Executive Summary

Unintentional injuries – such as accidents involving motor vehicle crashes, falls, drowning, poisoning, or even burns resulting from fires – are the leading cause of death among people aged 1-44 years. As a group, American Indians and Alaska Natives (AI/AN) experience the highest rate per capita of unintentional injury and injury-related death when compared to other groups by racial/ethnic status. The primary cause of unintentional injury-related death is motor vehicle collisions, which are preventable.

Tribal public health law is a tool tribal governments can use to establish policy and legal solutions to prevent unintentional injuries and injury-related deaths on tribal lands, or reservation roads. This Policy Insights Brief includes:

- A discussion of contributing factors to unintentional injury and injury-related death on reservation roads;
- A summary of tribal public health law in seat belt use, child passenger restraint, pedestrian safety, and distracted driving prevention; and
- Recommendations for tribal leaders committed to improving tribal codes and regulations to prevent unintentional injury and injury-related death.

In the data, we observe a disturbing trend that our Native boys and men are both subject to higher rates of motor vehicle and pedestrian death and less likely to voluntarily comply with seat belt use regulations. There is a need for particular education and safety intervention with this population.

NCAI hopes to identify up to six tribal nations that have developed promising practices in preventing unintentional injuries through road safety measures to feature in a follow-up to this Policy Insights Brief. Please contact Emily White Hat at ewhitehat@ncai.org or (202) 466-7767 to share your tribe’s work.
Introduction

Unintentional injuries are the leading cause of death among people aged 1-44 years.1,2 As a group, American Indians and Alaska Natives (AI/AN) experience the highest rate per capita of unintentional injury and injury-related death when compared to other groups by racial/ethnic status (see Figure 1).3

![Figure 1: Age-Adjusted Unintentional Injury-Related Deaths, by Race/Ethnicity](Data Source: National Vital Statistics System-Mortality (NVSS-M))

Preventing Unintentional Injury on Reservation Roads

The primary cause of unintentional injury-related death is motor vehicle collisions, which are preventable. Public roads are particularly dangerous for drivers, passengers, and pedestrians, as they are the sites where most unintentional injuries and injury-related deaths occur. Following national trends, public roads are where injury-related deaths for AI/AN pedestrians occur (see Figure 2). In fact, it is reported that Native people are “killed at rates twice that of all other ethnic groups” in the US as a result of motor vehicle crashes (p. 39).5

![Figure 2: Pedestrian Deaths on Public Roads, by Race/Ethnicity](Data Source: Fatality Analysis Reporting System (FARS))

Thus, tribal governments have an essential role to play in developing strategies to prevent unintentional injury and injury-related death among AI/AN people. In particular, tribal public health law is a tool which tribal governments can use to establish policy and legal solutions to prevent unintentional injuries and injury-related deaths on tribal lands, or reservation roads. Existing tribal public health codes in this area increase awareness and ensure leaders carry out tribal legislative responsibility to implement comprehensive public health initiatives.
Road safety is an area of public health law that can greatly impact lives and improve health through education and prevention. Some of the ways tribal governments can work to prevent unintentional injuries and injury-related deaths are by establishing tribal code, law, and/or policy related to:

- Seat belt use;
- Child passenger restraint;
- Pedestrian safety; and
- Distracted driving (e.g., talking, dialing, sending text messages).

In what follows, we describe existing trends in each of these areas, a range of contributing factors related to unintentional injury and injury-related death for Native people, and current tribal and state prevention efforts established through law and regulatory policy.

**Seat Belt Use: Data & Trends**

In 2011, seat belts saved an estimated 12,000 lives. The National Highway Traffic Safety Administration (NHTSA) reports that the proper use of seat belts reduces the risk of critical injuries and death by about 50 percent. Sixty-two percent of those who died in nighttime crashes and 43 percent who died in daytime crashes were not using a seat belt. Over 30 percent of those unbelted were ejected, and 77 percent of those died.

Seat belt laws and use can significantly improve the safety of Native people and the costs related to medical services incurred by tribal governments. Within the first decade after the Navajo Nation passed a seat belt law, injuries dropped, and the reservation saved more than $40 million in medical costs. The Bureau of Indian Affairs administers the Indian Highway Safety Program (IHSP), and NHTSA provides survey design guidelines for tracking seat belt use rates in the US. The IHSP serves as the principal coordinator for highway safety across tribal nations.

IHSP and NHTSA have measured the rate of seat belt use on tribal reservations since 2004. The 2004 survey reported an overall seat belt use rate on tribal reservations of 55.4 percent, compared to the national rate of 80 percent. The national tribal reservation seat belt use rate has increased over time to 68.5 percent in 2011, the most recent year for which data are available (See Figure 3).

There appear to be two contributing factors leading to the lower rates of seat belt use on reservations when compared to national figures. First, older model vehicles that may not have working seat belts are common on reservations due to “the ruralness of the reservations, weather conditions, and farming businesses” (pg. 40). Efforts to install or repair seat belts in these vehicles could prevent unintentional injury and injury-related death on reservations. Second, it is reported that there is a widespread fear on reservations that, in the case of a crash or collision, seat belts will trap drivers and passengers rather than help preserve their lives, particularly in cases of vehicle fires or in accidents where the vehicle is submersed in water. Due to this misperception, many drivers and...
passengers on reservations choose not to use seat belts. Yet, research indicates that vehicle fires and submersion in water happen at most in one-half of one percent (0.05) of accidents and suggest that seat belt use in these instances actually contributes to keeping drivers and passengers conscious enabling them to escape more easily. Additionally, research consistently shows that seat belts prevent ejection from the vehicle in cases of collisions, protect the head and spinal cord, and keep all occupants of the vehicle from striking one another, among many other benefits. According to a 2010 report published by NHTSA on differences between daytime and nighttime seat belt use, “groups with lower seat belt use both day and night were:

- Males;
- Younger occupants;
- Pickup truck occupants;
- Occupants travelling in rural areas;
- Occupants killed on local roads;
- Residents of secondary enforcement law States;
- Occupants killed on weekends;
- Drivers with crashes and violations on their records;
- Drivers likely accountable in the crash; and
- Drivers with high blood alcohol concentrations” (p. v).

Data on AI/AN seat belt use also raise concerns about lower rates of non-compliance with seat belt laws for Native men, who are reported to have a lower estimated percentage of seat belt use when compared to Native women. Safety leaders on reservations must make it clear that fears about the danger of seat belts are unfounded and develop tailored road safety interventions about the importance of seat belt use in preventing injury and preserving life.

Seat belt laws are either enforced as primary or secondary laws. A tribe that enacts a primary seat belt law permits tribal law enforcement officers to stop a vehicle when the officers observe that drivers and/or front seat passengers are not wearing seat belts, rather than requiring officers to have another reason for stopping the vehicle like a speeding violation. The US Department of Transportation cites 2012 NHTSA data that seat belt use in primary law states is as high as 90 percent compared with only 78 percent in secondary law states. Tribal leaders can improve the safety of those operating motor vehicles on their roads by making seat belt laws primary enforcement laws in tribal codes.

Figure 4: Motor Vehicle Injury-Related Death Rates of Youth under 20, by Sex and Race/Ethnicity

Data Source: National Center for Health Statistics
Child Passenger Restraint: Data & Trends

From 2008-2009, motor vehicle collision was the primary cause of unintentional injury death among AI/AN children aged 1-14 years.\textsuperscript{24} These rates outpace the rates for Black and White children; and they are especially high for Native boys (See Figure 4).\textsuperscript{25}

When properly installed and used, child restraint systems reduce the risk of death by 71 percent for infants and by 54 percent for children aged 1-4 years.\textsuperscript{27} Tennessee was the first state to pass a child occupant restraint law in 1978. By 1985, all 50 states passed laws requiring restraints for children in motor vehicles.\textsuperscript{28} Starting as early as 1990, several tribal nations enacted child restraint laws, and a majority of these tribal traffic codes have primary enforcement provisions – meaning that drivers who are transporting children who are not secured in child restraint systems can be stopped by tribal police solely for this violation.

Two major factors contributing to non-compliance with child restraint laws on reservations are a lack of access to child safety seats and lack of training in the proper installation of child safety seats.\textsuperscript{29} An additional challenge is allowing children to ride in the beds of pickup trucks, which are present in large numbers on reservations, that can be very dangerous in a vehicle collision. There is a need for education, training, and enforcement to ensure that Native children are protected from unintentional injury and death.\textsuperscript{30}

Pedestrian Safety: Data & Trends

Pedestrians are among the most vulnerable users of public roads. According to the Centers for Disease Control and Prevention, AI/AN have the highest traffic-related pedestrian death rates (see Figure 5).\textsuperscript{31} Transportation and infrastructure impact pedestrian safety – specifically regarding sidewalks, guardrails, crosswalks, and overpasses, as well as road upkeep and maintenance. Therefore, tribal codes that establish road safety policies and regulations to protect pedestrians can prevent unintentional injuries.
Distracted Driving: Data & Trends

A safe pedestrian environment is strengthened by zero tolerance for distracted driving. The NHTSA’s Driver Distraction Program defines distraction as a specific type of inattention that occurs when drivers divert their attention from the driving task to focus on other activities. According to the 2012 National Survey on Distracted Driving Attitudes and Behaviors, 30 percent of Native drivers are distraction-prone, while 70 percent are distraction-averse.\textsuperscript{32,33,34} In 2010, nine percent of fatal crashes involved driver distraction, and 13 percent of the drivers in these fatal crashes were reported to have been using a cell phone at the time of the crash.\textsuperscript{35} Distraction occurs when drivers take their eyes off the road, their hands off the wheel, and their minds off their primary task of driving safely.\textsuperscript{36} As tribal nations are updating and implementing public health law codes, it will be important for tribal leaders to consider establishing distracted driving codes to protect drivers, passengers, and pedestrians. Enacting a distracted driving code and providing education on the importance of attentive driving could foster safe driving behavior and prevent unintentional injury.

Tribal Codes: Data & Trends

Through a review of 383 publicly-available tribal codes, the NCAI Policy Research Center identified 30 codes specifically related to traffic and/or road safety to include in the Native Public Health Law Database (the Database) we are developing. This group includes codes from 27 different tribes across eight of the 12 NCAI regions (see Figure 6). These totals should not be read to indicate that tribes in the Alaska, Eastern Oklahoma, Pacific, and Southwest regions have no traffic or road safety codes. The Database only includes those that are publicly-available that were identified through our initial search. We welcome tribes in all regions to consider sharing their public health law codes as part of the Database.

Of the 30 tribal traffic and road safety codes available online, 17 have seat belt provisions, and 18 have child restraint provisions. Tribal nations in NCAI’s Northwest region had the most seat belt and child restraint system provisions. Of the 17 seat belt codes, five sections clearly indicated it was a primary or secondary law.

Tribal Seat Belt Codes. There was a range of trends noted in the 17 seat belt codes, including:

- Language specifying the required age for seat belt use, where the minimum age was 16 years (six codes);
- Exceptions to using seat belts in instances where: 1) occupants have a medical or physical reason accommodated by a physician’s note (10 codes); 2) all seat belts are being used (five codes); and 3) vehicles manufactured prior to 1965 are involved (three codes);
- Penalty fines for non-compliance range from $25 - $200.

Tribal Child Passenger Restraint Codes. There was a range of trends noted in the 18 child restraint codes, including:

- Language specifying the appropriate age and/or weight for children to be transported using a restraint system – with a majority requiring children under age six to be in car seats;
- Descriptions of instances where an adult seat belt can be used to secure children (eight codes);
- General guidelines for rear-facing or forward-facing positions of a child restraint system (four codes);
- Exceptions to using child restraints that include: when there are multiple children being transported; when there is insufficient area in the vehicle to accommodate more than one child restraint system; and when at least one child is in a child restraint system (four codes); and
- Penalty fines for non-compliance with stated regulations range from $50 - $250.

**Pedestrian & Driver Safety Codes.** Trends in pedestrian and distracted driving codes, include:

- Pedestrians will remain off the main traveled portion of the road and/or cross roadways within marked or unmarked crosswalks;
- Either a pedestrian or a motor vehicle must yield the right of way on a tribal road;
- Pedestrian provision fines for non-compliance range from $40 - $100; and
- Language that seeks to hold distracted drivers accountable for their behavior.
Strengthening Tribal Public Health Law

Seat Belt Code Recommendations. Based on analyses of existing tribal and federal law, tribal leaders should consider:

- Enacting primary enforcement seat belt laws;\textsuperscript{37}
- Requiring seat belt use for motor vehicle occupants in all seating positions (front and back);
- Not allowing exceptions for individuals with physical disabilities because child restraint systems and motor vehicle safety equipment can accommodate physical impairments;
- Requiring seat belt use for all passenger vehicles, including: taxis, pickup trucks, and SUVs; and
- Establishing penalty fines of no less than $50.\textsuperscript{38}

Child Passenger Restraint Code Recommendations. Based on analyses of existing tribal and federal law, tribal leaders should consider:

- Enacting primary enforcement child restraint laws;
- Requiring the use of properly secured child safety seats when transporting children who fall under age and weight requirements;
- Including clear specifications about rear-facing and/or forward-facing position requirements;
- Prohibiting child passengers riding and/or sitting in the cargo portion of a pickup truck;
- Having a process for updating regulations with new child safety standards;\textsuperscript{39}
- Eliminating exceptions for drivers transporting large numbers of children;
- Requiring booster seats for children aged 8 - 12 years or less than 4 feet 9 inches tall;\textsuperscript{40} and
- Establishing penalty fines of no less than $50.

<table>
<thead>
<tr>
<th>Figure 8: Basic Recommendations For Child Safety &amp; Restraint from NHTSA</th>
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<tr>
<td>Birth – 12 months</td>
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<td>Rear-facing car seat</td>
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<tr>
<td>4 – 7 years</td>
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<tr>
<td>Forward-facing car seat until child reaches max height or max weight allowed by car seat manufacturer</td>
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Pedestrian Safety Code Recommendations. Fewer than 10 of the traffic codes have pedestrian safety provisions. We suggest that tribes developing codes and other policy in this arena consider:

- Increasing the length of suspension for driver’s privileges;
- Creating requirements for driver education on pedestrian awareness for drivers with a traffic infraction;\textsuperscript{41} and
- Increasing minimum penalty fines of no less than $50 for injuring a pedestrian.
Tribes can modify the built environment to prevent pedestrian deaths with improvements to roads, lighting, and sidewalks. In addition, tribes can create public awareness campaigns like New York City’s “That’s Why It’s Speed Limit 30” campaign using graphic billboards like the one below to educate drivers about the importance of reducing driving speed to protect pedestrians:

![Graphic Billboard]

**Distracted Driving Code Recommendations.** One tribal resolution among the 30 traffic codes directly discourages distracted driving. We suggest tribes developing codes and other policy in this arena consider:

- Prohibiting driver use of all hand-held devices;
- At a minimum, enacting secondary enforcement laws for distracted driving; and
- Establishing penalty fines of no less than $50 for a distracted driving offense.

**Conclusion**

Data reveal a variety of factors that impact unintentional injuries among the AI/AN population. Traffic-related deaths remain the leading cause of death due to unintentional injury among Native people. Multiple risk factors like drivers’ attitudes and behaviors, built environment (e.g., guardrails and sidewalks), education, and awareness are crucial to reducing driver, motor vehicle occupant, and pedestrian deaths and saving the lives of Native children and adults. A number of tribal nations are making efforts to address unintentional injury by establishing and enforcing tribal codes, regulations, and policies.

Yet, there is more to do. For example, we observe a disturbing trend that our Native boys and men are both subject to higher rates of motor vehicle and pedestrian death and less likely to voluntarily comply with seat belt use regulations. There is a need for particular education and safety intervention with this population. Additionally, there continue to be significant jurisdictional issues that emerge in establishing effective public health law initiatives that often require coordination across tribal, state, and federal government departments. Some efforts like those of the Federal Highway Administration to host Tribal Safety Summits and support tribes in developing Tribal Transportation Safety plans are important steps to address jurisdictional and persistent funding issues.

We have a shared goal to foster comprehensive tribal public health laws related to road safety and injury prevention that will assist in reducing the disproportionate burden of unintentional injury-related deaths among the AI/AN population. Seat belt and child restraint laws can be effective when tribal leaders and other stakeholders enact strong, comprehensive regulations and collaborate to enforce the laws. Tribal leaders have an opportunity to improve the health and wellness of their citizens to prevent unintentional injuries through tribal public health law. NCAI and the Robert Wood Johnson Foundation look forward to supporting tribal leaders in this effort.
Contact NCAI

NCAI hopes to identify up to six tribal nations that have developed promising practices in preventing unintentional injuries through road safety measures to feature in a second version of this Policy Insights Brief. Please contact Emily White Hat at ewhitehat@ncai.org or (202) 466-7767 to share your tribe’s work.

Endnotes


10 Ibid.

11 Ibid.


15 As seat belts are safety mechanisms, it is important to work with manufacturers and licensed technicians to ensure installations and repairs are completed in the most effective manner.


18 According to the Governor’s Highway Safety Association, sixteen states have secondary enforcement seat belt laws.


26 Ibid.


31 Ibid.

32 Distraction-prone: Drivers who consistently reported engaging in distracted driving behaviors.

33 Distraction-averse: Drivers who reported distracted driving behaviors less often.


37 States with high populations of Native people that have implemented seat belt laws as primary laws include: Alaska, California, Michigan, Minnesota, New Mexico, Oklahoma, South Dakota, Washington, and Wisconsin.

38 A 2010 NHTSA report indicated that increasing the penalty for non-use of seat belts from $25 to $60 led to a four-percentage point increase in seat belt use, where an increase from $25 to $100 led to a seven-percentage point increase in seat belt use (For further information see www.nhtsa.gov/staticfiles/nti/occupant_protection/pdf/811413.pdf).


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ABOUT THIS PUBLICATION

This publication was produced as part of the Native Public Health Law Partnership project led by NCAI, developed with the National Indian Health Board, and funded by the Robert Wood Johnson Foundation. The goals of the project are: 1) to provide information on public health laws in Indian Country; 2) to recognize tribal authority to regulate public health; and 3) to develop a database tool to enable tribes to share information with each other and the broader public health law community about tribal public health law, codes, and policy.

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