

Small, yet important steps



By Snehitha Vardhineni

Table of Contents

1. Overview 3	,
2. Children Ages 1-4 3	•
Unintentional Drowning Injuries	
4-7	
3. Information and Statistics Related to Other Causes7	,
Unintentional Fire or Burn Injuries7	,
Unintentional Poisoning Injuries7	,
Unintentional Suffocation Injuries7-	-8
Unintentional Transportation Injuries	,
Unintentional Pedestrian Injuries	
4. References	9

Overview

Globally, injuries among children are a growing issue. Each year, an estimated 875,000 children face death and between 10 million and 30 million children are impacted by nonfatal injuries. Majority of these deaths and injuries occur in low and middle income countries. However, developed nations also have problems related to childhood injuries. In the United States, approximately 12,000 children die due to unintentional injury-related causes. Between the years 2000 and 2005, the average death rate among children due to injury was 15 per 100,000. This statistic varied based on the sex and age of the children as well. In all the age groups, males had higher death rates in comparison to the females. Although unintentional injuries that lead to death occur due to various causes, the most common one among children is transportation.

Children Ages 1-4

Statistics are based on the years 2000-2005

In children ages 1-4, the most common external cause of injury was motor vehicle transportation (MVT) related accidents. MVT-related accidents caused approximately 31% of deaths that occurred among children in this age group. The second most common cause was drowning, which accounted for 27% of deaths that occurred among children in this age group. Other causes that resulted in death include fires or burns, suffocation, falls, and poisoning.

<u>Unintentional Drowning Injuries Among Children</u>

In 2010, 1,027 children in the United States died due to unintentional drowning.

Drowning rates have varied by race: black children drowned three times more than white

children. Although deaths and injuries caused by drowning occur frequently among children ages 1-4, they are often predictable and preventable. The Center for Disease Control and Prevention (CDC) developed a National Action Plan (NAP) to help prevent deaths and injuries caused by unintentional drowning injuries by raising awareness about child injury and its impacts on the children of the United States, and offer solutions to predict and prevent such injuries. There are six domains as part of the NAP that include goals and actions based on the knowledge we currently have, what we need to do, and how we need to do that. The domains are Data and Surveillance, Research, Communication, Education and training, Health systems and health care, and Policy.

<u>Data and Surveillance:</u> collecting, analyzing, and interpreting child health data to plan, implement, and evaluate efforts towards child injury prevention.

- Data systems such as Child Death Review, teams that conduct comprehensive,
 multidisciplinary reviews of child deaths around the nation to gain a clear
 understanding of how and why children die, are implemented to collect detailed
 information on circumstances in which children are dying due to unintentional
 drowning in order to design better intervention programs.
- Analyze similarities and differences between local, state, and national data in order to track the effects of prevention efforts.

<u>Research:</u> identifying risk factors, intervention, and evaluating programs in order to reduce injury.

- Determine which water safety messages promote belief and behavior change.
- Determine how to motivate populations at risk to learn water safety measures.

<u>Communication:</u> strategies to promote injury prevention to target audiences through designing messages and delivering them through appropriate channels to reach the most amount of people.

- Work with media and police to shed light onto child injury stories, sending messages
 about the importance of learning how to swim, knowing how to perform CPR, and
 installing safety equipment/measures near pools.
- Advertise through water safety campaigns at schools, day care centers,
 pediatricians' offices, and other centers related to children.

<u>Education and training:</u> organize learning experiences in order to increase knowledge, hopefully leading to change in behavior and attitude.

- Encourage preschoolers and school-aged children to learn how to swim.
- Encourage CPR training for older children and adults.

<u>Health systems and health care:</u> infrastructure required to deliver quality care and preventative services.

- Inform parents about important water safety strategies at all child examinations (especially at pediatricians' offices).
- Promote CPR as a proven intervention for saving people who are drowning, giving parents a reason to become trained in performing CPR.

<u>Policy:</u> laws, regulations, administrative actions, and practices that allow for better environments.

• Support practices and policies to provide activities that reduce the risk of drowning.

• Implement and evaluate policies to make proven interventions accessible to the general public.

A case example related to drowning that is provided by the CDC:

• Parents with two young children, 4-year old Jim and 3-year old Amy, visit friends who have an in-ground pool in their backyard. The friends' three children are already in the water, and Jim and Amy jump in and start playing with the others. The two fathers drink beer and fire up the grill. Their backs are to the nearby pool, but they occasionally glance over at the kids. The two mothers head inside the house to prepare the rest of the meal, asking the men to keep an eye on the kids. Tired of the game, Jim climbs out of the water, walks over to the pool's deeper end, and jumps in. Only Amy notices him do this, and sees that he does not come back up, but does not really understand that this is serious. After a moment, she walks over to her dad, tugs on his pants, and says softly, "Jim is under."

Some tips to help people stay safe in water include:

- Closely supervise children near water. Children might not always show obvious signs of distress when in troubled situations with water.
- Learn to swim, and make sure that children also know how to swim and float, as it is potentially a life-saving skill.
- Learn CPR in order for it to be performed in the time that the paramedics arrive.
- Wear appropriately fitted life jackets when on a boat.
- Install safe fences around swimming pools.

In the U.S., states that have high rates of drowning injuries include Alaska, Mississippi, Florida, Wyoming, Arkansas, Louisiana, Oklahoma, and Arizona. States that have low rates

of drowning injuries include the District of Columbia, Delaware, North Dakota, Rhode Island, South Dakota, and Vermont.

<u>Information and statistics related to other causes of injury (Ages 0-19)</u>

<u>Unintentional Fire or Burn Injuries Among Children</u>

In the U.S., the overall death rate in children due to unintentional fire or burn injuries is 0.7 per 100,000. The states with high rates of fire/burn injuries include South Dakota, Mississippi, Arkansas, and Louisiana. The states with low rates of fire/burn injuries include Washington, Oregon, California, Arizona, Minnesota, Wisconsin, New Jersey, and Massachusetts.

Unintentional Poisoning Injuries Among Children

In the U.S., the overall death rate in children due to unintentional poisoning is 0.8 per 100,000. The state with the highest rate of unintentional poisoning deaths is Alaska (2.1 per 100,000). Some other states with high rates are Florida, Kentucky, Louisiana, New Mexico, and Pennsylvania. Some states with low rates include Massachusetts, California, Iowa, Kansas, Minnesota, and New York.

<u>Unintentional Suffocation Injuries Among Children</u>

In the U.S., the overall death rate in children due to unintentional suffocation is 1.2 per 100,000. The states with high rates of death include Alaska, Indiana, Michigan, Missouri,

and Wyoming. The states with low rates of death include California, Connecticut, Massachusetts, New Jersey, and New York.

<u>Unintentional Transportation-Related Injuries Among Children</u>

In the U.S., the overall death rate in children due to unintentional transportation-related injuries is 9.8 per 100,000, making it the most common type of injury among children and young adults. The states with high rates of death include Alabama, Arkansas, Mississippi, Montana, South Dakota, West Virginia, and Wyoming. Some states with death rates on the lower end include California, Connecticut, District of Columbia, Hawaii, Illinois, Massachusetts, New Jersey, and New York.

<u>Unintentional Pedestrian Injuries Among Children</u>

In the U.S., the overall death rate in children due to pedestrian injuries is 1.2 per 100,000. The states with high rates of death include Alaska, Arizona, Louisiana, Nevada, Mississippi, South Dakota, and West Virginia. The states with low rates of death include Massachusetts, Connecticut, Iowa, Minnesota, New Jersey, Virginia, Wisconsin, and Nebraska.

References

s/Drowning.html

- (2019). Cdc.gov. Retrieved 14 January 2019, from https://www.cdc.gov/safechild/pdf/cdc-childhoodinjury.pdf
- National Action Plan for Child Injury Prevention | Child Safety and Injury Prevention |
 CDC Injury Center. (2019). Cdc.gov. Retrieved 14 January 2019, from https://www.cdc.gov/safechild/nap/index.html
- Drowning | Gateway to Health Communication | CDC. (2019). Cdc.gov. Retrieved 14
 January 2019, from

 https://www.cdc.gov/healthcommunication/toolstemplates/entertainmented/tip