2012

Hamilton County Child Fatality Review Annual Report

HAMILTON COUNTY PUBLIC HEALTH

PREVENT. PROMOTE. PROTECT.

December, 2014

Dedication

Every death of a child in Hamilton County matters. This report is dedicated to the children, and their families and friends and communities whose lives were changed forever.

Acknowledgements

The Hamilton County Child Fatality Review 2012 Annual Report was made possible through the collaboration, and the commitment of the numerous individuals who are members of the Child Fatality Review Board in Hamilton County. This report mirrors the endeavors of the individuals who strive to enhance the lives of children living in Hamilton County.

Dear Friends of Hamilton County Children:

It's common knowledge that child deaths are an important indicator of the general health of a community. After all, children represent the future of our society. There are few health outcomes more tragic than the loss of a child. Most tragic is that a great number of these deaths occur from preventable causes.

In 2000, the Ohio General Assembly developed a state-wide Child Fatality Review (CFR) program. Ohio's program mandated that CFR boards be implemented in each Ohio county to review the deaths of children under 18-years-of-age.

Hamilton County's infant mortality rates are higher than national averages. While this report covers child deaths to age 18, the vast majority of deaths in the County occur in children under one-year-of-age.

The following report represents a "deep dive" into the causes of child fatalities throughout the County. While the report focuses on data from 2012, it also includes a summary of child deaths from 2007-2011.

Preventing child death is a complicated endeavor. Reducing incidences requires collaboration between many stakeholders including individuals, healthcare systems, physicians, clinics and other support sources affecting social determinants of health.

It is my sincere hope that you spend some time digesting the information in this report. Information is power and it will require the collective power of many to bring Hamilton County rates of child mortality to levels representative of the quality of our community.

Sincerely,

Tim Ingram

Health Commissioner

TABLE OF CONTENTS

Executive Summary
Key Findings
Limitations

Executive Summary

The death of a child is the most profound loss a parent can experience. In order to reduce the number of these tragic losses, we must first understand why and how the children in our community are dying.

The Hamilton County Child Fatality Review Annual Report displays information from the reviews of the child deaths that occurred in 2012 in Hamilton County. The child deaths that occurred in Hamilton County in 2012 are reviewed in this report by demographic characteristics, manner of death, and cause of death. This report also includes a summary of the child deaths that occurred in Hamilton County for a five year period, 2007 to 2011. The child deaths during this five year period are also reviewed by demographic characteristics, manner of deaths, and cause of death, in addition to age groups.

The Hamilton County Child Fatality Review Team (CFRT), which now operates under the auspices of Hamilton County Public Health, officially began reviewing cases on January 1, 1996. The following report represents the fifteenth full year of the child death reviews by the Hamilton County team.

The purpose of the CFRT is to prevent child deaths by examining the cause of deaths in the aggregate, making policy recommendations from the review of child deaths in Hamilton County and increasing coordination and communication between agencies and systems.

The main goals of the CFRT are:

- To compile uniform statistics on all deaths among children aged 17 and under in Hamilton County.
- To accurately identify and document the causes of death of all Hamilton County children.
- To identify trends among child deaths in Hamilton County.
- To identify causes of death that may be preventable, and make subsequent recommendations about policy changes in public health and public safety for Hamilton County.
- To develop uniform protocols and procedures for investigating child deaths.

This report is intended to describe the trends and patterns found across the child deaths and to make meaningful recommendations that improve the outcomes for all children in Hamilton County. It is hoped that the recommendations in this report will result in continued collaboration across the various organizations whose focus is on improving the health of children in Hamilton County. It is through this collaborative effort that we can strive to protect the health of the children living in Hamilton County.

Key Findings

- In 2012 Hamilton County lost 132 children.
- Infant deaths accounted for 76 percent of child deaths in 2012 in Hamilton County.
- Male children had a higher percentage of child deaths than female children in Hamilton County (56 and 44, respectively).
- Black children in Hamilton County are disproportionately affected, and experienced more child deaths than white children.
- 98 percent of all child deaths in 2012 in Hamilton County were non-Hispanic children.
- Prematurity was the leading medical condition that resulted in the death of a child in Hamilton County in 2012.
- In 2012, 17 child deaths were sleep-related, in which the sleep environment of the child played a role in the child's death.
- From 2007-2011, Hamilton County lost 802 children.
- Infant deaths accounted for 76 percent of child deaths from 2007-2011 in Hamilton County.
- 102 children died from sleep-related deaths from 2007-2011 in Hamilton County.
- There were 41 child homicides in Hamilton County between 2007-2011, which are all considered to have been preventable.
- Since 2009, child suicide deaths in Hamilton County decreased by 25 percent.
- Between 2007-2011 Hamilton County had an Infant Mortality rate of 10.7 per 1,000 live births.
- The leading cause of death for children 1-14 years of age was from a medical condition.
- The leading cause of death for children 15-17 years of age was from external injury (e.g. motor vehicle accidents, asphyxia, injuries from weapon).

Limitations

The Child Fatality Review (CFR) data system collects information surrounding the death of the child. However, not all information is available during the review of the child death and pieces of information can be missing or unknown. Missing data is identified in the data tables beginning on page III of the Appendix. The goal of CFR is to identify the preventability of the child deaths and make meaningful recommendations. From 2007-2011, 104 child deaths did not indicate whether or not the death was preventable.

Note: Some percentages may not equal 100 percent due to rounding.

Reviews for 2012 Child Deaths

2012 Child Death Review

In 2012, Hamilton County witnessed 132 of its child residents die from various causes, many of which could have been prevented. This equates to a child fatality rate for Hamilton County of approximately 7.05 child deaths per 10,000 children. Each of these child deaths were reviewed by the Hamilton County CFR Board to identify factors surrounding the death of a child that could have been changed to prevent the loss of a child. Child deaths in the aggregate are reviewed by demographic characteristics to identify populations that are disproportionally affected by the death of a child.

The CFR data system classifies the child's death into one of six age groups:

- 0-28 Days (infants less than 28 days old)
- 28 Days—1 Year
- 1-4 Years
- 5-9 Years
- 10-14 Years
- 15-17 Years

The percentage of child deaths for 2012 varies substantially when classified into one of the six age group categories. Of the 132 child deaths in 2012, it was found that infants, defined as children less than 1 year of age, accounted for a total of 76 percent of the child deaths in Hamilton County. When infants' ages are further broken down into a specific range, infants who were less than 28 days old accounted for 55 percent of child deaths, while the remaining 21 percent were to infants who were between 28 days and 1 year of age. Children who were between the ages of 5-9 and 10-14 years of age accounted for smallest percentage of child deaths in 2012 (4 and 5 percent, respectively). Children who were in the mid-teenage years of 15-17 represented 8 percent of the child deaths, while the remaining 7 percent were younger children who were 1-4 years of age.

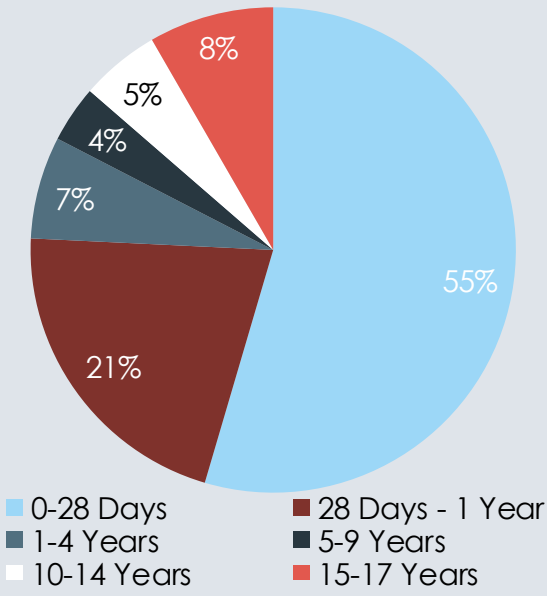
As the demographics of the child deaths are further reviewed, male children accounted for the majority of the child deaths. Fifty-six percent of child deaths were to male children, while female children accounted for 44 percent of deaths. Black children accounted for a higher percentage of the child deaths in 2012. Fifty-five percent of child deaths occurred to black children, while white children accounted for 42 percent of the deaths in 2012. The remaining three percent were children of other racial groups. The final demographic charac-

132

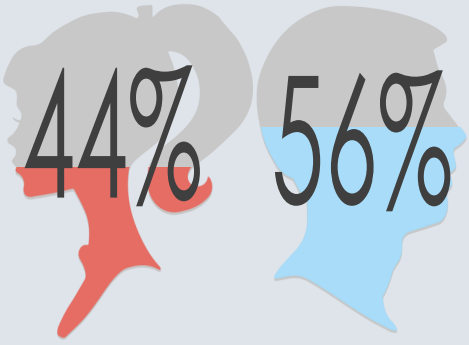
CHILD DEATHS IN HAMILTON COUNTY IN 2012

7.05 per 10,000

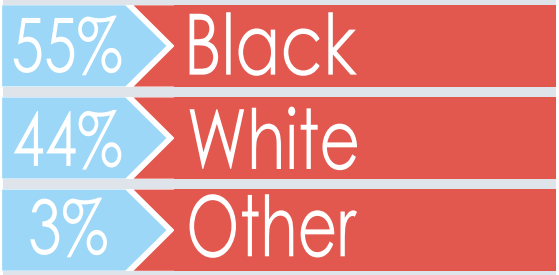
2012 CHILD FATALITY RATE, HAMILTON COUNTY



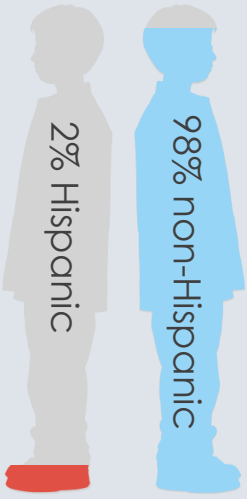
PERCENT OF CHILD DEATHS BY AGE, 2012



PERCENT OF CHILD DEATHS BY GENDER, 2012



PERCENT OF CHILD DEATHS BY RACE, 2012



PERCENT OF CHILD DEATHS BY ETHNICITY, 2012

teristic reviewed was ethnicity. Ethnicity is classified as being either Hispanic or non-Hispanic. An overwhelming majority of child deaths (98 percent) were children who were non-Hispanic, while Hispanic children represented the remaining 2 percent of child deaths in 2012.

Every death is assigned a manner of death and a cause of death. Manner and cause of death are different. The cause of death is the actual mechanism by which the death occurred. The manner of death is how the death of the child is classified based on the surrounding circumstances of the cause of death and how the cause was brought about. There are five categories in which the manner of death is classified as:

- Accident
- Homicide
- Suicide
- Natural
- Undetermined

For deaths that are reviewed by the CFR Board, the manner of death is reported as it is listed on the child's death certificate. In 2012, 75 percent of the child deaths that occurred in Hamilton County were deaths due to natural causes. Eleven percent of child deaths were undetermined. A death is classified as undetermined when the information surrounding the death, that was available at the time to authorities completing the investigation, was insufficient to determine the manner of death[1]. Child deaths that were classified as accidental deaths accounted for 8 percent of child deaths. Homicides of children in Hamilton County accounted for 5 percent of child deaths in 2012, while suicide deaths were the smallest percentage of child deaths (1 percent).

The cause of death, as opposed to manner, can be classified into one of four different categories:

- A medical condition
- External causes due to injury
- Undetermined if injury or medical condition
- Unknown

If a cause of death was due to a medical condition, the deaths is further classified by the specific medical condition or disease that contributed to the death of the child. If the death of a child was from external causes due to injury, the nature of the injury is further classified. Injury is defined as being "any unintentional or intentional damage to the body resulting from acute exposure to thermal, mechanical, electrical or chemical energy that exceeds a threshold of tolerance in the body or from the absence of such essentials as heat or

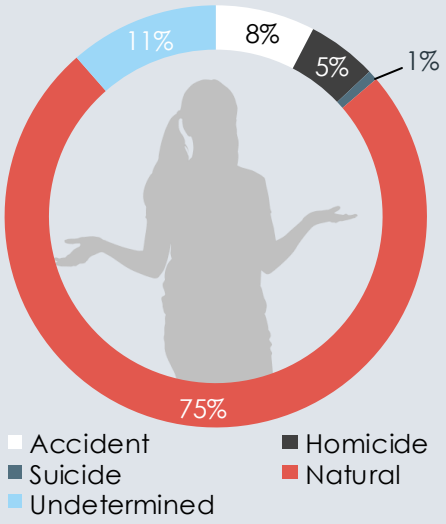
oxygen[2]." When the cause of death cannot be classified as a death from a medical condition or external causes, the death is classified as being undetermined if injury or medical condition caused the child's death. There are cases in which no information on the primary cause of death is available or known. In these cases the cause of death is deemed as unknown.

The major cause of death for children in Hamilton County was from a medical condition. Seventy-five percent of the children who died in 2012, died from a medical condition. Deaths from external causes due to an injury accounted for 14 percent of child deaths. Eleven percent of the child deaths that occurred were undetermined if the death was due to an injury or a medical condition. A cause of death that was deemed as unknown accounted for the smallest percentage of child deaths in 2012 (1 percent).

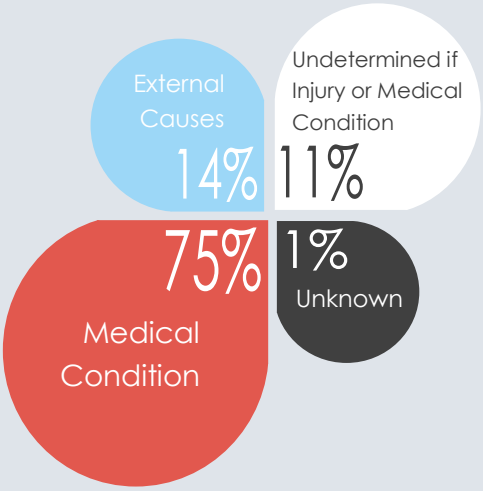
A cause of death is deemed as a medical condition when the death is the result of the natural progression of a disease, ailment, disorder or prematurity. The CFR data system lists 17 medical conditions that contributed to the death of the child:

- Asthma
- Cancer
- Cardiovascular
- Congenital Anomaly
- HIV/AIDS
- Influenza
- Low Birth Weight
- Malnutrition/Dehydration
- Neurological/Seizure Disorder
- Pneumonia
- Prematurity
- SIDS
- Other Infection
- Other Perinatal Condition
- Other medical Condition
- Undetermined Medical Cause
- Unknown

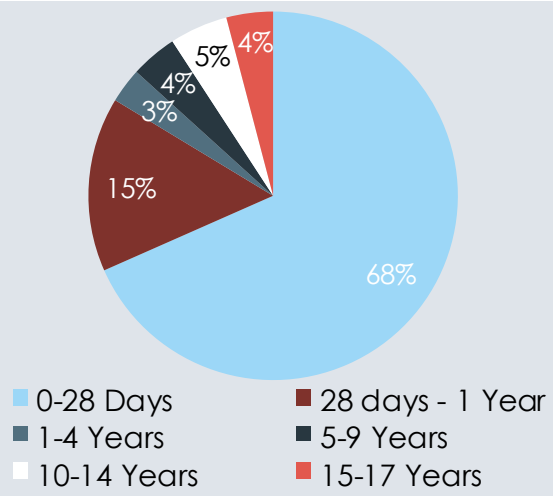
Many health conditions can result in the death of a child, and it is believed that many of the medical conditions cannot be considered to be preventable in the same way an accident or homicide is deemed preventable. However, there are some instances in which the illness, disorder or deaths may have been prevented. It is through early screening and detection, consistent and early prenatal care and counseling that may aid in the prevention of some medical



PERCENT OF CHILD DEATHS BY MANNER OF DEATH, 2012



PERCENT OF CHILD DEATHS BY CAUSE OF DEATH, 2012



PERCENT OF CHILD DEATHS DUE TO MEDICAL CONDITION BY AGE, 2012

Prematurity	63%
Congenital Anomaly	15%
Neurological/Seizure Disorder	5%
Other Medical Condition	4%
Cancer	4%
Other Perinatal Condition	3%
Pneumonia	2%
Cardiovascular	1%
Other Infection	1%
Unknown	1%

PERCENT OF CHILD DEATHS DUE TO MEDICAL CONDITION BY TYPE OF CONDITION, 2012

conditions[3]. Not all medical conditions can be prevented, however early and appropriate detection and treatment can aid in the prevention of the death of a child due to a medical condition.

The 2012 review of child deaths found that 98 of the 128 child deaths in Hamilton County were deaths due to a medical condition. Infants who were less than 28 days of age accounted for the majority, 68 percent of deaths due to a medical condition. Fifteen percent of the child deaths due to a medical condition were to infants who were between the ages of 28 days and 1 year of age. Children who were between the ages of 10-14 years of age accounted for 5 percent of deaths due to a medical condition. The remaining 11 percent of deaths were to children who were 1-4, 5-9 and 15-17 years of age (3, 4, and 4 percent, respectively). Fifty-seven percent of the deaths due to medical conditions were to male children. Female children accounted for the remaining 43 percent of child deaths. Black children comprised 52 percent of child deaths due to a medical condition. Forty-four percent of deaths were to white children, while the remaining 4 percent were to children of other racial groups.

Prematurity, congenital anomalies, and neurological/seizure disorders were the top three leading medical conditions that caused a child's death in 2012. Sixty-three percent of deaths from a medical condition were due to prematurity. Prematurity is the birth of a baby that is at least three weeks prior to the baby's due date (<37 weeks gestation), also known as preterm birth[4]. Congenital anomalies accounted for 15 percent of deaths. A congenital anomaly , also known as a birth defect, is a serious condition that changes the structure of one or more parts of the body and can affect almost any part of the body (e.g. heart, brain)[5]. Neurological/seizure disorders accounted for 5 percent of child deaths in 2012. Neurological/seizure disorder include disorders such as epilepsy and stroke.

While the majority of child deaths were due to a medical condition, Hamilton County still suffered a large loss of children due to external causes. The death of a child classified as a death from external causes, can be either intentional or unintentional. The CFR data system lists 12 external causes that contributed to the death of a child:

- Motor Vehicle or Other Transport
- Fire, Burn, or Electrocution
- Drowning
- Asphyxia
- Weapon, Including Body Part
- Animal Bite
- Fall or Crush
- Poisoning, Overdose or Acute Intoxication

- Exposure
- Undetermined
- Other
- Unknown

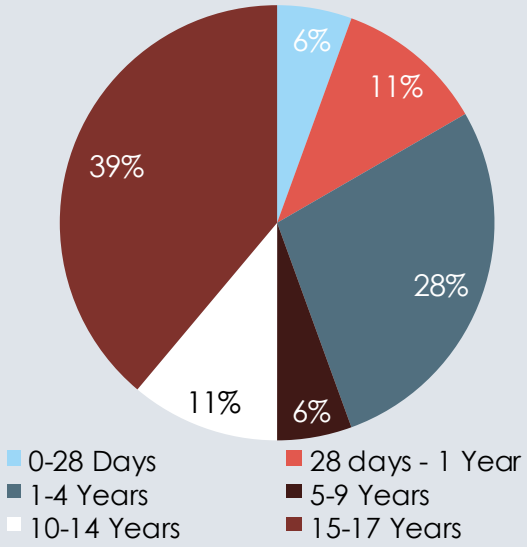
The 2012 review found that 18 of the 132 child deaths in Hamilton County were due to external causes. Unlike child deaths due to a medical condition, children who were in the mid-teenage years of 15-17 , accounted for 39 percent of child deaths due to external causes. Young children who were 1-4 years of age, comprised the second largest portion, 28 percent of deaths from external causes. Infants who were between the ages of 28 days and 1 year of age and children who were 10-14 years of age accounted for 11 percent each. Children who were 5-9 years of age and infants younger than 28 days each accounted for 6 percent of child deaths due to external causes.

As seen with children who died from a medical condition, 56 percent of child deaths from an external cause were male children, while female children accounted for 44 percent. Black children accounted for the majority of child deaths from external causes, comprising 56 percent of child deaths. White children accounted for the remaining 44 percent of deaths.

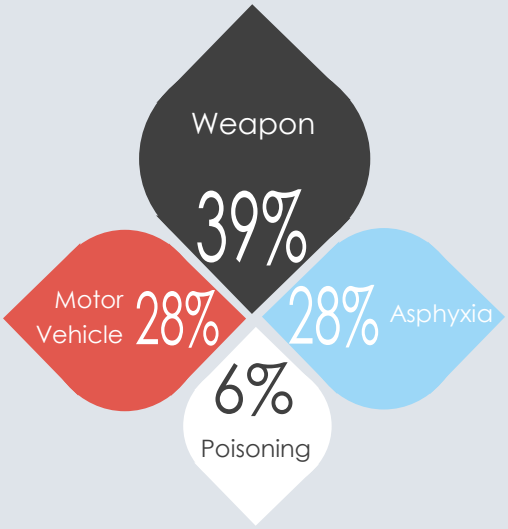
Injuries from a weapon (including an individual's body part), asphyxia, motor vehicle injuries, and poisoning, overdose or acute intoxication were the four external causes that led to a child's death in Hamilton County for 2012. Death that was a result of an injury sustained from a weapon, which includes body parts (e.g., foot or hand) accounted for 39 percent of the child deaths due to external causes. Injuries sustained due to motor vehicle and asphyxia each accounted for 28 percent of the cases reviewed. The remaining six percent of deaths were the result of a poisoning, overdose or acute intoxication.

While the Hamilton County Child Fatality Review board faces the problem of child deaths in Hamilton County from external causes and medical causes, the board also reviews a significant number of sleep-related deaths of children each year. The CFR data system captures details, regardless of the cause of death, when the death of a child is deemed as a sleep-related death.

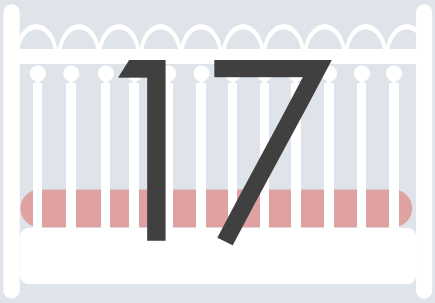
In 2012, 17 of the 132 child deaths were deemed as a sleep-related death. Seventy-one percent of sleep-related deaths occurred to infants who were between 28 days and 1 year of age. Infants who were less than 28 days of age accounted for 24 percent of sleep-related deaths. Children between 1-4 years of age accounted for the remaining 6 percent of sleep-related deaths in 2012. As the demographics of the sleep-related deaths are further reviewed, female children ac-



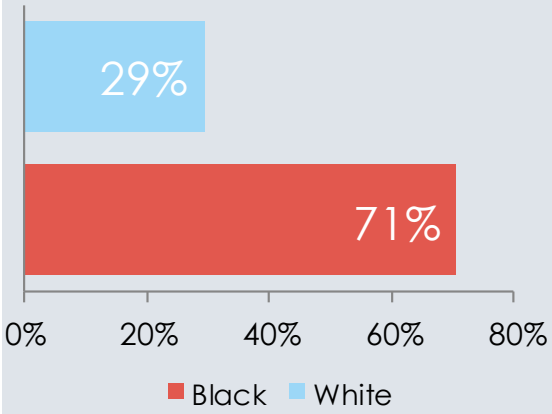
PERCENT OF CHILD DEATHS DUE TO EXTERNAL CAUSES BY AGE, 2012



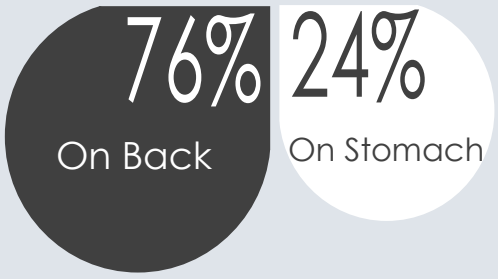
PERCENT OF CHILD DEATHS DUE TO EXTERNAL CAUSES BY CAUSE OF INJURY, 2012



NUMBER OF SLEEP-RELATED CHILD DEATHS, 2012



PERCENT OF SLEEP-RELATED CHILD DEATHS BY RACE, 2012



PERCENT OF SLEEP-RELATED CHILD DEATHS BY INFANT SLEEPING POSITION, 2012

count for 53 percent of the sleep-related deaths, while male children accounted for 47 percent. Black children, however, are disproportionally affected by sleep-related deaths. Black children accounted for an overwhelming 71 percent of the sleep-related deaths, while white children accounted for the remaining 29 percent.

The manner of death surrounding the sleep-related deaths was ruled as undetermined in the majority (88 percent) of child deaths. The remaining 12 percent of sleep-related child deaths were ruled as an accidental death. A cause of death deemed as undetermined if a medical condition or injury caused the death of a child accounted for 82 percent of sleep-related deaths. Twelve percent of sleep-related deaths were due to an external cause, while 6 percent were due to an unknown cause. The sleep-related deaths that were due to external causes were deemed as accidental suffocation.

The sleeping environment; sleeping position, and sleeping location of the child, and co-sleeping all contributed to an infant suffering from a sleep-related death. In seventy-six percent of the sleep-related deaths in 2012, the child was placed on his/her back to sleep. In twenty-four percent of the sleep-related deaths, the child was placed on his/her stomach to sleep. The most common sleeping location for a child who suffered from a sleep-related death was in an adult bed (35 percent). In 24 percent of sleep-related deaths the child was put to sleep on a couch. Crib and other locations accounted for 19 percent and 12 percent, respectively, of sleep-related deaths. In six percent of sleep-related deaths the child was sleeping in a bassinette, while the sleeping location remained unknown in 6 percent of sleep-related deaths. The majority of the time the child was co-sleeping when they experienced a sleep-related death. Co-sleeping is when a child shares the bed with either an adult, another child, or a pet. Sixty-five percent of the sleep-related deaths in 2012, the child was found to be co-sleeping, while 29 percent of deaths the child was not co-sleeping. In six percent of sleep-related deaths, it was unknown if the child was co-sleeping.

Death rates for children are widely recognized as a valuable measure of the wellbeing of child health in a community. The Hamilton County CFR works to reduce the number of child deaths in Hamilton County, and to improve the health and wellbeing of children living in Hamilton County. Each child death is reviewed to determine if the child death is considered to have been a preventable death. A child death is considered to be preventable if the circumstances that caused the death of the child could have been changed by either the parent, individual, or the community. Once the CFR Team reviews the death, it is classified as either "Yes, Probably Preventable," "No, Probably Not Pre-

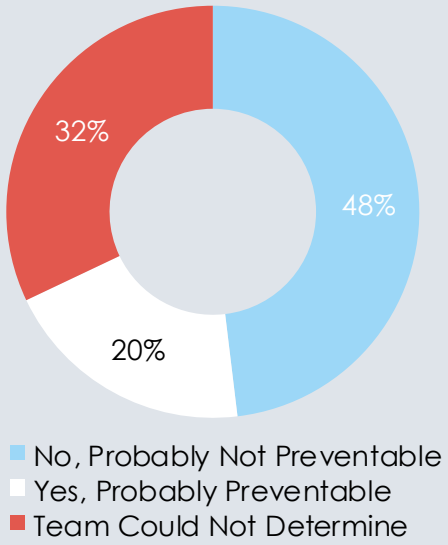
ventable" or "Team Could Not Determine." Often times a case may be deemed as not being able to have been prevented, or the circumstances surrounding the case couldn't have been determined as to whether the child death could have been prevented. These cases are nonetheless important, as the CFR is able to identify areas where there are gaps in care, and community factors that could influence the health outcomes of the children living within those communities. Recommendations for these types of cases are still given by the CFR Team as a way to work toward improving the health and wellness, and preventing the deaths of children in the future.

In 2012, the Hamilton County CFR Team deemed that 48 percent of the child deaths were probably not preventable. Thirty-two percent of the child deaths that occurred, the CFR Team could not determine, based on the circumstances surrounding the cases, if the death of the child could have been prevented. The remaining 20 percent of child deaths were deemed that the child's death could have been prevented by changing various circumstances that led to the death of the child.

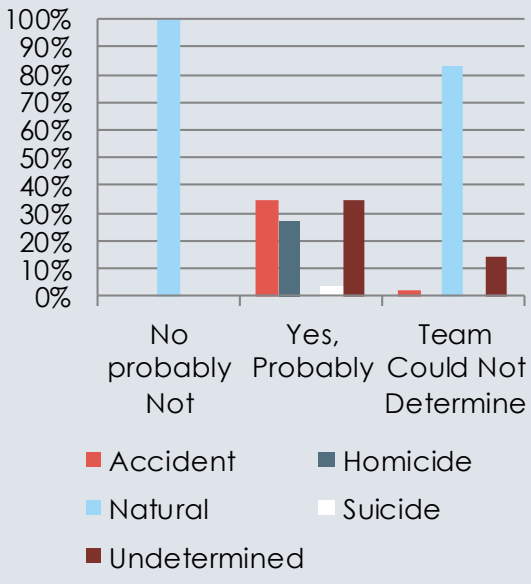
Key Recommendations

One of the main goals of the CFR Team is to make recommendations about policy changes in public health and public safety for Hamilton County. The recommendations that were made from the review of the child deaths in 2012 in Hamilton County are:

- Emphasis and continued education around safe sleep practices. Ensuring that hospitals are providing safe sleep education, and that safe sleep also applies to nap time. Emphasis on the ABCs of safe sleep:
  - **A**lone - the child should always sleep alone, never co-sleeping.
  - **B**ack - the child should always be placed on his/her back to sleep.
  - **C**rib - the child should sleep in a crib, even during nap time.
- Education for parents/guardians about being aware of the individuals who are watching over their children. For examples, parents should know the background of the individual (e.g., previous child abuse charges, history of neglect/abuse).
- Education about ensuring the safety of children. Emphasis on not allowing children to play in or near roadways. Education on practices of crossing the street at a crosswalk, and looking



PERCENT OF CHILD DEATHS BY PREVENTABILITY, 2012



CHILD DEATH PREVENTABILITY BY MANNER OF DEATH, 2012

both ways before crossing the street. Emphasis on children walking on sidewalks, not roadways.

- Education on domestic violence, not only provided to parents/guardians but to children also so they might be able to recognize the signs of domestic violence and how they might handle the situation. Ensuring that the hospitals complete domestic violence screenings.
- Provide resources to high risk individuals that incorporate information on positive decision making/behavior development. These resources should have a focus on drugs/alcohol use and weapon use along with mental health services.

Reviews for 2007-2011 Child Deaths

2007-2011 Child Death Review

To further understand the various factors that contribute to child death in Hamilton County, a five-year period (2007-2011) of data was analyzed. During these five years Hamilton County witnessed 802 of its children die from various causes, many of which could have been prevented. This means that during the 5 year period, Hamilton County had a child fatality rate of 8.11 child deaths per 10,000 children. The Hamilton County CFR Team reviewed each of these child deaths to identify the factors surrounding the child's deaths that could have been changed to prevent the tragic loss of a child. The child deaths that occurred during the 5 years are reviewed in the aggregate by demographic characteristics to identify the populations that are disproportionately affected by the death of a child.

The percentage of child deaths for 2007-2011, varies substantially when classified into one of the six age group categories. Of the 802 child deaths, it was found that infants accounted for a majority of child deaths in Hamilton County. Fifty-five percent of child deaths were to infants who were less than 28 days old. Infants who were between 28 days and 1 year of age accounted for 21 percent of child deaths between 2007-2011. Younger children, between 1-4 years of age, accounted for 7 percent of the child deaths in Hamilton County between 2007-2011. Children who were between the ages of 5-9 years of age accounted for the smallest percentage of the child deaths (4 percent). Older children, 10-14 and 15-17 years of age accounted for the remaining 14 percent of child deaths (6 and 8 percent respectively).

As the demographics of child deaths are further reviewed, male children accounted for a majority of the child deaths. Fifty-eight percent of child deaths were to male children, while female children accounted for 42 percent of deaths. Black children comprised a higher percentage of child deaths between 2007-2011. Fifty-six percent of child deaths occurred to black children, while white children accounted for 43 percent of deaths. The remaining one percent were to children of other racial groups. The final demographic characteristic reviewed was ethnicity. An overwhelming majority of child deaths, 96 percent, were to children who were non-Hispanic children. Hispanic children represented the remaining 4 percent of child deaths between 2007-2011.

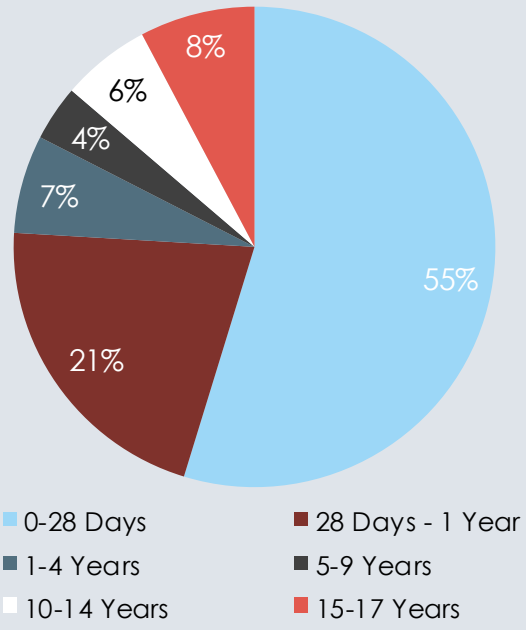
As with the 2012 child deaths, the child deaths that occurred from 2007-2011, were also assigned a manner of death and cause of death.

802

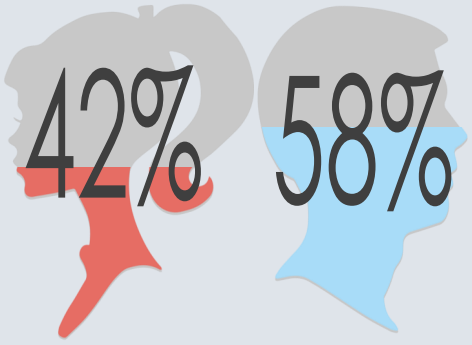
CHILD DEATHS IN HAMILTON COUNTY IN 2007-2011

8.11 per 10,000

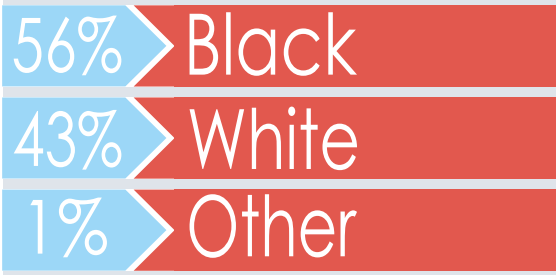
2007-2011 CHILD FATALITY RATE, HAMILTON COUNTY



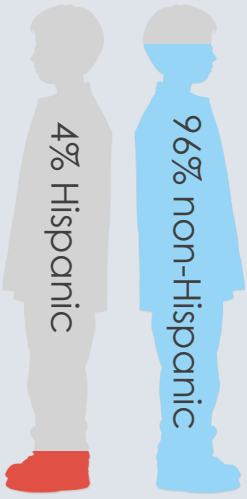
PERCENT OF CHILD DEATHS BY AGE, 2007-2011



PERCENT OF CHILD DEATHS BY GENDER, 2007-2011



PERCENT OF CHILD DEATHS BY RACE, 2007-2011



PERCENT OF CHILD DEATHS BY ETHNICITY, 2007-2011

Between the years of 2007-2011, 74 percent of child deaths that occurred in Hamilton County occurred from natural causes. Ten percent of child deaths were classified as undetermined. Child deaths that were classified as accidental deaths accounted for 9 percent of child deaths. Homicides of children in Hamilton County accounted for 5 percent of child deaths in 2007-2011, while suicides were the lowest percentage of child deaths (2 percent).

The major cause of death for children in Hamilton County between 2007-2011 was from a medical condition. Seventy-six percent of the children who died during the five year time frame, died from a medical condition. Deaths from external causes due to an injury accounted for 16 percent of child deaths. Eight percent of the child deaths that occurred where undetermined if the death was due to an injury or a medical condition. A cause of death that was deemed as unknown accounted for the smallest percentage of child deaths in 2007-2011 (less than 1 percent).

When a cause of death is from a medical condition, the death of the child is due to the result of the natural progression of a disease, ailment, disorder or prematurity. A death due to a medical condition can be classified as one of 17 various types of medical conditions, illustrated previously in this report (see page 7). Infants who were less than 28 days of age accounted for 72 percent of deaths due to a medical condition. Fourteen percent of the child deaths due to a medical condition were infants who were between 28 days and 1 year of age. Children who were between 1-4, 5-9 and 10-14 years of age accounted for a total of 12 percent of child deaths due to a medical condition (4 percent for each age group). The remaining 2 percent of child deaths were to older children who were between 15-17 years of age.

Fifty-six percent of child deaths due to a medical condition were to male children. Female children accounted for the remaining 44 percent of child deaths. Black children again accounted for the majority of child deaths due to a medical condition. Fifty-seven percent of child deaths were to black children, while white children accounted for 43 percent of child deaths. Less than 1 percent of the child deaths were to children of other racial groups.

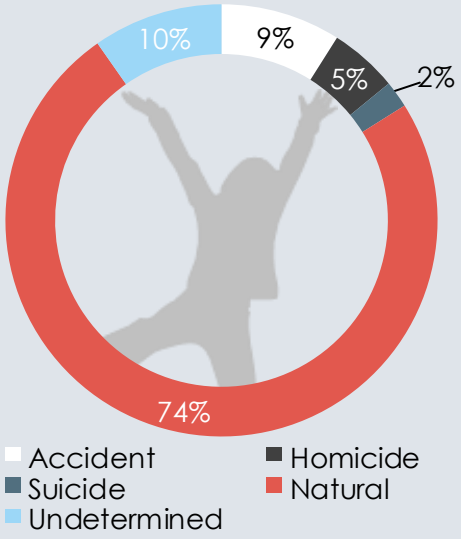
Prematurity, congenital anomaly and other medical conditions were the top three leading medical conditions that caused a child's death between 2007-2011. Fifty-eight percent of deaths from a medical condition were due to prematurity. Prematurity is the birth of a baby that is at least three weeks prior to the baby's due date (<37 weeks gestation), also known as preterm birth[4]. Congenital anomalies accounted for 16 percent of child deaths. Other medical conditions accounted for 5 percent of child deaths in Hamilton County between

2007-2011. Other medical conditions are medical conditions that resulted in the death of a child but is not on the list provided by the CFR data system.

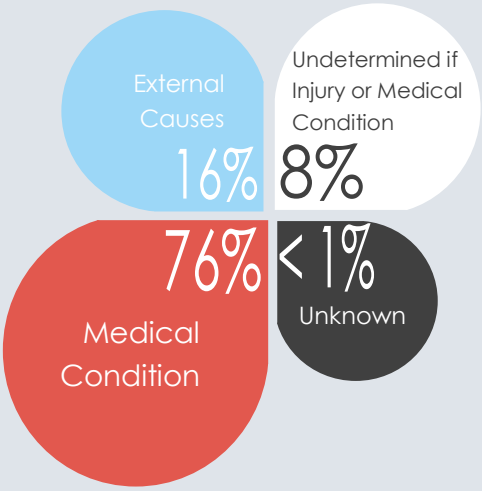
While the majority of the child deaths in Hamilton County were due to a medical condition, Hamilton County still suffered a large loss of children due to external causes. The death of a child due to external causes is the death that was a result of an injury that can either be intentional or unintentional. Sixteen percent of child deaths between 2007-2011 were due to external causes of injury. Male children accounted for an overwhelming majority, 72 percent, of child deaths due to external causes of injury. Female children accounted for only 28 percent of child deaths. As seen with many other causes of death, black children are disproportionately affected by deaths due to external causes. Fifty-seven percent of child deaths due to external causes were black children, while white children accounted for 42 percent of child deaths. One percent of child deaths were to children who were of other racial groups.

Older children, 15-17 years of age, accounted for the majority of child deaths, 36 percent, that were due to external causes. Infants who were between 28 days and 1 year of age accounted for the second largest percentage of child deaths, 22 percent. Children who were between 1-4 and 10-14 years of age accounted for 17 percent each of the child deaths due to external causes in Hamilton County. The remaining 8 percent of child deaths is comprised of infants who were less than 28 days of age (3 percent) and children between the ages of 5-9 years of age (5 percent).

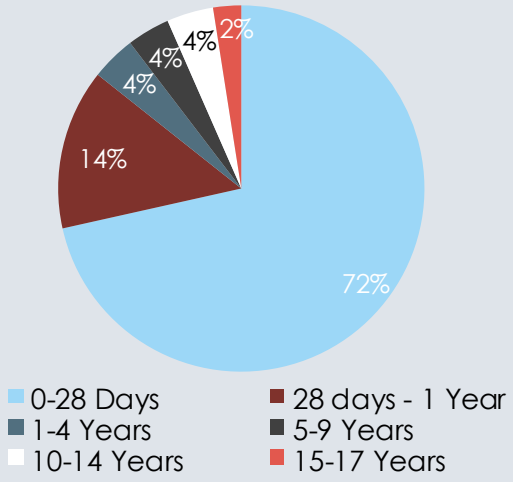
Injuries from a weapon (including an individual's body part), asphyxia, and motor vehicle accidents were the three highest external causes of injury that led to a child's death in Hamilton County from 2007-2011. Death that was sustained from a weapon, which can include an individual's body part (e.g. foot or hand), accounted for the largest percent of deaths due to an external cause, 32 percent. Asphyxia deaths comprised 24 percent of the deaths that were due to an external cause, while motor vehicle accidents accounted for 18 percent of deaths. Eight percent of child deaths due to external causes were deaths in which the child had drown. Poisoning, overdose or acute intoxication, that were a result of external causes, resulting in the death of a child in Hamilton County comprised 6 percent of child deaths. Four percent of Hamilton County child deaths due to external causes were a result of fire, burns or electrocution. A child death due to a fall or crush and a death that ruled as undetermined comprised 3 percent each. A child's death is ruled as undetermined for external causes when a thorough review of the child's death is com-



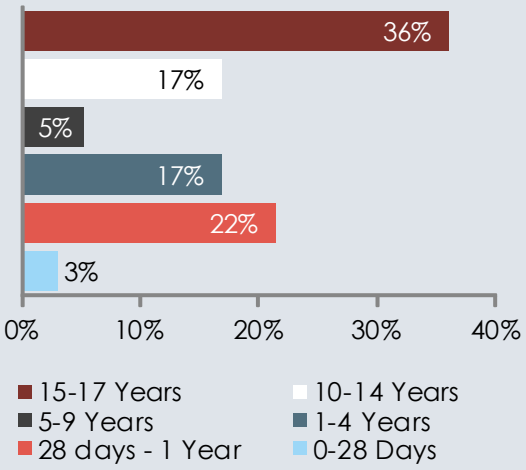
PERCENT OF CHILD DEATHS BY MANNER OF DEATH, 2007-2011



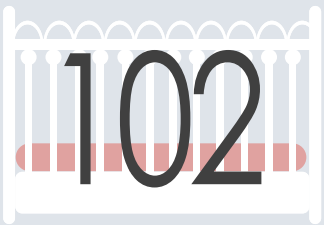
PERCENT OF CHILD DEATHS BY CAUSE OF DEATH, 2007-2011



PERCENT OF CHILD DEATHS DUE TO MEDICAL CONDITION BY AGE, 2007-2011



PERCENT OF CHILD DEATHS DUE TO EXTERNAL CAUSES BY AGE, 2007-2011



NUMBER OF SLEEP-RELATED CHILD DEATHS, 2007-2011

pleted and the method of how the injury was sustained is not available or known. The remaining 2 percent of child deaths in Hamilton County due to external causes were deaths due to exposure. A death is classified as a death due to exposure when the child was exposed to elements such as weather conditions, excessive heat or cold, environmental conditions (harmful algae) or smoke that resulted in the death of a child.

As seen previously in this report, Hamilton County faces the problem of a significant number of sleep-related deaths of infants each year. From 2007-2011, Hamilton County witnessed 102 child deaths that were sleep-related deaths. Approximately 13 percent of child deaths in Hamilton County between 2007-2011 were sleep-related deaths. That means one out of every eight child deaths in Hamilton County is a sleep-related death. An overwhelming majority of sleep-related deaths, 84 percent, were to infants who were between 28 days and 1 year of age. Children who were between 1 –4 years of age accounted for 10 percent of the sleep-related child deaths seen in 2007-2011. Infants who were less 28 days of age accounted for 5 percent of sleep -related deaths. The remaining 1 percent of deaths were to children 5 -9 years of age. As the demographics of the sleep-related deaths were further reviewed, male children accounted for over half, 54 percent, of the sleep-related deaths from 2007-2011. Female children accounted for the remaining 46 percent of deaths. Black children are affected by sleep-related deaths disproportionately than white children. Fifty-four percent of the sleep-related deaths in 2007-2011 were to black children, with white children accounting for the remaining 46 percent of deaths.

The manner of death surrounding the sleep-related deaths was ruled as undetermined in the majority (70 percent) of the child deaths. Nineteen percent of sleep-related child deaths were ruled as accidental deaths. The remaining 11 percent of child deaths were natural deaths. A cause of death that was deemed as being undetermined if a medical condition or injury caused the death of a child accounted for 57 percent of sleep-related deaths. Twenty-two percent of sleep -related deaths were due to an external cause. A sleep-related death that was due to a medical condition accounted for 18 percent of deaths. The remaining 3 percent of sleep-related deaths were an unknown cause.

The sleep-related deaths that were due to external causes deemed as accidental asphyxia accounted for 74 percent of the deaths. Nine percent of sleep-related deaths due to external causes were a result of a fire, in which the child died from smoke inhalation while sleeping. Seventeen percent of sleep-related deaths due to external causes

were deemed as being as undetermined as to what caused the injury that resulted in the child's death.

The sleeping environment; sleeping position, and sleeping location of the child, and co-sleeping all contribute to an infant suffering from a sleep-related death. In sixty-six percent of the sleep-related deaths from 2007-2011, the child was placed on his/her back to sleep. In twenty-one percent of sleep-related deaths the child was placed on his/her stomach to sleep. The child was placed on their side to sleep in the remaining 13 percent of sleep-related deaths. The most common location a child who suffered from a sleep-related death was in an adult bed. Thirty-seven percent of deaths the child was sleeping in an adult bed. In 20 percent of sleep-related deaths the child was sleeping in a crib. Couch and other locations accounted for 11 percent and 10 percent, respectively, of sleep-related deaths. Nine percent of sleep-related deaths the child was sleeping a bassinette, while the child was sleeping in a playpen in 7 percent of sleep-related deaths. The sleeping location remained unknown in 3 percent of sleep-related deaths in 2007-2011. The remaining 4 percent of deaths the child was sleeping on the floor, in a car-seat or in a chair (2, 1, and 1 percent respectively). The majority of the time the child was co-sleeping when they experienced a sleep-related death. In seventy percent of the sleep-related deaths from 2007-2011, the child was found to be co-sleeping, while 26 percent of deaths the child was not co-sleeping. In three percent of sleep-related deaths, it was unknown if the child was co-sleeping.

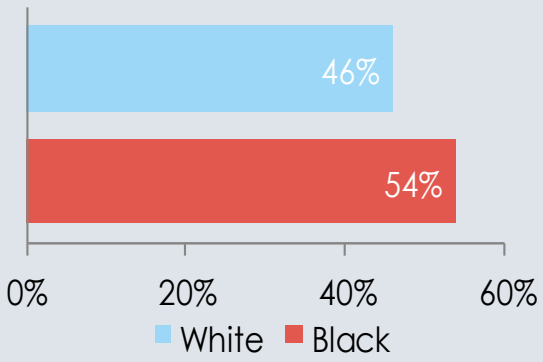
The child deaths for the five year period of 2007-2011 in Hamilton County, were further reviewed by five selected causes of death:

- Vehicular Deaths
- Asphyxia Deaths
- Poisoning Deaths
- Homicides
- Suicides

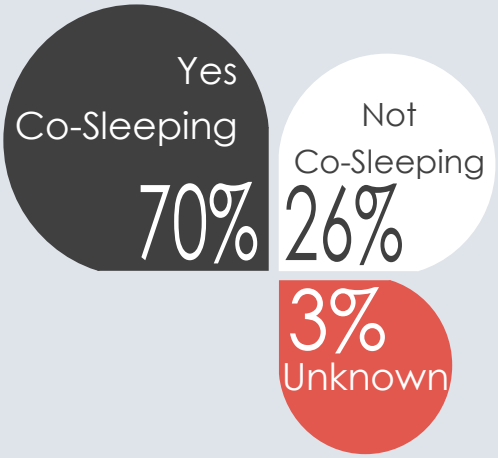
Child deaths were reviewed for the selected causes of death to identify disparities within the Hamilton County child population to allow interventions to be tailored to specific populations.

Vehicular Deaths

Vehicular deaths were the leading cause of unintentional deaths to children[6]. There were a total of 24 child deaths that were due to motor vehicle accidents between 2007-2011. From 2007 to 2009, the percent of child deaths due to motor vehicle deaths trended downward, from 24 to 8 percent. Since 2009, Hamilton County has experienced an increase in the percentage of child deaths due to

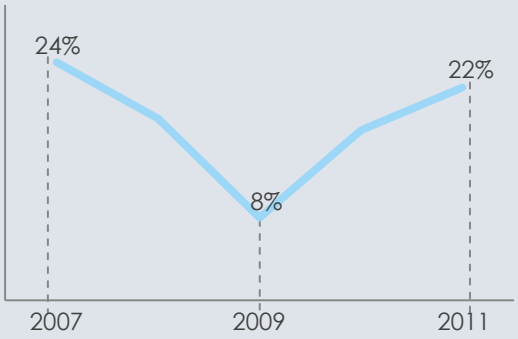


PERCENT OF SLEEP-RELATED DEATHS BY RACE, 2007-2011

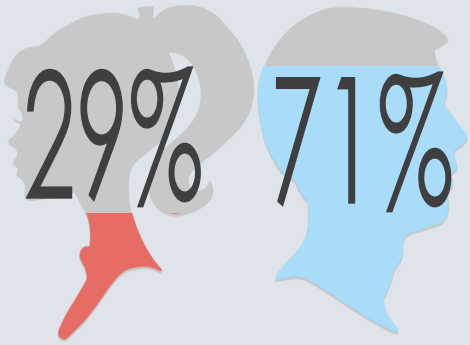


PERCENT OF SLEEP-RELATED DEATHS BY CO-SLEEPING, 2007-2011

NUMBER OF VEHICULAR DEATHS, 2007-2011



PERCENT OF VEHICULAR DEATHS BY YEAR, 2007-2011



PERCENT OF VEHICULAR DEATHS BY GENDER, 2007-2011

NUMBER OF ASPHYXIA DEATHS, 2007-2011

motor vehicle accidents (22 percent). Male children account for a majority (71 percent) of deaths that were due to motor vehicle accidents. Female children accounted for the remaining 29 percent. Fifty-eight percent of the child deaths that were due to motor vehicle accidents were to white children. Black children accounted for 42 percent of the motor vehicle deaths. Children who were in the mid-teenage years of 15-17 accounted for half of the deaths due to a motor vehicle accident. Children who were between 10-14 years of age comprised the second largest percentage of motor vehicle deaths (29 percent). Younger children, between 1-4 years of age, accounted for 13 percent of child deaths, with the remaining 8 percent of deaths accounting for children 5-9 years of age and infants less than 28 days of age (4 percent each).

Black males who were between the ages of 15-17 years of age, and white males who were between the ages of 10-14 years of age accounted for 34 percent (17 percent each) of deaths due to motor vehicle accidents. White females between the ages of 15-17 and black males between 10-14 years of age each accounted for 13 percent of deaths due to motor vehicle accidents. Sixteen percent of deaths due to motor vehicle accidents were black females between 15-17 years of age (8 percent) and white females 1-4 years of age (8 percent). Black male children between 1-4 years of age accounted for 4 percent of deaths. Motor vehicle deaths of infants less than 28 days old and children 5-9 years of age were white male children, each accounting for 4 percent of child deaths.

Asphyxia Deaths

Between 2007-2011 Hamilton County lost 31 children whose deaths were a result of asphyxia. Since 2009 the percent of asphyxia deaths in children has been trending downwards (13 percent) after an increase from 2007-2008 (12 to 38 percent). Male children accounted for 61 percent of the child deaths due to asphyxia. The remaining 39 percent of asphyxia deaths were to female children. Black children accounted for over half, 55 percent, of asphyxia deaths. Asphyxia deaths to white children accounted for the remaining 45 percent.

A majority of asphyxia deaths were in infants. Forty-two percent of asphyxia deaths were in infants who were between 28 days and 1 year of age. Infants who were less than 28 days old accounted for 10 percent of asphyxia deaths. Nineteen percent of asphyxia deaths were in children who were in the mid-teenage years, 15-17. Children who were between 10-14 years of age accounted for 16 percent of asphyxia deaths, with the remaining 13 percent of deaths occurring in children who were 1-4. An overwhelming majority, 77 percent, of asphyxia deaths were a sleep-related asphyxia deaths. The remaining

23 percent were non sleep-related asphyxia deaths. These asphyxia deaths would represent those children who committed suicide by asphyxia, along with accidental asphyxia by choking on a foreign object.

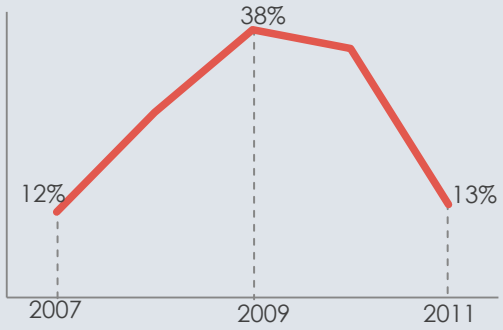
Asphyxia deaths that were caused by choking on a foreign object accounted for 3 percent of the asphyxia deaths to Hamilton County children in 2007-2011. Suffocation represented the largest percentage of asphyxia deaths. Sixty-three percent of Hamilton County children who suffered an asphyxia death were suffocated. Deaths due to suffocation result when the child is in position or place where he/she is unable to breath[7]. Strangulation represented 33 percent of asphyxia deaths in 2007-2011.

Poisoning Deaths

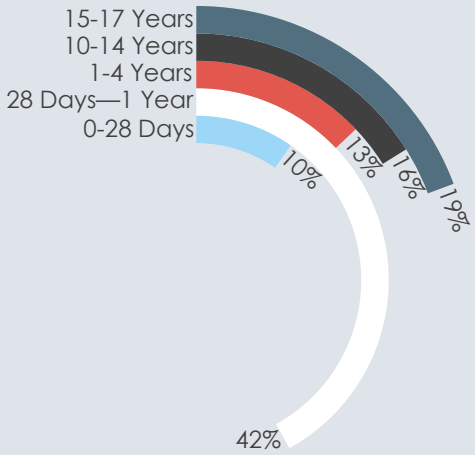
Poisoning deaths are most often due to inadequate supervision by parents and/or caregivers[8], however there are poisoning deaths that are due to a child intentionally poisoning themselves as a form of suicide. Eight child deaths in 2007-2011 were deaths that were due to poisoning. Deaths that are deemed as a poisoning death also include overdoses and acute intoxication that result in the death of a child. Since 2008, the percent of poisoning deaths in children in Hamilton county has trended downward, however, 2011 saw an increase in child deaths that were due to poisoning (9 percent). Male children accounted for 88 percent of the poisoning deaths, with female children accounting for 12 percent of deaths. White children are disproportionality affected by poisoning deaths. Seventy-five percent of poisoning deaths were in white children, with black children accounting for the remaining 25 percent of deaths.

Older children, 15-17 years of age, accounted for 63 percent of poisoning deaths in 2007-2011. Children who were 10-14, 1-4 years , and infants between 28 days and 1 years of age, each accounting for 13 percent of poisoning deaths. Half of the child poisoning deaths were the result of an accidental overdose. Accidental overdoses are the inadvertent/accidental consumption of a dose that is larger than usually or ordinarily taken for treatment, and is likely to result in a serious toxic reaction or even death[9]. Deliberate poisonings accounted for 38 percent of poisoning deaths. The remaining 13 percent of poisoning deaths were classified as an other type of poisoning incident. Deaths in which the poisoning incidence is classified as other happens when the poisoning occurs by a method not classified by the CFR data system.

Alcohol, opiate pain killers, and street drugs were the top three causative agents that resulted in the death of a child, accounting for

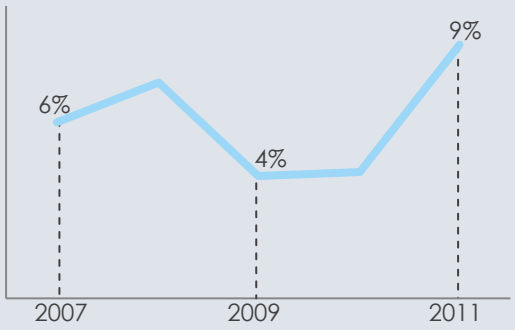


PERCENT OF ASPHYXIA DEATHS BY YEAR, 2007-2011

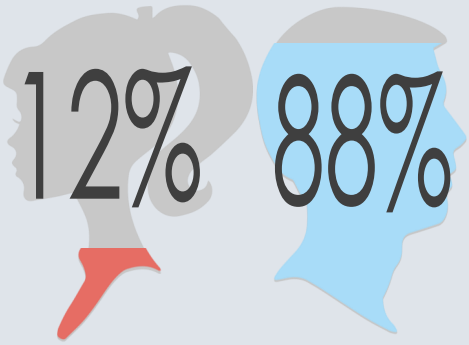


PERCENT OF ASPHYXIA DEATHS BY AGE, 2007-2011

NUMBER OF POISONING DEATHS, 2007-2011



PERCENT OF POISONING DEATHS BY YEAR, 2007-2011



PERCENT OF POISONING DEATHS BY GENDER, 2007-2011

NUMBER OF HOMICIDE DEATHS, 2007-2011

25 percent of child deaths each. Antifreeze and methadone each accounted for 12.5 percent of child deaths due to poisoning.

Homicides

Homicides of children are most often murders of teens by other teens[10]. The CFR data system collects information surrounding the circumstances when the manner of death of a child is deemed as a homicide, regardless of the classification of the cause of death. Hamilton County witnessed 41 homicides of children, representing 5 percent of all child deaths between 2007-2011. Children who were between the ages of 15-17 accounted for 39 percent of homicide deaths. Young children, between 1-4 years of age, accounted for 22 percent of homicide deaths. Infants accounted for 24 percent of homicides from 2007-2011. Twenty-two percent of homicides were of infants who were between 28 days and 1 year of age, and 2 percent occurred to infants less than 28 days old. Children who were 1-4 years of age also accounted for 22 percent of homicides. Ten percent of homicides were children 10-14 years of age, with the remaining 2 percent occurring to children 5-9 years of age.

Black children were disproportionately affected by homicides in Hamilton County from 2007-2011. Seventy-three percent of homicide deaths occurred in black children, while white children accounted for a smaller 27 percent of homicides. Male children were an overwhelming majority of homicide deaths to children in Hamilton County. Seventy-three percent of homicide deaths occurred to male children, while female children accounted for 27 percent.

Seven percent of child homicides had a cause of death that was due to a medical condition. These deaths are classified as homicides as the surrounding circumstances that lead to the medical condition that caused the death of a child was ruled as a homicide. The majority of child homicides (93 percent) had a cause of death that was due to external causes. Injuries from a weapon, asphyxia, and poisoning, overdose or acute intoxication were the three external causes that resulted in the death of a child ruled as a homicide in Hamilton County. Homicides that were a result of an injury sustained from a weapon, which includes an individual's body part accounted for 89 percent of the child homicides. Homicides caused by asphyxia accounted for 8 percent of child deaths. Three percent of homicides were caused by deliberate poisoning of the child using methadone.

The CFR data system captures information about the type of weapon used in the homicide of a child. In sixty-four percent of child homicides, the weapon used was a firearm. Firearms can include handguns, shotguns and BB guns. In 21 percent of child homicides in Ham-

ilton County, a person's body part was the weapon used (e.g., hands and feet). In nine percent of the cases the weapon used was unknown. Blunt instruments, (e.g., baseball bats, golf clubs or brass knuckles) were used in 3 percent of child homicides. In the remaining 3 percent of child homicides, a sharp instrument (e.g., knives, axes) was the weapon used resulting in the death of a child.

In eighty-two percent of child homicides from 2007-2011, the child was killed by someone they knew[11]:

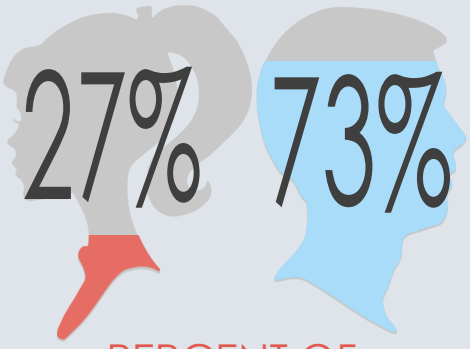
- Biological parent
- Acquaintance
- Mother's partner
- Friend

In thirty-two percent of child homicides in Hamilton County, the biological parent was the perpetrator. An acquaintance of the child was responsible for 27 percent of child homicides between 2007-2011. An acquaintance is someone an individual knows, but is not usually a close friend. The mother's partner was the individual responsible for 18 percent of child homicides in Hamilton County. A child's friend was the perpetrator in 5 percent of homicides from 2007-2011. In nine percent of child homicides in Hamilton County, some other individual was the perpetrator. An individual is classified as other when the relationship to the child is not one of the listed persons by the CFR data system. A law enforcement officer was responsible for 5 percent of the child homicides in Hamilton County. A stranger, or someone an individual does not know, was the perpetrator in the remaining 5 percent of child homicides in Hamilton County.

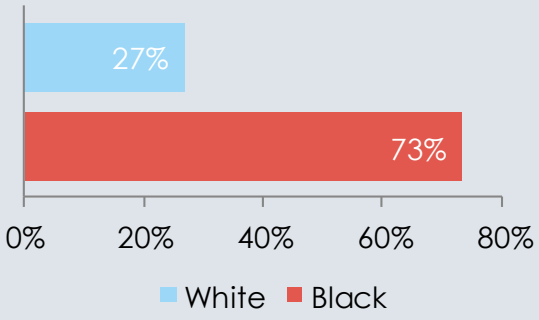
The majority of the child homicides took place in the child's home (44 percent). In fifteen percent of child homicides a roadway was the location of the homicide. The sidewalk was the location of 10 percent of child homicides in Hamilton County. A relative's house, and other locations not classified by the CFR data system were the location in 16 percent of the child homicides in Hamilton County (8 percent each). Five percent of homicides of children from 2007-2011 occurred at a friend's home or a recreational area. Child homicides in Hamilton County occurred in both the driveway of an individuals house, and a hospital (3 percent each).

Suicides

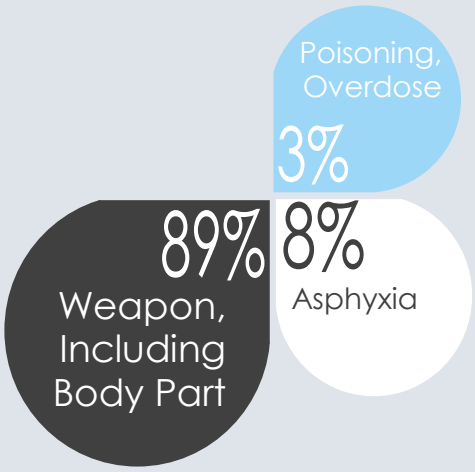
Suicides are a serious public health problem that has lasting effects on individuals, families and communities[12]. A death that is ruled as a suicide is a death that is "caused by self-directed injurious behavior with any intent to die as a result of the behavior[13]." As with homicides, when the manner of death of a child is ruled as a suicide, the



PERCENT OF HOMCIDE DEATHS BY GENDER, 2007-2011

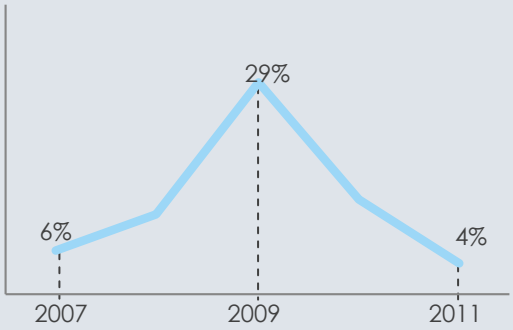


PERCENT OF HOMICIDE DEATHS BY RACE, 2007-2011

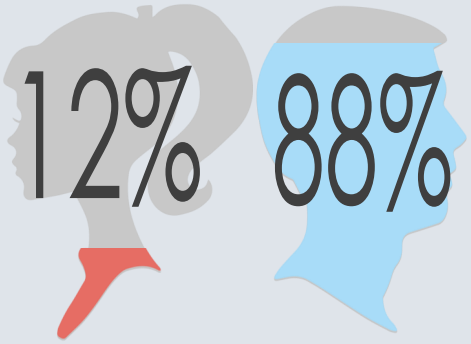


PERCENT OF HOMICIDE DEATHS BY EXTERNAL CAUSE, 2007-2011

NUMBER OF SUICIDE DEATHS, 2007-2011



PERCENT OF SUICIDE DEATHS BY YEAR, 2007-2011



PERCENT OF SUICIDE DEATHS BY GENDER, 2007-2011

CFR data system collects information surrounding the circumstances of the death, regardless of the classification of the cause of death. Between 2007-2011, Hamilton County had 16 children commit suicide. Since 2009 the percent of suicides in children has been trending downward (4 percent) after an increase from 2007-2009 (6 to 29 percent). Male children accounted for 88 percent of suicide deaths in Hamilton County. Twelve percent of suicides were female children. White children in Hamilton County have higher rates of suicides. Over half (56 percent) of suicides from 2007-2011 were to white children. Suicides in black children accounted for the remaining 44 percent. Children who were in the mid-teen age group of 15-17 years comprised 88 percent of suicides in Hamilton County. The remaining 12 percent of suicides were to children who were between 10-14 years of age.

Suicide by asphyxia, weapon and poisoning, overdose or acute intoxication were the three external causes that resulted in the death of a child. Fifty percent of suicide deaths were due to asphyxia in which death was either asphyxia due to strangulation or asphyxia due to suffocation. Strangulation cases accounted for 88 percent of suicide deaths due to asphyxia. The remaining 12 percent of suicide deaths due to asphyxia were cases in which the death was due to suffocation. Thirteen percent of suicide deaths were due to a deliberate poisoning, overdose or acute intoxication. Child suicides in Hamilton County that were due to a weapon accounted for 38 percent of suicides.

Majority of the child suicides took place in the child's home (63 percent). Thirteen percent of child suicides occurred at a relative's home. A friends home, licensed foster care home, other recreational area, or another location not classified by the CFR data system were the locations in 24 percent of the child homicides in Hamilton County (6 percent each).

To align with the Ohio Child Fatality Review Annual Report, the child deaths in Hamilton County are further reviewed by age groups. These age groups are classified by the CFR data system as illustrated previously in this report (see Page 5). The review of child deaths by age group helps to identify specific areas in which programs can be applied to work at preventing child deaths in the future. The specific age groups reviewed are:

- Infants (Children less than 1 year of age)
- 1-4 years old
- 5-9 years old
- 10-14 years old
- 15-17 years old

Infant Deaths

Infants are children who are less than 1 year of age. The death of a baby/infant prior to his/her first birthday is known as infant mortality. The infant mortality rate is the estimated number of infant deaths for every 1,000 live births[14]. Infant mortality is one of the most important indicators of the health of a community. It is associated with various factors such as maternal health, quality health care, socioeconomic conditions, access to health care, and public health practices[15]. Since 2007 the infant mortality rate in Hamilton County has remained relatively stable. The overall infant mortality rate for 2007-2011 was 10.7 per 1,000 live births. There were obvious disparities in infant mortality when reviewed by race. The infant mortality rate for white infants in Hamilton County for 2007-2011 was 7.7 per 1,000 live births. The black infant mortality rate was nearly two and a half times higher than that of white infants at 18.6 per 1,000 live births.

From 2007-2011, Hamilton County had 609 of infant deaths. This means that 76 percent of the child deaths in Hamilton County for the five year period were infants. Seventy-two percent of the infant deaths in Hamilton county were infants who were less than 28 days of age. Infants who were between 28 days and 1 year of age accounted for 28 percent of infant deaths. Male infants had the highest percentage of infant deaths in Hamilton County from 2007-2011. Fifty-seven percent of infant deaths were male, while females accounted for 43 percent. In less than 1 percent of infant deaths, the sex of the infant was not recorded, and listed as unknown. Black infants accounted for over half (59 percent) of Hamilton County's infant deaths from 2007-2011. Forty-one percent of infant deaths were to white infants. Less than 1 percent of infant deaths in Hamilton County were to infants of other racial groups. Non-Hispanic infants accounted for an overwhelming majority (96 percent) of infant deaths in Hamilton County. Four percent of infant deaths were to Hispanic infants.

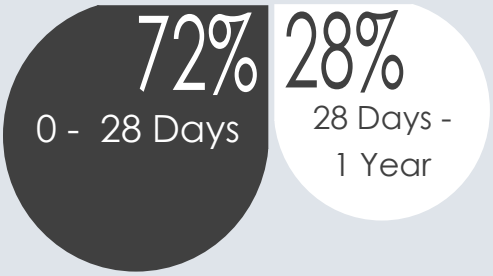
Between the years 2007-2011, 84 percent of infant deaths that occurred in Hamilton County were from natural causes. Eleven percent of infant deaths were classified as undetermined. Infant deaths that were classified as accidental deaths accounted for 3 percent of infant deaths. Homicides of infants in Hamilton County represented the smallest percentage of infant deaths in 2007-2011, accounting for 2 percent of infant deaths.

The major cause of death for infants in Hamilton County between 2007-2011 was from a medical condition. Eighty-five percent of the infants who died during the five year time period died from a medi-

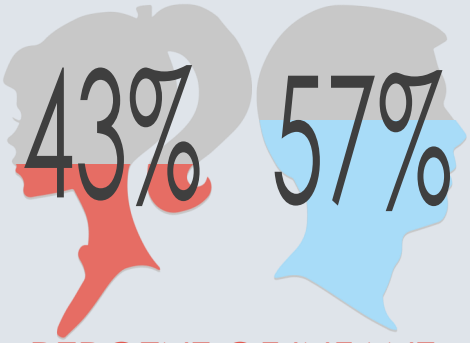
INFANT DEATHS IN HAMILTON COUNTY IN 2007-2011

10.7 per 1,000

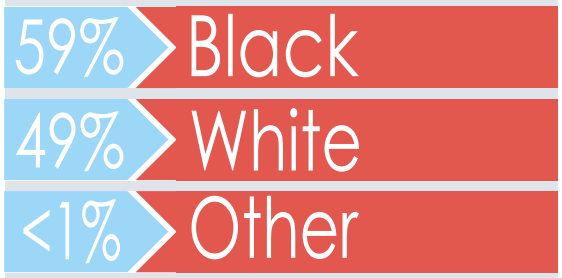
2007-2011 INFANT MORTALITY RATE, HAMILTON COUNTY



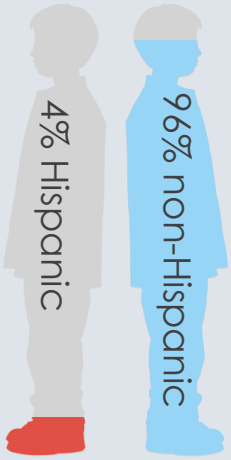
PERCENT OF INFANT DEATHS BY AGE, 2007-2011



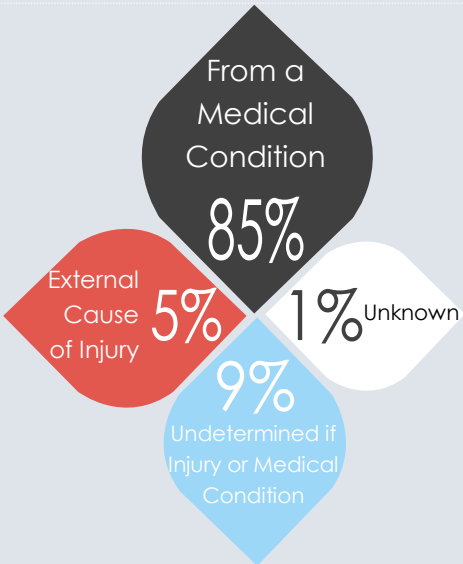
PERCENT OF INFANT DEATHS BY GENDER, 2007-2011



PERCENT OF INFANT DEATHS BY RACE, 2007-2011



PERCENT OF INFANT DEATHS BY ETHNICITY, 2007-2011



PERCENT OF INFANT DEATHS BY CAUSE OF DEATH, 2007-2011

cal condition. In nine percent of infant deaths that occurred it was undetermined if the death was due to an injury or a medical condition. Deaths from external causes due to an injury accounted for 5 percent of infant deaths. A cause of death that is deemed as unknown accounted for the smallest percentage of infant deaths in 2007 -2011, 1 percent. As illustrated previously, a death due to a medical condition is classified further by the type of medical condition that resulted in the death of a child. Prematurity, congenital anomalies, and other perinatal conditions were the top three leading medical conditions that resulted in an infant death in Hamilton County from 2007-2011. Sixty-eight percent of infant deaths from a medical condition were due to prematurity. Congenital anomalies accounted for 15 percent of infant deaths. Other perinatal conditions accounted for 4 percent of infant deaths in Hamilton County from 2007-2011. Other perinatal conditions are medical conditions that occur during the time surrounding the child birth that affect the newborn baby, and are not classified by the CFR data system. Infections accounted for 3 percent of infant deaths. Six percent of infant deaths in Hamilton County due to a medical condition were a result of neurological/seizure disorders, other medical conditions not classified by the CFR data system, and undetermined medical causes (2 percent each). Cardiovascular conditions, Sudden Infant Death Syndrome (SIDS) and unknown medical conditions accounted for a total of 3 percent of infant deaths (1 percent each). Less than 1 percent of infant deaths were due to malnutrition, asthma, cancer and pneumonia.

A majority of infant deaths in Hamilton County were due to a medical condition, however, Hamilton County still witnessed a loss of infants from external causes due to injury. Fifty percent of the infants that died from external causes, died as a result of asphyxia. All of the infant deaths that were due to asphyxia were sleep-related infant deaths. These deaths are cases in which the sleep environment played a role in the death of the infant. Twenty-two percent of infants died from injuries sustained from a weapon (including an individual's body part). Infant deaths in which the cause of injury was ruled as undetermined accounted for 13 percent of infant deaths from 2007-2011. Six percent of Hamilton County infant deaths due to external causes were due to the child drowning. Infant deaths from injury due to exposure, motor vehicle, and poisoning, overdose or acute intoxication accounted for the remaining 9 percent of infant deaths (3 percent each) in Hamilton County.

1-4 Year Old Child Deaths

From 2007-2011, 53 children between 1-4 years of age died in Hamilton County. Fifty-seven percent of deaths among children 1-4 years

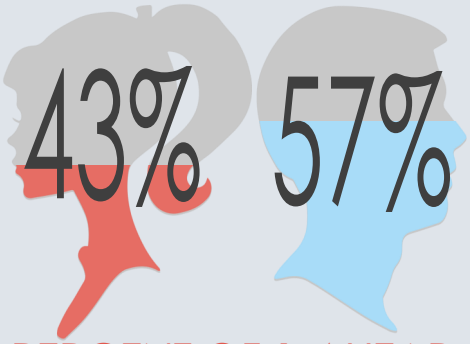
of age were male children. Female children accounted for the remaining 43 percent of child deaths. White children accounted for over half, 53 percent, of deaths to children 1-4 years of age. Forty-seven percent of deaths to children 1-4 years of age in Hamilton County between 2007-2011 were among black children. Non-Hispanic children accounted for a majority, 94 percent, of deaths to children between 1-4 years of age. Six percent of deaths were Hispanic children.

Between the years of 2007-2011, 43 percent of deaths to children 1-4 years of age in Hamilton County occurred from natural causes. Twenty-five percent of deaths were ruled as accidental deaths, while deaths ruled as homicides accounted for 17 percent of deaths. Fifteen percent of deaths were ruled that the manner of death was undetermined.

The major cause of death to children 1-4 years of age was from a medical condition. Forty-five percent of children 1-4 years of age during the five year time frame died from a medical condition. Forty -two percent of child deaths were from external causes sustained from an injury. Death was deemed undetermined as to whether or not a death was due to an injury or a medical condition in 11 percent of deaths in children 1-4 years of age in Hamilton County. A cause of death deemed as unknown accounted for the smallest percentage of deaths in 2007-2011 to children 1-4 years of age, 2 percent.

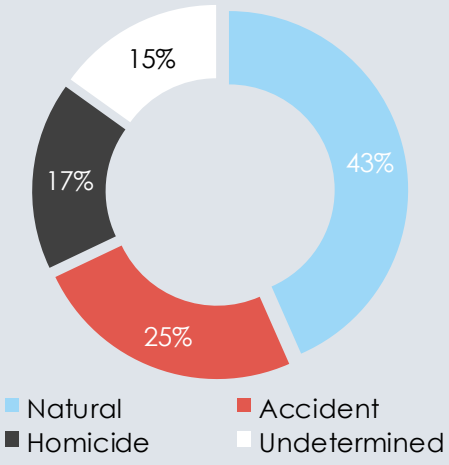
Infections, congenital anomalies, and other medical conditions were the top three leading medical conditions that resulted in the death of a child between 1-4 years of age in Hamilton County. Twenty-nine percent of deaths from medical conditions were due to an infection the child had acquired. Congenital anomalies accounted for 21 percent of deaths to children 1-4 years of age. Twenty-one percent of deaths to children 1-4 years of age were due to other medical conditions not classified by the CFR data system. Neurological/seizure disorders and pneumonia each accounted for 8 percent of child deaths in Hamilton County in 2007-2011. Deaths to children 1-4 years of age due to cancer accounted for 4 percent of deaths. Complications from prematurity and other perinatal conditions each accounted for 4 percent of deaths to children 1-4 years of age.

The second leading cause of death of 1-4 year old children in Hamilton County was from external causes sustained from an injury. Injury sustained due to a weapon accounted for 27 percent of deaths to children 1-4 years of age. Asphyxia deaths to children 1-4 years of age accounted for 18 percent of deaths in Hamilton County. Fourteen percent of deaths due to external causes were due to the child drowning. Deaths due to injury from a motor vehicle accident also

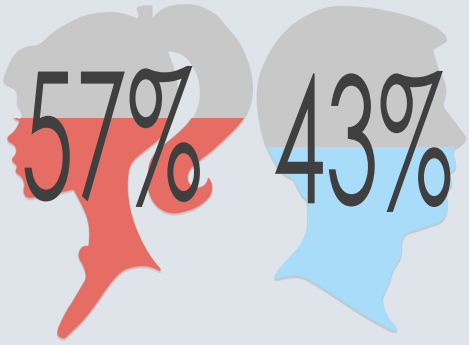


PERCENT OF 1-4 YEAR OLD CHILD DEATHS BY GENDER, 2007-2011

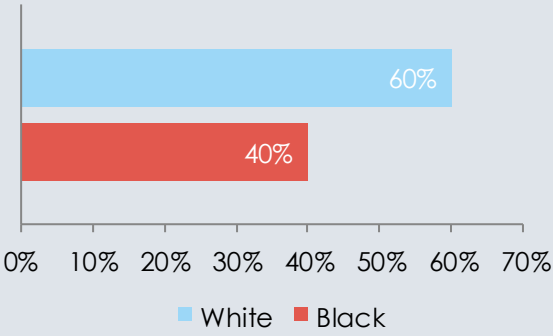
PERCENT OF 1-4 YEAR OLD CHILD DEATHS BY RACE, 2007-2011



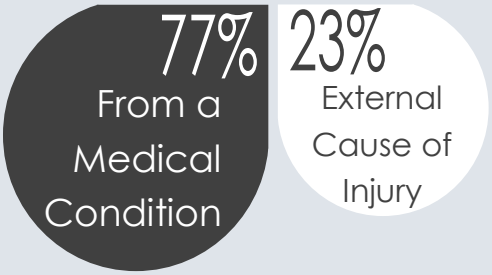
PERCENT OF 1-4 YEAR OLD CHILD DEATHS BY MANNER OF DEATH, 2007-2011



PERCENT OF 5-9 YEAR OLD CHILD DEATHS BY GENDER, 2007-2011



PERCENT OF 5-9 YEAR OLD CHILD DEATHS BY RACE, 2007-2011



PERCENT OF 5-9 YEAR OLD CHILD DEATHS BY CAUSE OF DEATH, 2007-2011

accounted for 14 percent in 2007-2011. Deaths due to injury from fire, burn or electrocution accounted for 14 percent of external causes of death to children 1-4 years of age in Hamilton County. The remaining 15 percent of deaths were due to injuries sustained from exposure, fall or crushing, and poisoning, overdose or acute intoxication (5 percent each).

5-9 Year Old Child Deaths

From 2007-2011, 30 children in Hamilton County who died were between 5-9 years of age. Female children accounted for over half (57 percent) of the deaths to children 5-9 years of age in Hamilton County. Forty-three percent of deaths were male children. White children who are between 5-9 years of age were disproportionately affected. Sixty percent of the deaths to Hamilton County children between 5-9 years of age occurred to white children. Black children accounted for the remaining 40 percent of child deaths in that age group. As seen with the younger age groups, non-Hispanic children accounted for the majority of deaths. Ninety-seven percent of deaths to children 5-9 years of age occurred in non-Hispanic children, while Hispanic children accounted for 3 percent of child deaths.

Seventy-seven percent of deaths to children 5-9 years of age in Hamilton County were deaths from natural causes. Accidental deaths accounted for 20 percent of deaths. The remaining 3 percent of child deaths were due to homicides.

The major cause of death of Hamilton County children between 5-9 years of age between 2007-2011 was from a medical condition (77 percent). Twenty-three percent of child deaths age 5-9 were from external causes due to an injury. Other medical conditions, cancer, and asthma were the top three leading medical conditions that resulted in the death of a child between 5-9 years of age in Hamilton County. Thirty percent of deaths from medical conditions were due to other medical conditions not classified by the CFR data system. Cancer accounted for 17 percent of deaths in children 5-9 years of age. Thirteen percent of deaths in children 5-9 years of age were due to asthmas. Neurological/seizure disorders also accounted for 13 percent of child deaths in Hamilton County in 2007-2011. Deaths to children 5-9 years of age due to complications from congenital anomalies accounted for 9 percent of deaths. Congenital anomalies, while mostly affecting newborns, can impact older children later in life. Congenital anomalies may result in long-term disability, and are important causes of childhood death[16]. Nine percent of child deaths in 2007-2011 where due to other infections not classified by the CFR data system. Influenza and complications other perinatal conditions each accounted for 4 percent of deaths to children 5-9 years of age.

Death due to external causes sustained from an injury was the second leading cause of death to 5-9 year old children in Hamilton County. Injury sustained due to a weapon accounted for 29 percent of deaths in 2007-2011. Deaths due to injuries sustained from a fire, burn or electrocution also accounted for 29 percent of deaths in children 5-9 years of age in Hamilton County. Deaths due to drowning, falls or crushing, and motor vehicle and other transport accounted for the remaining child deaths, 14 percent each.

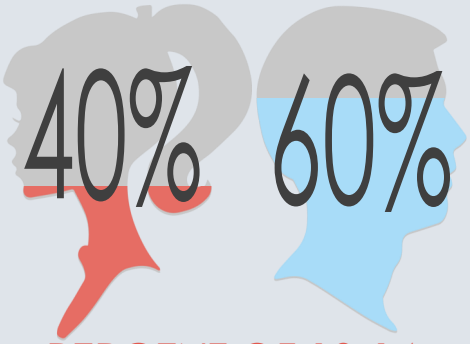
10-14 Year Old Child Deaths

Hamilton County lost 48 children who were between 10-14 years of age from 2007-2011. Sixty percent of those deaths were male. Female children accounted for the remaining 40 percent. Over half of the deaths to children 10-14 years of age were white children (54 percent). Forty-six percent of these deaths were to black children. One-hundred percent of deaths to children 10-14 years of age were to non-Hispanic children.

From 2007-2011, 52 percent of deaths of children 10-14 years of age in Hamilton County were from natural causes. Thirty-one percent of deaths were ruled accidental. Homicides of children 10-14 years of age accounted for 10 percent of child deaths in Hamilton County. Four percent of deaths to Hamilton County children 10-14 years of age, were suicides. Two percent of deaths were ruled that the manner of death was undetermined.

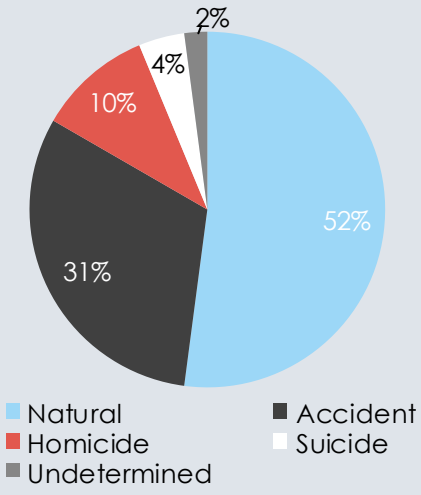
The major cause of death to children 10-14 years of age was from a medical condition. Fifty-two percent of deaths from 2007-2011 was due to a medical condition. Forty-six percent of deaths to children 10-14 years of age were from external causes due to an injury. Deaths to children 10-14 years of age in which the cause of death was undetermined if the death was due to an injury or medical condition accounted for the smallest percentage of child deaths, 2 percent.

Congenital anomaly, other medical conditions and cancer were the top three leading medical conditions that resulted in the death of a child in Hamilton County from 2007-2011. Congenital anomalies accounted the highest percentage (32 percent) of 10-14 year old child deaths due to medical conditions. Twenty-four percent of child deaths were due to other medical conditions that are not classified by the CFR data system. Cancer and neurological /seizure disorder accounted for a total of 24 percent of child deaths (12 percent each). Other infections not classified by the Child Fatality Review data system accounted for 8 percent of deaths to children 10-14 years of age. Four percent of deaths to children 10-14 years of age were due

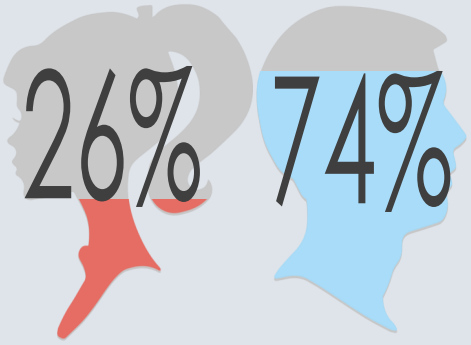


PERCENT OF 10-14 YEAR OLD CHILD DEATHS BY GENDER, 2007-2011

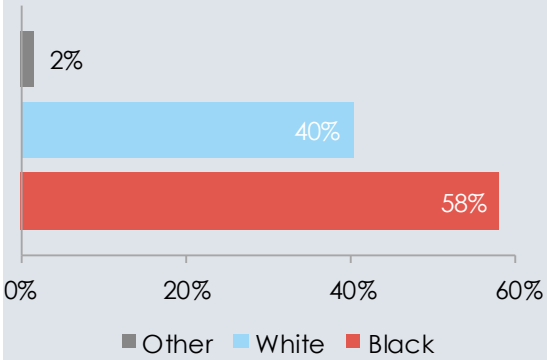
PERCENT OF 10-14 YEAR OLD CHILD DEATHS BY RACE, 2007-2011



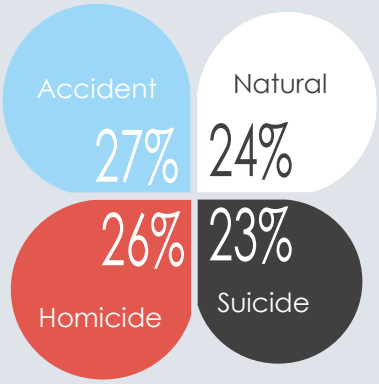
PERCENT OF 10-14 YEAR OLD CHILD DEATHS BY MANNER OF DEATH, 2007-2011



PERCENT OF 15-17 YEAR OLD CHILD DEATHS BY GENDER, 2007-2011



PERCENT OF 15-17 YEAR OLD CHILD DEATHS BY RACE, 2007-2011



PERCENT OF 15-17 YEAR OLD CHILD DEATHS BY CAUSE OF DEATH, 2007-2011

to asthmas. Pneumonia and other perinatal conditions also accounted for 4 percent each, of child deaths, ages 10-14.

A majority of children 10-14 years of age died due to medical conditions, however, Hamilton County still witnessed a loss of children from external causes due to an external injury. Thirty-two percent of children 10-14 years of age who died due to injuries, sustained those injuries from motor vehicle or other transport. Asphyxia deaths to children 10-14 years of age accounted for 23 percent of child deaths in Hamilton County. Twenty-three percent of deaths due to external causes were due to the child drowning. Deaths due to injuries from weapons, including body parts, accounted for 18 percent of child deaths. The remaining 5 percent of deaths were due to poisoning, overdose, or acute intoxication.

15-17 Year Old Child Deaths

The oldest group of child deaths reviewed, 15-17 year olds, accounted for 62 child deaths in Hamilton County from 2007-2011. A majority of deaths to children 15-17 years of age were male children (74 percent). Female children accounted for 26 percent of child deaths. Black children accounted for over half (58 percent) of these child deaths. Forty percent of child deaths were to white children. Two percent of 15-17 year old child deaths were to children in other racial groups. Non-Hispanic children accounted for an overwhelming majority, 97 percent, of child deaths in Hamilton County. Three percent of deaths of children 15-17 years of age were Hispanic children.

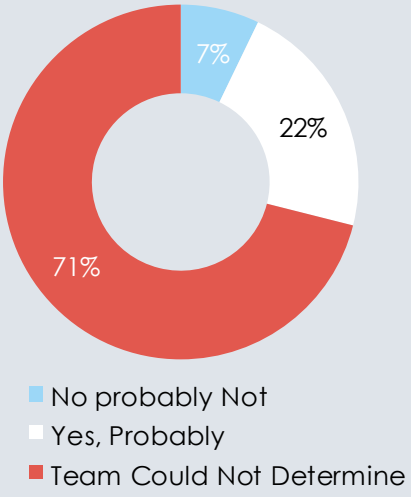
From 2007-2011, 27 percent of deaths of children 15-17 years of age were due to accidents. Homicide was the manner of death in 26 percent of child deaths. Twenty-four percent of deaths to children 15-17 years of age in Hamilton County were from natural causes. Suicides accounted for the remaining 23 percent of deaths in Hamilton County children between 15-17 years of age.

The leading cause of death in children 15-17 years of age was from external causes due to an injury. Seventy-six percent of deaths from 2007-2011 were due to external causes. Child death caused from a medical condition accounted for the remaining 24 percent of deaths. The three leading medical conditions that resulted in death for children 15-17 years of age were cardiovascular, other medical conditions, and cancer. Cardiovascular deaths accounted for 27 percent of deaths due to a medical condition. Twenty-seven percent of deaths to children 15-17 years of age were from other medical conditions not classified by the CFR data system. Cancer accounted for 13 percent of deaths due to medical condition from 2007-2011 in children 15-17 years of age. Neurological/seizure disorders and other infections not

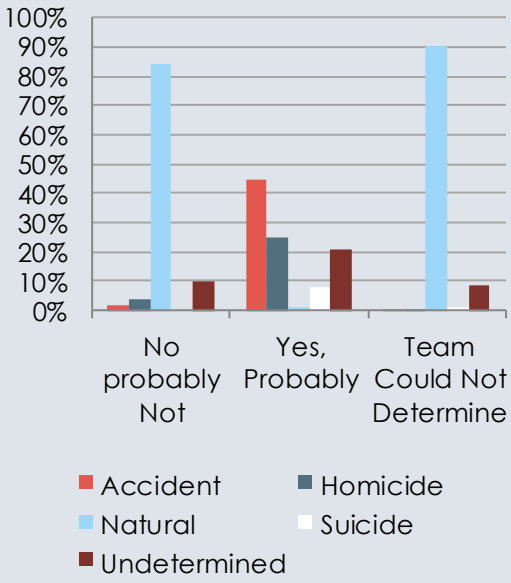
classified by the CFR data system each also accounted for 13 percent of the child deaths. The smallest percentage of deaths to children 15 -17 years of age was due to asthma (7 percent).

Death due to external causes of injury was the leading cause of death for children 15-17 years of age in Hamilton County. Forty-seven percent of children who died from external causes died due to injuries sustained from weapons. Injuries sustained from motor vehicle and other transport accounted for 26 percent of the external causes of death to children 15-17 years of age. Asphyxia deaths accounted for 13 percent of the external causes of death in children 15 -17 years of age. Eleven percent of deaths from external causes were due to poisoning, overdose or acute intoxication. The smallest percentage of deaths in Hamilton County children 15-17 years of age were deaths from falls or crushing (4 percent).

By reviewing the deaths of children in Hamilton County, circumstances surrounding the death of the child is ascertained to identify if the death could have been considered a preventable death. As illustrated previously in this report, the death of a child is deemed as preventable if the circumstances that caused the death of the child could have been changed. For the child deaths that occurred from 2007-2011, the Hamilton County CFR Team deemed that 7 percent of the child deaths were probably not preventable. Seventy-one percent of child deaths that occurred, the CFR Team could not determine, based on the circumstances surrounding the cases if the death of the child could have been prevented. The remaining 22 percent of child deaths were deemed that the child's death could have been prevented by changing various circumstances that led to the death of the child. It should be noted that 104 child deaths that occurred between 2007-2011 were missing the preventability indicator. For information on this discrepancy please refer to the "Limitations" on page 3 of this report.



PERCENT OF CHILD DEATHS BY PREVENTABILITY, 2007-2011



PERCENT OF PREVENTABILITY BY MANNER OF DEATH, 2007-2011

Conclusion

The goal of the Hamilton County CFR is to decrease the number of child deaths in Hamilton County through prevention efforts. This is accomplished through identification of groups (e.g., racial, ethnic, and age groups) within the population of Hamilton County that experience disparities in child death. This report is intended to describe the trends and patterns found across child deaths and make meaningful recommendations that can be used to engage the community of Hamilton County to work at improving the outcomes for all children. It is hoped that this report will result in an increased and continued collaboration across the various organizations to focus on improving the health of children in Hamilton County.

Appendices

Appendices

2012 Child Fatality Review Team

David Carlson, *Chair* ..... Senior Epidemiologist, Hamilton County Public Health

Lora Besse ..... Hamilton County Prosecutor's Office

Kathryn Boller-Koch ..... Hamilton County Juvenile Court

Sgt. Joseph Briede ..... Cincinnati Police Department

Lt Derek Douglas ..... Cincinnati Fire Department

Mark Eck .....Hamilton County Jobs and Family Services

Dr. Steven Englender ..... Director, Center for Public Health Preparedness, Cincinnati Health Department

Melissa Jimenez ..... Cincinnati Children's Hospital Medical Center

Dr. Brooks Keeshin ..... Cincinnati Children's Hospital Medical Center

Dr. Karen Looman ..... Deputy Coroner, Forensic Pathologist, Hamilton County Coroner's Office

Heidi Malott ..... Cincinnati Children's Hospital Medical Center

Carrie Stoudemire ..... Special Projects Coordinator, Hamilton County Mental Health and Recovery Services Board

Lauran Monhollen ..... Cincinnati Children's Hospital Medical Center

Mark Piepmeier ..... Hamilton County Prosecutor's Office

Dr. Bill Ralston ..... Chief Deputy Coroner, Senior Forensic Pathologist, Hamilton County Coroner's Office

Sgt Bill Rarrick ..... Hamilton County Sheriff's Office

Rich Schneider ..... Hamilton County Prosecutor's Office

Dr. Robert Shapiro ..... Cincinnati Children's Hospital Medical Center

Sandi Webster ..... Hamilton County Jobs and Family Services

Child Fatality Review Team Membership

Regular Child Fatality Review Team (CFRT) members are representatives of the following agencies:

- Hamilton County Public Health
- Children's Services of Hamilton County Department of Job and Family Services
- Cincinnati Children's Hospital Medical Center
- Hamilton County Coroner
- Cincinnati Health Department
- Cincinnati Fire Department
- Cincinnati Police Department
- Hamilton County Prosecutor
- Hamilton County Sheriff's Department
- Hamilton County Juvenile Court
- Hamilton County Mental Health and Recovery Services Board

Meetings are closed to the general public and the media. Only CFRT members and invited guests are permitted to attend CFRT meetings. Representatives of other agencies and organizations are occasionally invited to attend when a relevant case is being discussed.

Cases Reviewed

The Hamilton County CFR Team screens all deaths of children aged 17 years and younger who are residents of Hamilton County at the time of death. The CFRT limits death reviews to residents of Hamilton County and does not review deaths of non-residents who die in Hamilton County.

Death certificates of all Hamilton County residents 17 years and younger are sent to Hamilton County Public Health by each of the Health Departments in Hamilton County. Hamilton County Public Health records all demographic data about all the child deaths (e.g., gender, race, age, residence, etc.) into the CFR data system. The Hamilton County Coroner's office reviews each death certificate to categorize the cause of death and determine whether it qualifies for a full team review by meeting any of the following criteria:

- Homicide
- Suicide
- Unintentional injuries (accidents)
- Undetermined, including presumed Sudden Infant Death Syndrome (SIDS)
- Unexpected outcomes (e.g., unexpected death from identified medical causes)
- Unexpected clusters (e.g., unusual frequency of deaths from identified medical causes)
- All cases investigated by law enforcement

If the former's office determines that the case meets any of the criteria, the case is scheduled for a full CFRT review. Case names are also sent to Job and Family Services (JFS) to determine if there has been any involvement with Chil-

dren's Services at any time. Additionally, any CFRT member can request a full team review of any case they feel would benefit from a full review, whether or not it meets the criteria for full review.

Full team reviews involve an in-depth examination of the death by the entire CFRT, with members reporting on any relevant information they might have about the death. The CFRT tries to reach a conclusion about whether or not the death was preventable, based on the information available on the circumstances leading up to the death.

Suggested Citation

Boeshart T, Carlson D, Davidson D, Samet M. *Hamilton County Child Fatality Review Annual Report - 2012*. Hamilton County, Ohio: Hamilton County Public Health. December 2014.

Data Tables

Note: Some percentages may not equal 100 percent due to rounding

Table 1: 2007-2012 Child Deaths by Year, Hamilton County

	2007	2008	2009	2010	2011	2012
Number of Deaths	179	162	153	150	158	132

Table 2: 2007-2012 Child Death Rate* by Year, Hamilton County

	2007	2008	2009	2010	2011	2012
Number of Deaths	8.72	7.86	7.63	7.91	8.43	7.05

*Rate is per 10,000 child residents

Table 3: 2012 Child Deaths by Age, Race, Ethnicity and Gender, Hamilton County

		2012
Age		
0-28 Days	Number of Deaths	72
	Percent of Deaths	55%
28 Days - 1 Year	Number of Deaths	28
	Percent of Deaths	21%
1-4 Years	Number of Deaths	9
	Percent of Deaths	7%
5-9 Years	Number of Deaths	5
	Percent of Deaths	4%
10-14 Years	Number of Deaths	7
	Percent of Deaths	5%
15-17 Years	Number of Deaths	11
	Percent of Deaths	8%
Race		
White	Number of Deaths	55
	Percent of Deaths	42%
Black	Number of Deaths	72
	Percent of Deaths	55%
Other	Number of Deaths	4
	Percent of Deaths	3%
Missing/Unknown		1
Ethnicity		
Hispanic	Number of Deaths	3
	Percent of Deaths	2%
Non-Hispanic	Number of Deaths	129
	Percent of Deaths	98%
Gender		
Male	Number of Deaths	74
	Percent of Deaths	56%
Female	Number of Deaths	57
	Percent of Deaths	44%
Missing		1
Total	Number of Deaths	132

Table 4: 2012 Manner of Child Deaths by Age, Race, Ethnicity and Gender, Hamilton County

		Natural	Accident	Homicide	Suicide	Undetermined	Total
Age							
0-28 Days	Number of Deaths	67	1	0	0	3	71
	Percent of Deaths	68%	10%	0%	0%	20%	
28 Days - 1 Year	Number of Deaths	15	2	0	0	11	28
	Percent of Deaths	15%	20%	0%	0%	73%	
1-4 Years	Number of Deaths	3	2	3	0	1	9
	Percent of Deaths	3%	20%	43%	0%	7%	
5-9 Years	Number of Deaths	4	0	1	0	0	5
	Percent of Deaths	4%	0%	10%	0%	0%	
10-14 Years	Number of Deaths	5	1	1	0	0	7
	Percent of Deaths	5%	10%	14%	0%	0%	
15-17 Years	Number of Deaths	4	3	3	1	0	11
	Percent of Deaths	4%	30%	43%	100%	0%	
Missing							1
Race							
White	Number of Deaths	43	5	2	1	4	55
	Percent of Deaths	44%	50%	29%	100%	27%	
Black	Number of Deaths	50	5	5	0	11	71
	Percent of Deaths	52%	50%	71%	0%	13%	
Other	Number of Deaths	4	0	0	0	0	4
	Percent of Deaths	4%	0%	0%	0%	0%	
Missing/Unknown							2
Ethnicity							
Hispanic	Number of Deaths	3	0	0	0	0	3
	Percent of Deaths	3%	0%	0%	0%	0%	
Non-Hispanic	Number of Deaths	95	10	7	1	15	128
	Percent of Deaths	97%	100%	100%	100%	100%	
Missing							1
Gender							
Male	Number of Deaths	55	5	4	1	8	73
	Percent of Deaths	56%	50%	57%	100%	53%	
Female	Number of Deaths	42	5	3	0	7	57
	Percent of Deaths	43%	50%	43%	0%	47%	
Missing							2
Total	Number of Deaths	98	10	7	1	15	131*
	Percent of Deaths	75%	8%	5%	1%	11%	

*Total has one child death missing a manner of death

Table 5: 2012 Cause of Child Deaths by Age, Race, Ethnicity and Gender, Hamilton County

		From a Medical Condition	From an External Cause of Injury	Undetermined if Injury or Medical Condition	Unknown	Total
Age						
0-28 Days	Number of Deaths	67	1	3	0	71
	Percent of Deaths	64%	6%	21%	0%	
28 Days - 1 Year	Number of Deaths	15	2	10	1	28
	Percent of Deaths	15%	11%	71%	100%	
1-4 Years	Number of Deaths	3	5	1	0	9
	Percent of Deaths	3%	28%	7%	0%	
5-9 Years	Number of Deaths	4	1	0	0	5
	Percent of Deaths	4%	6%	0%	0%	
10-14 Years	Number of Deaths	5	2	0	0	7
	Percent of Deaths	5%	11%	0%	0%	
15-17 Years	Number of Deaths	4	7	0	0	11
	Percent of Deaths	4%	39%	0%	0%	
Missing						1
Race						
White	Number of Deaths	43	8	4	0	55
	Percent of Deaths	44%	44%	29%	0%	
Black	Number of Deaths	50	10	10	1	71
	Percent of Deaths	52%	50%	71%	0%	
Other	Number of Deaths	4	0	0	0	4
	Percent of Deaths	4%	0%	0%	0%	
Missing/Unknown						2
Ethnicity						
Hispanic	Number of Deaths	3	0	0	0	3
	Percent of Deaths	3%	0%	0%	0%	
Non-Hispanic	Number of Deaths	95	18	14	1	128
	Percent of Deaths	97%	100%	100%	100%	
Missing						1
Gender						
Male	Number of Deaths	55	10	8	0	73
	Percent of Deaths	57%	56%	57%	0%	
Female	Number of Deaths	42	8	6	1	57
	Percent of Deaths	43%	44%	43%	100%	
Missing						2
Total	Number of Deaths	98	18	14	1	131*
	Percent of Deaths	75%	14%	11%	1%	

*Total has one child death missing a cause of death

Table 6: 2012 Cause of Child Deaths by Medical Condition, Hamilton County

		2012
Prematurity	Number of Deaths	62
	Percent of Deaths	63%
Congenital Anomaly	Number of Deaths	15
	Percent of Deaths	15%
Neurological/ Seizure Disorder	Number of Deaths	5
	Percent of Deaths	5%
Other Medical Condition	Number of Deaths	4
	Percent of Deaths	4%
Cancer	Number of Deaths	4
	Percent of Deaths	4%
Other Perinatal Condition	Number of Deaths	3
	Percent of Deaths	3%
Pneumonia	Number of Deaths	2
	Percent of Deaths	2%
Cardiovascular	Number of Deaths	1
	Percent of Deaths	1%
Other Infection	Number of Deaths	1
	Percent of Deaths	1%
Unknown	Number of Deaths	1
	Percent of Deaths	1%

Table 7: 2012 Cause of Child Deaths by External Cause of Injury, Hamilton County

		2012
Weapon, Including Body part	Number of Deaths	7
	Percent of Deaths	39%
Asphyxia	Number of Deaths	5
	Percent of Deaths	28%
Motor Vehicle & Other Transport	Number of Deaths	5
	Percent of Deaths	28%
Poisoning, Overdose or Acute Intoxication	Number of Deaths	1
	Percent of Deaths	6%

Table 8: 2007-2012 Sleep-Related Child Deaths by Year, Hamilton County

	Number of Deaths
2007	23
2008	24
2009	15
2010	20
2011	20
2012	17

Table 9: 2012 Sleep-Related Child Deaths by Manner of Death, Cause of Death, and External Cause of Injury, Hamilton County

		2012
Manner of Death		
Undetermined	Number of Deaths	15
	Percent of Deaths	88%
Accident	Number of Deaths	2
	Percent of Deaths	12%
Cause of Death		
Undetermined if Injury or Medical Condition	Number of Deaths	14
	Percent of Deaths	82%
From an External Cause of Injury	Number of Deaths	2
	Percent of Deaths	12%
Unknown	Number of Deaths	1
	Percent of Deaths	6%
External Cause of Injury		
Asphyxia	Number of Deaths	2
	Percent of Deaths	10%

Table 10: 2012 Sleep-Related Child Deaths by Age, Race, Ethnicity and Gender, Hamilton County

		2012
Age		
0-28 Days	Number of Deaths	4
	Percent of Deaths	24%
28 Days - 1 Year	Number of Deaths	12
	Percent of Deaths	71%
1-4 Years	Number of Deaths	1
	Percent of Deaths	6%
5-9 Years	Number of Deaths	0
	Percent of Deaths	0%
10-14 Years	Number of Deaths	0
	Percent of Deaths	0%
15-17 Years	Number of Deaths	0
	Percent of Deaths	0%
Missing		
Race		
White	Number of Deaths	5
	Percent of Deaths	29%
Black	Number of Deaths	12
	Percent of Deaths	71%
Other	Number of Deaths	0
	Percent of Deaths	0%
Missing/Unknown		
Ethnicity		
Hispanic	Number of Deaths	0
	Percent of Deaths	0%
Non-Hispanic	Number of Deaths	17
	Percent of Deaths	100%
Missing		
Gender		
Male	Number of Deaths	8
	Percent of Deaths	47%
Female	Number of Deaths	9
	Percent of Deaths	53%
Missing		
Total	Number of Deaths	17
	Percent of Deaths	13%

Table 11: 2012 Sleep-Related Child Deaths by Child Sleeping Position, Co-Sleeping Status, and Sleep Location Hamilton County

		2012
Sleeping Position		
On Back	Number of Deaths	13
	Percent of Deaths	76%
On Stomach	Number of Deaths	4
	Percent of Deaths	24%
Co-Sleeping Status		
Yes was Co-Sleeping	Number of Deaths	11
	Percent of Deaths	65%
Not Co-Sleeping	Number of Deaths	5
	Percent of Deaths	29%
Unknown	Number of Deaths	1
	Percent of Deaths	6%
Sleeping Location		
Adult Bed	Number of Deaths	6
	Percent of Deaths	35%
Couch	Number of Deaths	4
	Percent of Deaths	24%
Crib	Number of Deaths	3
	Percent of Deaths	18%
Other	Number of Deaths	2
	Percent of Deaths	12%
Bassinette	Number of Deaths	1
	Percent of Deaths	6%
Unknown	Number of Deaths	1
	Percent of Deaths	6%

Table 12: 2012 Preventability of Child Death by Manner of Death, Hamilton County

		No, Probably Not Preventable	Yes, Probably Preventable	Team Could Not Determine
Manner of Death				
Natural	Number of Deaths	63	0	35
	Percent of Deaths	100%	0%	83%
Accident	Number of Deaths	0	9	1
	Percent of Deaths	0%	35%	2%
Homicide	Number of Deaths	0	7	0
	Percent of Deaths	0%	27%	0%
Suicide	Number of Deaths	0	1	0
	Percent of Deaths	0%	4%	0%
Undetermined	Number of Deaths	0	9	6
	Percent of Deaths	0%	35%	14%
Missing		1		
Total	Number of Deaths	63	26	42
	Percent of Deaths	48%	20%	32%

Table 13: 2007-2011 Child Deaths by Age, Hamilton County

		2007-2011
Age		
0-28 Days	Number of Deaths	439
	Percent of Deaths	55%
28 Days - 1 Year	Number of Deaths	170
	Percent of Deaths	21%
1-4 Years	Number of Deaths	53
	Percent of Deaths	7%
5-9 Years	Number of Deaths	30
	Percent of Deaths	4%
10-14 Years	Number of Deaths	48
	Percent of Deaths	6%
15-17 Years	Number of Deaths	62
	Percent of Deaths	8%
Total	Number of Deaths	802

Table 14: 2007-2011 Child Deaths by Race, Ethnicity, and Gender, Hamilton County

		2007-2011
Race		
White	Number of Deaths	347
	Percent of Deaths	43%
Black	Number of Deaths	452
	Percent of Deaths	56%
Other	Number of Deaths	3
	Percent of Deaths	1%
Ethnicity		
Hispanic	Number of Deaths	32
	Percent of Deaths	4%
Non-Hispanic	Number of Deaths	767
	Percent of Deaths	96%
Missing		3
Gender		
Male	Number of Deaths	464
	Percent of Deaths	58%
Female	Number of Deaths	337
	Percent of Deaths	42%
Missing		1

Table 15: 2007-2011 Manner of Child Deaths by Age, Race, Ethnicity and Gender, Hamilton County

		Natural	Accident	Homicide	Suicide	Undetermined	Total
Age							
0-28 Days	Number of Deaths	433	4	1	0	1	439
	Percent of Deaths	73%	6%	2%	0%	1%	
28 Days - 1 Year	Number of Deaths	76	17	9	0	68	170
	Percent of Deaths	13%	24%	22%	0%	87%	
1-4 Years	Number of Deaths	23	13	9	0	8	53
	Percent of Deaths	4%	18%	22%	0%	10%	
5-9 Years	Number of Deaths	23	6	1	0	0	30
	Percent of Deaths	4%	8%	2%	0%	0%	
10-14 Years	Number of Deaths	25	15	5	2	1	48
	Percent of Deaths	4%	21%	12%	13%	1%	
15-17 Years	Number of Deaths	15	17	16	14	0	62
	Percent of Deaths	3%	24%	39%	88%	0%	
Race							
White	Number of Deaths	254	36	11	9	37	347
	Percent of Deaths	43%	50%	27%	56%	47%	
Black	Number of Deaths	339	35	30	7	41	452
	Percent of Deaths	57%	49%	73%	44%	53%	
Other	Number of Deaths	2	1	0	0	0	3
	Percent of Deaths	< 1%	1%	0%	0%	0%	
Ethnicity							
Hispanic	Number of Deaths	25	0	2	0	5	32
	Percent of Deaths	4%	0%	5%	0%	6%	
Non-Hispanic	Number of Deaths	567	72	39	16	73	767
	Percent of Deaths	96%	100%	95%	100%	94%	
Missing							3
Gender							
Male	Number of Deaths	331	48	30	14	41	464
	Percent of Deaths	56%	67%	73%	88%	53%	
Female	Number of Deaths	263	24	11	2	37	337
	Percent of Deaths	44%	33%	27%	13%	47%	
Missing							1
Total	Number of Deaths	595	72	41	16	78	802
	Percent of Deaths	74%	9%	5%	2%	10%	

Table 16: 2007-2011 Cause of Child Deaths by Age, Race, Ethnicity and Gender, Hamilton County

		From a Medical Condition	From an External Cause of Injury	Undetermined if Injury or Medical Condition	Unknown	Total
Age						
0-28 Days	Number of Deaths	434	4	1	0	439
	Percent of Deaths	72%	3%	2%	0%	
28 Days - 1 Year	Number of Deaths	86	28	54	2	170
	Percent of Deaths	14%	22%	84%	67%	
1-4 Years	Number of Deaths	24	22	6	1	53
	Percent of Deaths	45	17%	10%	33%	
5-9 Years	Number of Deaths	23	7	0	0	30
	Percent of Deaths	4%	5%	0%	0%	
10-14 Years	Number of Deaths	25	22	1	0	48
	Percent of Deaths	4%	17%	2%	0%	
15-17 Years	Number of Deaths	15	47	0	0	62
	Percent of Deaths	2%	36%	0%	0%	
Race						
White	Number of Deaths	258	55	32	2	347
	Percent of Deaths	43%	42%	52%	67%	
Black	Number of Deaths	347	74	30	1	452
	Percent of Deaths	57%	57%	48%	33%	
Other	Number of Deaths	2	1	0	0	3
	Percent of Deaths	< 1%	1%	0%	0%	
Ethnicity						
Hispanic	Number of Deaths	26	2	3	1	32
	Percent of Deaths	4%	2%	5%	33%	
Non-Hispanic	Number of Deaths	578	128	59	2	767
	Percent of Deaths	96%	98%	95%	67%	
Missing						3
Gender						
Male	Number of Deaths	337	93	33	1	464
	Percent of Deaths	56%	72%	53%	33%	
Female	Number of Deaths	269	37	29	2	337
	Percent of Deaths	44%	28%	47%	67%	
Unknown/Missing						1
Total	Number of Deaths	607	130	62	3	802
	Percent of Deaths	75%	14%	11%	1%	

Table 17: 2007-2011 Cause of Child Deaths by Medical Condition, Hamilton County

		2007-2011
Prematurity	Number of Deaths	355
	Percent of Deaths	58%
Congenital Anomaly	Number of Deaths	95
	Percent of Deaths	16%
Other Medical Condition	Number of Deaths	33
	Percent of Deaths	5%
Other Infection	Number of Deaths	30
	Percent of Deaths	5%
Other Perinatal Condition	Number of Deaths	23
	Percent of Deaths	4%
Neurological/ Seizure Disorder	Number of Deaths	18
	Percent of Deaths	3%
Cancer	Number of Deaths	11
	Percent of Deaths	2%
Undetermined Medical Cause	Number of Deaths	11
	Percent of Deaths	2%
Cardiovascular	Number of Deaths	10
	Percent of Deaths	2%
Asthma	Number of Deaths	6
	Percent of Deaths	1%
Unknown	Number of Deaths	5
	Percent of Deaths	1%
Pneumonia	Number of Deaths	4
	Percent of Deaths	1%
SIDS	Number of Deaths	3
	Percent of Deaths	< 1%
Malnutrition/ Dehydration	Number of Deaths	2
	Percent of Deaths	< 1%
Influenza	Number of Deaths	1
	Percent of deaths	< 1%

Table 18: 2007-2011 Cause of Child Deaths by External Cause of Injury, Hamilton County

		2007-2011
Weapon, Including Body Part	Number of Deaths	41
	Percent of Deaths	32%
Asphyxia	Number of Deaths	31
	Percent of Deaths	24%
Motor Vehicle & Other Transport	Number of Deaths	24
	Percent of Deaths	18%
Drowning	Number of Deaths	11
	Percent of Deaths	8%
Poisoning, Overdose or Acute Intoxication	Number of Deaths	8
	Percent of Deaths	6%
Fire, Burn or Electrocution	Number of Deaths	5
	Percent of Deaths	4%
Fall or Crush	Number of Deaths	4
	Percent of Deaths	3%
Undetermined	Number of Deaths	4
	Percent of Deaths	3%
Exposure	Number of Deaths	2
	Percent of Deaths	2%

Table 19: 2007-2011 Sleep-Related Child Deaths by Age, Race, Ethnicity and Gender, Hamilton County

		2007-2011
Age		
0-28 Days	Number of Deaths	5
	Percent of Deaths	5%
28 Days - 1 Year	Number of Deaths	86
	Percent of Deaths	84%
1-4 Years	Number of Deaths	10
	Percent of Deaths	10%
5-9 Years	Number of Deaths	1
	Percent of Deaths	1%
10-14 Years	Number of Deaths	0
	Percent of Deaths	0%
15-17 Years	Number of Deaths	0
	Percent of Deaths	0%
Missing		
Race		
White	Number of Deaths	47
	Percent of Deaths	46%
Black	Number of Deaths	55
	Percent of Deaths	54%
Other	Number of Deaths	0
	Percent of Deaths	0%
Missing/Unknown		
Ethnicity		
Hispanic	Number of Deaths	5
	Percent of Deaths	5%
Non-Hispanic	Number of Deaths	97
	Percent of Deaths	95%
Missing		
Gender		
Male	Number of Deaths	55
	Percent of Deaths	54%
Female	Number of Deaths	47
	Percent of Deaths	46%
Missing		
Total	Number of Deaths	102
	Percent of Deaths	13%

Table 20: 2007-2011 Sleep-Related Child Deaths by Manner of Death, Cause of Death, Hamilton County

		2007-2011
Manner of Death		
Undetermined	Number of Deaths	72
	Percent of Deaths	70%
Accident	Number of Deaths	19
	Percent of Deaths	19%
Natural	Number of Deaths	11
	Percent of Deaths	11%
Cause of Death		
Undetermined if Injury or Medical Condition	Number of Deaths	54
	Percent of Deaths	57%
From an External Cause of Injury	Number of Deaths	23
	Percent of Deaths	22%
From a Medical Condition	Number of Deaths	18
	Percent of Deaths	18%
Unknown	Number of Deaths	3
	Percent of Deaths	3%

Table 21: 2007-2011 Sleep-Related Child Deaths by Medical Condition, and External Cause of Injury, Hamilton County

		2007-2011
Medical Condition		
Undetermined Medical Cause	Number of Deaths	7
	Percent of Deaths	39%
SIDS	Number of Deaths	3
	Percent of Deaths	17%
Unknown	Number of Deaths	3
	Percent of Deaths	17%
Other Infection	Number of Deaths	2
	Percent of Deaths	11%
Congenital Anomaly	Number of Deaths	1
	Percent of Deaths	6%
Pneumonia	Number of Deaths	1
	Percent of Deaths	6%
Other Medical Condition	Number of Deaths	1
	Percent of Deaths	6%
External Cause of Injury		
Asphyxia	Number of Deaths	17
	Percent of Deaths	74%
Undetermined	Number of Deaths	4
	Percent of Deaths	17%
Fire, Burn or Electrocution	Number of Deaths	2
	Percent of Deaths	9%

Table 22: 2007-2011 Sleep-Related Child Deaths by Co-Sleeping Status, and Sleep Location, Hamilton County

		2007-2011
Co-Sleeping Status		
Yes was Co-Sleeping	Number of Deaths	62
	Percent of Deaths	70%
Not Co-Sleeping	Number of Deaths	23
	Percent of Deaths	26%
Unknown	Number of Deaths	3
	Percent of Deaths	2%
Missing		14
Sleeping Location		
Adult Bed	Number of Deaths	38
	Percent of Deaths	37%
Crib	Number of Deaths	20
	Percent of Deaths	20%
Couch	Number of Deaths	11
	Percent of Deaths	11%
Other	Number of Deaths	10
	Percent of Deaths	10%
Bassinette	Number of Deaths	9
	Percent of Deaths	9%
Playpen	Number of Deaths	7
	Percent of Deaths	7%
Unknown	Number of Deaths	3
	Percent of Deaths	3%
Floor	Number of Deaths	2
	Percent of Deaths	2%
Car-seat	Number of Deaths	1
	Percent of Deaths	1%
Chair	Number of Deaths	1
	Percent of Deaths	1%

Table 23: 2007-2011 Sleep-Related Child Deaths by Child Sleeping Position, Hamilton County

		2007-2011
Sleeping Position		
On Back	Number of Deaths	67
	Percent of Deaths	66%
On Stomach	Number of Deaths	21
	Percent of Deaths	21%
On Side	Number of Deaths	13
	Percent of Deaths	13%
Missing		1

Table 24: 2007-2011 Vehicular Child Deaths by Year, Hamilton County

	2007	2008	2009	2010	2011
Number of Deaths	8	5	2	4	5
Percent of Deaths*	24%	19%	8%	17%	22%

*Percent of Deaths due to External Cause of Injury

Table 25: 2007-2011 Vehicular Child Deaths by Age Group, and Race, Hamilton County

		2007-2011
Age		
0-28 Days	Number of Deaths	1
	Percent of Deaths	4%
28 Days - 1 Year	Number of Deaths	0
	Percent of Deaths	0%
1-4 Years	Number of Deaths	3
	Percent of Deaths	13%
5-9 Years	Number of Deaths	1
	Percent of Deaths	4%
10-14 Years	Number of Deaths	7
	Percent of Deaths	29%
15-17 Years	Number of Deaths	12
	Percent of Deaths	50%
Race		
White	Number of Deaths	14
	Percent of Deaths	58%
Black	Number of Deaths	10
	Percent of Deaths	42%
Other	Number of Deaths	0
	Percent of Deaths	0%

Table 26: 2007-2011 Vehicular Child Deaths by Gender, and Ethnicity, Hamilton County

		2007-2011
Gender		
Male	Number of Deaths	17
	Percent of Deaths	71%
Female	Number of Deaths	7
	Percent of Deaths	29%
Ethnicity		
Hispanic	Number of Deaths	0
	Percent of Deaths	0%
Non-Hispanic	Number of Deaths	24
	Percent of Deaths	100%

Table 27: 2007-2011 Child Asphyxia Deaths by Year, Hamilton County

	2007	2008	2009	2010	2011
Number of Deaths	4	7	9	8	3
Percent of Deaths*	12%	26%	38%	35%	13%

*Percent of Deaths due to External Cause of Injury

Table 28: 2007-2011 Child Asphyxia Deaths by Age Group, Gender, Race and Ethnicity, Hamilton County

		2007-2011
Age		
0-28 Days	Number of Deaths	3
	Percent of Deaths	10%
28 Days - 1 Year	Number of Deaths	13
	Percent of Deaths	42%
1-4 Years	Number of Deaths	4
	Percent of Deaths	13%
5-9 Years	Number of Deaths	0
	Percent of Deaths	0%
10-14 Years	Number of Deaths	5
	Percent of Deaths	16%
15-17 Years	Number of Deaths	6
	Percent of Deaths	19%
Race		
White	Number of Deaths	14
	Percent of Deaths	45%
Black	Number of Deaths	17
	Percent of Deaths	55%
Other	Number of Deaths	0
	Percent of Deaths	0%
Ethnicity		
Hispanic	Number of Deaths	0
	Percent of Deaths	0%
Non-Hispanic	Number of Deaths	31
	Percent of Deaths	100%
Gender		
Male	Number of Deaths	19
	Percent of Deaths	61%
Female	Number of Deaths	12
	Percent of Deaths	39%

Table 29: 2007-2011 Child Asphyxia Deaths by Sleep-Related Status, Hamilton County

		2007-2011
Sleep-Related		
Yes, Sleep-Related Death	Number of Deaths	17
	Percent of Deaths	77%
No, Not Sleep-Related Death	Number of Deaths	5
	Percent of Deaths	23%
Missing		9

Table 30: 2007-2011 Child Asphyxia Deaths by Cause of Asphyxia, Hamilton County

		2007-2011
Cause of Asphyxia		
Suffocation	Number of Deaths	19
	Percent of Deaths	63%
Strangulation	Number of Deaths	10
	Percent of Deaths	33%
Choking	Number of Deaths	1
	Percent of Deaths	3%
Missing		1

Table 31: 2007-2011 Child Poisoning Deaths by Year, Hamilton County

	Number of Deaths	Percent of Deaths*
2007	2	6%
2008	2	7%
2009	1	4%
2010	1	4%
2011	2	9%

*Percent of Deaths due to External Cause of Injury

Table 32: 2007-2011 Child Poisoning Deaths by Age Group, Gender, Race and Ethnicity, Hamilton County

		2007-2011
Age		
0-28 Days	Number of Deaths	0
	Percent of Deaths	0%
28 Days - 1 Year	Number of Deaths	1
	Percent of Deaths	13%
1-4 Years	Number of Deaths	1
	Percent of Deaths	13%
5-9 Years	Number of Deaths	0
	Percent of Deaths	0%
10-14 Years	Number of Deaths	1
	Percent of Deaths	13%
15-17 Years	Number of Deaths	5
	Percent of Deaths	63%
Race		
White	Number of Deaths	2
	Percent of Deaths	25%
Black	Number of Deaths	6
	Percent of Deaths	75%
Other	Number of Deaths	0
	Percent of Deaths	0%
Ethnicity		
Hispanic	Number of Deaths	0
	Percent of Deaths	0%
Non-Hispanic	Number of Deaths	8
	Percent of Deaths	100%
Gender		
Male	Number of Deaths	7
	Percent of Deaths	88%
Female	Number of Deaths	1
	Percent of Deaths	12%

Table 33: 2007-2011 Child Poisoning Deaths by Incident Type, and Source of Poisoning, Hamilton County

		2007-2011
Type of Incident		
Accidental Overdose	Number of Deaths	4
	Percent of Deaths	50%
Deliberate Poisoning	Number of Deaths	3
	Percent of Deaths	38%
Other	Number of Deaths	1
	Percent of Deaths	13%
Source of Poisoning		
Alcohol	Number of Deaths	2
	Percent of Deaths	25%
Opiate Pain Killers	Number of Deaths	2
	Percent of Deaths	25%
Street Drugs	Number of Deaths	2
	Percent of Deaths	25%
Antifreeze	Number of Deaths	1
	Percent of Deaths	12.5%
Methadone	Number of Deaths	1
	Percent of Deaths	12.5%

Table 34: 2007-2011 Child Homicide Deaths by Year, Hamilton County

	2007	2008	2009	2010	2011
Number of Deaths	11	6	9	6	9
Percent of Deaths*	33%	225	38%	26%	39%

*Percent of Deaths due to External Cause of Injury

Table 35: 2007-2011 Child Homicide Deaths by Age Group, and Race, Hamilton County

		2007-2011
Age		
0-28 Days	Number of Deaths	1
	Percent of Deaths	2%
28 Days - 1 Year	Number of Deaths	9
	Percent of Deaths	22%
1-4 Years	Number of Deaths	9
	Percent of Deaths	22%
5-9 Years	Number of Deaths	1
	Percent of Deaths	2%
10-14 Years	Number of Deaths	5
	Percent of Deaths	12%
15-17 Years	Number of Deaths	16
	Percent of Deaths	39%
Race		
White	Number of Deaths	11
	Percent of Deaths	27%
Black	Number of Deaths	30
	Percent of Deaths	73%
Other	Number of Deaths	0
	Percent of Deaths	0%

Table 36: 2007-2011 Child Homicide Deaths by Gender, and Ethnicity, Hamilton County

		2007-2011
Gender		
Male	Number of Deaths	30
	Percent of Deaths	73%
Female	Number of Deaths	11
	Percent of Deaths	27%
Ethnicity		
Hispanic	Number of Deaths	2
	Percent of Deaths	5%
Non-Hispanic	Number of Deaths	39
	Percent of Deaths	95%

Table 37: 2007-2011 Child Homicide Deaths by Cause of Death, Hamilton County

		2007-2011
From an External Cause of Injury	Number of Deaths	38
	Percent of Deaths	93%
From a Medical Condition	Number of Deaths	3
	Percent of Deaths	7%

Table 38: 2007-2011 Child Homicide Deaths by External Cause of Injury, Hamilton County

		2007-2011
External Cause of Injury		
Weapon, Including Body Part	Number of Deaths	34
	Percent of Deaths	89%
Asphyxia	Number of Deaths	3
	Percent of Deaths	8%
Poisoning, Overdose or Acute Intoxication	Number of Deaths	1
	Percent of Deaths	3%
Missing		3

Table 39: 2007-2011 Child Homicide Deaths by Type of Weapon, Hamilton County

		2007-2011
External Cause of Injury		
Firearm	Number of Deaths	21
	Percent of Deaths	64%
Person's Body Part	Number of Deaths	7
	Percent of Deaths	21%
Unknown	Number of Deaths	3
	Percent of Deaths	9%
Blunt Instrument	Number of Deaths	1
	Percent of Deaths	3%
Sharp Instrument	Number of Deaths	1
	Percent of Deaths	3%
Missing		8

Table 40: 2007-2011 Child Homicide Deaths by Location of Homicide, Hamilton County

		2007-2011
Location of Homicide		
Child's Home	Number of Deaths	17
	Percent of Deaths	44%
Roadway	Number of Deaths	6
	Percent of Deaths	15%
Sidewalk	Number of Deaths	4
	Percent of Deaths	10%
Relative's House	Number of Deaths	3
	Percent of Deaths	8%
Other	Number of Deaths	3
	Percent of Deaths	8%
Friend's Home	Number of Deaths	2
	Percent of Deaths	5%
Other Recreational Area	Number of Deaths	2
	Percent of Deaths	5%
Driveway	Number of Deaths	1
	Percent of Deaths	3%
Hospital	Number of Deaths	1
	Percent of Deaths	3%
Missing		2

Table 41: 2007-2011 Child Homicide Deaths by Perpetrator, Hamilton County

		2007-2011
Perpetrator		
Biological Parent	Number of Deaths	7
	Percent of Deaths	32%
Acquaintance	Number of Deaths	6
	Percent of Deaths	27%
Mother's Partner	Number of Deaths	4
	Percent of Deaths	18%
Other	Number of Deaths	2
	Percent of Deaths	9%
Friend	Number of Deaths	1
	Percent of Deaths	5%
Law Enforcement Officer	Number of Deaths	1
	Percent of Deaths	5%
Stranger	Number of Deaths	1
	Percent of Deaths	5%
Missing		3

Table 42: 2007-2011 Child Suicide Deaths by Year, Hamilton County

	2007	2008	2009	2010	2011
Number of Deaths	2	3	7	3	1
Percent of Deaths*	6%	11%	29%	13%	4%

*Percent of Deaths due to External Cause of Injury

Table 43: 2007-2011 Child Suicide Deaths by Age Group, and Race, Hamilton County

		2007-2011
Age		
0-28 Days	Number of Deaths	0
	Percent of Deaths	0%
28 Days - 1 Year	Number of Deaths	0
	Percent of Deaths	0%
1-4 Years	Number of Deaths	0
	Percent of Deaths	0%
5-9 Years	Number of Deaths	0
	Percent of Deaths	0%
10-14 Years	Number of Deaths	2
	Percent of Deaths	12%
15-17 Years	Number of Deaths	14
	Percent of Deaths	88%
Race		
White	Number of Deaths	9
	Percent of Deaths	56%
Black	Number of Deaths	7
	Percent of Deaths	44%
Other	Number of Deaths	0
	Percent of Deaths	0%

Table 44: 2007-2011 Child Suicide Deaths by Gender, and Ethnicity, Hamilton County

		2007-2011
Gender		
Male	Number of Deaths	14
	Percent of Deaths	88%
Female	Number of Deaths	2
	Percent of Deaths	13%
Ethnicity		
Hispanic	Number of Deaths	0
	Percent of Deaths	0%
Non-Hispanic	Number of Deaths	16
	Percent of Deaths	16%

Table 45: 2007-2011 Child Suicide Deaths by Cause of Death and External Cause of Injury, Hamilton County

		2007-2011
Cause of Death		
From an External Cause of Injury	Number of Deaths	16
	Percent of Deaths	100%
External Cause of Injury		
Asphyxia	Number of Deaths	8
	Percent of Deaths	50%
Weapon, Including Body Part	Number of Deaths	6
	Percent of Deaths	38%
Poisoning, Overdose or Acute Intoxication	Number of Deaths	2
	Percent of Deaths	13%

Table 46: 2007-2011 Age Group of Child Deaths by Gender, Race, and Ethnicity, Hamilton County

		Infant (0-1 Year)	1-4 Years	5-9 Years	10-14 Years	15-17 Years
Gender						
Male	Number of Deaths	346	30	13	29	46
	Percent of Deaths	57%	57%	43%	60%	74%
Female	Number of Deaths	262	23	17	19	16
	Percent of Deaths	43%	43%	57%	40%	26%
Missing/Unknown		1				
Race						
White	Number of Deaths	250	28	18	26	25
	Percent of Deaths	41%	53%	60%	54%	40%
Black	Number of Deaths	357	25	12	22	36
	Percent of Deaths	59%	47%	40%	46%	58%
Other	Number of Deaths	2	0	0	0	1
	Percent of Deaths	< 1%	0%	0%	0%	2%
Missing/Unknown						
Ethnicity						
Hispanic	Number of Deaths	26	3	1	0	2
	Percent of Deaths	4%	6%	3%	0%	3%
Non-Hispanic	Number of Deaths	581	50	28	48	60
	Percent of Deaths	96%	940%	97%	100%	97%
Missing/Unknown				1		

Table 47: 2007-2011 Age Group of Child Deaths by Medical Condition, Hamilton County

		Infant (0-1 Year)	1-4 Years	5-9 Years	10-14 Years	15-17 Years
Prematurity	Number of Deaths	354	1	0	0	0
	Percent of Deaths	68%	4%	0%	0%	0%
Congenital Anomaly	Number of Deaths	80	5	2	8	0
	Percent of Deaths	15%	21%	9%	32%	0%
Other Perinatal Condition	Number of Deaths	20	1	1	1	0
	Percent of Deaths	4%	4%	4%	4%	0%
Other Infection	Number of Deaths	17	7	2	2	2
	Percent of Deaths	3%	29%	9%	8%	13%
Other Medical Condition	Number of Deaths	11	5	7	6	4
	Percent of Deaths	2%	21%	30%	24%	27%
Undetermined Medical Cause	Number of Deaths	11	0	0	0	0
	Percent of Deaths	2%	0%	0%	0%	0%
Neurological/ Seizure Disorder	Number of Deaths	8	2	3	3	2
	Percent of Deaths	2%	8%	13%	12%	13%
Cardiovascular	Number of Deaths	6	0	0	0	4
	Percent of Deaths	1%	0%	0%	0%	27%
Unknown	Number of Deaths	5	0	0	0	0
	Percent of Deaths	1%	0%	0%	0%	0%
SIDS	Number of Deaths	3	0	0	0	0
	Percent of Deaths	1%	0%	0%	0%	0%
Malnutrition/ Dehydration	Number of Deaths	1	0	0	0	0
	Percent of Deaths	< 1%	0%	0%	0%	0%
Asthma	Number of Deaths	1	0	3	1	1
	Percent of Deaths	< 1%	0%	13%	4%	7%
Cancer	Number of Deaths	1	1	4	3	2
	Percent of Deaths	< 1%	4%	17%	12%	13%
Pneumonia	Number of Deaths	1	2	0	1	0
	Percent of Deaths	< 1%	8%	0%	4%	0%
Influenza	Number of Deaths	0	0	1	0	0
	Percent of deaths	0%	0%	4%	0%	0%

Table 48: 2007-2011 Age Group of Child Deaths by External Cause of Injury, Hamilton County

		Infant (0-1 Year)	1-4 Years	5-9 Years	10-14 Years	15-17 Years
Asphyxia	Number of Deaths	16	4	0	5	6
	Percent of Deaths	50%	18%	0%	23%	13%
Weapon, Including Body Part	Number of Deaths	7	6	2	4	22
	Percent of Deaths	22%	27%	29%	18%	47%
Undetermined	Number of Deaths	4	0	0	0	0
	Percent of Deaths	13%	0%	0%	0%	0%
Drowning	Number of Deaths	2	3	1	5	0
	Percent of Deaths	6%	14%	14%	23%	0%
Exposure	Number of Deaths	1	1	0	0	0
	Percent of Deaths	3%	5%	0%	0%	0%
Motor Vehicle and Other Transport	Number of Deaths	1	3	1	7	12
	Percent of Deaths	3%	14%	14%	32%	26%
Poisoning, Overdose or Acute Intoxication	Number of Deaths	1	1	0	1	5
	Percent of Deaths	3%	5%	0%	5%	11%
Fire, Burn or Electrocution	Number of Deaths	0	3	2	0	0
	Percent of Deaths	0%	14%	29%	0%	0%
Fall or Crush	Number of Deaths	0	1	1	0	2
	Percent of Deaths	0%	5%	14%	0%	4%

Table 49: 2007-2011 Preventability of Child Death by Manner of Death, Hamilton County

		No, Probably Not Preventable	Yes, Probably Preventable	Team Could Not Determine
Manner of Death				
Natural	Number of Deaths	42	2	447
	Percent of Deaths	84%	1%	90%
Accident	Number of Deaths	1	68	3
	Percent of Deaths	2%	45%	1%
Homicide	Number of Deaths	2	23	1
	Percent of Deaths	45	25%	< 1%
Suicide	Number of Deaths	0	12	4
	Percent of Deaths	0%	8%	1%
Undetermined	Number of Deaths	5	32	41
	Percent of Deaths	10%	215	8%
Missing		104		
Total*	Number of Deaths	50	152	496
	Percent of Deaths	7%	22%	71%

*Total has 104 child death missing preventability status

References

1. "WISH — Violent Death Module Definitions." *WISH — Violent Death Module Definitions*. Wisconsin Department of Health Services, 9 Mar. 2011. Web. 3 Sept. 2014. <http://www.dhs.wisconsin.gov/wish/main/violentdeath/define.htm>.
2. "Child Death Review Case Reporting System: Data Dictionary." *The National Center for the Review & Prevention of Child Deaths*. National Center for Review & Prevention of Child Deaths, 1 Oct. 2013. Web. 3 Sept. 2014.
3. "Ohio Child Fatality Review Thirteen Annual Report." *Ohio Department of Health: Child Fatality Review Annual Reports*. Ohio Department of Health, Ohio Children's Trust Fund, 1 Sept. 2013. Web. 3 Sept. 2014. <http://www.odh.ohio.gov/~/media/ODH/ASSETS/Files/cfhs/child fatality review/2013/2013 Ohio Child Fatality Review Updated Draft.ashx>.
4. "National Prematurity Awareness Month." *Centers for Disease Control and Prevention: National Prematurity Awareness Month*. Centers for Disease Control and Prevention, 29 Oct. 2013. Web. 3 Sept. 2014. <http://www.cdc.gov/features/prematurebirth/>.
5. "Facts about Birth Defects." *Centers for Disease Control and Prevention: Birth Defects*. Centers for Disease Control and Prevention, 6 Feb. 2014. Web. 3 Sept. 2014. <http://www.cdc.gov/ncbddd/birthdefects/facts.html>.
6. "Causes of Death - Motor Vehicle." *Motor Vehicle*. National MCH Center for Child Death Review. Web. 3 Sept. 2014. <http://www.childdeathreview.org/causesMV.htm>.
7. "Causes of Death - Suffocation." *Suffocation*. National MCH Center for Child Death Review. Web. 3 Sept. 2014. <http://www.childdeathreview.org/causessuf.htm>.
8. "Causes of Death - Other Accidents." *Other Accidents*. National MCH Center for Child Death Review. Web. 3 Sept. 2014. <http://www.childdeathreview.org/causesOA.htm>.
9. "What All The Words Mean – A Glossary." *Stairway to Recovery: Glossary of Terms*. University of Pennsylvania Health System, 2003. Web. 3 Sept. 2014. <http://www.uphs.upenn.edu/addiction/berman/glossary/>.
10. "Causes of Death - Homicide (Firearm)." *Homicide (Firearm)*. National MCH Center for Child Death Review. Web. 3 Sept. 2014. <http://www.childdeathreview.org/causesHF.htm>.
11. "Expanded Homicide Data." *Crime in the United States 2009*. U.S. Department of Justice - Federal Bureau of Investigation, 1 Sept. 2010. Web. 3 Sept. 2014. <http://www2.fbi.gov/ucr/cius2009/offenses/expanded_information/homicide.html>.
12. "Suicide Prevention." *Centers for Disease Control and Prevention: Injury Prevention and Control*. Centers for Disease Control and Prevention, 10 Apr. 2014. Web. 3 Sept. 2014. <http://www.cdc.gov/violencePrevention/suicide/>.
13. "Definitions: Self-directed Violence." *Centers for Disease Control and Prevention: Injury Prevention and Control*. Centers for Disease Control and Prevention, 31 Dec. 2013. Web. 3 Sept. 2014. <http://www.cdc.gov/violenceprevention/suicide/definitions.html>.
14. "Infant Mortality." *Centers for Disease Control and Prevention: Reproductive Health*. Centers for Disease Control and Prevention, 12 Aug. 2014. Web. 3 Sept. 2014. <http://www.cdc.gov/reproductivehealth/maternalinfanthealth/infantmortality.htm>.
15. "NCHS Data Brief: Recent Trends in Infant Mortality in the United States." *Centers for Disease Control and Prevention: Publications and Information Products*. Centers for Disease Control and Prevention, 19 Jan. 2010. Web. 3 Sept. 2014. <http://www.cdc.gov/nchs/data/databriefs/db09.htm>.
16. "Congenital Anomalies." *World Health Organization: Media Centre*. World Health Organization, 1 Jan. 2014. Web. 3 Sept. 2014. <http://www.who.int/mediacentre/factsheets/fs370/en/>.

Contact Us

Hamilton County
Public Health

Address

250 William Howard Taft Road,
2nd Floor,
Cincinnati, Ohio 45219

Phone Number

[513] 946-7800

Fax Number

[513] 946-7943

Website

www.hamiltoncountyhealth.org

Follow us on Social Media

@HamCoHealth

HAMILTON COUNTY
PUBLIC HEALTH

PREVENT. PROMOTE. PROTECT.