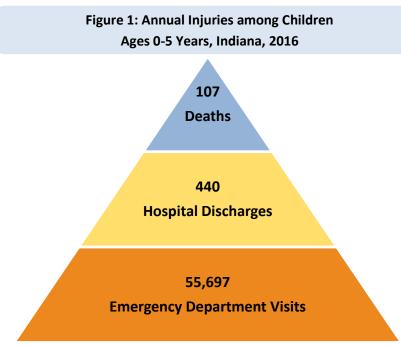
Injury is a Leading Cause of Death in Children

By the Numbers

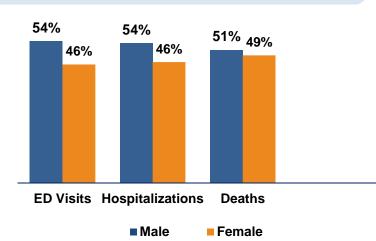
Injuries are a major public health problem across the United States and in Indiana. Injuries are not random events. They follow a predictable sequence of events and can be prevented using specific injury prevention strategies. In 2016, there were 107 injury-related deaths of children ages 0-5. 67 children were less than one year of age and 40 children were ages 1-5.

In addition to injury-related mortality, there were 440 hospitalizations and 55,697 emergency department (ED) Visits. Children who received treatment in physician offices or at home were not included in this frequency report.



For every child who died, more than four children were hospitalized and 520 were treated in emergency departments.

Figure 2: Percent of Injury Deaths, Hospitalizations and Emergency Department Visits among Children Ages 0-5 Years, by Sex, Indiana, 2016



^{*}ED visits, hospitalizations, and mortality data are all based on ICD-10-CM diagnosis 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.

Childhood Injuries by Sex

Males consistently had higher percentages of injury-related ED visits, hospitalizations, and deaths than females of ages 0-5 in Indiana and accounting for a larger number of injuries overall. When observing more specific age categories among Indiana children ages 0-5, female deaths were higher than males among children ages 1-5 and hospitalizations were higher in females than males among children younger than 1.



Injury Deaths in Infants

There were 67 deaths in children younger than 1 year old that resulted from injury. Fifty-four were unintentional, nine were homicides, and four were undetermined.

The leading cause (57%) of injury death was suffocation in bed. The next two resulted from other/unspecified suffocation at 18% and homicide at 13%.

Unsafe sleeping environments, which includes linens, pillows, or other objects in the crib or another body in the bed or on the same sleeping surface, often result in suffocations.

Figure 3: Injury Deaths among Infants
Younger than 1 Year, Indiana, 2016

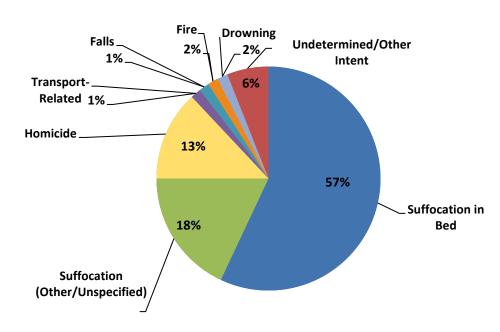
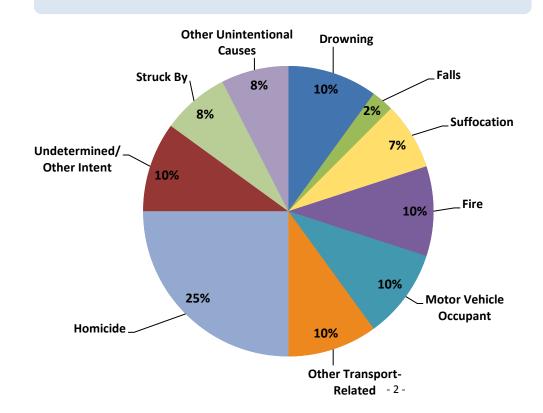


Figure 4: Injury Deaths in Children Ages 1 - 5 Years, Indiana, 2016



Injury Deaths in Young Children

There were 40 deaths in children of the ages 1-5 that resulted from injury. Twenty-six were unintentional, 10 were homicides, and four were undetermined.

The leading cause (25%) of injury death was homicide. The second leading cause (20%) was among transport-related deaths in the two categories: motor vehicle occupant and other transport-related.

Using car seats have been shown to reduce death in motor vehicle-related accidents.



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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



Activities:

Child Passenger Safety and Booster Bashes: Motor vehicle-related injuries are the leading cause of death for children. One preventive measure that is successful in reducing these injuries are child safety restraints or car seats, yet studies have found that 73% of child restraints are used incorrectly. The 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

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.



Communications: The ISDH Division of Trauma and Injury Prevention is active on Twitter, @INDTrauma, with the hashtag #SafetyIN to deliver up-to-date safety and injury prevention information.

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.

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.

Indiana Infant Mortality Initiatives

Because Indiana's infant mortality rate is consistently one of the lowest in the nation, reducing infant mortality is a top ISDH priority. Numerous initiatives are underway to address reducing infant mortality.

Labor of Love public awareness campaign: A sustained, statewide information effort to raise awareness of the problem of infant mortality and encourage support for education and prevention. The fundamental premise of the campaign is to educate citizens that everyone has a role to play to ensure our babies reach their first birthdays. Website: http://www.in.gov/laboroflove/. Application: https://askliv.com/

MOMS Helpline: This program is committed to improving pregnant women's access to early and regular prenatal care and connecting them with a network of prenatal and child healthcare services within their local communities, state agencies and other organizations in Indiana. The MOMS Helpline goal is to help reduce Indiana's infant mortality rate, and our dedicated specialists provide valuable information and referrals and educate and advocate on behalf of moms and pregnant women. Phone number: 1-844-MCH-MOMS (1-844-624-6667).

Indiana Safe Sleep Program: ISDH has implemented a statewide program that provides education and Infant Survival Kits to infant caregivers and families. The survival kits contain one infant portable crib, one fitted sheet with imprinted safe sleep messaging, one wearable blanket, one pacifier and safe sleep recommendations for those who are financially in-need with an infant at risk for SIDS or sleep-related death. The educational messages focus on three key risk reduction recommendations or the ABCs of safe sleep: babies sleep safest ALONE, on their BACKS and in a CRIB or other separate, safe sleep environment. The messaging encourages breastfeeding and safe bonding practices that can occur while the baby and mother are awake, both in and outside of the adult bed. Email Gretchen Martin, MSW, GMartin1@isdh.IN.gov for more information.

Direct On-Scene Education (DOSE) Can Make a Difference in Your Community: DOSE is an innovative program aimed at eliminating sleep-related infant death due to suffocation, strangulation or positional asphyxia by using first responders to identify and remove hazards while delivering education on scene. First responders are trained to identify infant safe sleep hazards while responding to emergency and nonemergency calls. Operations personnel are quick to educate families in an attempt to lower infant deaths due to unsafe sleep environments. If a first responder finds an expectant mother or infant younger than 1 year old, they will initiate an environmental check and distribute a survival kit. If any hazards are found in the home or in the baby's sleep space, they are identified and removed and the family is educated as to why these hazards must be kept away from the baby. The verbal education is the key to behavior change in the field. First responders are on scene to help, providing a better opportunity for their message to make a lasting impression. If your organization is interested in becoming DOSE trained, please email Gretchen Martin, MSW, GMartin1@isdh.in.gov.



Indiana Child Fatality Review Program

The Program Child Fatality Review (CFR) is a collaborative process that can help us better understand why children die within the community and help us identify how we can prevent future deaths. CFR teams are multidisciplinary, professional teams that conduct a comprehensive, in-depth review of a child's death and the circumstances and risk factors involved and then seek to understand how and why the child died so that future injury and death can be prevented.

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.

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

Fetal-Infant Mortality Review (FIMR)

Fetal and Infant Mortality Review (FIMR) is a community-based and action-oriented process to improve service systems and resources for women, infants and families. This evidence-based process examines fetal and infant deaths, determines preventability and engages communities to take action. FIMR engages a multidisciplinary case review team to review the case summaries from de-identified infant and fetal deaths. These case summaries include maternal interviews for their perspective on why the death occurred. Based on these reviews, the team makes recommendations for system changes. A team of community leaders (community action team) is then assembled to take recommendations to action. Email Gretchen Martin, MSW, GMartin1@isdh.IN.gov for more information.

Indiana Violent Death Reporting System (INVDRS)

All 50 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 INVDRS monitors and assesses the magnitude, trends and characteristics of violent deaths by collecting comprehensive data from various existing data sources. Email: INVDRS@isdh.in.gov.

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.



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Resources

Indiana State Department of Health

2 N. Meridian St.

Indianapolis, IN 46204

Website: www.StateHealth.IN.gov

Indiana Child Fatality Review and

FIMR Programs

Phone: (317) 233-1240

Email: GMartin1@isdh.IN.gov

Website: https://www.in.gov/isdh/26154.htm

Maternal and Child Health Division

Phone: (317) 233-7940

Website: https://www.in.gov/isdh/19571.htm

Trauma and Injury Prevention Division

Email: Indianatrauma@isdh.IN.gov

Website: https://www.in.gov/isdh/19537.htm

Twitter: @INDTrauma

Indiana Department of Child Services

402 W. Washington St. Indianapolis, IN 46204 Phone: (317) 234-KIDS

Email: Communications@dcs.IN.gov

Website: https://www.in.gov/dcs/2370.htm

CDC National Center for Injury

Prevention and Control

Website: https://www.cdc.gov/injury/

Indiana Child Abuse/Neglect Hotline

Phone: 1-800-800-5556

Indiana Poison Control

Phone: 1-800-222-1222

Website: http://indianapoison.org/

American Academy of Pediatrics

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

Automotive Safety Program

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

Children's Safety Network

Website: https://www.childrenssafetynetwork.org/

Indiana Labor of Love

Website: https://www.in.gov/laboroflove/

Cribs for Kids

Website: https://cribsforkids.org/

Safe Kids Indiana/Safe Kids Worldwide

Website: https://www.safekids.org/

First Candle

Website: https://firstcandle.org/

Safe to Sleep

Website: https://safetosleep.nichd.nih.gov/

Data Notes: 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). All data in this report are based on calendar years. 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.

www.StateHealth.IN.gov

Indiana State Department of Health

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