



# Ohio Child Fatality Review Twelfth Annual Report



September, 2012



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This report includes reviews of child deaths that occurred in 2010 and aggregate reviews for 2006-2010.

## *Mission*

To reduce the incidence of preventable child deaths in Ohio

## *Submitted September 30, 2012, to*

**John R. Kasich**, Governor, State of Ohio

**William G. Batchelder**, Speaker, Ohio House of Representatives

**Thomas E. Niehaus**, President, Ohio Senate

**Armond Budish**, Minority Leader, Ohio House of Representatives

**Eric Kearney**, Minority Leader, Ohio Senate

Ohio Child Fatality Review Boards

Ohio Family and Children First Councils

## *Submitted by*

Ohio Department of Health

Ohio Children's Trust Fund





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## Dedication

This report reflects the work of many dedicated professionals in every community throughout the State of Ohio who have committed themselves to gaining a better understanding of how and why children die. Their work is driven by a desire to protect and improve the lives of young Ohioans. Each child's death represents a tragic loss for the family, as well as the community. We dedicate this report to the memory of these children and to their families.

## Acknowledgements

This report is made possible by the support and dedication of more than 500 community leaders who serve on Child Fatality Review (CFR) boards throughout the State of Ohio. Acknowledging that the death of a child is a community problem, members of the CFR boards step outside zones of personal comfort to examine all of the circumstances that lead to child deaths. We thank them for having the courage to use their professional expertise to work toward preventing future child deaths.

We also extend our thanks to the Ohio Child Fatality Review Advisory Committee members. Their input and support in directing the development of CFR in Ohio has led to continued program improvements.

We acknowledge the generous contributions of other agencies in facilitating the CFR program including the Ohio Children's Trust Fund; the Ohio Department of Health (ODH), divisions of Family and Community Health Services and Prevention, and Office of Healthy Ohio; state and local vital statistics registrars; and the National Center for the Review and Prevention of Child Death.

The collaborative efforts of all of these individuals and their organizations ensure Ohio children can look forward to a safer, healthier future.

Dear Friends of Ohio Children:

We respectfully present the Twelfth Annual Ohio Child Fatality Review (CFR) Report containing information from reviews of child deaths that occurred in calendar year 2010, as well as a summary of the data for deaths that occurred during the five-year period from 2006 to 2010. In facts and figures, this report tells the story of why Ohio children are dying and outlines the work of the CFR program and local and state efforts to prevent these deaths. We hope this report will lead to a reduction in the incidence of the untimely and preventable deaths of Ohio children.

Established by the Ohio General Assembly in July 2000, the CFR program works to examine the factors contributing to Ohio children's deaths. It is only through careful review of child deaths that we are better prepared to prevent future deaths. This report was created to raise awareness of preventable child deaths and understanding of prevention initiatives to ensure the health and well-being of our state's children.

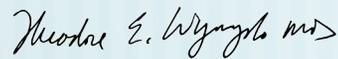
In 2010, 1,580 Ohio children died and 98 percent of these deaths were reviewed by local CFR boards. The CFR process begins at the local level where local boards consisting of professionals from public health, children's services, recovery services, law enforcement and health care review the circumstances surrounding every child death in their county. Through their collective expertise and collaborative assessment, solutions are identified and local prevention initiatives created.

All of us must work together to prevent future child deaths by:

- ◀ Educating families, children, neighbors, organizations and communities on preventable child deaths.
- ◀ Encouraging community and individual involvement in recognizing and preventing risk factors that contribute to child deaths.
- ◀ Assisting and supporting families to achieve healthy parenting practices through education and resources.
- ◀ Empowering individuals to intervene in situations where violence and neglect harm children.
- ◀ Improving systems of care so all children receive optimal health care before and after birth and throughout their lives.

We encourage you to consider the facts, analysis and recommendations presented in this report and make a commitment to create a safer and healthier Ohio for our children. Only **together** can we eliminate preventable child deaths.

Sincerely,



Theodore E. Wymyslo, MD  
Director of Health  
Ohio Department of Health



Kristen Rost  
Executive Director  
Ohio Children's Trust Fund



## Executive Summary

## Ohio Child Fatality Review Executive Summary

The **2012 Child Fatality Review (CFR) Annual Report** presents information from the reviews of deaths that occurred in 2010, as well as a summary of the data for deaths that occurred from 2006 to 2010.

Every child's death is a tragic loss for the family and community. Through careful review of these deaths, we are better prepared to prevent future deaths.

The Ohio CFR program was established in 2000 by the Ohio General Assembly in response to the need to better understand why children die. The law mandates CFR boards in each of Ohio's counties (or regions) to review the deaths of all children younger than 18. Ohio's CFR boards are composed of multidisciplinary groups of community leaders. Their careful review process results in a thorough description of the factors related to child deaths.

In 2005, Ohio CFR boards began using a new case report tool and data system developed by the National Center for Child Death Review. The tool and data system underwent slight revisions in 2007, 2010 and 2011, based on feedback from users. As a result, the revised tool more clearly captures information about the factors related to each child death and better documents the often complex conversations that happen during the review process.

The comprehensive nature of the case report tool and the functionality of the data system have allowed more complete analysis for all groups of deaths. Each section of this report contains detailed data regarding the circumstances and factors related to child deaths. The sections offer in-depth information about identified groups of deaths by age group and by special circumstances such as suicides, homicides and child abuse deaths, demonstrating the potential of data analysis combined with the review process to identify risk factors and to give direction for prevention activities.

CFR does make a difference. This report highlights many of the local initiatives that have resulted from the CFR process. These collaborations, partnerships and activities are proof that communities are aware that knowledge of the facts about a child death is not sufficient to prevent future deaths. The knowledge must be put into action.

The mission of CFR is to reduce the incidence of preventable child deaths in Ohio. Through the process of local reviews, communities and the state acknowledge that the circumstances involved in most child deaths are too complex and multidimensional for responsibility to rest with a single individual or agency. The CFR process has raised the collective awareness of all participants and has led to a clearer understanding of agency responsibilities and possibilities for collaboration on all efforts addressing child health and safety. It is only through continued collaborative work that we can hope to protect the health and lives of our children.

## Key Findings

A total of 1,546 reviews of 2010 child deaths were reported by Ohio's 88 local CFR boards. Of these, 1,542 reviews were complete for manner and cause of death and were used for analysis. This represents 98 percent of all 1,580 child deaths for 2010 reported in data from Ohio vital statistics. Deaths that were not reviewed include cases still under investigation or involved in prosecution and out-of-state deaths reported too late for thorough reviews.

Black children and boys died at disproportionately higher rates than white children and girls for most causes of death. Thirty-one percent (482) of deaths reviewed were to black children and 56 percent (864) were to boys. Their representation in the general population is 17 percent for black children and 51 percent for boys.

Reviewed cases are categorized by manner and by cause of death. Manner of death is a classification of deaths based on the circumstances surrounding a cause of death and how the cause came about. The five manner of death categories on the Ohio death certificate are natural, accident, homicide, suicide or undetermined/pending/unknown.

- ◀ Natural deaths accounted for 73 percent (1,128) of all deaths reviewed.
- ◀ Accidents (unintentional injuries) accounted for 15 percent (223) of the deaths.
- ◀ Homicides accounted for 3 percent (53) of the deaths.
- ◀ Suicides accounted for 2 percent (28) of the deaths.
- ◀ Seven percent (110) of deaths reviewed were of an undetermined, pending or unknown manner.

Seventy-two percent (1,130) of the deaths reviewed were due to medical causes.

- ◀ Seventy-eight percent (882) of deaths due to medical causes were to infants less than 1 year of age.
- ◀ The most frequent medical cause of death was prematurity (512).

Twenty-two percent (334) of all deaths reviewed resulted from external causes.

- ◀ Vehicular crashes were the leading cause of death from external injuries. Vehicular deaths accounted for 6 percent (88) of all deaths reviewed. Of the 59 deaths that occurred in cars, trucks, vans or SUVs, only 34 percent (20) of the children killed were reported to be using appropriate restraints.
- ◀ Five percent (78) of all deaths reviewed were from asphyxia, including suffocation, strangulation and choking. More than half of the deaths (46) were children less than 1 year of age, many of which occurred in a sleep environment. Of the 24 asphyxia deaths to children 10-17 years old, 67 percent (16) were suicides.
- ◀ Weapons, including body parts used as weapons, accounted for 4 percent (54) of all deaths reviewed. Fifty-two percent (28) were youth 10 to 17 years of age and 48 percent (26) were black children. The manner of death was accident for only one of the weapons deaths.
- ◀ Fire, burn and electrocution accounted for 2 percent (30) of all deaths reviewed. Eighty-three percent (25) of victims were less than 5 years old.

- ◀ Less than two percent (28) of all deaths reviewed were from drowning and submersion. Fifty percent (14) of the drowning deaths were to children under 5 years of age.
- ◀ Poisoning deaths represented 1 percent (16) of all deaths reviewed. Seventy-five percent (12) of poisoning deaths occurred to children 15-17 years old.

Deaths to infants younger than 1 year accounted for 68 percent (1,044) of the reviews.

- ◀ Infants less than 1 month old accounted for 69 percent (717) of all infant deaths and 46 percent of all deaths reviewed.
- ◀ Prematurity was the most frequent cause of infant deaths, accounting for 49 percent (509).
- ◀ Congenital anomalies accounted for 13 percent (140) of all infant deaths.
- ◀ For 810 reviews where gestational age was known, 70 percent (568) of the infants were born preterm (before 37 weeks gestation).
- ◀ Sleep-related deaths (including sudden infant death syndrome or SIDS) accounted for 14 percent (148) of the 1,044 total reviews for infant deaths in 2010, more than any single cause of death except prematurity. Forty-six percent (68) of sleep-related deaths were to black infants, which is disproportionate to their representation in the Ohio child population (17 percent). Sixty-two percent (91) of the sleep-related deaths occurred in locations considered unsafe such as in adult beds and on couches. Fifty-five percent (81) occurred to infants who were sharing a sleeping surface (bedsharing) with someone else at the time of death.

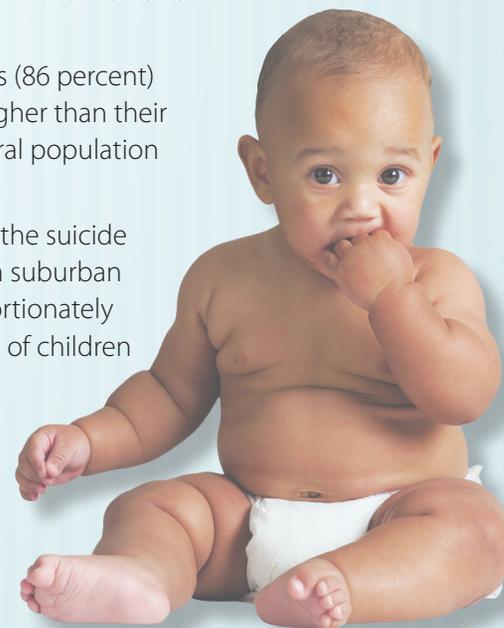
- ◀ SIDS accounted for 3 percent (28) of the 1,044 total reviews for infant deaths. At least fifty-four percent (15) of SIDS victims were exposed to smoke in utero.

Three percent (53) of all deaths reviewed resulted from homicide.

- ◀ Homicide deaths to boys (72 percent) and black children (53 percent) were disproportionately higher than their representation in the general population (51 percent for boys and 17 percent for black children).
- ◀ Fifty-one percent (27) of homicide deaths were to children younger than 5 years. Thirty-six percent (19) were to children 15-17 years old.

Two percent (28) of all deaths reviewed resulted from suicide.

- ◀ Suicides represent 12 percent of all reviews for children ages 10 to 17.
- ◀ Suicide deaths among boys (86 percent) were disproportionately higher than their representation in the general population (51 percent).
- ◀ Twenty-nine percent (8) of the suicide deaths reviewed were from suburban counties, which is disproportionately higher than the proportion of children living in those counties (18 percent).



Local CFR boards reviewed 24 deaths to children resulting from child abuse and neglect in 2010. These represent less than 2 percent of all 1,542 deaths reviewed.

- ◀ Eighteen of the 24 reviews indicated that physical abuse caused or contributed to the death, while eight reviews indicated that neglect caused or contributed to the death.
- ◀ All but two of the reviews were for children younger than 10 years.

Of the 1,542 deaths reviewed, CFR boards determined 22 percent (340) were probably preventable.

- ◀ Eighty-seven percent (193) of accidental deaths were deemed probably preventable.
- ◀ Fifty-six percent (76) of deaths to children 15 to 17 years of age were deemed probably preventable.

For the five-year period 2006-2010, 8,247 deaths were reviewed, which represents 96 percent of the 8,554 child deaths reported by Ohio vital statistics.

- ◀ The mortality rate for Ohio children has decreased from 65 deaths per 100,000 population in 2006 to 58 in 2010.
- ◀ The percentage of deaths from external causes due to vehicular crashes decreased from 28 percent in 2006 to 23 percent in 2009, then increased to 26 percent in 2010.
- ◀ The percentage of deaths from external causes due to asphyxia has increased from 26 percent in 2006 to 29 percent in 2009, then decreased to 23 percent in 2010.

The reviews for the five-year period were analyzed by age group.

- ◀ Fifty-eight percent (309) of the infant deaths due to external causes were due to asphyxia.

- ◀ Vehicular crashes were the leading external cause of death for children older than 1 year.

- ▶ Nineteen percent (68) of the 353 reviews for external causes for children 1 to 4 years old were due to vehicular crashes.
- ▶ Thirty-eight percent (66) of the 176 reviews for external causes for children 5 to 9 years old were due to vehicular crashes.
- ▶ Thirty-five percent (89) of the 255 reviews for external causes for children 10 to 14 years old were due to vehicular crashes.
- ▶ Forty-three percent (288) of the 670 reviews for external causes for children 15 to 17 years old were due to vehicular crashes.

Local CFR boards continue to make numerous recommendations for prevention and share their recommendations and findings with others in the community. More than half of the 88 counties shared information about local prevention initiatives and activities that have resulted from the CFR process in 2010.



## Limitations

Calculation of rates is not appropriate with Ohio's CFR data because not all child deaths are reviewed. Instead of rates, CFR statistics have been reported as a proportion of the total reviews. This makes analysis of trends over time difficult, as an increase in the proportion of one factor will result in a mathematical decrease in the proportion of other factors. Complex analysis is needed to determine if such changes in proportion represent true trends in the factors of child deaths.

For this report, cases with multiple races indicated were assigned to the race that represents the least proportion of the general child population of Ohio. For example, if a case indicated both black and Asian, the case was assigned to Asian, because the proportion of Asian children is less than the proportion of black children in Ohio.

The CFR case report tool and data system record Hispanic ethnicity as a variable separate from race. A child of any race may be of Hispanic ethnicity.

The ICD-10 codes used for classification of vital statistics data in this report were selected to most closely correspond with the causes of death indicated on the CFR Case Report Tool and may not match the codes used for some causes of death in other reports or data systems. The codes used for this report can be found in the appendices.

Since the inception of statewide data collection in 2001, Ohio CFR has used two different data systems, and the latest system has undergone improvements and revisions. Because of the differences in data elements and classifications, data in this annual report may not be comparable to data in previous reports. In-depth evaluation of contributing factors associated with child deaths is limited in some cases by small cell numbers and lack of access to relevant data.

Of the 1,580 deaths of Ohio children in 2010, 2 percent (28) occurred out-of-state. The first step of the review process, identification of a child death, is difficult when the death occurs out-of-state. Death certificates are recorded in the state where the death occurs and a process is not in place to routinely notify the county of residence for a timely review. This is a particular problem in rural Appalachian counties, where 8 percent (18) of the 233 deaths occurred outside Ohio. By contrast, less than 1 percent (8) of the 913 deaths to children of metropolitan counties died out-of-state. The state coordinator continues to work with the Ohio Vital Statistics to improve the timely notification of out-of-state deaths.

## Prevention Initiatives

Within the 2000 law that established the Ohio Child Fatality Review (CFR), goals for local CFR boards include making recommendations and developing plans for implementing local service and program changes for prevention of future deaths. Recommendations become initiatives only when resources, priorities and authority converge to make change happen. Again this year, more than half of the counties reported over 100 examples of successful implementation of CFR recommendations. This means that CFR boards have shared their findings and recommendations and engaged partners for change. What follows is a sample of the initiatives and activities taking place across Ohio.

### SIDS and Sleep-Related Deaths

The largest number of initiatives deal with reducing the risk of sudden infant death syndrome (SIDS) and other sleep-related deaths. A variety of programs target minority families, grandparents, caregivers, health professionals and the whole community with risk reduction messages that include Back to Sleep and the risks of inappropriate bedding and bedsharing. Many of these initiatives are on-going, being incorporated into existing programs such as prenatal clinics, Help Me Grow (HMG) and Special Supplemental Food Program for Women, Infants and Children (WIC). Efforts to reach the whole community include the use of billboards, displays at fairs and festivals and distribution of educational materials at popular sites for families, such as zoos, playgrounds and family restaurants.

- ▶ In **Clark** County, funding was secured from a local foundation to provide a one-piece infant garment with a safe sleep message to each new baby born at the local birthing center.
- ▶ The **Cuyahoga** County CFR board and board of health provides education to the medical and nursing staff in the maternity hospitals. The education stresses the importance of role modeling safe sleep practices in the hospital and engaging parents and family members in a discussion of safe sleep.
- ▶ Clients of programs throughout the health department in **Erie** County were provided infant safe sleep information, based on a survey of knowledge and practices that was conducted the previous year. The health department also provided education and a safe crib display at the county fair.
- ▶ The **Franklin** County Infant Safe Sleep and SIDS Risk Reduction Task Force created a public service announcement focusing on the “ABC’s of Safe Sleep.” The video was featured on the health department’s website, partner websites and YouTube.
- ▶ The **Franklin** County CFR board partnered with the police department, health department, childrens’ protective services, coroner’s office and ODH to conduct a statewide infant death investigation training to encourage agencies to conduct scene investigations for all unexplained infant deaths. The training promoted the use of CDC’s Sudden Unexplained Infant Death Investigation form to collect the necessary information during the investigation. More than 100 professionals from 29 counties participated in the hands-on training.



- ◀ Findings from the **Fulton** County CFR helped secure an ODH Child and Family Health Services grant to fund a safe sleep campaign, including billboards and movie theater advertisements.
- ◀ **Hamilton** County's innovative partnership with the Cincinnati Police Department has expanded to include the Fire Department. Police and firefighters have been trained in the importance of safe sleep and reducing risks through safe sleep arrangements. A referral process was developed for families who do not have cribs or who need other kinds of social service assistance.
- ◀ A pamphlet about infant safe sleep and risk reduction practices was developed and is being distributed to clients of the **Jefferson** County Children's Services.
- ◀ Information on reducing the risk of SIDS and providing a safe sleep environment was presented to parents of newborns in **Lucas** County. Families in need are referred to Cribs 4 Kids®, which provided cribs to 276 families in 2010.
- ◀ In **Mahoning** and **Trumbull** Counties, the United Way of Youngstown and the Mahoning Valley Health and Wellness Vision Council/Infant Mortality Task Force are collaborating on an initiative to promote safe sleep education. Discharge teaching instructions at one local hospital were evaluated to insure consistent education of new parents at the time of discharge. The unit nursing staff were educated on sleep positioning and bedding, communication to families, and role modeling. An on-line infant safe sleep continuing education course for nurses was developed.
- ◀ The impact of an ongoing safe sleep campaign in **Montgomery** County is being evaluated. Over 12,000 one-piece infant garments imprinted with a safe sleep message

were distributed through the prenatal, child health and Special Supplemental Food Program for Women, Infants and Children (WIC) clinics. Changes in knowledge, attitudes and behavior are measured through pre- and post-surveys.

- ◀ The **Stark** County Safe Sleep Task Force is a Cribs 4 Kids® provider. In addition to providing cribs to needy families who participate in a 90-minute class on safe sleep practices the task force teaches classes on infant sleep safety to various groups, including local high schools and prenatal support groups.
- ◀ The **Summit** County CFR board contacted community agencies that collect and distribute donated cribs with information about crib safety and recall information regarding drop-side cribs. CFR data and safe sleep guidelines were shared during grand rounds at the children's hospital and through a press conference and an article in the local newspaper.

### Child Abuse and Neglect

The CFR process can identify opportunities for improvement in programs and policies to prevent child abuse and neglect. Responsibility for prevention activities is shared among all the member agencies.

- ◀ A community program developed by Children's Services in **Allen** County to address child abuse at the hands of a parent's significant other is now in its third year. With community and professional input, a parenting curriculum "Choose Your Partner Carefully; Your Child's Life Depends on It" has been developed and shared with other organizations to use with staff and clients. **Jackson** and **Ross** Counties are using a similar campaign.

- ◀ A task force of 30 professionals from a wide variety of social service and legal fields in **Cuyahoga** County developed recommendations focusing on decision points during the family reunification process, permanency and use of evidence-based practice. Many recommendations are now being implemented.
- ◀ Using findings from the CFR process, **Muskingum** County Children’s Services and the prosecuting attorney’s office developed public service announcements to increase awareness and prevention of shaken baby syndrome.
- ◀ As a result of the CFR process, the **Harrison** County Help Me Grow (HMG) is soliciting referrals of at-risk pregnant women and those with children under age 3 years. The HMG curriculum includes discussion of caregiver issues.
- ◀ The **Montgomery** County Children’s Services is reviewing and revising practices regarding closing cases, in an effort to avoid children and families being lost to follow-up or without needed prevention and supportive services from other agencies.
- ◀ The **Montgomery** County prosecutor’s office and police jurisdictions have implemented a new search warrant template to be used during child death investigations when there is probable cause to believe that the caregiver was under the influence of alcohol or drugs.
- ◀ Children taken into protective services in **Wood** County are provided health services such as immunizations, physicals and developmental screenings. Services are funded by the county health levy.

### Suicide

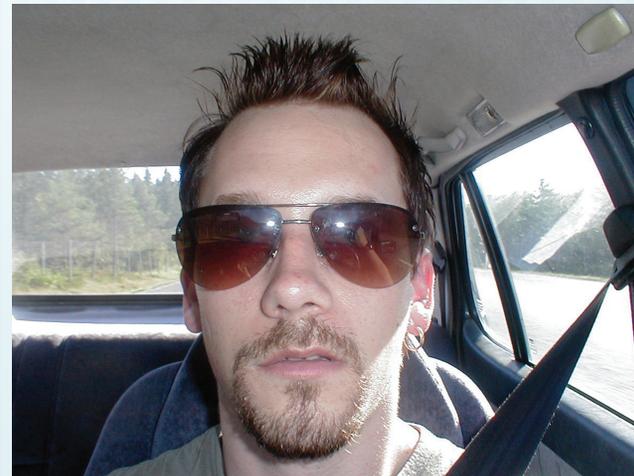
The need for youth suicide prevention is also being addressed as a result of the CFR process. In many counties, such as **Lucas,**

**Allen, Franklin** and **Coshocton,** CFR findings are shared with county suicide prevention coalitions and task forces to focus on awareness of suicide and develop strategies to reduce the factors that increase the risk of suicide, identify youth at risk and increase the availability of mental health services.

- ◀ In an effort to better review and understand youth suicide, **Clermont** County CFR board with the help of the mental health and recovery board looked at recent research on key factors for youth suicide, including impulsiveness.

### Vehicular Injuries

Vehicular crashes continue to be a leading cause of injury and death to children. Many local CFR boards were involved in efforts to pass Ohio’s Distracted Driving law which took effect in August 2012. Boards are active in educating families about the new law, in addition to Ohio’s Booster Seat law and Graduated Driver License law. In addition to continued efforts in most counties to improve teen driver education and infant car seat programs, local CFR boards are addressing specific issues regarding vehicular deaths in their community.



- ◀ A teen driving summit sponsored by the **Clermont** County Safe Communities program encouraged and empowered teen leaders to develop programs for their schools to get peers to slow down, buckle up and eliminate cell phone use while driving.
- ◀ The **Clinton** County CFR is researching prevention strategies for all-terrain vehicular injuries, using the recommendations of the American Academy of Pediatrics.
- ◀ Using Partnerships for Success Grant funding, the **Fulton** County “Parents Who Host” campaign continues to educate parents and the community about underage drinking and driving.
- ◀ Several counties, including **Fulton, Greene** and **Butler**, sponsor 4-H CarTeens, a traffic safety program conducted by 4-H for juvenile traffic offenders. 4-H CarTeens’ goals include reducing the number of repeat juvenile traffic offenders, decreasing the number of teen traffic offenders, and increasing teen awareness of traffic/vehicular safety.
- ◀ A school district in **Lucas** County changed its policy so that students no longer must cross the street when exiting or entering the bus if the speed limit is 35 miles per hour or more. In addition, the district is testing the use of video cameras mounted on four buses to document activity on the driver’s side, including the license plate number of vehicles passing the buses illegally. During the 2010-2011 school year, 39 citations were issued.

### Infant Deaths

In response to needs identified through the reviews of infant deaths, collaborative groups have been organized and continue in many counties, such as **Allen, Cuyahoga, Fulton, Hamilton** and **Lucas**, to promote early prenatal care and healthy lifestyles

for pregnant women and to educate women to be as healthy as possible before becoming pregnant. Typical partners include HMG, WIC, Child and Family Health Services projects, local physicians, schools and other health and social service providers.

- ◀ **Hardin** County is using Facebook and agency websites to promote early prenatal care.
- ◀ **Scioto** County is investigating screening all newborns for exposure to drugs.
- ◀ An infant death scene investigation task force has begun in **Trumbull** County.

### Substance Abuse

The misuse and abuse of prescription drugs and other substances harms youth and children, who suffer intentional or accidental overdose and prenatal exposure as well as inadequate care and supervision when adults use. Local CFR boards have joined with other community agencies to combat this epidemic and protect children.

- ◀ The CFR process in **Allen** County prompted discussion of the impact of “bath salts,” which led to a regional summit attended by participants from ten surrounding counties. Post-summit activities are increasing education and awareness of the dangers.
- ◀ A growing concern with prescription drug use among teens in **Clark** County resulted in the formation of Cole’s Warriors, a coalition to address the problem.
- ◀ **Vinton** County is improving inter-agency communication and referrals to identify high-risk children in families with drug use, violence or criminal activity.
- ◀ The **Fairfield** CFR board is seeking more information

on prenatal use of drugs and alcohol by mothers who experience an infant death due to prematurity, so preventive services can be developed.

### General Health and Safety

Countywide collaborations and partnerships produced many programs to increase the general health and safety of children.

- ◀ A collaboration between the Child and Family Health Services and the **Fulton** County Safety Task Force distributed best practice-materials for improving safety for young children by ensuring entrances and exits from the home are child-proofed and pools and ponds are gated or blocked.
- ◀ Activities in **Holmes, Lawrence, Perry** and **Richland** Counties are addressing fire safety education and distribution and proper use of smoke alarms, especially in mobile homes.
- ◀ General home and child safety information is shared by the **Hardin** County CFR via the health department's website and Facebook page. The dangers of unstable televisions and tall furniture were featured.

### Systems Improvements

One of the goals set by Ohio law for CFR is to promote cooperation, collaboration and communication among all groups that serve families and children. The CFR process continues to have a positive impact on participating agencies. Many boards report an increase in cooperation and understanding between participating agencies and some have developed written policies to facilitate communication. The review process stimulates discussion about existing services in communities, identifying gaps in services, access to service

barriers, the need to maximize use of existing services and opportunities for increased collaboration.

- ◀ The **Franklin** County CFR board invited local, state and federal elected officials to a meeting to learn more about the CFR process and how they can support efforts to prevent child deaths.
- ◀ The **Montgomery** County CFR board has been working with the legal representatives from the local hospitals, health department and prosecutor's office to form an agreement for all county hospitals to participate in the CFR process. This is an effort to improve the sharing of information.
- ◀ Several counties including **Wood** and **Logan**, have identified a need for bereavement services and are forming partnerships to improve services.
- ◀ The **Clermont** County CFR published its first report to the community. The goal was to increase awareness of preventable deaths by making the data from the past five years more public. Geographic Information System (GIS) analysis was included.



## Ohio Children's Trust Fund

The Ohio Children's Trust Fund (OCTF) is Ohio's sole public funding source for child abuse and neglect prevention. OCTF was created in Ohio law in 1984 and is governed by a board of 15 members representing a broad public-private partnership. The board consists of representatives from children's services agencies, education, law enforcement and the pediatric community. Eight members are appointed by the Governor to represent the citizens of Ohio, four members are legislative appointees and three members are agency directors (ODH, ODJFS and the Ohio Department of Alcohol and Drug Addiction Services). The Board supervises the policies and programs of the Trust Fund and the ODJFS serves as the administrative agent for procurement and budgeting purposes.

OCTF receives revenues from surcharges on birth and death certificates and divorce and dissolution decrees. As provided under Ohio law, OCTF invests this revenue in three areas: county allocations, statewide prevention programs and initiatives, and child advocacy centers (CACs). OCTF also receives federal dollars through the Community Based Child Abuse Prevention (CBCAP) Grant. The purpose of the grant is to fund community based primary and secondary child abuse prevention programs with statewide significance.

In 2011, OCTF became the Ohio Chapter of Prevent Child Abuse America. The OCTF and Prevent Child Abuse America share a common mission and the OCTF Board was excited for the opportunity to align Ohio's statewide prevention efforts under one entity and to further the work of Prevent Child Abuse Ohio.

In transforming OCTF into Ohio's leader and authority on child maltreatment prevention, the 2009 – 2014 strategic plan incorporates three critical areas: child maltreatment as a public health problem, promoting protective factors, and investing in evidence-informed practices. It is through these three areas that OCTF works to fulfill its mission of preventing child abuse and neglect through investing in strong communities, healthy families, and safe children. In addition, the 2009–2014 strategic plan shifts OCTF from focusing solely on funding prevention programs to prioritizing increased attention to consumer education, social marketing and public policy initiatives.



## Reviews for 2010 Deaths

## 2012 Data Reporting

By April 1 of each year, local Child Fatality Review (CFR) boards must submit to ODH the following information with respect to each child death reviewed:

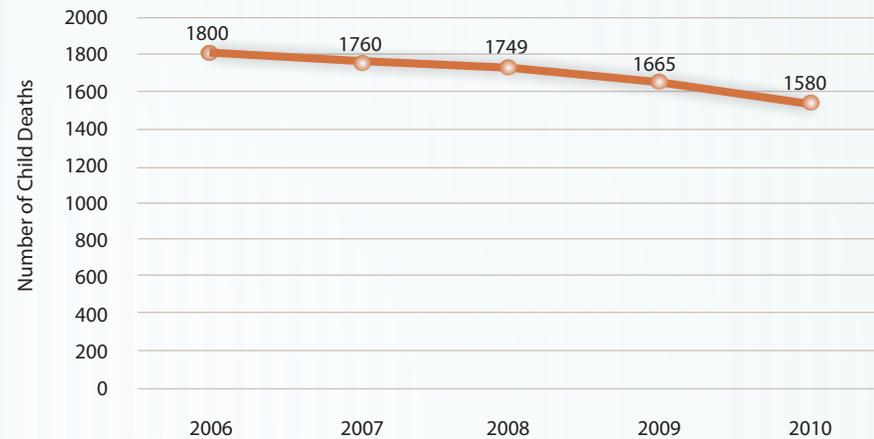
- ◀ Cause of death
- ◀ Factors contributing to death
- ◀ Age
- ◀ Gender
- ◀ Race
- ◀ Geographic location of death
- ◀ Year of death

In addition to the case review information, the local boards submit a report of their activities and recommendations for actions that might prevent future deaths. This report contains no case-identifying information and is a public record.

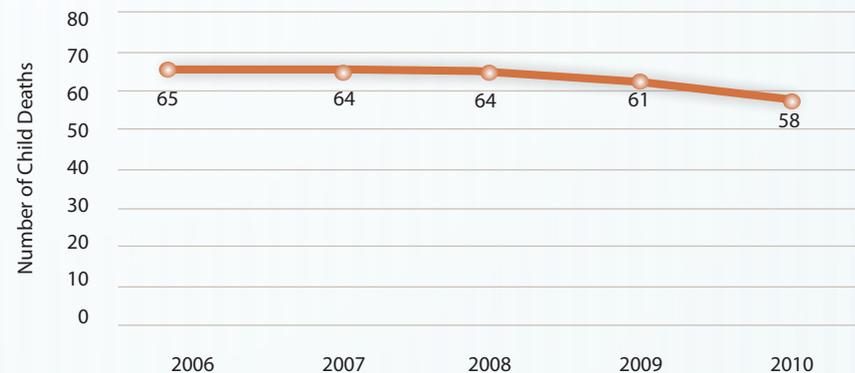
There were a total of 1,546 reviews of 2010 child deaths reported by April 1, 2012. Of these, 1,542 were complete for manner and cause of death and used for analysis. This represents 98 percent of all child deaths (1,580) in Ohio for 2010, based on data from Ohio vital statistics. All 88 counties submitted reports, although not all counties reported reviews. More than 200 recommendations for prevention were submitted. More than half of the 88 counties shared information about local prevention initiatives and activities that have resulted from the CFR process.

According to Ohio Vital Statistics, the number of Ohio child deaths has decreased from 1,800 in 2006, when 1,708 reviews (95 percent) were completed, to 1,580 in 2010. The child mortality rate has decreased from 65 deaths per 100,000 children in 2006 to 58 in 2010.

### Ohio Child Deaths by Year, 2006-2010



### Ohio Child Mortality Rate by Year, 2006-2010

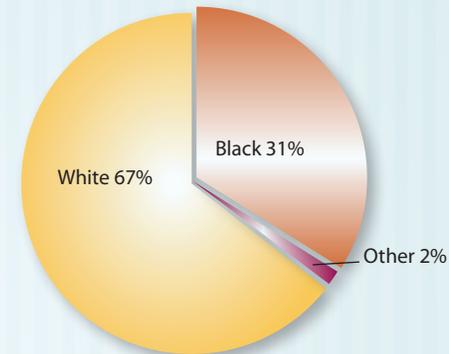


## Reviews For 2010 Deaths

### Reviews by Demographic Characteristics

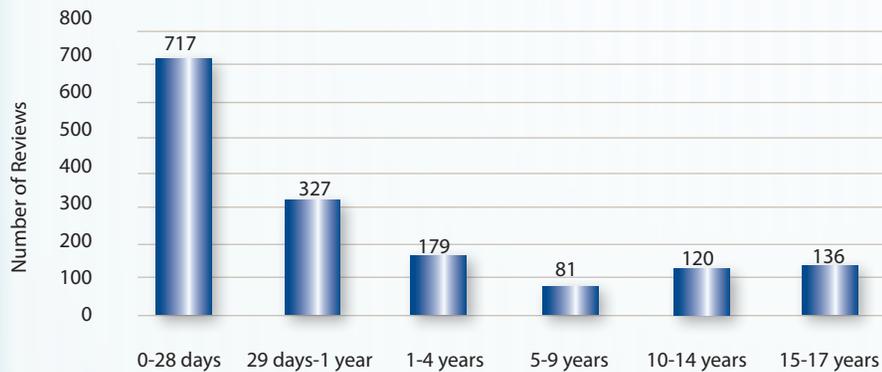
Local child fatality review (CFR) boards reviewed the deaths of 1,542 children who died in 2010. Sixty-eight percent (1,044) of the reviews were for children less than one year of age. There were greater percentages of reviews among boys (56 percent) and among black children (31 percent) relative to their representation in the general Ohio child population (51 percent for boys and 17 percent for black children, per U.S. Census data).<sup>1</sup> Five percent (75) of all reviews were for children of Hispanic ethnicity, which closely compares to their representation in the general Ohio child population (5 percent).

### Reviews of 2010 Deaths by Race, N= 1,542

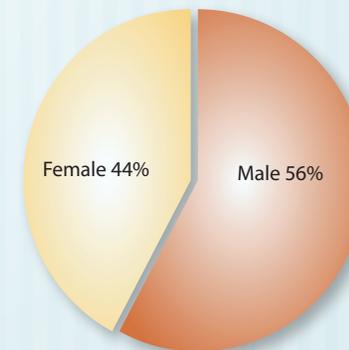


*\*37 cases with multiple races indicated were assigned to the minority race.*

### Reviews of 2010 Deaths by Age, N= 1,542



### Reviews of 2010 Deaths by Gender, N= 1,542



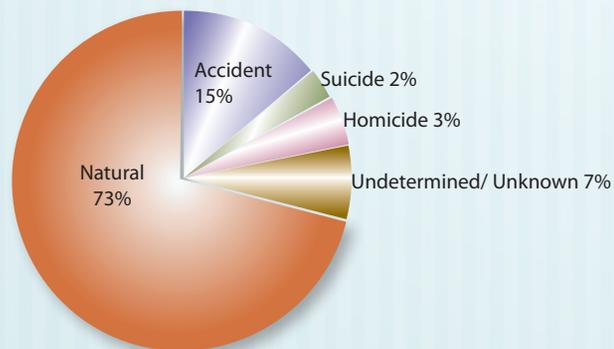
## Reviews by Manner of Death

Manner of death is a classification of deaths based on the circumstances surrounding a cause of death and how the cause came about. The five manner-of-death categories on the Ohio death certificate are natural, accident, homicide, suicide and undetermined. For deaths being reviewed, CFR boards report the manner of death as indicated on the death certificate. For deaths that occurred in 2010, the 1,542 reviews were classified as follows:

- ◀ Seventy-three percent (1,128) were natural deaths.
- ◀ Fifteen percent (223) were accidents.
- ◀ Three percent (53) were homicides.
- ◀ Two percent (28) were suicides.
- ◀ Seven percent (110) were of an undetermined or unknown manner.

Since 2004, the proportional distribution of reviews across the manners has changed very little. See Appendix V for additional tables including manner of death by demographic information.

**Reviews of 2010 Deaths by Manner**  
N= 1,542

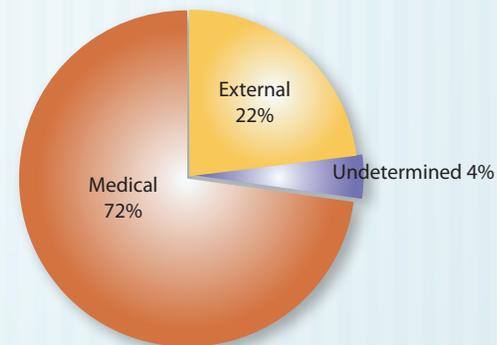


## Reviews by Cause of Death

The CFR case report tool and data system implemented in 2005 classify causes of death by medical or external causes. Medical causes are further specified by particular disease entities. External causes are further specified by the nature of the injury. In 2010, the 1,542 reviews were classified as follows:

- ◀ Seventy-two percent (1,130) were due to medical causes.
- ◀ Twenty-two percent (334) were due to external causes.
- ◀ In 78 reviews, the cause of death could not be determined as either medical or external.

**Reviews of 2010 Deaths by Cause**  
N= 1,542



## Deaths from Medical Causes

### Background

Deaths from medical causes are the result of a natural process such as disease, prematurity or congenital defect. A death due to a medical cause can result from one of many serious health conditions.

Many of these conditions are not believed to be preventable in the same way accidents are preventable. But with some illnesses such as asthma, infectious diseases and screenable genetic disorders, under certain circumstances, fatalities may be prevented. Many might be prevented through better counseling during preconception and pregnancy, earlier or more consistent prenatal care and smoking cessation counseling. While some conditions cannot be prevented, early detection and prompt, appropriate treatment can often prevent deaths.

### Vital Statistics

Ohio vital statistics reported 1,224 children who died of medical causes in 2010. For further information on the ICD-10 codes used to produce vital statistics data, see Appendix V.

### CFR Findings

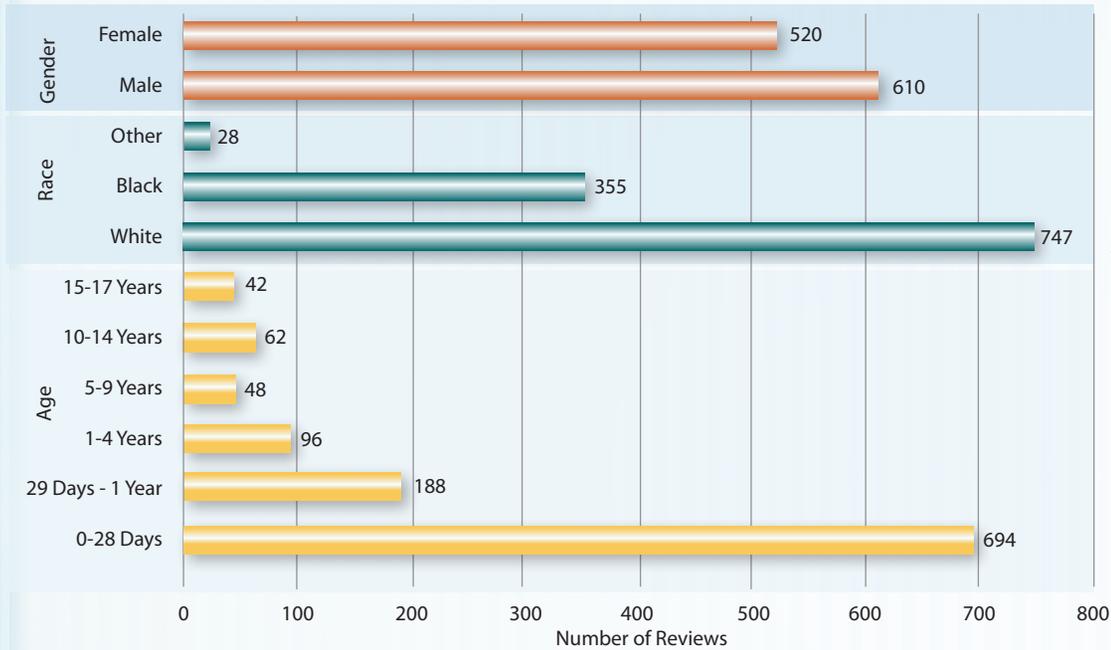
Seventy-two percent (1,130) of the 1,542 reviews for 2010 deaths were from medical causes.

- ◀ Seventy-eight percent (882) of the 1,130 reviews for medical causes were to infants under the age of 1 year.
- ◀ Fifty-four percent (610) of the 1,130 reviews for medical causes were to male children.

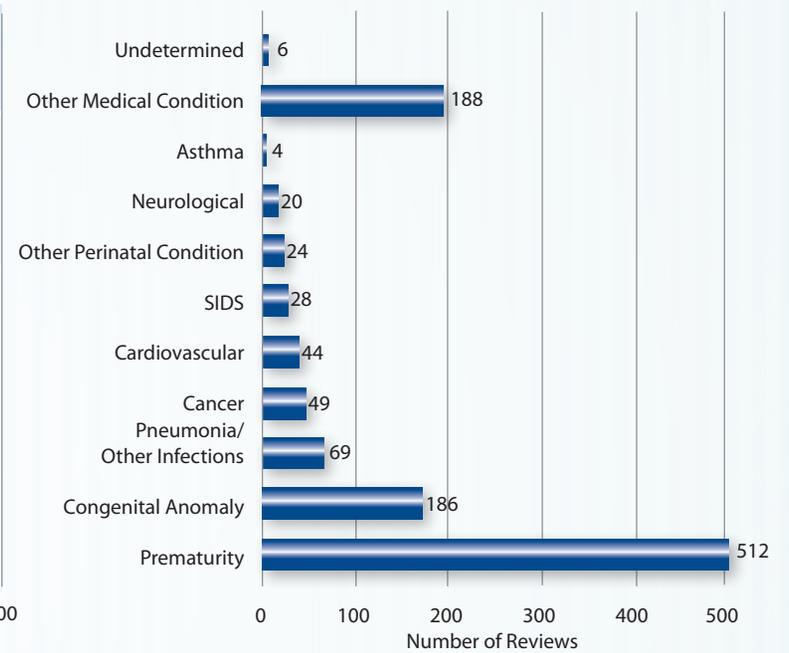
- ◀ Thirty-one percent (355) of the 1,130 reviews for medical causes were to black children, which is disproportionate to their representation in the Ohio child population (17 percent).
- ◀ The CFR data system provides a list of 15 medical conditions in addition to an “Other” category for classifying deaths from medical causes more specifically. Prematurity, congenital anomalies and pneumonia/other infections were the three leading medical causes of death.
  - ▶ Forty-five percent (512) of the deaths from medical causes were due to prematurity.
  - ▶ Sixteen percent (186) were due to congenital anomalies.
  - ▶ Six percent (69) were due to pneumonia and other infectious conditions.
  - ▶ Sudden infant death syndrome (SIDS) is a medical cause of death. Two percent (28) of the deaths from medical causes were due to SIDS.
- ◀ The leading medical cause of death for children older than 1 year was cancer. Nineteen percent (48) of 248 deaths from medical causes to children older than 1 year were due to cancer.

For additional tables including all medical causes of death by demographic information, please see Appendix VII.

Reviews of 2010 Deaths from Medical Causes, N=1,130



Reviews of 2010 Deaths from Medical Causes, N=1,130



### Three Leading Medical Causes of Death, by Age, Race and Gender

	Prematurity (N=512)		Congenital Anomalies (N=186)		Pneumonia/ Other Infections (N=69)	
	#	%	#	%	#	%
Age						
1-28 Days	475	93	100	54	10	14
29-364 Days	34	7	40	22	31	45
1-4 Years	2	<1	28	15	13	19
5-9 Years	1	<1	4	2	3	4
10-14 Years	-	-	8	4	9	13
15-17 Years	-	-	6	3	3	4
Unknown	-	-	-	-	-	-
Missing	-	-	-	-	-	-
Race						
White	297	58	130	70	54	78
Black	208	41	51	27	13	19
Other	7	1	5	3	2	3
Unknown	-	-	-	-	-	-
Missing	-	-	-	-	-	-
Gender						
Male	286	56	92	49	38	55
Female	226	44	94	51	31	45
Unknown	-	-	-	-	-	-
Missing	-	-	-	-	-	-
Total	512		186		69	

Percents may not total 100 due to rounding.

## Deaths From External Causes

### Background

External causes of death are injuries, either unintentional or intentional, resulting from acute exposure to forces that exceed a threshold of the body's tolerance, or from the absence of such essentials as heat or oxygen.<sup>2</sup>

### Vital Statistics

Ohio vital statistics reported 356 children who died of external causes in 2010. For further information on the ICD-10 codes used to produce Vital Statistics data, see Appendix V.

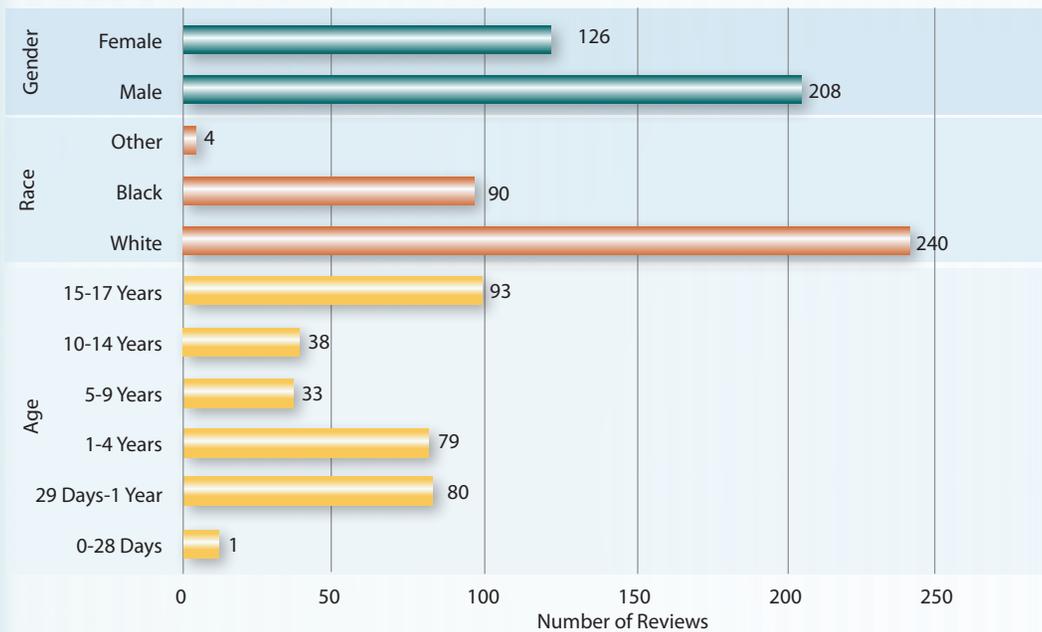
### CFR Findings

Twenty-two percent (334) of the 1,542 reviews for 2010 deaths were due to external causes.

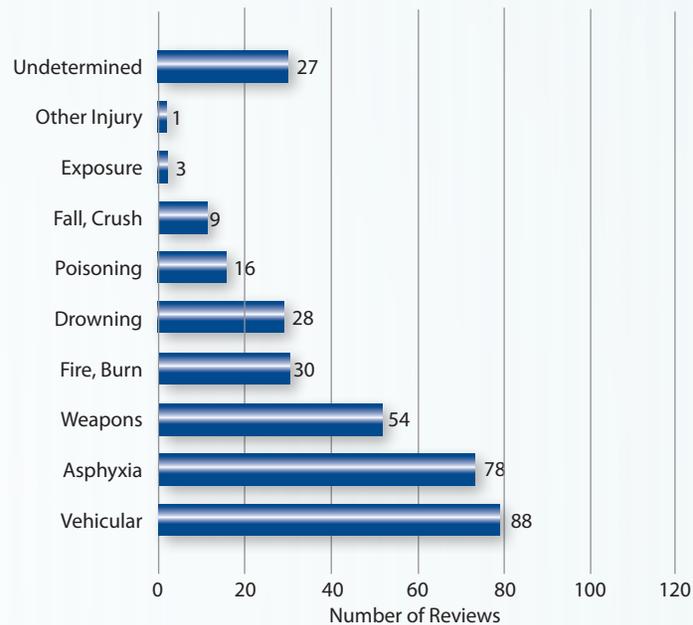
- ◀ Twenty-eight percent (93) of the 334 reviews of deaths from external causes were for children ages 15 to 17 years.
- ◀ Twenty-seven percent (90) of the 334 reviews for external causes were for black children, which is disproportionate to their representation in the Ohio child population (17 percent).
- ◀ Sixty-two percent (208) of the 334 reviews for external causes were for boys, which is disproportionate to their representation in the population (51 percent).
- ◀ Vehicular injuries, asphyxia, and weapons injuries were the three leading external causes for the 334 reviews. In 2008 and 2009, asphyxia was the leading external cause of death.
  - ▶ Twenty-six percent (88) were due to vehicular injuries.
  - ▶ Twenty-three percent (78) were due to asphyxia.
  - ▶ Sixteen percent (54) were due to weapons injuries, including the use of body parts as weapons.

For additional tables including all external causes of death by demographic information, please see Appendix VII.

Reviews of 2010 Deaths from External Causes, N=334



Reviews of 2010 Deaths from External Causes, N=334



## Reviews by County Type

### Background

ODH categorizes Ohio's 88 counties into four county-type designations (rural Appalachian, rural non-Appalachian, suburban and metropolitan) based on similarities in terms of population and geography. The current county type designations originated with the Ohio Family Health Survey in 1988 and are based on the U.S. Code and U.S. Census information. See Appendix VI for a map of Ohio counties by county type.

To analyze the CFR data by county type, the computer-assigned case number was used to determine the county of review. In nearly all cases, the county of review is the county of the child's residence.

In 2010, Ohio's child population was distributed as follows:

- ◀ 12 percent rural Appalachian;
- ◀ 15 percent rural non-Appalachian;
- ◀ 18 percent suburban;
- ◀ and 55 percent metropolitan.<sup>3</sup>

According to Ohio vital statistics, the 2010 child deaths were distributed as follows:

- ◀ 15 percent rural Appalachian;
- ◀ 13 percent rural non-Appalachian;
- ◀ 14 percent suburban;
- ◀ and 58 percent metropolitan.<sup>4</sup>

The percentage of all deaths that were reviewed varied by county type:

- ◀ 94 percent rural Appalachian;
- ◀ 99 percent rural non-Appalachian;
- ◀ 91 percent suburban;
- ◀ and 100 percent metropolitan.

For an explanation of deaths not reviewed, please see "Limitations" on page 5 and "Overview of Ohio Child Fatality Review Program" on page 69.

It is known that many factors related to child deaths are not evenly distributed across the county types. Complex analysis is needed to determine the significance of the CFR county-type findings.

### CFR Findings

The 1,542 reviews of deaths that occurred in 2010 were distributed as follows:

- ◀ Fourteen percent of reviews (218) were from rural Appalachian counties.
- ◀ Thirteen percent of reviews (206) were from rural non-Appalachian counties.
- ◀ Thirteen percent of reviews (206) were from suburban counties, which is disproportionately lower than the proportion of children living in suburban counties (18 percent).
- ◀ Sixty percent of reviews (912) were from metropolitan counties, which is disproportionately higher than the proportion of children living in metropolitan counties (55 percent).

### Manner of Death by County Type

- ◀ Sixty-one percent (689) of natural deaths reviewed were from metropolitan counties, which is disproportionately higher than the proportion of children living in metropolitan counties (55 percent).
- ◀ Twenty-five percent (56) of reviews for accidental deaths were from rural Appalachian, which is disproportionately higher than the proportion of children living in those counties (12 percent).
- ◀ Twenty-eight percent (8) of suicide deaths reviewed were from suburban counties, which is disproportionately higher than the proportion of children living in those counties (18 percent).
- ◀ The percentage of reviews for homicide deaths was higher in metropolitan (67 percent) and in rural Appalachian (19 percent) counties than the proportion of children living in those counties (55 percent and 12 percent).

### Manner of Death by County Type, N=1,542

	Rural Appalachian		Rural Non-Appalachian		Suburban		Metropolitan		Total
	#	%	#	%	#	%	#	%	#
Natural	139	12	154	14	146	13	689	61	1,128
Accident	56	25	35	16	40	18	92	41	223
Suicide	3	11	3	24	8	29	14	50	28
Homicide	10	19	5	9	3	6	36	67	54
Undetermined/Unknown	10	9	9	8	9	8	82	75	110
<b>Total</b>	<b>218</b>	<b>14</b>	<b>206</b>	<b>13</b>	<b>206</b>	<b>13</b>	<b>912</b>	<b>59</b>	<b>1,542</b>

*Percents may not total 100 due to rounding.*



### Medical Causes of Death by County Type

- ◀ Sixty-one percent (687) of the reviews of deaths from medical causes were from metropolitan counties, which is disproportionately higher than the proportion of children living in metropolitan counties (55 percent). Reviews of deaths due to prematurity were particularly over-represented in metropolitan counties. Seventy-two percent (368) of deaths due to prematurity were from metropolitan counties. In contrast, only 11 percent (54) of the deaths due to prematurity were from suburban counties, which is disproportionately less than the proportion of children living in suburban counties (18 percent).

**Medical Causes of Death by County Type, N=1,130**

	Rural Appalachian		Rural Non-Appalachian		Suburban		Metropolitan		Total
	#	%	#	%	#	%	#	%	#
Prematurity	46	9	44	9	54	11	368	72	512
Congenital Anomaly	28	15	28	15	23	12	107	58	186
Pneumonia/ Other Infection	9	13	13	19	12	17	35	51	69
All Other Medical Causes	60	17	68	19	58	16	177	49	363
<b>Total</b>	<b>143</b>	<b>13</b>	<b>153</b>	<b>14</b>	<b>141</b>	<b>13</b>	<b>687</b>	<b>61</b>	<b>1,130</b>

*Percents may not total 100 due to rounding.*



### External Causes of Death by County Type

- Twenty-eight percent (25) of vehicular deaths were from rural Appalachian counties, which is disproportionately higher than the proportion of children living in rural Appalachian counties (12 percent).
- Fifty-three percent (16) of fire and burn deaths reviewed were from rural Appalachian counties, which is disproportionately higher than the proportion of children living in those counties (12 percent).

### Reviews of Special Interest

The distribution of the 148 reviews for sleep-related deaths varies from the population distribution by county type.

- Seven percent of reviews (10) were from rural Appalachian counties.
- Seven percent of reviews (11) were from rural non-Appalachian counties.
- Nine percent of reviews (13) were from suburban counties.
- Seventy-seven percent of reviews (114) were from metropolitan counties.

The distribution of the 24 reviews for child abuse and neglect deaths also varies from the population distribution by county type. Fifty-eight percent (14) of the reviews were from metropolitan counties.

For more data regarding reviews of 2010 deaths, see Appendix VII.

### External Causes of Death by County Type, N=334

	Rural Appalachian		Rural Non-Appalachian		Suburban		Metropolitan		Total
	#	%	#	%	#	%	#	%	#
Vehicular	25	28	18	21	13	15	32	36	88
Asphyxia	11	14	6	8	18	23	43	55	78
Fire/Burn	16	53	4	13	3	10	7	23	30
All Other External Causes	19	14	17	12	19	14	83	60	138
<b>Total</b>	<b>71</b>	<b>21</b>	<b>45</b>	<b>14</b>	<b>53</b>	<b>16</b>	<b>165</b>	<b>57</b>	<b>334</b>

Percents may not total 100 due to rounding.



Reviews for 2006-2010 Deaths

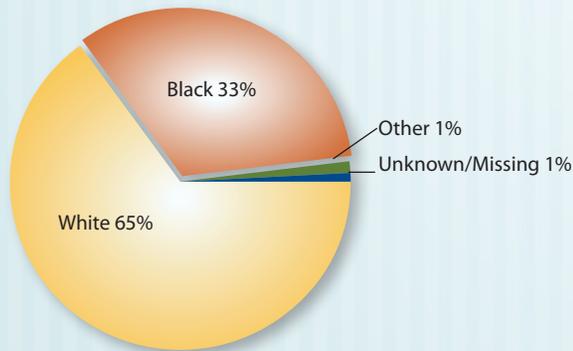
## Reviews for 2006-2010 Deaths

### Summary of Reviews

To gain more understanding of the factors related to child death, data have been analyzed for the five-year year-of-death period 2006-2010. For the five-year period, Ohio CFR boards have completed 8,247 reviews, which represent 96 percent of the 8,554 child deaths reported by Ohio vital statistics.

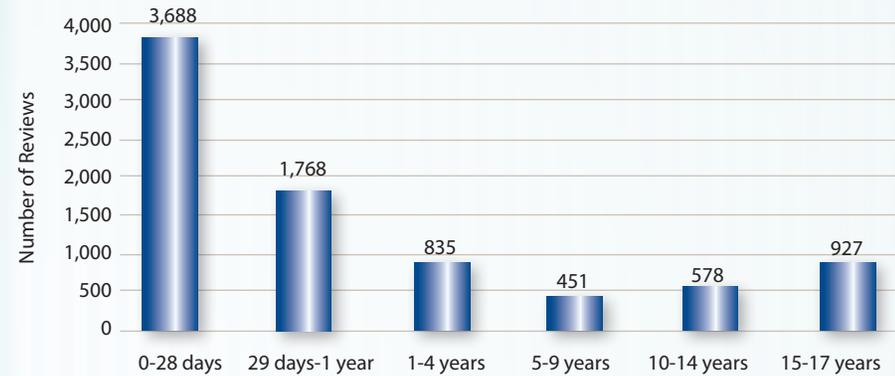
- ◀ Sixty-six percent (5,456) of the reviews were for children less than 1 year of age.
- ◀ There were greater percentages of reviews among boys (58 percent) and among black children (33 percent) relative to their representation in the general Ohio population (51 percent for boys and 17 percent for black children, per U.S. Census data).<sup>5</sup>
- ◀ Five percent (381) of all reviews were for children of Hispanic ethnicity.

### Reviews of 2006-2010 Deaths by Race, N= 8,247

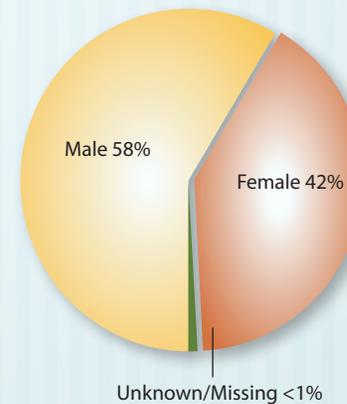


\* 173 cases with multiple races were assigned to the minority race.

### Reviews of 2006-2010 Deaths by Age, N= 8,247



### Reviews of 2006-2010 Deaths by Gender, N= 8,247

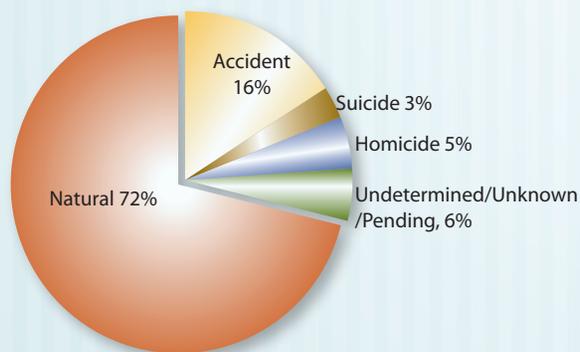


### Reviews by Manner of Death

For the five-year period 2006-2010, the 8,247 reviews were classified as follows:

- ◀ Seventy-two percent (5,912) were natural deaths.
- ◀ Sixteen percent (1,284) were accidents.
- ◀ Five percent (367) were homicides.
- ◀ Three percent (220) were suicides.
- ◀ Six percent (464) were of an undetermined or unknown manner.

Reviews of 2006-2010 Deaths by Manner, N= 8,247

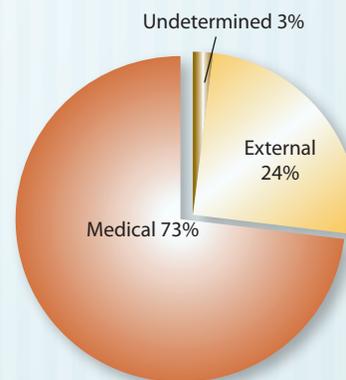


### Reviews by Cause of Death

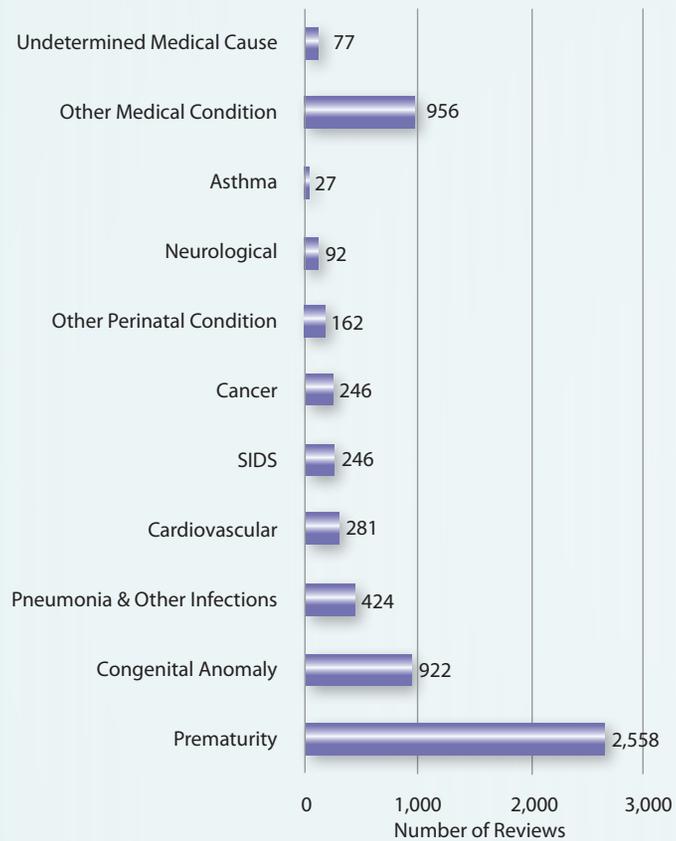
The CFR case report tool and data system implemented in 2005 classify causes of death by medical or external causes. Medical causes are further specified by particular disease entities. External causes are further specified by the nature of the injury. For the five-year period 2005-2009, the 8,247 reviews were classified as follows:

- ◀ Seventy-three percent (5,991) were due to medical causes.
- ◀ Twenty-four percent (1,988) were due to external causes.
- ◀ For three percent (268) of the cases, the cause of death could not be determined as either medical or external.

Reviews of 2006-2010 Deaths by Cause, N= 8,247



### Reviews of 2006-2010 Deaths from Medical Causes, N= 5,991



### Reviews of 2006-2010 Deaths from External Causes, N= 1,988



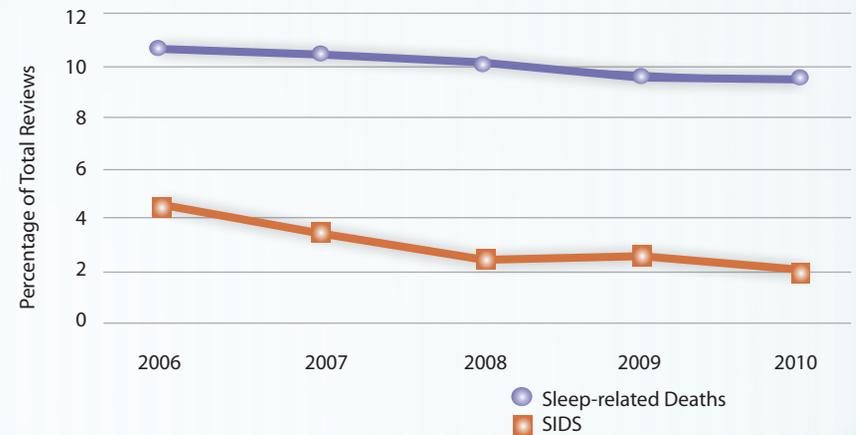
See Appendix VII for additional review information regarding demographics for 2006-2010 deaths.

## Trends Over Five Years

For the five-year period 2006-2010, the proportional distribution of reviews across many factors, such as manner of death, age, race, gender and preventability, has changed very little.

- ◀ Seventy-two percent (5,912) of the reviews were natural manner of death. The percentage changed little over the period, from a high of 73 percent in 2007 to a low of 70 percent in 2008.
- ◀ Sixty-six percent (5,456) of the reviews were for infants less than 1 year old. The percentage has increased slightly each year, from 65 percent in 2006 to 68 percent in 2010. The increase is likely due to improved processes to identify and review these deaths.
- ◀ Fifty-eight percent (4,770) of the reviews were for boys. The percentage changed little over the period, from a high of 59 percent in 2006 and 2007 to a low of 56 percent in 2010.
- ◀ Thirty-three percent (2,714) of the reviews were for black children. The percentage has changed little over the period, from 33 percent in 2006 to 35 percent in 2008 and 31 percent in 2010.
- ◀ Twenty-three percent of the deaths reviewed were deemed probably preventable. The percentage changed little over the period, from a high of 24 percent in 2006 and 2008 to a low of 22 percent in 2007, 2009 and 2010.
- ◀ Reviews for sleep-related infant deaths account for 10 percent (830) of all reviews. The percentage was 11 in 2006 and remained at 10 for the rest of the five-year period.

### Sleep-Related Deaths and SIDS, 2006-2010



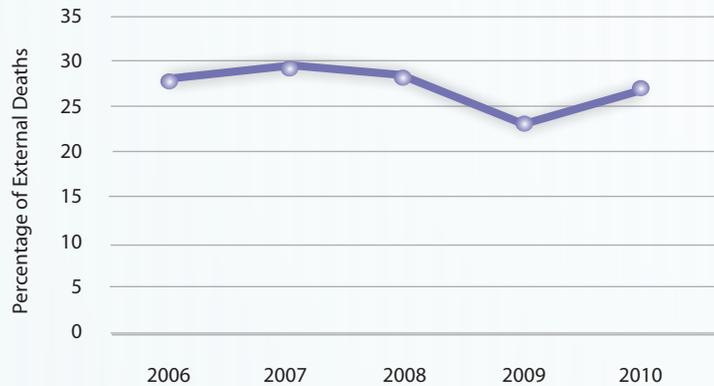
Over the five-year period, changes were noted in the percentage of reviews for some groups of death, particularly vehicular injuries and asphyxia.

- ◀ Seven percent (533) of all reviews were due to vehicular crashes. This is 27 percent of the 1,988 reviews for deaths from external causes. The percentage of deaths from external causes due to vehicular crashes has decreased from 28 percent in 2006 to 23 percent in 2009, before increasing to 26 percent in 2010. The overall five year trend is a decrease in the percentage of deaths due to vehicular crashes. White boys ages 15 – 17 years accounted for 30 percent (158) of all vehicular deaths.

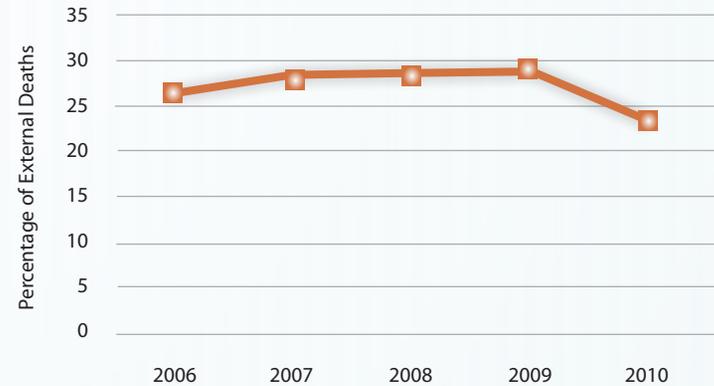
- Seven percent (537) of all reviews were due to asphyxia. This is 27 percent of the 1,988 reviews for deaths from external causes. The percentage of deaths from external causes due to asphyxia increased from 26 percent in 2006 to 29 percent in 2009, before decreasing to 23 percent in 2010. Each year, the largest numbers of asphyxia deaths are suffocation deaths to infants less than 1 year old. Forty-eight percent (260) of the asphyxia deaths were sleep-related infant deaths.

The comprehensive nature of the case report tool and the functionality of the data system have allowed more complete analysis for all groups of deaths. The following sections of this report offer in-depth information about reviews of deaths to Hispanic children, poisoning deaths, deaths by special circumstances, such as suicides, homicides and child abuse deaths, and by age group. Each section contains detailed data regarding the circumstances and factors related to child deaths.

**Reviews of Vehicular Deaths, 2006-2010**



**Reviews of Asphyxia Deaths, 2006-2010**



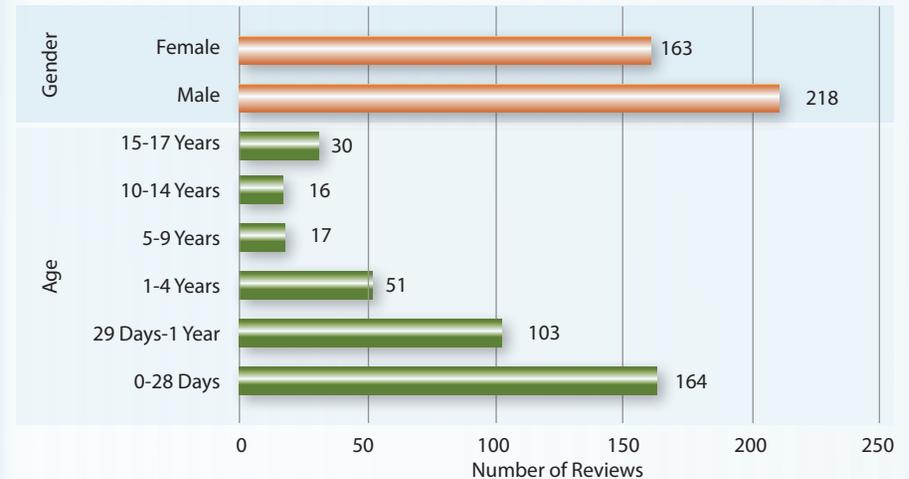
## Deaths to Hispanic Children, All Ages

The CFR case report tool and data system record Hispanic ethnicity as a variable separate from race. A child of any race may be of Hispanic ethnicity.

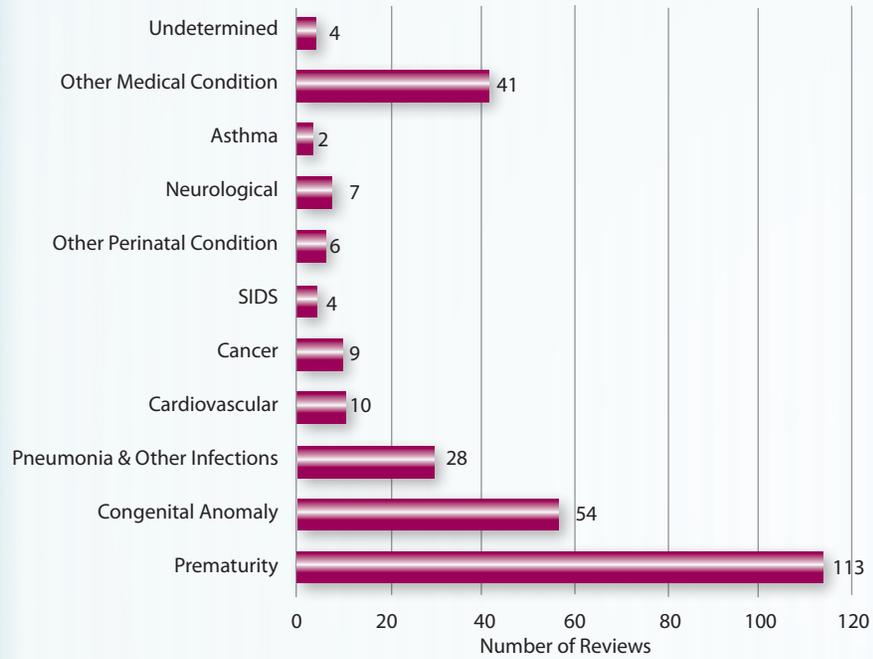
For the five-year period 2006-2010, 381 of the 8,247 total reviews were for children of Hispanic ethnicity. During the five-year period, the population of Hispanic children living in Ohio increased from 3 percent of the total child population in 2006 to 5 percent in 2010.<sup>6</sup> The increase is reflected in the percentage of all reviews for Hispanic children which increased from 4 percent in 2006 to 5 percent in 2010.

- ◀ Seventy percent (267) of the reviews for Hispanic children were for infants.
- ◀ Prematurity and congenital anomalies were the leading medical causes of death, accounting for 44 percent (167) of the reviews for Hispanic children.
- ◀ The leading external cause of death was vehicular crashes (20), followed by asphyxia (19) and weapons (18).
- ◀ Fifteen percent (41) of the reviews were for infant sleep-related deaths.

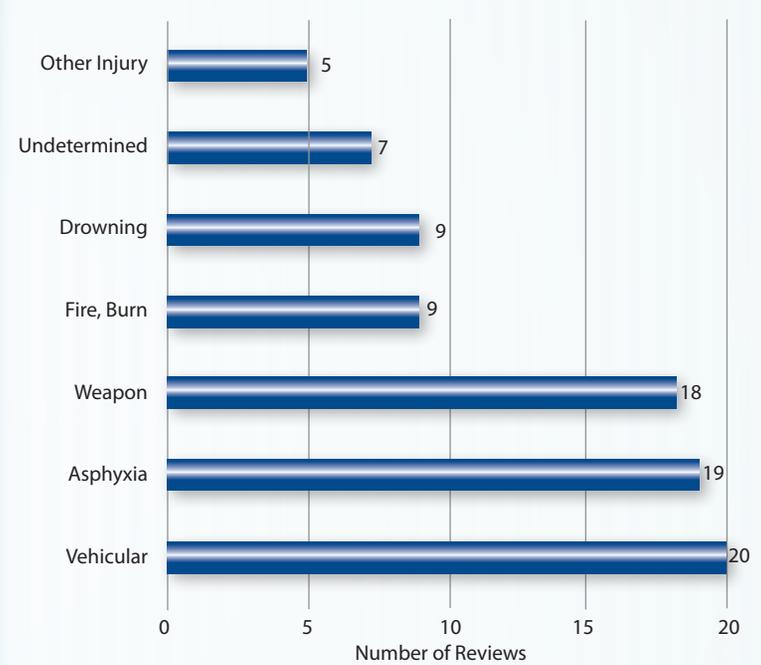
**Reviews of Deaths to Hispanic Children by Age and Gender  
2006-2010, N=357**



**Reviews of Deaths to Hispanic Children  
by Medical Causes 2006-2010, N=278**



**Reviews of Deaths to Hispanic Children  
by External Causes 2006-2010, N=87**

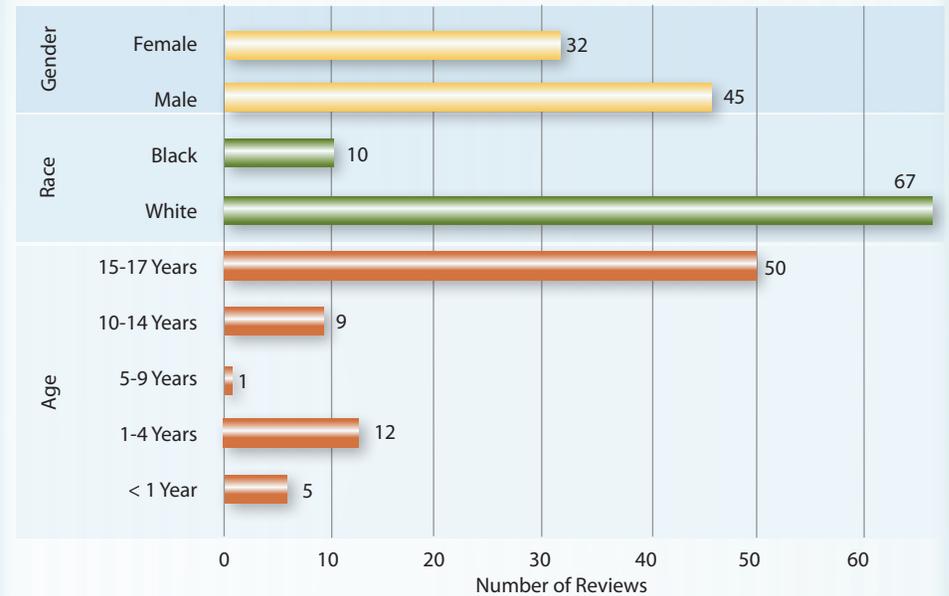


## Poisoning Deaths, All Ages

Combining data from five years allows more analysis for deaths due to poison, where in-depth analysis is limited by small numbers in a single year.

- ◀ Local CFR boards reviewed 77 poisoning deaths for 2006-2010. These deaths represent four percent of the 1,988 deaths from external causes for the period. Seventy-one percent (55) of the deaths were of accidental manner. Twelve percent (9) were suicides.
- ▶ Sixty-four percent (50) of the deaths occurred to 15 to 17 year olds.
  - ☺ The poison agents for this age group included prescription and over-the-counter medications, methadone, street drugs, alcohol and carbon monoxide.
- ▶ Twenty-three percent (18) of the poisoning deaths occurred to children younger than 10 years.
  - ☺ The poison agents for this age group included prescription and over-the-counter medications, methadone, and street drugs. None were poisoned by household cleaners or plants.

Reviews of Poison Deaths, 2006-2010, N=77



## Prescription Drug Abuse, Misuse and Overdose in Ohio

From 1999 to 2010, Ohio's death rate due to unintentional drug poisonings increased 372 percent, and the increase in deaths has been driven largely by prescription drug overdoses. In an effort to curb prescription drug abuse and diversion in Ohio, House Bill 93 was passed unanimously in the Ohio legislature and signed into law by Governor John R. Kasich in May, 2011. This bill provides the state medical and pharmacy boards and law enforcement agencies with additional tools to shut down pill mills, and investigate and prosecute those providers that are illegally and unethically prescribing and dispensing medication. Since the implementation of HB 93, Ohio law enforcement has been able to shut down more than a dozen pill mills operating in Scioto County alone.

The Ohio Department of Alcohol and Drug Addiction Services, the Ohio Attorney General's Office and ODH are actively engaged in addressing this problem through funding community coalitions, promoting public awareness campaigns, implementing drug disposal events, funding prevention programs in schools, colleges and work sites, and revising and expanding criminal justice and treatment programs to respond appropriately to increasing needs related to prescription drug abuse.

Ohio is making great progress in its efforts to curb prescription drug abuse, misuse and overdose. Through these endeavors, the state hopes to promote the health and safety of parents, which will ultimately promote the well-being of Ohio's children. For additional information and resources about this topic and details on program activities are available on the ODH Violence and Injury Prevention Program Drug Overdose website at: <http://www.healthyohioprogram.org/vipp/drug/dpoison.aspx>.



## Homicide, All Ages

### Background

The CFR case report tool and data system capture information about homicide as a manner of death and as an act of commission, regardless of the cause of death. Because homicide has unique risk factors and prevention strategies, homicide reviews from all causes of death have been combined for further analysis as a group.

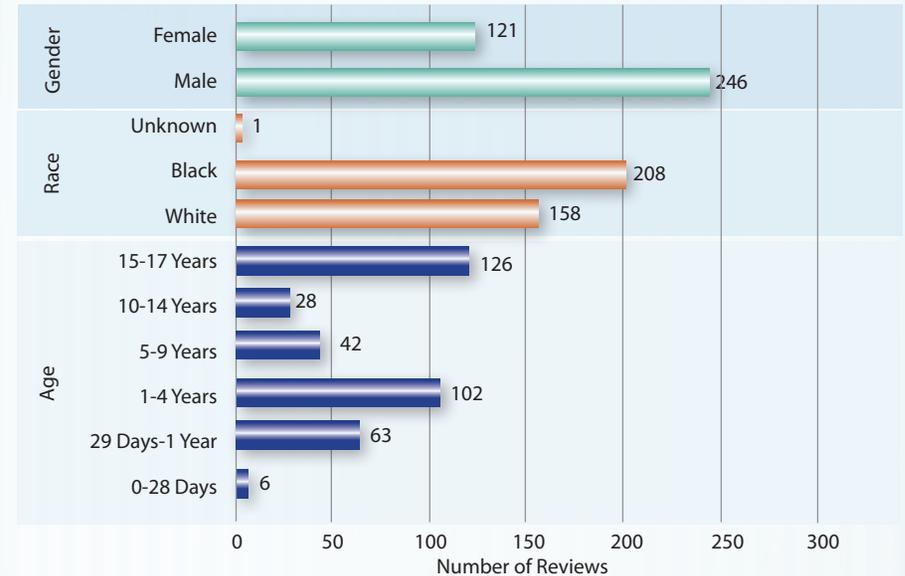
According to the National Center for Injury Prevention and Control, in 2009 homicide was the third-leading cause of death for young people ages 10 to 17 years and accounted for 12 percent of the deaths in this age group. Homicide was the leading manner of death for black children ages 10 to 17 years, accounting for 27 percent.<sup>7</sup>

### CFR Findings

For the five-year period 2006-2010, local CFR boards reviewed 367 deaths to children resulting from homicide. Homicides represent five percent of the total reviews and fourteen percent of all reviews for children ages 15 to 17 years. The percentage of all reviews due to homicide was 4 percent in 2008 and 2009, and 5 percent in 2006, 2007 and 2010.

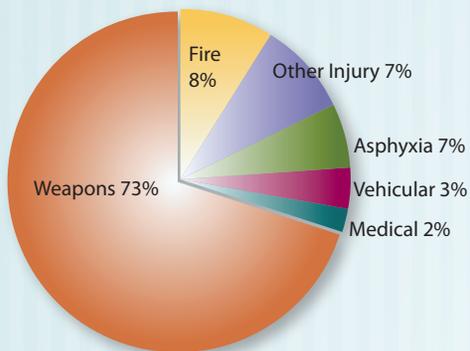
- ◀ Homicide deaths to boys (67 percent) were disproportionately higher than their representation in the general population (51 percent).

Reviews of Homicides, 2006-2010, N=367

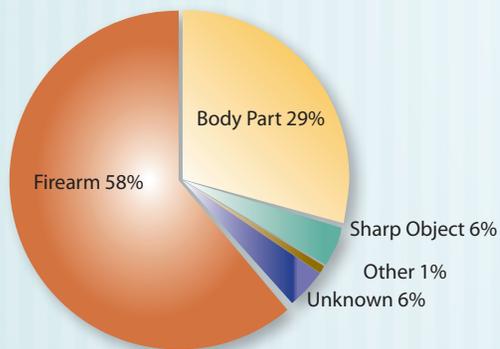


- ◀ The proportion of homicide deaths to black children (57 percent) was more than 3 times their representation in the general population (17 percent).
- ◀ Of the 175 deaths from all causes to black boys ages 15 to 17 years, 53 percent (92) were homicides, while only 3 percent (14) of the 451 deaths from all causes to white boys ages 15 to 17 years were homicide.

### Homicides by Cause of Death, 2006-2010, N= 367



### Homicides by Weapon Type, 2006-2010, N= 267



For a better understanding of the factors related to homicides, the 367 reviews were divided by age: 213 reviews for children 0 to 9 years old, and 154 reviews for children 10 to 17 years old.

- ◀ Seventy-three percent (267) of homicide deaths were caused by a weapon, including body parts.
  - ▶ Eighty-one percent (125) of the homicides to children 10 to 17 years old involved firearms as the weapon. Fifteen percent (31) of the homicides to children 0 to 9 years old involved firearms.
  - ▶ Thirty-six percent (77) of the homicides to children 0 to 9 years old involved the use of body parts as weapons.
  
- ◀ The perpetrator was more often a family member for children less than 10.
  - ▶ For children less than 10 years old, the perpetrator was a parent, stepparent, parent’s partner or other relative in 74 percent (157) of reviews.
  - ▶ For children ages 10 to 17, the most frequently reported perpetrator was an acquaintance or friend (33 percent). There were 12 children ages 10 to 17 killed by a gang member (8 percent).
  
- ◀ In 49 percent (180) of the homicide reviews, the place of incident was the child’s home.
  - ▶ For children less than 10 years old, the place of incident was the child’s home in 74 percent of reviews.
  - ▶ For children ages 10 to 17 years, the commonly reported places of incident were roadways (19 percent), sidewalks (18 percent), child’s home (23 percent), and friend’s home (23 percent).

### Reviews of Homicides by Perpetrator, 2006-2010, N=367

Person Causing Death	#	%
Biological Parent	112	31
Stepparent	6	<2
Adoptive/Foster Parent	3	<1
Parent's Partner	43	12
Other Relative	24	7
Acquaintance	44	12
Friend/Boyfriend/Girlfriend	26	7
Gang Member	12	4
Stranger	31	9
Unknown	42	12
Other	13	3
Missing	11	
<b>Total</b>	<b>367</b>	<b>100</b>

Percents may not total 100 due to rounding.

### Reviews of Homicides by Place of Incident, 2006-2010, N=367

Place of Incident	#	%
Home	180	46
Road	33	9
Friend's Home	34	10
Relative's Home	19	8
Sidewalk/Driveway/Parking Lot	46	11
Other	38	12
Unknown	17	4
Missing	0	
<b>Total</b>	<b>367</b>	<b>100</b>

Percents may not total 100 due to rounding.

## Suicide, All Ages

### Background

Suicide is death caused by self-directed injurious behavior with intent to die.<sup>8</sup> The CFR case report tool and data system capture information about suicide as a manner of death and as an act of commission, regardless of the cause of death. Because suicide has unique risk factors and prevention strategies, suicide deaths from all causes have been combined for further analysis.

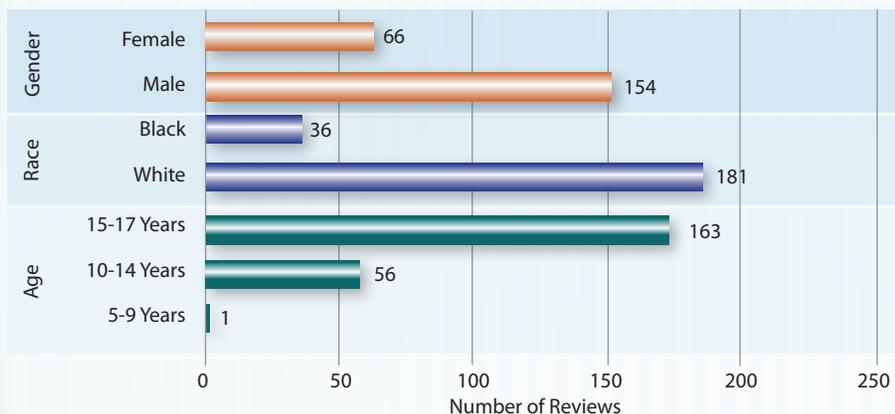
According to the National Center for Injury Prevention and Control, suicide accounted for 13 percent of the deaths for young people ages 10 to 17 years nationally in 2009.<sup>9</sup>

### CFR Findings

For the five-year period 2006-2010, local CFR boards reviewed 220 deaths to children from suicide. These represent three percent of the total 8,247 reviews and 15 percent of all reviews for children ages 10-17. The largest number of suicides occurred in 2008 (58) and the fewest occurred in 2010 (28).

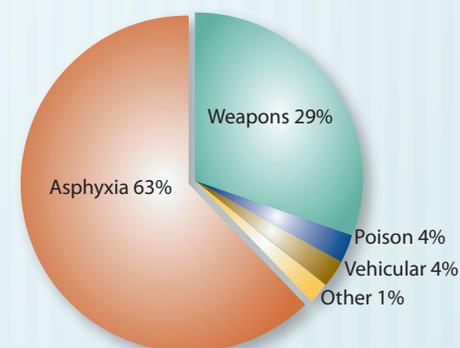
- ◀ Suicide deaths were disproportionately higher among boys (82 percent) than their representation in the general population (51 percent).
- ◀ Seventy-four percent (163) of the suicide deaths reviewed were to children ages 15 to 17.
- ◀ Sixty-three percent (138) of the suicide deaths were caused by asphyxiation and 29 percent (63) were caused by a weapon.

**Reviews of Suicides, 2006-2010, N=220**



- ◀ The most frequently indicated factors that might have contributed to the child's despondency included family problems, such as divorce and arguments with parents; arguments and break-ups with friends; school issues including failure; drug and alcohol use; victimization by bullying; and other personal crises.
- ◀ Twenty percent (44) of reviews for suicide deaths indicated the child had a history of child abuse or neglect. Fourteen had an open child protective services case at the time of the incident.
- ◀ Twenty-eight percent (62) of the suicide victims were receiving mental health services at the time of the incident. Nineteen percent (42) had been prescribed medications for mental health conditions.

**Suicides by Cause of Death, 2006-2010 N=220**



*Percentages do not total to 100 due to rounding.*

## Child Abuse and Neglect, All Ages

### Background

Child abuse and neglect is any act or failure to act on the part of a parent or caretaker that results in death, serious physical or emotional harm, sexual abuse or exploitation; or that presents an imminent risk of serious harm. Physical abuse includes punching, beating, shaking, kicking, biting, burning or otherwise harming a child and often is the result of excessive discipline or physical punishment that is inappropriate for the child's age. Head injuries and internal abdominal injuries are the most frequent causes of abuse fatalities. Neglect is the failure of parents or caregivers to provide for the basic needs of their children, including food, clothing, shelter, supervision and medical care. Deaths from neglect are attributed to malnutrition, failure to thrive, infections and accidents resulting from unsafe environments and lack of supervision.

Some deaths from child abuse and neglect are the result of long-term patterns of maltreatment, while many other deaths result from a single incident. According to Prevent Child Abuse America, there are several factors that put parents at greater risk of abusing a child: social isolation, difficulty dealing with anger and stress, financial hardship, mental health issues, apparent disinterest in caring for the health and safety of their child and alcohol or drug abuse.<sup>10</sup>

Many child abuse and neglect deaths are coded on the official death certificate as other causes of death, particularly unintentional injuries or natural deaths. In a study of 51 deaths identified as child abuse and neglect by local Ohio Child Fatality Review (CFR) boards in 2003 and 2004, 31 different causes

of death were recorded on the death certificates. The causes included both medical and external injuries, both intentional and unintentional.<sup>11</sup>

Best estimates are that any single source of child abuse fatality data, such as death certificates, exposes just the tip of the iceberg. The interagency, multidisciplinary approach of the CFR process may be the best way to recognize and assess the number and the circumstances of child maltreatment fatalities. Even the CFR process is likely to under count child abuse fatalities due to delays in reviews caused by lengthy investigation and prosecution procedures.

The CFR case report tool and data system capture information about child abuse and neglect deaths as acts of omission or commission, regardless of the cause of death. The tool collects details about the circumstances and persons responsible for the death.

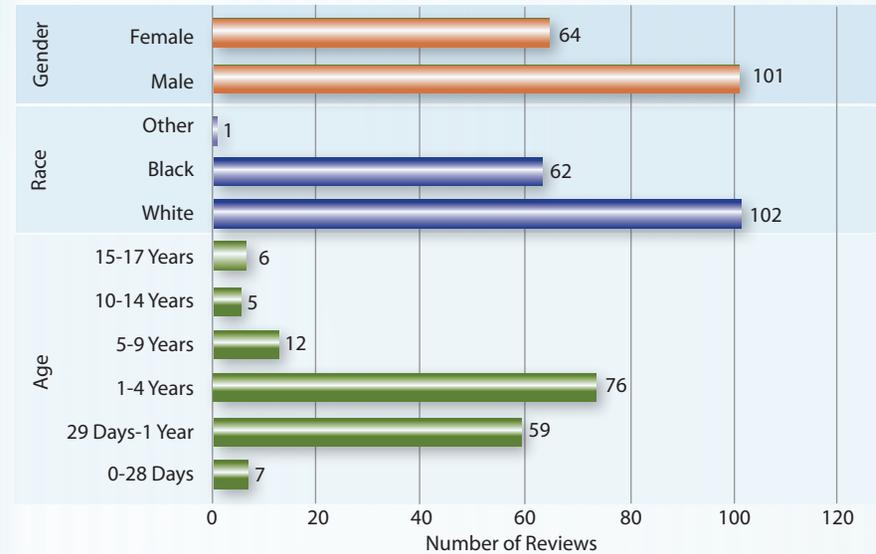
### CFR Findings

For the five-year period 2006-2010, local CFR boards reviewed 165 deaths from child abuse and neglect. These represent two percent of all 8,247 deaths reviewed. The percentage of reviews of child abuse and neglect deaths has not changed during the five-year period.

- ◀ Seventy-four percent (122) of the 165 reviews indicated that physical abuse caused or contributed to the death, while 36 percent (49) reviews indicated that neglect caused or contributed to the death. Six reviews indicated both abuse and neglect caused or contributed to the death.

- ◀ Eighty-six percent (142) of child abuse and neglect deaths occurred among children younger than 5 years old.
- ◀ A greater percentage of child abuse and neglect deaths occurred to black children (38 percent) relative to their representation in the general population (17 percent).
- ◀ The 165 deaths identified as child abuse and neglect were the result of several kinds of injuries.
  - ▶ Fifty-one percent (84) were the result of weapons including use of a body part as a weapon.
  - ▶ Other causes of death included asphyxiation, poison, drowning, fire/burn and medical causes.
- ◀ The majority of the 165 child abuse and neglect deaths reviewed were violent deaths, with 122 resulting from physical abuse, including 35 indicating the child had been shaken.

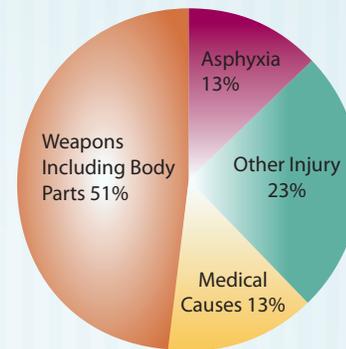
**Reviews of Child Abuse and Neglect Deaths  
2006-2010, N=165**



- ◀ Thirty-eight percent (62) of the 165 child abuse and neglect deaths reviewed indicated the child had a prior history of child abuse and neglect, and 22 percent (37) had an open child protective services case at the time of the incident.
- ◀ Fifty-nine percent (97) of the reviews indicated the person causing the death was a biological parent. The parent's partner was cited in 21 percent (34) of the reviews.
- ◀ For the 148 reviews where the type of residence was known, 92 percent (136) of the children were living in a parental home. Only seven were in official placement in foster homes, relative foster homes or licensed group homes.

For all 8,247 deaths reviewed from all causes for the five-year period 2006-2010, 5 percent (401) indicated a prior history of child abuse or neglect, and 4 percent (315) had an open case with child protective services at the time of the death.

### Child Abuse and Neglect Deaths by Cause of Death, 2006-2010 N=165



### Reviews of Child Abuse and Neglect Deaths by Person Causing Death, 2006-2010, N=165

Person	#	%
Biological Parent	97	59
Stepparent/Foster Parent	6	4
Parent's Partner	34	21
Other Relative	5	3
Friend/Acquaintance	6	4
Unknown/Missing	14	9
<b>Total</b>	<b>165</b>	<b>100</b>

*Percents may not total 100 due to rounding.*