

A photograph of three young children playing hopscotch on an asphalt playground. The children are in motion, creating a slight blur. The hopscotch grid is drawn on the ground with green and blue chalk, featuring numbers and letters. The child in the foreground is a young boy in a white shirt and dark pants, jumping over a square. Behind him, a girl in a pink dress and a boy in a red sweater are also jumping. The background shows more of the hopscotch grid and the asphalt surface.

Indiana Statewide
Child Fatality Review
Committee

ANNUAL REPORT

on child deaths for calendar year
2014

Submitted to:

The Honorable Michael Pence, Governor, State of Indiana

Indiana State Senate

Indiana House of Representatives

Jerome M. Adams, M.D., M.P.H., Commissioner, Indiana State Department of Health

Mary Beth Bonaventura, Director, Department of Child Services

Commission on Improving the Status of Children in Indiana

Indiana Local Child Fatality Review Teams

Indiana Statewide Child Fatality Review Committee

VISION

Understanding the circumstances causing a child's death will help prevent other deaths, poor health outcomes and injury or disability in other children.

MISSION STATEMENT

The Statewide Child Fatality Review Committee will work to support local Child Fatality Review teams by providing guidance, expertise and consultation in analyzing and understanding the causes, trends and system responses to child fatalities. It will make recommendations in law, policy and practice to prevent child deaths in Indiana.

FUNCTION

Advise the governor, legislature, state agencies and the public on changes in law, policy and practice to prevent deaths among children and improve the overall health and safety of Indiana's children.

Recommend improvements in protocols and procedures for/to the Indiana Child Fatality Review Program.

Recommend systems improvements in policy and practice for state and local agencies in order to improve their effectiveness in identifying, investigating, responding to and preventing child fatalities.

Provide support and expert consultation to local Child Fatality Review teams.

Review Indiana's child mortality data and local Child Fatality Review team reports to identify causes, risk factors and trends in child fatalities.

Provide an annual report on child fatalities, to include mortality data, Statewide Child Fatality Review Committee recommendations and an overview of the Indiana Child Fatality Review Program.



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December 1, 2015

Child safety and injury prevention advocates:

Child fatality review is an essential component in helping us understand and prevent injury, death and disability to our children. The work of the statewide committee and local teams is an effort to improve the understanding of the “who, what, where, when, why and how” details involved in these deaths so we may help prevent them in the future. After several years of changing child fatality legislation, the Indiana State Child Fatality Review Program has begun its third full year of reviewing fatalities of Indiana’s children.

The following is the Statewide Child Fatality Review Committee’s report covering the work of the committee, local teams and program staff for the calendar year 2014. On behalf of the committee, I would like to acknowledge the hard work and dedication of the members of the local Child Fatality Review teams. The dedication and commitment exemplified by those professionals who volunteer their time to serve on Indiana’s local Child Fatality Review teams is invaluable. It is our hope that their hard work and perseverance will lead to changes that eventually save the lives of countless Hoosier children. On behalf of the Indiana Statewide Child Fatality Review Committee, I would like to extend my sincere appreciation to each of you for your commitment to keeping kids safe.

The mission of the statewide committee is to support the local Child Fatality Review teams by providing guidance, expertise and consultation in analyzing and understanding the causes, trends, and system responses to child fatalities, and to make recommendations in law, policy and practice to prevent child deaths in Indiana. In recognition of this commitment and dedication, it is with great pride that as chair, I present this, our second annual report, to the governor of Indiana, the Indiana Legislative Council, the Department of Child Services, the Indiana state health commissioner and the Commission on Improving the Status of Children.

On behalf of the Committee,

Roberta A. Hibbard, MD

MEMBERS

Chair and Pediatrician

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Chief, Section of Child Protection Programs
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*Indiana Emergency Medical Services Commission
Public Representative*

Introduction

Death rates for infants, children and teens are widely recognized as valuable measures of child well-being. It is the accuracy of key factors associated with child deaths that provides the basis for identifying vulnerable children, and responding in ways that protect and improve their lives. More than 25 years of research have proven that prevention or significant reductions of child abuse and neglect fatalities, as well as other serious and fatal injuries, cannot be achieved without more complete information about how and why children are dying. Without such thorough information, many child deaths go under-reported and are often misclassified. Scholars, professionals and other officials around the nation agree that a system of comprehensive child fatality review teams has made a major difference.

The 2014 Statewide Child Fatality Review Committee Annual Report presents information on the changes to Indiana law over the last several years, the activities of the Statewide Child Fatality Review Committee during these statute changes, and the reviews of child deaths that occurred during calendar year 2014.



More than 25 years of research have shown that prevention or significant reductions of child abuse and neglect fatalities, as well as other serious and fatal injuries, cannot be achieved without more complete information about how and why children are dying.

EXECUTIVE SUMMARY

Indiana Statewide Child Fatality Review Committee Annual Report on Child Deaths for Calendar Year 2014

December 31, 2015

Report Section

Page Reference

Introduction

Pg. 1

Every child's death is a tragic loss for the family and community. In 2013, 226 Indiana children died from injury. Through careful review of these deaths, we are better prepared to prevent future deaths. Child Fatality Review is a public health strategy to understand child deaths through multidisciplinary review on the local level. Data are collected and analyzed to best understand risks to children. The lessons learned from the reviews inform the local and statewide activities to reduce preventable child deaths. Child Fatality Review is practiced in every U.S. state and in other countries.

Background

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The Indiana Child Fatality Review Program was established in 2006 by legislation in response to the need to better understand why children die. The law mandates local child fatality review teams in each of Indiana's counties (or regions) review the deaths of all children younger than 18. The Indiana State Department of Health (ISDH) provides support for the Indiana Statewide Child Fatality Review Committee and the Indiana State Child Fatality Review coordinator, which provides guidance for the local teams.

Child Fatality Review does make a difference. Prevention initiatives and collaborations are highlighted, as well as improvements for educational and capacity-building opportunities for local teams. Findings and data are highlighted throughout the report and exemplify that communities are aware that knowledge of the facts about a child's death is not sufficient to prevent future deaths. The knowledge must be put into action. The review process has raised the collective awareness in our communities and has led to a clearer understanding of agency and systemic responsibilities and possibilities for collaboration on efforts addressing child health and safety.

The public health Child Fatality Review process

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Child Fatality Review team members, at both the state and local levels, collect information corresponding to their disciplines and the set of questions in the database sponsored by the National Center for the Review & Prevention of Child Death (NCRPCD). Members share what information they have about the specific child deaths being reviewed. They then use the discussion and review process to identify risk factors specific to their communities. All reviews conclude with the questions: *Was this death preventable? And if so, how?* The data collected augment death certificate data and provide rich insight into the causes and circumstances surrounding child fatalities in Indiana. Local teams monitor child death trends in the community, share the lessons learned in the community and spearhead or participate in local prevention activities. This information can then be used to drive the development of quality preventive plans and measures.

Current status of local teams

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By the end of 2014, there were active local Child Fatality Review teams covering 86 of Indiana's 92 counties. The 2014 Indiana State Child Fatality Review Annual Report highlights the activities of the Indiana State Child Fatality Review Program and local teams throughout 2014.

Indiana Child Fatality Review program activities

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In 2014, Indiana Statewide Child Fatality Review Committee members dedicated their efforts to establishing the Indiana Child Fatality Review teams and processes, educating the community and Child Fatality Review team members, researching child safety issues and advocating for their recommendations to promote child safety and to enhance Indiana Child Fatality Review effectiveness. It was a year of considerable accomplishment and expansion. The team:

- Increased the number of counties participating in the program from 45 to 86
- Increased knowledge about topics impacting the health and well-being of children by engaging local and national professionals to present to both the statewide committee and local teams
- Assisted in creating relationships between the ISDH Trauma and Injury Prevention Division, Indiana Violent Death Reporting System (INVDRS) staff and the local Child Fatality Review teams, in an effort to enhance participation in both programs
- Facilitated a partnership between ISDH and the Indiana Department of Child Services (DCS) that evolved into the Indiana Safe Sleep Collaborative Program, which aims to reduce the risk of sleep-related death in Hoosier infants
- Increased awareness of the Indiana State Child Fatality Review program by creating a logo and branding, with the assistance of the ISDH Office of Public Affairs, and
- Presenting information to multiple agencies, media outlets, communities and stakeholders
- Reviewed the deaths of 92 Indiana children and identified preventable risk factors associated with the majority of these incidents



Based on local Child Fatality Review team input and aggregate child death data, the Indiana State Child Fatality Review Program issues the following recommendations:

- Sudden Unexplained Infant Death
 - o Increase knowledge in caregivers about the preventable risk factors
 - o Increase knowledge in professionals about appropriate investigation techniques for these deaths
 - o Create a standardized reporting process
- Suicide
 - o Improve collaboration between school systems and mental health clinicians to ensure a continuum of care
- Motor vehicle collisions
 - o Improve community awareness about child passenger safety
 - o Improve community awareness about the dangers of impaired or distracted driving
- Prematurity and infant deaths
 - o Improve knowledge in young women, healthcare providers and communities about the importance of preconception and prenatal health
 - o Increase access to appropriate health care for women of childbearing age
- Indiana State Child Fatality Review Program
 - o Increase capacity of the program by continuing to engage new local teams
 - o Improve knowledge of best practices by providing continuing education opportunities
 - o Improve timeliness and quality for data collection in the National Review and Prevention of Child Deaths Case Reporting System
 - o Execute a memorandum of understanding with ISDH Vital Records Divisions to improve access to death certificates
 - o Develop a protocol for the review of child deaths where the county of incident is not the county of death

For more information:

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Indiana State Child Fatality Review Program

Fetal-Infant Mortality Review Program

Safe Sleep Program

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BACKGROUND

In 2006, Indiana legislation initiated a child death review system, designed to produce an accurate picture of each child death, identify the risk factors involved and inform injury-prevention efforts. While the program has evolved and adapted to meet new challenges, the objectives have remained the same. The program identifies potentially fatal risks to infants and children and responds with multi-level prevention strategies.

Through continued evolution, including a 2012 legislative update that attempted to standardize and coordinate the process in response to state need, the Indiana State Child Fatality Review Program grows increasingly more effective, relevant and sustainable. Changes to IC 31-33-24 and IC 31-33-25 mandated that the Indiana Department of Child Services (DCS) establish a multidisciplinary local Child Fatality Review team in each of the DCS geographical regions. This legislation required every county in our state to maintain a multidisciplinary panel, at a minimum comprised of coroner, law enforcement, pathologist, fire or emergency medical responders, school representative, physician, prosecutor, public health and DCS, to examine the non-natural deaths of all children under age 18. This legislation also allowed the teams to include optional members at the discretion of the panel. The teams did not act as an investigative body. Their purpose was to enhance the knowledge base of the mandated investigators, evaluate and address potential services needs, identify and implement prevention interventions for the family and community and enhance multidisciplinary communications and coordination.

Beginning in 2013, Indiana legislation moved the Statewide Child Fatality Review Committee and the local Child Fatality Review teams from Title 31 to Title 16, under the auspices of the Indiana State Department of Health (ISDH). This new law, IC 16-49, required multi-disciplinary Child Fatality Review teams be implemented at the local level, with coordination and support for the local teams and statewide committee to be provided by the ISDH. It also required that ISDH create a coordinator position to help support the local teams and statewide committee.

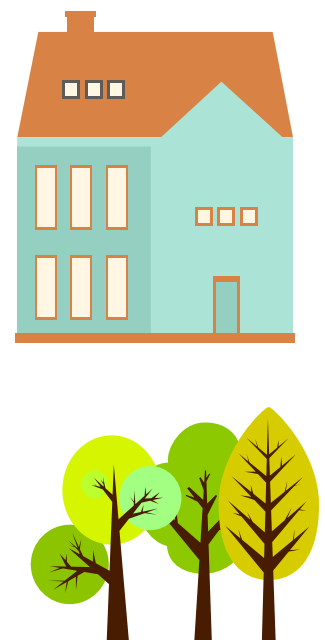
IC 16-49 made the prosecuting attorney in each county responsible for establishing a Child Fatality Review committee whose membership includes the prosecuting attorney or their representative, the county coroner or deputy coroner, and representatives from the local health department, DCS, and law enforcement. The Child Fatality Review committee is responsible for selecting members to serve on the local Child Fatality Review team and determining whether to establish a county Child Fatality Review team or to enter into an agreement with another county or counties to form a regional Child Fatality Review team. The prosecuting attorney is responsible for filing a report with the state coordinator outlining what type of team was selected, the membership for the local team and any assistance required by the coordinator.

While the local teams' criteria for selecting which cases to review remained unchanged with the move from Title 31 to Title 16, IC 16-49-3-4 requires the local health officer in each county to provide all of the death certificates for children under 18 years of age to their local team so that the team may determine which cases meet the criteria for review.

Local teams gather as much information as possible to determine the most accurate manner and cause of a child's death. Team members have the opportunity to share information, discuss and prioritize child health and risk factors and promote local education and community-based prevention programs. The goal of the program is to have local teams in every county so that local initiatives for injury prevention can be implemented. As of December 2014, 86 counties had an active local Child Fatality Review team, or were in the process of implementation. The Statewide Child Fatality Review Committee was tasked with reviewing case information, submitted by the local teams, to identify statewide injury trends and develop strategies that would help inform injury-prevention efforts.

Of the average 700 child deaths that occur annually in Indiana, approximately 30 percent merit review. To come under review, the cause of death must be unclear, unexplained, or of a suspicious circumstance, to include all accident, homicide, suicide or undetermined deaths plus any death assessed by DCS. The team may review any case, including a natural death, if team members are concerned that the death was unexpected or unexplained by the cause and manner of death.

In 2012, the Indiana State Child Fatality Review Program converted from a paper data collection system to the web-based National Center for the Review and Prevention of Child Deaths (NCRPCD) – Child Death Case Reporting System (CDR). The system allows for standardized data collection and reporting by local and state users. Utilizing consistent data collection and reporting practices will further enhance knowledge and identification of trends and patterns of risk and lead to improved child death investigations. This practice will also help identify gaps in community-based services and improve the implementation of prevention practices on local, state and national levels. The success of this process of data collection and reporting is due, in large part, to the support of the county-based team members who volunteer for this difficult work. Their hard work is a true expression of their dedication and commitment to helping improve the health and safety of Indiana's children.



The public health child fatality review process

According to the National Center for Child Death Review, there are six steps to a quality review of a child's death:

- **Share, question and clarify** all case information.
- **Discuss** the investigation that occurred.
- **Discuss** the delivery of services (to family, friends, schoolmates, community).
- **Identify** risk factors (preventable factors or contributing factors).
- **Recommend** systems improvements (based on any identified gaps in policy or procedure).
- **Identify** and take action to implement prevention recommendations.





Goals

The goal of the Indiana Child Fatality Review Program is to ultimately decrease child deaths through prevention efforts. This is done by monitoring data, identifying trends, injuries, and deaths that may be preventable in Indiana, and reviewing and learning from the reported deaths. In collaboration with key partners, this learning is applied to developing recommendations and community interventions that may help prevent injuries and future child deaths.

INDIANA DEATH CERTIFICATES

After a person dies, the county coroner or other appointed reporting authority will determine both a cause and manner of death to be recorded on the decedent's death certificate. This is important to note since, as a result of the Child Fatality Review team's review of the death, the team's determination of cause and manner of death may differ from those recorded on the death certificate.

Manners of death

The manner of death describes how the death came about and falls into one of five categories:

- 1) Homicide,
- 2) Suicide,
- 3) Accidental,
- 4) Natural causes, *or*
- 5) Undetermined.

Natural deaths include medically related deaths from illnesses such as cancer, prematurity or congenital defects.

Accidental deaths include types of unintentional deaths such as fire, falls, auto/pedestrian fatalities and drowning.

Homicides are the killing of one human being by another human being. The term homicide is used regardless of the perpetrator's intent and describes events ranging in scope from accidents without clear intention or to the opposite extreme of an act of violence.

Suicide is the deliberate taking of one's own life. There may be a wide variety of circumstances surrounding suicide deaths including contributing factors such as behavioral health issues, substance abuse, bullying or terminal illness.

Undetermined deaths are those situations where the pathologist and/or coroner are unable to pinpoint a final manner of death. These types of cases typically involve information from the investigation that is either incomplete or conflicting, which impedes the pathologist's/coroner's ability to make a final determination. It may also include cases whereby after a complete investigation, the intent surrounding the death is unclear and it cannot be determined if the death was due to an accident or intentional circumstance. For example, it may not be clear whether a firearm death is due to an accident, suicide or homicide.

Causes of death

The cause of death refers to what specifically killed the person (drowning, overdose, car crash, suffocation, etc). For example, the cause of death may be determined to be from drowning, but the manner of death then describes the intent surrounding the death (homicide, accident, or undetermined).

While manner and cause of death are separate, it is the combination of the two that defines how the death occurred. For Child Fatality Review, knowing if the injury was unintentional, intentional or undetermined will allow for a better understanding of how the child died. Most Child Fatality Review findings coincide with the death certificate manner of death, but there may be instances where they do not. This can occur when other factors gleaned from the review process were not readily available at the time the death certificate was complete. Child Fatality Review findings may also result in getting the official manner of death amended.

Preventability

Injury prevention is a critical component to ensuring public health and safety. The World Health Organization (WHO) public health approach to injury prevention consists of four steps:

- 1) Define the problem through the systematic collection of information about the magnitude, scope, characteristics and consequences of injury;**
- 2) Establish why these injuries occur, using research to determine the causes and correlates of injury, the factors that increase or decrease the risk for injury, and the factors that could be modified through interventions;**
- 3) Find out what works to prevent injury by designing, implementing and evaluating interventions;**
- 4) Implement effective and promising interventions in a wide range of settings. The effects of these interventions on risk factors and the target outcome should be monitored, and their impact and cost-effectiveness should be evaluated.**

Child Fatality Review is a public health injury prevention process that examines the preventability of the circumstances and risk factors involved in a child's death. The overall goal is to improve the health and safety of all children by identifying and understanding the risk factors that place a child at risk for illness or injury.

Child Fatality Review teams may define a death as preventable when some reasonable action could have prevented the death. The team may determine that the risk factors or circumstances that caused or contributed to a death were preventable, but it may not know, at the time of review, how it could have been prevented. Teams will often revisit the prevention discussion when additional information provides further insight.

Even if a particular case is deemed "probably not preventable," the Child Fatality Review process is valuable in improving interagency collaboration and investigation practices, and identifying gaps in community services or access to resources. For this reason, many local teams make recommendations and initiate changes even when a particular death is not deemed preventable.

ESTABLISHING A LOCAL CHILD FATALITY REVIEW NETWORK IN INDIANA

Local teams

The state coordinator and Indiana Statewide Child Fatality Review Committee focused on a grass-roots approach to improving the Child Fatality Review Network throughout the year. The state coordinator conducted multiple conference calls, met with stakeholders in multiple counties and attended the initial meetings of many local teams, in an effort to guide them with best-practice suggestions.

Teams that were assisted with site visits during 2014 include:

Boone County	Dubois County	Jasper County	Warrick County
Brown County	Fountain/Warren counties	Kosciusko County	Whitley County
Clay County	Greene County	Lake County	Morgan County
Crawford County	Hamilton County	Marion County	St. Joseph County
Daviess County	Howard County	Marshall County	Tippecanoe County
Scott County			
DCS Region 7 - Grant, Blackford, Jay, Randolph, Delaware counties			
DCS Region 8 - Clay, Vigo, Sullivan, Parke, Vermillion counties			
DCS Region 12 - Henry, Rush, Wayne, Fayette, Union, Franklin counties			
DCS Region 15 - Decatur, Ripley, Dearborn, Ohio, Switzerland, Jefferson counties			

CURRENT STATUS OF LOCAL TEAMS

Since IC 16-49 became effective in July 2013, the Statewide Child Fatality Review Committee has continued to work to support the new local Child Fatality Review teams and provide guidance and expertise where needed. The maps opposite and below (Figures 1-4), show the progression of the development of the local teams through December 2014. Official teams are those teams that have submitted Child Fatality Review committee reports to the state coordinator; non-official teams are those that are known to have been implemented but have yet to submit their Child Fatality Review committee reports to the state coordinator. Unverified teams are those that have made contact with the state coordinator and are in the process of team implementation.

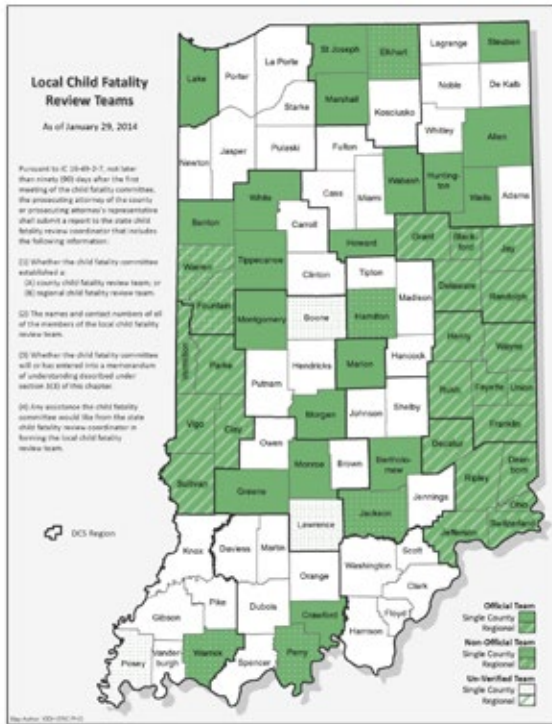


Figure 1: Status of local Child Fatality Review teams, January 2014

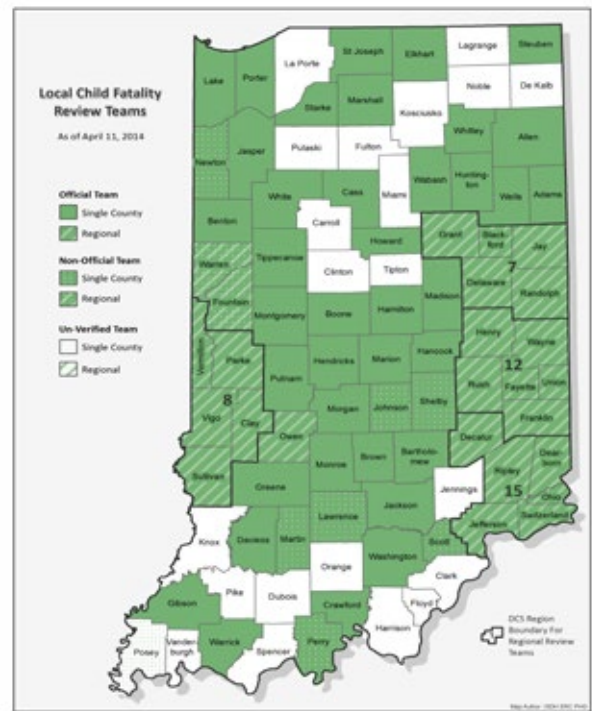


Figure 2: Status of Local Child Fatality Review Teams, April 2014

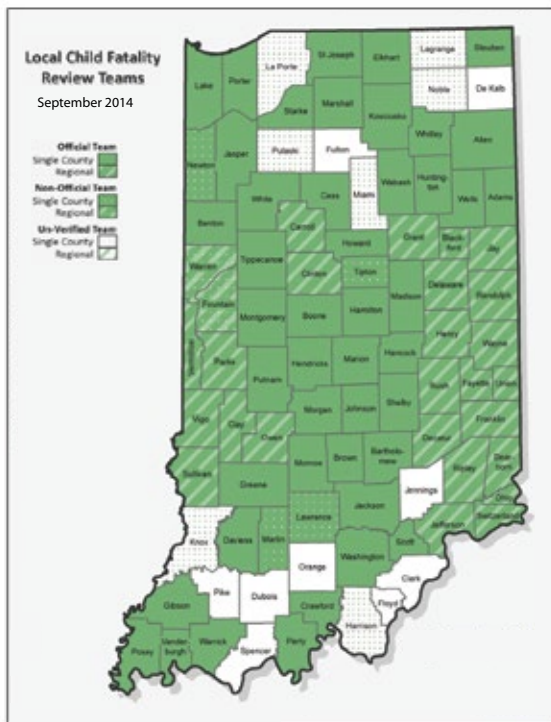


Figure 3: Status of local Child Fatality Review teams, September 2014



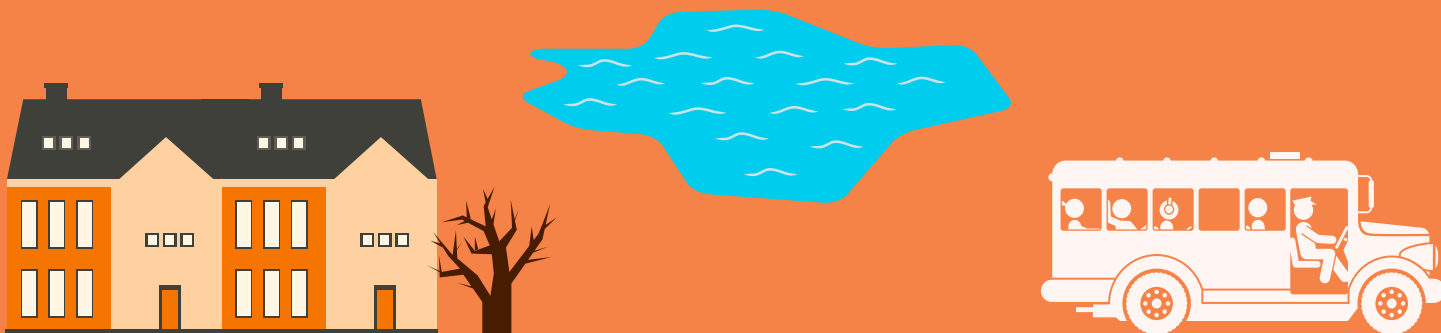
Figure 4: Status of local Child Fatality Review teams, December 2014

Promoting the network

The State Coordinator worked to engage partnering agencies to help expand knowledge of the Child Fatality Review purpose and process and to improve collaboration among stakeholders. This was done by attending local meetings with groups such as a local Infant Mortality Task Force, Fetal-Infant Mortality Review Team, Domestic Violence Fatality Review Team, and Child Abuse and Neglect Task Force.

Working with INVDRS

In 2014, the Trauma and Injury Prevention staff at ISDH received funding from the Centers for Disease Control and Prevention's National Center for Injury Prevention and Control to participate in the National Violent Death Reporting System. The Indiana Violent Death Reporting System (INVDRS) project seeks to collect comprehensive, objective and accurate population-based information on victims, suspects, weapons and circumstances related to violent deaths. Data are combined from multiple sources, such as coroner records, law enforcement reports and vital records. The data are used to help provide an understanding of violent deaths and better inform prevention efforts at state, local and national levels. The INVDRS data collection process is intensive and time-consuming, because data-sharing agreements must be executed with the hundreds of agencies involved in the investigation of violent deaths. To help streamline the process and facilitate these relationships, the Indiana State Child Fatality Review Program coordinator reached out to many of the local Child Fatality Review teams for their assistance. While all of the teams that were engaged were willing to help facilitate the process, special recognition should be bestowed upon the local teams in the INVDRS pilot counties—Marion, Lake, Allen, Vanderburgh, St. Joseph and Madison. Figure 6 outlines the overlap between the INVDRS and Child Fatality Review.



Indiana Violent Death Reporting System

Reporting Child Violent Death

The Indiana Violent Death Reporting System will capture 100% of violent death incidents and January 1, 2015 by utilizing and enhancing the work done through Child Fatality Review (CFR).

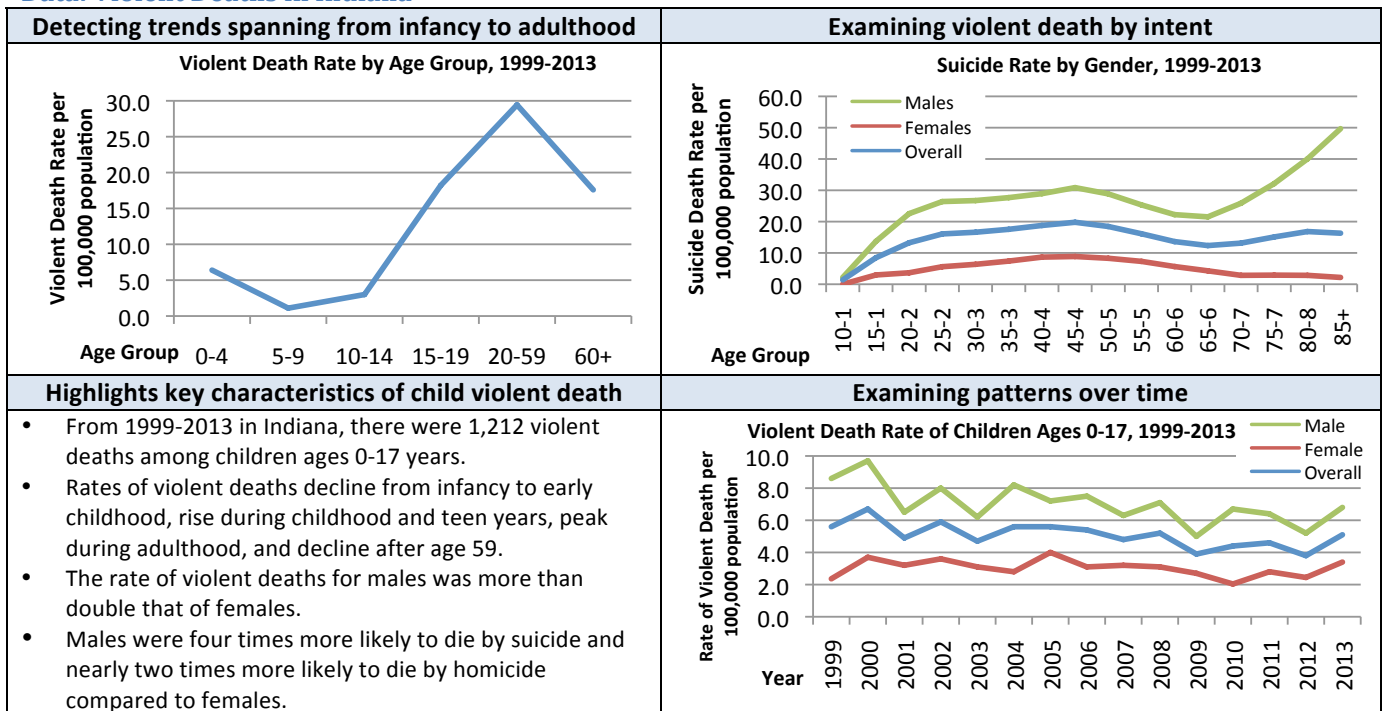
Overview: INVDRS

- Collect comprehensive, objective, and accurate population-based information on victims, suspects, weapons, and circumstances related to homicides, suicides, unintentional firearm injury deaths, legal intervention deaths, deaths of undetermined intent, and deaths due to terrorism.
- Combine data from multiple sources, including death certificates, coroner records, law enforcement reports, 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

Overlap: INVDRS and Child Fatality Review

INVDRS	INVDRS & CFR	CFR
<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Use confidential reporting system to collect data for analysis • Examine extensive background and circumstance information on victims, suspects, relationships, weapons, and life events related to the incident to identify examining associated risk factors and warning signs to prevent future death • Shared common data providers, users, and stakeholders for increased utility and completeness 	<ul style="list-style-type: none"> • Focuses on local community and statewide action • Local teams are mandatory in all counties • Contributes data to National CDR Case Reporting System on a team by team basis

Data: Violent Deaths in Indiana



INVDRS Advisory Board:

The success of the implementation and utilization of INVDRS relies upon its partners and Advisory Board (AB) members. The AB will:

- Focus on the technical aspects of developing and implementing the reporting system
- Provide access to data (if applicable) and help develop solutions to identified barriers
- Advise on the publication of useful and actionable reports and fact sheets

For more information about INVDRS, please contact the Principal Investigator, Katie Hokanson, at KHokanson@isdh.in.gov
 For more information about Child Fatality Review, please contact Program Coordinator Gretchen Martin, at GMartin1@isdh.in.gov
 Report template based on Wisconsin Violent Death Reporting System: Reporting Child Violent Death

Figure 6: INVDRS and Child Fatality Review

IN Safe Sleep Program

Sudden Unexpected Infant Deaths (SUID) and Sudden Infant Death Syndrome (SIDS) are leading causes of infant deaths in Indiana. For this reason, almost all of the local Child Fatality Review teams have struggled with the trauma and devastation of having to review these preventable deaths. Knowing that infant safe sleep was a topic important to the teams, the ISDH facilitated a partnership with the Indiana Department of Child Services (DCS) that has evolved into the Indiana Safe Sleep Collaborative Program. The Safe Sleep Program aims to reduce the risk of sleep-related death in infants by establishing partnerships with agencies in the State of Indiana to provide safe sleep education and Infant Survival Kits (one infant portable crib, fitted sheet with safe sleep message imprinted on it, wearable blanket, pacifier and safe sleep recommendations) for families who do not have safe places for their infants to sleep. As part of the program, a number of educational materials that will help caregivers learn more about safe sleep are provided in the Infant Survival Kit. The educational messages focus on three key risk-reduction recommendations from the American Academy of Pediatrics and National Institutes of Health: infants sleep safest alone, on their backs and in a separate, safe sleep environment. The accompanying education, with emphasis on the importance of prenatal care, breastfeeding, room-sharing and smoking cessation in pregnancy and around infants, is intended to help families understand the risk factors associated with SIDS and infant death.

Through the partnership between ISDH and DCS, the program has the ability to collect demographic information from all Infant Survival Kit recipients, so outcomes associated with this endeavor can be evaluated. This program will help support the local teams as they work to prevent child deaths.

Legal guidance

Throughout 2014, we worked to provide the local teams with the legal guidance necessary to help ensure compliance with the state's laws. The public access counselor presented a web-based training explaining the Open Door/Public Access Law requirements local teams must follow. All local teams were invited to participate in the live webinar, which was later posted online for future reference. The ISDH Office of Legal Affairs also provided guidance to local teams on how to address HIPAA exceptions that allow Child Fatality Review teams to obtain confidential medical and mental health records for the review process.

Local teams were voicing difficulties in knowing when to conduct a review in cases where a child was transported out of the county of incident to another county for medical care where they are later pronounced deceased. Indiana statute only provided the county where the death occurred with the authority to conduct the review. The team in the county of incident often wished to conduct the review, however, since that was where the investigation was conducted and where the opportunities for prevention were present. The ISDH legal team was instrumental in providing guidance to help local teams navigate this review process.



Barriers and challenges

The most critical barrier to establishing local teams often revolved around this issue of a child's death being pronounced in a county other than where the incident occurred. This was especially problematic in rural Indiana counties where trauma centers are not present and critical care patients are often transported to other counties with access to Level 1 trauma care. While this access to care is crucial to ensuring positive outcomes after critical incidents, it was difficult for the counties where many of these incidents occurred to gain the momentum to move forward with implementing their Child Fatality Review team, because an overwhelming majority of these counties lost the legal authority to review the deaths that occurred in their community. For this reason, many of the teams were late forming.

INITIATIVES ADDRESSING OUR MISSION

The activities of the Indiana Statewide Child Fatality Review Committee in 2014 centered around learning about and building capacity for Child Fatality Review in the state, as well as examining possible prevention activities that could play a role in keeping Indiana children safe.

Knowledge gained and shared

During 2014, the state coordinator attended several national child fatality and injury prevention conferences and meetings to gather information and develop a strategic plan to help build a robust child fatality/injury prevention network. Abby Collier from the Children's Health Alliance of Wisconsin presented information about Wisconsin's Child Fatality Review program. As the project manager of a well-established and highly-respected program, Ms. Collier was able to provide the state coordinator and statewide committee with ideas for engaging the local Child Fatality Review teams and fundraising. She also encouraged the provision of ample education opportunities aimed at increasing the capacity and knowledge of local team members.

The statewide committee also utilized its monthly meetings to gather information on local programs and entities gaining momentum or having success in implementing injury prevention programs and resources.

The statewide committee participated in a presentation provided by the program manager of the Eskenazi Health Prescription for Hope Program. The hospital-based violence-intervention program enrolls patients who are recovering from gunshot wounds, stabbing or other assaults, and is aimed at reducing recurrence of those violence-related injuries. By providing community education on violence and crime prevention, as well as creating a network of community agencies to partner in the provision of services to victims and families, Prescription for Hope has marked potential at increasing the safety of families and children in Indianapolis and surrounding counties.

The statewide committee also hosted DCS staff, who presented information on their SFY 2013 Child Fatality Report Fact Sheet and the Child Abuse and Neglect Annual Report of Child Fatalities in CY 2012. DCS clarified the determination of "substantiated" and "unsubstantiated" cases, and the statewide committee gained a better understanding of the DCS "prior history" determination.

The state coordinator worked to create awareness about and disseminate the messages of the Indiana State Child Fatality Review Program through conferences and contact with individual counties and media outlets. These events increased understanding about Child Fatality Review and afforded the statewide committee opportunities to network with organizations in Indiana that could assist in program efforts. Meetings were held with entities and agencies interested in learning about Child Fatality Review or safe sleep practices. Presentations were provided to groups like the Indiana Youth Institute, whose mission is to promote the health and development of Indiana's children, and Choices, whose mission is to strengthen individuals and families and improve community systems of care.

Presentations were also made at conferences hosted by or for the agencies whose members serve on local teams—the Indiana Emergency Response Conference, Children's Justice Act Conference, the Indiana Coroner's Annual Conference, the Indiana Prosecuting Attorneys Council spring conference, the Indiana Volunteer Firefighters quarterly board meeting, the Indiana Public Health Nurse conference, the Indiana Sheriff's Association winter conference and an Indiana Public Health Leadership symposium. The state coordinator also provided information to the Indiana Perinatal Quality Improvement Collaborative (IPQIC) Governing Council, the Commission on Improving the Status of Children and the Indiana Injury Prevention Advisory Council.

Information was also provided to The Indianapolis Star and the Indiana Prosecuting Attorneys Council quarterly newsletter, highlighting the work done by local teams.

Prevention agents come in many forms. They can include physicians who speak with patients about preconception health, law enforcement officials who train as car seat safety technicians, social workers who recognize the signs of abuse and neglect and parents who talk regularly with their children about their lives and daily stresses. The combined contributions of these individuals can positively affect the community and help prevent child fatalities.

Program improvements developed

Another step in establishing a comprehensive Child Fatality Review program in Indiana was to create an information-sharing web presence on the ISDH's web page. The state coordinator presented the content to the statewide committee for review and each member suggested ideas for subject matter, with a process of updates and improvements that continued over several months.

The statewide committee also began preparing proposals for legislative updates for the 2015 General Assembly session. Among the suggested updates to the code as it relates to Child Fatality Review were:

- 1) Inclusion of a provision for the review of near fatalities and serious injuries**
- 2) Revision of the code to require the county of incidence to conduct the child fatality review and to allow the county of death to do so, if they chose**

The goals of both of these alterations were to provide the local Child Fatality Review teams an opportunity to more accurately assess the injury trends in their jurisdictions and thus create more targeted prevention programs aimed at protecting the children in their respective communities.

Meeting the local teams' needs

Through multiple conversations with local teams and community stakeholders in early 2014, the statewide committee determined a focus on the prevention of SUID and SIDS was a priority for many agencies in Indiana. There exists a marked need for standardization of both investigation techniques and nomenclature. To this end, it was decided to offer Sudden Unexplained Infant Death Investigation (SUIDI) training opportunities across the state.

SUIDI, created by the Centers for Disease Control and Prevention (CDC) in 2006, aims to standardize and improve data collected at infant death scenes and to promote consistent classification and reporting of SUID cases (CDC, 2014). It also encourages the inclusion of all appropriate local agencies on the death scene in order to facilitate an emphasis on approaching all investigations as a team. First introduced in Indiana in 2007, the most recent training for first responders here was in 2010. With a goal of educating approximately 500 first responders, representing each of the 92 Indiana counties, the statewide committee made plans to host regional training events during calendar year 2015. In order to assist trained agencies in conducting effective SUIDI protocol, the statewide committee plans to offer the necessary equipment to each agency as a supplement to the class. This would include bound Train-the-Trainer textbooks and a SUIDI Scene Re-enactment newborn doll. After conferring with experts in SUIDI protocol, as well as surveying a sample of first responding agencies, it was determined that a lifelike newborn doll would be the most appropriate tool to provide investigators.

With an emphasis on building local Child Fatality Review teams and increasing their capacity to effectively review cases and collect comprehensive data, the statewide committee began discussing opportunities to provide education to team members. Funding for a large statewide conference became available and plans were put into place to create an appropriate agenda and engage national Child Fatality Review and injury prevention experts. The statewide committee made plans to host the first Indiana State Child Fatality Review Conference during the summer of 2015. Invitations would be extended to all appropriate agencies and local Child Fatality Review teams in each of the 92 counties.

Finally, the state committee continues to engage prosecuting attorneys in counties that have yet to form a local Child Fatality Review team. In-person presentations to individual communities and their stakeholders, as well as the creation of regularly published newsletter will work to generate interest for upcoming teams, keep existing teams informed and provide a feedback loop whereby local teams and the statewide committee can maintain communication.



SPOTLIGHT ON PREVENTION: Local team activities and successes

Jackson County Child Fatality Review team



Figure 7. Jackson County Prosecuting Attorney, AmyMarie Travis

Led by Prosecutor AmyMarie Travis, the Jackson County Child Fatality Review Team took steps to educate its citizens about safe sleeping practices for infants - a leading cause of infant injuries or deaths throughout the state. Prosecutor Travis developed a presentation for a county high school where students in health class received infant safe sleep education. As a result, another high school implemented the topic in its coursework, and both schools have chosen to maintain the safe sleep education as part of their curriculum. Additionally, the prosecutor obtained an agreement from the family court judge to integrate safe sleep education into the curriculum for the parenting classes required of all divorcing parents in Jackson County. Both of these education activities provide sustainable injury prevention public health messaging, while also actively engaging young men and fathers who are often not part of the education about providing a safe sleep environment for infants.

Crawford County Child Fatality Review Team

In Crawford County, the local team, led by Prosecutor Cheryl Hillenburg, addressed the problem of water safety for county youth. After the team reviewed a drowning fatality, it decided a proactive approach toward water safety education was needed. Because a large number of families and children were expected to attend the area Little League Park for the local "World Series," the event was identified as an opportunity to reach many Crawford County residents. Terry Allen from the Department of Natural Resources (DNR), and a member of the Crawford County Child Fatality Review Team, used a boat and truck owned by DNR to educate children about water safety (Figure 8 and Figure 9).



Figure 8. Crawford County Child Fatality Review Team, water safety event

The team members solicited businesses and individuals for funding to provide free life jacket vouchers to children at the Little League Park. The participants were asked to sign a water-safety pledge, and nearly 100 vouchers were given away, which allowed parents to take their children to a local business to be fitted with life jackets.

Figure 9. Crawford County Child Fatality Review Team, water safety event



Marion County Child Fatality Review Team

In June 2014, the Marion County Child Fatality Review Team (MCCFRT) released a report based on its case review during 2013, and as a result of its role while serving as the DCS Citizen's Review Panel. In 2012, the team had noted a trend in five specific ZIP codes with the highest number of child deaths (46201, 46218, 46222, 46226 and 46227). These same five ZIP codes also had the highest infant mortality rates, numbers of registered convicted violent offenders and sexual offenders, numbers of infants and children referred for sexual assault examinations, numbers of infants and children hospitalized because of suspected physical abuse, and percentages of Medicaid births (Medicaid being acknowledged as a proxy for poverty). Based on their identification of the issues in those five ZIP codes (Figure 10), the MCCFRT changed its process for reviewing child deaths on a trial basis during the 2013-2014 year to determine whether additional opportunities for child death prevention might be identified (MCCFRT, 2014).

The trial review of all cases in these five high-risk ZIP codes, done regardless of whether a coroner's case had been opened or if there had been DCS involvement, helped the team identify additional useful – and concerning – information about those cases. Specifically noted were a higher proportion of prematurity-related causes of death compared to all other ZIP codes, a larger number of police calls for incidents/crimes often involving violence in the home, and a smaller but significant proportion of homes with prior DCS involvement (MCCFRT, 2014).

Of additional concern were several examples of families for whom the police were called to address domestic violence-related incidents with children present in the home, but no report was made to DCS. This was alarming because it is well known that domestic violence is one of the leading risk factors for child abuse/neglect. Research has documented that in homes where there is domestic violence and where there are children, approximately half will also have child maltreatment. Furthermore, there is clear scientific evidence demonstrating the adverse effects of emotional maltreatment (including witnessing domestic violence and traumatic stress) on the neurodevelopment of young children, even during the first few years of life. The effects of such toxic stress and adversity early in life extend well beyond childhood and include many of our society's most common health and mental health problems among adults. The MCCFRT felt its data clearly suggested a need for more extensive training for law enforcement and other first responders on the importance of involving DCS when responding to a domestic violence call where children are present in the home, even if the child has no visible physical injury (MCCFRT, 2014).

Given the significant concerns identified, MCCFRT members expanded the routine review of child fatalities during the upcoming year to include an additional three ZIP codes (46203, 46208 and 46224) (Figure 11). This decision was based on the fact that the three additional ZIP codes had several child fatalities not reviewed by the team during the course of this study and shared other similarities to the original five targeted ZIP codes, including higher numbers of single females as head of household, a higher proportion of households below the poverty level and lower median incomes (MCCFRT, 2014).

Finally, six sets of twins (all natural deaths with primary cause being complications of prematurity) were identified during the course of this study. Five of the six sets of twins were from families who lived in one of the eight targeted ZIP codes. This finding was extremely concerning to the team, as they felt this could indicate that twins in these targeted ZIP codes may be at a significantly increased risk of child death due to complications of prematurity. The team determined that a more thorough and consistent review of child deaths in these apparently high-risk areas could help identify additional opportunities for prevention of child fatalities, and also have implications for child death review statewide (MCCFRT, 2014).

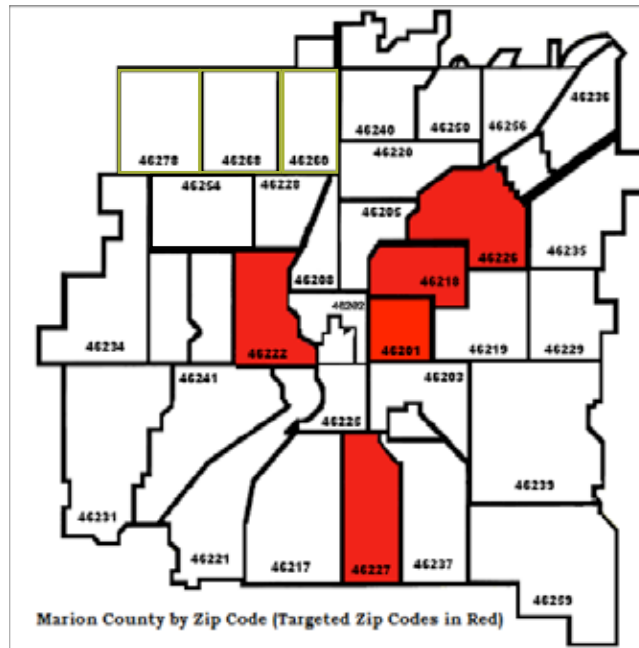


Figure 10. Marion County, IN, by ZIP code. The five targeted ZIP codes for 2013-2014, based on the highest number of child deaths reviewed during 2012-2013, are in red.

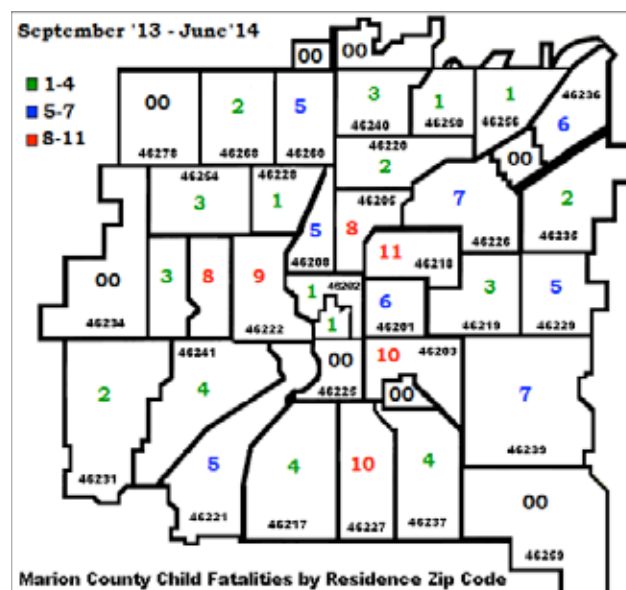


Figure 11. Marion County, IN, child fatalities available for review during 2013-2014 by ZIP code of residence.

Research has documented that, in homes where there is domestic violence and where there are children, approximately half will also have child maltreatment.



FINDINGS: PEDIATRIC MORTALITY DATA

The members of the Indiana Statewide Child Fatality Review Committee review pediatric mortality data, as provided by the ISDH and DCS, to determine how Indiana children are dying. Understanding the trends, especially at a community level, is necessary to suggest proper prevention activities. While the statewide committee did not review all deaths discussed in this section, the knowledge gained from discussing the data helped formulate recommendations. Deaths occurring in 2013 represent the most recently available data for reporting.

Leading causes of death

Unintentional injuries are the leading cause of death for Indiana's children. For Indiana children less than 1 year of age, congenital anomalies and perinatal conditions, such as prematurity and low birth weight, are the primary cause of death. For this reason, the local Child Fatality Review teams in Indiana may need to expand their review of risk factors and prevention efforts to include the health risks associated with infant mortality, such as improving access to prenatal care, smoking cessation and reducing obesity rates. Some local teams have decided to address these risk factors in their community by reviewing all infant deaths in order to improve access and quality of health care services for mothers and children. Some regions have also begun addressing these risk factors through Fetal Infant Mortality Review (FIMR) teams. FIMR is utilized as an action-oriented community process that continually assesses, monitors and works to improve service systems and community resources for women, infants and families. Because FIMR follows the Maternal Mortality Review (MMR) model, it implements a case review process focused on infant deaths in a community context. Counties conducting FIMR meetings in 2014 included Marion County and the Vanderburgh County regional team comprised of Vanderburgh, Gibson, Warrick and Posey counties.

Figure 12 outlines the five leading causes of death for all children in Indiana. The highlighted cells are injury-related causes of death, and the cells without color are causes of death related to risk factors associated with health.

Many child fatalities could be prevented with a stricter emphasis on a continuum of supervision and care. This should not only include DCS and the court system, but also the education system and parents.

Age Groups					
Rank	<1	1-4	5-9	10-14	15-19
1	Congenital anomalies 132	Unintentional injury 39	Unintentional injury 18	Unintentional injury 21	Unintentional injury 104
2	Short gestation 121	Malignant neoplasms 10	Malignant neoplasms 14	Malignant neoplasms 12	Homicide 53
3	SIDS 48	Congenital anomalies ---	Congenital anomalies ---	Suicide 10	Suicide 43
4	Unintentional injury 39	Homicide ---	Homicide ---	Congenital anomalies ---	Malignant neoplasms 14
5	Maternal pregnancy complications 24	Heart disease ---	Chronic lower respiratory disease ---	Chronic lower respiratory disease ---	Heart disease ---

Figure 12: Five Leading Causes of Death, Indiana 2013, All Races, Both Sexes



1 in 2

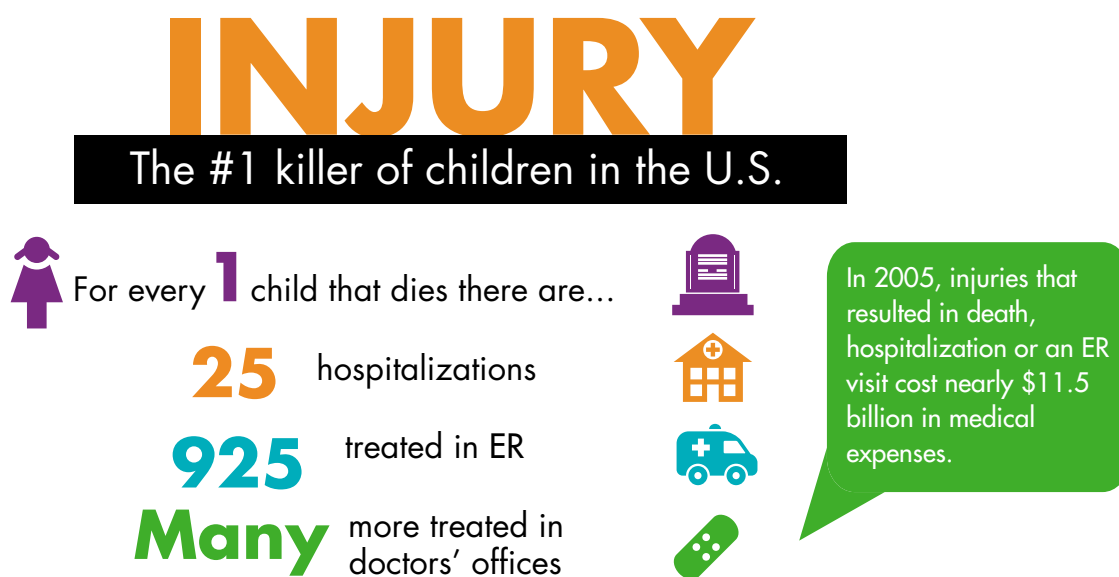
Almost half of all black (45%) and Hispanic (46%) children who died in crashes were not buckled up (2009 - 2010).

Source: Center for Disease Control and Prevention

Injury deaths

In Indiana, unintentional injury is the leading cause of death for children ages 1-17. In 2013, 226 Indiana children ages 0-17 died from injury, of which 149 deaths were unintentional and 65 were intentional in nature. Most of these deaths are preventable. For every childhood injury death, many more children are hospitalized, and hundreds are seen in emergency departments (Figure 13). Through the Child Fatality Review process, local Child Fatality Review teams can help identify the risk factors and characteristics involved in injury deaths so that effective efforts can be implemented to prevent future injury, disability and death.

Figure 13. Affect of injury on US Children



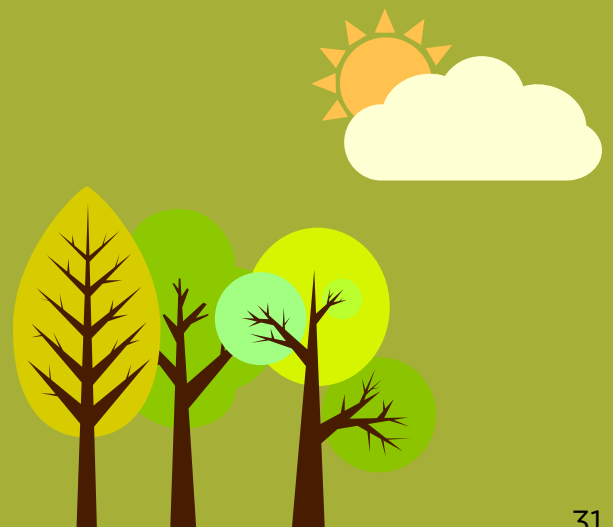
SOURCES: Web-based Inquiry Statistics Query and Reporting System (WISQARS), CDC, 2009.
National Health Interview Survey, 2009 data release, CDC, National Center for Health Statistics.

Data on injury-related deaths for children from birth to 17 years were identified from death certificates maintained by the ISDH Vital Records Division and analyzed by ISDH Trauma and Injury Prevention staff. The statewide committee and the state coordinator assisted both divisions in the development of documents to share this information with the public, injury-prevention specialists and stakeholders. The resulting Special Emphasis Reports (Appendix A-C) utilize conventional classification of injury deaths:

- Unintentional injury – An injury that was not deliberate and occurred without intent to harm or cause death; an injury not intended to happen. This type of injury is described as accidental.
 - o Transportation accident – Fatal injury in which the victim was a passenger in or injured by a motorized vehicle or was a bicyclist on a roadway
 - o Non-transportation accident – Fatal injury caused by external factors such as falls, fires or drownings

- Intentional injury – Injury resulting from intentional use of force or purposeful action against oneself or others.
 - o Homicide – Fatality resulting from injuries sustained through an act of criminal negligence or violence committed by another person to cause fear, harm or death
 - o Suicide – Fatality from an intentional, self-inflicted act with the intent to cause harm or death to self
- Undetermined – The classification of a death when all available information is insufficient to point to any one manner of death. In some cases, both cause and manner of death may remain undetermined.

In Indiana, unintentional injury is the leading cause of death for children ages 0-17.



COMMITTEE-REVIEWED FATALITY DATA

Although the number and causes of child deaths can be determined from death certificates and vital records data, we must look closer at the “who, what, where, when, why, and how” details involved in these deaths if we hope to understand how to prevent them in the future. Case-identifiable vital records data are critical to the ability of the Indiana State Child Fatality Review Program staff to track which deaths should be reviewed by local teams and to ensure comprehensive, quality data collection at the local level. In 2014, the Indiana State Child Fatality Review Program staff initiated efforts to execute a data sharing agreement with the ISDH Vital Records Division to obtain these records.

The statewide committee conducted individual child fatality case reviews, examined aggregate data provided by Trauma and Injury Prevention and Maternal & Child Health epidemiologists and studied summary reports from cases reviewed and provided by the local Child Fatality Review teams. The statewide committee reviewed 92 of the cases of the 226 children who died of injury in 2014. Special thanks to the local teams who provided summary forms informing the statewide committee of the cases reviewed.

Cases were submitted from the following counties:

Bartholomew	Clinton	Elkhart	Fayette
Greene	Hamilton	Henry	Howard
Jackson	Jay	Johnson	Lake
Marion	Monroe	St. Joseph	Tippecanoe
Vigo	Warrick	Washington	Wayne

These cases consisted of the following causes and manners of death:

- 11 homicides
- 20 SUIDS
- 7 suicides
- 24 accidents
 - o 14 children sustained injuries involving motorized vehicles
 - o 7 children sustained injuries in house fires
 - o 1 child drowned
 - o 2 children died from other causes of injury

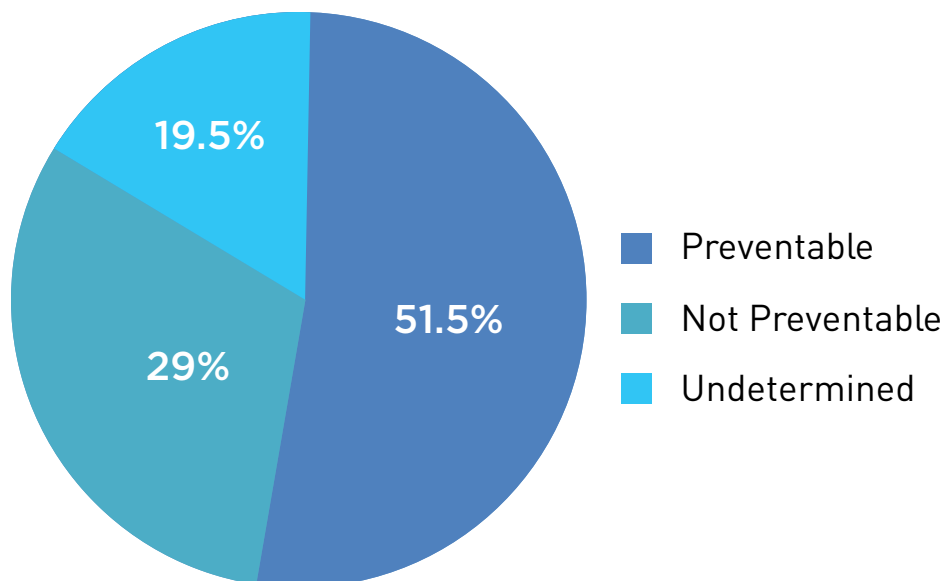
- 29 natural deaths
- 1 undetermined

With regard to preventability determinations:

- 57 percent of the total suicide cases reviewed were preventable (n=7). The preventability of the remaining suicide cases could not be determined by the case data available.
- All but one of the homicide cases reviewed were preventable (n=11).
- 85 percent of SUID cases reviewed were preventable (n=20).
- 55 percent of unintentional injury deaths were preventable (n=22).
- Only two of the natural deaths reviewed were preventable (n=21). Six cases were deemed undetermined based on available case data, and the remainder were not preventable.

The statewide committee noted that of the 92 cases reviewed, 47 cases were determined to be preventable by the local Child Fatality Review teams, 27 cases were determined not to be preventable, and the preventability of 18 cases could not be determined at the local level. Since most injury deaths are preventable, this alerted the statewide committee to data collection issues requiring discussion throughout the Indiana State Child Fatality Review Program. In order to improve the quality of the data collected by local teams, the statewide committee and Indiana State Child Fatality Review Program staff will provide refresher training to local teams so that data elements are answered and input in a consistent manner. Further, there were instances when both the local teams and statewide committee did not agree with the cause and manner of death on the death certificates. This was especially prevalent in SUID cases, leading the statewide committee to conclude better training and education is necessary with regard to coding and classification of infant death.

Figure 14. Preventability of reviewed cases, as determined by the statewide committee



Issues and review requests from local teams

Per the mission of the Indiana State Child Fatality Review Program, the local Child Fatality Review teams are encouraged to escalate concerns about individual cases, investigations or policies to the statewide committee to address. A number of teams reached out for assistance.

Local teams requested assistance in:

1) Standardizing death certificate data in SUID cases and increasing caregiver knowledge about safe sleep practices through hospital and prenatal care provider education

Many positional asphyxia cases were classified as natural deaths on death certificates. The classification of SUID/SIDS cases, especially as it relates to infant deaths due to unsafe sleep environments, needs to be standardized. This will involve the training of coroners in all 92 counties to adopt a consistent classification.

Further, while the Safe Sleep Program is helping caregivers provide their infants with a safe sleep environment, the education new parents are receiving varies by agency. Prenatal clinics are often providing different messages than hospital lactation consultants. Information can also vary from that of pediatricians and other medical providers. Offering a standardized education protocol has been the goal of the Safe Sleep Program, and propagating that message in hospitals and clinics statewide would be beneficial.

A consistent safe sleep message should include the recommendations of the American Academy of Pediatrics (AAP), which states that babies should sleep alone, in a crib and on their back. Further, empowering new parents to instruct all caregivers on safe sleep practices should be emphasized.

2) Reviewing death and injury data to determine the burden of pedestrian injuries and deaths in children in rural counties, particularly as it relates to mailboxes and lack of sidewalks

There were multiple cases in which a child was struck by a motor vehicle, especially in rural counties where sidewalks were not available and/or the child was crossing the street to access the mailbox. A request was made to evaluate the burden of this circumstance on child injury and death.

While injuries associated with the death are meant to be reported on the death certificate, the injury fields only include: date, time, place, occurrence at work, state, city/town, address, ZIP code, how the injury occurred and whether it was associated with transportation. The details of the injury would be provided in the place of injury (Field 36) and description of occurrence (Field 39); however, the specific details are not commonly listed.

For example, regarding the request above, the place of injury might be stated as “road” (or some variation) and the description might only say “hit by vehicle,” with the transportation field indicating the decedent was a pedestrian. These pieces of information, along with the other injury fields, would give a general idea of what happened (i.e. the child was on the road and got hit by an oncoming vehicle) but provide no specifics. Child Fatality Review aims to flesh out these circumstances and any implications associated with the reason the child was in the road. By increasing the amount and quality of data collected, the Indiana State Child Fatality Review Program should be able to identify how much of a danger a lack of sidewalks on rural country roads poses to children.

3) Evaluating current practice regarding the probation of, and mental health support for, juveniles with histories of violence, criminal or drug-related behaviors

Seven of the cases the statewide committee was asked to review in 2014 involved the homicide of a child between the ages of 15 and 18 years. Seven other cases involved the suicide of a child age 13 to 17. With very few exceptions, the case data on these children showed a history of involvement with the Department of Child Services (DCS), a mental health facility and/or the juvenile court system.

Many child fatalities could be prevented with a stricter emphasis on a continuum of supervision and care. This should not only include DCS and the court system, but also the education system and parents.

To more effectively address these factors, the statewide committee invited the Division of Mental Health and Addiction (DMHA) legal representative and client advocacy director at the Mental Health America of Indiana (MHAI) to discuss current practices. The DMHA guest also fielded the statewide committee’s concerns about pediatric patients being discharged from inpatient treatment before they are medically ready, and without an appropriate discharge plan. The statewide committee offered recommendations about improving best practice, which included:

- a. Engaging schools in the continuum of care and discharge planning for a child under the care of a mental health clinician
- b. Creating a well understood, comprehensive discharge plan for the parents of a child upon discharge from a mental health institution

4) Establish a protocol for Child Fatality Review when the injury and death occur in different counties

Child Fatality Review teams are often faced with complicated case reviews. Many factors contribute to child injury and death and often involve multiple agencies in multiple jurisdictions are often involved. Prompt notification of the child death, sharing of case information, and collaboration in the investigation are challenging in the best-case scenarios. Because several child fatality reviews in 2014 were under the auspices of more than one jurisdiction– sometimes even across state lines – these collaborations are still in their infancy and local team members could not conduct comprehensive reviews.

RECOMMENDATIONS

Through the work of the Indiana State Child Fatality Review Program, the statewide committee was able to generate recommendations for stakeholders. Many involve removing risk factors predominant in child fatality cases.

Sudden unexplained and sleep-related infant deaths

According to the Centers for Disease Control and Prevention (CDC), Sudden Unexplained Infant Deaths (SUID) are those fatalities occurring abruptly and unexpectedly in an infant younger than one year of age. Cause of death is not immediately detectable prior to investigation. A determination of a SUID may occur after conducting a complete autopsy, an examination of the death scene and a review of the clinical history

Before the SUID designation was established, many of these deaths were called Sudden Infant Death Syndrome (SIDS). SIDS is a type of SUID assigned when no other cause of death is determinable even after a thorough examination, including review of the medical history, an autopsy and a scene investigation. The change to the use of SUID occurred after investigators uncovered a broader range of explanations for each death in addition to SIDS. For the most part, U.S. coroners and pathologists are moving away from the use of SIDS as a cause of death on the death certificate and classifying the deaths as undetermined. “Undetermined” typically means the pathologist was unable to establish a cause and manner of death because there was not enough information collected during the infant death investigation. Other types of SUID include those due to suffocation, asphyxia, poisoning, undetected medical disorders, hypothermia and hyperthermia. For these deaths, manner and cause of death may not be immediately obvious prior to the investigation or the Child Fatality Review team’s discussion.

An unsafe sleep environment was the preventable factor associated with the majority of SUID deaths; it was connected to 18 of the 20 SUID fatalities reviewed by the statewide committee in 2014. Under the umbrella of unsafe sleep, there are a number of additional risk factors contributing to each death. These include bed-sharing and rollovers (when another person accidentally rolls over on top of the child while in bed).

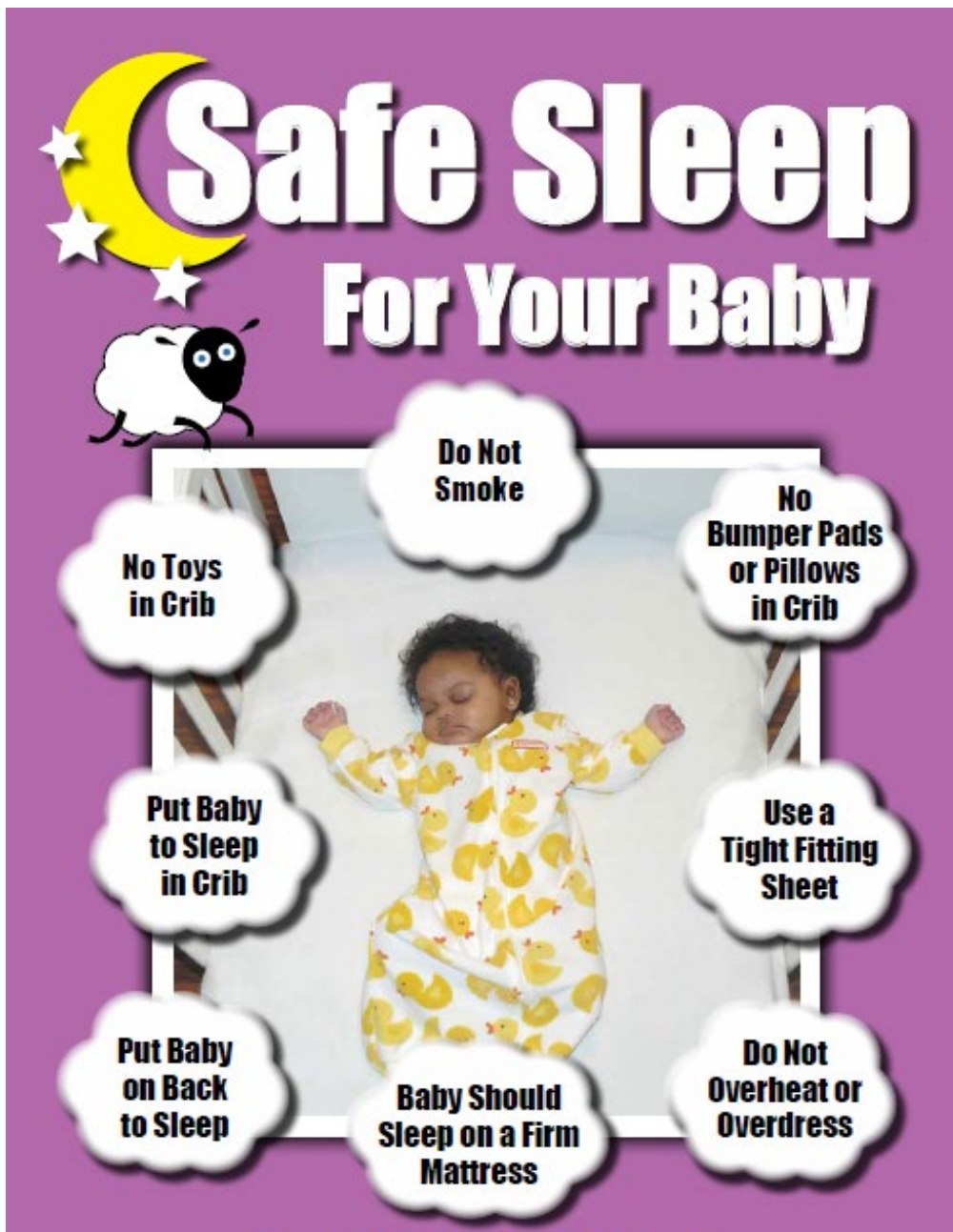
To prevent a SUID, the American Academy of Pediatrics (AAP) recommends ensuring safe sleep environments for infants including:

1) Safe sleep practices

- Always place babies to sleep on their backs during naps and at nighttime. Because babies sleeping on their sides are more likely to accidentally roll onto their stomach, the side position is just as dangerous as the stomach position.
- Avoid letting the baby get too hot. The baby could be too hot if you notice sweating, damp hair, flushed cheeks, heat rash and rapid breathing. Dress the baby lightly for sleep. Set the room temperature in a range that is comfortable for a lightly clothed adult.
- Consider using a pacifier at naptime and bed time. The pacifier should not have cords or clips that might be a strangulation risk.

2) Safe sleep environment

- Place babies on a firm mattress, covered by a fitted sheet that meets current safety standards. For more about crib safety standards, visit the Consumer Product Safety Commission's web site at www.cpsc.gov.
- Place the crib in an area that is always smoke-free.
- Don't place babies to sleep on adult beds, chairs, sofas, waterbeds, pillows or cushions.
- Toys and other soft bedding, including fluffy blankets, comforters, pillows, stuffed animals, bumper pads, and wedges, should not be placed in the crib with babies. Loose bedding, such as quilts and blankets, should not be used, as these items can impair the infant's ability to breathe if they are close to his face. Sleep clothing, such as sleepers, sleep sacks, and wearable blankets, is better alternatives to blankets.



Source: Tennessee Department of Health

For families and community

- Families with infants should follow the AAP recommendations on safe sleep as listed above.
- ISDH and other agencies tasked with health education should follow the AAP recommendations and teach communities safe sleep practices and provide services and education to new parents. This may include PSAs for safe sleep education, safe breastfeeding/sleep practices and co-sleep education in conjunction with car seat check-up events and other child safety fairs.
- Law enforcement and first responders should be trained to identify potentially unsafe sleep environments and receive training on infant death scene investigations and the proper completion of the infant death investigation checklists.
- Early childhood home visitors should educate families about and reinforce safe sleep practices.

For hospitals

- All Indiana hospitals caring for infants should model safe-sleep practices using the AAP recommendations, including placing infants on their back to sleep and having cribs free of soft objects and loose bedding.
- All Indiana hospitals caring for infants should adopt the Cribs for Kids standard of practice and strive for a gold level of certification.

For childcare providers

- Adhere to the AAP recommendations on safe sleep.

For policymakers

- Health departments should adopt a method for ensuring a standard definition for all SUID deaths.
- Pathologists should adopt a standard pre-autopsy conference in all infant deaths, which includes a completed SUIDI form.

Deaths due to motor vehicle crashes

While fatalities due to motor vehicle crashes have declined in recent years, they were still the leading cause of unintentional injury in children in 2014. There are more steps that can be taken to protect Indiana children.

For parents and caregivers

- Place children in the appropriate child-safety restraints when operating a motor vehicle.
- Children should always wear properly fitted helmets when participating in any motorized or un-motorized wheeled activities, including bicycling, skateboarding or skating, or riding scooters, ATVs, golf carts or other devices.
- Children below age 16 should not operate or ride on an off-road vehicle without proper training and supervision.

- Ensure proper supervision of children at all times.
- Model good behavior by always wearing a seatbelt and never operating a vehicle when under the influence of alcohol and/or drugs.
- Avoid distracted driving, including texting and phone use while driving.

For the community

- Law enforcement officers should continue primary enforcement of child restraint violations.
- Law enforcement officers should continue rigorous DUI enforcement and educate the community regarding the consequences of driving under the influence of alcohol and/or drugs.
- Communities and parents should collaborate with the ISDH and Safe Kids to promote awareness about child passenger and motorized vehicle safety and encourage participation in events such as car-seat check-ups, safety workshops and sports clinics. They should connect families to organizations that can provide information on child safety seats for those in need.

Strategies to increase car seat and booster seat use

- Child restraint laws require children riding in a car to use approved restraint devices (car seats, booster seats or seat belts) appropriate for their age, height and weight. Strengthening current laws with booster seat provisions helps reduce injuries and deaths by requiring children who have outgrown car seats to use booster seats through age 8 years or until seat belts fit properly.
- Enhanced enforcement programs for child passenger safety are similar to those used for seat belt use. Effective programs are short-term, highly visible in the community, and advertised widely in the media.
- Distribution and education programs help parents and caregivers get access to car seats through giveaways, loans or low-cost rentals. They also teach the importance of car seats and how to properly use and install them.
- Incentive and education programs reward parents or children with coupons or other prizes for correctly using car seats. Programs offer print materials, videos, or other instructional aids for parents and caregivers.



Source:

http://www.cdc.gov/motorvehiclesafety/child_passenger_safety/strategies.html

Suicide deaths

Child suicides are on the rise in Indiana, and tragically, the victims are getting younger. Understanding the circumstances and events leading up to the suicide can aid in developing appropriate interventions for future prevention efforts.

For parents and caregivers

- Watch children with known behavioral problems (substance abuse and delinquency) or possible mental disorders (depression or impulse-control problems) for signs and symptoms of suicidal ideation and immediately seek early treatment and care.
- Talk with children about firearm safety and limit youth access to any lethal means.
- Monitor children's social media for any talk about suicide and take immediate action.

For the community

- Indiana schools should collaborate with the Indiana Suicide Prevention Coalition to support and implement school and community prevention programs teaching students how to address suicide and related behaviors. Further, a standardized approach to bereavement counseling within schools should be implemented.
- Community leaders should collaborate to hold appropriate community events to provide education on gun safety and distribute gunlocks to families.
- Add education programs about suicide prevention to after-school clubs, YMCA, etc.

For mental health clinicians

- Mental health care providers should continue to work with the Department of Education (DOE) to ensure children with mental health issues have appropriate discharge plans in place.
- Evaluate current practices surrounding the care and discharge of youth with a history of mental illness.
- Work to improve communication with parents, schools and appropriate social work agencies so a continuum of care can be established.



National Suicide Prevention Lifeline
1-800-273-TALK

www.suicidepreventionlifeline.org

The lifeline is FREE, confidential and always available.

HELP a loved one, a friend or yourself.

Among students in grades 9-12 in the U.S. during 2013:⁴

- **17.0%** of students surveyed seriously considered attempting suicide in the previous 12 months (**22.4%** of females and **11.6%** of males).
- **13.6%** of students made a plan about how they would attempt suicide in the previous 12 months (**16.9%** of females and **10.3%** of males).
- **8.0%** of students attempted suicide one or more times in the previous 12 months (**10.6%** of females and **5.4%** of males).
- **2.7%** of students made a suicide attempt that resulted in an injury, poisoning or overdose that required medical attention (**3.6%** of females and **1.8%** of males).

Source: CDC, Suicide, Facts at a Glance 2015

4. Kann L, Kinchen S, Shanklin SL, et al. Youth Risk Behavior Surveillance — United States, 2013. MMWR 2014; 63(ss04): 1-168. Available from <http://www.cdc.gov/mmwr/preview/mmwrhtml/ss6304a1.htm>.



CALL TO ACTION:

Increasing suicide prevention and awareness in Indiana

Individuals and communities

1. Support community efforts to provide adequate health care, positive educational outcomes and efficient communication systems.
2. Where appropriate, honor and celebrate those who are successfully moving forward in recovery.
3. Utilize Web resources and social networks (Facebook, Twitter) to promote suicide awareness.
4. Create environments in schools, faith communities and other structured settings where people feel welcome and accepted.

Schools

1. Make awareness training available in schools, for teachers and staff.
2. Provide support groups and peer mentors.
3. Make mental health education with age-appropriate suicide prevention a component of health education starting in elementary school.
4. Make suicide prevention information available in a wide variety of settings.

Community partnerships and task forces

1. Collaborate with mental health and substance abuse agencies to implement public information campaigns that present mental health and substance abuse treatment as part of basic health care.
2. Develop a speaker's bureau on mental health, substance abuse and suicide prevention and include consumers of treatment services, as well as treatment providers and researchers.
3. Develop public service announcements that feature those who have recovered from mental illness, substance abuse or suicidality after treatment.
4. Provide information to the media that educates about safe, responsible reporting and portrayal of suicide, mental illness and substance abuse.
5. Provide support groups and peer mentors.
6. Work with injury-prevention practitioners to develop appropriate materials to educate community members on the prevention of substance abuse and access to means of harm.

Employers

1. Make suicide-prevention information available in a wide variety of settings.
2. Support employee participation in suicide awareness, training and community action events.
3. Sponsor suicide-prevention training activities in your workplace.

Healthcare providers

1. Provide information to the media about safe, responsible reporting and portrayal of suicide, mental illness and substance abuse.
2. Work with injury-prevention practitioners to develop appropriate materials to educate community members on the prevention of substance abuse and access to means of harm.
3. Support the integration of mental health and addiction treatment with primary care.
4. Make suicide-prevention information available in a wide variety of settings.

Infant deaths, prematurity

A death due to prematurity is one in an infant born prior to 37 weeks gestation with no other underlying cause of death. In the 2013 data reviewed by the statewide committee, approximately 285 infant deaths were due to factors related to prematurity. While it is not always possible to determine if prematurity is preventable, many of the risk factors associated are preventable, such as a lack of prenatal care or smoking while pregnant. Lowering the infant mortality rate in Indiana will be dependent upon identifying state resources aimed at reducing these risk factors, as well as addressing racial disparities.

For parents and caregivers

- Learn and understand the importance of prenatal health and improve reproductive, nutritional, physical and mental health prior to pregnancy.
- See a doctor as soon as you know you are pregnant.
- If you are pregnant, do not smoke.

For medical providers

- Work to ensure every interaction with women of childbearing age is an opportunity to discuss preconception or pregnancy health.
- Follow established guidelines for monitoring of and outreach to women known for higher-risk pregnancy, including substance-abusing women.

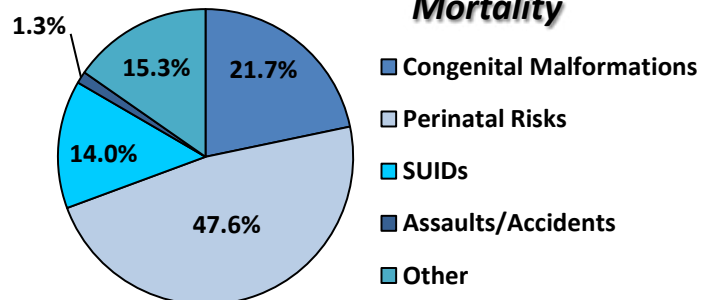
For the community

- Understand and promote awareness about the importance of a woman's preconception health and the long-term impact it has on her and any potential children.
- Connect with local schools and advocacy centers to make young women aware of the prenatal clinics and assistance available in their region.

PRACTICES TO REDUCE INFANT MORTALITY

- Improve overall health for women of child-bearing age
- Promote early & adequate prenatal care
- Decrease early elective deliveries before 39 weeks
- Decrease prenatal smoking & substance abuse
- Increase breastfeeding duration & exclusivity
- Support birth spacing & interconception wellness

Causes of Infant Mortality





Improving Indiana's Child Fatality Review process

The Indiana Statewide Child Fatality Review Committee learned many lessons and made vast improvements in the status of the Child Fatality Review process in Indiana during 2014. By seeking education, establishing and connecting with local teams and placing an emphasis on information sharing and data collection, Indiana's capacity for examining child death trends has greatly improved. The Centers for Disease Control and Prevention (CDC) and the Healthy People 2020 initiative aims to have 90% of all child deaths due to external causes reviewed by a Child Fatality Review team. While Indiana is making progress toward that goal, there is still much work to be done.

For local Child Fatality Review teams

- Improve timeliness and quality of data collection and entry into the National Child Death Review database.
- Cultivate positive relationships with all agencies in their jurisdictions to better facilitate information-sharing.
- Ensure each data-driven prevention recommendation is assigned to a champion to be certain of its successful execution.

For the Indiana Statewide Child Fatality Review Committee

- Provide continuous training, education and mentoring opportunities for local Child Fatality Review teams, as needed
- Present Sudden Unexplained Infant Death Investigation (SUIDI) training to first responders across the state in an effort to standardize the diagnosis and reporting of infant death.
- Create a standardized communication network between the statewide committee and the local teams to establish a feedback loop.
- Enter into a data-sharing agreement with the ISDH Division of Vital Records, in order to receive more timely notification of child deaths through death certificate data.
- Investigate options for more timely delivery of death certificates to local teams, as well as strategies for improved data collection and data entry of those child deaths reviewed by local teams.

The Centers for Disease Control and Prevention (CDC) and the Healthy People 2020 initiative aims to have 90% of all child deaths due to external causes reviewed by a Child Fatality Review team.

Resources and Appendices

For more information on ways to help your baby survive and thrive, visit:

First Candle
www.firstcandle.org
(443) 640-1049

For resources to assist with providing a safe sleep environment for your child, please contact:

Kelly Cunningham
Indiana Safe Sleep Program Coordinator
Indiana State Department of Health
(317) 652-4643
kcunningham2@isdh.in.gov

American Academy of Pediatrics Policy Statement on Safe Sleep
<http://pediatrics.aappublications.org/content/early/2011/10/12/peds.2011-2284.full.pdf+html>

For information on infant crying, soothing and coping, visit:

The Period of Purple Crying
(801) 447-9360
PURPLEcrying.info

For more information on child injury prevention, please visit:

Child Fatality Review Program
Indiana State Department of Health
<http://in.gov/isdh/26198.htm>

Trauma & Injury Prevention Program
Indiana State Department of Health
Indianatrauma@isdh.in.gov
<http://in.gov/isdh/25394.htm>

Safe Kids Worldwide
<http://www.safekids.org/>

SafeKids Worldwide Prevention Programs
<http://www.safekids.org/programs>

The Children's Safety Network
<http://www.childrensafetynetwork.org/injurytopic>

Automotive Safety Program – Indiana
(800)-KID-N-CAR
<http://www.preventinjury.org/>

If you suspect child abuse or neglect, please contact:

The Indiana Child Abuse and Neglect Hotline
(800)800-5556

Prevent Child Abuse
www.pcain.org

To report child abuse or neglect, or seek assistance: 1-(800) CHILDREN (244.5373)

Poison Hotline

(800)222-1222

Teen Suicide Hotline

(800)SUICIDE

(800)784-2433

Suicide Prevention Resource Center

<http://www.sprc.org/states/indiana>

Baby & Me Tobacco Free

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

Indiana Perinatal Quality Improvement Collaborative Report to the Governing Council

https://secure.in.gov/isdh/files/Addressing_Infant_Mortality_in_Indiana.pdf

Tobacco Prevention & Cessation

Indiana State Department of Health

www.isdh.in.gov/tpc

Centers for Disease Control Infant Mortality

<http://www.cdc.gov/reproductivehealth/MaternalInfantHealth/InfantMortality.htm>

Labor of Love

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

Quit Line

<http://quitnowindiana.com/>

Injury Prevention Resource Guide

<http://www.in.gov/isdh/25396.htm>

Maternal & Child Health Division

Indiana State Department of Health

<http://www.in.gov/isdh/19571.htm>

Trauma & Injury Prevention Division Indiana State Department of Health

<http://www.in.gov/isdh/19537.htm>

Indiana Women, Infants & Children Program (WIC)

Indiana State Department of Health

<http://www.in.gov/isdh/19691.htm>



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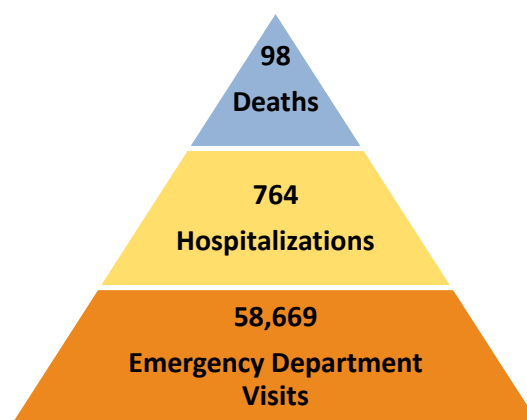
Special Emphasis Report: Infant and Early Childhood Injury, 2012

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 2012, 98 Indiana children ages 0-5 years died due to injury. There were 42 deaths among infants less than one year of age and 56 among children ages 1-5 years.

In addition to these injury deaths, there were 764 injury-related hospitalizations, of which 201 were among infants and 563 were among children ages 1-5 years. There were also 58,669 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, 2012

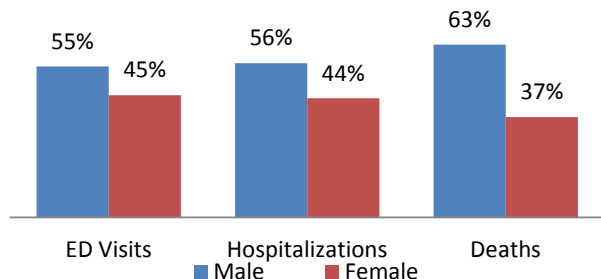


For every child that dies, 8 children are hospitalized and nearly 600 are treated in emergency departments.

2012 Indiana Injury Facts

- 98 children ages 0-5 died due to injury
- 43% of the children who died were infants
- There were 764 child injury-related hospitalizations
 - 74% were children ages 1-5
- 58,669 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, 2012



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 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.

*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

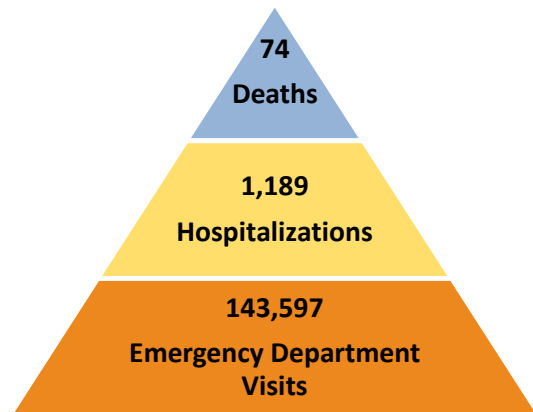
Special Emphasis Report: Injuries Among School-Age Children 6-11, 2011- 2013

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. Injuries are the number one killer of children over age 1 and contribute to significant morbidity. From 2011- 2013, 74 Indiana children ages 6-11 years died due to injury, at a rate of 4.62 per 100,000.

In addition to these injury deaths, there were 1,189 injury-related hospitalizations and 143,597 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 6-11 Years, Indiana, 2011-2013



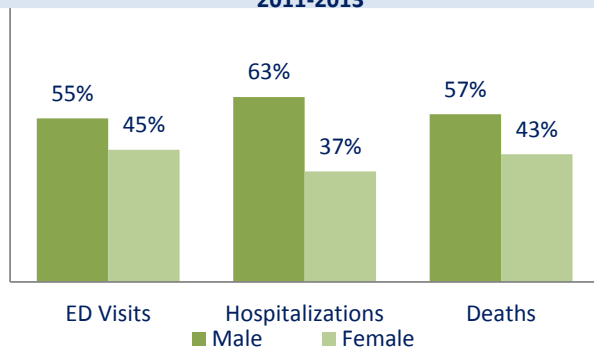
For every child that died, 16 children were hospitalized and nearly 1,940 were treated in emergency departments.

Every day there were more than 131 injury-related ED visits among children 6-11 year old.

2011-2013 Indiana Injury Facts

- 74 children ages 6-11 died due to injury
 - Leading causes were transport-related injuries, homicide and drowning
- 1,189 child injury-related hospitalizations
- 143,597 child-injury ED visits
 - Falls and transport-related circumstances were the leading causes of hospitalizations and ED visits
- 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 6-11 Years, by Sex, Indiana, 2011-2013



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

Child Injury by Gender

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 emergency departments, hospitalized, and died due to injury compared to females of the same age.





INDIANA

Special Emphasis Report: Middle & High School Teen Injury, 2011-2013

Injury is a Leading Cause of Death in Teens

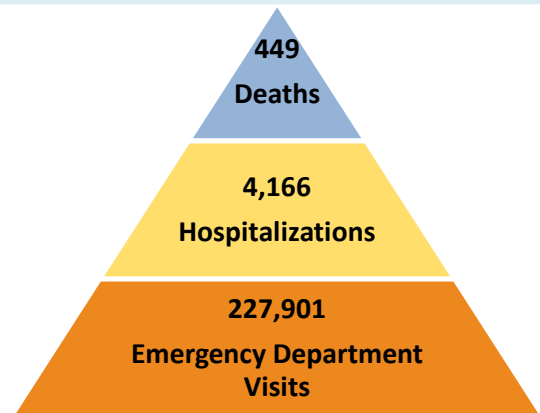
Injuries are a major public health problem across the United States and in Indiana. Injuries are not random chance events, but follow a predictable sequence of events, and can be prevented using specific strategies. From 2011-2013, 449 Indiana children ages 12-18 years died due to injury. There were 62 deaths among 12-14 year olds and 387 deaths among 15-18 years. One hundred eighteen of the injury deaths were suicides, of which nearly 43% of those deaths were due to discharge of firearms. Sixty-eight of the injury deaths were due to assault.

In addition to these injury deaths, there were 4,166 injury-related hospitalizations, of which 1,080 were among 12-14 year olds and 3,086 were among ages 15-18 years. There were also 227,901 emergency department (ED) visits. These numbers do not include teens who received treatment in physician offices or at home.

2011-2013 Indiana Injury Facts

- 449 teens ages 12-18 died due to injury
- There were 4,166 teen injury-related hospitalizations
- 227,901 teen emergency department visits were made due to injury
- More male teens were injured, treated in emergency departments, hospitalized and died than female children
 - 3 in 4 injury deaths among boys
 - 3 in 4 suicide deaths among boys

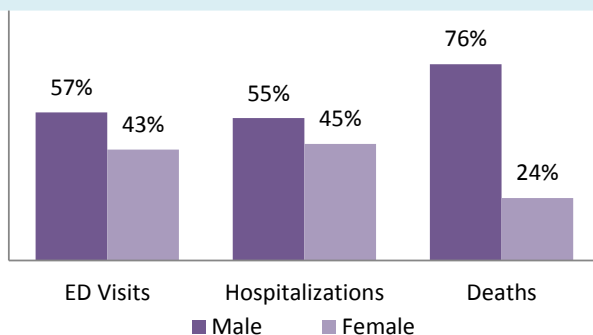
Figure 1: Annual Injuries* among Children Ages 12-18 Years, Indiana, 2011-2013



For every teen that died, 9 teens were hospitalized and nearly 508 were treated in emergency departments.

Every day there were more than 208 injury-related ED visits and hospitalizations among teens.

Figure 2: Percent of Injury Deaths, Hospitalizations and Emergency Department Visits among Teens Ages 12-18 Years, by Sex, Indiana, 2011-2013



Child Injury by Gender

Males accounted for a greater number of injuries and had higher rates of injury-related medical treatment in Indiana among teens ages 12-18 years compared to females. More male teens age 12-18 years were treated in emergency departments, hospitalized, and died due to injury compared to females of the same age.

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

This document was supported by the Grant or Cooperative Agreement Number, 2 B01 OT 009019, funded by the Centers for Disease Control and Prevention. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention or the Department of Health and Human Services.

My mom said that breastfeeding hurts!

I've heard that breastfeeding is really hard to do.



I cannot work or go to school and nurse.

I'm worried I won't make enough milk.



My partner doesn't want me to nurse.



I am not comfortable nursing the baby at my breast.

Formula is healthier for my baby.

I'm afraid I'll be tired.



Breastfeeding Concerns:

Are you worried?

A publication of the Indiana State Department of Health, Office of Women's Health, 2015.



Labor of Love
Helping Indiana Reduce Infant Death

It was tough at first, but with help from lactation specialists I am doing great!

I'm so glad I don't have to get up and make bottles when I am really tired!

I learned how to use a breast pump. It worked great and I feel more comfortable.

I know that Indiana has laws that let me pump at work and school.

I realized that breastfeeding is all about supply and demand. The more I nurse, the more milk I make.



My lactation specialist taught my family about breastfeeding. Now they support me completely!

My pediatrician said that pain during breastfeeding is not normal. She sent me to a lactation specialist for help.

- Help and support for you:**
- Indiana State Department of Health
Office of Women's Health
<http://www.in.gov/isdh/18061.htm>
 - Indiana Perinatal Network
www.indianaperinatal.org
 - Indiana Breastfeeding Coalition
www.indianabreastfeeding.org
 - Indiana Black Breastfeeding Coalition
indianablackbreastfeedingcoalition.com
 - La Leche League of Indiana
llofindiana.org
 - Women, Infants and Children (WIC)
[www.http://www.in.gov/isdh/19691.htm](http://www.in.gov/isdh/19691.htm)

Breastfeeding Reality: Best for baby. Better for you.

Using the correct car seat or booster seat can be a lifesaver: make sure your child is always buckled in an age- and size-appropriate car seat or booster seat.



REAR-FACING CAR SEAT

Birth up to Age 2*
Buckle children in a rear-facing seat until age 2 or when they reach the upper weight or height limit of that seat.



FORWARD-FACING CAR SEAT

Age 2 up to at least age 5*
When children outgrow their rear-facing seat, they should be buckled in a forward-facing car seat until at least age 5 or when they reach the upper weight or height limit of that seat.



BOOSTER SEAT

Age 5 up until seat belts fit properly*
Once children outgrow their forward-facing seat, they should be buckled in a booster seat until seat belts fit properly. The recommended height for proper seat belt fit is 57 inches tall.



SEAT BELT

Once seat belts fit properly without a booster seat
Children no longer need to use a booster seat once seat belts fit them properly. Seat belts fit properly when the lap belt lays across the upper thighs (not the stomach) and the shoulder belt lays across the chest (not the neck).

Keep children ages 12 and under in the back seat. Never place a rear-facing car seat in front of an active air bag.

**Recommended age ranges for each seat type vary to account for differences in child growth and height/weight limits of car seats and booster seats. Use the car seat or booster seat owner's manual to check installation and the seat height/weight limits, and proper seat use.*

Child safety seat recommendations: American Academy of Pediatrics.
Graphic design: adapted from National Highway Traffic Safety Administration.

www.cdc.gov/motorvehiclesafety/cps



INFANT MORTALITY

Indiana 2013

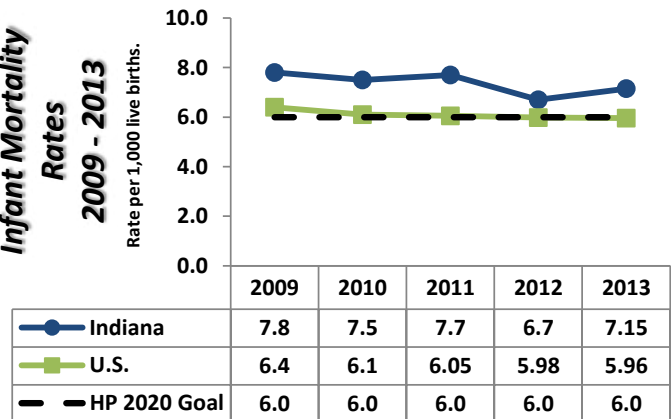
For more information on infant mortality in your area, please see the Indiana State Department of Health Mortality Report, Tables 2 and 8 (<http://www.in.gov/isdh/reports/mortality/2013/toc.htm>)

HOSPITAL REGION	IMR
CENTRAL Brown, Hamilton, Hancock, Hendricks, Johnson, Lawrence, Marion, Monroe, Morgan, Shelby	7.3
CENTRAL SOUTHWESTERN Clay, Greene, Owen, Parke, Putnam, Sullivan, Vermillion, Vigo	5.4*
EASTERN Blackford, Delaware, Grant, Henry, Howard, Jay, Madison, Randolph, Tipton	8.8
MIDWESTERN Cass, Fulton, Jasper, Miami, Newton, Pulaski, Starke, White	5.3*
NORTHEASTERN Adams, Allen, DeKalb, Huntington, Kosciusko, LaGrange, Noble, Steuben, Wabash, Wells, Whitley	7.1
NORTHERN Elkhart, LaPorte, Marshall, St. Joseph	6.6
NORTHWESTERN Lake, Porter	8.0
SOUTHEASTERN Dearborn, Decatur, Fayette, Franklin, Ohio, Ripley, Rush, Union, Wayne	5.9*
SOUTHERN Bartholomew, Clark, Crawford, Floyd, Harrison, Jackson, Jefferson, Jennings, Orange, Scott, Switzerland, Washington	5.9
SOUTHWESTERN Davies, Dubois, Gibson, Knox, Martin, Perry, Pike, Posey, Spencer, Vanderburgh, Warrick	8.9
WESTERN Benton, Boone, Carroll, Clinton, Fountain, Montgomery, Tippecanoe, Warren	6.3
*Numerator less than 20, rate unstable.	

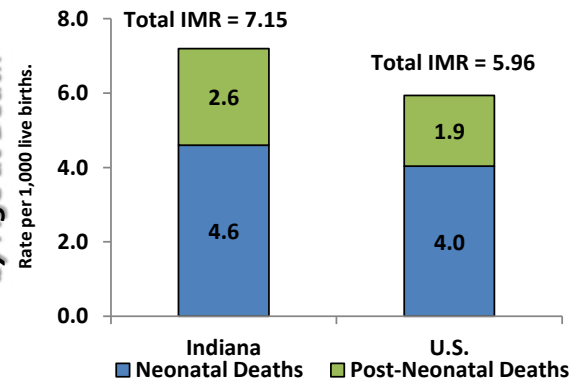
INFANT MORTALITY FACTS

- Infant mortality is defined as the death of a baby before his or her first birthday
- The infant mortality rate (IMR) is the number of babies who die in the first year of life, per 1,000 live births
- In 2013, there were 594 infant deaths across the state
- Black infants are 2.6 times more likely to die than white infants in Indiana
- Neonatal Infant Death = 0 – 27 Days
- Post-Neonatal Infant Death = 28 – 364 Days

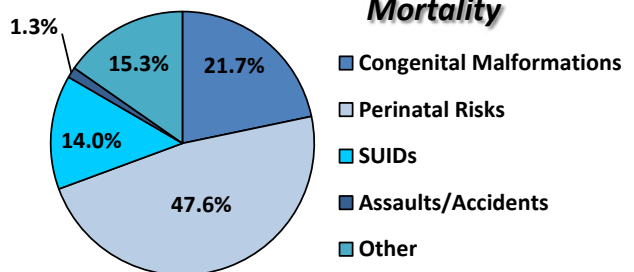
Infant Mortality Rates



Infant Mortality Rates by Age at Death



Causes of Infant Mortality



PRACTICES TO REDUCE INFANT MORTALITY

- Improve overall health for women of child-bearing age
- Promote early & adequate prenatal care
- Decrease early elective deliveries before 39 weeks
- Decrease prenatal smoking & substance abuse
- Increase breastfeeding duration & exclusivity
- Support birth spacing & interconception wellness

BIRTH OUTCOME INDICATORS

INDIANA STATE DEPARTMENT OF HEALTH
DIVISION OF MATERNAL AND CHILD HEALTH

Indiana 2013

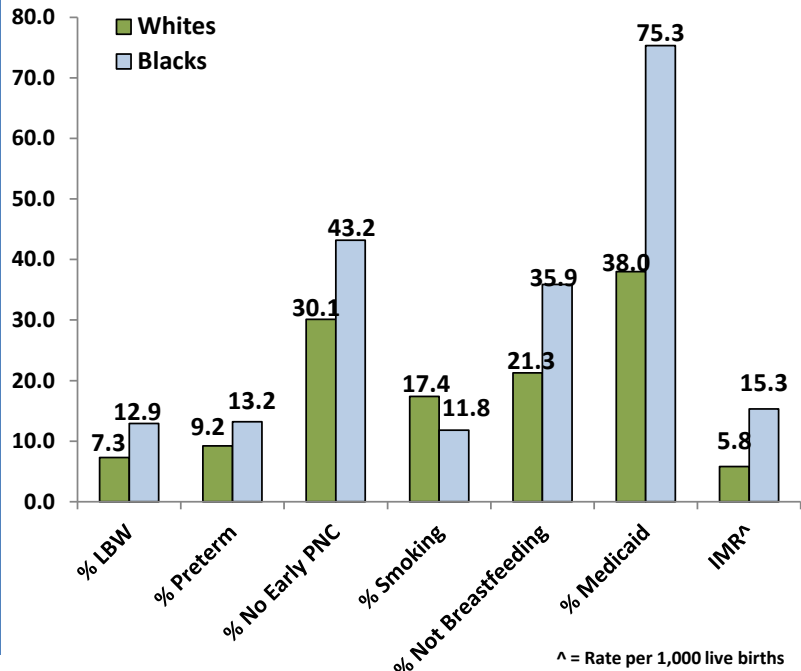
For more information on birth outcomes in your area, please see the Indiana State Department of Health Natality Report (<http://www.in.gov/isdh/reports/natality/2013/toc.htm>)

INDIANA QUICK FACTS

- 83, 115 live births:
 - 80.9% White
 - 12.0% Black
 - 90.9% Non-Hispanic
 - 9.0% Hispanic
- Better LBW rate compared to the nation
- Smoking rates among pregnant women are always one of the nation's worst
- Almost 1/3 of pregnant women do not receive early PNC

DISPARITIES IN INDIANA

- Black women in Indiana are more likely to have a LBW or preterm baby & not get early PNC
- Black women in Indiana are less likely to be breastfed at hospital discharge
- White women in Indiana are more likely to smoke during pregnancy



LBW = Low Birthweight PNC = Prenatal Care IMR = Infant Mortality Rate NC = No comparable measure

	% LBW (< 2,500 G)	% PRETERM (< 37 WKS GESTATION)	% NO EARLY PNC (1 ST TRIMESTER)	% SMOKING	% NOT BREASTFEEDING	% MOTHER ON MEDICAID
N.W.	8.3 5.1% Higher	10.7 11.5% Higher	30.2 7.6% Lower	10.6 32.5% Lower	29.0 27.8% Higher	47.9 8.6% Higher
NORTHERN	7.4 6.3% Lower	8.7 9.4% Lower	37.7 15.3% Higher	15.7 No difference	16.4 27.8% Lower	52.1 18.1% Higher
N.E.	7.9 No difference	9.2 4.2% Lower	49.6 51.7% Higher	12.9 17.8% Lower	19.0 16.3% Lower	39.4 10.7% Lower
M.W.	7.5 5.1% Lower	9.1 5.2% Lower	33.7 3.1% Higher	23.3 48.4% Higher	28.3 24.7% Higher	44.8 1.6% Higher
WESTERN	7.1 10.1% Lower	8.6 10.4% Lower	27.9 14.7% Lower	16.5 5.1% Higher	21.6 4.8% Lower	38.9 11.8% Lower
EASTERN	8.7 10.1% Higher	10.2 6.3% Higher	27.4 16.2% Lower	23.7 51.0% Higher	29.4 29.5% Higher	55.0 24.7% Higher
CENTRAL S.W.	8.1 2.5% Higher	10.0 4.2% Higher	32.1 1.8% Lower	20.7 31.8% Higher	28.7 26.4% Higher	54.5 23.6% Higher
CENTRAL	8.0 1.3% Higher	9.9 3.1% Higher	29.5 9.8% Lower	12.3 21.7% Lower	19.6 13.7% Lower	44.4 0.68% Higher
S.E.	7.2 8.9% Lower	8.4 12.5% Lower	29.9 8.6% Lower	23.5 49.7% Higher	32.9 44.9% Higher	44.8 1.6% Higher
S.W.	7.7 2.5% Lower	9.8 2.1% Higher	25.0 23.5% Lower	19.6 24.8% Higher	22.9 0.9% Higher	33.7 23.6% Lower
SOUTHERN	8.2 3.8% Higher	9.7 1.0% Higher	29.8 8.9% Lower	19.9 26.8% Higher	26.6 17.2% Higher	32.6 26.1% Lower
INDIANA	7.9	9.6	32.7	15.7	22.7	44.1
U.S.	8.0	NC	25.8	8.5	21.2	43.7

• Bottom number is percent difference from State.

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