



Indiana

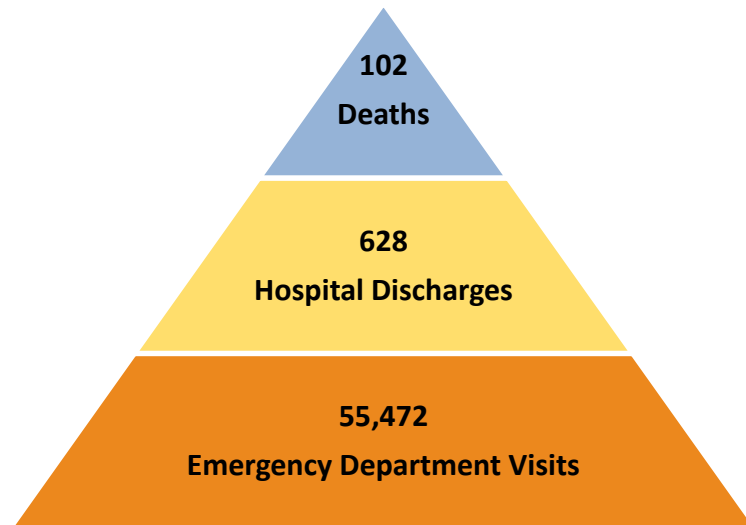
Special Emphasis Report: Infant and Early Childhood Injury, 2013

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. In 2013, 102 Indiana children ages 0-5 years died due to injury. There were 51 deaths among infants less than one year of age and 51 among children ages 1-5 years.

In addition to these injury deaths, there were 628 injury-related hospitalizations, of which 148 were among infants and 480 were among children ages 1-5 years. There were also 55,472 emergency department (ED) visits. These numbers do not include children who received treatment in physician offices or at home.

Figure 1: Annual Injuries among Children Ages 0-5 Years, Indiana, 2013

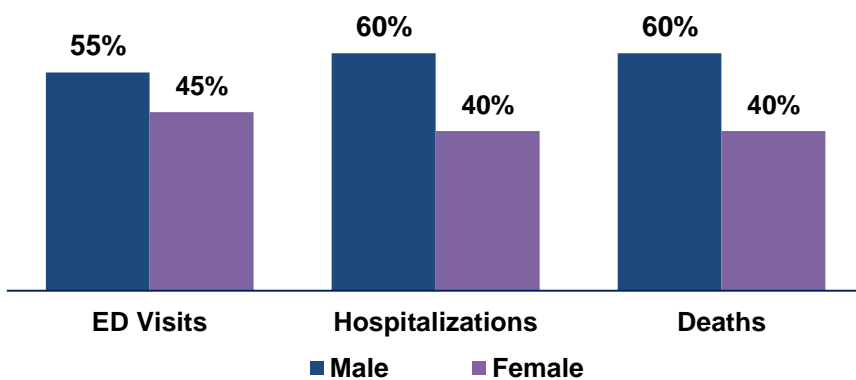


For every child that dies, 6 children are hospitalized and nearly 550 are treated in emergency departments.

2013 Indiana Injury Facts

- 102 children ages 0-5 died due to injury
- Half the children who died were infants
- There were 628 child injury-related hospitalizations
 - 76% were children ages 1-5
- 55,472 child emergency department visits were made due to injury
- More male children were injured, treated in emergency departments, hospitalized and died than female children

Figure 2: Percent of Injury Deaths, Hospitalizations and Emergency Department Visits among Children Ages 0-5 Years, by Sex, Indiana, 2013



Childhood 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 0-5 years compared to females. More male children ages 0-5 years were treated in emergency departments, hospitalized and died due to injury compared to females of the same age.



Indiana State
Department of Health

*Hospitalizations and emergency department visit data are based on ICD-9 primary diagnostic code of injuries and poisoning.

This document was produced in conjunction with CDC's Core Violence and Injury Prevention Program under Cooperative Agreement 11-1101.



Indiana

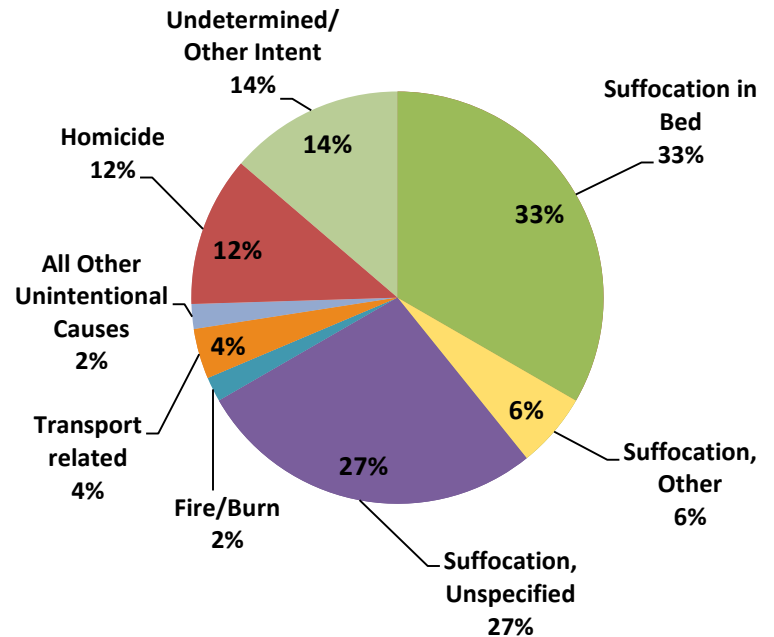
Special Emphasis Report: Infant and Early Childhood Injury, 2013

Injury Deaths in Infants

Infants <1 Year Injury Facts

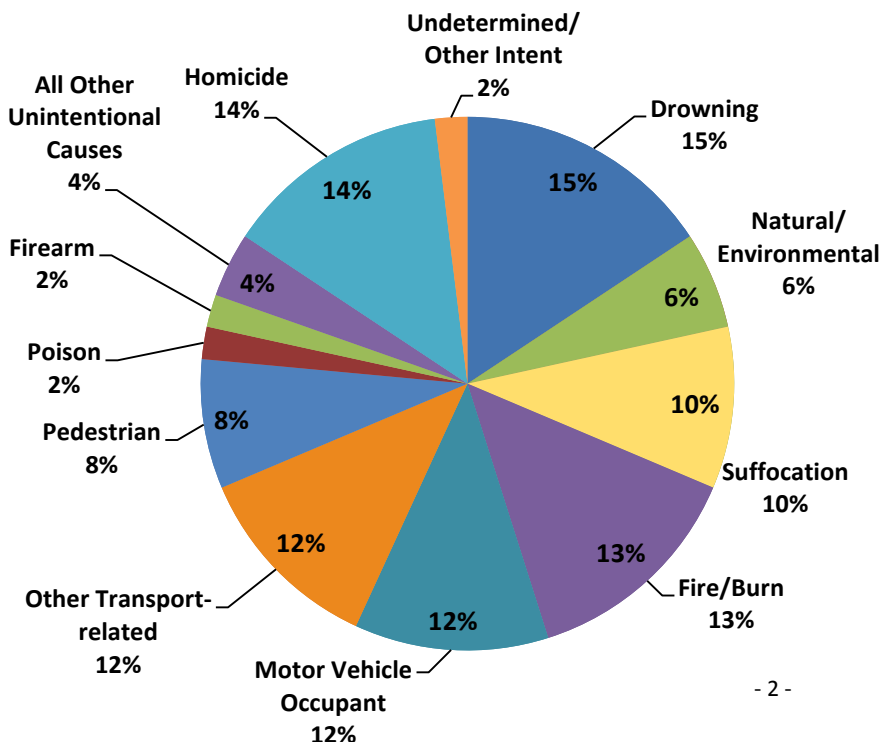
- 51 infant deaths in 2013
- 38 unintentional deaths, 6 homicides and 7 undetermined deaths
- Suffocation was the leading cause (67%) of injury death for infants
- Suffocation deaths are preventable
- Unsafe sleep environments which include linens, pillows or other items in the crib, or another body in the bed or on the same sleeping surface often result in suffocations
- Plastic bags and other specified threats to breathing also result in infant suffocation deaths

Figure 3: Injury Deaths among Infants Less than 1 Year, Indiana, 2013 (N=51)



Injury Deaths in Young Children

Figure 4: Injury Deaths in Children Ages 1 – 5 Years, Indiana, 2013 (N=51)



Ages 1-5 Injury Facts

- 51 deaths in 2013
- 43 unintentional deaths, 7 homicides and 1 undetermined death
- Motor vehicle traffic-related & other transport-related injuries were the leading cause of injury death
- Car seat use reduces the risk of death by as much as 54%
- Drowning and homicide were the second leading causes of injury deaths



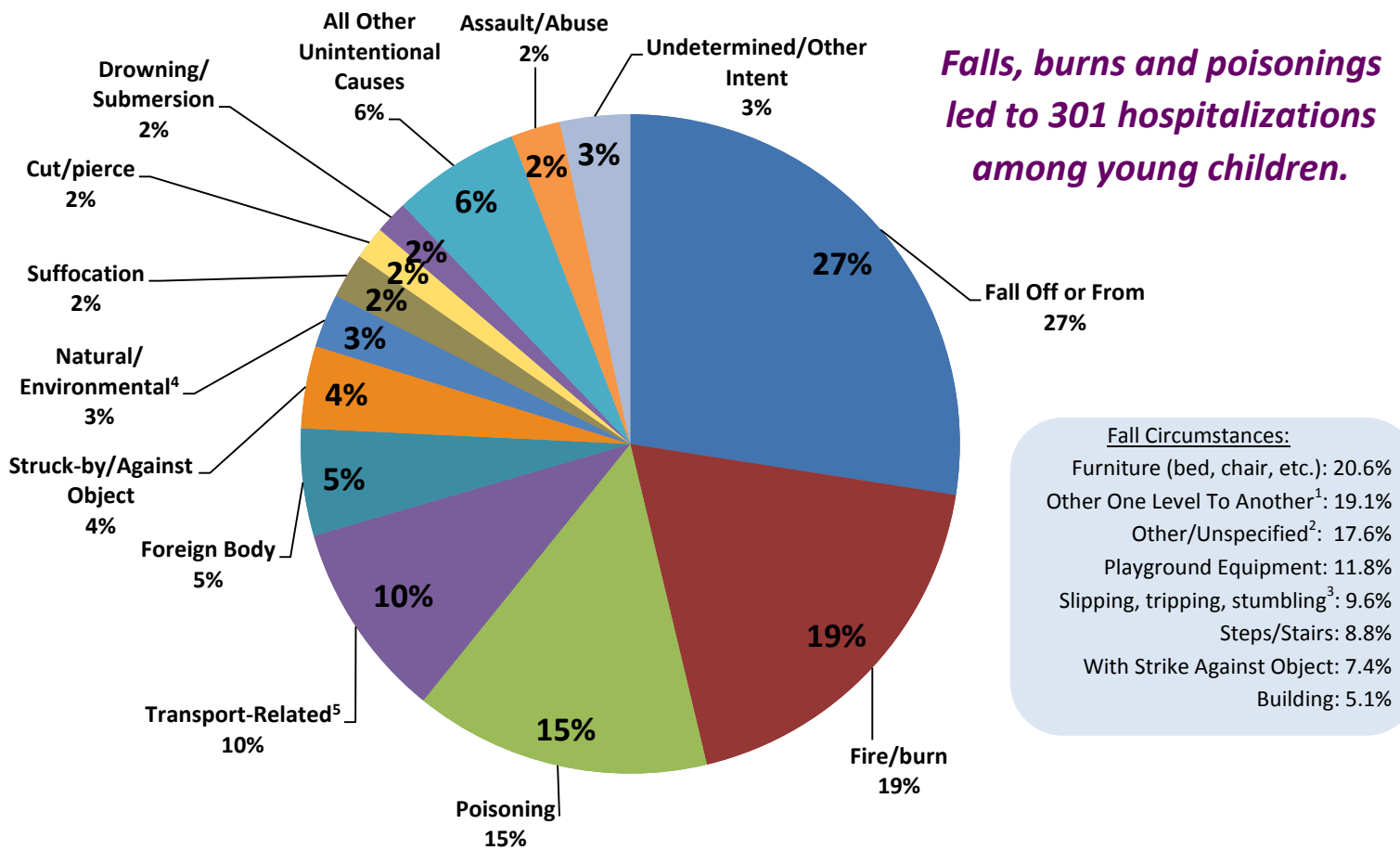
Indiana

Special Emphasis Report: Infant and Early Childhood Injury, 2013

Injury-Related Hospitalizations

Figure 5: Injury-Related Hospital Discharges among Children Ages 0 – 5 Years, Indiana, 2013 (N=495)

- In 2013, there were 495 injury-related hospitalizations of Indiana children ages 0-5 years, with 90 hospitalizations among infants and 405 among children ages 1-5 years. Most injury-related hospitalizations were unintentional in nature (94.1%).
- Falls were the leading cause of injury-related hospitalizations among both infants (36.6%, n= 33) and young children (25.4%, n=103). The next leading cause of hospitalizations was fire/burns (18.8%, n=93), poisoning (14.5%, n =72) and transport-related injuries (9.7%, n =72).
- Of the 72 hospitalizations due to poisonings, 77.8% were due to drugs, medicinal substances and biologics and 22.2% were by other solid and liquid substances, gases and vapors.



**Injury-related Hospitalization cases selected based on ICD-9 primary diagnosis codes with external cause of injury codes.

1. Fall from one level to another not already included in another fall category, which includes: falls from cliff, wheelchair, commode, or embankment, haystack, stationary vehicle or tree.
2. Fall from ladder or scaffolding; into hole or other opening in surface; from collision, pushing, or shoving, by or with another person; or other or unspecified fall
3. Fall from non-motorized scooter, roller skates, skateboard, ski, snowboard, and other slipping and tripping or stumbling, such as on moving sidewalk, etc.
4. Natural and Environmental causes such as excessive heat, dog bites, insect stings, exposure to cold, tornado, etc.
5. Transport-related includes motor vehicle (MV) occupant, bicycle/tricycle (MV & non-MV), pedestrian (MV & non-MV), and other transport.



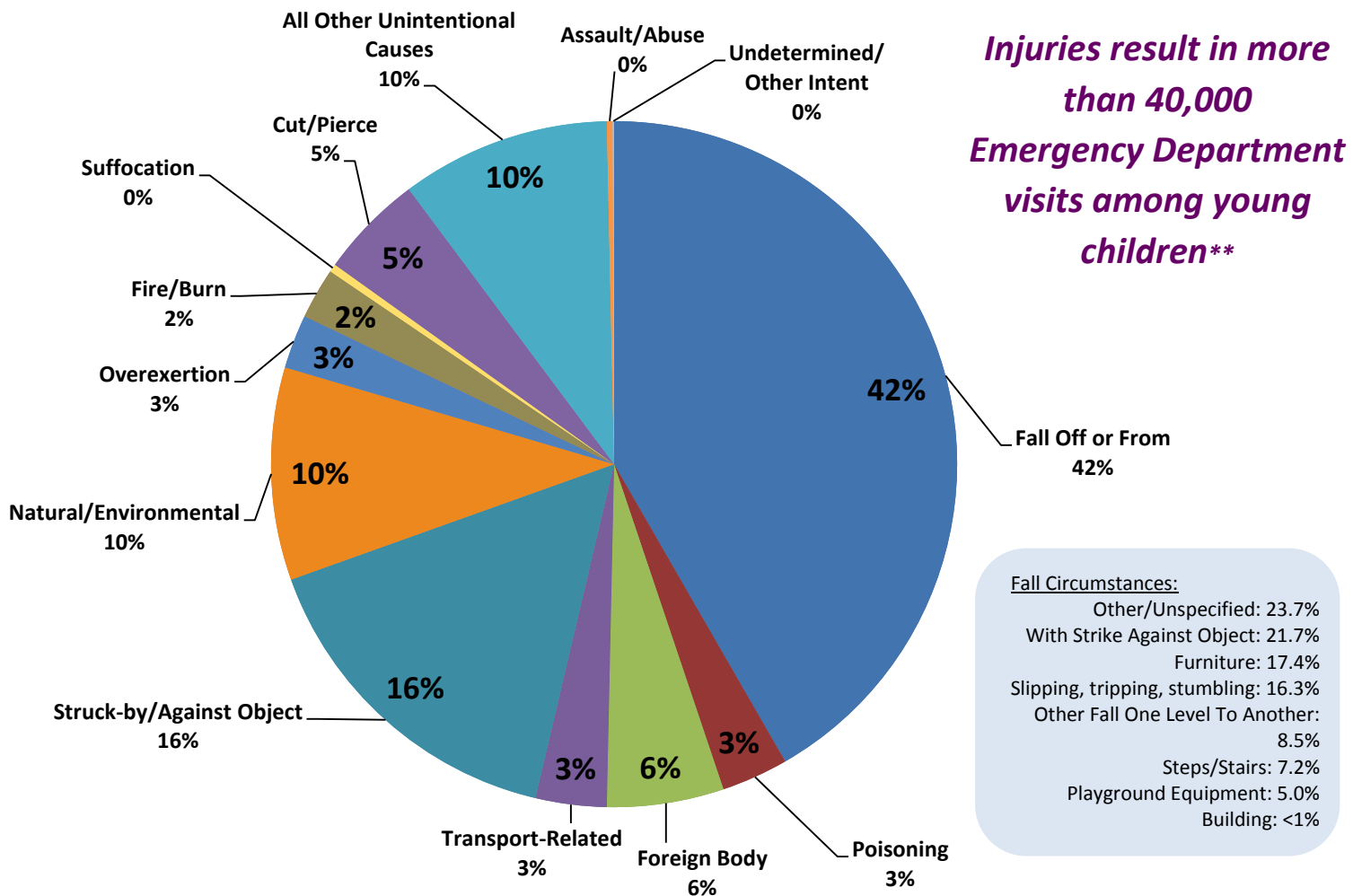
Indiana

Special Emphasis Report: Infant and Early Childhood Injury, 2013

Injury-Related Emergency Department Visits

Figure 6: Injury-Related Emergency Department Visits among Children Ages 0 – 5 Years, Indiana, 2013 (N=40,655)

- In 2013, there were 40,655 injury-related emergency department (ED) visits** of Indiana children ages 0-5 years, with 2,194 visits among infants and 38,461 among young children.
- The leading causes of injury-related ED visits in children ages 0-5 were falls (42%, n = 16,947), striking against or being struck by an object or person, (16%, n = 6,445) and natural or environmental causes, including insect stings and dog bites (10%, n = 4,074).
- Of the 1,203 ED visits of infants for falls in 2012, nearly two in five (36%, n =438) involved falls from furniture and 14.3% involved falls striking against an object (n = 172).
- Of the 15,744 ED visits of children ages 1-5 years for falls in 2013, one in five (22%, n = 3,492) involved falls from with striking against an object and 17.0% involved slipping, tripping, or stumbling.



**Injury-related emergency department cases selected based on ICD-9 primary diagnosis codes with external cause of injury codes.



Indiana

Special Emphasis Report: Infant and Early Childhood Injury, 2013

Table 1: Injury-Related Hospital Discharges and Emergency Department (ED) Visits among Children Ages 0 -5 Years, by Age Group, Indiana, 2011-2013

	Infants less than 1 Year		Children Ages 1-5 Years	
	Hospitalizations	ED Visits	Hospitalizations	ED Visits
Unintentional Injuries	319	10,170	1378	118,263
Cut/pierce	0	276	18	6,084
Drowning/submersion	U	10	25	135
Falls (<i>off/from</i>):	127	5,393	375	48,551
<i>Furniture</i>	45	2,058	72	7,648
<i>Steps/stairs</i>	13	462	41	3,274
<i>With strike against object</i>	10	665	31	11,102
<i>Slipping/tripping/stumbling</i>	6	299	42	8,069
<i>Playground equipment</i>	U	18	36	2,682
<i>Building</i>	U	U	16	101
<i>Other fall from one level to another</i>	45	925	76	3,904
<i>Other/unspecified</i>	6	960	61	11,711
Fire/Burn	45	377	277	2,961
Foreign Body	49	525	59	6,538
Natural and Environmental	9	593	48	11,229
<i>Excessive heat</i>	U	17	U	31
<i>Dog bites</i>	U	100	25	2,891
<i>Other bites/stings/animal injury</i>	U	456	18	8,251
<i>All other natural/environmental</i>	U	20	U	56
Poisoning	15	313	226	3,738
Struck-by/against object	13	1,255	66	19,960
Suffocation	17	56	24	264
Transport-related	9	157	198	4,164
<i>Motor vehicle (MV)-occupant</i>	7	120	90	1,620
<i>Bicycle/tricycle (MV & non-MV)</i>	U	U	22	1399
<i>Pedestrian (MV & non-MV)</i>	U	U	42	230
<i>Other transport</i>	U	36	44	915
All other unintentional causes	31	981	62	9,964
Assault/Abuse	28	43	27	333
Undetermined/Other Intent	28	61	35	772
Total Injury-Related Cases	372	10,274	1,440	119,488

Counts fewer than 5 are suppressed (U)

**Injury-related hospitalization cases selected based on ICD-9 primary diagnosis codes with external cause of injury codes. Injury-related emergency department cases selected based on ICD-9 primary diagnosis codes with external cause of injury codes.

Details of cause categories are in Appendix A and B of Gabella BA, Proescholdbell SK, Hume B, et. al. 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.



Indiana

Special Emphasis Report: Infant and Early Childhood Injury, 2013

Indiana Child Injury Prevention Activities

Because Injury is the leading cause of death for Hoosiers ages 1 to 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.

Actions: Preventing Injuries in Indiana: Injury Prevention Resource Guide serve 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.

Communications: The 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, works 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 Violent Death Reporting System



Indiana is one of 32 states to receive funding for the Centers for Disease Control (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 will monitor and assess the magnitude, trends and characteristics of violent deaths through collecting comprehensive data from various existing data sources. The grant will be administered by the State Department of Health's Division of Trauma and Injury Prevention.

The INVDRS will:

- Collect 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.
- Combine 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.
- Contribute de-identified data to the National Violent Death Reporting System (NVDRS) funded by the Centers for Disease Control and Prevention, National Center for Injury Prevention and Control.

The Indiana Violent Death Reporting System (INVDRS) will capture 100% of violent death incidents among children in Indiana beginning January 1, 2015.

Contact: INVDRS@isdh.in.gov



Indiana

Special Emphasis Report: Infant and Early Childhood Injury, 2013

Maternal and Child Health - Indiana Infant Mortality Initiatives

Indiana has the 6th worst infant mortality rate in the nation. Because Indiana's infant mortality rate is consistently one of the worst in the nation, reducing infant mortality is the number one priority of the ISDH. Numerous initiatives are underway to address reducing infant mortality:

Infant mortality grantees: As a result of our 1st annual Infant Mortality Summit in November 2013, ISDH Maternal and Child Health (MCH) made \$1 million available in funding for infant mortality initiatives.

“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/>

Cribs for Kids program: Suffocation deaths continue to be a contributor to our overall infant mortality rate in Indiana. ISDH works collaboratively with the Department of Child Services (DCS) regarding safe sleep. The MCH Safe Sleep Coordinator works collaboratively between both agencies to provide statewide education on safe sleep in accordance with the ISDH infant mortality plan, and to provide oversight of the Cribs for Kids distribution program for DCS.

Safe Sleep: ISDH in collaboration with DCS 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, fitted sheet with imprinted safe sleep messaging, wearable blanket, 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 –**ABC:**

babies sleep safest alone, on their backs and in a 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. Contact:

Gretchen Martin, MSW, GMartin1@isdh.IN.gov



Indiana Home Visiting Program

The Indiana Home Visiting program is jointly led by ISDH and DCS. The Maternal Infant Early Childhood Home Visiting (MIECHV) grant is an evidence-based policy initiative providing Indiana with resources to expand home visiting services in our state. The overall goal of MIECHV is to improve health and development outcomes for children and families who are at risk. To date, the MIECHV funds have provided home visiting services to more than 4,000 families. Home visitors provide qualified families education and tools to address risk factors, referrals to appropriate services beyond home visiting and support in developing and attaining appropriate goals. Indiana provides MIECHV funded home visiting services in Marion, Lake, Scott, St. Joseph, Grant, LaPorte and Elkhart Counties via nine Healthy Families Indiana providers and a Nurse Family Partnership program.

The MIECHV program requires that grantees demonstrate improvement among eligible families participating in the program, including:

- Improved maternal and newborn health;
- Prevention of child injuries, child abuse, neglect or maltreatment and reduction of ED visits;
- Reduction in crime or domestic violence; and
- Improvements in the coordination and referrals for other community resources and supports.



Indiana

Special Emphasis Report: Infant and Early Childhood Injury, 2013

Indiana Child Fatality Review Program

Mission

The Indiana Child Fatality Review 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

Overview of 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 which 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.

On July 1, 2013, a new Indiana law (IC 16-49) went into effect, requiring child fatality review teams in each county, with coordination and support for these teams to be provided by the ISDH. IC 16-49 also required that a coordinator position be created under the ISDH to help support and coordinate the local teams and Statewide Child Fatality Review Committee-- whose members are appointed by the Governor.

Each local child fatality review team is required to have representation from the coroner/deputy coroner, pathologist, pediatrician or family practice physician and local representatives from law enforcement, the local health department, DCS, emergency medical services (EMS), 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, 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. By working together to understand the circumstances involved in a child's death, we can prevent child injury and death, and make Indiana a healthier and safer place for our children.



Indiana

Special Emphasis Report: Infant and Early Childhood Injury, 2013

Resources

Indiana State Department of Health

2 North Meridian Street
Indianapolis, Indiana 46204
Website: www.StateHealth.in.gov

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

Phone: (317)233-7716
Email: Indianatrauma@isdh.IN.gov
Website: <http://www.in.gov/isdh/19537.htm>
Twitter: [@INDTrauma](https://twitter.com/INDTrauma)

Indiana Labor of Love:

Website: <http://www.in.gov/laboroflove/>

Indiana Department of Child Services

402 W. Washington Street
Indianapolis, IN 46204
Email: Communciations@dcs.IN.gov
Website: <http://www.in.gov/dcs/2869.htm>

Indiana Family Helpline

Phone: 1-855-HELP-1ST (1-855-435-7178)
Website: <http://www.in.gov/isdh/21047.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.childrensafetynetwork.org

Cribs for Kids

<http://www.cribsforkids.org/>

Centers for Disease Control and

Prevention: Injury Prevention & Control:

Website: <http://www.cdc.gov/injury/>

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

First Candle

<http://www.firstcandle.org/>

Safe Child Program

www.cdc.gov/safechild

Safe Kids Indiana/ Safe Kids Worldwide

<http://www.safekids.org/>

Safe to Sleep

<http://www.nichd.nih.gov/sts/Pages/default.aspx>



Labor of Love
Helping Indiana Reduce Infant Death

Data Notes: All data in this report are based on the CDC injury definition, whereby injury cases are based on ICD-10 underlying cause codes (deaths), ICD-9-CM primary diagnosis codes (hospitalizations), or either an ICD-9-CM primary diagnosis code or an external cause of injury code (E-codes) (ED visits). Not every injury case may be coded with an E-code, and because the analysis of the mechanism of injury is dependent upon the E-code, the aggregate numbers may be different. Deaths and transfers may be included in hospitalization and ED visit data. 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, Epidemiology Resource Team Data Analysis Team. Document prepared by ISDH Division of Trauma and Injury Prevention.

INDIANA STATE DEPARTMENT OF HEALTH

<http://www.indianatrauma.org>

Released October 2015