INDIANA

Special Emphasis Report: Injuries Among School-Age Children 6-11, 2015

## Injury Is a Leading Cause of Death in Children

Injuries are a major public health problem across the United States and in Indiana. Injuries are not random chance events, but follow a predictable sequence of events and can be prevented using specific strategies. Injuries are the number-one killer of children over age 1 and contribute to significant morbidity. From 2015, 27 Indiana children ages 6 – 11 years died due to injury.

In addition to these injury deaths, there were 283 injury-related hospitalizations and 44,469 emergency department (ED) visits. These numbers do not include children who received treatment in physician's offices or at home.

2015 Indiana Injury Facts

- 27 children ages 6 – 11 died due to injury.
  - Leading causes were transport-related injuries, homicide and fire/burn.
- 283 child injury-related hospitalizations.
- 44,469 child-injury ED visits
  - Falls and transport-related circumstances were leading causes of hospitalizations and ED visits.
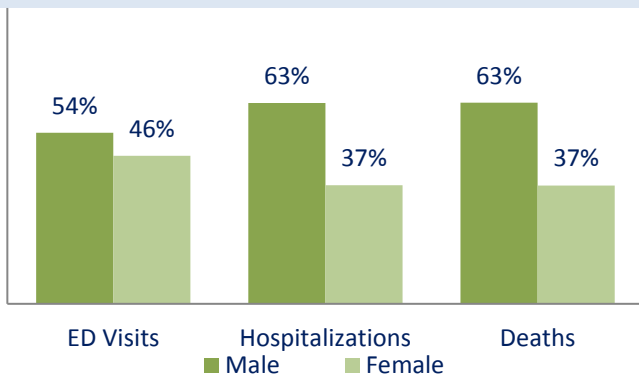- More male children were injured, treated in EDs, hospitalized and died than female children.

Figure 1: Annual Injuries* among Children Ages 6 – 11 Years, Indiana, 2015

- 27 Deaths
- 283 Hospitalizations
- 44,469 Emergency Department Visits
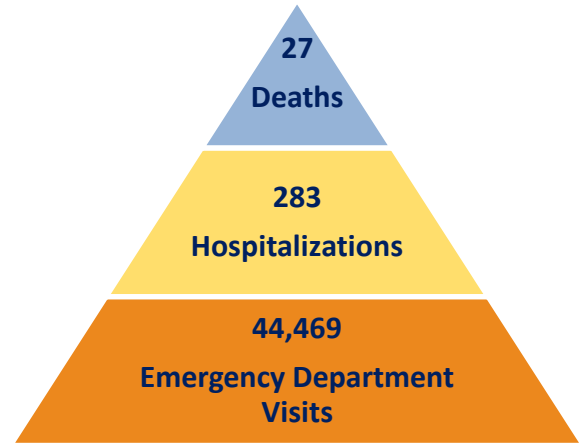
For every child who died, 10 children were hospitalized and nearly 1,647 were treated in EDs.

Every day there were more than 122 injury-related ED visits among children 6 – 11 years old.

Child Injury by Sex

Males accounted for a greater number of injuries and had higher rates of injury-related medical treatment in Indiana among children ages 6 – 11 years compared to females. More male children ages 6 – 11 years were treated in EDs, hospitalized and died due to injury compared to females of the same age.

Figure 2: Percent of Injury Deaths, Hospitalizations and Emergency Department Visits among Children Ages 6 – 11 Years, by Sex, Indiana, 2015

	Male	Female
ED Visits	54%	46%
Hospitalizations	63%	37%
Deaths	63%	37%

*Hospitalizations and ED visit data are based on ICD-9-CM primary diagnostic code of injuries and poisoning for federal fiscal year Oct. 1, 2014 – Sept. 30, 2015. Death data are based on ICD-10 codes and are for calendar year 2015.

Indiana State Department of Health

Injury Deaths in Children 6 – 11 Years

Figure 3: Injury Deaths in Children Ages 6 – 11 Years, Indiana, 2015

- From 2015, there were 27 injury deaths of Indiana children ages 6 – 11 years, with nine deaths among children ages 6 – 8 years and 18 deaths among children ages 9 – 11 years.

- Most injury deaths were unintentional in nature (85.2%). There were four homicide deaths.

- The leading cause of injury death was transport-related, followed by homicide and fire/burn.

- The American Academy of Pediatrics recommends using a booster seat age 5 up to the time when the seat belt fits properly, which is when the child is at least 57 inches tall. Kids 12 years and under should ride in the back seat using a seat belt.
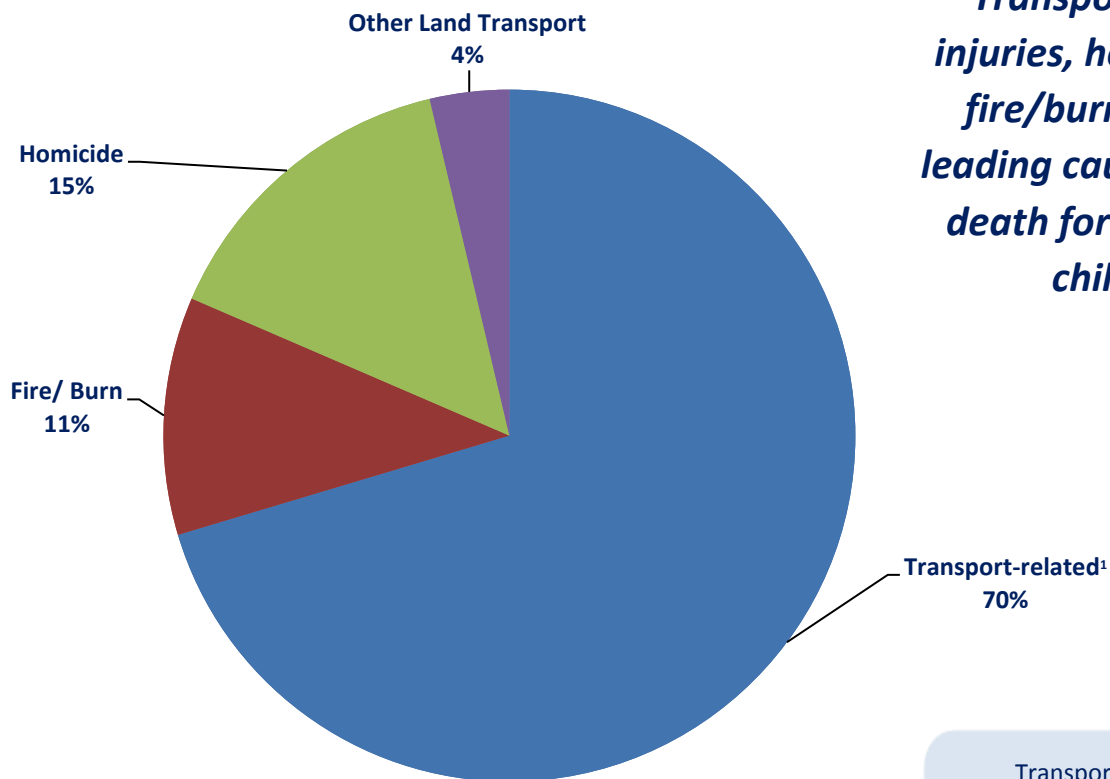
Transport-related injuries, homicide and fire/burn were the leading causes of injury death for school-age children.

Other Land Transport
4%

Homicide
15%

Fire/ Burn
11%

Transport-related[1]
70%

Transport-related Circumstances:
Motor Vehicle Occupant: 36.8%
Pedestrian: 15.8%
Other Transport: 47.4%

Injury deaths are based on ICD-10 underlying cause codes.

1. Transport-related includes motor vehicle occupant, bicycle/tricycle (MV and non-MV), pedestrian (MV and non-MV) and other transport.

Indiana Child Injury Prevention Activities

Because injury is the leading cause of death for Hoosiers ages 1 – 44 years, the Division of Trauma and Injury Prevention at the Indiana State Department of Health (ISDH) works to prevent injuries and create a healthier and safer Indiana.

Child Passenger Safety and Booster Bashes: Motor vehicle-related injuries are the leading cause of death for children. One preventive measure successful in reducing these injuries is child safety restraints, yet studies have found that 73% of child restraints are used incorrectly. ISDH is working closely with partners to reduce the number of misused seats and increase the number of properly used car seats through access and education. Big Kid Booster Bash events target children ages 4 – 8 who are not big enough to use a seat belt properly but still require additional protections.

The **Child Passenger Safety Technician (CPST) Scholarship Program**, sponsored through the Division of Trauma and Injury Prevention, is dedicated to preventing injuries and trauma throughout Indiana. Through a Maternal Child and Health Services grant, recipients can be reimbursed up to $250 for participating in a training course to become a CPST. The CPST Scholarship Program funds must be used toward fees related to the training class. Email: IndianaTrauma@isdh.in.gov

Surveillance: The Division of Trauma and Injury Prevention conducts statewide injury surveillance through death certificates, hospitalizations and ED visits. The Indiana Trauma Registry captures statewide trauma data for all seriously injured for the purposes of identifying the trauma population, statewide process improvement activities and research.

Partnerships: The **Indiana Injury Prevention Advisory Council**, made up of members working in injury and violence prevention, strives to reduce the number and severity of preventable injuries in Indiana through leadership and advocacy.

Communications: The Division is active on Twitter @INDTrauma, utilizing the hashtag #SafetyIN to deliver up-to-date safety and injury prevention information.

Indiana Violent Death Reporting System

INVDRS
Indiana Violent Death
Reporting System

Indiana is one of 42 states to receive funding for the Centers for Disease Control and Prevention (CDC) Collecting Violent Death Data Using the National Violent Death Reporting System. The purpose of the funding is to improve the planning, implementation and evaluation of violence prevention programs. The Indiana Violent Death Reporting System (INVDRS) monitors and assesses the magnitude, trends and characteristics of violent deaths by collecting comprehensive data from various existing data sources.

The INVDRS:
- Collects comprehensive, objective and accurate population-based information on victims, suspects, weapons and circumstances related to homicides, suicides, unintentional firearm injuries, legal intervention deaths, deaths of undetermined intent and terrorism deaths.
- Combines data from multiple sources, including death certificates, coroner records, law enforcement reports and other additional data to increase scientific understanding of violent injury to be translated into prevention strategies for state, local and national efforts.
- Contributes de-identified data to the National Violent Death Reporting System (NVDRS) funded by the CDC, National Center for Injury Prevention and Control.

Contact: INVDRS@isdh.in.gov

Indiana Child Fatality Review Program

Mission

The Indiana Child Fatality Review (CFR) Program attempts to better understand how and why children die, take action to prevent other deaths and improve the health and safety of our children.

Operating Principles	Objectives
• The death of a child is a community responsibility and should motivate community members into action to prevent future injury and death. • Review requires multidisciplinary participation and should lead to an understanding of the risk factors involved in the death. • Reviews should focus on prevention and lead to effective recommendations and action steps to keep children safe and protected.	• Ensure the accurate identification and uniform, consistent reporting of cause and manner of death of every child. • Improve agency responses in the investigation of child deaths. • Identify significant risk factors and trends in child deaths. • Identify and advocate for needed changes in legislation, policy and practice to prevent child deaths. • Increase public awareness of the issues that affect the health and safety of our children.

Overview of the Program

CFR is a collaborative process that can help us better understand why children and teens die within the community and how we can prevent future deaths. On July 1, 2013, a new Indiana law (IC 16-49) went into effect, requiring CFR teams in each county, with coordination and support for these teams to be provided by ISDH. IC 16-49 also required that a coordinator position be created under ISDH to help support and coordinate the local teams and Statewide Child Fatality Review Committee, whose members are appointed by the governor.

CFR teams are multidisciplinary, professional teams that conduct comprehensive, in-depth reviews of a child's death and the circumstances and risk factors involved and then seek to understand how and why the child died to prevent future injury and death. Each local CFR team is required to have representation from the coroner/deputy coroner; a pathologist; a pediatrician or family practice physician; and local representatives from law enforcement, the health department, Department of Child Services (DCS), emergency medical services, a school district within the region, fire responders, the prosecuting attorney's office and the mental-health community. The teams are required to review all deaths of children under the age of 18 that are sudden, unexpected or unexplained; all deaths that are assessed by DCS; and all deaths that are determined to be the result of homicide, suicide or accident or are undetermined. The local teams provide data collected from their reviews to the Statewide Child Fatality Review Committee, which then classifies the details of these deaths, identifies trends and informs efforts to implement effective statewide prevention strategies.

Overlap of Child Fatality Review and Indiana Violent Death Reporting System

The INVDRS has captured 100% of violent death incidents among children in Indiana beginning Jan. 1, 2015, by using and enhancing the work done through CFR.

CFR	CFR and INVDRS	INVDRS
• Focuses on local community and statewide action • Represents at least 90 of Indiana's 92 counties • Contributes data to National CDR Case Reporting System on a team-by-team basis	• Use discrete reporting system to compile data for analysis • Examine extensive background and circumstance information on victims, suspects, relationships, weapons and life events related to the incident • Share stakeholders, data providers and data users • Work to prevent future deaths by examining associated risk factors and warning signs	• Focuses on state-based data collection and dissemination • Captures death certificate data from 100% of Indiana counties • Contributes data to NVDRS in conjunction with 31 other states

Child Injuries Are Preventable: Prevention Tips

Poisoning:

- **Poison proof your home:** Keep medications and toxic products, such as household cleaning prod[ucts] in their original containers or packaging and away from children.
- Follow label directions and read all warnings when giving medication to children.
- Dispose of unwanted or unneeded medications safely at prescription Drug Take-Back Events.
- Call the **Indiana poison control center (1-800-222-1222)** if you think your child has been poisoned but is alert and awake or if you have questions concerning poisoning.
- Call **911** if you have a poison emergency and your child has collapsed or is not breathing.
  For more information, visit: http://www.cdc.gov/safechild/Poisoning/index.html

Fire, Burn and Scald:

- Young children are more likely to sustain injuries from scald burns caused by hot liquids or steam. **Check water heater temperature** and bath water temperatures.
- **Install working smoke alarms** and **carbon monoxide alarms** on every floor of your home and near all rooms where family sleep.
- Test smoke alarms once a month to ensure they are working properly, replace batteries every year and replace devices every 10 years.
- **Make an escape plan** and practice it with your family to be prepared should you have a house fire.
- Call **911** if you have a fire emergency.
For more information, visit:
http://www.cdc.gov/safechild/Burns/index.html

Water Safety and Drowning:

- **Supervise** children when they are in or near water, including bathtubs, lakes and pools.
- Do not allow kids to run around the pool deck.
- Teach kids basic swimming skills and learn cardiopulmonary resuscitation (CPR).
- Make sure kids wear life jackets in and around natural bodies of water, even if they know how to swim.
- Install four-sided isolation fence with self-closing and self-latching gates around backyard swimming pools.
- Call **911** if you have a drowning emergency.
For more information, visit:
http://www.cdc.gov/safechild/Drowning/index.html

Motor Vehicle Collision:

- Children become more vulnerable to motor vehicle collision injuries as they age.
- Most deaths of children age 5 – 19 years are due to traffic injuries as occupants, pedestrians, bicyclists and motorcyclists.[1]
- The American Academy of Pediatrics recommends using a booster seat age 5 up to the time when the seat belt fits properly, which is when the child is at least 57 inches tall. **Kids 12 years and under should ride in the back seat** using a seat belt, no matter how short the drive.
- Take action against distractions while driving, such as texting, loud radios, speeding and reckless behaviors.
  For more information, visit:
    http://www.cdc.gov/motorvehiclesafety/

Sports and Recreation:

- Kids can suffer a wide range of injuries such as broken bones, bruises, lacerations and concussions or traumatic brain injuries (TBIs) from sports and recreation activities.
- Ensure that children use **age-** and **size-appropriate** playground equipment, and avoid playgrounds with non-impact absorbing surfaces, such as asphalt, concrete or dirt.
- Wear the proper **protective gear** when playing active sports to prevent fall injuries, such as wrist guards, knee and elbow pads, and helmets. Make sure your child wears the right size helmet every time when riding, skating and scooting.
- Ask your child's coaches if they have had concussion and sports safety training. Learn the signs and symptoms of TBI.
  For more information, visit:
  http://www.cdc.gov/safechild/Sports_Injuries/index.html

1) Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. National Action Plan for Child Injury Prevention. Atlanta (GA): CDC, NCIPC; 2012

Resources

Indiana State Department of Health
2 N. Meridian St.
Indianapolis, IN 46204

Indiana Child Fatality Review Program
Phone: (317) 233-1240
Email: GMartin1@isdh.IN.gov
Website: http://www.in.gov/isdh/26349.htm

Maternal and Child Health Division
Phone: (317) 233-7940
Website: http://www.in.gov/isdh/19571.htm

Trauma and Injury Prevention Division
Email: Indianatrauma@isdh.IN.gov
Website: http://www.in.gov/isdh/19537.htm

Indiana Department of Child Services
402 W. Washington St.
Indianapolis, IN 46204
Email: Communciations@dcs.IN.gov
Website: http://www.in.gov/dcs/2869.htm

Indiana Child Abuse/Neglect Hotline
Phone: 1-800-800-5556

Indiana Poison Center
Poison Helpline: 1-800-222-1222
http://indianapoison.org/

American Academy of Pediatrics
www.aap.org

Automotive Safety Program
http://www.preventinjury.org/

Children's Safety Network
www.childrenssafetynetwork.org

PACER's National Bullying Prevention Center
Elementary School Students:
www.PACERKidsAgainstBullying.org
Parents and Professionals:
www.PACER.org/Bullying

Safe Child Program
www.cdc.gov/safechild

Safe Kids Indiana/ Safe Kids Worldwide
http://www.safekids.org/

This report and other Indiana injury data reports are available on the ISDH website. Requests for data also can be submitted to the ISDH Trauma and Injury Prevention Division.