CDC, states
- Updated annually
- Publicly available

### Quality Assurance

- The North American Association of Central Cancer Registries (NAACCR) sets guidelines for state registries
- Annual quality assessments

# What is SEER?

Surveillance Epidemiology and End Results

## Cancer Data –

- Incidence, prevalence and survival is available for **28% of the overall US population** (a representative sample)

26% of African Americans

41% of Hispanics

43% of AI/AN

54% of Asians

71 % of Hawaiian/Pacific Islanders

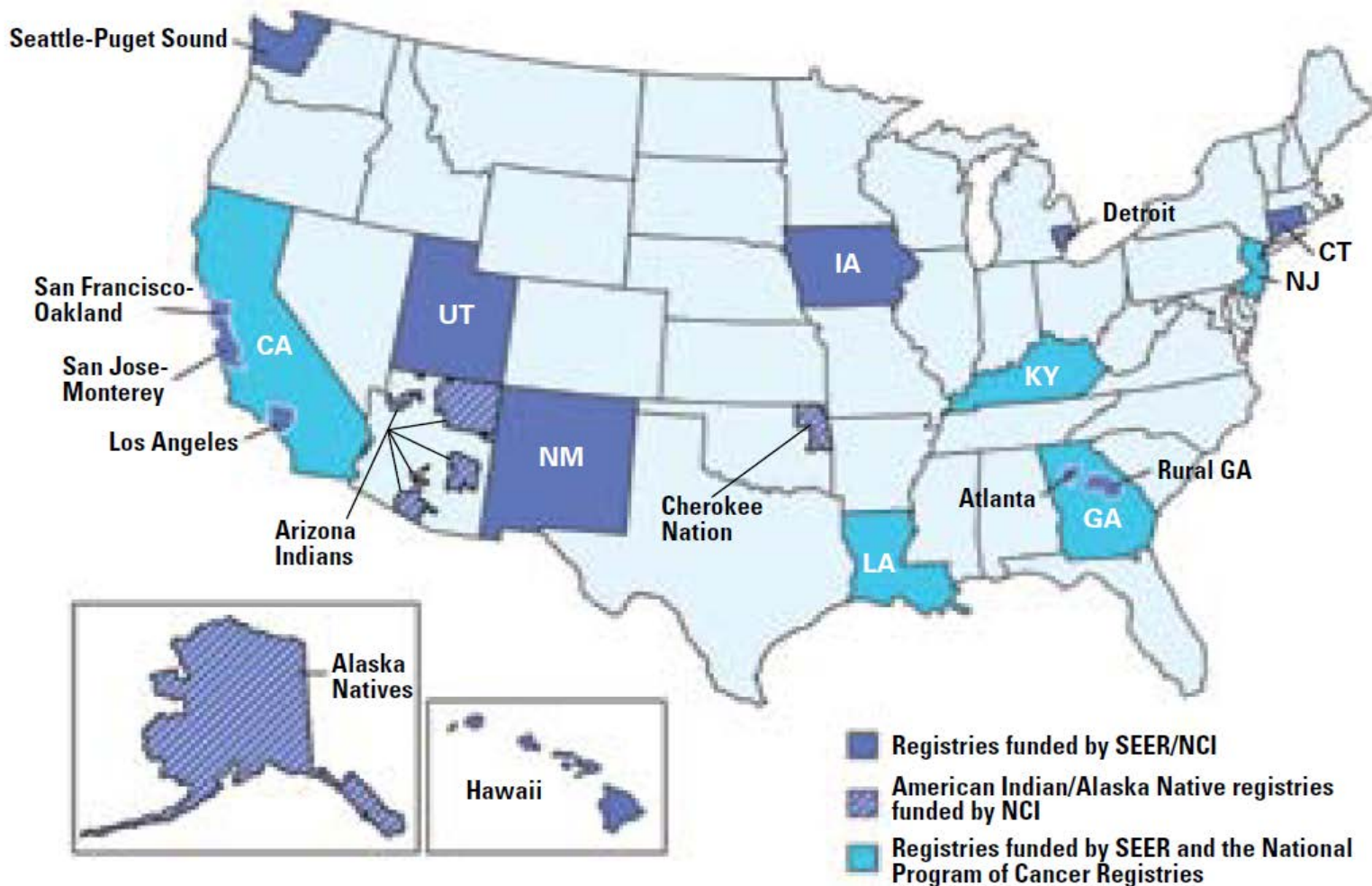
**[see map on next slide]**

## Available data include:

- Patient demographics
- Primary tumor site
- Tumor morphology
- Stage at diagnosis
- First course of treatment
- Follow-up for vital status

# SEER collects data on every case of cancer reported from 20 U.S. geographic areas

These areas (shown below) cover about 28% of the U.S. population and are representative of the demographics of the entire U.S. population. [Map and text from SEER]



# What is SEER?

Surveillance Epidemiology and End Results

## Mortality Data

- In contrast to cancer data, mortality is available for every death that occurred in the US between 1969 and 2009
- Includes all causes of death in addition to cancer deaths

# Causes of Death in SEER

Tuberculosis

Syphilis

HIV (1987+)

Septicemia

Diabetes Mellitus

Diseases of Heart

Hypertension without Heart Disease

Cerebrovascular Diseases

Atherosclerosis

Aortic Aneurysm and Dissection

Pneumonia and Influenza

Other Diseases of Arteries, Arterioles, Capillaries

Other Infectious and Parasitic Diseases

Chronic Obstructive Pulmonary Disease and Allied Conditions

Complications of Pregnancy, Childbirth, Puerperium

Certain Conditions Originating in Perinatal Period

Symptoms, Signs and Ill-Defined Conditions

Alzheimer's Disease

Stomach and Duodenal Ulcers

Chronic Liver Disease and Cirrhosis

Nephritis, Nephrotic Syndrome and

Nephrosis

Congenital Anomalies

**Accidents and Adverse Effects**

Suicide and Self-Inflicted Injury

Homicide and Legal Intervention

# What is SEER\*Stat?

- Statistical software developed by SEER
- Allows for the analysis of SEER data *without direct access to the data*
- Protects the identity of cases (suppresses low case counts)
- Stops the user from editing or changing data



# What types of data sets are available for through SEER\*Stat?

**SEER Incidence Data** - cancer incidence and survival data from the SEER cancer registries

**US Mortality Data** - data from the National Center for Health Statistics (NCHS)

**US Population Data** - data used in SEER\*Stat to calculate incidence and mortality rates (obtained periodically from the Census Bureau)

**Standard Populations for Age-adjusting** - files distributed with SEER\*Stat to create age-adjusted statistics

**County Attributes** - variables (e.g.. median income values by county) linked to SEER Incidence, US Mortality, and US Population data

It is also possible to analyze your own data files using the SEER\*Prep Software to convert your data to the file format required by SEER\*Stat.

# What can you do with SEER\*Stat?

Study the **cause of death** (including suicide and accidental deaths)

or the impact of **cancer** (by age, stage at diagnosis, grade or tumor size)

on **populations** (county, state, national, CHSDA)

by **demographics** (age, gender, race)

or **county characteristics** (poverty level, income, education)

over **time** (1969-2009)

# Race

Information about a person's race is gathered from:

## **Death certificates** for mortality datasets

- Determined by funeral director as provided by an informant or on the basis of observation

## **Medical records** for cancer incidence datasets

- Procedures for assigning race is not standardized
- Misclassification is greatest for American Indians/Alaska Natives versus other races
- Cancer incidence data often considers only those in CHSDAs to be American Indians/Alaska Natives

# Contract Health Service Delivery Area (CHSDA)

- CHSDA residence is used to determine eligibility for services that are not available directly from Indian Health Service
- CHSDA counties usually extend beyond the reservation boundaries but capture the AI population served by IHS and Tribal Health Programs
- CHSDA counties for different tribes may overlap

# What can you do with SEER\*Stat?

## Session types

- **Frequency session** - generate the number of records stratified by any variable in a database
- **Rate session** - calculate disease incidence and mortality rates

## Advanced cancer statistics (not covered here)

**Survival session**

**Limited-Duration Prevalence Session**

**MP-SIR Session** (Multiple Primary - Standardized Incidence Ratios)

**Case listing session** (Create lists of tumors, not lists of people)

## Counts, Frequencies, Rates...

**Count** = the number of times an event happened

E.g. It rained 4 days

**Frequency** = same as count (sometimes called frequency count)

**Rate** = the number of times an event happened given some denominator (usually time or a total)

E.g. It rained 4 days in the past week

**How many American Indian or Alaska Natives were died from suicide or homicide in each CHSDA Region (1973-2009)?**

**Let's open up SEER\*Stat**

**If you are doing this for the first time you will need to enter your ID and password**

**How many American Indian or Alaska Natives were died from suicide or homicide in each CHSDA Region (1973-2009)?**

Since we are interested in the number of cases we want a frequency session

Under **File**, select **New > Frequency Session**



**How many American Indian or Alaska Natives were died from suicide or homicide in each CHSDA Region (1973-2009)?**

**Notice the tabs:**

**Data**

**Statistic**

**Selection**

**Table**

**Output**

**How many American Indian or Alaska Natives were died from suicide or homicide in each CHSDA Region (1973-2009)?**

**Notice the tabs:**

**Data** - Since we want all data available:

**Select Incidence – SEER 18 Regs Research Data + Hurricane Katrina Impacted Louisiana Cases, Nov 2011 Sub (1973-2009 varying)**

**How many American Indian or Alaska Natives were died from suicide or homicide in each CHSDA Region (1973-2009)?**

**Notice the tabs:**

**Statistic – Select Frequencies**

# How many American Indian or Alaska Natives were died from suicide or homicide in each CHSDA Region (1973-2009)?

## Notice the tabs:

### Selection – Edit...

#### 1. Race, Sex, Year Dx, Registry, County

- > Race recode (White, Black, Other)

- > Other (American Indian/AK Native, Asian/Pacific Islander)

#### 2. Cause of Death (COD) and Follow-up

- > COD to site recode

- > Suicide and Self-Inflicted Injury

- > Homicide and Legal Intervention (Shift key to select both)

**How many American Indian or Alaska Natives were died from suicide or homicide in each CHSDA Region (1973-2009)?**

**Notice the tabs:**

**Table –**

Under **‘Available Variables’**

“Race, Sex, Year Dx, Registry, County”

> CHSDA Region

click **Row**

**How many American Indian or Alaska Natives were died from suicide or homicide in each CHSDA Region (1973-2009)?**

**Notice the tabs:**

**Output –**

In the **Title** box, enter

**“How many American Indian or Alaska Natives were diagnosed with breast cancer by CHSDA Region (1973-2009)?”**

**Execute!** (click the yellow lightning bolt on the top tool bar)

## How many American Indian or Alaska Natives were died from suicide or homicide in each CHSDA Region (1973-2009)?

<b>Alaska</b>	<b>9</b>
<b>East</b>	<b>17</b>
<b>Northern Plains</b>	<b>15</b>
<b>Pacific Coast</b>	<b>419</b>
<b>Southwest</b>	<b>22</b>

**How many American Indian or Alaska Natives were died from suicide or homicide in each CHSDA Region (1973-2009)?**

**What if we then decided we wanted to know what percent of AI/AN diagnosed during this period were in Alaska? In the Southwest?**

Go back to the **Frequency Session** window

On the **Statistic** tab

- > Under **Percentages**

- > Click the **Column** option

**Execute!**



## How many American Indian or Alaska Natives were died from suicide or homicide in each CHSDA Region (1973-2009)?

	<b>Count</b>	<b>Column %</b>	<b>Cum %</b>
<b>Alaska</b>	<b>9</b>	<b>1.87%</b>	<b>1.87%</b>
<b>East</b>	<b>17</b>	<b>3.53%</b>	<b>5.39%</b>
<b>Northern Plains</b>	<b>15</b>	<b>3.11%</b>	<b>8.51%</b>
<b>Pacific Coast</b>	<b>419</b>	<b>86.93%</b>	<b>95.44%</b>
<b>Southwest</b>	<b>22</b>	<b>4.56%</b>	<b>100.00%</b>
<b>Total</b>	<b>482</b>	<b>100.00%</b>	<b>100.00%</b>

**Let's try another question:**

**Were the rates of death from all causes in Rapid City, SD greater among American Indians/Alaska Natives or Whites between 1969 - 2009?**

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Since we are interested in the rates of death we want a rate session

Under **File**, select **New > Rate Session**

**Were the rates of death from all causes in Rapid City, SD greater among American Indians/Alaska Natives or Whites between 1969 - 2009?**

**Notice the tabs are the same:**

**Data**

**Statistic**

**Selection**

**Table**

**Output**

**Were the rates of death from all causes in Rapid City, SD greater among American Indians/Alaska Natives or Whites between 1969 - 2009?**

**Notice the tabs are the same:**

**Data** - Since we want all data available and we want information at the county level:

Select **“Mortality – All COD, Aggregated With County, Total U.S. (1969-2009) <Katrina/Rita Population Adjustment”**

**Were the rates of death from all causes in Rapid City, SD greater among American Indians/Alaska Natives or Whites between 1969 - 2009?**

**Notice the tabs are the same:**

**Statistic** – All settings are ok to leave as is...

except additionally select:

**Include Rate Ratios on Last Row Variable Groupings**

**Were the rates of death from all causes in Rapid City, SD greater among American Indians/Alaska Natives or Whites between 1969 - 2009?**

**Notice the tabs are the same:**

**Selection – in Race, Sex, Year Dth, State, Cnty, Reg (Pop, Case Files) box**

1. Race, Sex, Year Dth, State, Cnty, Reg
  - > Race recode (White, Black, Other)
    - > Select **White**
    - & **Other (AI/AK Native, Asian/Pacific Islander)**
    - \* use the Ctrl key to select both
2. Race, Sex, Year Dth, State, Cnty, Reg
  - > State-county
    - > Select **SD: Pennington County (46103)**
    - (Rapid City is in Pennington County)

**Were the rates of death from all causes in Rapid City, SD greater among American Indians/Alaska Natives or Whites between 1969 - 2009?**

**Notice the tabs are the same:**

**Table –**

Under **'Available Variables'**

“Race, Sex, Year Dx, Registry, County”

> Race recode (White, Black, Other)

click **Row**



**Were the rates of death from all causes in Rapid City, SD greater among American Indians/Alaska Natives or Whites between 1969 - 2009?**

**Notice the tabs are the same:**

**Output –**

In the **Title** box, enter

**“Were the rates of death from all causes in Rapid City, SD greater among American Indians/Alaska Natives or Whites between 1969 - 2009? ”**

**Execute!**

**Were the rates of death from all causes in Rapid City, SD greater among American Indians/Alaska Natives or Whites between 1969 - 2009?**

**Why can't we interpret these rate ratios?**

**Were the rates of death from all causes in Rapid City, SD greater among American Indians/Alaska Natives or Whites between 1969 - 2009?**

**Table –**

Under **'Available Variables'** we had previously selected:

“Race, Sex, Year Dx, Registry, County”

> Race recode (White, Black, Other)

But we don't want to include the total column or the blank columns in our output!

**We will need to create a new variable to do this:**

**Go back to the Table tab –**

**Highlight Race recode (White, Black, Other) > Remove**

**Under ‘Available Variables’:**

**“Race, Sex, Year Dx, Registry, County”**

**> Double click: Race recode (White, Black, Other)**

This will open the **Dictionary** window

**> Find Race recode (White, Black, Other): double click**

**> Rename variable: Race (White, AI)**

**> Click All races, Delete**

**> Click Black and Other unspecified (1978-1991), Delete**

**> New variable is under User Defined, add as Row variable**

**Were the rates of death from all causes in Rapid City, SD greater among American Indians/Alaska Natives or Whites between 1969 - 2009?**

**Execute!**

**Interpretation?**

## SEER Rates

- The rates presented here are per 100,000 population and over the time period selected
- A rate of 1,245.2 means there were 1,245.2 deaths between 1969 and 2009 for every 100,000 people in the population

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$$\frac{1,557}{261,358} = \frac{x}{100,000}$$

$x = 595.7$  **NOT** 1,245.2 from our output .... **WHY?**



## Age adjusted SEER Rates

What does “age adjusted” mean?

- Weighted average of age-specific (crude) rates, where weights are the proportions of persons in the corresponding age groups of a standard population

$$aarate_{x-y} = \sum_{i=x}^y \left[ \left( \frac{count_i}{pop_i} \right) \times 100,000 \times \left( \frac{std\ pop_i}{\sum_{j=x}^y std\ pop_j} \right) \right]$$

## Why adjust for age?

- Reduces any confounding effects of age when comparing crude rates

## Rate Ratios (RR), 95% Confidence Intervals, P-values...

$$\text{Rate Ratio} = \frac{\text{Rate in group A}}{\text{Rate in group B}} = \frac{\text{Rate in AI/AN}}{\text{Rate in Whites}}$$

$$\text{RR} = \frac{1,245.2}{827.1} = 1.50550$$

...So, there were 1.5 times more deaths due to malignant cancers in Rapid City, SD among American Indians/Alaska Natives than among Whites between 1969 – 2009.

## Rate Ratios (RR), 95% Confidence Intervals, P-values...

**A 95% Confidence Interval** describes the amount of uncertainty associated with our estimate

$$\text{RR} = 1.5055$$

$$\text{95\% CI} = 1.4181, 1.5964$$

Our best estimate is that there were 1.5 times more deaths due to all causes among American Indians/Alaska Natives compared to Whites... however, there is a degree of uncertainty associated with this estimate...

We can be 95% confident that the true rate ratio lies between **1.4 and 1.6**

## **Rate Ratios (RR), 95% Confidence Intervals, P-values...**

**P-value = 0.0000**

**The probability the rate ratio we observed is due to chance**

**Note: Typically a p-value below 0.05 is considered evidence of a statistically significant difference between groups**

# HOW DO WE SAVE OUT RESULTS?

## Copy/Paste

**To copy data in SEER\*Stat: Edit > Copy > Page**

- Paste into a **word document** - highlight numbers > Insert Table > Convert Text to Table... > Separate text at Tabs
- Paste into **Excel**

**To export for use in statistical software (e.g. SAS, Stata):**

**Matrix > Export > Text File...**

**Set options...**

## **HOW DO WE PRESENT RESULTS?**

**Health Disparities Calculator (HD\*Calc)  
can be used to create line graphs**

**To export from SEER\*Stat for use in HD\*Calc:**

**Matrix > Export > Text File...**

**Make sure to click “Numeric Representation”**

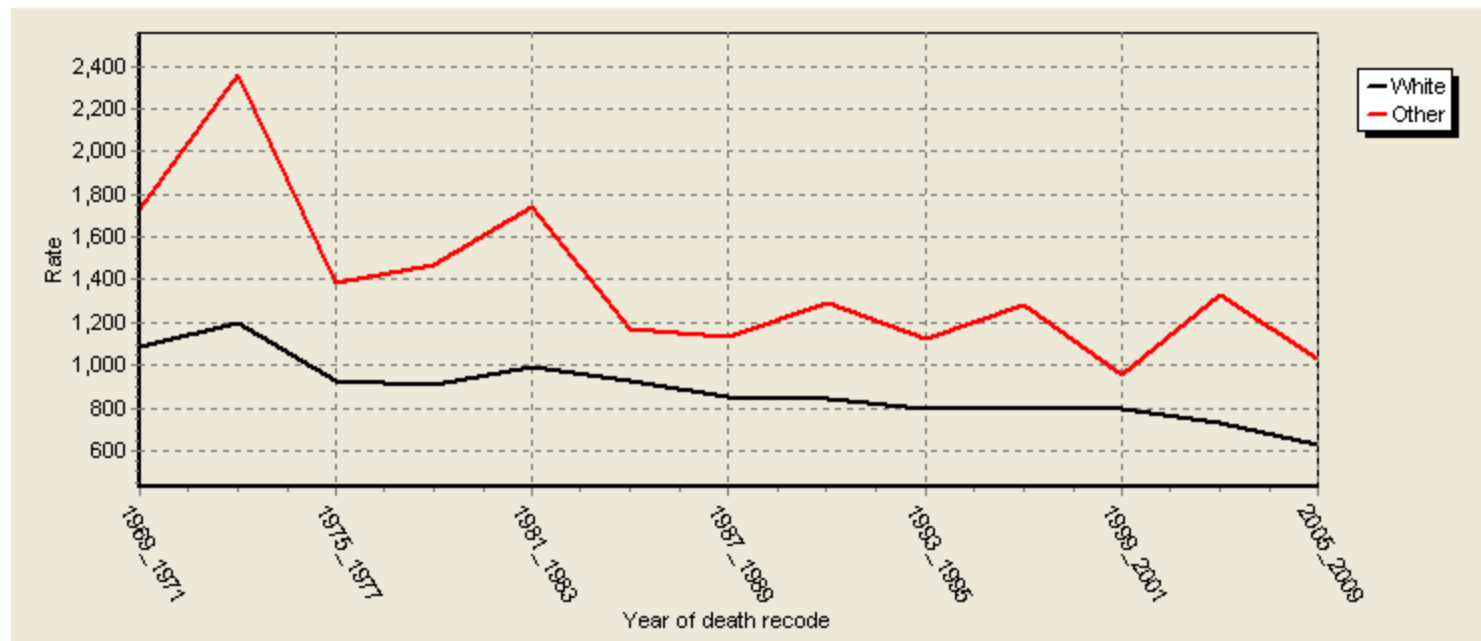
**To open in in HD\*Calc:**

**File > Open > Find .dic file ...**

**Make sure to change the variable types**

**Requires Time, Disparity, Rate, SE, and Population  
variables**

# Were the rates of death from all causes in Rapid City, SD greater among American Indians/Alaska Natives or Whites between 1969 - 2009?



Underlying mortality data provided by NCHS ([www.cdc.gov/nchs](http://www.cdc.gov/nchs)).

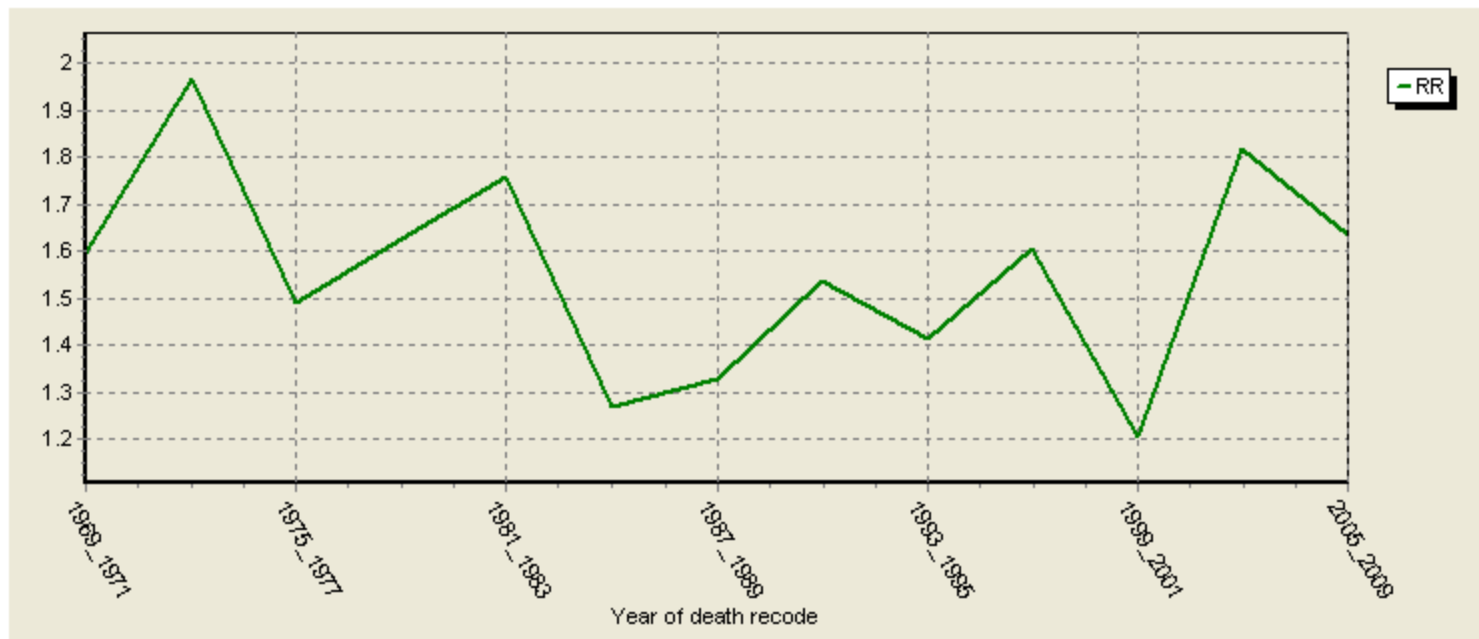
Rates are per 100,000 and age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130) standard; Confidence intervals (Tiwari mod) are 95% for rates and ratios.

^ Statistic not displayed due to fewer than 10 cases.

# The rate ratio indicates that the rate is significantly different than the rate for 1969-2008 ( $p < 0.05$ ).

Warning: Use caution when interpreting ratios and related statistics as the ratio variable contains overlapping groupings.

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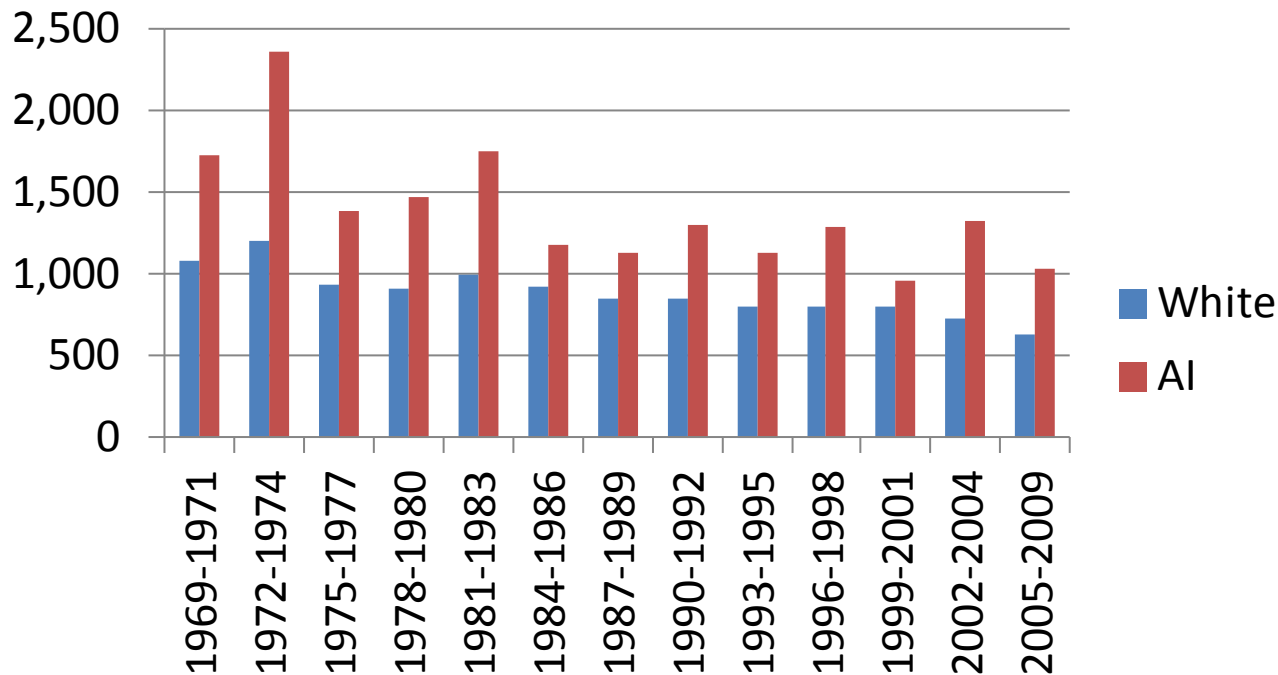
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**LUNCH!**

# Variation in Accidental Death Rates Among Northern Plains Tribes



Alexandra Maschino<sup>1</sup>, Sarah Reynolds<sup>2</sup>, Shinobu Watanabe-Galloway<sup>3</sup>, Jennifer Giroux<sup>4</sup>  
<sup>1</sup> Columbia University Mailman School of Public Health, <sup>2</sup> Rosebud Sioux Tribal Health Administration, <sup>3</sup> University of Nebraska Medical Center, <sup>4</sup> Great Plains Tribal Chairmen's Health Board

Great Plains Tribal  
Chairmen's Health Board



## BACKGROUND

Mortality rates among American Indians (AIs) are disproportionately high.<sup>1</sup> Unintentional deaths are the second leading cause of death (COD) among tribes in South Dakota (SD) and third leading COD among tribes in North Dakota.<sup>2</sup> All age groups combined, motor vehicle accidents account for the majority of fatal accidents among AIs in SD. However, suffocation is the leading cause among infants and falls in children under 10.<sup>2</sup> A 2006 study of seatbelt use on reservations found that five reservations in the Northern Plains (NP) area ranked lowest, seatbelt use among the five averaged just 38.9%.<sup>3</sup>

Few state health departments' abstract and aggregate AI mortality data by reservation's counties. NP Tribal Health Directors have requested their own reservation's data in order to monitor the health of their tribe. This study abstracted and aggregated death data for AIs and whites residing on reservation's Contract Health Service Delivery Area (CHSDA) to estimate accidental mortality rates and rate ratios for NP tribes. CHSDA specific data are provided for the Rosebud Sioux Tribe (RST).

## METHODS

Mortality data were abstracted and aggregated for AIs and whites for nineteen Tribal CHSDA regions in the NP to demonstrate accidental mortality rates and rate ratios. Trends, age and gender specific data are provided for the AIs and whites residing in RST CHSDA and compared to National All Races results. Data were obtained from the Surveillance, Epidemiology, and End Results (SEER) 1969 – 2009 US mortality registry. CHSDA residence is used to determine eligibility for services that are not available directly from Indian Health Service. CHSDA counties usually extend beyond the reservation boundaries but capture the AI population served by IHS and Tribal Health. CHSDA counties for two NP tribes overlap extensively. These tribes requested we use their reservation counties instead of CHSDA counties. Race was determined by death certificates.<sup>4</sup> American Indian, Alaska Native, Asian and Pacific Islander are one category in the database; for the purposes of this study we refer to this category as American Indian due to the low populations of the other racial groups in the NP. Accidental deaths were defined as an underlying cause of death classified by International Classification of Diseases, 10th Revision (ICD-10) external cause of injury codes as V01–X59 or Y85–Y86 (Motor Vehicle Accidents, Falls, Firearm Accidents, Drowning, Fires and Poisonings). Rates are age-adjusted to the 2000 US standard population and represent the number of cases per 100,000 individuals. Statistics were calculated using SEER\*Stat 7.1.0. Software and figures were created using Stata 12.0. State and national rates were obtained from the Web-based Injury Statistics Query and Reporting System (WISQRS).

## RESULTS

All tribes in the Northern Plains Region experienced higher accidental mortality rates than whites living in the same CHSDA counties (Figure 1). Rate ratios showed significant differences between rates in AIs and whites (RR 1.4 to 3.7; p<0.0001) in all regions with the exception of Flandreau Santee Sioux CHSDA (RR 1.2; 95% CI 0.6, 2.4; p=0.6).

Figure 1.

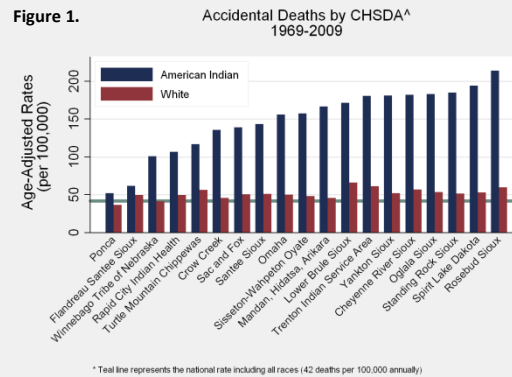


Figure 2.

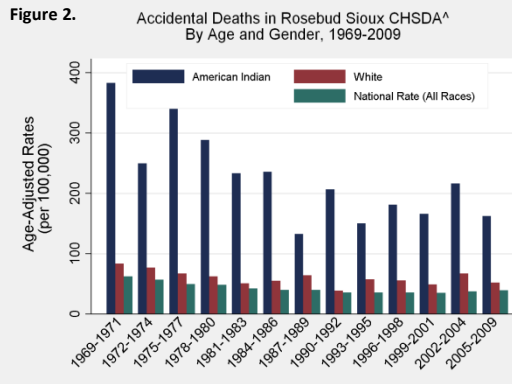
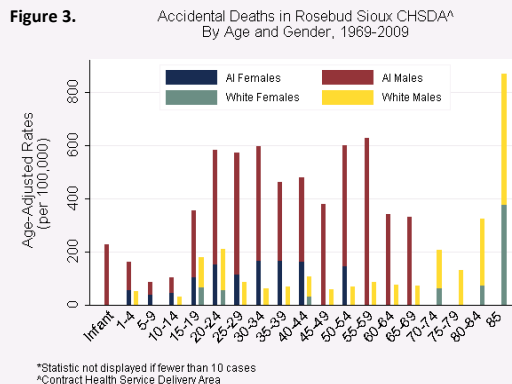


Figure 3.



\*Statistic not displayed if fewer than 10 cases  
 ^Contract Health Service Delivery Area



## RESULTS

Accidental death rates for AIs varied widely among NP tribes, ranging from 52 to 214 deaths per 100,000. Whites living in corresponding CHSDA counties experienced much lower rates (37 and 66 deaths per 100,000) which were comparable to the national rate for all races of 42 per 100,000. Trends over time (Figure 2) and by age and gender (Figure 3) for RST are demonstrated. Between 1969-71 there were 387 accidental deaths per 100,000 which dropped to 133 by the late 80's. Rates rose again in the 90's and have varied subsequently. National rates for all races (mean 43/100,000) and the rate for whites in the RST's CHSDA (mean 60/100,000) remained relatively constant. Accidental death rates among AIs have been as high as 5.7 times that of whites (1975-77) within the RST CHSDA and were significantly higher across all years (p<0.005). Elevated rates of accidental death for AIs were seen across nearly all age groups, with exceptionally disparate rates among infants (5.2 times the national rate) and adults (age 25-69), with rates between 4.1 and 7.7 times the rate of RST CHSDA whites. Consequentially, accidental deaths were the leading COD among AIs between the ages of 1-44 years. The age distribution of rates among whites reflected national trends (not shown).

## CONCLUSIONS

While the disparate rate of accidental deaths among AIs has been previously reported, the extent of variation between NP reservations has not. The data presented here indicate that existing prevention efforts need to be bolstered and tailored to the specific needs of each tribe. Such efforts require the collection of Tribal level data so that Tribal Health Directors and Tribal Leaders are able to monitor their own reservation's health status.

**Disclaimer:** This project was completed by the Great Plains Tribal Chairmen's Health Board as a service to the Northern Plains Tribal Health Directors. These results should not be disseminated without approval of individual tribes.

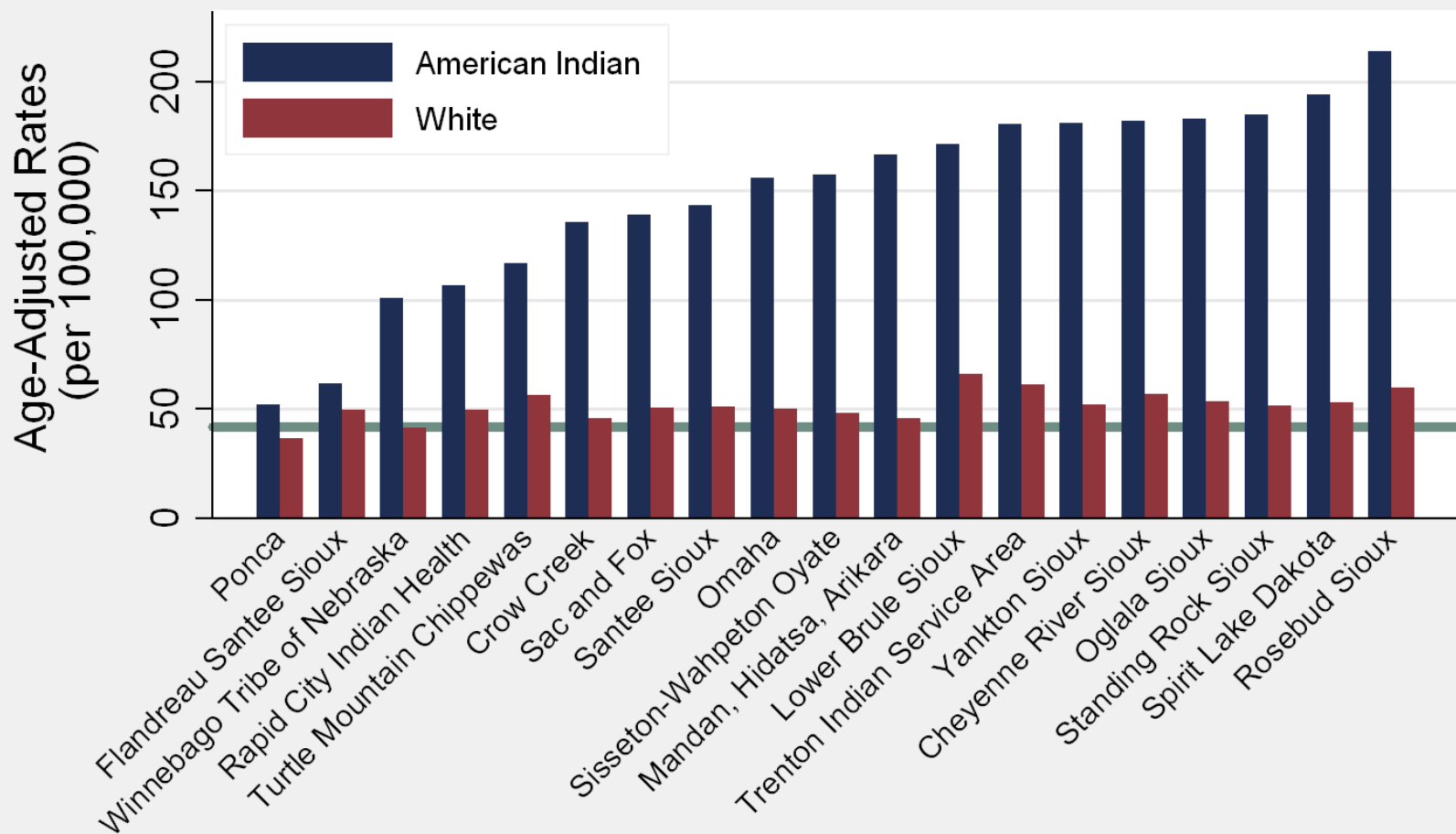
The findings and conclusion of this report are those of the authors and do not necessarily represent the official position of the Indian Health Service.

**Acknowledgements:** The collection and presentation of these data was done with the approval of Rosebud Sioux Tribal Health Administration.

## References

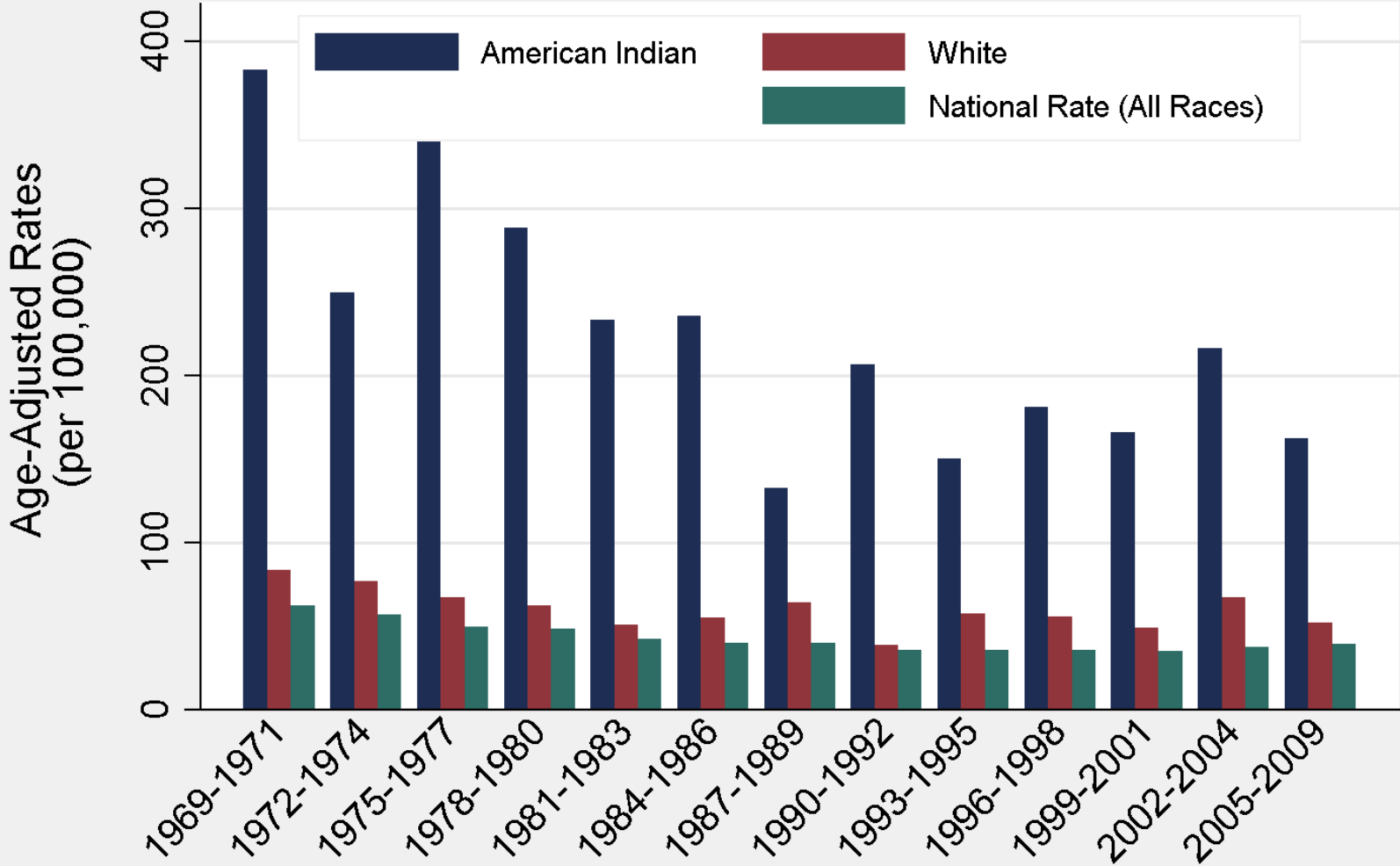
- Centers for Disease Control and Prevention (CDC). Vital signs: Unintentional injury deaths among persons aged 0–19 years — United States, 2000–2009. *MMWR Morbidity Mortality Wkly Rep* 2012 Apr 20; 61:270.
- Centers for Disease Control and Prevention (US), National Center for Injury Prevention and Control. WISQRS™ (Web-based Injury Statistics Query and Reporting System)
- 2006 Seat Belt Use Estimate for Native American Tribal Reservations, Chafe, R.H.B., Solomon, M. and Leaf, W.A., Preusser Research Group.
- Espey et al. Methods for improving cancer surveillance data in American Indian and Alaska Native populations. *Cancer* 2008; 113 (5 suppl): 1120-30.

## Accidental Deaths by CHSDA<sup>^</sup> 1969-2009

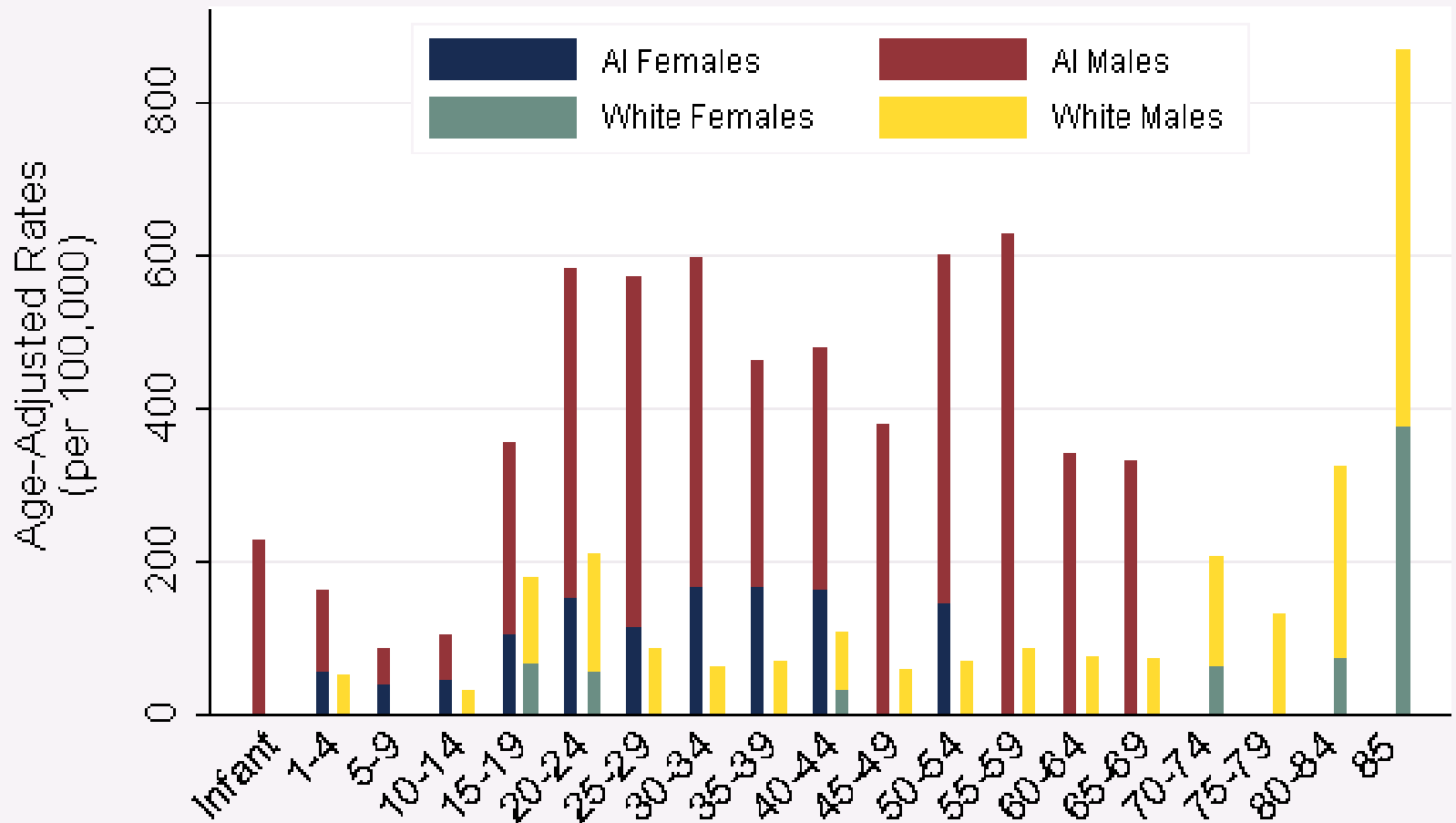


\* Teal line represents the national rate including all races (42 deaths per 100,000 annually)

# Accidental Deaths in Rosebud Sioux CHSDA^ 1969-2009



## Accidental Deaths in Rosebud Sioux CHSDA<sup>^</sup> By Age and Gender, 1969-2009



\*Statistic not displayed if fewer than 10 cases

<sup>^</sup>Contract Health Service Delivery Area

**Were the rates of death from accidental and adverse effects in Rosebud Sioux CHSDA greater among American Indians/Alaska Natives or Whites between 1969 - 2009?**

Since we are interested in the rates of death we want a rate session

Under **File**, select **New > Rate Session**

**Were the rates of death from accidental and adverse effects in Rosebud Sioux CHSDA greater among American Indians/Alaska Natives or Whites between 1969 - 2009?**

**Data** - Since we want all data available and we want information at the county level:

Select **“Mortality – All COD, Aggregated With County, Total U.S. (1969-2009) <Katrina/Rita Population Adjustment”**



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except additionally select:

**Include Rate Ratios on Last Row Variable Groupings**

# Were the rates of death from accidental and adverse effects in Rosebud Sioux CHSDA greater among American Indians/Alaska Natives or Whites between 1969 - 2009?

**Selection** – in Race, Sex, Year Dth, State, Cnty, Reg (Pop, Case Files) box

1. Race, Sex, Year Dth, State, Cnty, Reg

> Race recode (White, Black, Other)

> Select **White**

& **Other (AI/AK Native, Asian/Pacific Islander)**

\* use the Ctrl key to select both

2. Cause of Death (COD) and Follow-up

> Other

> Cause of Death Recode

> Accidents and Adverse Effects

> Add New Line

# Were the rates of death from accidental and adverse effects in Rosebud Sioux CHSDA greater among American Indians/Alaska Natives or Whites between 1969 - 2009?

**Selection** – in Race, Sex, Year Dth, State, Cnty, Reg (Pop, Case Files) box

3. Race, Sex, Year Dth, State, Cnty, Reg

> State-county

> Select SD: Bennet County (46007)

NE: Cherry County (31031)

SD: Gregory County (46053)

SD: Lyman County (46085)

SD: Mellette County (46095)

SD: Todd County (46121)

SD: Tripp County (46123)

\* hold the Ctrl key to select multiple counties

**Were the rates of death from accidental and adverse effects in Rosebud Sioux CHSDA greater among American Indians/Alaska Natives or Whites between 1969 - 2009?**

**Table –**

Under **'Available Variables'**

“Race, Sex, Year Dth, State, Cnty, Reg”

> Year of death recode

click **Row**

Under **'Available Variables'**

“User-Defined”

> **Race (White, AI)**

click **Row**

**Were the rates of death from accidental and adverse effects in Rosebud Sioux CHSDA greater among American Indians/Alaska Natives or Whites between 1969 - 2009?**

**Notice the tabs are the same:**

**Output –**

In the **Title** box, enter

**“Were the rates of death from accidental and adverse effects in Rosebud Sioux CHSDA greater among American Indians/Alaska Natives or Whites between 1969 - 2009? ”**

**Execute!**

## **HOW DO WE PRESENT RESULTS?**

**Health Disparities Calculator (HD\*Calc)  
can be used to create line graphs**

**To export from SEER\*Stat for use in HD\*Calc:**

**Matrix > Export > Text File...**

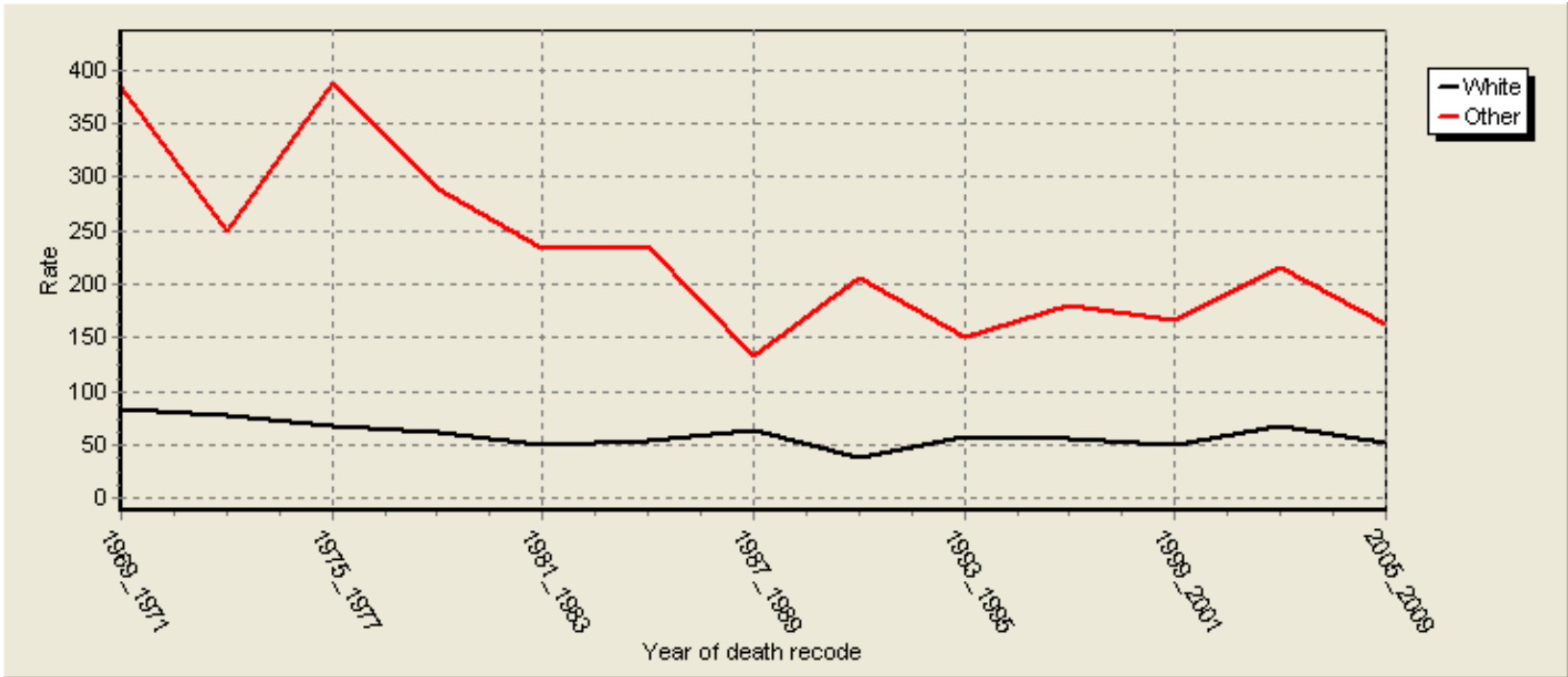
**Make sure to click “Numeric Representation”**

**To open in in HD\*Calc:**

**File > Open > Find .dic file ...**

**Make sure to change the variable types**

**Requires Time, Disparity, Rate, SE, and Population  
variables**



**Were the rates of death from accidental and adverse effects in Rosebud Sioux CHSDA greater among American Indians/Alaska Natives or Whites between 1969 - 2009?**

**Table –**

Under **'Available Variables'**

“User-Defined”

> **Race (White, AI)**

click **Column**

Under **'Available Variables'**

“Race, Sex, Year Dth, State, Cnty, Reg”

> Year of death recode

click **Row**



**Were the rates of death from accidental and adverse effects in Rosebud Sioux CHSDA greater among American Indians/Alaska Natives or Whites between 1969 - 2009?**

**PowerPoint Bar Chart (uses Excel)**

**To copy data into an Excel table:** Edit > Copy > Page

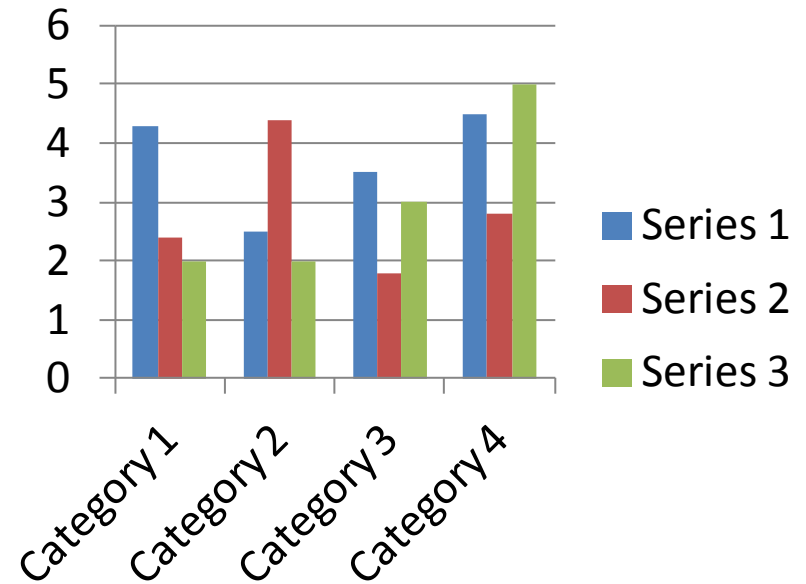
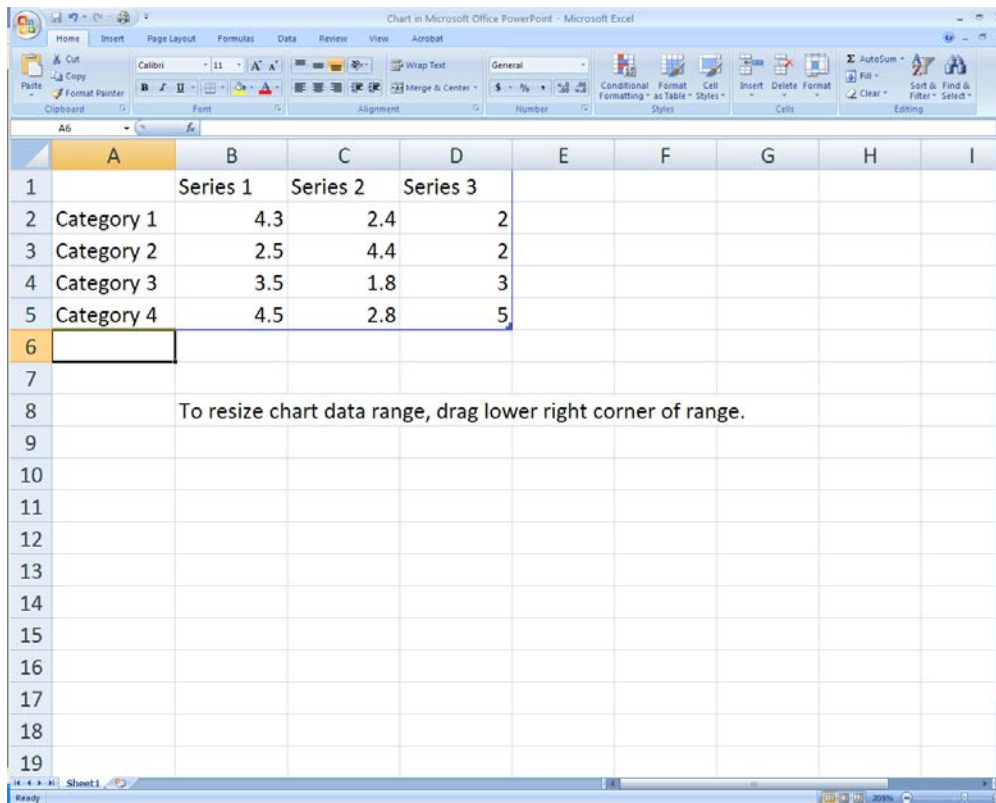
**In PowerPoint:**

Insert > Chart > Column (first option, basic bar chart)

... A generic bar chart should show up and open an Excel sheet

**Were the rates of death from accidental and adverse effects in Rosebud Sioux CHSDA greater among American Indians/Alaska Natives or Whites between 1969 - 2009?**

## **PowerPoint Bar Chart (uses Excel)**

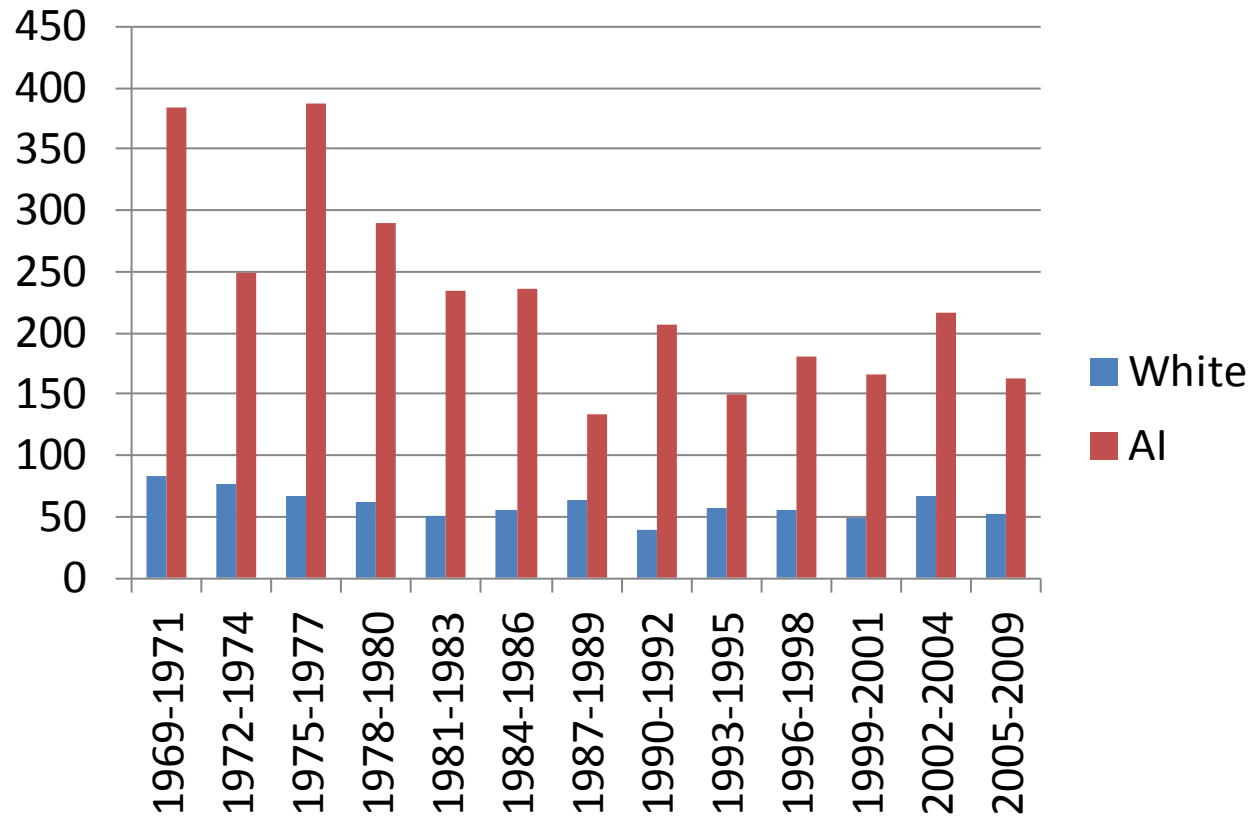




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**Rosebud Sioux    Bennett, SD; Cherry, NE; Gregory, SD;  
Lyman, SD; Mellette, SD; Todd, SD; Tripp, SD**

---



**What about males versus females?**

**Statistic –**

**Uncheck**

Include Rate Ratios on the Last Row Variable

Show Standard Errors and Confidence Intervals

**What about males versus females?**

**Table –**

Under **‘Available Variables’**

“Race, Sex, Year Dth, State, Cnty, Reg”

> Sex

click **Column**

**Execute!**

## What about males versus females?

**Table –**

Under **'Available Variables'**

“Race, Sex, Year Dth, State, Cnty, Reg”

> Sex

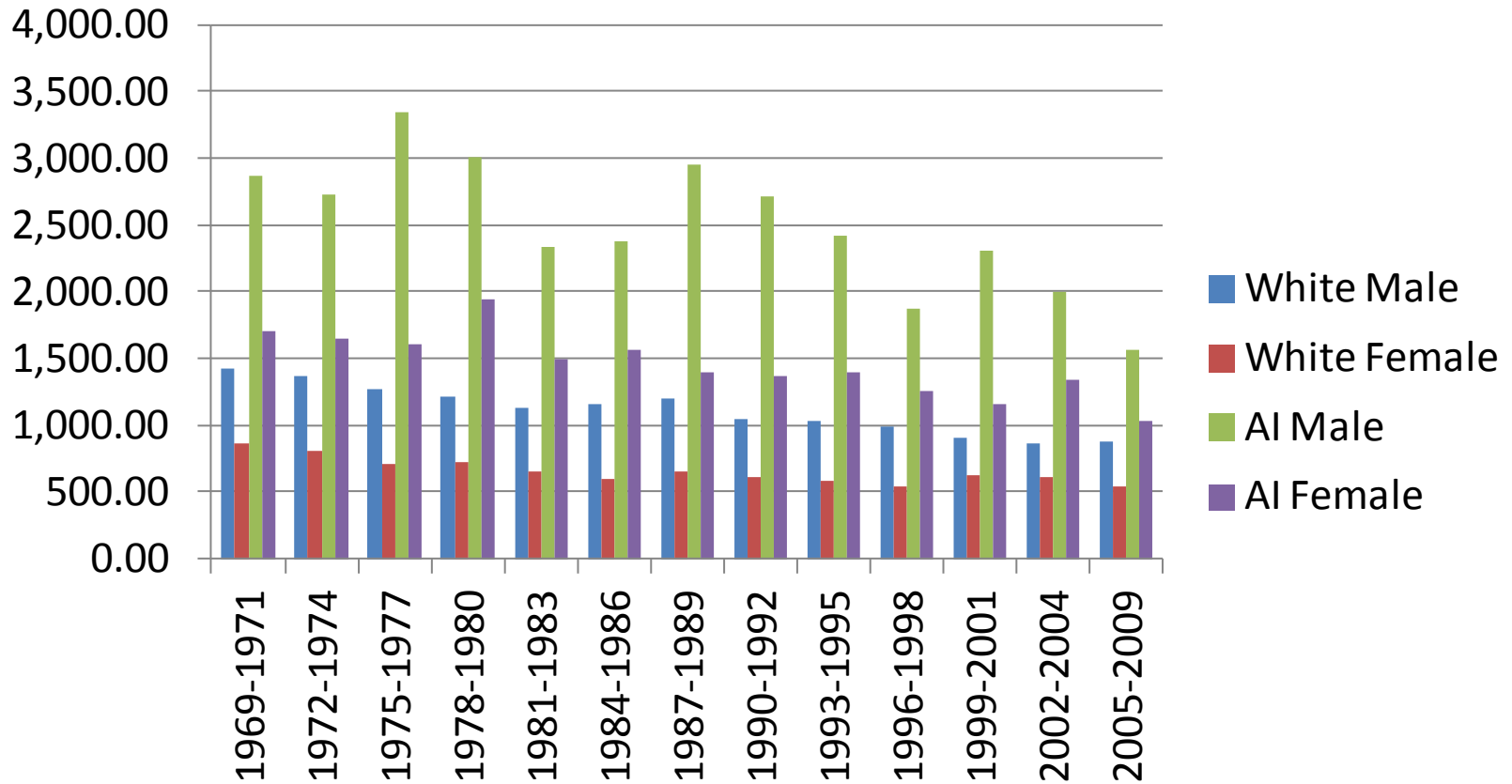
click **Column**

**Execute!**

**Edit > Copy > Page**

**Paste into Excel Table (through PowerPoint)**

# Were the rates of death from accidental and adverse effects in Rosebud Sioux CHSDA greater among American Indians/Alaska Natives or Whites between 1969 - 2009? What about males versus females?





**Your Turn!**

# Tribes and CHSDAs

State	Tribe	CHSDA County
Iowa	Sac & Fox	Tama, IA
Nebraska	Omaha	Burt, NE; Cuming, NE; Monona, IA; Thurston*, NE; Wayne*, NE
	Ponca	Boyd, NE; Burt, NE; Charles Mix, SD; Douglas, NE; Hall, NE; Holt, NE; Lancaster, NE; Madison, NE; Platte, NE; Pottawattamie, IA; Sarpy, NE; Stanton, NE; Wayne, NE; Woodbury, IA
North Dakota	Santee Sioux	Bon Homme, SD; Knox, NE
	Winnebago Tribe of Nebraska	Dakota, NE; Dixon, NE; Monona, IA; Thurston*, NE; Wayne*, NE; Woodbury, IA
	Mandan, Hidatsa, Arikara	Dunn, ND; McKenzie, ND; McLean, ND; Mercer, ND; Mountrail, ND; Ward, ND
	Spirit Lake Dakota	Benson, ND; Eddy, ND; Nelson, ND; Ramsey, ND
South Dakota	Trenton Indian Service Area	Divide, ND; McKenzie, ND; Richland, MT; Roosevelt, MT; Sheridan, MT; Williams, ND
	Turtle Mountain Chippewa	Rolette, ND
	Cheyenne River Sioux	Corson, SD; Dewey, SD; Haakon, SD; Meade, SD; Perkins, SD; Potter, SD; Stanley, SD; Sully, SD; Walworth, SD; Ziebach, SD
	Crow Creek Sioux§	Brule, SD; Buffalo, SD; Hand, SD; Hughes, SD; Hyde, SD; Lyman, SD; Stanley, SD
	Flandreau	Moody, SD**
	Standing Rock Sioux	Adams, ND; Campbell, SD; Corson, SD; Dewey, SD; Emmons, ND; Grant, ND; Morton, ND; Perkins, SD; Sioux, ND; Walworth; Ziebach, SD
	Lower Brule Sioux§	Brule, SD; Buffalo, SD; Hughes, SD; Lyman, SD; Stanley, SD
	Oglala Sioux	Bennett, SD; Cherry, NE; Custer, SD; Dawes, NE; Fall River, SD; Jackson, SD; Mellette, SD; Pennington, SD; Shannon, SD; Sheridan, NE; Todd, SD
	Rosebud Sioux	Bennett, SD; Cherry, NE; Gregory, SD; Lyman, SD; Mellette, SD; Todd, SD; Tripp, SD
	Sisseton-Wahpeton Oyate	Codington, SD; Day, SD; Grant, SD; Marshall, SD; Richland, ND; Roberts, SD; Sargent, ND; Traverse, MN
	Rapid City Indian Health	Pennington
	Yankton Sioux	Bon Homme, SD; Boyd, NE; Charles Mix, SD; Douglas, SD; Gregory, SD; Hutchison, SD; Knox, NE

\*Entire county included; only a portion is tribal land

\*\*No CHSDA

§THD requested tribal county be used instead of CHSDA (counties in orange excluded)