

Unintentional Fatal & Non-Fatal Injuries among Nebraska Children, ages 1-9

According to the Nebraska Health and Human Services Vital Records, unintentional injuries are the leading cause of death for Nebraska children ages 1-9. In 2012, the Nebraska death rate due to unintentional injuries for children ages 1-9 was 7.5 per 100,000 children compared to a national rate of 5.7. For Nebraska children ages 1 to 9, the leading cause of inpatient hospitalization due to injury is falls and the second leading cause is motor vehicle crashes. Other frequent causes of emergency department visits include fire/burn, natural/environment, cut/pierce, poisoning, overexertion, drowning, and other pedal cyclist.

Many factors play into unintentional injuries in children ages 1-9. These include individual behavior, physical environment, social behavior, supervision, and developmental status of the child. There are prevention interventions available to address these factors. Prevention efforts may focus on modifications of the environment, improvements in product safety, legislation, policies and their enforcement, education for behavior change, technology and engineering.

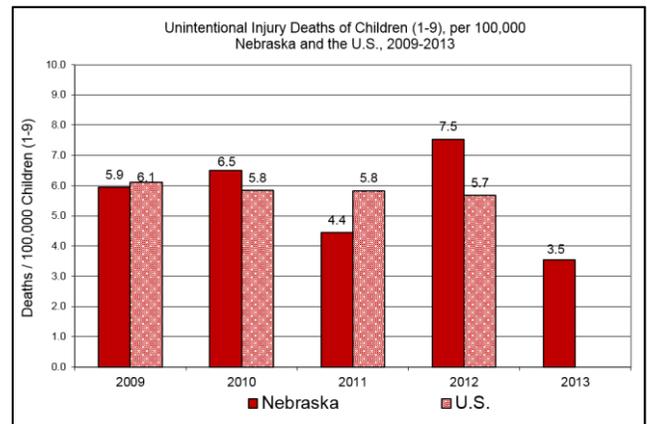
Criterion 1: The Problem is Worse than the Benchmark or Increasing

In Nebraska, from 2007 to 2011, the total rate of inpatient hospitalizations due to injury for 1-4 year olds was 106.8 per 100,000 population and for 5-9 year olds it was 75.6 per 100,000 population. The rate for emergency department visits among 1-4 year olds from 2007-2011 was 11,893 per 100,000 population. For 5 to 9 year olds, the rate was 7,420.9 per 100,000 population. (NE Hospital Discharge Data)

The unintentional injury death rate for children ages 1-9 in Nebraska is higher than the national rate, although not significantly so, and has not changed significantly over time since 2009. Comparisons with yearly national rates are limited, due to the relatively low number of deaths per year in Nebraska. The leading cause of death is motor vehicle crashes. The leading cause of non-fatal injuries over the years are falls.

During 2013 on Nebraska roadways:

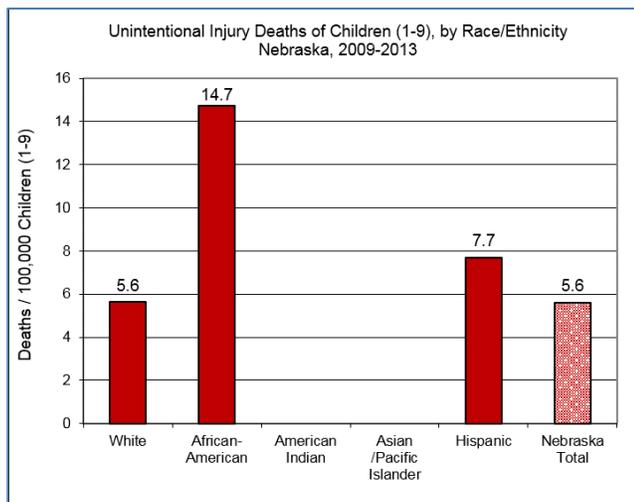
- Nine children ages 0-4 were killed and 299 children were injured;
- 465 children ages 5-9 and 604 children ages of 10-14 were injured. (NOHS Crash Report Data)



Criterion 2: Disparities Exist Related to Health Outcomes

In Nebraska, from 2009-2013, African American children had a higher death rate due to injury at 14.7 per 100,000 compared to Hispanic children at 7.7 and White children at 5.6. The death rates for males (7.2/100,000) are 1.5 times higher than for females (4.7/100,000) (NE Vital Records)

Due inconsistent of reporting of race information in the Nebraska Hospital Discharge dataset, racial and ethnic disparities for non-fatal injuries are difficult to quantify. Fewer than 6 percent of records contain race information.



Criterion 3: Strategies Exist to Address the Problem/An Effective Intervention is Available

In 2012 the Centers for Disease Control and Prevention developed the National Action Plan for Child Injury Prevention: An Agenda to Prevent Injuries and Promote the Safety of Children and Adolescents in the United States.

The Maternal and Child Health Bureau's (MCHB's) Title V Maternal and Child Health Services Block Grants to States Program has established 15 National Performance Measures for the 2015-2017 grant cycle. Performance Measure 7 is the rate of

injury-related admissions per population ages 0-19 years. This evidence brief points to a selection of resources for state MCH programs about injury and violence prevention and about emergency medical services for children, with emphasis on evidence based information

Falls

Falls in children are often due to the presence of home and outdoor and other hazards, such as stairs, open windows, or playground equipment, and to children's frequent inability to accurately assess risks, curiosity and propensity for risk-taking, and lack of fully developed motor skills and coordination.

Motor Vehicle Safety

Child Safety Seats and Booster Seats reduce injuries to children in motor vehicle accidents. Car seat use reduces the risk for death to infants <1 year old by 71%; and to 1–4 year olds by 54%. Booster seat use reduces the risk for serious injury by 45% for children aged 4–8 years when compared with seat belt use alone.¹

Nebraska has more than 300 Child Passenger Safety Technicians (CPST) across the state that provide education and training to community members about child passenger safety. The CPST's work in a variety of settings that provide child safety seat distribution and education.

Child safety seat laws which have been adopted by all states have reduced fatal injuries to children by 35% and injuries by 17%. Age requirements vary by state; the most effective laws include children up to age 8 or older. Nebraska law includes children up to age 6.

In Nebraska, child safety seat use is surveyed annually through observations conducted in rural and urban counties. Among the children observed

in the 2014 study, 96.9% were riding in child safety seats/booster seats. However, 2013-2014 data collected from 25 car seat check events conducted by Safe Kids Nebraska indicates 55% of car seats were used incorrectly.

Criterion 4: Societal Capacity to Address the Problem

There are several programs and organizations nationally and in Nebraska that address unintentional injuries in children.

* Safe Kids Nebraska is a member of Safe Kids Worldwide which is evidence based strategy for addressing childhood injuries. Safe Kids Worldwide supports state and local Safe Kids coalitions by providing them funding, research, advocacy and best practice guidelines for unintentional injury prevention. Safe Kids Nebraska and the eight local Safe Kids programs across the state all address unintentional injuries to children. Safe Kids Nebraska provides support to the local Safe Kids coalitions to promote safety through education and awareness campaigns, community programming, distribution of safety devices and local events/celebrations. The programs conduct community car seat check events, car seat inspection stations and also address various other unintentional injuries.

* The Nebraska Office of Highway Safety plays a significant role in child passenger safety activities across Nebraska. They fund several of the 23 car seat inspections stations in Nebraska, the child passenger safety technician training classes and a yearly conference. In addition, they provide free motor vehicle safety educational resources to the public.

* The American Academy of Pediatrics provides unintentional injury prevention resources, policy guidelines and advocacy to reduce unintentional injuries in children.

*The Children's Safety Network (CSN) National Resource Center for Injury and Violence Prevention is dedicated to working with state, territorial and community Maternal & Child Health and Injury & Violence prevention programs to create an environment where all children and youth are safe and healthy. They provide technical assistance on injury prevention planning, programs, and best practices; analyze and interpret injury data; partner with national organizations and Federal agencies to promote child and adolescent health and safety; disseminate the latest injury prevention research; conduct trainings and presentations; and produce publications. CSN also has resources in place to support NPM-7. These three components are:

- National Coordinated Child Safety Initiative
- Child Safety Collaborative Innovation and Improvement Network (COIIN)
- Child Safety Promotion Capacity Building

*The Nebraska Maternal, Infant, and Early Childhood Home Visiting Program (N-MIECHV) home visiting programs are one part of a comprehensive, high-quality early childhood system that promotes maternal, infant, and early childhood health, safety, and development. Home visiting encourages strong parent-child relationships. Home visiting offers a variety of family-focused services to expectant parents and families with new babies and young children.

*The Title V Block Grant requires State MCH programs to report on 18 National Performance Measures (NPMs). One of these NPMs #7 aims to reduce hospital admissions for non-fatal injury among children ages 0-9 and 10-19 years. The MCH library

Criterion 5: Severity of Consequences Criterion

Unintentional injuries are the leading cause of death for children ages 1-9. Deaths are only the tip of the iceberg with thousands of children being injured each year. Unintentional childhood injuries and deaths can cause significant financial and emotional burden on families, care givers and communities. Nationally in 2010, for 1-9 year olds the economic burden of non-fatal injuries accounted to more than 10 billion dollars for direct costs of hospitalizations and lost working days of care-takers.² Injuries can also lead to lifelong disability. Many of these factors can be effectively addressed through evidence-based programming and implementation of effective policies.

References:

1. http://www.cdc.gov/Motorvehiclesafety/child_passenger_safety/cps-factsheet.html
2. <http://wisqars.cdc.gov:8080/costT/>