



# INDIANA

## Special Emphasis Report: Injury Among School-Age Children, 2016

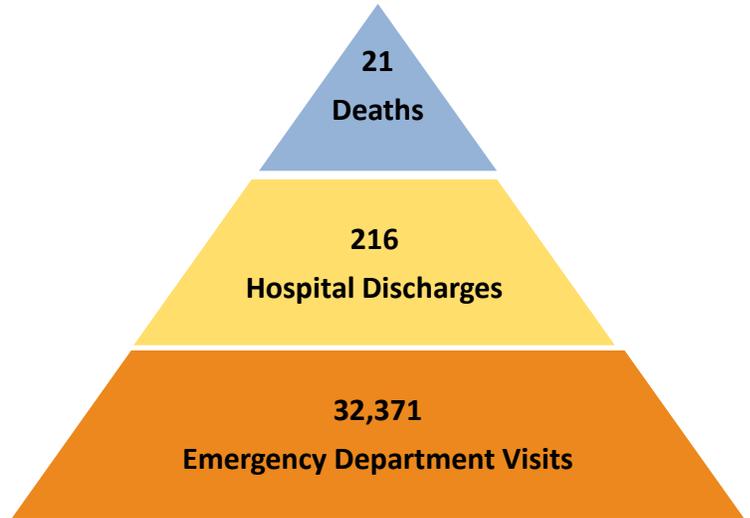
### Injury is a Leading Cause of Death in Children

#### By the Numbers

Injuries are a major public health problem across the United States and in Indiana. Injuries are not random events. They follow a predictable sequence of events and can be prevented using specific injury prevention strategies. In 2016, there were 180 injury-related deaths of Indiana children ages 12-18.

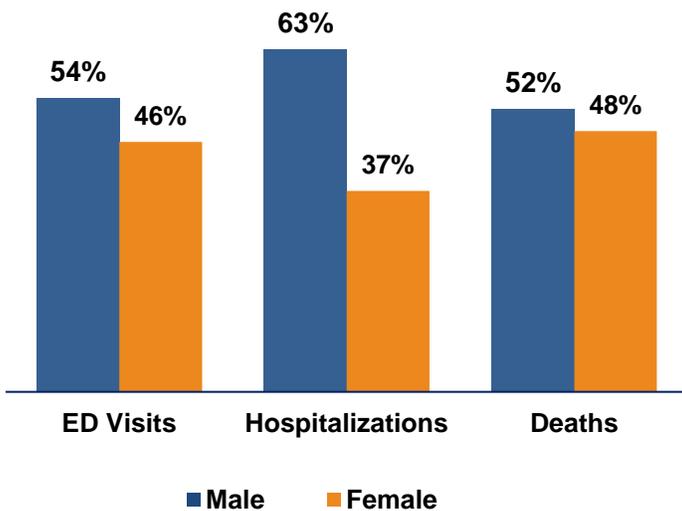
In addition to injury-related mortality, there were 216 hospitalizations and 32,371 Emergency Department (ED) Visits. Children who received treatment in physician offices or at home were not included in this frequency report.

Figure 1: Annual Injuries among Children Ages 6-11 Years, Indiana, 2016



For every child who died from injury, 10 were hospitalized and nearly 1,542 were treated in EDs.

Figure 2: Percent of Injury Deaths, Hospitalizations and Emergency Department Visits among Children Ages 6-11 Years, by Sex, Indiana, 2016



#### Childhood Injury by Sex

Males consistently had higher percentages of injury-related ED visits, hospitalizations, and deaths than females of ages 6-11 in Indiana, accounting for a larger number of injuries overall.

The largest difference between males and females was observed in injury inpatient hospitalizations. Males were hospitalized for injuries 1.7 times more than females.

\*ED visits, hospitalizations, and mortality data are all based on ICD-10-CM external cause codes or ICD-10 underlying cause codes of unintentional and intentional injury for the calendar year 2016. This document was produced in conjunction with CDC's Core Violence and Injury Prevention Program under Cooperative Agreement 11-1101.





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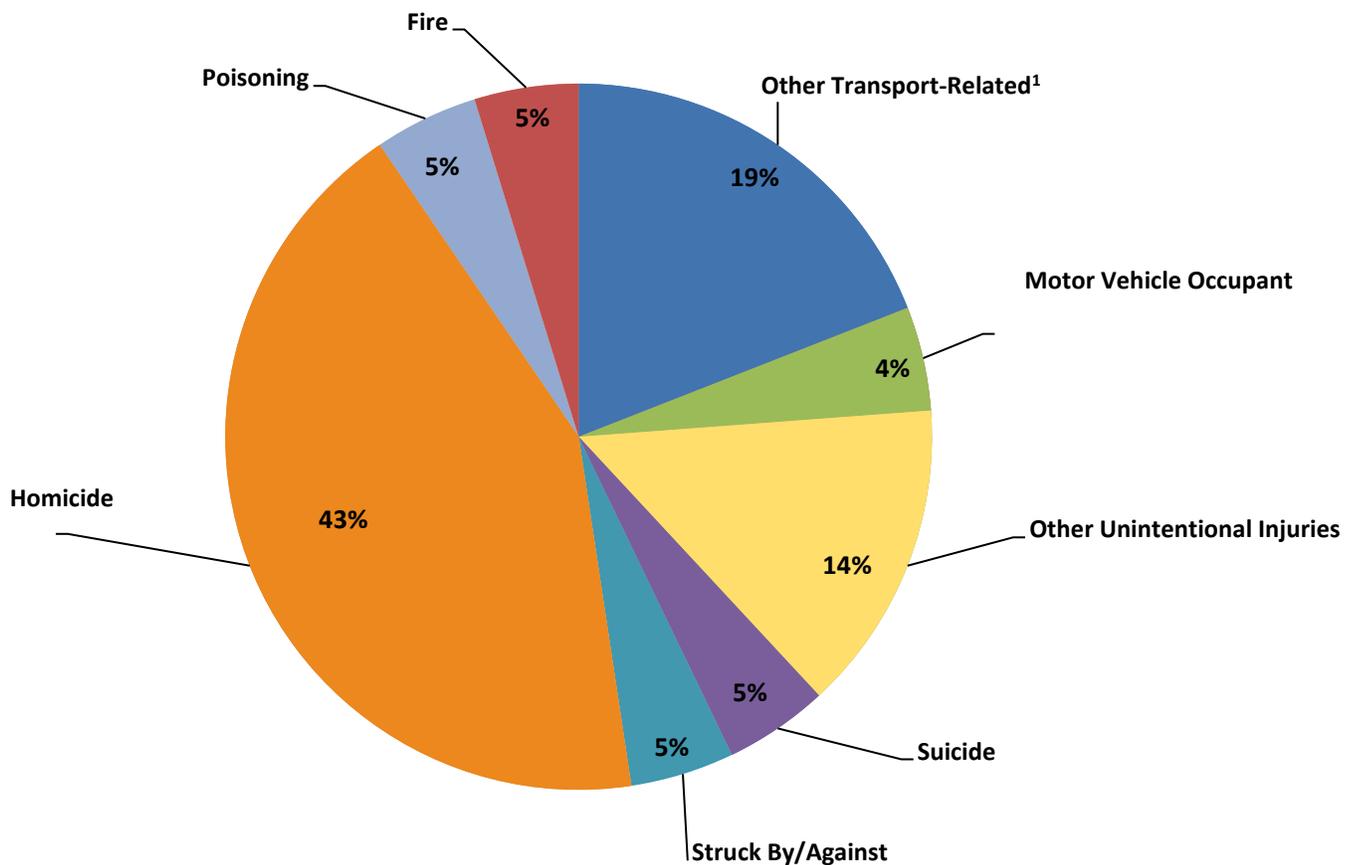
## Special Emphasis Report: Injury Among School-Age Children, 2016

### Injury Deaths in Indiana Children

#### Injury Deaths in Young Children Ages 6-11

There were 21 injury-related deaths in Indiana during 2016. Eleven were unintentional, nine were homicides, and one was a suicide. The leading cause (43%) of injury-related death was homicide. The second highest (23%) was transport-related accidents from two categories: motor vehicle occupant (4%) and other transport-related (19%). Children unrestrained or restrained inappropriately was a key predictor in 19% of fatal vehicle crashes in Indiana.<sup>2</sup> To prevent transport-related injuries, it is vital to properly restrain children in a child restraint system or seat belt and prevent positioning them in the front seat of the vehicle.

Figure 3: Percent of Injury Deaths among Children Ages 6-11 Years, Indiana, 2016



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 accidents.
2. Wolf LL, Chowdhury R, Tweed J, et al. Factors Associated with Pediatric Mortality from Motor Vehicle Crashes in the United States: A State-Based Analysis. *J Pediatr.* 2017;187:295-302.e3.



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### 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.

Division Mission: To develop, implement and provide oversight of a statewide comprehensive trauma care system that:

- Prevents injuries.
- Saves lives.
- Improves the care and outcomes of trauma patients.

Division Vision: Prevent injuries in 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 done by NHTSA have found that 73% of child restraints are used incorrectly.<sup>1</sup> 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 to 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](mailto:IndianaTrauma@isdh.in.gov)

**Preventing Injuries in Indiana:** Injury Prevention Resource Guide serves as a tool to provide easily accessible and understandable information and data on the size and scope of specific injuries in Indiana, while highlighting effective evidence-based solutions to the problem of injury.

The **Indiana Statewide Trauma System Injury Prevention Plan** includes statewide direction and focus for child injury prevention, specifically safe sleep, child passenger safety and bullying.

**Prescription Drug Overdose Prevention for States:** The ISDH has received funding to help prevent overdose deaths related to prescription opioids as part of the Center for Disease Control and Prevention's (CDC's) Prescription Drug Overdose program. Funding supports enhancements to INSPECT, the state's prescription drug monitoring program; improvements to opioid prescribing practices, prevention efforts at the state and community levels to address new and emerging problems related to prescription drug overdoses; and a partnership with the IU Fairbanks School of Public Health to evaluate the state's opioid prescribing practices. The ISDH expands the collection of overdose information to provide additional data regarding opioid overdose at the county level and will help inform prevention efforts and expand use of data for public health surveillance.

**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](https://twitter.com/INDTrauma), utilizing the hashtag **#SafetyIN** to deliver up-to-date safety and injury prevention information.



# INDIANA

## Special Emphasis Report: Injury Among School-Age Children, 2016

### 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

- 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.

#### Objectives

- 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.

#### Program Overview

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. A new Indiana law (IC 16-49) went into effect July 1, 2013, that requires a CFR team in each county, with coordination and support provided by ISDH. IC 16-49 also required that a coordinator position be created at 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. The teams then work 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 younger than age 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, 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 (INVDRS)

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

CFR	CFR and INVDRS	INVDRS
<ul style="list-style-type: none"> <li>• Focuses on local community and statewide action</li> <li>• Represents at least 90 of Indiana’s 92 counties</li> <li>• Contributes data to National CDR Case Reporting System on a team-by-team basis</li> </ul>	<ul style="list-style-type: none"> <li>• Use discrete reporting system to compile data for analysis</li> <li>• Examine extensive background and circumstance information on victims, suspects, relationships, weapons and life events related to the incident</li> <li>• Share stakeholders, data providers and data users</li> <li>• Work to prevent future deaths by examining associated risk factors and warning signs</li> </ul>	<ul style="list-style-type: none"> <li>• Focuses on state-based data collection and dissemination</li> <li>• Captures death certificate data from 100% of Indiana counties</li> <li>• Contributes data to NVDRS in conjunction with 50 other states</li> </ul>



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### **Indiana Violent Death Reporting System**

All 50 states receive funding for the 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.
- Combines data from multiple sources, including death certificates, coroner records, law enforcement reports and other data to increase scientific understanding of violent injury to be translated into prevention strategies for local, state and national efforts.
- Contributes de-identified data to the National Violent Death Reporting System (NVDRS) funded by the CDC's National Center for Injury Prevention and Control.

Email: [INVDRS@isdh.IN.gov](mailto:INVDRS@isdh.IN.gov)

### **Child Injuries Are Preventable: Prevention Tips**

#### **Poisoning:**

- Poison proof your home: Keep medications and toxic products, such as household cleaning products, 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/safecild/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, 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/safecild/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/safecild/Drowning/index.htm>.



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### **Child Injuries Are Preventable: Prevention Tips**

#### **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 nonimpact 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/safekid/Sports\\_Injuries/index.html](http://www.cdc.gov/safekid/Sports_Injuries/index.html)



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### Resources

#### Indiana State Department of Health

2 N. Meridian St. Indianapolis, IN 46204

Website: [www.StateHealth.IN.gov](http://www.StateHealth.IN.gov)

#### Indiana Child Fatality Review Program

Phone: (317) 233-1240

Email: [GMartin1@isdh.IN.gov](mailto: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](mailto: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](mailto: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

Phone: 1-800-222-1222

Website: <http://www.indianapoisson.org/>

#### American Academy of Pediatrics

Website: <https://www.aap.org/>

#### Automotive Safety Program

Website: <http://www.preventinjury.org/>

#### Children's Safety Network

Website: [www.childrensafetynetwork.org/](http://www.childrensafetynetwork.org/)

#### PACER's National Bullying Prevention Center

Children: [www.PACERKidsAgainstBullying.org/](http://www.PACERKidsAgainstBullying.org/)

Parents/Professionals: [www.PACER.org/Bullying/](http://www.PACER.org/Bullying/)

#### Safe Child Program

Website: [www.cdc.gov/safchild/](http://www.cdc.gov/safchild/)

1. Gabella BA, Proescholdbell SK, Hume B, Hedin R, Johnson RL, Thomas KE. State Special Emphasis Report: Instructions for Preparing Infant and Early Childhood Injury Data. Atlanta (GA): Centers for Disease Control and Prevention, National Center for Injury Prevention and Control; 2012.

All data in this report are based on the CDC's definition of injury and are based on ICD-10 underlying cause codes (deaths) or ICD-10-CM external cause codes (hospitalizations and ED visits). Deaths may be included in hospitalization and ED visit data. All data in this report are for the calendar year 2016. All injuries are considered unintentional unless otherwise specified. Reference to any commercial entity or product or service on this page should not be construed as an endorsement by the government of the company or its products or services.

Data sources: Indiana State Department of Health. Document prepared by ISDH Division of Trauma and Injury Prevention.

**INDIANA STATE DEPARTMENT OF HEALTH**

[www.StateHealth.IN.gov](http://www.StateHealth.IN.gov)

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