



NCIPC American Indian/Alaska Native Workgroup

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NCIPC Board of Scientific Counselors Meeting

December 5, 2019

Injury and violence across the lifespan and generations

Early Childhood → Adolescence → Adulthood → Future Generations

Overview

- Injury and violence burden among AI/AN communities
- Challenges for AI/AN public health efforts
- AI/AN communities and public health have solutions
- NCIPC Tribal Workgroup and funded projects

Injury and Violence Burden among AI/AN Communities

Ten Leading Causes of Death, AI/AN, 2013-2017

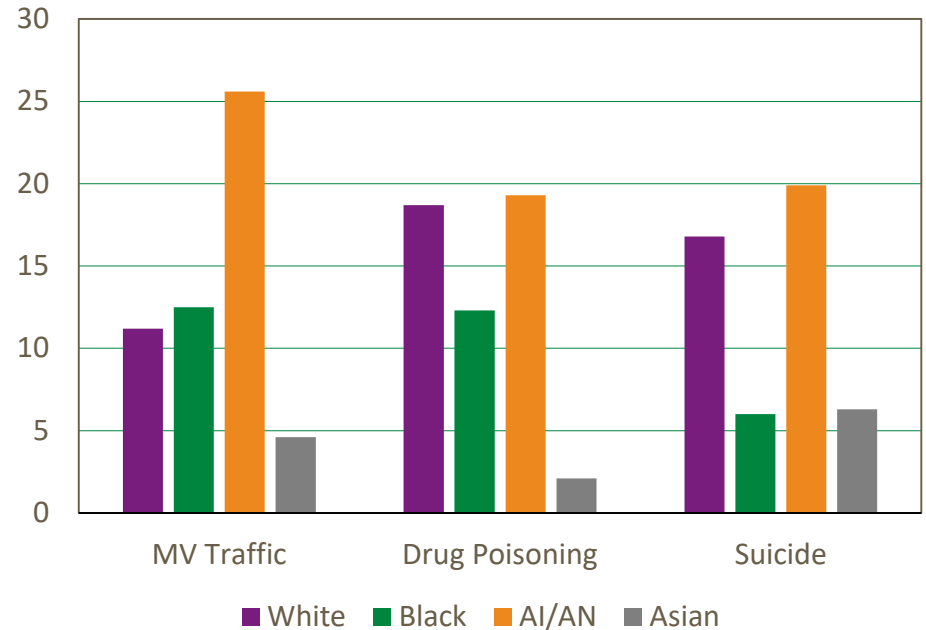
Rank	Age Groups										All Ages
	<1	1-4	5-9	10-14	15-24	25-34	35-44	45-54	55-64	65+	
1	Congenital Anomalies 342	Unintentional Injury 173	Unintentional Injury 98	Unintentional Injury 91	Unintentional Injury 1,313	Unintentional Injury 2,100	Unintentional Injury 1,865	Unintentional Injury 1,941	Malignant Neoplasms 4,122	Heart Disease 10,761	Heart Disease 17,076
2	Short Gestation 205	Homicide 53	Malignant Neoplasms 24	Suicide 64	Suicide 782	Suicide 784	Liver Disease 904	Heart Disease 1,916	Heart Disease 3,293	Malignant Neoplasms 9,786	Malignant Neoplasms 16,487
3	SIDS 194	Congenital Anomalies 46	Congenital Anomalies 16	Malignant Neoplasms 30	Homicide 285	Liver Disease 424	Heart Disease 741	Malignant Neoplasms 1,763	Unintentional Injury 1,367	Chronic Low. Respiratory Disease 3,198	Unintentional Injury 10,553
4	Unintentional Injury 139	Malignant Neoplasms 19	Homicide 14	Homicide 14	Malignant Neoplasms 78	Homicide 417	Suicide 514	Liver Disease 1,555	Liver Disease 1,361	Diabetes Mellitus 2,969	Diabetes Mellitus 5,288
5	Placenta Cord Membranes 75	Influenza & Pneumonia 13	Chronic Low. Respiratory Disease 7	Heart Disease 8	Heart Disease 58	Heart Disease 275	Malignant Neoplasms 486	Diabetes Mellitus 668	Diabetes Mellitus 1,239	Cerebrovascular 2,414	Liver Disease 5,142
6	Maternal Pregnancy Comp. 74	Heart Disease 12	Heart Disease 5	Congenital Anomalies 6	Congenital Anomalies 33	Malignant Neoplasms 176	Diabetes Mellitus 305	Suicide 383	Chronic Low. Respiratory Disease 762	Alzheimer's Disease 1,627	Chronic Low. Respiratory Disease 4,287
7	Homicide 28	Cerebrovascular 6	Influenza & Pneumonia 3	Influenza & Pneumonia 5	Liver Disease 21	Diabetes Mellitus 85	Homicide 271	Cerebrovascular 273	Cerebrovascular 493	Unintentional Injury 1,463	Cerebrovascular 3,359
8	Bacterial Sepsis 27	Septicemia 5	Perinatal Period 3	Chronic Low. Respiratory Disease 3	Chronic Low. Respiratory Disease 18	Septicemia 47	Influenza & Pneumonia 110	Chronic Low. Respiratory Disease 232	Nephritis 324	Influenza & Pneumonia 1,215	Suicide 2,856
9	Circulatory System Disease 27	Chronic Low. Respiratory Disease 4	Meningitis 2	Perinatal Period 3	Diabetes Mellitus 18	Cerebrovascular 46	Cerebrovascular 106	Septicemia 214	Septicemia 294	Nephritis 1,116	Influenza & Pneumonia 1,916
10	Necrotizing Enterocolitis 24	Perinatal Period 4	Seven Tied 1	Three Tied 2	Complicated Pregnancy 17	Influenza & Pneumonia 46	Septicemia 98	Influenza & Pneumonia 208	Influenza & Pneumonia 282	Liver Disease 877	Nephritis 1,706

Centers for Disease Control and Prevention, WISQARS. Leading Causes of Death, 1999-2017. Accessed on November 18, 2019.

AI/AN Injury Burden

- American Indians and Alaska Natives (AI/AN) face a disproportionately high rate of injury-related death compared with other races
- Between 2013 and 2017 the overall injury mortality rate for AI/AN was 1.6 times the rate of non-Hispanic whites

Age-Adjusted Injury Death Rates per 100,000, All Ages, 2013-2017



Adverse Childhood Experiences among AI/AN populations

- According to National Survey of Children's Health, AI/AN children were more likely to experience
 - 2+ ACEs (40.3% versus 21.0%)
 - 3+ ACEs (26.8% versus 11.5%)
 - 4+ ACEs (16.8% versus 6.2%)Compared to non-Hispanic White children
- According to the South Dakota Health Survey, AI/AN adults were more likely to experience:
 - 3 ACEs (13.0% versus 6.0%)
 - 4-5 ACEs (13.1% versus 7.4%)
 - 6 or more ACEs (19.3% versus 3.9%)

Kenney MK, Singh GK. Adverse Childhood Experiences among American Indian/Alaska Native Children: The 2012 National Survey of Children's Health. *Scientifica (Cairo)* 2016;2016:7424239.

Warne, D, Dulacki K, Spurlock M, Meath T, Davise MM, Wright B, & McConnel KJ. Adverse Childhood Experiences (ACE) among American Indians in South Dakota and Associations with Mental Health Conditions, Alcohol Use, and Smoking. *J Health Care Poor Underserved* 2017;28(4):1559-1577.

AI/AN People are More Likely to Experience ACES

ACES	AI/AN Children (%)	Non-Hispanic White Children (%)
2+	40	21
3+	27	12
4+	17	6

ACES	AI/AN Adults (%)	comparison group (%)
3	13	6
4-5	13	7
6+	19	4

Kenney MK, Singh GK. Adverse Childhood Experiences among American Indian/Alaska Native Children: The 2012 National Survey of Children's Health. *Scientifica(Cairo)*2016;2016:7424239.

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Challenges for AI/AN public health efforts

Racial Misclassification

- Misclassification of race is a widespread problem that affects the accuracy of fatal and non-fatal AI/AN injury data
- Misclassification results in an underrepresentation of AI/ANs in state and national data sets
- Rates of racial misclassification vary widely among Indian Health Service administrative areas

Historical Trauma among AI/AN

- Government policy toward AI/ANs has resulted in significant historical traumas that continue to affect AI/AN communities
 - Forced removal and relocation from traditional lands
 - Boarding school era
 - Assimilation policies
- Historical trauma contributes to a health inequity for AI/AN

Protective Factors

- AI/AN communities also have unique cultural protective factors
 - Cultural traditions
 - Connection to community
 - Extended family



**AI/AN Communities and public health
have solutions**

**Preventing ACEs, injury, and violence
requires understanding why
some children and families
are at greater risk than others.**



The power of prevention

Preventing ACEs in future generations could reduce levels of:



Early sex
(before age 16)
by 33%



Unintended teen pregnancy
by 38%



Smoking
(current)
by 16%



Binge drinking
(current)
by 15%



Cannabis use
(lifetime)
by 33%



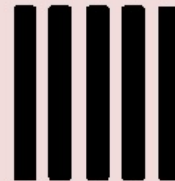
Heroin/crack use
(lifetime)
by 59%



Violence victimisation
(past year)
by 51%



Violence perpetration
(past year)
by 52%



Incarceration
(lifetime)
by 53%




Poor diet
(current; <2 fruit & veg portions daily)
by 14%

NCIPC AI/AN (Tribal) Workgroup

- Established by NCIPC staff in 2017
- Mission
 - Foster collaboration and advancement in the field of Injury and Violence Prevention for AI/AN people in support of CDC's commitment to promote health, prevent disease and injury, and improve quality of life
- Staff membership represents a cross-section of injury prevention topics and public health functions

NCIPC Tribal Workgroup Objectives

1. Support ongoing AI/AN injury and violence work at CDC.
 2. Promote collaboration to eliminate, control, and prevent injury and violence in AI/AN communities.
 3. Support research and programmatic activities to reduce injury and violence among AI/AN people.
 4. Maximize synergies across NCIPC's activities and programs related to AI/AN people and communities.
 5. Foster cross-division sharing of ideas and information related to injury and violence among AI/AN people and communities.
 6. Inform NCIPC and Division leadership on AI/AN issues and gaps in the field and propose solutions.
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NCIPC Funded Projects

NCIPC Funding Targeting AI/AN Populations

- NCIPC is currently funding tribes and tribal organizations in the following topic areas:
 - Opioids
 - Motor vehicle crashes
 - Older adult falls
 - Violence
 - Cross topic
 - ACEs
 - Tribal Listening Sessions
 - Federal Agency Partnerships – CDC/IHS Conference

Opioid Overdose Prevention

- NCIPC has dedicated over \$12M to combat the opioid epidemic in AI/AN communities
 - Tribal Epidemiology Center Public Health Infrastructure (TECPHI) Opioid Supplement
 - Tribal Public Health Capacity Building and Quality Improvement Umbrella Cooperative Agreement
 - Strengthening Public Health Systems and Services Through National Partnerships to Improve and Protect the Nation's Health

Collaborative projects to address ACEs in Native Communities

- Eagle Books – focus on protective factors to prevent violence
- Partnership with AAIP – ACEs toolkit
 - <https://www.aaip.org/programs/aces-toolkit/>
 - Article about AI/AN physicians and addressing ACEs
- Partnership with NIHB – ACEs Resource Basket
- Tribal Convenings to better understand violence prevention need (previously mentioned)

National Conference on AI/AN Injury and Violence Prevention (IVP)

- NCIPC collaborated with the Indian Health Service Injury Prevention Program to co-host the first National Conference on AI/AN IVP in July 2019
- Impacts:
 - Over 250 attendees representing researchers, practitioners, students, and federal partners from across Indian Country
 - Strengthened partnerships with federal partners, especially IHS
 - Overwhelmingly positive evaluations with a strong interest in continuing the conference in future years

Tribal Listening Sessions

- NCPIC is convening 2 different sets of tribal listening sessions during FY 2020 to gather input from tribes to inform future initiatives
 - Division of Violence Prevention
 - Focus on establishing priorities for ACEs, sexual/intimate partner violence and other violence areas
 - Division of Injury Prevention
 - Focus on injury surveillance issues and priorities for tribes and tribal organizations

For more information, contact CDC
1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 www.cdc.gov

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

