Child Fatalities 2015

Protecting Our Future

The Cuyahoga County Child Fatality Report
Nineteenth Edition

COUNTY OF CUYAHOGA
OHIO

The Cuyahoga County
Office of Early Childhood
Invest in Children

The Cuyahoga County
Child Fatality Review Committee
Armond Budish, Cuyahoga County Executive

Invest in Children
Cuyahoga County

*We dedicate this report to all the families who
mourn the death of their child.
The community honors their memory by pledging itself
to a course of action that strives to prevent the death of another.*

The purpose of the Cuyahoga County Child Fatality Review Board is to decrease the number of preventable child deaths. The Board reviews the deaths of all children less than 18 years old who live in Cuyahoga County. This confidential review is conducted by an interdisciplinary team who identifies the contributing causes, risk factors, and trends. The Board makes data-driven recommendations to protect the health and safety of all children in the community.

Infant Mortality and Disparities:

- Promote the strategies of the Ohio Institute for Equity in Birth Outcomes to eliminate racial disparities and improve birth outcomes in Cuyahoga County.

Prematurity:

- Support the efforts of the March of Dimes in the areas of research and public awareness regarding the causes, risk factors, and lifelong effects of prematurity. Continue to educate women and expectant parents about the warning signs of preterm labor and the importance of a "Life Course Perspective" to decrease the risks of preterm births.

- Support promising and evidence-based practices that decrease preterm births, such as CenteringPregnancy® and the use of progesterone for high-risk women.

- Encourage child and family serving agencies to incorporate interconception care and a reproductive life plan as core components of their programs.

- Promote a seamless system for perinatal services that also addresses the complex needs of many pregnant women by linking them to services for chronic health problems, drug treatment, and mental health counseling.

Birth Defects:

- Encourage programs encompass-ing a "Life Course Perspective," that identify and modify medical, social, environmental, and behav-ioral risks throughout a woman's life that can impact future pregnancies.

Sleep Related Deaths:

- Continue to educate childbirth instructors and staff at maternity and pediatric hospitals in Cuyahoga County about the importance of role modeling safe sleep in the hospital and educating all caregivers. Encourage the development of hospital safe sleep policies and a review of safe sleep discharge education.

- Increase family serving agencies' awareness of the components of a safe infant sleep environment by providing staff training on risk factors, local sleep related fatality data, and the most recent American Academy of Pediatrics safe sleep recommendations.

- Partner with family serving agencies to provide safe sleep education to other infant caregivers, such as grandparents, relatives, and friends, with a focus on providing a safe sleep environment in any location.

- Promote the Ohio safe sleep campaign and its educational resources to hospitals and agencies in Cuyahoga County.

- Support the Ohio law that requires hospitals to provide safe sleep education and to assess for a safe sleep environment at home before discharge.

Medically Related Deaths:

- Reinforce the importance of a medical home for children with chronic illnesses.

Unintentional Injuries:

- Support the Greater Cleveland Safe Kids / Safe Communities Coalition in their comprehensive efforts to prevent injuries and educate the community on safety issues that include: child passenger seats/restraints; teen drivers; pedestrian, bus, and bicycle safety; unintentional poisoning; and fire, water, and sports safety.

- Partner with child/family agencies to disseminate the message stressing the importance of adequate and appropriate adult supervision of children in homes, around water, and in neighborhoods.

- Reinforce the importance of gun safety in the home – unloaded, locked, and out of the reach of children.

Homicide:

- Promote the use of 24-hour parenting hotlines as a safe and confidential resource for parents in crisis.

- Support educational programs that assist parents and guardians in understanding age appropriate behaviors, using alternative methods of discipline, and choosing suitable caregivers.

- Support domestic and teen dating violence education and programs that: help families identify warning signs; outline actions to take, especially for escalating behaviors; provide access to counseling and emergency shelter; and initiate early intervention to limit the effects on children in the home.

- Advocate for community-based safe haven centers for teens, to provide supervised activities and programs after school and on weekends.

Suicide:

- Support school programs for depression awareness, bullying, and suicide prevention that also include resources for assistance.

Infant – A person under 1 year of age.

Neonatal Period – The time period for all infants from their date of birth through the 27th day of life.

Postneonatal Period – The time period for all infants from the 28th day of life until the day before their 1st birthday.

Child – A person who has not yet reached their 18th birthday (all references to "child" in this report specify which age group/range is being discussed).

Cause of Death – Event that causes a physical problem, no matter how brief or prolonged, that leads to a child's death.

Manner of Death – Description of circumstances under which a child died. There are five categories for manner of death:

1. **Natural:** the death is a consequence of natural disease.
2. **Accident:** unintended and essentially unavoidable death, not by a natural, suicidal, or homicidal manner.
3. **Suicide:** death caused by self, with some degree of conscious intent.
4. **Homicide:** death caused by another human.
5. **Undetermined:** not enough evidence, yet or ever, to determine the manner of death.

Sleep Related Deaths – Deaths to infants under the age of 1 year that occur while sleeping. They can be classified as the following three types:

1. **Sudden Infant Death Syndrome (SIDS):** a sudden, unexplained death of an infant less than 1 year old. It is a diagnosis of exclusion, meaning that after an extensive review of the infant's medical history, a complete autopsy, and a death scene investigation, no cause can be identified.
2. **Accidental Suffocation:** a result of another person lying on the baby, wedging of the baby, or the baby's face, in a soft surface such as a pillow, blanket, or bumper pad.
3. **Sudden Unexplained Infant Death (SUID)/ Undetermined:** ruled as the cause of death when an exact reason cannot be found, but the scene investigation indicates that there were dangers in the baby's sleep area.

White – A person having ancestry in any of the original peoples of Europe, the Middle East, or North Africa. It includes people who self-report their race as "white" on demographic documents.

Black – A person having origins in any of the black racial groups of Africa. It includes people who self-report their race as "black" on demographic documents.

All Other Races – A person who does not have ancestry in any of the original peoples of Europe, the Middle East, or Africa. It includes people who indicate their race is not "white" or "black," such as American Indian or Alaska Native, Asian, and Native Hawaiian or Other Pacific Islander, as well as ethnicities such as Hispanic.

Rate – Measure that indicates how often an event is occurring during a certain time period; it is calculated by taking the count of an event during a specific time period and dividing this number by the population that is at risk for experiencing the event during the time period. Rates are often expressed in units of 10, such as per 100, per 1,000, or per 100,000.

Example: The infant death rate is expressed as the number of deaths that occurred among infants 1 to 364 days old who were born alive during a given year, divided by the number of live births that occurred in the same year, multiplied by 1,000. Therefore, if 200 infants died during 2015, and there were 16,000 live births during the same year, the infant death rate would be 12.5 per 1,000 live births (calculated by taking 200 divided by 16,000 and multiplying by 1,000).

Disparity – Term used to describe the difference or inequity between two groups.

Example: If the infant death rate was lower in whites compared to the infant death rate in blacks, a racial disparity exists because one racial group (blacks) has a higher rate of infant deaths compared to another racial group (whites).

Ratio – Comparison made between two things; the fraction formed by the division of one amount by another.

Example: The population of Anytown, USA, was 100,000. It had 40,000 dwelling units. The ratio of people to dwelling units was 2.5 (100,000 divided by 40,000 equals 2.5).

Trend – Term used to describe the general direction in which data are headed over a period of time. It often is demonstrated by placing a line in a chart. There needs to be a minimum of two data points to start a trend line, but as a general rule, most researchers prefer a minimum of six data points to predict a trend.

First Ring Suburbs of Cleveland – Municipalities whose borders touch some portion of the city of Cleveland. See Appendix A in data tables section.

Outer Ring Suburbs of Cleveland – Municipalities whose borders don't touch some portion of the city of Cleveland. See Appendix A in data tables section.

Social Determinants of Health – The circumstances in which people are born, grow up, live, work, and age, and the systems put in place to deal with illness. These circumstances are, in turn, shaped by a wider set of forces: economics, social policies, and politics.[1]

[1] World Health Organization. Social determinants of health: Key concepts. Available online at http://www.who.int/social_determinants/thecommission/finalreport/key_concepts/en/index.html (accessed July 25, 2014).

Table of Contents

Index of Figures, Maps, and Tables

Protecting Our Future

An Overall Look at 2015

There were 200 child deaths in 2015, the highest total number of deaths in the last six years.

In 2015, the total number of child deaths increased by 35 from the 2014 total of 165, but remained just below the average number for the last ten years. Deaths in children ages 1 to 9 years old increased by 39%, and infant deaths increased by 28%. A 23% decrease occurred in child deaths between 10 and 17 years old. The total number of child deaths for 2015 included 155 infants, 25 children from 1 to 9 years old, and 20 children from 10 to 17 years old. (**Table 1**).

Table 1 Annual Number of Deaths by Age Group

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Total
Under 1 Year	166	162	171	141	140	144	131	133	121	155	**1,464**
1 - 9 Years	31	33	30	42	16	23	30	31	18	25	**279**
10 - 17 Years	36	35	39	30	22	20	21	22	26	20	**271**
Total	**233**	**230**	**240**	**213**	**178**	**187**	**182**	**186**	**165**	**200**	**2,014**

Thirty-four more infants died in 2015, the highest number of infant deaths in the last seven years.

One hundred fifty-five infants died in 2015. Eleven more deaths were due to prematurity (from 76 in 2014 to 87 in 2015). Sleep related causes and birth defects resulted in eight more deaths, while infections caused an increase of four deaths. Homicide and other medical causes resulted in two additional deaths. There was one more death in both the accidental injury related and other perinatal complications categories, while there was one fewer death in the cancer, motor vehicle accident, and undetermined other categories.

There were seven more deaths among children between 1 and 9 years.

Twenty-five children between 1 and 9 years of age died this year. Other medical causes had the biggest increase with five more deaths (from two in 2014 to seven in 2015), while birth defects, cancer, and drowning had two more deaths. Undetermined other had one more death. Homicide had three fewer deaths (from seven in 2014 to four in 2015), while infection and poisoning had one fewer death.

There were six fewer deaths among children between 10 and 17 years.

Twenty children ages 10 to 17 years died in 2015. This tied the lowest total number of deaths in this age group in the last ten years. Homicide and other medical causes resulted in four fewer deaths. Birth defects caused two fewer deaths, and cancer caused one less death. There were two more deaths as a result of motor vehicle accidents, while the number of deaths increased by one due to infection, accidental injury related, and suicide.

protectingourfuture.cuyahogacounty.us

Map 1

Distribution of Poverty and Child Fatalities
Cuyahoga County, Ohio (2006 – 2015)

Infant & Child Fatalities

- 2006 - 2014 Fatalities (1,814)
- ▲ Infants (155)
- ■ 1 - 9 Years (25)
- ● 10 - 17 Years (20)

Percentage of Persons Below Federal Poverty Guideline*

- 0.0 - 5.0
- 5.1 - 11.4
- 11.5 - 22.5
- 22.6 - 38.4
- 38.5 - 87.1
- Municipal Border
- Unpopulated Area

*Data obtained from the 2008-2012 American Community Survey, US Census Bureau. Percentage of poverty was calculated at the 2010 census tract level.
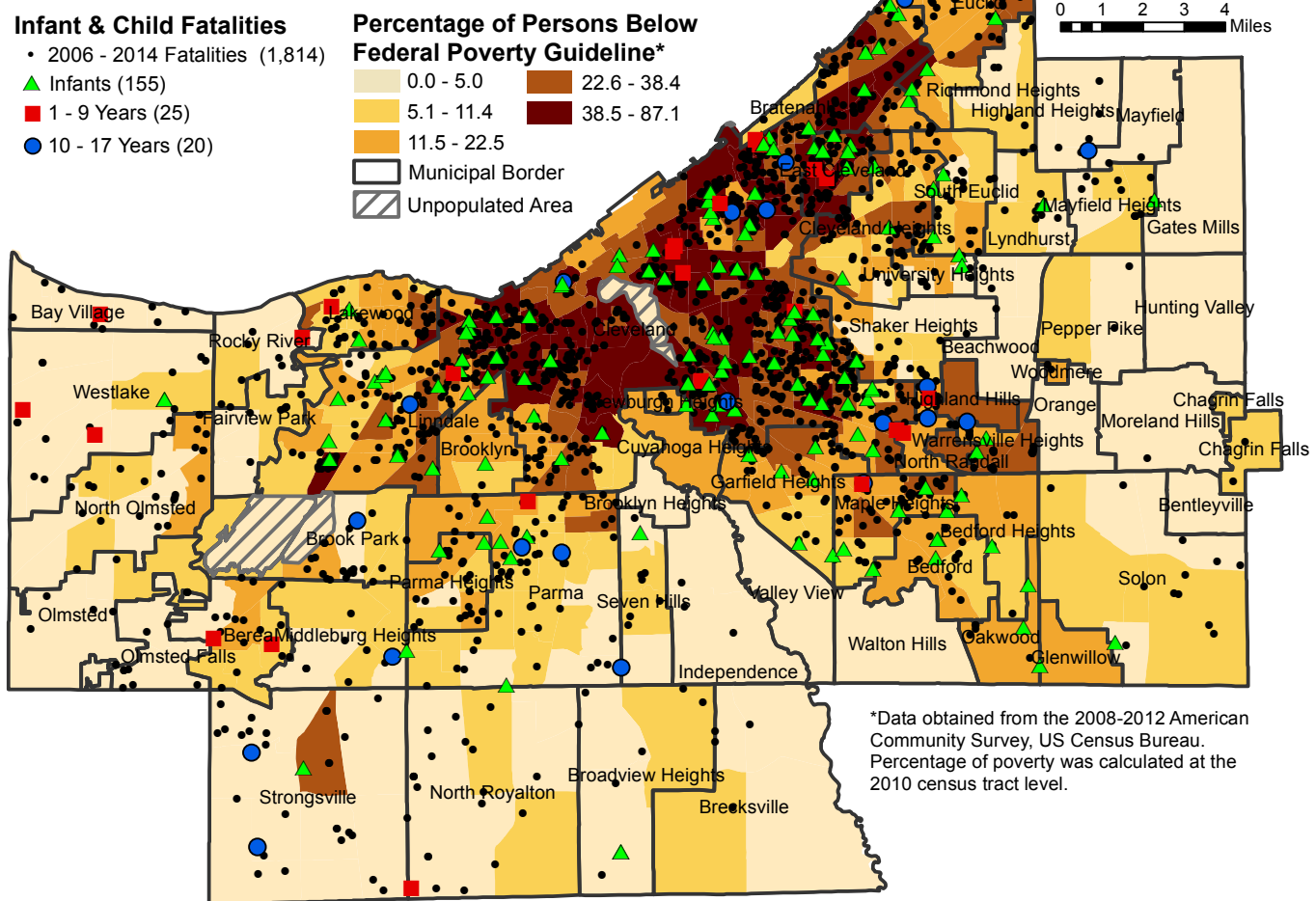
Map 1 illustrates the close relation between poverty and child deaths.[2,3] Fewer than 5% of people are living below the federal poverty guideline in the lightest shaded area, while 38% to 87% in the darkest shaded area are living in poverty. The 2015 federal poverty guideline for a family of four was $24,250.[4]

[2] US Census Bureau. 2008-2012 American Community Survey (ACS) 5-year estimates. Available online at http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml (accessed July 3, 2014).

[3] US Census Bureau. 2010 Census of population and housing: Summary file 1. Available online at http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml (accessed July 3, 2014).

[4] US Department of Health and Human Services (HHS). The 2015 HHS poverty guidelines. Available online at https://aspe.hhs.gov/2015-poverty-guidelines (accessed May 20, 2016).

Protecting Our Future

Second-highest child death rate in the last ten years.

Figure 1 gives a historical perspective over the last 20 years and shows the increase in the rate of child deaths in 2015. Thirty-five more deaths in 2015 led to a 21% increase in the rate of child deaths in Cuyahoga County. This significant increase produced the second-highest child death rate in the last ten years, and the highest total number of deaths in the last seven years. An increase in the rate of infant deaths was a major factor in the overall increase in the child death rate.

Figure 1 Total Child Deaths (age 0–17) Cuyahoga County (1995–2015)

Deaths per 100,000 Children ● Child Death Rate ━ 2006-2015 Trend Line

Year	Rate	Count
1995	102.6	347
1996	82.8	280
1997	88.4	299
1998	73.3	248
1999	70.1	237
2000	80.5	280
2001	69.0	240
2002	66.4	231
2003	54.3	189
2004	65.2	227
2005	68.7	239
2006	67.0	233
2007	66.1	230
2008	69.0	240
2009	61.2	213
2010	61.3	178
2011	64.4	187
2012	62.7	182
2013	64.1	186
2014	56.8	165
2015	68.9	200
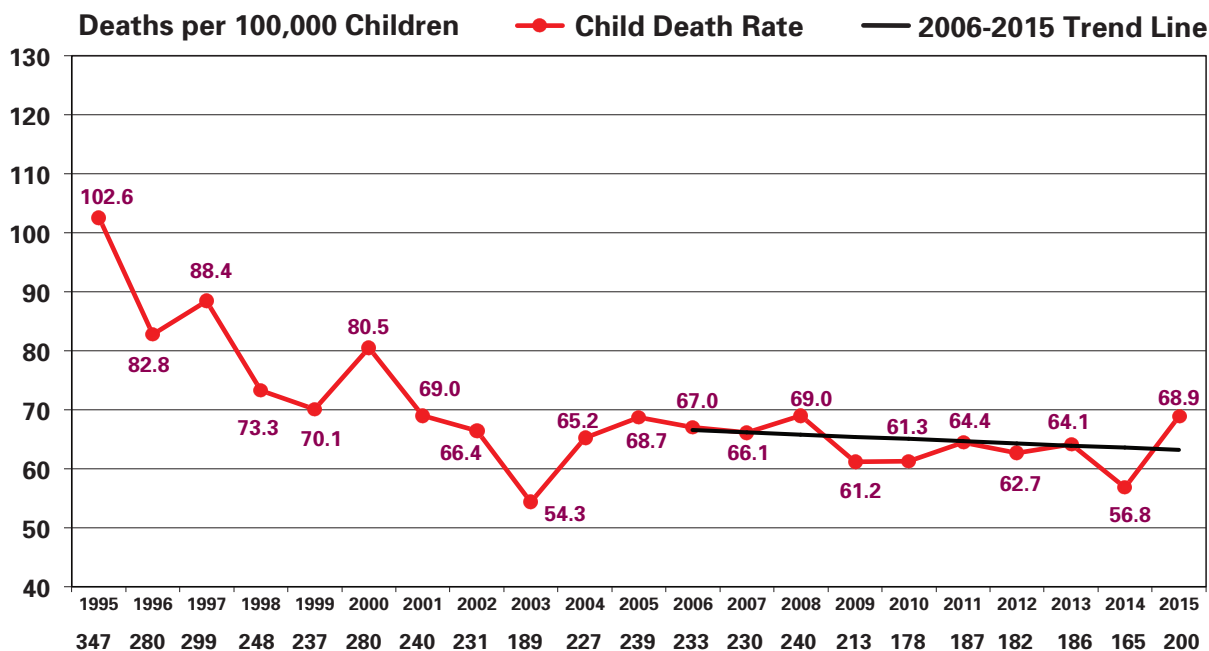
Rates for 2015 infants are estimates only.

Table 2 provides a breakdown of the leading causes of death by age group. It shows that a majority (73%) of deaths continue to be rooted in medical causes such as prematurity, birth defects, cancer, infection, and other medical conditions. Infants accounted for 78% of all child deaths, which is the highest ratio of infant deaths to total deaths in the last five years. Prematurity caused the highest number of deaths in the last seven years. The leading cause of death in the 1- to 9-year-old age group was other medical causes. Homicide, other medical causes, and suicide tied for the leading causes of death in the 10- to 17-year-old age group. Those three categories accounted for 60% of all deaths in that age group.

Table 2 Leading Causes of Death by Age Group in 2015

Cause of Death	Under 1 Year	1 - 9 Years	10 - 17 Years	Total
Prematurity	87	0	0	87
Sleep Related	27	0	0	27
Birth Defect	21	4	1	26
Other Medical Causes	4	7	4	15
Homicide	4	4	4	12
Infection	7	0	1	8
Accidental - Injury Related	1	3	1	5
Cancer	0	4	1	5
Motor Vehicle Accident	0	0	3	3
Other Perinatal Complications	4	0	0	4
Suicide	0	0	4	4
Drowning	0	2	1	3
Undetermined - Other	0	1	0	1
Total	**155**	**25**	**20**	**200**

Prematurity caused the largest increase in total number of deaths (from 76 in 2014 to 87 in 2015). There were 8 more deaths due to birth defects and sleep related causes. Almost 40% of birth defect deaths resulted from heart or kidney anomalies. Infections caused 4 additional deaths, while 3 more deaths were due to other medical causes. Accidental injury related and drowning caused 2 more deaths, while motor vehicle accidents, other perinatal complications, and suicide resulted in 1 more death.

There were only two causes that resulted in fewer deaths in 2015. Homicides decreased the most (from 17 in 2014 to 12 in 2015), while poisoning decreased by 1 death.

In the following pages, there will be a discussion of the specific causes of death and the associated risk factors that impact each age group and race. As in previous reports, the data tell a compelling story about the lives and deaths of children and the challenges families face every day.

Fast facts:

- *3 infants died each week.*
- *1 child died due to homicide every month.*

Protecting Our Future

Cuyahoga County has the highest child homicide rate in 2014.

The Child Fatality Review Board sought data sources that allowed direct comparisons to other large, urban areas in Ohio focusing on child death and infant mortality rates. We compared Cuyahoga County with Franklin (Columbus area), Hamilton (Cincinnati area), Montgomery (Dayton area), and Summit (Akron area) counties, as well as the state as a whole.[5] These 2014 numbers were the most current data available.

Cuyahoga was in the midrange for most infant and child indicators. Cuyahoga had the third-highest white and overall infant mortality rate (IMR), but the second-highest black IMR (**Figure 2**). Cuyahoga had the highest child homicide rate, but was lower than Franklin and Hamilton counties in the overall child death rate.

Figure 2 Peer County Comparisons in 2014
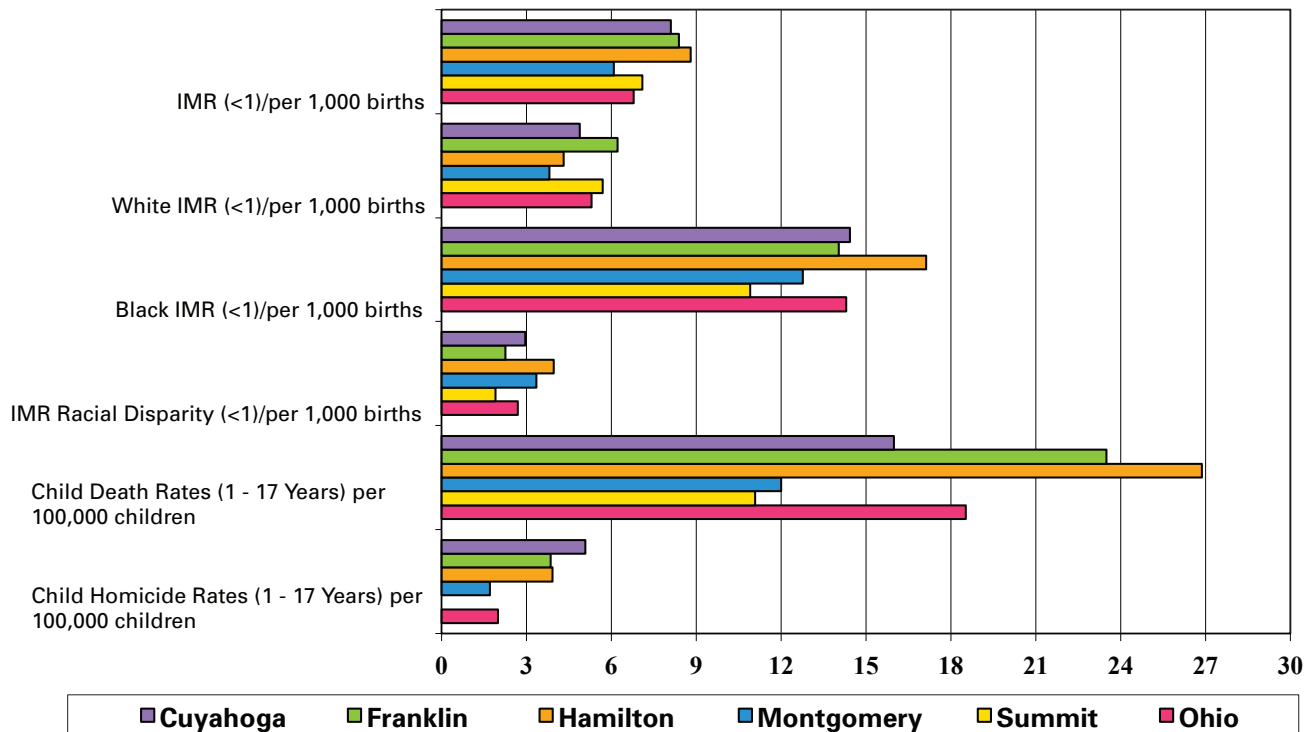
Black children nearly three times more likely to die than white children.

The racial disparity between black and white child deaths remained stable with a ratio of 2.9 in 2015, which is tied for the second-lowest rate in the last ten years (**Figure 3**). The ratio remained the same because both black and white child death rates increased by more than 20%. The black child death rate of 124 was the highest rate in the last seven years, while the white child death rate of 42 was the second-highest rate in the last ten years (Table 1).

Figure 3 Child Death Rates by Race (age 0-17)

* Reader's note – In previous editions of this report, we reported "white" and "all other races" death rates.

Beginning in 2015, we will use "black" in order to conduct racial disparity analyses. This change will allow for easier comparison to state and other county data.

Deaths per 100,000 Children

Ratio of Deaths: Black to White

Rates for 2015 infants are estimates only.
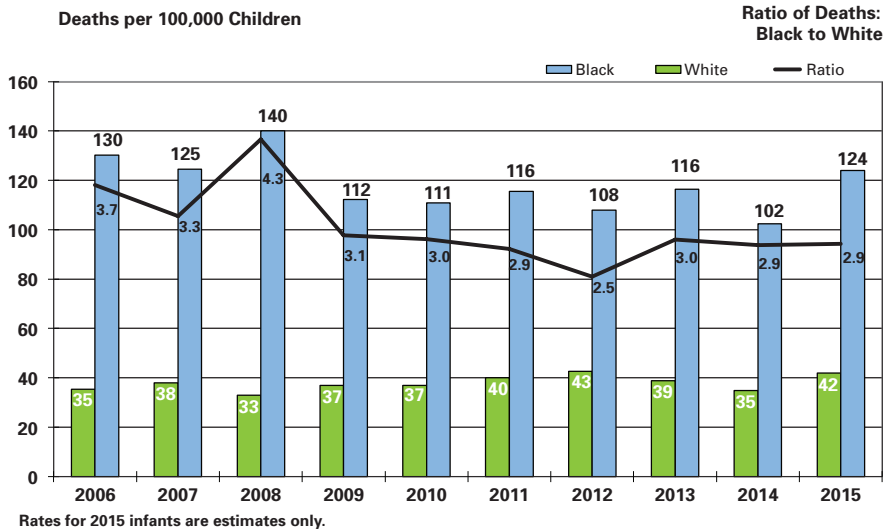
It is important to look at the racial disparity for infants and children separately, as illustrated in **Figure 4**. The graph shows that the rate for black children ages 1 to 17 years decreased from 2.2 in 2014 to 2.0 in 2015, the lowest racial disparity in the last five years.

The graph also shows the racial disparity of infant deaths (3.0) tied with 2014 as the highest ratio in the last five years. The 2014 infant death racial disparity ratio (most recent data available) in the state of Ohio is 2.7[6] and the US ratio is 2.2.[7] The Cuyahoga County ratio is 36% higher than the national ratio.

Figure 4 Black to White Racial Disparity Ratios

Rates for 2015 infants are estimates only.
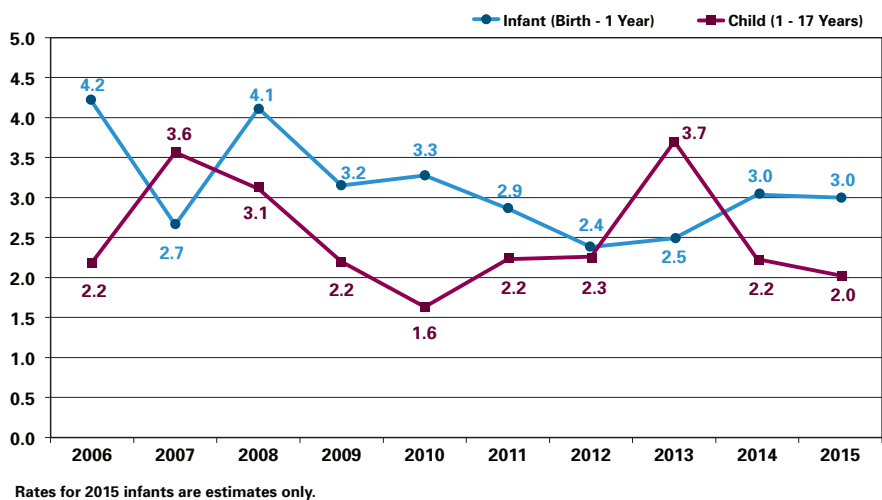
6   ODH, Center for Public Health Statistics and Informatics. 2014 Ohio Infant Mortality Data: General Findings. Available online at http://www.odh.ohio.gov/~/media/ODH/ASSETS/Files/cfhs/Infant%20Mortality/2014%20Ohio%20Infant%20Mortality%20Report%20Final.pdf (accessed July 19, 2016).

7   Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS). Deaths: Final Data for 2014. Available online at http://www.cdc.gov/nchs/data/nvsr/nvsr65/nvsr65_04.pdf (accessed July 6, 2016).

Protecting Our Future

Map 2
Distribution of Poverty and Race for Child Fatalities
Cuyahoga County, Ohio (2006-2015)

Race
- ■ All Other Races (21)
- ▲ Black (1,340)
- ● White (651)

Percentage of Persons Below Federal Poverty Guideline*
- 0.0 - 5.0
- 5.1 - 11.4
- 11.5 - 22.5
- 22.6 - 38.4
- 38.5 - 87.1
- ▭ Municipal Border
- ▨ Unpopulated Area

Map 2 illustrates that race is associated with the geographical locations of poverty and child death. In the last ten years, twice as many black children died than all other children in Cuyahoga County. The majority of black child deaths occurred on the eastern side of the county, whereas the largest portion of white child deaths occurred on the western side of the county.

**Race was unknown for two children.

*Data obtained from the 2008-2012 American Community Survey, US Census Bureau. Percentage of poverty was calculated at the 2010 census tract level.
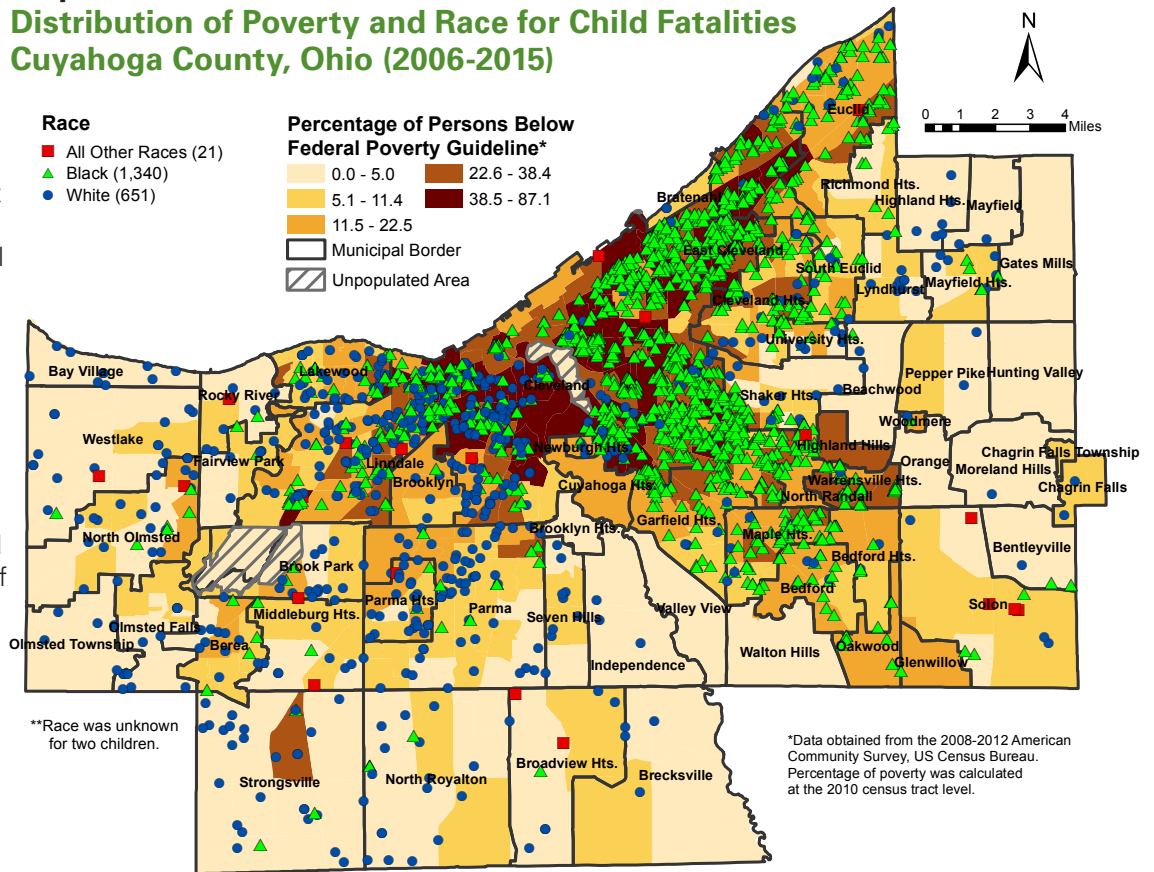
Economic stability plays a vital role in the health and well-being of a community. A common indicator used to measure the economic well-being of an area is the poverty rate. The 2014 Cuyahoga County poverty rate (most recent census data available) was 19.3%, which was higher than the 2014 national poverty rate of 15.5%.[8] During the same time period, more than one in three black people in Cuyahoga County lived in poverty (35.5%), while only one in nine (11.4%) white people was impoverished.[9] Neighborhoods with high poverty rates result in limited resources and decreased economic opportunities, which can result in chronic stress, poor health outcomes, and high infant and child mortality rates.

Structural and individual racism can also lead to chronic stress. Chronic stress disrupts most major systems in the body, including the ability to regulate the production of cortisol (a stress hormone) and pro-inflammatory proteins (cytokines). An increase in these substances during pregnancy is associated with adverse maternal and infant outcomes, including preterm birth, hypertension, diabetes, preeclampsia, and miscarriage.[10] A study found that minority women had significantly higher stress and cortisol levels and a limited ability to control the production of cytokines.[11] In order to significantly reduce mortality and health inequities in Cuyahoga County, policy change and community investment are necessary to ensure equity in opportunities and quality of life, regardless of race or place of residence.[11]

[8] US Census Bureau. 2014 ACS 1-year estimates. Available online at http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml (accessed May 20, 2016).

[9] Ibid.

[10] Emory News Center. Biological changes found in pregnant women with chronic stress. (August 9, 2013). Available online at http://news.emory.edu/stories/2013/08/chronic_stress_pregnant_women/ (accessed July 19, 2016).

[11] Corwin EJ, Guo Y, Pajer K, Lowe N, McCarthy D, Schmiege S, Weber M, et al. Immune dysregulation and glucocorticoid resistance in minority and low income pregnant women. (2013). *Journal of Pyschoneuroendocrinology*; 38(9).

Fast facts:

- Black infants are three times more likely to die than white infants.
  - Black people are three times more likely to live in poverty than white people.

Community Actions:

The **Health Improvement Partnership-Cuyahoga (HIP-Cuyahoga)**, www.hipcuyahoga.org, is committed to developing opportunities for everyone to be healthy in Cuyahoga County, through policy, environmental, and lifestyle changes. A key priority is to "end intergenerational cycles of poverty by eliminating structural racism in public policies and institutional practices that perpetuate racial inequities."* As noted, structural racism can affect health and birth outcomes. Addressing these issues establishes a foundation that results in healthier communities for everyone. The Eliminating Structural Racism subcommittee goals include:

- Improve the community's knowledge, awareness, and understanding of the role structural and institutional racism plays as a social determinant of health.

- Develop messaging about the impact of structural and institutional racism on opportunities for health.

- Use an equity-focused approach to develop policies that increase social and economic opportunities for racial and ethnic minorities and change individual and organizational behaviors.

* Gullett H and Brown G. Make health more than just a number by reducing health disparities in Cuyahoga County. (August 3, 2016). *The Plain Dealer.* Available online at http://www.cleveland.com/opinion/index.ssf/2016/08/making_health_more_than_just_a.html (accessed August 8, 2016).

Protecting Our Future

Cuyahoga County's infant mortality rate is the highest in the last seven years.

Infant mortality is an international measure of how well a society ensures the health of its people, particularly its women and youngest citizens.[12] The 2015 Cuyahoga County infant mortality rate (IMR) is 10.4 infant deaths per 1,000 live births, the highest rate in the last seven years (**Figure 5**). The current rate is based on 155 infant deaths among 14,844 live births, according to preliminary birth data received from the Ohio Department of Health (ODH) (**Table 8**).[13] The local IMR of 10.4 remains significantly higher than the finalized Ohio IMR of 6.8 in 2014,[14] and the finalized 2014 US IMR of 5.82[15] (most recent data available). *In order for Cuyahoga County to match the 2014 Ohio IMR, one infant per week who died in 2015 would have needed to survive.*

Figure 5 Infant Mortality Rate (IMR) per 1,000 Live Births
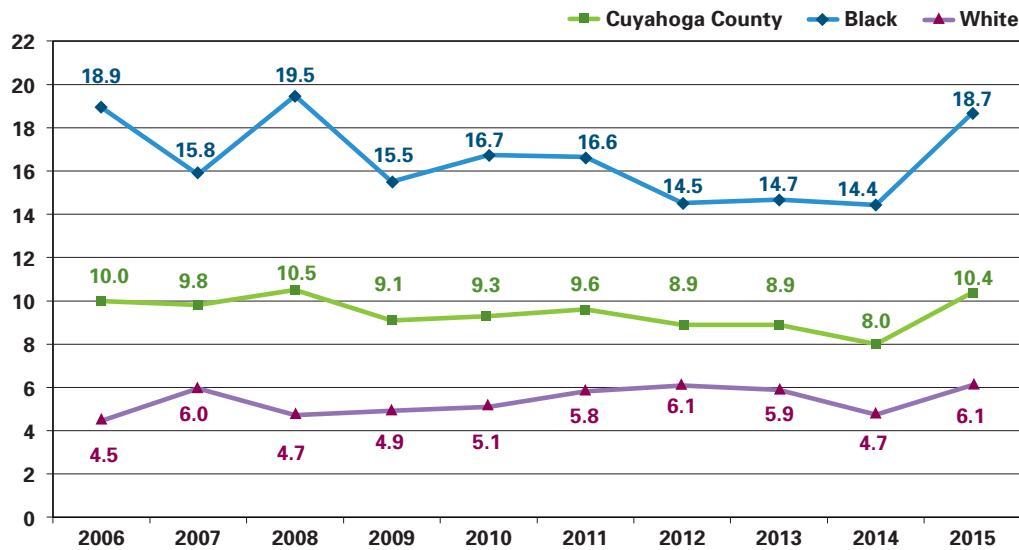
Rates for 2015 infants are estimates only.

Figure 5 shows that the black IMR of 18.7 is the highest rate in the last seven years, almost 30% higher than 2014. The white IMR of 6.1 increased by almost 30%, tied for the highest rate in the last ten years. The overall IMR of 10.4 is significantly higher than the Healthy People 2020 goal of 6.0.[16] It is almost twice as high as the 2015 US Health and Human Services Secretary Advisory Committee on Infant Mortality IMR goal of 5.5.[17]

The most frequent causes of infant death continued to be prematurity (87), sleep related deaths (27), and birth defects (21) (Table 2). These top three causes accounted for 87% of all infant deaths, the lowest percentage in the last three years. Of the 20 remaining infant deaths, 15 were medically related, 4 were ruled homicides, and 1 was ruled an accident.

[12] Association of Maternal & Child Health Programs (AMCHP). Forging a comprehensive initiative to improve birth outcomes and reduce infant mortality: Policy and program options for state planning. (July 2012). Available online at http://www.amchp.org/AboutTitleV/Resources/Documents/AMCHP%20Birth%20Outcomes%20Compendium.pdf (accessed May 19, 2016).

[13] Data on 2015 births are estimates only. The estimates are derived from unconfirmed delivery hospital data and historical patterns of geographic and racial distributions. Past experience indicates that the estimation technique used is quite accurate and provides a reasonable projection well in advance of the availability of state data for confirmed rates. ODH, Center for Public Health Statistics and Informatics (accessed June 22, 2016). The Department specifically disclaims responsibility for any analyses, interpretations, or conclusions.

[14] (ODH, Center for Public Health Statistics and Informatics, July 19, 2016).

[15] (CDC, National Center for Health Statistics, July 6, 2016).

[16] HHS, Office of Disease Prevention and Health Promotion. Healthy People 2020. Washington, DC. Available online at http://www.healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topicId=26 (accessed June 15, 2016).

[17] HHS, Health Resources & Services Administration. Report of the Secretary's Advisory Committee on Infant Mortality: Recommendations for HHS action and framework for a national strategy. (January 2013). Available online at http://www.hrsa.gov/advisorycommittees/mchbadvisory/InfantMortality/Correspondence/recommendationsjan2013.pdf (accessed July 7, 2016).

Map 3
Distribution of Poverty and Race for Infant Fatalities Cuyahoga County, Ohio (2006–2015)

Race
- ■ All Other Races (10)
- ▲ Black (1,009)
- ● White (444)

Percentage of Persons Below Federal Poverty Guideline*
- 0.0 - 5.0
- 5.1 - 11.4
- 11.5 - 22.5
- 22.6 - 38.4
- 38.5 - 87.1
- Municipal Border
- Unpopulated Area

Map 3 shows the number of infant deaths by race for the last ten years. The local data indicates more than 1,000 black infants died within the last ten years, compared to 444 white infants, and only 10 infants of all other races. The majority of infant deaths occurred in neighborhoods with the highest poverty, including many areas in the city of Cleveland.
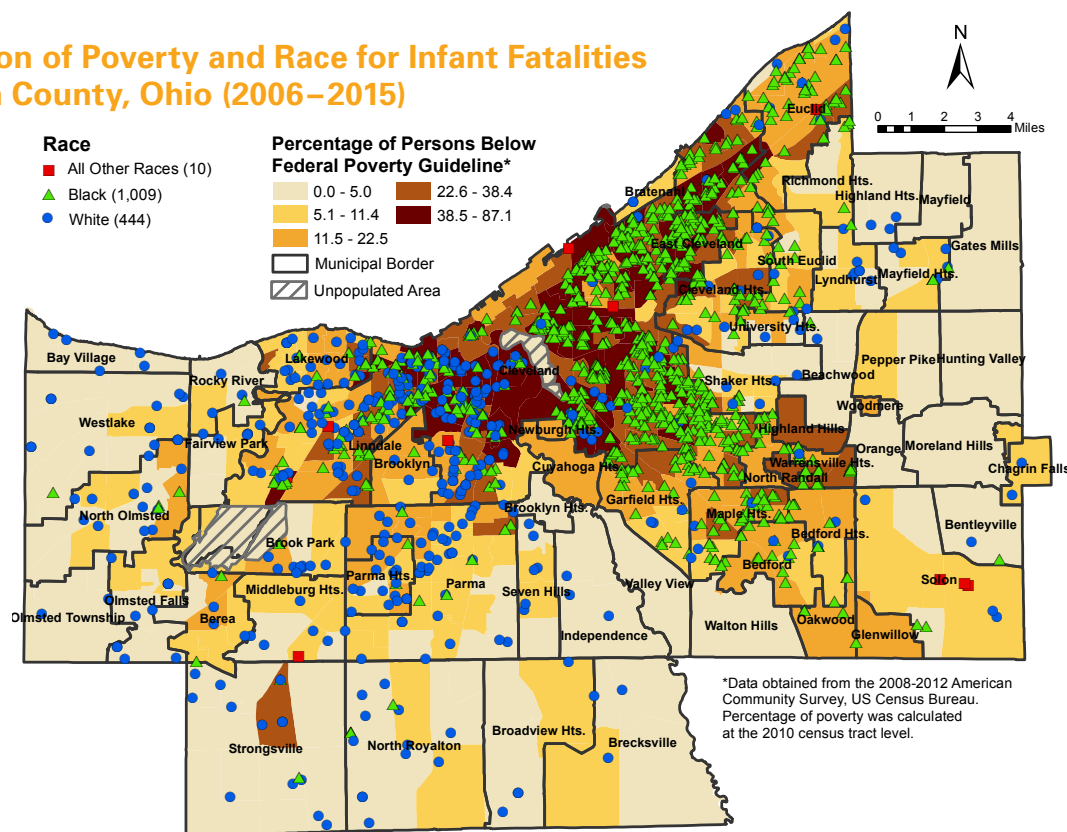
*Data obtained from the 2008-2012 American Community Survey, US Census Bureau. Percentage of poverty was calculated at the 2010 census tract level.

Community Actions:

Ohio Equity Institute (OEI) for Equity in Birth Outcomes Initiatives

The **Cuyahoga County Board of Health**, the **Cleveland Department of Public Health**, the **Ohio Department of Health**, and **CityMatCH** are members of OEI. This initiative explored public health strategies to eliminate health inequities in birth outcomes and improve local and state infant mortality rates. The Cleveland/Cuyahoga County OEI team selected best practice strategies that include:

- Upstream Approach – decrease unplanned pregnancies with the increased use of long acting reversible contraceptives (LARC).

- Downstream Approach – expand CenteringPregnancy® or group prenatal care.
  - As a result of these efforts, 90% of clinicians are able to provide same-day insertion of a LARC and 100% of the hospitals provide CenteringPregnancy® or group prenatal appointments as a standard of care.

- In June 2015, OEI organized a community event, "One Life, One Voice, One Community: Every baby deserves a 1st birthday," to raise awareness of infant mortality and connect community members with resources.

- In 2016, a documentary titled "One Life" focused on the many factors that contribute to infant mortality. This video has been shared with family serving agencies and the community (https://vimeo.com/164384561).

- In July 2014, a Fetal Infant Mortality Review Committee was established to review the root causes of fetal and infant deaths in Cuyahoga County (**Appendix B**).

Protecting Our Future

Prematurity accounts for 56% of infant deaths and 44% of all child deaths in 2015.

Any baby born before 37 weeks of gestation is considered premature. In 2015, 87 infants died due to prematurity, accounting for 56% of all infant deaths (**Figure 6**). The cause-specific IMR for prematurity is 5.9 deaths per 1,000 live births,[18] which is the highest rate in the last seven years (Table 8). Prematurity remains the leading cause of death for children of all ages (44% of the total).

The percentage of preterm births in Cuyahoga County increased from 11.3% in 2013 to a preliminary rate of 12.1% in 2015.[19] The percentage of Ohio preterm births in 2013 was 10.3%, which remained unchanged in 2015.[20] Similarly, 9.6% of US births were preterm, which was equal to the 2015 preliminary figure.[21]

Figure 6 The Impact of Prematurity on Child Deaths in 2015

Distribution of Deaths by Age Group

Causes of Infant Deaths

1 - 9 Years 12%

10 - 17 Years 10%

Infants 78%

13%

14%

17%

56%

☐ Other Causes of Death
☐ Birth Defects
☐ Sleep Related Deaths
☐ Prematurity
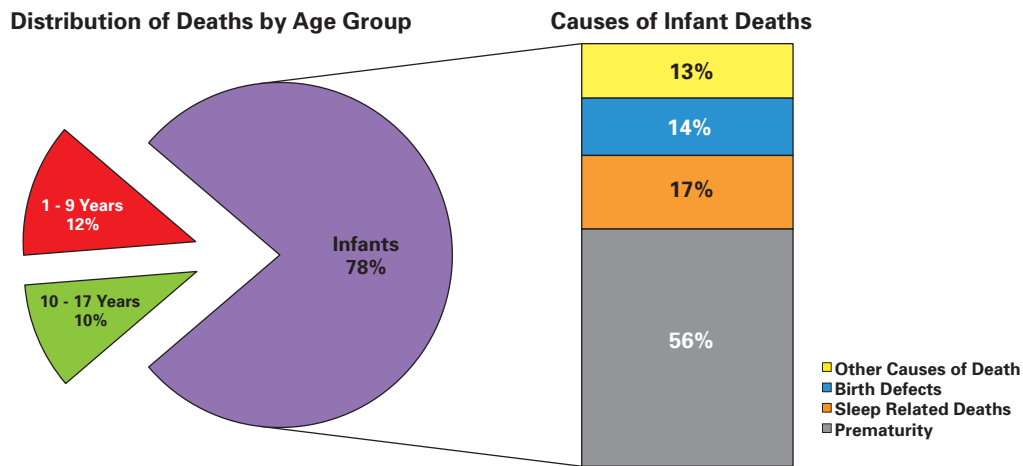
Figure 7 Rates of Infant Death Due to Prematurity by Race

Deaths Due to Prematurity per 1,000 Live Births   ●— Black ◆— White
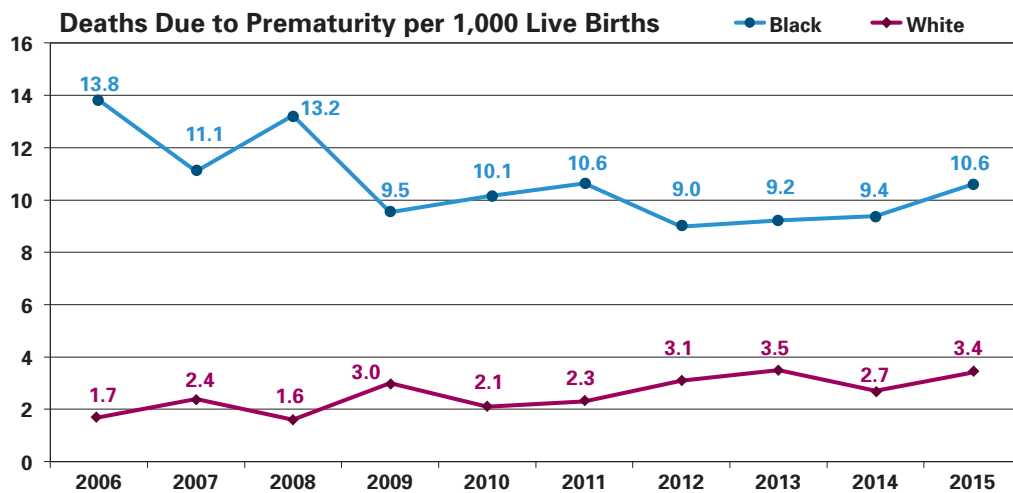
Rates for 2015 infants are estimates only.

The prematurity-related racial disparity in infant deaths is illustrated in **Figure 7**. In 2015, black infants were more than three times as likely to die due to prematurity as white infants. The black prematurity death rate of 10.6 tied with 2011 for the highest rate in the last seven years. The white prematurity death rate of 3.4 was the second-highest rate in the last ten years, and 26% higher than the 2014 rate of 2.7. If the 2015 black rate were equal to the white rate, the overall IMR would have decreased from 10.4 to 7.7.

[18] (ODH, Center for Public Health Statistics and Informatics, June 22, 2016).

[19] Ibid.

[20] CDC, NCHS. Births: Preliminary data for 2015. Available online at http://www.cdc.gov/nchs/data/nvsr/nvsr65/nvsr65_03_ tables.pdf (accessed July 18, 2016).

[21] Ibid.

An analysis was done to measure the frequency of medical, social, and economic risk factors that played a role in prematurity-related deaths in 2015. Poverty was noted in more than three-quarters of the cases (76%). Chorioamnionitis was the second-most common risk factor, found in 53% of the prematurity fatalities. Poverty and chorioamnionitis each increased by 12 cases in 2015. Mom with a chronic health condition, premature rupture of membranes (PROM), and cervical insufficiency were three risk factors noted in at least 30% of all preterm deaths. There were moderate increases for Mom with a chronic health condition (13%) and PROM (14%), whereas cervical insufficiency declined by 10% this year. Among those deaths due to prematurity where drug use was a risk factor, marijuana was the most commonly used drug. Obesity was the leading risk factor in the category Mom with a chronic health condition. Almost 45% of the mothers whose infants died from prematurity were obese. Risk factors associated with prematurity in at least 10% of cases are summarized in **Table 3**.

Of the 87 infant deaths caused by prematurity, 51 (59%) were male and 61 (70%) were black. Fifty-six percent of those infants were Cleveland residents, 23% were from first ring suburbs, and 21% were residents in outer ring suburbs. First ring suburbs are all municipalities that have a portion of their border touching the city of Cleveland; outer ring suburbs are municipalities that have no boundaries touching the border of Cleveland (**Appendix A** shows the list of first ring and outer ring municipalities). More than three of four infants (77%) were born so early that they lived less than 12 hours, and only 14 (16%) survived more than seven days. Additionally, almost two-thirds (65%) were born at less than 22 weeks gestation, 15% were born at 23 weeks, and 20% were born between 24 and 32 weeks. In one study of births between 2006 and 2011, the majority of infants born at 23 weeks gestation received medical intervention and had a survival rate of 33%.[22]

Prematurity also impacts the financial stability of our health care system. The average medical cost for a premature and/or low birth weight baby through the infant's first year of life was $55,393.[23] Almost 1,800 babies were born preterm in 2015 in Cuyahoga County; the estimated medical cost for nurturing these preterm infants was approximately $100 million.[24]

Table 3 Common Risk Factors Associated with 87 Deaths Due to Prematurity in 2015

Risk Factor	#	%
Poverty	66	75.9
Chorioamnionitis	46	52.9
Mom with a chronic health condition	41	47.1
Premature rupture of membranes (PROM)	40	46.0
Cervical insufficiency	27	31.0
Previous fetal loss	26	29.9
Parental tobacco use	25	28.7
Intrauterine tobacco exposure	21	24.1
Maternal history of mental health problems	20	23.0
Previous preterm delivery	18	20.7
Multiple gestation	17	19.5
Unplanned pregnancy	14	16.1
Parental education less than high school	14	16.1
Sexually transmitted infections - past history	14	16.1
At-risk maternal age - 35 years old or older	14	16.1
Sexually transmitted infections - during pregnancy	14	16.1
Intrauterine drug exposure	10	11.5
Placental abruption	10	11.5
Parental illicit drug use	9	10.3

---

[22] Rysavy MA, Li L, Bell EF, Das A, Hintz SR, Stoll BJ, Vohr BR, et al. Between-hospital variation in treatment and outcomes in extremely preterm infants. (May 7, 2015). *The New England Journal of Medicine*; 372(19), 1801–1811. Available online at http://www.nejm.org/toc/nejm/372/19/ (accessed July 20, 2016).

[23] March of Dimes. Premature babies cost employers $12.7 billion annually. (February 7, 2014). Available online at http://www.marchofdimes.org/news/premature-babies-cost-employers-127-billion-annually.aspx (accessed July 17, 2016).

[24] (ODH, Center for Public Health Statistics and Informatics, June 22, 2016).

Fast facts:

- More than half of all infant deaths were due to prematurity.
  - Black babies were three times more likely to die due to prematurity than white babies.

Figure 8 illustrates the 2015 IMR by gestational age (stated in completed weeks of gestation) for infants born 28 weeks or more. The graph shows the IMR of infants 28 to 31 weeks was more than three times that of infants 32 to 33 weeks.[25] Surprisingly, for the fourth time in the last five years, the IMR for infants 34 to 36 weeks was greater than the IMR for infants 32 to 33 weeks.[26-29] The new classification for "full term" is any infant born from 39 to 40 weeks.[30] Infants delivered at full term were nearly 18 times more likely to survive than those born at 28 to 31 weeks.

Figure 8 Infant Mortality Rate by Gestational Age

Deaths per 1,000 Live Births ■ Completed Weeks of Gestation

Gestational Age	Deaths per 1,000 Live Births
28 - 31	37.2
32 - 33	12.3
34 - 36	12.6
37 - 38	4.8
39 - 40	2.1
41 - 42	2.9
Total	10.4

Rates for 2015 infants are estimates only.
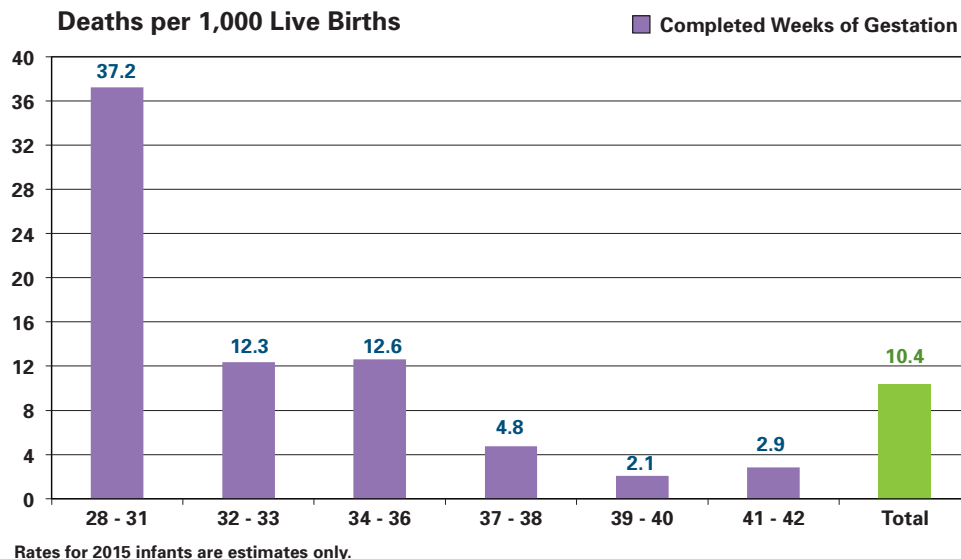
[25] CDC, NCHS. Measuring gestational age in vital statistics data: Transitioning to the obstetric estimate. Available online at http://www.cdc.gov/nchs/data/nvsr/nvsr64/nvsr64_05.pdf (accessed July 9, 2016).

[26] The Cuyahoga County Child Fatality Review Committee. Protecting our future: Child fatalities for 2014 (18th ed.). (2015). Available online at http://protectingourfuture.cuyahogacounty.us/en-US/annual-reports.aspx (accessed July 25, 2016).

[27] The Cuyahoga County Child Fatality Review Committee. Protecting our future: Child fatalities for 2013 (17th ed.). (2014). Available online at http://protectingourfuture.cuyahogacounty.us/en-US/annual-reports.aspx (accessed July 25, 2016).

[28] The Cuyahoga County Child Fatality Review Committee. Protecting our future: Child fatalities for 2012 (16th ed.). (2013). Available online at http://protectingourfuture.cuyahogacounty.us/en-US/annual-reports.aspx (accessed July 25, 2016).

[29] The Cuyahoga County Child Fatality Review Committee. Protecting our future: Child fatalities for 2011 (15th ed.). (2012). Available online at http://protectingourfuture.cuyahogacounty.us/en-US/annual-reports.aspx (accessed July 25, 2016).

[30] American College of Obstetricians and Gynecologists. Definition of term pregnancy. Committee opinion No. 579. *Obstetrics & Gynecology*; 122(5), 1139–1140. Available online at http://www.acog.org/Resources-And-Publications/Committee-Opinions/Committee-on-Obstetric-Practice/Definition-of-Term-Pregnancy (accessed July 25, 2016).

Sleep Related Deaths

There are 27 sleep related deaths in 2015.

There are three types of sleep related deaths: 1) Sudden Infant Death Syndrome (SIDS); 2) Accidental Suffocation; and 3) Sudden Unexplained Infant Death (SUID)/Undetermined.

SIDS is a diagnosis of exclusion, meaning that after a review of the infant's medical history, a complete autopsy, and a death scene investigation, no cause can be identified. Accidental suffocation is a result of another person lying on the baby, wedging of the baby, or the baby's face, in a soft surface such as a pillow, blanket, comforter, or bumper pad. SUID/Undetermined is ruled as the cause of death when an exact reason cannot be found, but the scene investigation indicates there were dangers in the baby's sleep area. **Figure 9** illustrates the number and types of sleep related deaths that have occurred in Cuyahoga County over a ten-year span.

Figure 9 Sleep Related Deaths by Type
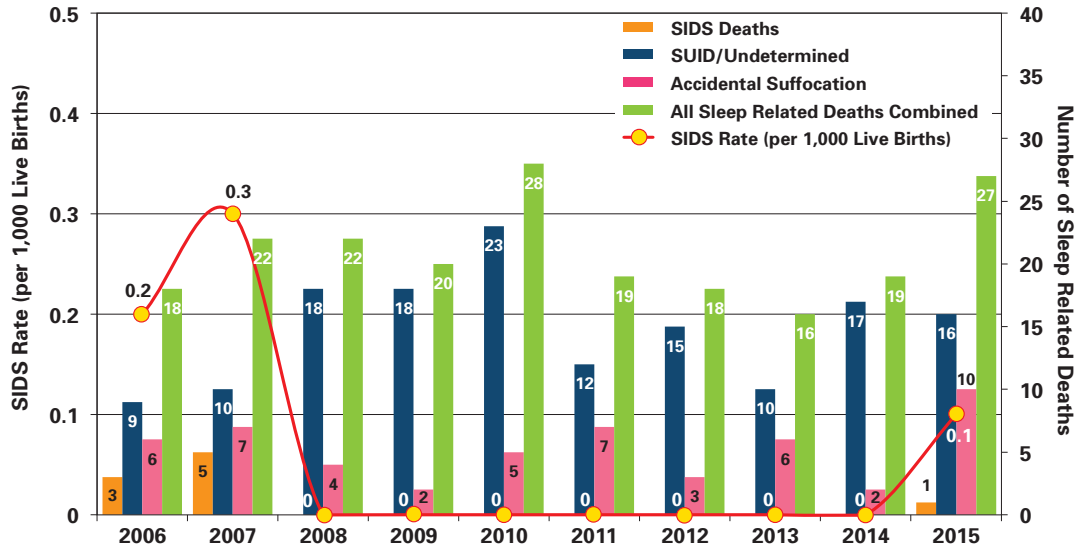
There were 27 sleep related deaths in 2015. This represents a 42% increase from 2014 and the second-highest number in the last ten years. Ten sleep related deaths were ruled as accidental suffocation, the highest number in the last ten years. Sixteen were ruled SUID/undetermined due to potential hazards in the sleep environment. One sleep related death was ruled SIDS, the first such death in eight years, but the case indicated potential risk factors in the sleep environment. Seventeen deaths involved surface sharing, which is the second-highest number in the last ten years. All sleep related deaths involved some type of sleep hazard (such as soft bed surface, position in which baby was placed, pillows, blankets, and other items in the sleep environment) (**Table 4**). The data strongly support the importance of putting a baby to sleep alone, on their back, in a recommended sleeping place (bassinet, crib, or pack-n-play), and keeping hazards outside of the sleep environment.

Table 4 Number of Sleep Related Deaths by Type and Presence of Risk Factors

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Totals
SIDS	3	5	0	0	0	0	0	0	0	1	**9**
SUID/Undetermined	9	10	18	18	23	12	15	10	17	16	**148**
Accidental Suffocation	6	7	4	2	5	7	3	6	2	10	**52**
Total Number of Deaths	**18**	**22**	**22**	**20**	**28**	**19**	**18**	**16**	**19**	**27**	**209**
Risk Factors Present											
Surface sharing at time of death	12	12	11	11	18	9	13	11	10	17	**124**
Hazards in sleep area	14	20	22	20	28	19	18	16	19	27	**203**
Total Number of Risk Factors	**26**	**32**	**33**	**31**	**46**	**28**	**31**	**27**	**29**	**44**	**327**

Protecting Our Future

Map 4
Distribution of Poverty and Sleep Related Infant Fatalities Cuyahoga County, Ohio (2006-2015)

Map 4 illustrates the distribution of the three types of sleep related deaths over the last ten years. More than 70% of all cases were ruled as undetermined, and the majority of sleep related deaths occurred in locations with a high concentration of people living below the federal poverty guideline.

Table 5 shows the demographics of the 209 infants who died in a sleep environment in the last ten years. Overall, 62% of all sleep related deaths occurred in Cleveland (130), with 26% in first ring suburbs (54) and 12% in outer ring suburbs (25). In 2015, the number of sleep related deaths in first ring suburbs tied for the second-highest total in the last ten years. Sleep related deaths in the outer ring suburbs tied with three other years for the second-highest total number in the last ten years.

Sleep Related Fatalities
- ■ SIDS (9)
- ▲ SUID/Undetermined (148)
- ● Accidental Suffocation (52)

Percentage of Persons Below Federal Poverty Guideline*
- 0.0 - 5.0
- 5.1 - 11.4
- 11.5 - 22.5
- 22.6 - 38.4
- 38.5 - 87.1
- Municipal Border
- Unpopulated Area

*Data obtained from the 2008-2012 American Community Survey, US Census Bureau. Percentage of poverty was calculated at the 2010 census tract level.
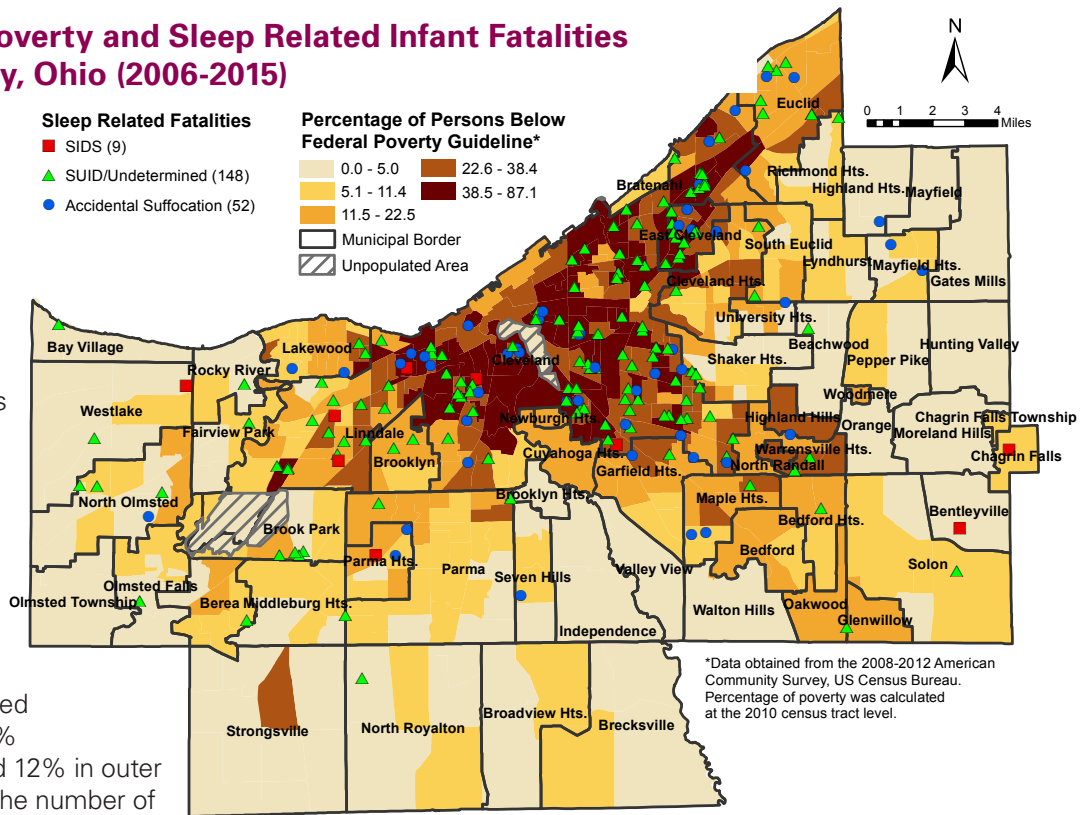
Table 5 Sleep Related Death Demographics (n=209)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Total
Neighborhood											
Cleveland	9	13	15	14	18	11	12	7	14	17	**130**
First Ring	3	6	6	3	7	6	4	8	4	7	**54**
Outer Ring	6	3	1	3	3	2	2	1	1	3	**25**
Infant's Sex											
Female	9	13	13	9	11	6	6	8	11	14	**100**
Male	9	9	9	11	17	13	12	8	8	13	**109**
Mom's Age											
< 20 Years	4	3	7	3	5	1	3	3	7	5	**41**
20 - 29 Years	9	14	12	12	15	12	11	11	10	15	**121**
30 - 39 Years	4	2	2	4	7	5	4	1	2	5	**36**
≥ 40 Years	1	0	0	1	0	0	0	1	0	2	**5**
Unknown	0	3	1	0	1	1	0	0	0	0	**6**
Infant's Race											
Black	9	10	16	16	21	12	14	12	16	21	**147**
White	8	12	6	4	7	7	4	4	3	6	**61**
Other	1	0	0	0	0	0	0	0	0	0	**1**
Placed Sleep Position[1,2]											
Back	10	14	13	10	18	9	12	10	8	13	**117**
Stomach	3	2	7	5	7	6	4	2	7	8	**51**
Side	3	6	2	5	3	4	2	4	3	5	**37**

[1] Two cases in 2006 and one case in 2014 and 2015 had unknown sleep position.

[2] As reported by parent or caregiver.

These data paint a clear picture for targeted safe sleep education outreach. More than 75% of sleep related deaths occurred among black infants, and the total (21) tied with 2010 as the highest number in the last ten years. Fifty percent of infants placed in a known sleep position were put on their stomach or side. Although 13 infants were placed on their back, all had other risk factors noted such as surface sharing or extra bedding. These data suggest that sleep position, surface sharing, and sleep hazards are modifiable risks that, if removed, can significantly reduce, or possibly eliminate, *the most preventable type of death for children under the age of 18 in the county.*

Figure 10 2006-2015 Sleep Related Deaths by Age of Infant (n=209)

Figure 11 2006-2015 Sleep Related Risk Factors by Neighborhood
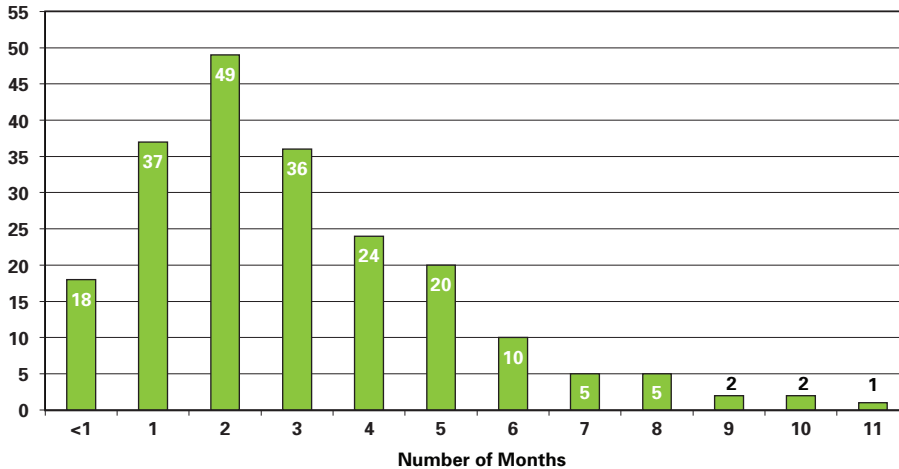
Figure 10 shows the number of infants who died in the last ten years by the infant's age. Almost 60% happened when the infant was one to three months old. Nearly 95% of sleep related deaths occurred within the first six months of the infant's life. Nearly 25% of the infants were two months old, the highest percentage for a single month. For the eighth consecutive year, at least one infant older than 6 months died in a sleep environment. The data clearly show the importance that all caregivers of infants under one year follow the A,B,C safe sleep message. Babies should sleep alone, on their backs, in an empty crib.

Figure 11 examines whether there are differences between where an infant lives and the economic, medical, and environmental risk factors that may contribute to an infant's death. In the last ten years, more than four in five sleep related deaths in Cleveland occurred among infants living in poverty. Almost 70% of the first ring suburb infants, and nearly 30% of the outer ring suburb infants, lived in poverty. In the last five years, nearly 90% of infants who died in a sleep environment lived below the federal poverty guideline. Unlike the disparity of poverty by location, medical risk factors did not have a large disparity by neighborhood. Only 23% of infants who died in a sleep environment were considered low birthweight (less than 2,500 grams, or 5 lb. 8 oz. at birth). One in five (20%) infants was born prematurely. Low birthweight and prematurity are noted risks in increasing the chance of SIDS.[31]

---

[31] Thompson JMD and Mitchell EA. Are the risk factors for SIDS different for preterm and term infants? (2006). *Archives of Disease in Childhood*; 91(2), 107–111. Available online at http://adc.bmj.com/content/91/2/107.abstract (accessed July 26, 2016).

Protecting Our Future

After analyzing three environmental risk factors (surface sharing, extra bedding, and parental tobacco use), the data suggest that these risk factors play a major role in the well-being of a sleeping infant. In the last ten years, there was extra bedding found in nearly 80% of all sleep related deaths, and in more than 90% in the last five years. In 2015, all but one infant had at least one piece of extra bedding in the sleep environment. From 2006 to 2015, more than three in five infants shared their sleep surface with another child or adult. More than 70% of Cleveland infants who died in their sleep had at least one parent who smoked, and 65% of all infants had parental smoking noted as a risk factor. The data paint a clear picture that, for infants who die in their sleep in Cuyahoga County, economic and environmental risk factors are more prevalent than medical risk factors.

Fast facts:

- More than 2 babies died every month in an unsafe sleep environment.
- 10 infant deaths were ruled as accidental suffocation, the highest total in the last ten years.

Community Actions:

How is the safe sleep message getting to all caregivers?

- **MomsFirst** partnered with the **Cuyahoga County Board of Health (CCBH)** to host three interactive baby shower events in neighborhoods with the highest infant mortality rates. These showers provided education to parents, grandparents, siblings, and community members about how to safely place a baby to sleep. These intergenerational events allowed for not only pregnant and parenting women to benefit from safe sleep information, but also grandparents who care for their grandchildren.

- MomsFirst distributed safe sleep materials to senior adults through the **City of Cleveland Department of Aging**. Safe sleep posters and materials were also distributed through the **Cleveland Public Library** system.

- **Boot Camp for New Dads®** is an interactive infant care class taught by experienced dads that is offered at all the hospital systems in Cuyahoga County.

Safe Sleep Education

- The **Cuyahoga County Division of Children and Family Services (DCFS)** evaluates safe sleeping arrangements when conducting home visits or safety checks. All DCFS-involved families with children under the age of 2 receive a presentation by their DCFS worker on how to practice safe sleep. Pack-n-plays are also distributed to families identified as needing a safe sleep environment.

- "Safe sleep cards" with the message, "Alone, on my Back, in a bare naked Crib," local data about sleep related deaths, and a picture of a safe sleep environment, continue to be circulated throughout Cuyahoga County. They have been distributed to hospitals, home visiting programs, community recreation centers, neighborhood clinics, churches, and family serving agencies.

- Nurses from CCBH Welcome Home Newborn Visiting program discuss safe sleep and how to calm a crying baby during their visits with families. From 2015-2016, almost 2,000 newborn visits were completed.

- CCBH is a leading Cribs for Kids® pack-n-play distribution center for low income families in need of a safe sleep environment.

Total number of child deaths lower than the ten-year average.

Forty-five children aged 1 to 17 died in 2015, which was a 2% increase over the previous year, but significantly lower than the ten-year average of 55 (**Figure 12**). From 2006 to 2010, the five-year average number of child deaths in this age group was 63, but the 2011 to 2015 five-year average was only 47, a 25% decrease. In the last six years, there was a significant decrease in the number of homicides, drownings, and cancer and other medical causes in this age group.

In 2015, 23 injury related deaths accounted for 51% of all fatalities among 1- to 17-year-olds, the lowest percentage of deaths in this category in the last three years. The 2015 preliminary county injury death rate of 8.4 per 100,000 children 1- to 17 years is lower than the 2014 (most recent data available) Ohio rate (9.5), and the United States rate (9.9).[32-36] These injury related deaths were attributed to: homicide (8), accidental injury related (4), motor vehicle accident (3), suicide (4), drowning (3), and undetermined other (1) (Table 2). The number of children who died as a result of homicide and poisoning decreased in 2015, while accidental injury related, drowning, motor vehicle accident, and suicide deaths increased.

The number of medical related deaths (22) was the third-lowest in ten years. The causes of death included other medical causes (11), birth defects (5), cancer (5), and infection (1) (Table 2). Cancer and other medical causes increased by one.

Figure 12 Total Child Deaths per Year (age 1-17)

Number of Deaths
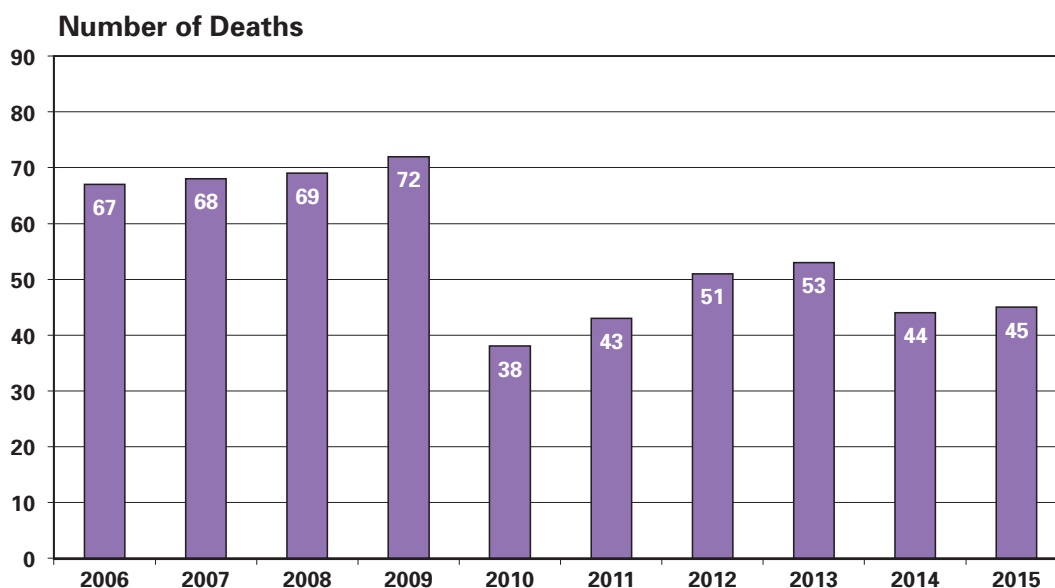
[32] CDC, National Center for Injury Prevention & Control, Web-based Injury Statistics Query and Reporting System (WISQARS). 10 Leading Causes of Fatal Injury Reports for ages 1-17, National, Regional, and States 1999-2014. Available online at http://www.cdc.gov/injury/wisqars/leading_causes_death.html (accessed July 26, 2016).

[33] (ODH, Center for Public Health Statistics and Informatics, June 22, 2016).

[34] (CDC, NCHS. Births: Preliminary data for 2014, July 18, 2016).

[35] US Census Bureau. 2014 population estimates. Available online at http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml (accessed July 23, 2016).

[36] (US Census Bureau. 2010 Census of population and housing; Summary file 1, July 13, 2014).

Protecting Our Future

Highest number of unintentional injury deaths in the last six years.

In 2015, 23 children of all ages died as a result of unintentional injuries. This is more than twice the number of deaths last year, and the highest number in the last six years. Of the 23 children, 15 were black and 13 were male. These 23 deaths included: 10 accidental suffocation, 3 motor vehicle accident (MVA), 3 drowning, 2 SUID, 2 trauma, 1 choking, 1 fall, and 1 gunshot wound (**Figure 13**). All 10 accidental suffocation deaths were related to unsafe sleep environments. The 2015 preliminary rate for unintentional deaths among 1- to 17-year-olds was 3.6 per 100,000.[37-38] This rate is significantly lower than the 2014 rates (most recent data available) for Ohio (4.7), and the United States (6.0).[39-41]

Figure 13 Unintentional Injury Deaths in Cuyahoga County (n=23)
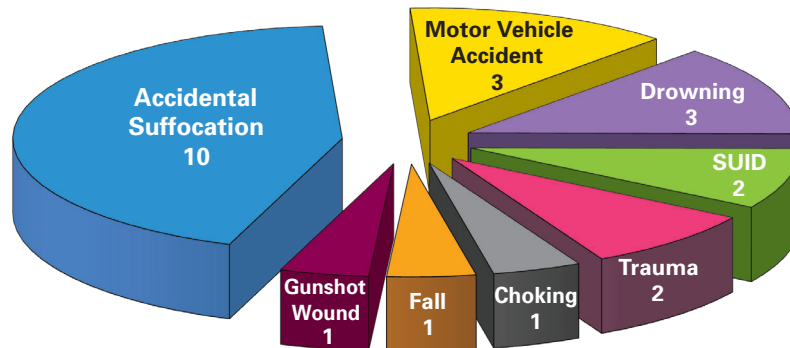
Case reviews revealed that the most common risk factors identified in these deaths were poverty (19), parental tobacco use (10), suspected parental history of abuse/neglect as a child (10), illicit drug use by a parent (9), surface sharing (9), maternal chronic illness (7), inadequate supervision (6), history of child neglect (5), and history of maternal mental illness (5).

Figure 14 Total Motor Vehicle Deaths by Age Group per Year

Number of Deaths ■ Under 1 Year ■ 1 - 9 Years ■ 10 - 17 Years
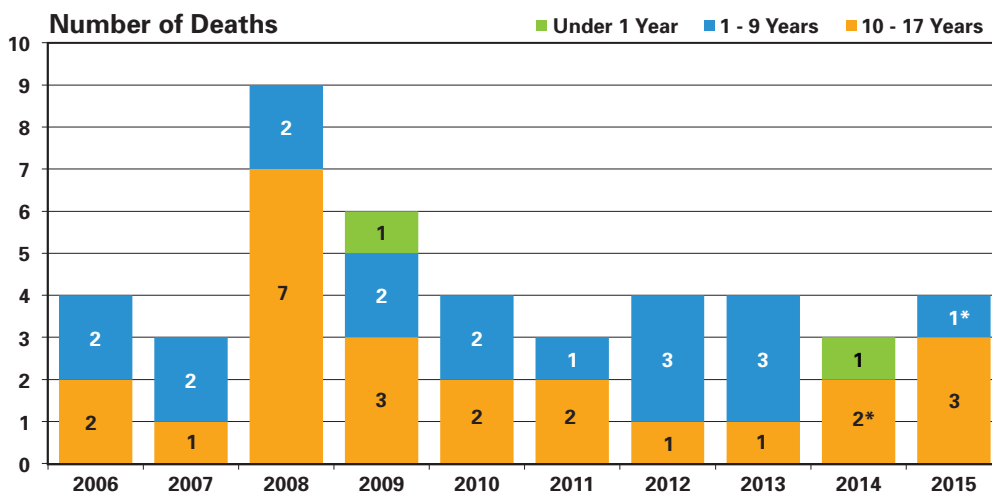
* In 2014 and 2015, one death ruled as homicide.

Figure 14 gives a historical perspective of the age distribution of traffic related fatalities. This year tied with four other years for the second-lowest number of MVAs. There were 3 deaths in the 10- to 17-year age group and 1 death in the 1- to 9-year age group. There were no infant deaths for the eighth time in the last ten years.

[37] (ODH, Center for Public Health Statistics and Informatics, June 22, 2016).

[38] (US Census Bureau. 2010 Census of population and housing; Summary file 1, July 13, 2014).

[39] (US Census Bureau. 2014 population estimates, July 23, 2016).

[40] (CDC, NCHS. Births: Preliminary data for 2014, July 18, 2016).

[41] CDC, WISQARS. 10 Leading Causes of Unintentional Injury Deaths for ages 1-17, National, Regional, and States 1999-2014. Available online at http://www.cdc.gov/injury/wisqars/ (accessed July 26, 2016).

Of the 4 motor vehicle deaths, 2 were passengers and 2 were pedestrians hit by a vehicle. The passenger fatalities occurred in the same accident, in which the driver was speeding and lost control of a stolen car. One child was walking home at night and was involved in a hit-and-run accident. The other accident involved a child who was running from an assailant and was hit crossing the road. This death was ruled a homicide.

In the US in 2014, unintentional injury was the number one cause of death among children in the 1-17 years group (most recent data available).[42] Motor vehicle accident related deaths in the US accounted for 49% of all unintentional injury deaths in this age group.[43] In 2014 (the most recent data available), deaths from motor vehicle accidents among children ages 1-17 years in the United States were 2.9 per 100,000 children.[44-46] Cuyahoga County's 2015 rate among ages 1-17 years is nearly half the national rate, at 1.5 per 100,000 children.[47-48]

Community Actions:

- The **Rainbow Injury Prevention Center** teen traffic safety programs in high schools include: "Science of Attention," which focuses on the dangers of distracted driving, "Drive To Stay Alive," and "Click it or Ticket," which encourage safe driving and seat belt use. These programs reached more than 11,000 students.

- The Center promoted child pedestrian safety by coordinating International Walk to School Day activities in 27 local schools for more than 9,500 students.

Figure 15 Total Drowning Deaths per Year
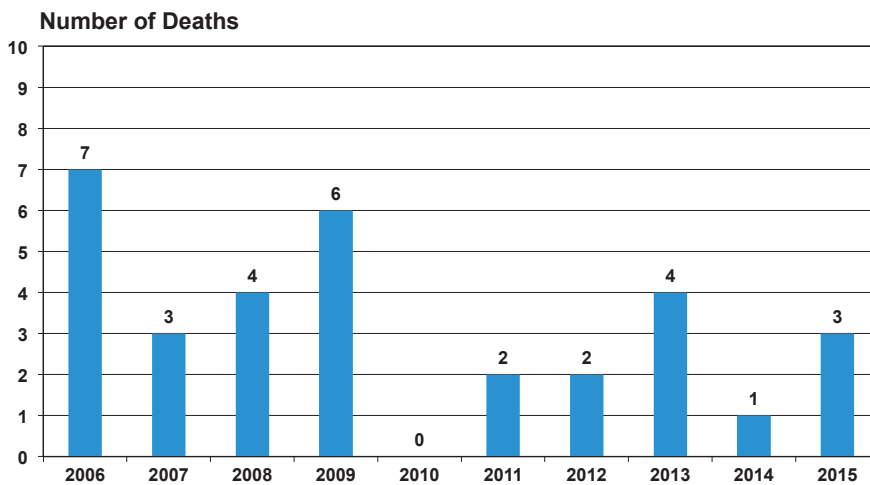
Number of Deaths

Figure 15 illustrates the number of drowning deaths in the last decade. In 2015, 3 children drowned. Two cases involved young children with inadequate supervision as a risk factor. The third case was a teenager who didn't know how to swim, but was challenged to swim across a waterway. Drowning was the second-leading cause of unintentional injury related deaths among 1- to 17-year-olds in the United States in 2014 (most recent data available).[49] The 2014 national drowning rate for this age group was 1.1 per 100,000 children, which is equal to the 2015 Cuyahoga County rate.[50-54]

[42] CDC, WISQARS. 10 Leading Causes of Death for ages 1-17, National, Regional, and States 1999-2014. Available online at http://www.cdc.gov/injury/wisqars/ (accessed July 27, 2016).

[43] (CDC, WISQARS. 10 Leading Causes of Unintentional Injury Deaths for ages 1-17, National, Regional, and States 1999-2014, July 26, 2016).

[44] (CDC, NCHS. Births: Preliminary data for 2014, July 18, 2016).

[45] (US Census Bureau. 2014 population estimates, July 23, 2016).

[46] (CDC, WISQARS. 10 Leading Causes of Unintentional Injury Deaths for ages 1-17, National, Regional, and States 1999-2014, July 26, 2016).

[47] (US Census Bureau. 2010 Census of population and housing; Summary file 1, July 13, 2014).

[48] (ODH, Center for Public Health Statistics and Informatics, June 22, 2016).

[49] (CDC, WISQARS. 10 Leading Causes of Unintentional Injury Deaths for ages 1-17, National, Regional, and States 1999-2014. July 26, 2016).

[50] Ibid.

[51] (CDC, NCHS. Births: Preliminary data for 2014, July 18, 2016).

[52] (US Census Bureau. 2014 population estimates, July 23, 2016).

[53] (US Census Bureau. 2010 Census of population and housing; Summary file 1, July 13, 2014).

[54] (ODH, Center for Public Health Statistics and Informatics, June 22, 2016).

Protecting Our Future

Figure 16 Total Accidental Fire Deaths per Year
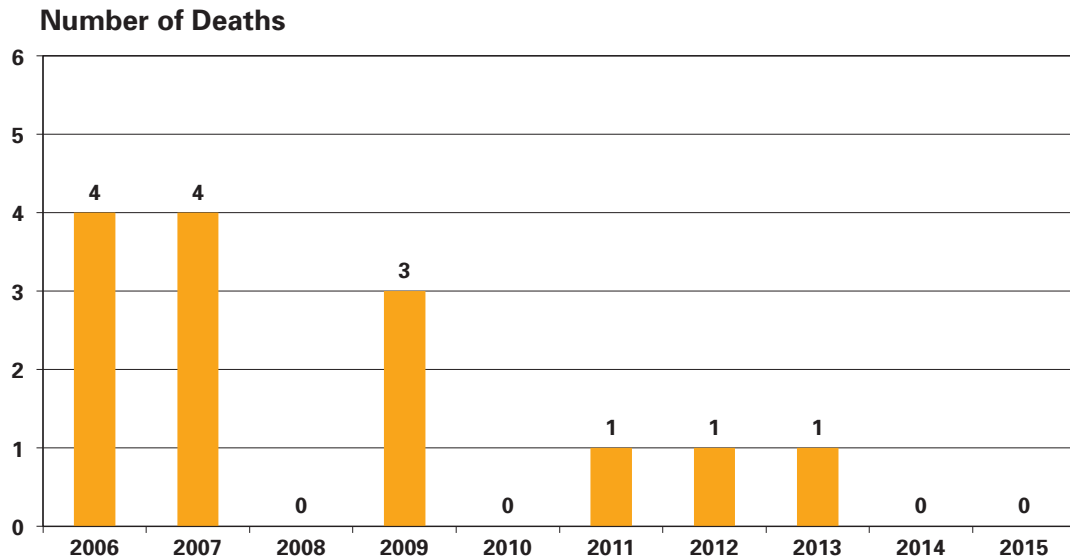
Number of Deaths

Figure 16 shows there were no accidental fire related deaths in 2015 for the second consecutive year. The total number of accidental fire deaths for the last ten years was 14, with only three such deaths in the last five years. Fire was the third-leading cause of unintentional injuries in the US among 1- to 17-year olds in 2014 (most recent data available).[55]

[55] (CDC, WISQARS. 10 Leading Causes of Unintentional Injury Deaths for ages 1-17, National, Regional, and States 1999-2014, July 26, 2016).

Five fewer homicides in 2015.

Intentional injury deaths include homicide and suicide. These types of deaths also have a racial disparity. Almost 30% of deaths in black children ages 1-17 years were due to homicide or suicide, compared to 17% of deaths in white children.

The 12 homicides in 2015 was the third-lowest total in the last ten years. **Figure 17** illustrates that 4 infants, 4 children ages 1 to 9 years, and 4 children ages 10 to 17 years died due to homicide. The 4 infant deaths was the highest total in this age group in the last ten years. Homicide deaths among children ages 10 to 17 years was the second-lowest total since 2006.

Figure 17 **Total Child Homicide Deaths by Age Group per Year**
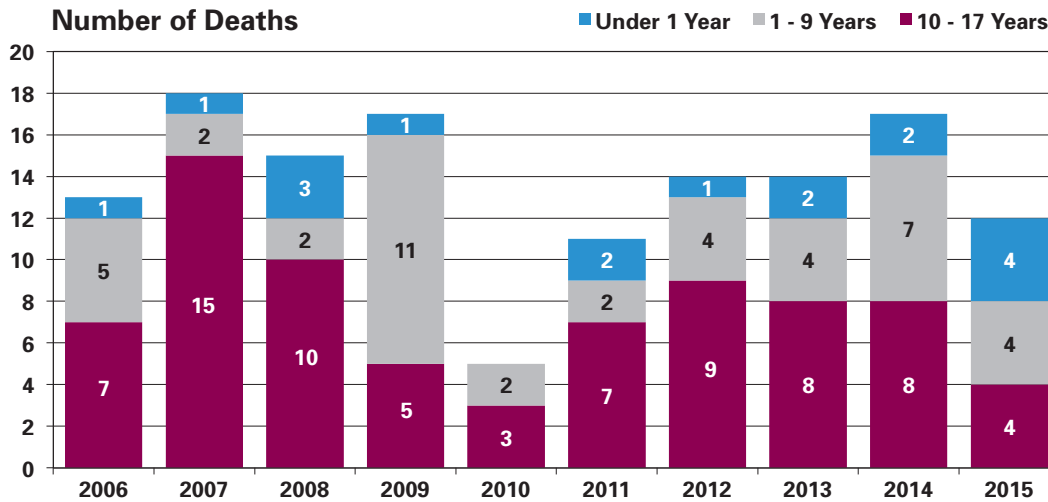
Homicide dropped to the fifth-leading cause of death in 2015. Homicides among children ages 1 to 17 years decreased 47% (from 15 in 2014 to 8 in 2015). In the state of Ohio and the United States in 2014 (most recent data available), homicide was the fourth-leading cause of death among children ages 1-17 years.[56] For the 10-17 years age group, homicide was the fourth-leading cause of death in the United States, but the second-leading cause of death in Ohio.[57]

Of the 12 homicide victims this year, 7 were boys and 11 were black children. The ages of the children were less than 1 year (4), 1 year (1), 3 years (1), 5 years (1), 9 years (1), 15 years (3), and 17 years (1). Six of the 8 homicides in the 1-17 years age group were gun related. The remaining homicides were due to physical abuse (1) and MVA (1). Two of the 4 infant homicides were gun related. The other infant homicides were due to physical abuse (1) and hyperthermia in a car (1).

Tied for the leading risk factors associated with homicide were poverty, gun access, and history of reports for suspected domestic violence or child maltreatment. Inadequate supervision, negative influence of family and friends, and parental illicit drug use were the next three most common risk factors.

---

[56] CDC, WISQARS. 10 Leading Causes of Fatal Injury Reports for ages 1-17, National, Regional, and States 1999-2014 July 26, 2016).

[57] Ibid.

Protecting Our Future

Figure 18 Total Firearm Deaths by Manner per Year

Figure 18 portrays the number of firearm deaths by manner (homicide, suicide, accidental, and undetermined) over a ten-year span. In 2015, there were 9 firearm deaths. Seven deaths were homicides, 1 suicide, and 1 accidental. Four of the gun-related homicides were committed against children 5 years old or younger, whereas the other 5 deaths involved teenagers, 15-17 years old. Two cases were gang-related shootings.

Number of Deaths

Legend: Homicide, Suicide, Accidental, Undetermined

Year	Homicide	Suicide	Accidental	Undetermined
2006	5			
2007	14	2	1	
2008	10		1	
2009	7	2	1	
2010	2	2		1
2011	7	1		
2012	9	2		
2013	7		1	1
2014	7	1		
2015	7	1	1	

There were 4 suicides in 2015, which was roughly equal to the ten-year average (**Figure 19**). All suicides were among children 16 to 17 years old, and 3 were males. Three suicides were by hanging and one was by self-inflicted gunshot wound. The risk factor "at-risk child" was noted in 3 cases. In 50% of the cases, the following risk factors were noted: parental illicit drug use, lack of support and negative influence of family and friends, child criminal history, aggression (child), and history of suspected domestic violence or child maltreatment.

Figure 19 Total Child Suicide Deaths per Year

According to the CDC, in 2014 (most recent data available), suicide was the second-leading cause of death among 10- to 17-year-olds in Ohio and in the United States.[58] Suicide was the third-leading cause of death among children ages 1 to 17 years in the United States, and the second-leading cause in the same age group in Ohio.[59] According to the Cuyahoga County Youth Risk Behavior Survey in 2014, more than one in seven middle school students had intentionally hurt themselves.[60]

Number of Deaths

Year	Deaths
2006	2
2007	4
2008	7
2009	4
2010	3
2011	2
2012	4
2013	5
2014	3
2015	4

[58] CDC, WISQARS. 10 Leading Causes of Fatal Injury Reports for ages 10-17, National, Regional, and States 1999-2014. Available online at http://www.cdc.gov/injury/wisqars/leading_causes_death.html (accessed July 26, 2016).

[59] (CDC, WISQARS. 10 Leading Causes of Fatal Injury Reports for ages 1-17, National, Regional, and States 1999-2014, July 26, 2016).
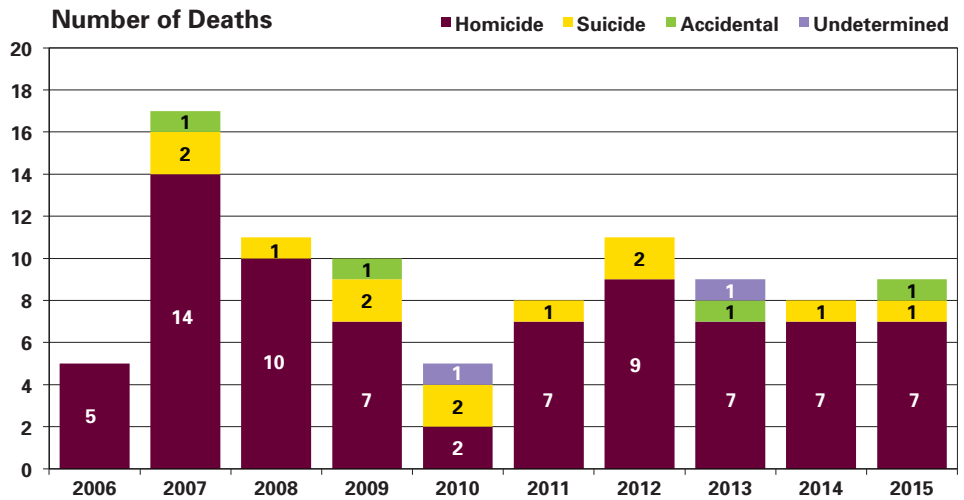
[60] Prevention Research Center for Healthy Neighborhoods. 2014 Cuyahoga County middle school youth risk behavior survey results: Grades 7-8. Available online at http://www.prchn.org/Reports.aspx (accessed July 26, 2016).

Community Actions:

- The **Alcohol, Drug Addiction and Mental Health Services (ADAMHS) Board of Cuyahoga County** conducts a suicide prevention awareness campaign. The county campaign promotes the 24-hour Suicide Prevention Hotline, Crisis Text, Crisis Chat, and online behavioral health screenings. There is also a social media campaign that includes targeted ads to youth on Facebook and Twitter.

- In 2015, the ADAMHS Board piloted a "Children's Response Team" to ensure that the unique needs of children were addressed in the community. It provided child-specific emergency service that responded to acute psychiatric, crisis situations, in addition to suicidal ideations.

Map 5

Distribution of Poverty and Child Homicide and Suicide Cuyahoga County, Ohio (2006–2015)

Map 5 shows the distribution of homicide and suicide over a period of ten years. In 2015, 7 of the 12 homicide victims (58%) were residents of Cleveland, but all 4 suicides occurred in the suburbs. The majority of the homicides and suicides in 2015 occurred in areas with a high density of families and individuals living below the federal poverty guideline. In the last ten years, suicides most often occurred in suburbs with low levels of poverty. On the other hand, the majority of homicides occurred in the city of Cleveland, where a large proportion of people live in poverty.

Type of Death
- ▲ Homicide (136)
- ■ Suicide (38)

Percentage of Persons Below Federal Poverty Guideline*
- 0.0 - 5.0
- 5.1 - 11.4
- 11.5 - 22.5
- 22.6 - 38.4
- 38.5 - 87.1
- Municipal Border
- Unpopulated Area

*Data obtained from the 2008-2012 American Community Survey, US Census Bureau. Percentage of poverty was calculated at the 2010 census tract level.
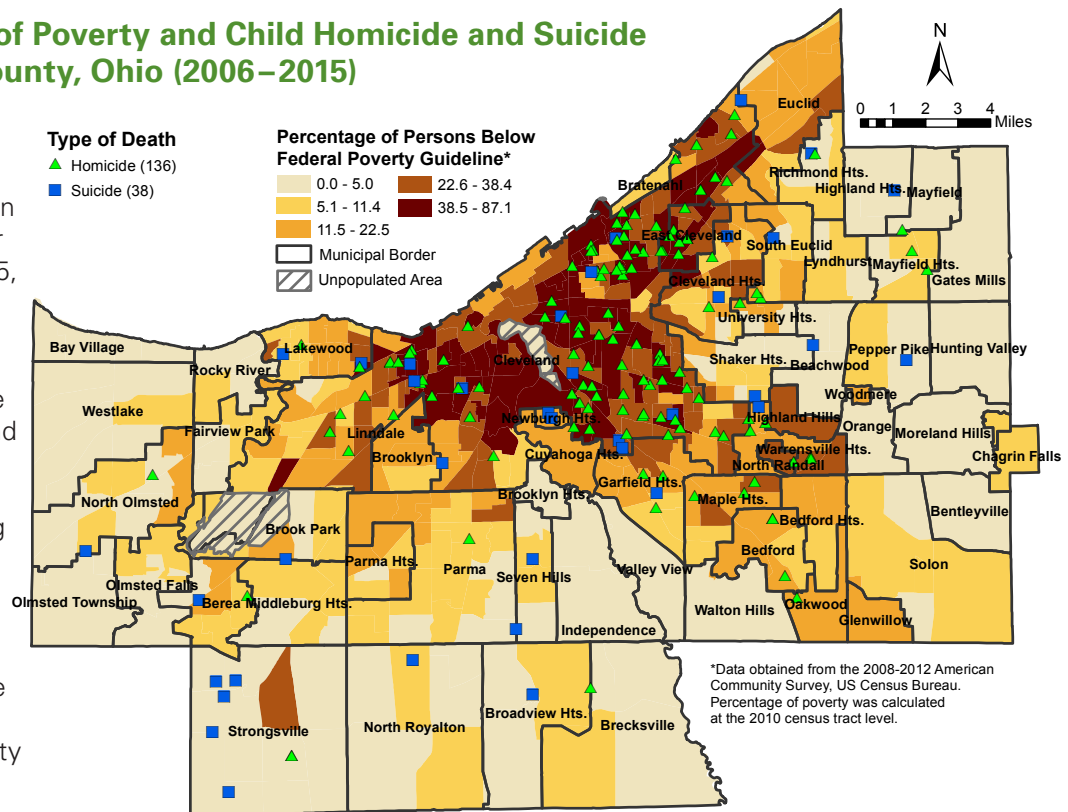
In 2015, there were 7 abuse or neglect related child deaths, which is slightly lower than the five-year average. The county rate of child abuse or neglect deaths was 2.4 per 100,000 children, which was a 29% decrease from 2014 (**Figure 20**). The national rate for child fatalities due to abuse or neglect was 2.1 per 100,000 children in 2014 (the most recent data available).[61]

Figure 20 **Child Deaths Due to Abuse and Neglect**
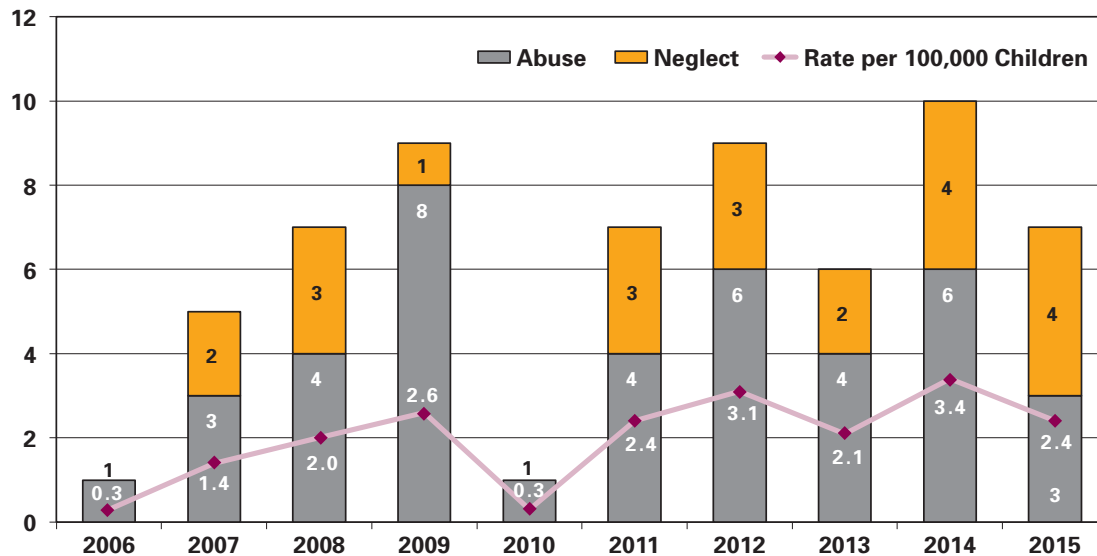
Of the 7 child abuse or neglect victims, 4 were females and 6 were black. Three were residents of Cleveland. The ages ranged from 4 days to 15 years old, with 4 of the deaths occurring in children 1 year of age or younger. Of the 4 neglect cases, 2 involved medical neglect of a child with a chronic illness, 1 involved a child shooting another with a gun they found, and the fourth was a child left alone in the car. Of the 3 child abuse homicides, 2 were due to blunt trauma and 1 was the result of a fatal gunshot wound to a pregnant woman whose unborn baby died hours after an emergency delivery. The risk factors most often found in these deaths included: poverty (5), history of suspected domestic violence or child maltreatment (4), and child with a chronic illness (3).

Community Actions:

• The **Medical Investigations Unit** of the **Cuyahoga County Division of Children and Family Services (DCFS)** assists families with medically fragile children or those who have suffered from severe abuse. This unit has advance training and experience with complex medical issues and develops relationships with the medical providers to ensure that the children's needs are being met. This unit also educates DCFS staff on chronic health issues such as asthma and diabetes.

• DCFS utilizes multiple programs to help parents of any age improve their parenting skills and learn how to engage with their child in an appropriate, safe, and nurturing manner. The programs include

– Nurturing Parenting, a treatment focused on abusive and neglectful, dysfunctional parent-child interactions. It has home-based services and group sessions.

– Supported Visits, offered for up to 17 sessions with a "visit coach" to provide parent coaching during family visits.

[61] HHS, Administration for Children and Families, Children's Bureau. Child maltreatment 2014. (2016). Available online at http://www.acf.hhs.gov/sites/default/files/cb/cm2014.pdf (accessed July 26, 2016).

Eighty-one percent of families who lost a child receive some level of program or public assistance.

Community service agencies worked with 81% of families who lost a child in 2015. This is a 13% increase from 2014, and the highest percentage of families served in the last five years. Service agencies included: the Cuyahoga County Division of Children and Family Services (DCFS), Help Me Grow, Juvenile Justice, MomsFirst, and Women, Infants, and Children (WIC). Not all services were provided during 2015; and in some cases they were provided long before the occurence of the death.

- 49 victims or family members were served by one service agency
- 54 by two agencies
- 58 by three or more agencies

More than half (56%) of the victims or family members were served by two or more community service agencies, and almost 30% were involved with at least three agencies within Cuyahoga County.

The 1-9 years group had the highest percentage (92%) of children or families served.

Infants were the second-highest percentage involved in any services (80%) and the 10-17 years group was the lowest percentage of people who were involved with the service agencies (70%).

Protecting Our Future

Nearly 75% of children who died were living in poverty.

Table 6 indicates the number of cases that had at least one risk factor noted in each category. **Appendix C** presents a summary of risk factors within each category. Overall, 99% of families had one or more medical indicators; almost 75% lived in poverty; 50% had behavioral risk factors; 39% of children and/or parents had a history of mental health problems; 38% of parents used cigarettes, alcohol, or drugs; and 32% had a history of violence or a criminal record (child abuse or neglect, partner abuse, custody removal, criminal history, or other household violence). Almost 19% had a social risk factor (such as negative influence or no support from family or friends, gun access, or gang involvement); nearly 16% had an environmental risk factor (such as secondhand smoke or deplorable housing); 8% had system issues with community or public service agencies; and 2.5% dealt with child substance abuse. The percent change column compares the 2015 percentage to 2014. A positive percentage represents an increase in that risk factor for 2015.

Table 6 Categories of Risk Factors Identified

Risk Factor	Total Cases (of 200)	Percent (%) of Cases	2015 to 2014 Percent (%) Change
Medical	198	99.0	0.8
Economic	149	74.5	0.8
Behavioral	100	50.0	16.2
Mental Health	78	39.0	(4.0)
Parental Substance Abuse	76	38.0	(5.0)
Violence Related	64	32.0	(5.7)
Socal	38	19.0	(17.5)
Environmental	31	15.5	50.4
System	16	8.0	(26.7)
Child Substance Abuse	5	2.5	(31.3)

Since the risk factors affecting families create complex situations, it is important that services remain available to meet their needs. Collaborative efforts are necessary to address the root causes that impact the health of children and the community. We must strive to ensure the well-being of the next generation and truly demonstrate a commitment to *Protecting Our Future*.

The following community actions represent ongoing efforts to reduce preventable deaths in children, while others represent new initiatives that build and strengthen existing outreach, education, and service delivery systems.

Prematurity and Infant Mortality

- Beginning with prenatal care through an infant's second year of life, the Cleveland **MomsFirst** project is designed to improve birth outcomes and ensure a healthy start for babies by providing support to high-risk pregnant women and teens. Core services include outreach, case management, health education, and interconception care. The project also provides screening and referral for perinatal and postpartum depression, substance/alcohol abuse, toxic stress, and intimate partner violence.

- The goal of MomsFirst is to reduce disparities in infant mortality. The participants are primarily high-risk African American pregnant women and teens. Cleveland's 2014 overall infant mortality rate (IMR) was 9.98 infant deaths per 1,000 live births with a white IMR of 5.65 and a black IMR of 14.05. MomsFirst's IMR for participants in 2014 was 5.9. Given that MomsFirst participants are reflective of those women at the highest risk for poor birth outcomes, these data provide strong evidence of a successful program to reduce infant mortality.

  – All MomsFirst sites hold neighborhood consortia meetings to educate the community at large about the following topics: preterm labor, safe sleep, smoking cessation, substance abuse, family planning, STD/HIV/AIDS prevention and testing, intimate partner violence, and perinatal depression.

  – The women served by MomsFirst are at an elevated risk for depression due to both pregnancy and socioeconomic factors. Depression can affect a pregnant woman's functional status and her ability to obtain prenatal care, eat properly, and avoid dangerous behaviors. Untreated depression during pregnancy is associated with spontaneous abortion, preterm delivery, and other adverse effects. The **Cleveland Regional Perinatal Network** developed a system-wide approach to screen and refer women identified as at risk for perinatal depression by establishing universal screening and referral protocols at several health care institutions and community agencies. As a result of these protocols, there has been a significant increase in referrals to perinatal mental health providers.

  – MomsFirst also has protocols to address toxic stress, intimate partner violence, and substance abuse among their participants, and to refer to appropriate agencies.

- The mission of the **March of Dimes** is to improve the health of babies by preventing birth defects, premature birth, and infant mortality. The Ohio campaign focus is to reduce disparities in preterm birth rates, improve the health of women before and between pregnancies, advance perinatal quality improvement, and expand preterm birth research. Additionally, March of Dimes grants are awarded to programs and research that focus on this mission.

  – In 2016, the Ohio March of Dimes provided funds to support provider training and the implementation of CenteringPregnancy® at MetroHealth Medical Center.

- **MetroHealth Medical Center** offers a high-risk prematurity clinic to help parents of fragile preterm babies avoid sleep related deaths, optimize infant development, and develop positive parenting and feeding skills.

- **Invest In Children** funds organizations that work with pregnant parents to improve birth outcomes and reduce infant mortality. They also provide newborn visits to low income families. Messages for parents are woven throughout all of their programs, including information about prenatal and interconception health, safe sleep, and environmental tobacco smoke.

- The **Cuyahoga County Board of Health (CCBH)** provides training sessions for MomsFirst staff members and educational classes for MomsFirst clients on the topics of infant mortality, preterm labor, prematurity, and safe sleep.

- CCBH provides presentations about health, equity, and infant mortality to the staff at hospitals in the county in order to highlight the link between population health, policy, medical care, and the community.

Sleep Related Deaths

- In 2015-2016, the **Cuyahoga County Board of Health (CCBH)**, as outreach for the Child Fatality Review Board, continued to provide safe sleep education for medical and nursing staff at maternity and pediatric hospitals throughout the county.

- The CCBH nurse is currently the co-chair of the statewide Ohio Injury Prevention Partnership's safe sleep subcommittee, which developed a statewide safe sleep campaign that was introduced in May 2014. The subcommittee has also developed safe sleep hospital policy guidelines.

- The **WIC Program** continues to provide safe sleep information to their clients during visits.

- The **Rainbow Injury Prevention Center** designed a safe sleep postcard that is given to new parents at University Hospitals MacDonald Women's Hospital as part of the hospital's child safety rounding project. During 2015, the staff visited more than 2,600 new mothers.

- **MomsFirst** provides safe sleep education to all participants in the program, with more than 1,800 families served in 2015. The project continues to assist families in need of a safe sleep environment in obtaining a pack-n-play.

- Safe sleep fliers continue to be included with birth certificates mailed to parents.

- The Rainbow Injury Prevention Center initiated training for the Direct On-Scene Education (DOSE) Program. First responders are taught to identify and remove hazards in an infant's sleep area while in a home responding to routine calls. If the family does not have a safe sleep place, a pack-n-play can be provided.

- **Help Me Grow** staff provides safe sleep education and materials to their clients.

Unintentional Injuries

- The **Rainbow Injury Prevention Center** is dedicated to preventing unintentional injuries.

  – As Greater Cleveland's child passenger safety experts, the staff operates free Car Seat Inspection Stations; provides low-cost car seat distribution for income-qualified families; offers infant car seat consultations for expectant parents; develops educational campaigns such as "Face the Facts/Face the Back" to keep children rear facing until at least 2 years of age; conducts free car seat checkup events; leads booster seat promotion efforts; and designs seat belt promotion campaigns aimed at tweens and teens.

  – The Center develops programs to address unintentional injuries with topics about bicycle, sports, pedestrian, and home safety.

  – The Rainbow Injury Prevention Center also uses Facebook and Twitter to spread safety messages to a wide audience.

- **MetroHealth Medical Center** providers include education on safe infant sleep and adequate adult supervision of children as part of well-child checkups.

- The **Cleveland Division of Police** and its Bureau of Community Policing donated gun locks to **Help Me Grow** that can be given to families when gun safety issues are identified in the home. Education on safe gun storage is also provided.

Homicide

- The **Cuyahoga County Division of Children and Family Services (DCFS)** incorporates many programs to best serve their clients.
  - DCFS uses neighborhood collaboratives to support children and families who struggle with social and economic challenges. Services offered include food pantries, emergency rent assistance, budgeting classes, parent support groups, and after school clubs. These partnerships play a vital role in prevention efforts that allow children and families to be served safely in their home.
  - The Special Investigations Unit at DCFS, in conjunction with the Practice Evaluation Unit, continues to perform a comprehensive record review for all fatalities in which the deceased child was involved with the agency at the time of the fatality, and/or during the previous 12 months. Lessons learned from investigations contribute to ongoing staff development throughout the agency, particularly in the areas of safety planning and prevention.
  - DCFS uses Trauma-Focused Cognitive Behavior Therapy to help children and families who have been impacted by abuse or violence in the home or community. As a screening agency for the Defending Childhood Initiative, DCFS utilizes a trauma screening to determine if a child or family could be best served through the program. The most common types of violence reported were sexual abuse and domestic violence.
  - The **Cuyahoga Tapestry System of Care** is designed for children and youth with severe emotional, behavioral, or mental health difficulties and their families. It is a team-based planning process intended to provide individualized and coordinated family-driven care. The focus is on building a team of natural and formal supports in the community to "wrap around" the family and develop a plan of care.
  - Multi-Systemic Therapy (MST) is designed for youth 12 to 17 years old who are at risk for out-of-home placement due to antisocial or delinquent behavior. It is community based and provided in the context of the family. It provides family support, case management, family therapy, and behavioral interventions.

- The **Cuyahoga County Witness/Victim Service Center (WVSC)** is an official site of the US Department of Justice's **Defending Childhood Initiative**. This project seeks to not only prevent violence, but also identify and treat children who are experiencing trauma as a result of exposure to violence in their homes, schools, or communities. More than 150 professionals have been trained to assess for trauma in children, and more than 27,000 children have been screened to determine if services for evidence-based treatment are needed.
  - WVSC manages the **Children Who Witness Violence** program, which provides immediate crisis stabilization to children in the aftermath of exposure to violence.
  - WVSC promotes child and family safety by being the home of the Violence Against Women Safe Havens Grant, a program providing supervised visitation and safe exchange services through a contract with the **Domestic Violence & Child Advocacy Center**.
  - WVSC is available for outreach and education in the community. Presentations to schools, human/social service providers, medical personnel, and law enforcement are a means of linking the Center to the needs of the community.

- The **Cleveland Division of Police** has made it a policy to refer all children who witness any violent situation to the Children Who Witness Violence program.

Protecting Our Future

- The **Cuyahoga County Family Drug Court** works with parents whose children are alleged to be abused or neglected and who are at risk of losing their children because of drug dependency. This intensive program is designed to reduce the time that a child may spend in placement while the parent receives treatment.

- In concert with the Defending Childhood Initiative, the **Alcohol, Drug Addiction and Mental Health Services (ADAMHS) Board of Cuyahoga County** has a network of adolescent treatment agencies specializing in services to teenagers, in addition to its school-based and community prevention programming.

- The **Cuyahoga County Juvenile Court** has many interventions and programs to assist youth who are in their system.

  – The Juvenile Detention Alternatives Initiative is a nationwide program that is being used in Cuyahoga County to develop options other than the use of a detention center for court-involved youth.

  – Effective Practices in Community Supervision is a new intervention method used by probation officers to help offenders make positive changes in their thinking and behavior so they will be less likely to commit a new crime.

  – Juvenile Court has a School-Based Probation Unit. In this partnership with the schools, school-based probation officers provide control, supervision, and incentives that delinquent youth often need to attend school regularly and comply with school rules.

  – Cognitive Behavioral Therapy is a day treatment program for youth who are struggling to meet the conditions of their probation. This year a parenting component was added to address the needs of the parents whose children are in this program.

Suicide

- The **Alcohol, Drug Addiction, and Mental Health Services (ADAMHS) Board of Cuyahoga County** is the lead agency for the coordination of school-based mental health and prevention services. The social-emotional needs of the students are addressed with services and referrals as needed.

- **Cuyahoga County Juvenile Court** has a Mental Health Court that is designed for youth who have been identified as having mental health issues. These children are provided intensive supervision and service coordination.

- The **Behavioral Health Juvenile Justice** program provides an intensive level of community supervision for youth diagnosed with mental illness or chemical dependence.

Interagency Actions

As a result of the Child Fatality Review Program, interagency communication and collaboration have been strengthened.

- The partnership between **Help Me Grow (HMG)** and the **Cuyahoga County Division of Children and Family Services (DCFS)** continues to strengthen protocols with DCFS. This includes new strategies for engaging families who have had a case of substantiated abuse and neglect, as well as improving communication and coordination between the DCFS caseworker and the HMG worker. A new outreach initiative is the looping of the HMG video in the DCFS waiting room.

- The **Early Childhood Mental Health (ECMH)** centralized system is a cooperative effort with Help Me Grow, the **Alcohol, Drug Addiction and Mental Health Services Board of Cuyahoga County**, **Invest in Children**, the **Educational Service Center of Cuyahoga County**, and DCFS. This serves as a single point of entry for children, from birth to 6 years old, who may be experiencing emotional, behavioral, and social problems.

- **MetroHealth Medical Center (MHMC)** hosts a quarterly meeting with DCFS to improve collaboration between the two agencies and to update policy information.

- Children in foster care are often survivors of abuse or unsafe living arrangements. To meet the needs of these special youngsters, MHMC and DCFS initiated a Medical Home for Children in Foster Care program. Children are seen by MHMC staff and enrolled in a coordinated tracking program designed to improve their current and long-term health and well-being.

Data Tables

Table 7 Annual Number of Gun Related Deaths by Manner, Age, and Sex

BOYS Cause of Death	Age	Year										Total
		2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Undetermined	14	0	0	0	0	1	0	0	0	0	0	1
	16	0	0	0	0	0	0	0	1	0	0	1
Total		0	0	0	0	1	0	0	1	0	0	2
Accidental	1	0	0	0	0	0	0	0	0	0	1	1
	15	0	0	0	1	0	0	0	0	0	0	1
	16	0	1	0	0	0	0	0	0	0	0	1
Total		0	1	0	1	0	0	0	0	0	1	3
Suicide	13	0	0	0	1	0	0	0	0	0	0	1
	14	0	2	0	0	0	0	0	0	1	0	3
	15	0	0	0	1	0	0	0	0	0	0	1
	16	0	0	0	0	0	0	1	0	0	1	2
	17	0	0	0	0	2	1	0	0	0	0	3
Total		0	2	0	2	2	1	1	0	1	1	10
Homicide	2	0	0	0	2	0	0	0	0	1	0	3
	3	0	0	0	0	0	0	0	0	0	1	1
	5	0	0	0	0	0	0	0	0	0	1	1
	10	0	0	0	0	0	0	1	0	0	0	1
	11	1	0	0	0	0	0	0	0	0	0	1
	12	0	0	0	0	0	0	0	0	1	0	1
	13	0	1	1	0	0	0	0	0	0	0	2
	14	1	0	0	0	0	0	0	0	0	0	1
	15	0	1	2	0	0	0	1	0	2	3	9
	16	1	2	2	1	0	3	1	2	0	0	12
	17	1	9	2	3	2	3	1	4	0	1	26
Total		4	13	7	6	2	6	4	6	4	6	58
TOTAL ALL BOYS		4	16	7	9	5	7	5	7	5	8	73

GIRLS Cause of Death	Age	Year										Total
		2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Accidental	6	0	0	0	0	0	0	0	1	0	0	1
Total		0	0	0	0	0	0	0	1	0	0	1
Suicide	16	0	0	0	0	0	0	1	0	0	0	1
	17	0	0	1	0	0	0	0	0	0	0	1
Total		0	0	1	0	0	0	1	0	0	0	2
Homicide	<1	0	0	0	0	0	0	0	0	0	1	1
	1	0	0	0	0	0	0	1	0	0	0	1
	5	0	0	0	1	0	0	0	0	1	0	2
	6	1	0	0	0	0	0	1	0	0	0	2
	10	0	0	0	0	0	0	2	0	0	0	2
	11	0	0	1	0	0	0	0	0	0	0	1
	12	0	1	0	0	0	0	0	0	1	0	2
	14	0	0	0	0	0	0	1	0	0	0	1
	15	0	0	1	0	0	1	0	0	0	0	2
	16	0	0	0	0	0	0	0	1	0	0	1
	17	0	0	1	0	0	0	0	0	1	0	2
Total		1	1	3	1	0	1	5	1	3	1	17
TOTAL ALL GIRLS		1	1	4	1	0	1	6	2	3	1	20

| TOTAL CHILDREN | | 5 | 17 | 11 | 10 | 5 | 8 | 11 | 9 | 8 | 9 | 93 |

Table 8 Demographic Profiles and Cause Specific Rates [1]

	2010 Census Data									
	Population Under 18 Years	Percent of Population Under 18								
Cuyahoga County (Total)	290,262	23	**Percent of Total County Child Population in Cleveland**					34		
Cuyahoga County (White)	154,615	19								
Cuyahoga County (Black)	106,489	28	**Percent of Total County Child Population Black**					37		
City of Cleveland	97,657	25								
Annual Birth Data[2]	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Cuyahoga County	16,682	16,450	16,249	15,525	15,108	14,993	14,783	14,920	15,079	14,844
% Black	38.6	41.1	40.5	39.9	39.2	38.9	39.2	39.3	38.2	38.6
% White	57.9	56.1	56.0	56.3	51.9	51.7	51.1	51.2	51.7	51.5

Annual Death Data	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Annual Child Deaths	233	230	240	213	178	187	182	186	165	200
Annual Infant Deaths	166	162	171	141	140	144	131	133	121	155
% Deaths to Infants	71.2	70.4	71.3	66.2	78.7	77.0	72.0	71.5	73.3	77.5

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Child Mortality/ 100,000 Children	67.0	66.1	69.0	61.2	61.3	64.4	62.7	64.1	56.8	68.9
Annual Total Medical Death Rate	49.1	49.4	50.3	42.8	46.5	49.3	46.5	47.5	40.7	50.3
Cancer	2.3	2.9	3.2	2.6	1.7	1.4	2.1	1.4	1.7	1.7
Annual Total Injury Death Rate	17.8	16.7	18.7	18.4	14.8	15.2	15.2	16.5	16.5	18.6
Homicide	3.7	5.7	4.3	4.9	1.7	3.8	4.8	4.8	5.9	4.1
Motor Vehicle Accident	1.1	0.9	2.6	1.7	1.4	1.0	1.4	1.4	0.7	1.0
Fire	1.1	1.1	0.0	0.9	0.0	0.3	0.3	0.3	0.0	0.0
Drowning	2.0	1.1	1.1	1.7	0.0	0.7	0.7	1.4	0.3	1.0
Suicide	0.6	1.1	2.0	1.1	1.0	0.7	1.4	1.7	1.0	1.4

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Infant Mortality/ 1,000 Births	10.0	9.8	10.5	9.1	9.3	9.6	8.9	8.9	8.0	10.4
Neonatal Mortality/ 1,000 Births	7.3	6.8	7.2	6.5	6.4	6.4	6.5	6.7	6.2	7.3
Postneonatal Mortality/ 1,000 Births	2.7	3.0	3.3	2.6	2.9	3.2	2.4	2.2	1.8	3.2
Prematurity	6.3	5.9	6.3	5.5	5.2	5.3	5.1	5.5	5.5	5.9
SIDS Only	0.2	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
SIDS and Sleep Related	1.1	1.3	1.4	1.3	1.9	1.3	1.2	1.1	1.3	1.8

[1] Darker yellow shaded boxes are 2015 birth estimates provided by the Ohio Department of Health.

[2] Ohio Department of Health, Ohio Public Health Information Warehouse. Available online at https://odhgateway.odh.ohio.gov/EDWS/DataCatalog (accessed May 16, 2016).

Table 9 Annual Number of Child Deaths Due to Injury and Medical Causes by Age Group

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Total
Total Injury Related Deaths											
Under 1 Year	24	21	30	27	28	22	20	18	23	31	**244**
1 - 9 Years	16	12	9	19	5	9	10	14	11	10	**115**
10 - 17 Years	22	25	26	18	10	13	14	16	13	13	**170**
Total	**62**	**58**	**65**	**64**	**43**	**44**	**44**	**48**	**47**	**54**	**529**
Total Deaths from Medical Causes											
Under 1 Year	142	141	141	114	112	122	111	115	98	124	**1,220**
1 - 9 Years	15	21	21	23	11	14	20	17	7	15	**164**
10 - 17 Years	14	10	13	12	12	7	7	6	13	7	**101**
Total	**171**	**172**	**175**	**149**	**135**	**143**	**138**	**138**	**118**	**146**	**1,485**
TOTAL ALL CAUSES	**233**	**230**	**240**	**213**	**178**	**187**	**182**	**186**	**165**	**200**	**2,014**

NOTE: Injury related deaths include sleep related accidental suffocation and "undetermined" deaths of infants, but not SIDS deaths.

Table 10 Cause of Death by Age Group and Year

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Total per Cause
Prematurity											876
Under 1 Year	105	97	102	85	79	80	76	82	76	87	
1 - 9 Years	0	1	2	1	0	1	0	1	0	0	
10 - 17 Years	0	0	0	0	0	0	1	0	0	0	
Birth Defects											337
Under 1 Year	28	31	31	28	20	35	25	23	13	21	
1 - 9 Years	5	6	9	6	5	2	9	9	2	4	
10 - 17 Years	2	3	3	3	4	2	1	3	3	1	
SIDS and Sleep Related Deaths											209
Under 1 Year	18	22	22	20	28	19	18	16	19	27	
Cancer and Other Medical Conditions											279
Under 1 Year	10	9	13	5	13	7	10	10	9	15	
1 - 9 Years	11	14	10	16	6	11	11	7	5	11	
10 - 17 Years	13	7	10	9	8	5	5	3	10	6	
Homicide											136
Under 1 Year	1	1	3	1	0	2	1	2	2	4	
1 - 9 Years	5	2	2	11	2	2	4	4	7	4	
10 - 17 Years	7	15	10	5	3	7	9	8	8	4	
Suicide											38
1 - 9 Years	0	0	0	0	0	0	0	0	0	0	
10 - 17 Years	2	4	7	4	3	2	4	5	3	4	
Motor Vehicle Accident											42
Under 1 Year	0	0	0	1	0	0	0	0	1	0	
1 - 9 Years	2	2	2	2	2	1	3	3	0	0	
10 - 17 Years	2	1	7	3	2	2	1	1	1	3	
Accidental Suffocation											3
Under 1 Year[1]	0	0	0	0	0	0	0	0	0	0	
1 - 9 Years	0	2	0	0	0	0	0	0	0	0	
10 - 17 Years	0	0	0	0	1	0	0	0	0	0	
Drowning											32
Under 1 Year	1	0	0	0	0	0	1	0	0	0	
1 - 9 Years	4	2	2	2	0	1	1	3	0	2	
10 - 17 Years	2	1	2	4	0	1	0	1	1	1	
Fire[2]											14
Under 1 Year	0	0	0	1	0	0	0	0	0	0	
1 - 9 Years	3	3	0	2	0	1	1	1	0	0	
10 - 17 Years	1	1	0	0	0	0	0	0	0	0	
Other Accidents[3]											48
Under 1 Year	3	2	0	0	0	1	0	0	1	1	
1 - 9 Years	1	1	3	2	1	4	1	3	4	4	
10 - 17 Years	7	3	0	2	1	1	0	1	0	1	
Total per Year	233	230	240	213	178	187	182	186	165	200	2,014

[1] Excludes those related to sleep environment.

[2] In 2006 there were 8 fire deaths, with 4 of those caused by a single arson (included in Homicide) and 4 caused accidentally (included in Fire).

[3] Includes falls, poisoning, violence of undetermined origin, and other accidents.

Protecting Our Future

Table 11 Annual Number of Child Deaths by Race and Age Group[1]

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Total
Race and Age Group											
Black											
Under 1 Year	122	107	128	96	99	97	84	86	83	107	**1,009**
1 - 9 Years	17	21	20	23	12	12	17	25	10	15	**172**
10 - 17 Years	20	24	23	18	7	14	14	13	16	10	**159**
Total	**159**	**152**	**171**	**137**	**118**	**123**	**115**	**124**	**109**	**132**	**1,340**
White											
Under 1 Year	43	55	43	43	40	45	46	45	37	47	**444**
1 - 9 Years	12	10	10	19	4	11	13	6	8	9	**102**
10 - 17 Years	16	11	13	12	13	6	7	9	9	9	**105**
Total	**71**	**76**	**66**	**74**	**57**	**62**	**66**	**60**	**54**	**65**	**651**
Other											
Under 1 Year	1	0	0	2	1	2	1	2	0	1	**10**
1 - 9 Years	1	2	0	0	0	0	0	0	0	1	**4**
10 - 17 Years	0	0	3	0	2	0	0	0	1	1	**7**
Total	**2**	**2**	**3**	**2**	**3**	**2**	**1**	**2**	**1**	**3**	**21**
Missing Race Info	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**
Rates of Death											**Average**
Black Crude Death Rate[2]	130.2	124.5	140.1	112.2	110.8	115.5	108.0	116.4	102.4	124.0	**118.4**
White Crude Death Rate[3]	35.3	37.8	32.8	36.8	36.9	40.1	42.7	38.8	34.9	42.0	**37.8**
Ratio of Black to White	3.7	3.3	4.3	3.1	3.0	2.9	2.5	3.0	2.9	2.9	**3.2**
Black Death Rate (excl Infants)[4]	32.0	39.0	37.2	35.4	18.9	25.8	30.8	37.8	25.8	24.8	**30.8**
White Death Rate (excl Infants)[5]	14.6	10.9	12.0	16.1	11.6	11.6	13.6	10.2	11.6	12.2	**12.4**
Ratio of Black to White (excl Infants)	2.2	3.6	3.1	2.2	1.6	2.2	2.3	3.7	2.2	2.0	**2.5**
Black Infant Mortality/1,000 Births[6]	18.9	15.8	19.5	15.5	16.7	16.6	14.5	14.7	14.4	18.7	**16.5**
White Infant Mortality/1,000 Births[7]	4.5	6.0	4.7	4.9	5.1	5.8	6.1	5.9	4.7	6.1	**5.4**
Ratio of Black to White IMR	4.2	2.7	4.1	3.2	3.3	2.9	2.4	2.5	3.0	3.0	**3.1**

[1] Darker yellow shaded boxes are based on adjusted estimates from unconfirmed delivery hospital data.

[2] Total Black deaths/106,489 x 100,000 (2010 census data in Table 8)

[3] Total White deaths/154,615 x 100,000 (2010 census data in Table 8)

[4] Total Black deaths (excl Infants)/106,489 minus All Other Races live births x 100,000 (2010 census data in Table 8)

[5] Total White deaths (excl Infants)/154,615 minus White live births x 100,000 (2010 census data in Table 8)

[6] Total Infant Black deaths/total Black live births x 1,000 (annual birth data in Table 8)

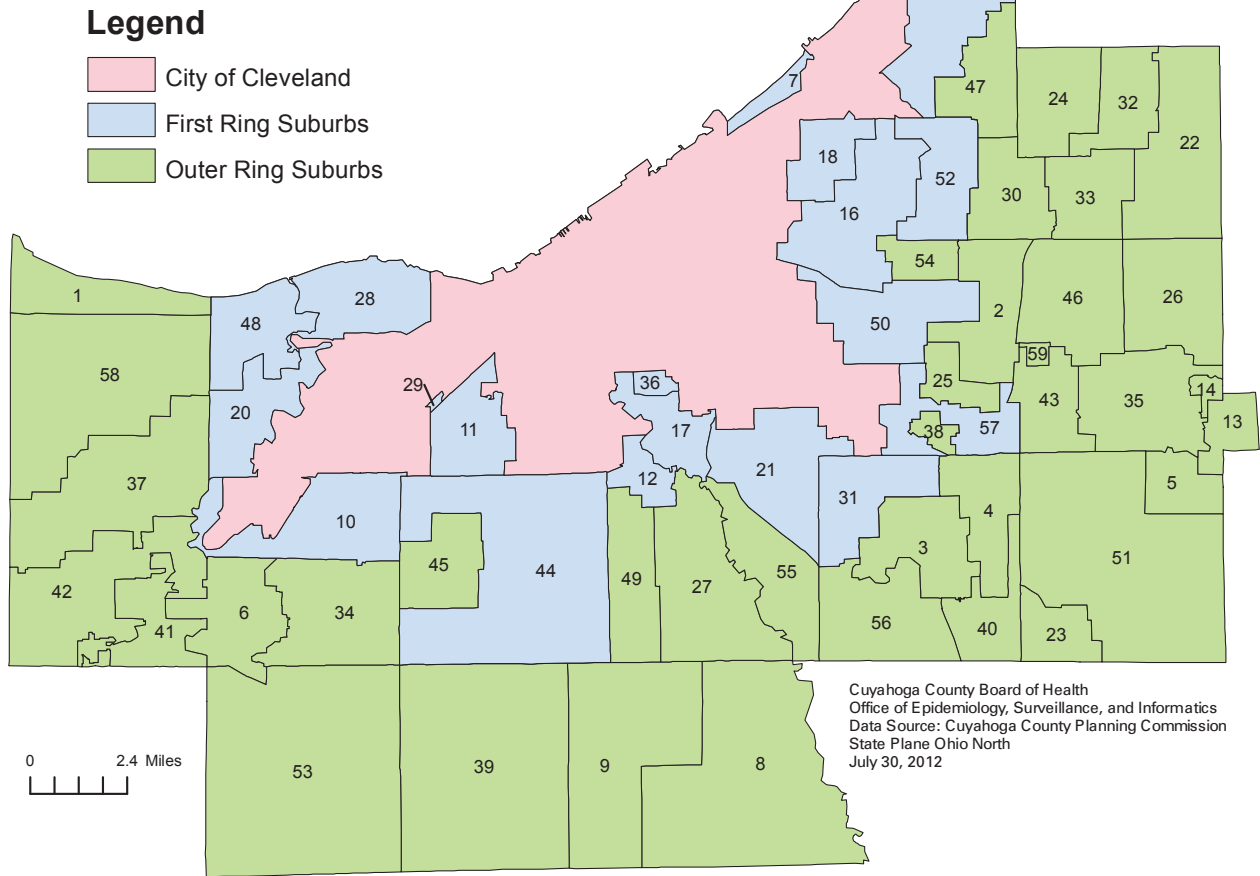[7] Total Infant White deaths/total White live births x 1,000 (annual birth data in Table 8)

Table 12 Annual Number of Child Deaths by Sex and Age Group

	2006*	2007	2008	2009	2010	2011*	2012*	2013	2014*	2015	Total
Sex and Age Group											
Male											
Under 1 Year	91	93	94	74	71	81	78	69	71	85	**807**
1 - 9 Years	15	16	15	26	6	11	12	16	8	19	**144**
10 - 17 Years	23	26	24	15	15	15	11	14	16	13	**172**
Total	129	135	133	115	92	107	101	99	95	117	**1,123**
Female											
Under 1 Year	74	69	77	67	69	63	52	64	49	70	**654**
1 - 9 Years	16	17	15	16	10	11	18	15	10	6	**134**
10 - 17 Years	13	9	15	15	7	5	10	8	10	7	**99**
Total	103	95	107	98	86	79	80	87	69	83	**887**
TOTAL ALL	232	230	240	213	178	186	181	186	164	200	**2,010**

* In 2006, 2011, 2012, and 2014, one infant had unknown sex.

Protecting Our Future

Appendix A City of Cleveland with First Ring and Outer Ring Suburbs

Legend

- City of Cleveland
- First Ring Suburbs
- Outer Ring Suburbs

Cuyahoga County Board of Health
Office of Epidemiology, Surveillance, and Informatics
Data Source: Cuyahoga County Planning Commission
State Plane Ohio North
July 30, 2012

0   2.4 Miles

Number	Municipality	Number	Municipality	Number	Municipality
1	Bay Village	22	Gates Mills	41	Olmsted Falls
2	Beachwood	23	Glenwillow	42	Olmsted Township
3	Bedford	24	Highland Heights	43	Orange
4	Bedford Heights	25	Highland Hills	44	Parma
5	Bentleyville	26	Hunting Valley	45	Parma Heights
6	Berea	27	Independence	46	Pepper Pike
7	Bratenahl	28	Lakewood	47	Richmond Heights
8	Brecksville	29	Linndale	48	Rocky River
9	Broadview Heights	30	Lyndhurst	49	Seven Hills
10	Brook Park	31	Maple Heights	50	Shaker Heights
11	Brooklyn	32	Mayfield	51	Solon
12	Brooklyn Heights	33	Mayfield Heights	52	South Euclid
13	Chagrin Falls	34	Middleburg Heights	53	Strongsville
14	Chagrin Falls Township	35	Moreland Hills	54	University Heights
16	Cleveland Heights	36	Newburgh Heights	55	Valley View
17	Cuyahoga Heights	37	North Olmsted	56	Walton Hills
18	East Cleveland	38	North Randall	57	Warrensville Heights
19	Euclid	39	North Royalton	58	Westlake
20	Fairview Park	40	Oakwood	59	Woodmere
21	Garfield Heights				

<div align="center">

CUYAHOGA COUNTY

FIMR
FETAL INFANT MORTALITY REVIEW

</div>

Program Description:

On July 1, 2014, the Cuyahoga County Board of Health began the first countywide Fetal Infant Mortality Review (FIMR) Program. This initiative was made available through the Ohio Equity Institute, with funding provided by the Ohio Department of Health, in collaboration with CityMatCH. FIMR is an action-oriented community process that identifies local infant mortality issues through the review of infant and fetal deaths. It continually assesses, monitors, and works to improve service systems and community resources for women, infants, and families. Research shows FIMR is an effective perinatal systems intervention to improve birth outcomes. (www.nfimr.org).

How it Works:

The FIMR Program is a multi-disciplinary approach that involves data gathering, case reviews, recommendations development, and action towards improvement. A unique feature of the FIMR Program is the family interview. A licensed counselor provides home visits to offer grief support and listen to a family's experience about the pregnancy, death of the infant, and community supports. Hearing the family's perspective on the death of their baby allows for a unique opportunity to make crucial community improvements, especially relating to gaps in services. The FIMR Program reviews fetal deaths that occur at a minimum of 20 weeks gestation and infant deaths.

Cases are reviewed at quarterly review team meetings and recommendations for community improvement are developed. Some recommendations can be implemented by the team, while larger scale recommendations involving systems and policy are taken to the Community Action Team.

Local Data:

In the first one and a half years, Cuyahoga County had 181 fetal deaths and 179 infant deaths.

Figure 1B provides a breakdown of the gestational age of all fetal deaths. While 37% of fetal deaths occurred before the age of viability (24 weeks gestational age), 63% of fetal deaths were at 24 weeks or later. Looking closer, 47% of fetal losses occurred in the third trimester, a time when babies should have a high survival rate.

**Figure 1B Gestational Age of Fetal Deaths (n=181)
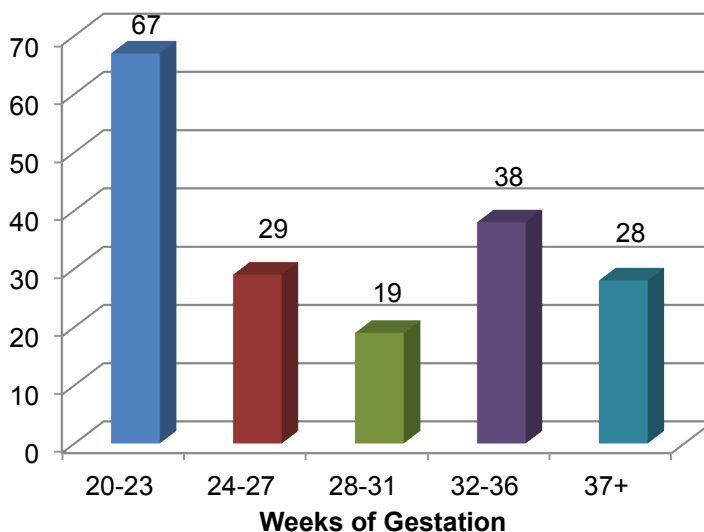(Cuyahoga County, July 1, 2014 - December 31, 2015)**

Protecting Our Future

Figure 2B demonstrates the racial disparity between black, white, and all other race fetal deaths. In Cuyahoga County, 58% of fetal deaths occurred to black mothers, 38% to white mothers, and 4% to all other race mothers. As with infant and child deaths, fetal deaths are more likely to occur among black women than white and all other race women.

Figure 2B **Fetal Deaths by Race of Mother**
(Cuyahoga County, July 1, 2014 - December 31, 2015)

- Black
- White
- Other

7
69
105
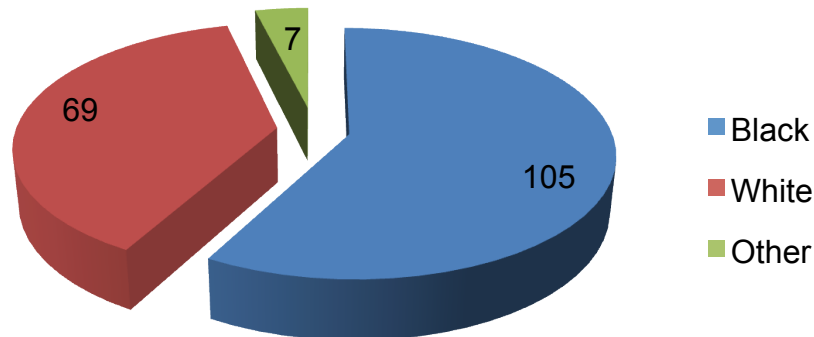
Progress:

Thirteen families participated in a home visit, 4 case review team meetings were held, and 17 recommendations were developed. Some have been implemented, while others will be taken to the Community Action Team.

FIMR in Action:

Problem 1: Family interviews reveal that it is difficult to find available comprehensive and up-to-date grief resources in the county.

Recommendation 1: Develop and maintain a county-wide grief resource brochure.

Action 1: A countywide grief resource brochure was created and is mailed to all families that experience the loss of their baby.

Problem 2: Family interviews reveal that parents of stillborn babies were upset that their baby never received a birth certificate.

Recommendation 2: Assess and assure that parents are aware of and have access to current vital statistics documents, including fetal birth certificates.

Action 2: FIMR staff found that the Office of Vital Statistics does offer a free Certificate of Stillbirth. All families in Cuyahoga County who have experienced a stillbirth are now mailed information about how to obtain the free Certificate of Stillbirth along with the FIMR Program information.

Summary of Risk Factors in 2015*

Mother's Medical Risk Factors

Chronic illness
  -Obesity
  -Hypertension
  -Diabetes
Preterm labor
Premature rupture of membranes (PROM)
Previous fetal loss
Previous infant loss
Previous preterm delivery
Prior history of sexually transmitted infections (STI)
STI – during current pregnancy
Chorioamnionitis
At-risk maternal age ≥ 35 years old
Infertility/ART
Positive beta strep
Multiple gestation
Pre-eclampsia (PET)
Cervical insufficiency
Abruption
Oligohydramnios
Polyhydramnios
17P not used but indicated

Pediatric Medical Risk Factors

Intrauterine growth retardation (IUGR)
Prematurity
Very low birth weight (< 1,500 grams)
Extremely low birth weight (< 1,000 grams)
Failure to thrive
Congenital anomalies
Infection
Chronic illness
Technologically dependent
Developmentally delayed
Apnea spells
Recent upper respiratory infection
Cancer
Injury/trauma

Economic Risk Factors

No insurance
Medicaid eligibility issues
Poverty
Frequent moves
Living in public shelter
Homeless

Behavioral Risk Factors

No prenatal care
Late entry into prenatal care
Missed appointments, mother
At-risk maternal age ≤ 17 years old
Pregnancy < 18 months apart
Missing immunizations, child
Missed appointments, child
Early onset parenting
Truancy, child
Delinquency, child
Aggression, child
Refused services offered
Unsafe sleep arrangement
Bedsharing
Lack of child safety
Car restraint not used
Inadequate supervision
Poor parenting
Unplanned pregnancy

Parental Substance Use

Tobacco
Alcohol
Illicit drugs
Prescription drugs

Child Substance Abuse

Tobacco
Alcohol
Illicit drugs
Prescription drugs
Intrauterine drug exposure
Intrauterine tobacco exposure

Violence Related Risk Factors

Child criminal history
Partner abuse
Child abuse
Child neglect
History of reports for suspected domestic violence or child maltreatment
History of custody removal
History of child exposure to violence within the family
Evidence of previous unexplained injuries
Mother criminal history
  - Currently in jail
  - Recent release
Father criminal history
  - Currently in jail
  - Recent release
Parental history of abuse or neglect as a child
Parental history of custody removal as a child
Parental history of suspected abuse or neglect as a child
Multigenerational reported abuse, neglect, or domestic violence
Medical neglect

Mental Health Risk Factors

Maternal history of mental illness
Paternal history of mental illness
Multiple family stresses
Parental education less than high school
Child with special need
Parent with intellectual disability
School problems, child
ADD/ADHD, child
Depression, child
History of suicide attempts, child
Self-injurious behavior, child

Child psychiatric diagnosis
Sexual identity issues, child

Environmental Risk Factors

Transportation inadequate
Secondhand smoke
No functional smoke detector
Deplorable housing

Social Risk Factors

Lack of support of family/friends
Negative influence of family/friends
Gang involvement
At-risk child
Social isolation
Lack of paternal involvement
Language difficulties
Cultural beliefs about health
Gun access

System Risk Factors

Multiple providers/sites, mother
Multiple providers/sites, child
At-risk, no toxicology screen, parent
Inadequate patient/client education
Dissatisfaction with system
Inadequate medical assessment
Inadequate reunification
Daycare concerns
Systems issues (health care, Division of Children and Family Services, law enforcement, school, juvenile court, mental health, etc.)
Foster/adopted child

* In addition to the risk factors listed here, there is an "other" option for each category for unlisted risk factors.

Cuyahoga County Child Fatality Review Board Membership 2015

Daralynn Constant and Anna Faraglia
Board Co-Chairpersons

Allison Apel
Cuyahoga County Div. of
Children & Family Services
3955 Euclid Avenue
Cleveland, Ohio 44115

Vivian Catchings-El
Alcohol, Drug Addiction &
Mental Health Services Board
2012 West 25th Street, 6th Floor
Cleveland, Ohio 44113

Lorrie Considine, RN, BSN
Cuyahoga County Board of Health
5550 Venture Drive
Parma, Ohio 44130

Daralynn Constant, LISW-S
Child Protection Program
Rainbow Babies & Children's
Hospital
11100 Euclid Avenue
Cleveland, Ohio 44106

Cuyahoga County Medical
Examiner's Death Scene
Investigation Team
11001 Cedar Avenue
Cleveland, Ohio 44106

Anna Faraglia, J.D.
Cuyahoga County
Prosecutor's Office
Justice Center, 9th Floor
1200 Ontario Street
Cleveland, Ohio 44113

Mark Feingold, M.D.
MetroHealth Medical Center
2500 MetroHealth Drive
Cleveland, Ohio 44109

Thomas Gilson, M.D.
Cuyahoga County
Medical Examiner
11001 Cedar Avenue
Cleveland, Ohio 44106

Jakolya Gordon
Witness/Victim Service Center
& Family Justice Center
75 Erieview Plaza, 5th Floor
Cleveland, Ohio 44114

Therese Horvath
Cuyahoga County Div. of
Children & Family Services
3955 Euclid Avenue
Cleveland, Ohio 44115

John Ladd, MNO
Invest In Children
310 W. Lakeside Avenue, Suite 565
Cleveland, Ohio 44113

Jacqueline Lambert
Cuyahoga County Juvenile Court
11811 Shaker Boulevard, Suite 401
Cleveland, Ohio 44120

Julie Loyke, CNP
Rainbow Babies & Children's
Hospital
11100 Euclid Avenue
Cleveland, Ohio 44106

Mary Louise Madigan
Cuyahoga County Office of
Health and Human Services
2079 E. 9th Street
Cleveland, Ohio 44115

Lori Mago, MPA
Help Me Grow/Cuyahoga County
Board of Developmental
Disabilities
1275 Lakeside Avenue East
Cleveland, Ohio 44114

Andrea McCollom, M.D.
Cuyahoga County Medical
Examiner Office
11001 Cedar Avenue
Cleveland, Ohio 44106

Nancy McCrickard, ND, RN
Cleveland Metropolitan
School District
1111 Superior Avenue East
Cleveland, Ohio 44114

Lolita McDavid, M.D., MPA
Rainbow Babies &
Children's Hospital
11100 Euclid Avenue
Cleveland, Ohio 44106

Tim Peyton
MomsFirst
Cleveland Dept. of Public Health
75 Erieview Plaza
Cleveland, Ohio 44114

Sgt. Gerard Reddix
Dept. of Public Safety
Div. of Emergency
Medical Service
1701 Lakeside Avenue
Cleveland, Ohio 44114

Barbara Riley, MPA
Cuyahoga County WIC Program
5202 Memphis Avenue
Cleveland, Ohio 44144

Diane Roberts, LISW
Dept. of Social Work
MetroHealth Medical Center
2500 MetroHealth Drive
Cleveland, Ohio 44109

Sgt. Dan Rowley
Bureau of Special Investigations
Cleveland Div. of Police
1300 Ontario Street
Cleveland, Ohio 44113

Kitty Russ, RN
Fairview Hospital
18101 Lorain Avenue
Cleveland, Ohio 44111

Richard Stacklin, MEd
Cuyahoga County Board of Health
5550 Venture Drive
Parma, Ohio 44130

Toni Walker
Help Me Grow
8111 Quincy Avenue, Suite 344
Cleveland, Ohio 44104

For more information on the Child Fatality Review Program, contact either of the following individuals or go to:

http://protectingourfuture.cuyahogacounty.us

Lorrie Considine, RN, BSN
Cuyahoga County
Board of Health
(216) 201-2001 ext. 1529

John Ladd, MNO
Cuyahoga County Office of Early Childhood
Invest In Children
216-443-6583