

**Racial Disparities in Pediatric Injury Hospitalization Rates
in a Rural State
South Dakota, 2009-2013**

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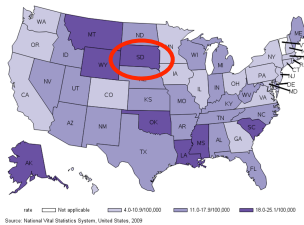
² South Dakota Department of Health, Pierre, SD

Purpose:

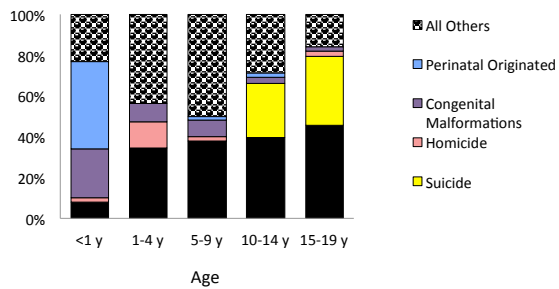
Compare injury hospitalization rates from 2009-2013 among White and American Indian populations:

- **manner of injuries:** (6 categories includes unintentional or accidental injuries, suicide or self-inflicted, homicide or assault, etc.)
- **mechanisms of injuries:** (18 categories on the way injury was sustained, or cause of injury – i.e., falls, motor vehicle accidents, poisoning, etc.)
- **nature of injuries:** (12 categories including fractures, system-wide & late effects, burns, etc.)

**Death Rates due to Unintentional Injuries Among Persons Aged ≤19 Years,
by State, 2009**



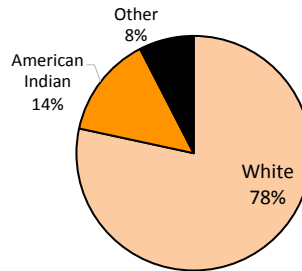
Leading Causes of Death by Age Group, South Dakota, 2009-2013



South Dakota's Indian Reservations



South Dakota Population: 0-19 Years, 2009-2013



Methods

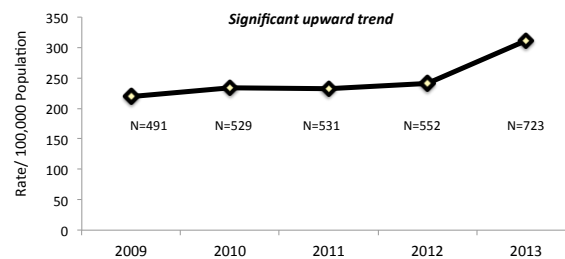
Hospital Admission Data

- South Dakota Association of Healthcare Organizations Data Collection System, 2009-13
- *Note:* IHS Hospital data are not included

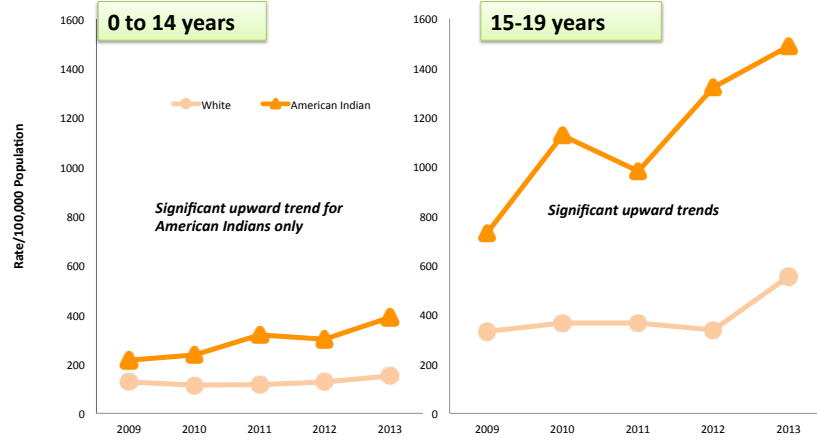
External Cause of Injury Code

- External Cause of Injury Code (DXE)
 - ICD-9-CM Diagnosis Codes: E000-E999
- Injury Diagnosis Matrix for ICD-9-CM & Barell Injury Diagnosis Matrix for classification (http://www.cdc.gov/nchs/injury/injury_tools.htm)

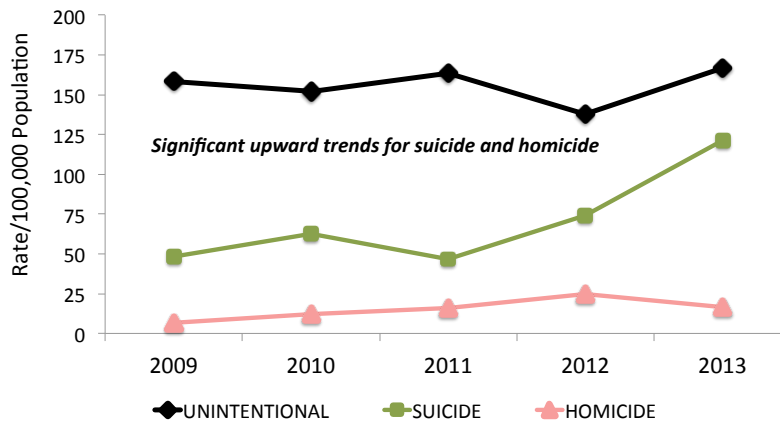
Injury Hospitalization Rates Among Children 0-19 Years of Age, South Dakota, 2009-2013



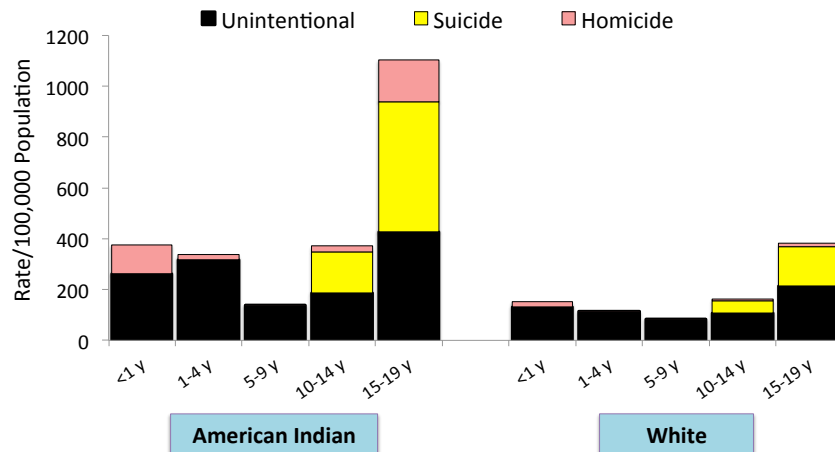
Injury Hospitalization Rates by Race and Age Group Among Children Aged 0-19 Years South Dakota, 2009-2013



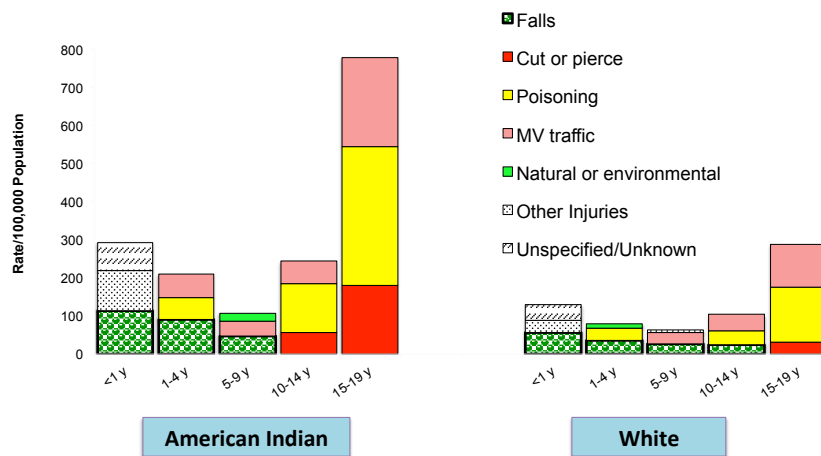
Injury Hospitalization Rates by Manner Among Children Aged 0-19 Years South Dakota, 2009-2013



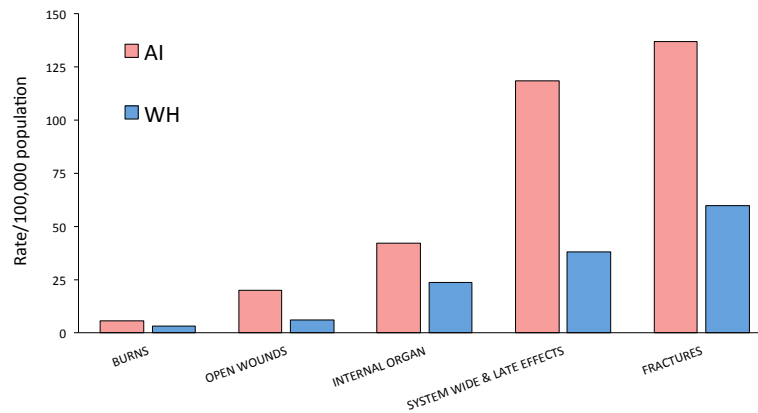
Injury Hospitalization Rates by Manner, Age and Race Among Children 0-19 Years, South Dakota, 2009-2013



Injury Hospitalization Rates for the Top 3 Mechanisms by Age and Race Among Children 0-19 Years, South Dakota, 2009-2013



Injury Hospitalization Rates by Nature of Injury and Race Among Children 0-19 Years of Age, South Dakota, 2009-2013



Conclusions

- South Dakota American Indian children have disproportionately higher hospitalization rates due to injuries.
- Knowing types of injuries requiring hospitalization will allow public health professionals to more efficiently target their efforts to prevent injuries.

Limitations

- Data set that was used did not include hospitalizations at IHS facilities.
- This would result in underestimating injury hospitalization rates for American Indian children.
- It is not known whether IHS Hospital admissions differ by manner, mechanism, or nature of injury than those seen in the South Dakota data set that was used.