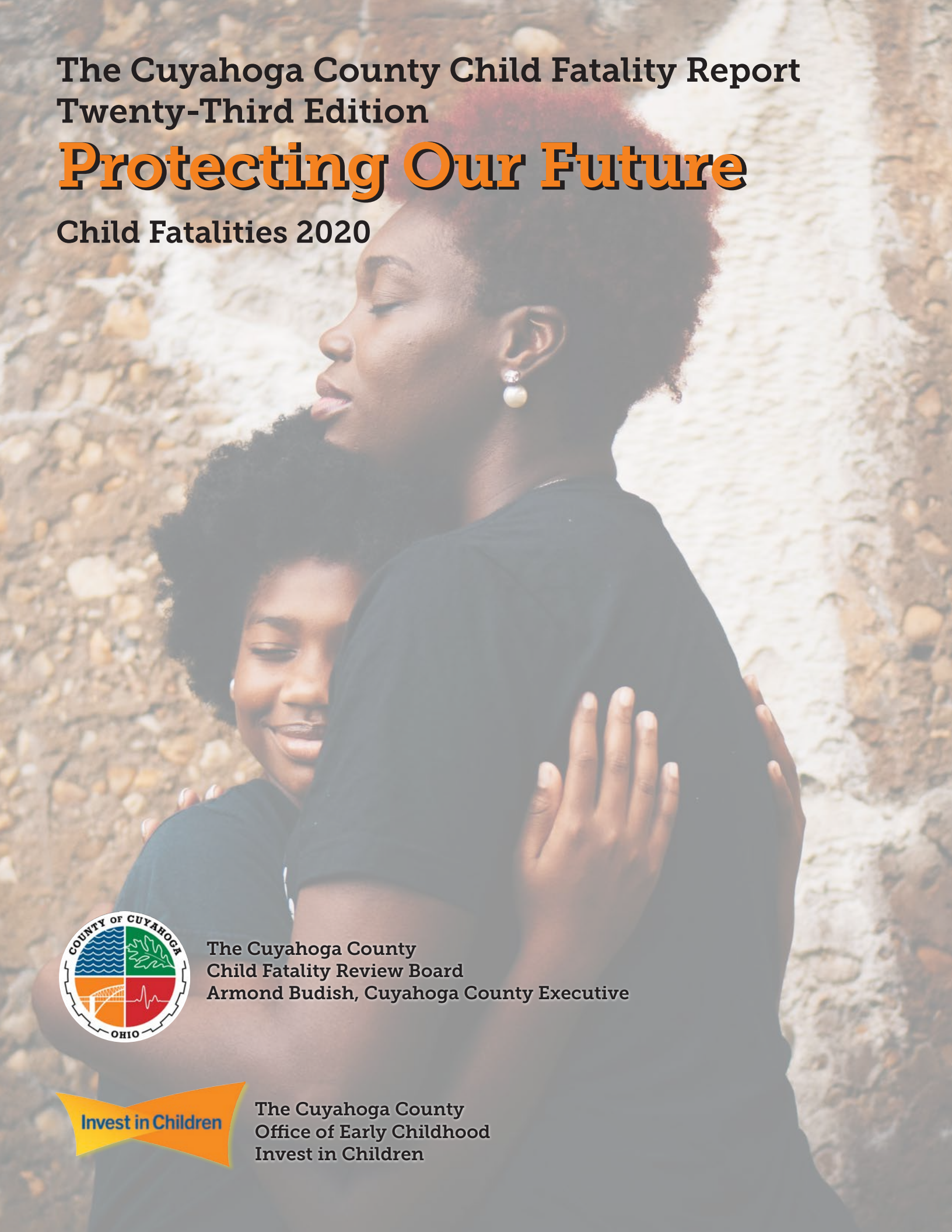
The Cuyahoga County Child Fatality Report
Twenty-Third Edition

Protecting Our Future

Child Fatalities 2020



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

Invest in Children

The Cuyahoga County
Office of Early Childhood
Invest in Children

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.

Recommendations

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

1. Promote the strategies of First Year Cleveland and the Ohio Institute for Equity in Birth Outcomes to reduce infant deaths and eliminate racial inequities in Cuyahoga County.

Prematurity

1. Support 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, the importance of interconception care, and the significance of a "Life Course Perspective" to decrease the risks of preterm births.
2. Support evidence-based and promising practices that decrease preterm births such as CenteringPregnancy®, progesterone use for high-risk women, and appropriate birth spacing.
3. 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.

Sleep Related Deaths

1. 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.
2. 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, educating all caregivers, having conversations with families about barriers to safe sleep, and providing tips to help parents continue safe sleep after discharge.
3. Increase home visitor programs and 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.
4. Promote First Year Cleveland Safe Sleep Heroes and the Ohio safe sleep campaign to hospitals and agencies in Cuyahoga County.

Medically Related Deaths

1. Reinforce the importance of a medical home, immunizations, care coordination, keeping appointments for children with chronic illnesses, and assess for barriers to compliance with the treatment plan.
2. Reinforce among providers that multiple missed appointments for potentially life-threatening conditions (asthma, diabetes, acute mental health issues, etc.) are frequently noted in child fatality case reviews. Providers observing such patterns are in a unique position to assess the situation for barriers to compliance and determine if reporting a suspicion of medical neglect is warranted.

Unintentional Injuries

1. Support the 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; and fire, water, and sports safety.
2. 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.
3. Reinforce the importance of gun safety in the home -- unloaded, locked, and out of the reach of children.
4. Monitor the opioid epidemic in Cuyahoga County to identify how and where it is affecting the health, welfare, and safety of children.

Homicide

1. Support educational programs that assist parents and guardians in understanding age appropriate behaviors, using alternative methods of discipline, and choosing suitable caregivers.
2. Support domestic 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.
3. Advocate for community-based safe haven centers for teens, to provide supervised activities and programs after school and on weekends.
4. Support the development and collaboration of violence intervention programs.

Suicide

1. Support school programs and mental health social platforms for depression awareness, bullying, and suicide prevention that also include resources for assistance.

Interagency

1. Strengthen the Cuyahoga County child protection system to ensure that institutions providing medical care or social services have real-time, cross-system collaboration, and information sharing to better serve and protect children who have experienced, or are at high risk for, serious or life-threatening injury or medical neglect.

COVID-19 Pandemic

1. Support mental health and social service programs that address the multiple needs of children and families during and after the COVID-19 pandemic.

COVID-19 Pandemic

During 2020, no children died in Cuyahoga County as a direct result of COVID-19 infection, but there were deaths where the case review process revealed that disruption of services and postponement of medical care were likely contributing factors. The following overview gives a brief timeline and highlights some of the system changes that occurred in order to provide context for the 2020 child deaths.

Cuyahoga County had its first COVID-19 case on February 28, 2020. Governor Mike DeWine declared a state of emergency on March 9th. The following day the World Health Organization announced a global pandemic. Within days there were statewide closures of schools, restaurants, fitness centers, and hair salons. All elective surgeries and procedures were indefinitely postponed. On March 23rd, a stay-at-home order was issued for the residents of Ohio. Child care centers were closed two days later. At the beginning of May, following a gradual decline in the number of new COVID-19 infections, elective health procedures were able to resume. Slowly throughout the month, businesses, retail, restaurants, gyms, and child care centers were reopened. On July 23rd, in response to a rapid increase in the number of cases, a statewide mask mandate while in public was issued and in August children in kindergarten to 12th grade were required to wear face coverings at school. In mid-December a COVID vaccine was available to begin Phase 1A of vaccinating residents of Ohio. This phase included health care workers, residents and staff of nursing homes, assisted living facilities, psychiatric hospitals, group homes, veteran homes, and EMS responders.

Throughout the first nine months of the pandemic there were travel advisories, social distancing requirements, number limits for social gatherings, and visiting restrictions in nursing homes and hospitals. Children participated in school through online learning, adults worked from home, and essential workers continued to be on the front lines. The number of COVID-19 cases fluctuated, however there were two waves in 2020. The first wave occurred during the summer and the second wave began in November. During 2020 Cuyahoga County had over 73,000 COVID-19 cases and almost 1,500 COVID-19 deaths.

Changes in providing health care or services to the community during the pandemic

All health care provider outpatient visits required COVID-19 screening questions, temperature checks, and masks. Initially, an additional visitor during appointments was not allowed, but that changed to one visitor. There was an effort to increase virtual visits for maternity and pediatric patients. Outpatient maternity facilities had to establish guidelines for patients who were being ruled out or tested positive for COVID-19, but needed to be seen in person by a provider. There was additional training for staff related to infection control and the rooming process, and childbirth education classes were transitioned to virtual classes.

Visiting at hospitals was restricted. Usually there was only one designated/consistent person as the visitor. In some hospitals doulas were not able to attend births unless they were the designated visitor. At most of the maternity hospitals, patients were able to use hospital technology to visit virtually with family.

A COVID-19 test was required for procedures or admission to most hospitals.

How human services providers adapted their program delivery

Prior to March 2020 **Cuyahoga County Division of Children and Family Services (DCFS)** had distributed I-Pads to direct service staff who work in the field as a part of a pilot program. This allowed a seamless transition during the pandemic to meet via video with families, have meetings with professional partners regarding abuse/neglect concerns, and attend court hearings from a secured device. The families were very receptive to the virtual meetings with increased participation noted. More dads were able to attend meetings and childcare was not an issue.

First responders, such as **Emergency Medical Services (EMS)**, had many protocol changes to ensure the safety of staff and patients during the pandemic. Personal Protective Equipment (PPE), including N95 masks, eye protection, and Tyvek suits were required for all emergencies. Donning this additional equipment and disinfecting the ambulance afterwards resulted in a delay in response times and in getting the units back into service. Some medical protocols regarding intubation and nebulized treatments also changed.

COVID-19 Pandemic

Invest in Children had to quickly adapt its approach to providing and funding services at the onset of the pandemic. Programs that involved home visits were moved to virtual meetings, or were put on hiatus if that was not possible. Five Universal Pre-Kindergarten (UPK) sites became approved as Pandemic Providers and continued to provide preschool options for first responders who had to continue to report to work. The Early Childhood Mental Health Program began an intensive outreach campaign to support families whose young children were experiencing adjustment challenges to being home, and whose families were under considerable new stress as well. Using social media ads and digital display advertising, neighborhood targeting was done to reach those families who were thought to have the greatest need.

The behavioral health providers funded by the **Alcohol, Drug Addiction & Mental Health Services (ADAMHS) Board** maintained in person services for clients in residential or out of home care facilities. When unable to maintain in person services, behavioral health providers transitioned to telehealth services. The youth crisis services expanded from 5 crisis/residential beds at 2 providers to 18 crisis/residential beds at 3 different providers in response to an increase in need.

- The Youth Wellness Summit with the Effective Leadership Academy pivoted to an online and on-demand resource.
- There were additional campaigns during the pandemic that included "Life Is Better With You Here", a suicide prevention campaign aimed at Black youth and their families and "Strive for 5" that encouraged connectedness for everyone.
- Outreach was made through care packages which included distribution of PPE and marketing information to inform the community that behavioral health services were still open and available.

Women, Infants, and Children (WIC) transitioned to telehealth visits and education over the phone with a registered dietitian. Participants still had to come into the WIC office to have the benefits loaded to their EBT card for current food. Many participants chose not to receive food due to a face-to-face visit. The no show rate increased to over 55%.

Child serving programs in the **Witness/Victim Service Center** provided telehealth services for children and families in need of behavioral health services and support. The 2020 annual Camp HOPE America program was hosted over a series of Zoom sessions instead of an in-person camp.

Technical Glossary

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.

Hispanic – A person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin regardless of race.

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 mortality rate (IMR) 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. Since 100 infants died during 2020, and there were 13,204 live births, the IMR is 7.6 per 1,000 live births (calculated by taking 100 divided by 13,204 and multiplying by 1,000).*

Inequity – Term used to describe an unfair difference between two groups.

> ***Example:*** *If the White infant mortality rate (IMR) was lower than the Black IMR, a racial inequity 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.

An Overall Look at 2020

There were 151 child deaths; the lowest number of child deaths in county history.

The total number of child deaths decreased by 23 in 2020 to a total of 151. This total number of child deaths was the lowest number in the county's history. Deaths to children 1 to 9 years old decreased by 23% while infant deaths decreased by 17% (from 120 to 100). The total number of infant deaths was also the lowest in the county's history. Child deaths between 10 and 17 years old increased by 11%. The total number of child deaths for 2020 included 100 infants, 20 children from 1 to 9 years old, and 31 children from 10 to 17 years old **(Table 1)**.

Table 1: Annual Number of Deaths by Age Group

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
Under 1 Year	144	131	133	121	155	128	118	120	120	100	**1,270**
1 - 9 Years	23	30	31	18	25	15	31	33	26	20	**252**
10 - 17 Years	20	21	22	26	20	29	39	32	28	31	**268**
Total	**187**	**182**	**186**	**165**	**200**	**172**	**188**	**185**	**174**	**151**	**1,790**

Lowest number of infant deaths in county history.

One hundred infants died in 2020. This was 20 less than 2019 and 27 lower than the 10-year average of 127. There were 23 fewer infant deaths due to prematurity (from 70 in 2019 to 47 in 2020). Birth defects and other medical causes had three fewer deaths. Sleep related and undetermined deaths declined by one. Perinatal complications had the largest increase (from 4 in 2019 to 11 in 2020). Infant deaths caused by infections and motor vehicle accidents increased by two in 2020.

Third-lowest number of child deaths between 1 and 9 years in the last ten years.

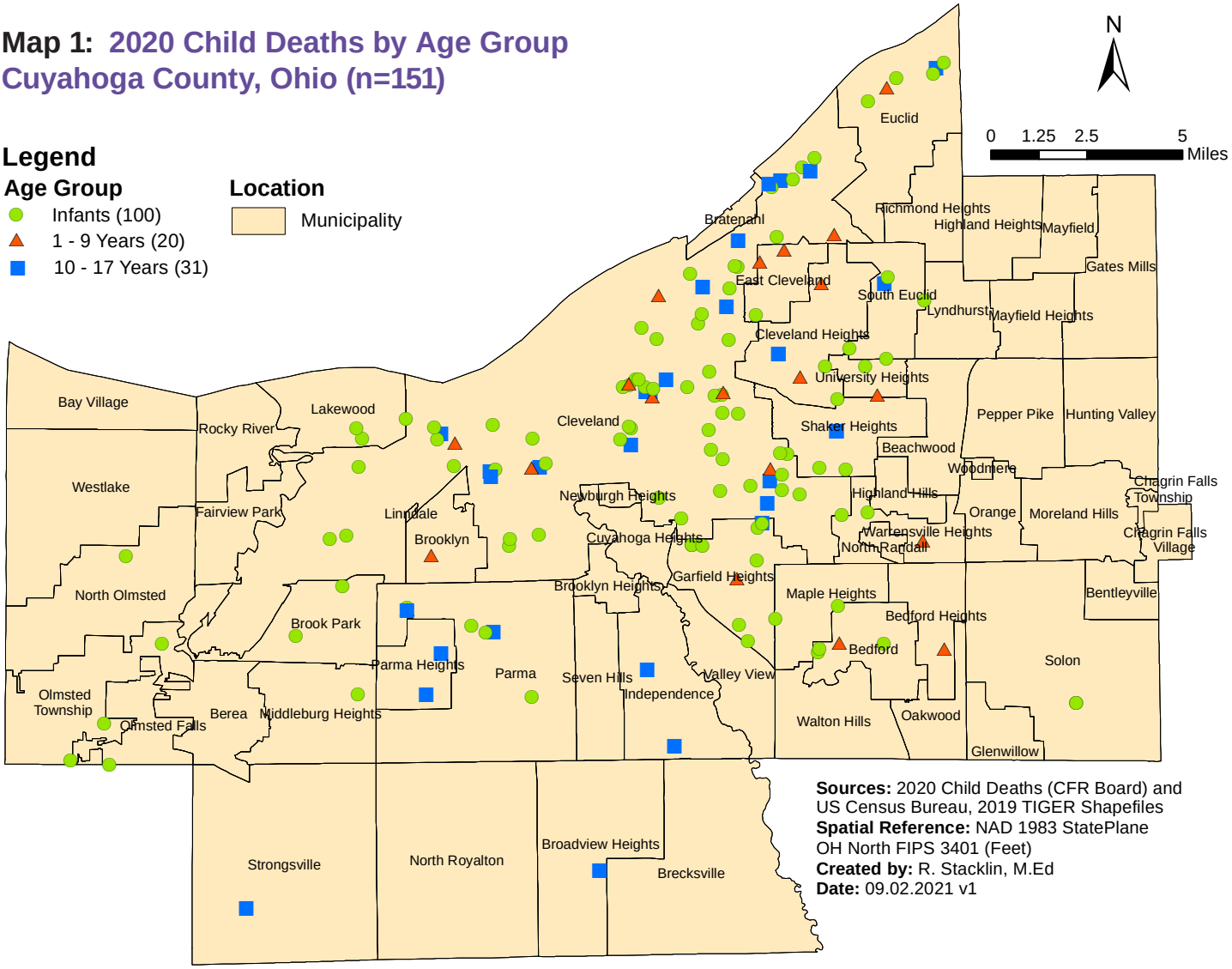
Twenty children between 1 and 9 years of age died in 2020, which was six less than in 2019. Deaths caused by infections decreased by three, and those by other medical causes decreased by four. The categories of birth defects, cancer, homicide, and motor vehicle accidents, each had one fewer death. Unintentional injury related deaths increased by three. Deaths caused by prematurity and undetermined causes each increased by one in 2020.

Third-highest number of child deaths between 10 and 17 years in the last ten years.

Thirty-one children ages 10 to 17 years died in 2020; three more than in 2019. There were three fewer motor vehicle accidents and two fewer undetermined deaths. The categories of drowning, infection, and poisoning each had one fewer death. The biggest increase was homicides which increased by five. Cancer related deaths went up by three and deaths due to birth defects increased by two.

An Overall Look at 2020

Map 1: 2020 Child Deaths by Age Group Cuyahoga County, Ohio (n=151)



Sources: 2020 Child Deaths (CFR Board) and US Census Bureau, 2019 TIGER Shapefiles
Spatial Reference: NAD 1983 StatePlane OH North FIPS 3401 (Feet)
Created by: R. Stacklin, M.Ed
Date: 09.02.2021 v1

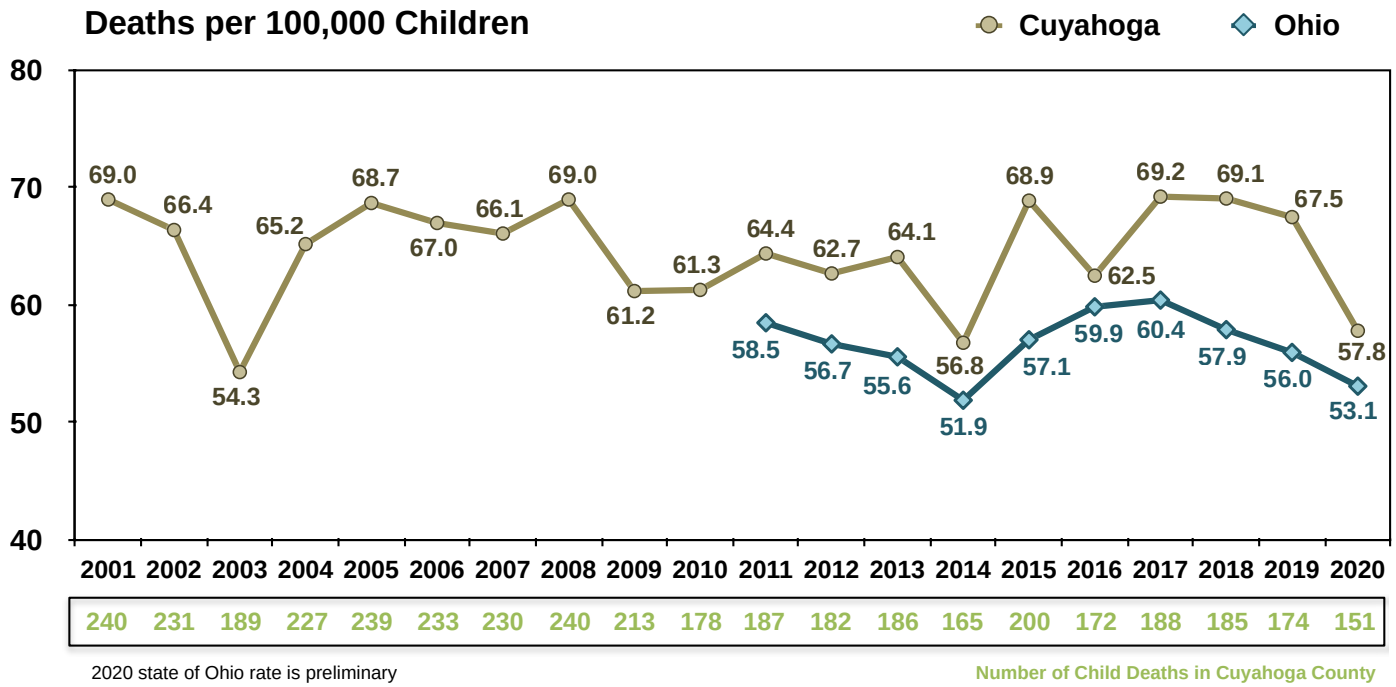
Map 1 shows the location of all child deaths in 2020. 1 The majority of deaths (53%) occurred within the city of Cleveland which has only 22% of the child population in Cuyahoga County **(Table 6)**. Deaths of children living in the first ring suburbs accounted for 31% and the remaining 16% of children lived in the outer ring suburbs **(Appendix A)**.

Taking a Closer Look

The child death rate was the second-lowest in the last ten years.

Figure 1 gives a historical perspective over the last 20 years in Cuyahoga County, and the last 10 years for the state of Ohio.[2-5] The county child death rate has been consistently higher than the state of Ohio. The county rate of child deaths in 2020 was the second-lowest in the last ten years. Twenty-three fewer deaths in 2020 led to a 13% decrease, which was, in large part, due to a significant reduction in the number of infant deaths.

Figure 1: Total Child Deaths (age 0-17) Cuyahoga County and State of Ohio



Taking a Closer Look

Table 2: Leading Causes of Death by Age Group in 2020

Cause of Death	Under 1 Year	1 - 9 Years	10 - 17 Years	Total
Prematurity	47	1	0	**48**
Sleep Related	23	0	0	**23**
Homicide	0	3	14	**17**
Birth Defect	12	2	2	**16**
Perinatal Complications	11	0	0	**11**
Other Medical Causes	1	3	3	**7**
Infection	4	0	1	**5**
Unintentional Injury	0	3	2	**5**
Cancer	0	1	3	**4**
Suicide	0	0	4	**4**
Drowning	0	2	1	**3**
Motor Vehicle Accident	2	1	0	**3**
Undetermined	0	3	0	**3**
Poisoning	0	1	1	**2**
Total	**100**	**20**	**31**	**151**

Table 2 provides a breakdown of the leading causes of death by age group. The majority (60%) of deaths continue to be rooted in medical causes such as prematurity, birth defects, cancer, infection, and other medical conditions **(Table 10)**. While prematurity continues to be the main cause of infant deaths, sleep related was the second-leading cause. Homicides, other medical causes, undetermined causes, and unintentional injuries were the leading causes of death in the 1- to 9-year-old age group. Homicides were the leading cause of death in the 10- to 17-year-old age group.

The cause of death with the largest year-over-year decrease was prematurity (from 70 in 2019 to 48 in 2020). Deaths due to other medical causes decreased by seven, while birth defects, infections, motor vehicle accidents, and undetermined causes each caused two fewer deaths in 2020. Drowning, poisoning, and sleep related deaths each declined by one.

Other perinatal complications caused seven more deaths and homicide deaths increased by four. Unintentional injury deaths increased by three and cancer deaths increased by two.

2020 Fast Facts

- *Infant deaths were the lowest in the county's history at 100.*
- *Birth defect and prematurity related deaths were the lowest in the last ten years.*

Peer County Comparisons 2019

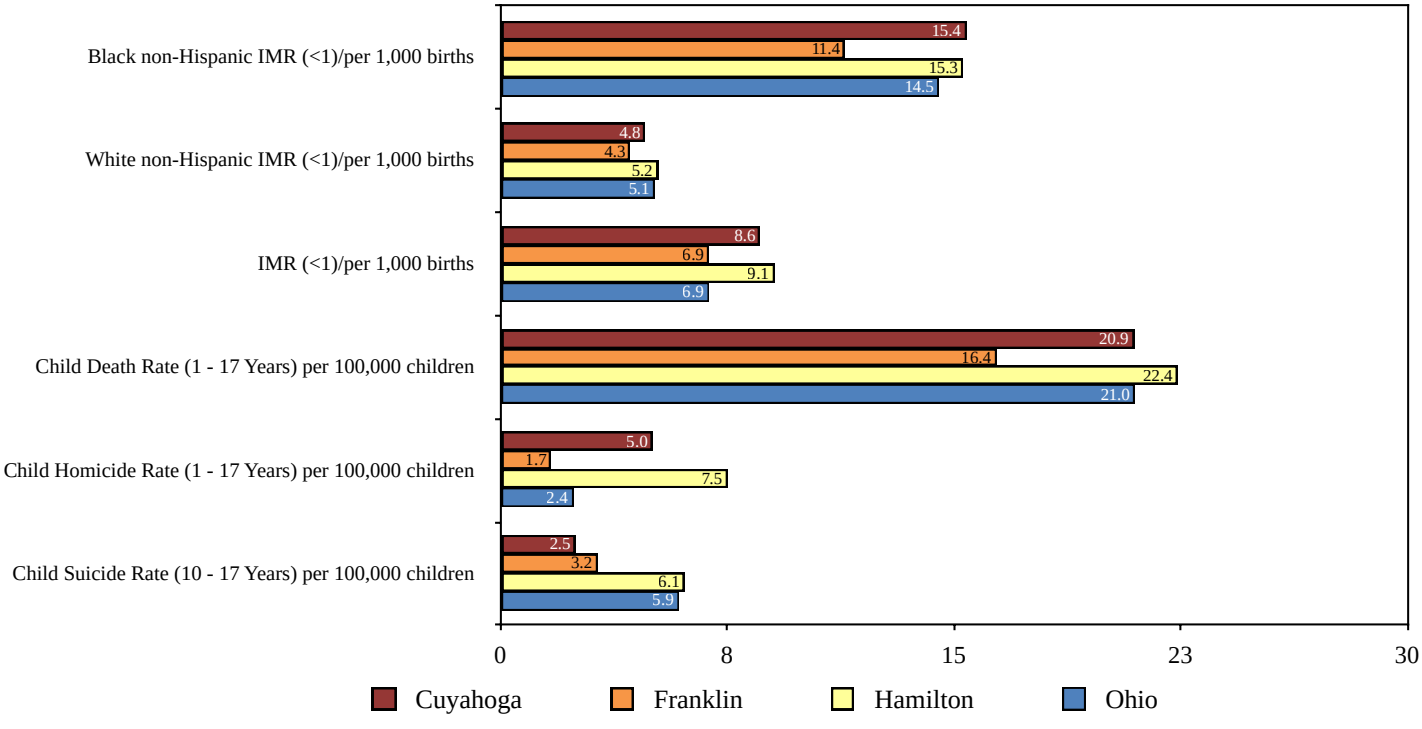
Cuyahoga County had the lowest child suicide rate in 2019.

The Child Fatality Review Board[6] sought data sources that allowed direct comparisons to other large, urban areas[7-8] and the state of Ohio,[9-10] all of whom are focusing on child death and infant mortality rates (IMR). The other counties include Franklin (Columbus area) and Hamilton (Cincinnati area). The 2019 data were the most current data available.

Cuyahoga (2.5 per 100,000 children) had the lowest child suicide rate in 2019 **(Figure 2)**. Rates where Cuyahoga County was lower than at least one of the other two counties and the state included the White infant mortality rate (IMR) and the child death rate. The child homicide rate and overall IMR were lower than one county, but higher than the state rate. The Black IMR was the highest of all locales with 15.4 per 1,000 live births in 2019.

County Infant Mortality Rates

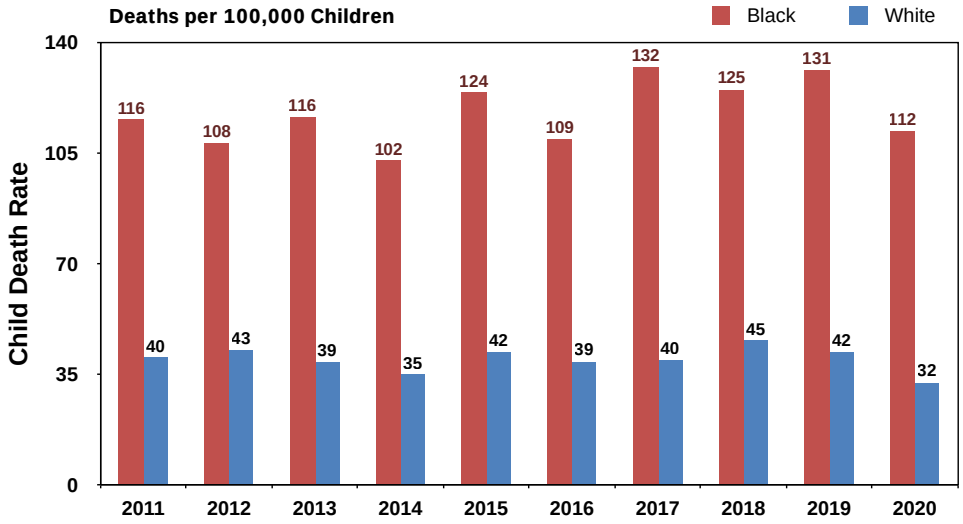
Figure 2: Peer County Comparisons in 2019



Racial and Economic Inequities

The Black-White child death inequity ratio was the highest in last ten years.

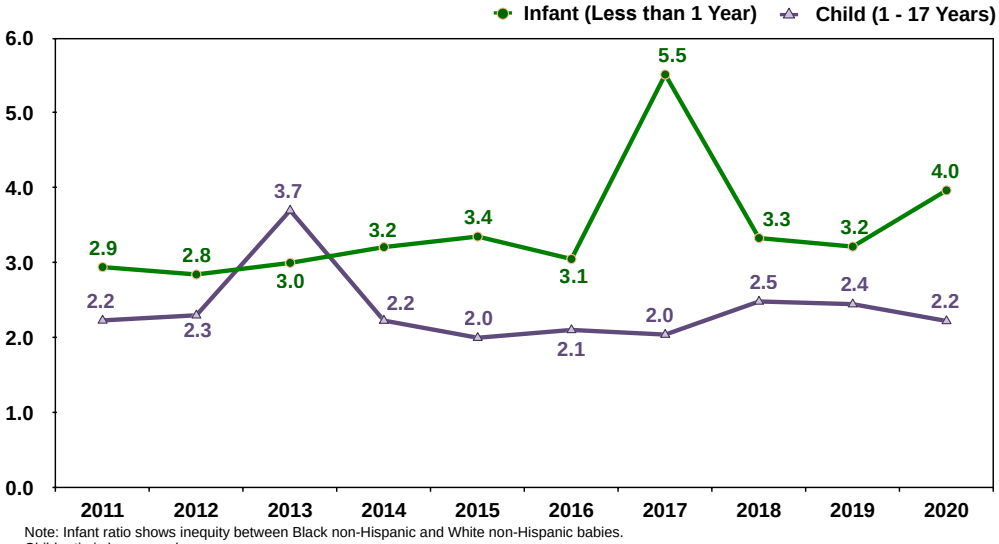
Figure 3: Child Death Rates by Race (age 0-17)



The Black-White child death racial inequity ratio increased to 3.5 in 2020, which was the highest ratio in the last ten years **(Table 9)**. The ratio increased because the white child death rate (32.4) decreased by nearly 23%, while the black rate (112.0) decreased by 10%. **(Figure 3)** The white rate was the lowest rate in the last ten years. The black rate was the fourth-lowest rate over the same time period. Of the 151 child deaths, 103 were black, 44 were white, 3 were of another race, and one was of an unknown race.

Figure 4: Infant and Child Deaths; Black-White Racial Inequity Ratio

It is important to look at the racial inequity for infants and children separately, as illustrated in **Figure 4**. The racial inequity of infant deaths (4.0) was the second highest in the last 10 years. The 2019 infant death racial inequity ratio in the state of Ohio was 2.8[11] and the US ratio was 2.5.[12] (most recent data available). The child black-white racial inequity ratio of 2.2 was tied for the fourth-lowest in the last ten years.



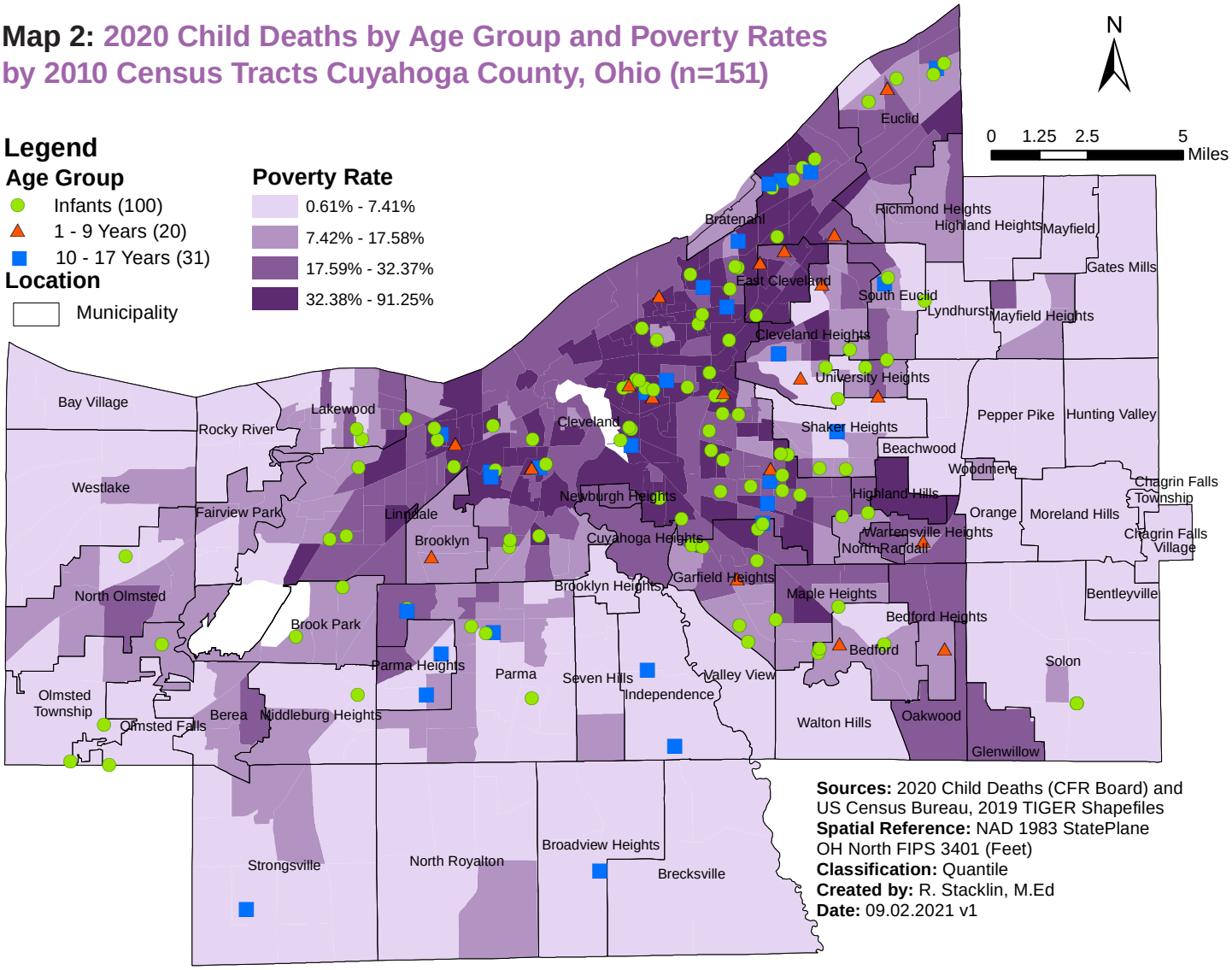
Note: Infant ratio shows inequity between Black non-Hispanic and White non-Hispanic babies.
Child ratio is by race only.

2020 Fast Facts

- *Black non-Hispanic infants died at 4 times the rate of White non-Hispanic infants.*
- *If there was equity in child deaths, 73 Black children would have survived.*

Racial and Economic Inequities

Map 2: 2020 Child Deaths by Age Group and Poverty Rates by 2010 Census Tracts Cuyahoga County, Ohio (n=151)



Map 2 illustrates the close relation between poverty, race, and child deaths.[13,14] The highest poverty levels are concentrated in the county's urban core with significantly lower levels of poverty in the outer ring suburbs. Seven percent or fewer of people living in the lightest shaded area were below the federal poverty guideline, while the areas with the darkest shade of purple had 32% to over 90% of the population who lived in poverty. More than 30% of Black people in Cuyahoga County lived in poverty, compared to 10% of White people.[15] The 2020 federal poverty guideline for a family of four was $26,200.[16]

In the last ten years, three Black children died for every one White child who died 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. As is consistently the case from year-to-year, a higher rate of child deaths occurred in areas that experienced high levels of poverty.[17]

Racial and Economic Inequities

Community Actions:

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

The Cuyahoga County Board of Health serves as the lead of the local OEI collaborative, the Cleveland Cuyahoga Partnership to Improve Birth Outcomes. This initiative explored public health strategies to eliminate health inequities in birth outcomes and improve local and state infant mortality rates and was established in 2014. In 2018, under the direction of the **Ohio Department of Health**, the Cleveland/Cuyahoga County team expanded best practice strategies to include:

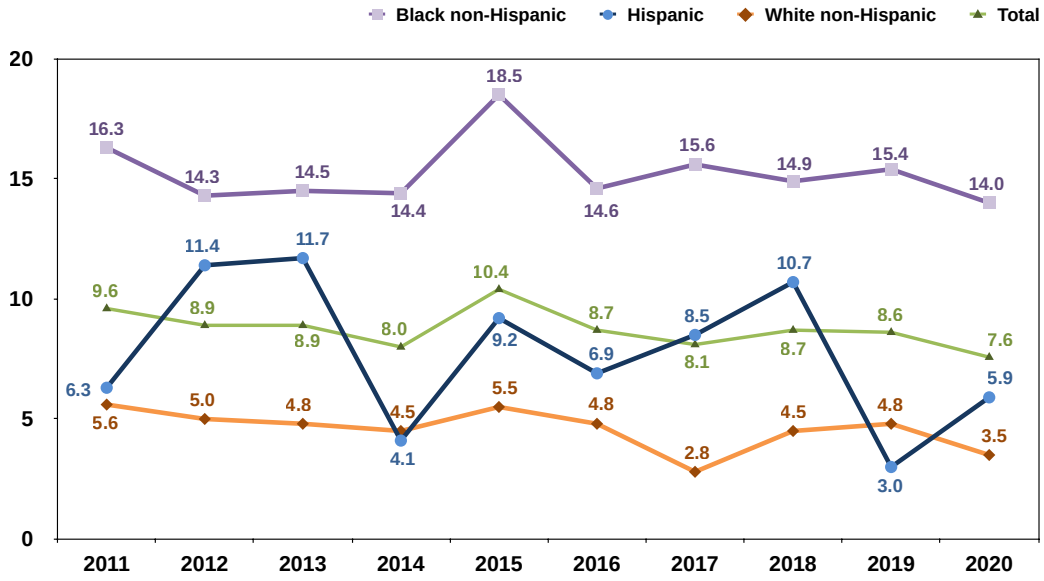
- Neighborhood Navigation – identify pregnant women who are currently not engaged in services and provide a connection to home visiting, clinical care and other services. The **Neighborhood Leadership Institute (NLI)** has implemented multiple outreach strategies to identify women which include community partnerships, canvassing, community events, and securing permission from **Cuyahoga County Health and Human Services** to have space in their offices to recruit women. In 2020, a non-traditional venue of social media was implemented to improve outreach during the pandemic.
    - Since January 2019, in partnership with NLI, over 2,800 unserved pregnant women have been connected to services.
- Social Determinants of Health (SDOH) Task Force – identify opportunities to adopt policies that impact social determinants of health.
    - Policy/system changes include:
        - Increasing patient awareness of labor and delivery locations through the creation and integration of a palm card that is provided through home visiting programs and prenatal care visits.
        - Providing bus vouchers and improvements to transit waiting areas in targeted communities to improve the access and utilization of public transit. Transportation was identified as the number one barrier to health care in data that were collected through navigation services. The SDOH task force partnered with the **Greater Cleveland Regional Transit Authority** to secure a $400,000 grant for the Baby on Board project to address social determinants to improve health outcomes.
        - Improved coordination of pregnancy related referrals for families who utilize public assistance.
- Placed Based Approach - provide support to families who reside in targeted communities using the collective impact model. Systems, organizations, and residents come together to establish a common agenda, shared measurement systems, mutually reinforcing activities, continuous communication, and backbone support organizations to move community driven strategies forward. The One Community efforts in 44128 and 44137 informed strategies such as advocacy for labor and delivery services, breastfeeding friendly churches, first responder trainings, and community friendly events for families.
- A Fetal Infant Mortality Review (FIMR) Committee was established to review the root causes of fetal and infant deaths in Cuyahoga County **(Appendix B)**.

Infant Mortality

Cuyahoga County's IMR was the lowest rate in the county's history.

The 2020 Cuyahoga County IMR was 7.6 infant deaths per 1,000 live births, the lowest rate in the last ten years **(Figure 5)**. The current rate is based on 100 infant deaths among 13,204 live births (Table 6).[18] The county IMR of 7.6 remains higher than the preliminary 2020 Ohio IMR of 6.7,[19] and the 2019 United States IMR of 5.58.[20] *In order for Cuyahoga County to match the 2019 US IMR, 27 infants who died in 2020 would have needed to live.*

Figure 5: Infant Mortality Rate (IMR) per 1,000 Live Births



2020 Fast Facts

- *Black IMR was the lowest in the last ten years.*
- *Overall IMR was the lowest in the county's history.*

Figure 5 shows that the Black non-Hispanic IMR of 14.0 was 9% lower than 2019 and the lowest rate in the last ten years. The White non-Hispanic IMR of 3.5 was second-lowest rate in the last ten years and decreased by 23% from 2019. The Hispanic IMR of 5.9 was the third-lowest rate in the last ten years.

The most frequent causes of infant death continued to be prematurity (47), sleep related deaths (23), and birth defects (12) (Table 2). These top three causes accounted for 82% of all infant deaths. Of the 18 remaining infant deaths, 16 were medically related and 2 were caused by motor vehicle accidents.

Birth defects were the third-leading cause of infant death in 2020. Sixty-two percent of these deaths were due to congenital abnormalities. Half of these infants had a heart defect and another 20% had multiple malformations. Twenty-five percent of birth defect deaths were due to chromosomal anomalies, while 13% of these infants were due to neural tube defects.

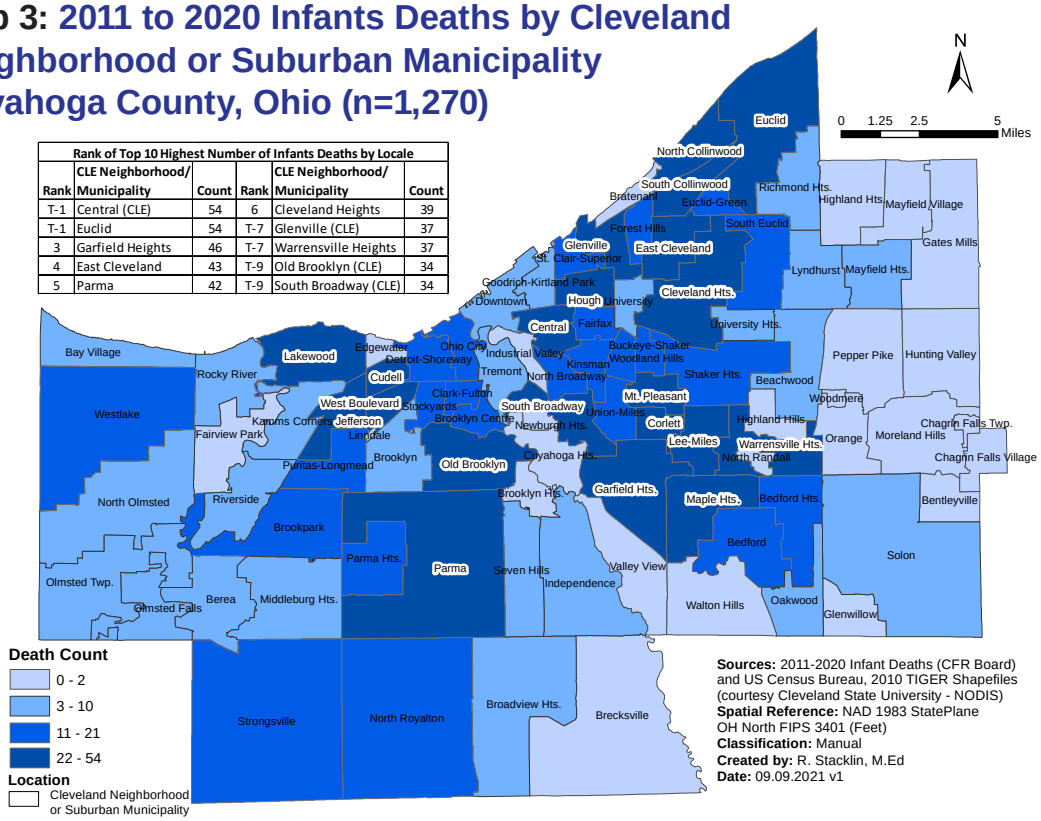
**Note: After this report was nearly finalized for publication, an extra infant death was filed with the state -- nearly a full year after the death occurred. That death is noted here, bringing the total number for 2020 to 101 and the county-wide IMR remains at 7.6. Including this death would not meaningfully alter the practical conclusions that can be drawn from the 2020 data, so the Infant Mortality section of the report was not rewritten.*

Infant Mortality

Map 3: 2011 to 2020 Infants Deaths by Cleveland Neighborhood or Suburban Manicipality Cuyahoga County, Ohio (n=1,270)

Map 3 shows the frequency of infant deaths for the last ten years.[21] Locations that ranked in the top ten averaged three to five infant deaths each year. Eight of the top ten locales with the highest number of infant deaths are located on the eastern side of the county. More specifically, five of these locales are first ring suburbs.

Rank of Top 10 Highest Number of Infants Deaths by Locale					
Rank	CLE Neighborhood/ Municipality	Count	Rank	CLE Neighborhood/ Municipality	Count
T-1	Central (CLE)	54	6	Cleveland Heights	39
T-1	Euclid	54	T-7	Glenville (CLE)	37
3	Garfield Heights	46	T-7	Warrensville Heights	37
4	East Cleveland	43	T-9	Old Brooklyn (CLE)	34
5	Parma	42	T-9	South Broadway (CLE)	34



Community Actions:

"The mission at **First Year Cleveland (FYC)** is to mobilize the community through partnerships and a unified strategy to reduce infant deaths and racial inequities. Our overarching goal is to reduce Cuyahoga County's infant mortality rate from 10.5 in 2015 to 6.0 by 2020, with an explicit focus on reducing Black infant deaths. And while we did not reach our goal, the 2020 year-end infant mortality rate was 7.58, a 28 percent reduction since 2015.

To accomplish this, we have activated FYC Action Teams as part of our mobilization strategy. These community teams are bringing partners, parents, and providers together to execute long-term solutions to address our priority areas:

- Reduce racial inequities
- Address extreme prematurity
- Eliminate sleep-related deaths

FYC is educating and mobilizing the community to act in order to effectively provide needed services and create a better understanding of how structural racism is affecting pregnant women and their babies."

The **Cleveland Clinic Foundation, MetroHealth Medical Center (MHMC), and University Hospitals** continue to identify infant mortality as a key priority for community outreach. University Hospitals announced the opening of a labor and delivery unit at its Ahuja site in 2023. This new site will provide access to women living in the southeast side of Cuyahoga County where no labor and delivery service currently exists.

Home visiting programs for high-risk mothers and infants have been identified as best practice to improve birth outcomes. During the pandemic virtual visits, phone contact, and virtual group interactions such as "Moms Clubs" provided support to these pregnant and parenting families.

- **The MomsFirst Program** uses a community health worker model to provide support to women beginning with prenatal care and continues until a child is 18 months old. Core services include outreach, case management, health education, and interconception care. During the pandemic resources such as diapers, portable cribs, household items, bus passes and educational materials were dropped off to each participant as needed.

- **MHMC Nurse Family Partnership** serves low-income, first-time mothers during their pregnancy and for two years after the birth of the baby.

- The **Cuyahoga County Board of Health Newborn Home Visiting Program** provides a home visit by a registered nurse after mom and baby are discharged from the hospital for qualifying families. The visit includes assessments of mom and baby, infant care education, breastfeeding support, discussion of available community resources, and referrals as needed.

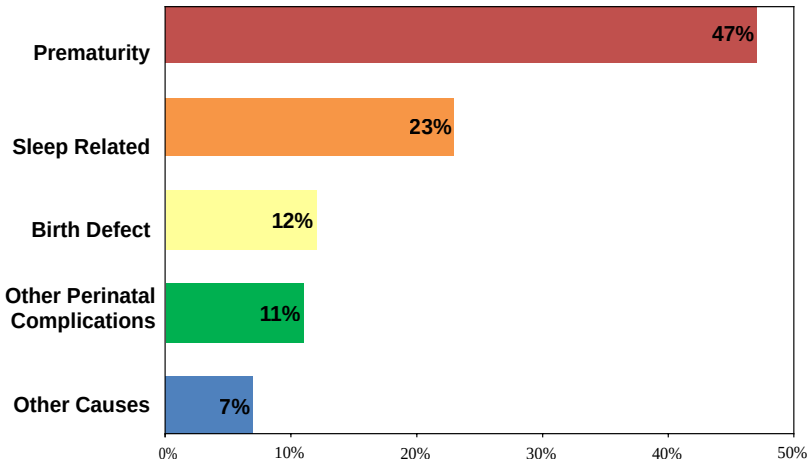
The MomsFirst Program was awarded funding for a maternal mortality reduction initiative that partners with MHMC to provide CenteringPregnancy for incarcerated pregnant women in the Cuyahoga County jail. They also receive labor and post-partum support though the Perinatal Support Professionals of **Birthing Beautiful Communities** and the continued services of MomsFirst's licensed social worker/community health worker.

Prematurity

Lowest number of prematurity-related deaths in 2020.

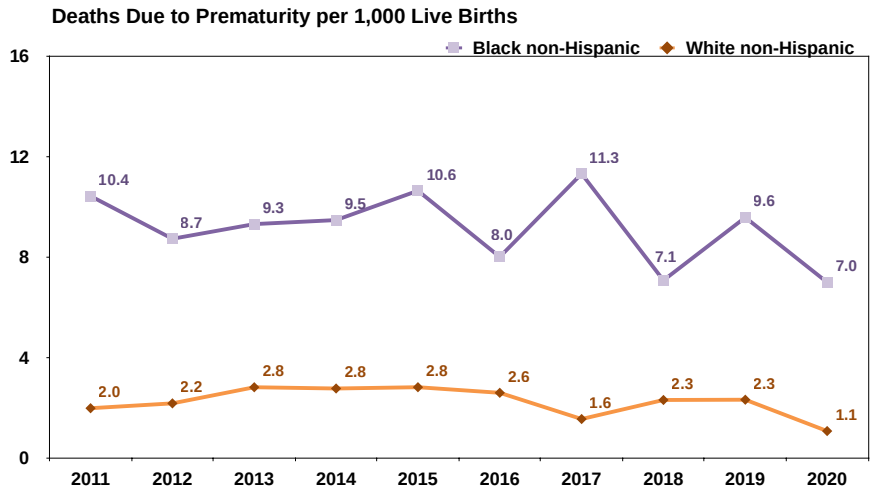
In 2020, 47 infants died due to prematurity, accounting for 47% of all infant deaths, which is the lowest proportion in the last ten years **(Figure 6)**. The cause-specific IMR for prematurity is 3.6 deaths per 1,000 live births.[22] This is the lowest rate in the last ten years (Table 6).

Figure 6: The Impact of Prematurity on Infant Deaths in 2020



The prematurity-related infant mortality rates by race are illustrated in **Figure 7**. The Black non-Hispanic prematurity death rate of 7.0[23] is the lowest in the last ten years and 27% lower than the 2019 rate. The White non-Hispanic rate of 1.1[24] decreased by 54% and was the lowest rate in the county's history*. Because the White rate decreased by twice as much as the Black rate, the Black-White racial inequity ratio increased to 6.5, which was the second-highest in the last ten years. If the 2020 Black non-Hispanic prematurity death rate was equal to the White non-Hispanic death rate, the overall Black IMR would have decreased from 14.0[25] to 8.2.[26]

Figure 7: Rates of Infant Death Due to Prematurity by Race



The percentage of preterm births in Cuyahoga County decreased from 11.6% in 2019 to 11.4% in 2020.[27,28] The 2020 Black preterm birth rate of 15.4% was significantly higher than the White preterm birth rate of 8.7%.[29] The county preterm birth rate was significantly higher than the 2020 Ohio preterm birth rate of 10.3%,[30] and the 2019 US preterm rate of 10.23%.[31] *Cuyahoga County would have needed 150 fewer preterm births in 2020 to equal the 2019 US rate.*

**Note: Before 2009, the White and Hispanic infant deaths were combined into a single rate.*

Prematurity

Economic, medical, and social risk factors that occurred in at least 15% of the prematurity-related deaths are listed for 2020 **(Table 3)**. Poverty, the most common risk factor, was noted in 75% of the cases. Previous preterm delivery was the second-most common risk factor, found in 71% of the prematurity related fatalities. This risk factor was the largest year-over-year increase (from 17 in 2019 to 34 in 2020). Chronic health conditions, chorioamnionitis (infection of the membranes surrounding the fetus), and premature rupture of membranes (PROM), were three risk factors noted in at least 40% of all preterm deaths. Obesity was the leading risk factor in the category "mom with a chronic health condition". Over 55% of the mothers whose infants died from prematurity were obese. Among those deaths due to prematurity where drug use was a risk factor, marijuana was the most commonly used drug.

Table 3: Common Risk Factors Associated with 48 Deaths Due to Prematurity in 2020

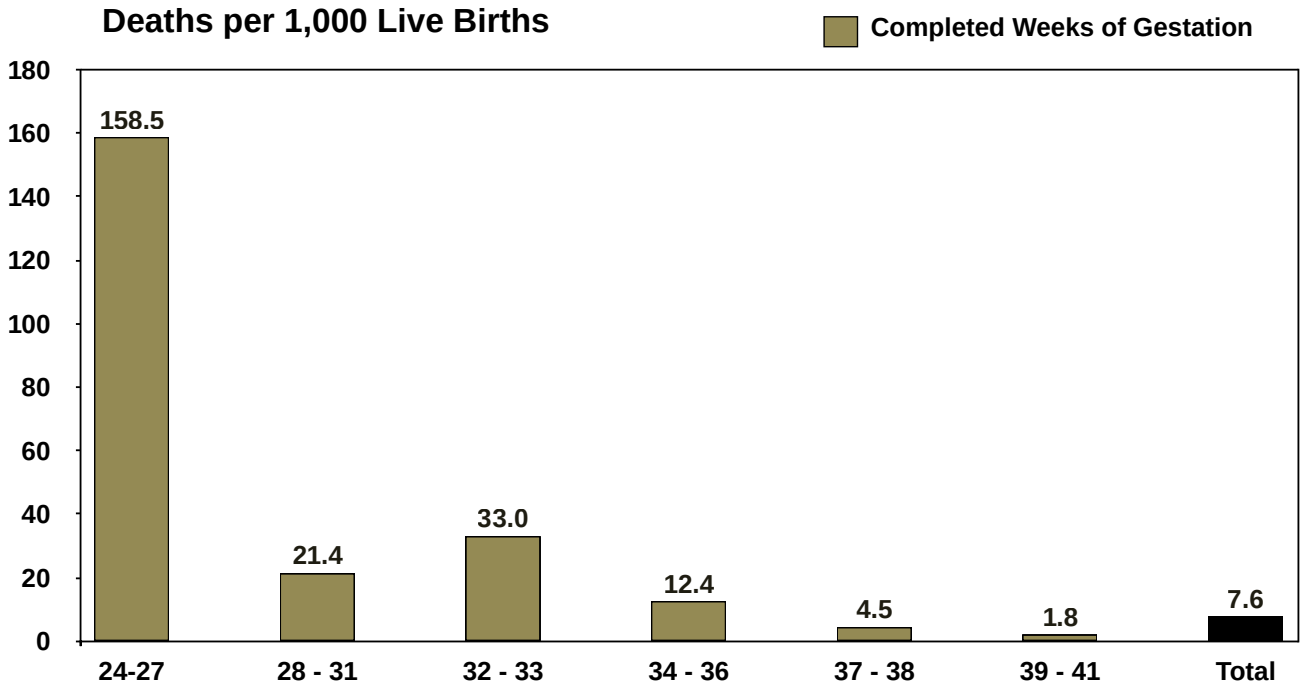
Risk Factor	#	%
Poverty	**36**	**75.0**
Previous preterm delivery	**34**	**70.8**
Mom with a chronic health condition	**29**	**60.4**
Chorioamnionitis	**23**	**47.9**
Premature rupture of membranes (PROM)	**22**	**45.8**
Cervical insufficiency	**18**	**37.5**
Maternal history of mental health problems	**18**	**37.5**
Unplanned pregnancy	**16**	**33.3**
Sexually transmitted infections - past history	**13**	**27.1**
Previous fetal loss	**12**	**25.0**
Parental tobacco use	**10**	**20.8**
Placental abruption	**10**	**20.8**
Intrauterine tobacco exposure	**9**	**18.8**
Multiple gestation	**9**	**18.8**
Parental illicit drug use	**9**	**18.8**
At-risk maternal age - 35 years old or older	**8**	**16.7**

Of the 48 child deaths caused by prematurity, 35 (73%) were Black non-Hispanic and 31 (65%) were male. Infants who lived in the city of Cleveland accounted for 52% of these deaths, 38% lived in a first ring suburb, and only 10% lived in an outer ring suburb. Prematurity continues to be the number one cause of infant death and is defined as a birth before 37 completed weeks of pregnancy. The majority of deaths occurred to infants born less than 23 weeks' gestation (63%). Ten percent were born at 23 weeks and the remaining 37% were born between 24 and 29 weeks. Nearly two-thirds (65%) of the infants were born so early that they lived less than 12 hours, but 25% survived more than seven days.

Prematurity

Figure 8 illustrates the 2020 IMR by gestational age (stated in completed weeks of gestation) for infants born 24 weeks or more. For all babies born at 24 to 27 weeks of gestation, the IMR was 158.5.[32] The graph shows the IMR of infants 28 to 31 weeks (21.4) was lower than infants born at 32 to 33 weeks (33.0).[33] The IMR for babies born full term (37 weeks or more gestation) was 2.7.[34] *Full term infants were nearly 60 times more likely to survive than those born at 24 to 27 weeks.*

Figure 8: Infant Mortality Rate by Gestational Age



2020 Fast Facts

- *Black & White non-Hispanic infant deaths due to prematurity were the lowest in the last ten years.*
- *Prematurity accounted for 47% of infant deaths.*

Sleep Related Deaths

Sleep related deaths ruled as accidental suffocation were the second-highest in the last ten years.

There were 23 sleep related deaths in 2020, which is one less than 2019 but higher than the ten-year average of 20 **(Table 4)**. Fifteen sleep related deaths were ruled as accidental suffocation, which is the second-highest number in the last ten years. Conversely, SUID/undetermined deaths potentially due to hazards in the sleep environment had tied for second-lowest number in the last ten years. A large majority of infants (79%) were placed on their back, as self-reported by their caregiver at the time of death. More than three-quarters (78%) of the babies were in unsafe sleep locations such as couches, adult beds, air mattresses, or sitting devices. More than 55% of sleep related deaths involved surface sharing. Almost one-in-three (32%) did not have a crib or equivalent safe sleep option available. Five of the infants without a crib were visiting family or friends. For the twelfth consecutive year, all sleep related deaths involved some type of sleep hazard (such as soft bed surface, position baby was placed for sleep, pillows, blankets, surface sharing, and other items in the sleep environment).

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

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
Type of Death											
SIDS	0	0	0	0	1	0	0	0	0	0	**1**
SUID/Undetermined	12	15	10	17	16	13	8	7	8	8	**114**
Accidental Suffocation	7	3	6	2	10	8	5	12	16	15	**84**
Total Number of Deaths	**19**	**18**	**16**	**19**	**27**	**21**	**13**	**19**	**24**	**23**	**199**
Risk Factors Present											
Surface sharing at time of death	9	13	11	10	17	13	13	11	16	13	**126**
Hazards in sleep area	19	18	16	19	27	21	13	19	24	23	**199**
Placed Sleep Position[1,2]											
Back	9	12	10	8	13	12	8	15	16	15	**118**
Stomach	6	4	2	7	8	5	4	0	6	3	**45**
Side	4	2	4	3	5	3	0	3	2	1	**27**
Crib Availability[3]											
No	4	7	5	4	4	3	4	4	6	7	**48**
Yes	14	10	10	15	21	18	8	15	16	12	**139**
Unknown	1	1	1	0	2	0	1	0	2	4	**12**

[1]One case in 2014-2018 had unknown sleep position & 2020 had 4 unknown cases.
[2]Self-reported during medical examiner's office death scene investigation.
[3]Either a crib, bassinet or portable crib.

Table 5 shows that, over a ten-year period, 67% of all sleep related deaths occurred in Cleveland (134), with nearly 25% in first ring suburbs (49) and 8% in outer ring suburbs (16). Male infant deaths (13) tied for the highest number in this category. More than 90% of mothers who experienced an infant sleep related death were between 20 to 39 years. Black non-Hispanic infants accounted for over 75% of sleep related deaths in the last ten years.

Sleep Related Deaths

Table 5: Sleep Related Death Demographics

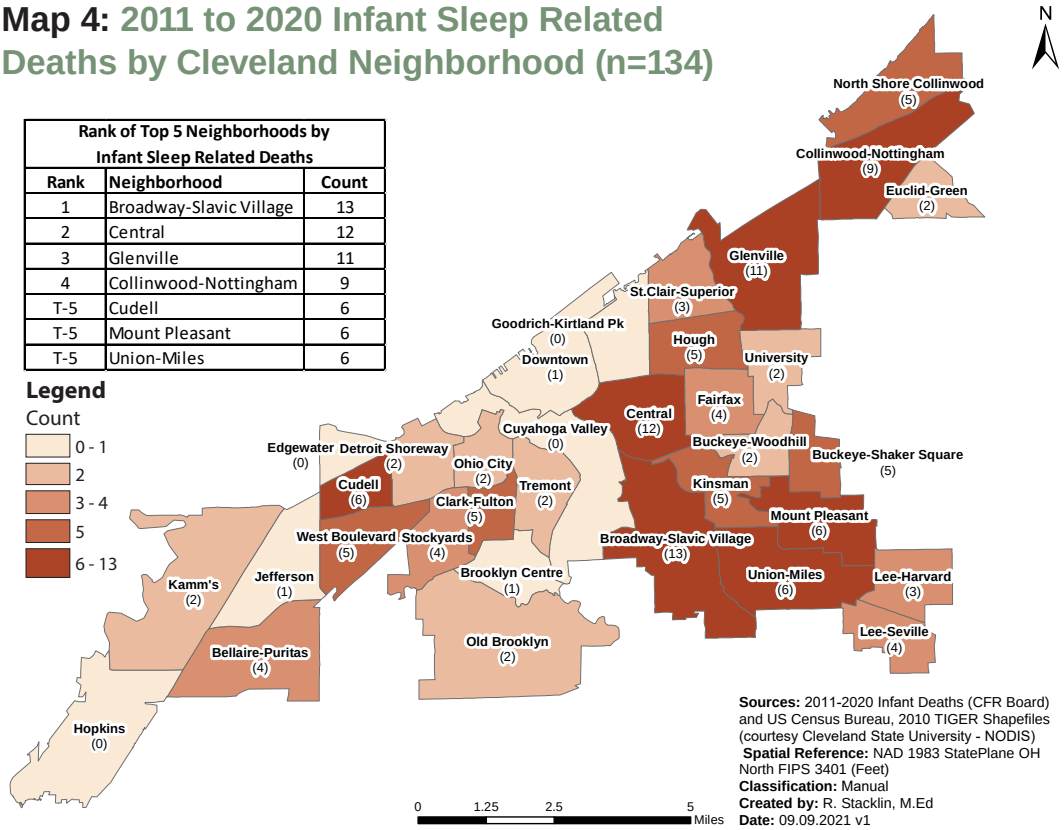
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
Neighborhood											
Cleveland	11	12	7	14	17	16	10	13	15	19	**134**
First Ring	6	4	8	4	7	4	2	5	6	3	**49**
Outer Ring	2	2	1	1	3	1	1	1	3	1	**16**
Infant's Sex											
Female	6	6	8	11	14	10	7	10	11	10	**93**
Male	13	12	8	8	13	11	6	9	13	13	**106**
Mom's Age											
< 20 Years	1	3	3	7	5	2	0	0	2	0	**23**
20 - 29 Years	12	11	11	10	15	17	11	16	17	14	**134**
30 - 39 Years	5	4	1	2	5	2	2	3	5	8	**37**
40 Years	0	0	1	0	2	0	0	0	0	1	**4**
Unknown	1	0	0	0	0	0	0	0	0	0	**1**
Infant's Race[1]											
Black non-Hispanic	11	14	12	16	21	15	12	16	18	18	**153**
Hispanic	1	0	1	1	1	1	0	1	0	0	**6**
White non-Hispanic	7	4	3	2	5	4	1	2	5	5	**38**
Total Number of Deaths	**19**	**18**	**16**	**19**	**27**	**21**	**13**	**19**	**24**	**23**	**199**

[1]One case in 2016 & 2019 was of another race.

Map 4 illustrates the distribution of sleep related deaths in Cleveland neighborhoods over the last ten years. Six of the top seven neighborhoods (in dark orange) are located on the east side of Cleveland and accounted for 47% of all sleep related deaths in Cleveland. Ten of the 13 neighborhoods with at least five deaths are located on the east side and these 13 neighborhoods account for 65% of all sleep related deaths in Cleveland.

Map 4: 2011 to 2020 Infant Sleep Related Deaths by Cleveland Neighborhood (n=134)

Rank of Top 5 Neighborhoods by Infant Sleep Related Deaths		
Rank	Neighborhood	Count
1	Broadway-Slavic Village	13
2	Central	12
3	Glenville	11
4	Collinwood-Nottingham	9
T-5	Cudell	6
T-5	Mount Pleasant	6
T-5	Union-Miles	6



Sources: 2011-2020 Infant Deaths (CFR Board) and US Census Bureau, 2010 TIGER Shapefiles (courtesy Cleveland State University - NODIS)
Spatial Reference: NAD 1983 StatePlane OH North FIPS 3401 (Feet)
Classification: Manual
Created by: R. Stacklin, M.Ed
Date: 09.09.2021 v1

Sleep Related Deaths

Figure 9: 2011-2020 Sleep Related Deaths by Age of Infant [n=199]

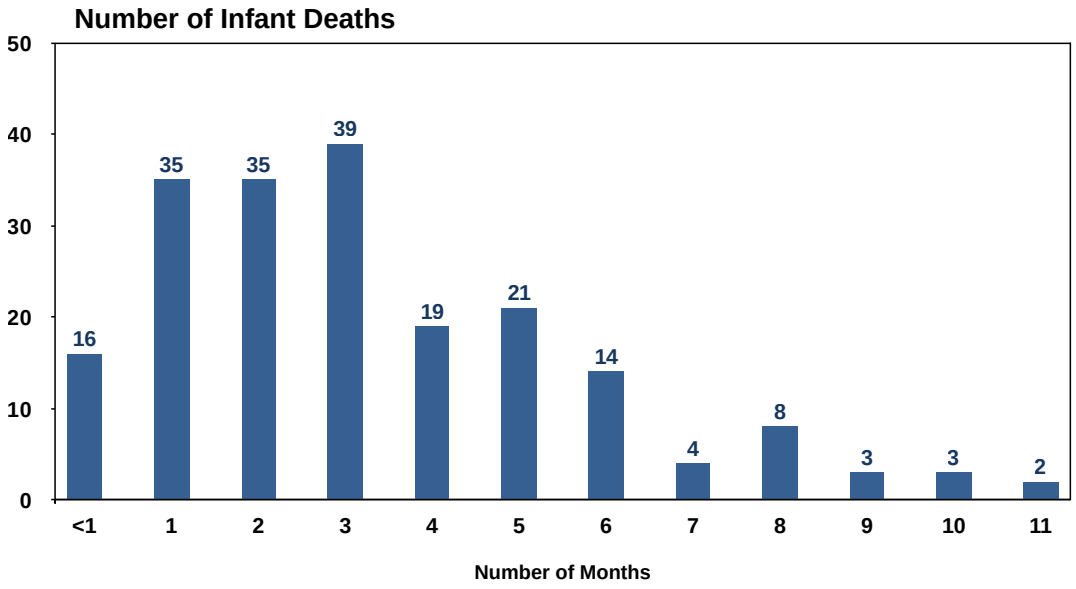
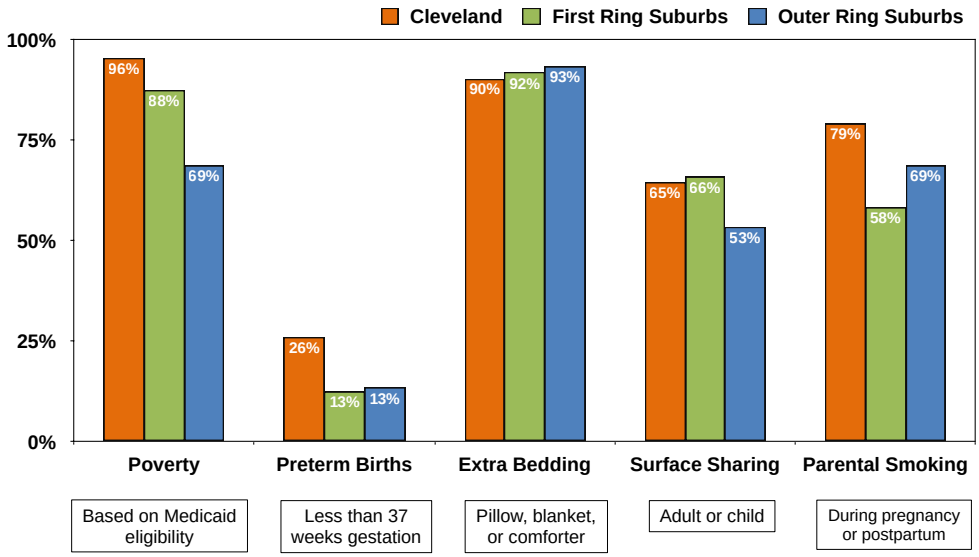


Figure 9 illustrates the age of infants when sleep related deaths occurred over a ten-year span. Ninety percent of all sleep related deaths occurred when the infant was six months or younger. Almost 55% of all sleep related deaths happened when the infant was one month to three months old, the peak for sleep related deaths. On average 2 infant sleep related deaths occurred each year to older infants (7 to 11 months old) in the last ten years.

Figure 10: 2011-2020 Sleep Related Risk Factors by Neighborhood

Figure 10 examines the economic, environmental, and medical risk factors noted in sleep related deaths by geographic location. In the last ten years, more than 90% of the infants who died from sleep related causes were Medicaid eligible, and that rate increased to 95% in the last five years. Less than one-in-four infants were born prematurely, and the rate was 23% in the last five years.



Environmental risk factors (extra bedding, parental tobacco use, and surface sharing) were commonly found in these cases. In the last ten years, extra bedding was found in 91% of all sleep related deaths, but the rate has decreased slightly to 88% of the deaths in the last five years. In 2020, all the infants had at least one piece of extra bedding in the sleep environment. Over the last ten years, more than 70% of the deaths had environmental smoking as a risk factor. When looking at the last five years, it rises to 80%. From 2011 to 2020, almost 65% of infants shared their sleep surface with another child or adult. *The data suggest that environmental and economic risk factors far outweigh the impact of medical risk factors for sleep related deaths in Cuyahoga County.*

Sleep Related Deaths

2020 Fast Facts

- *199 infant sleep related deaths in the last ten years.*
- *In 78% of sleep related deaths, infants were not sleeping in a crib.*

Community Actions:

First Year Cleveland (FYC) Safe Sleep Heroes Action Team 9

"This team focuses on promoting safe sleep and training others to become Safe Sleep Heroes for babies in our community. Action Team 9 includes parents, grandparents, caregivers, families who have experienced loss, faith-based leaders, neighbors — anyone who cares about preventing sleep-related infant deaths and promoting the best sleep practices for babies in their lives and in their community. Through online or virtual trainings, the participants learn:

- The ABCDs of Safe Sleep.
- The stories of families who have experienced loss because of sleep-related deaths.
- How to be a safe sleep advocate for their baby and babies in their community.
- How to engage and educate others on the ABCDs of Safe Sleep."

Since August 2018, over 18,000 people have been trained as Safe Sleep Heroes.

Action Team 9 members provided safe sleep education sessions for the staff at the Journey Center which provides emergency shelter for women and children impacted by domestic violence and child abuse. In partnership with the **Cuyahoga County Board of Health (CCBH)**, portable cribs were provided for families with infants that could be used while they were at the shelter and then take with them when they leave to ensure that safe sleep continues in their new home.

As a community outreach effort, FYC's Action Team 9 partnered with Popeyes Louisiana Restaurants to distribute 125,000 safe sleep postcards with their meals.

The CCBH is a Cribs for Kids partner, providing one-on-one education often in the parent's home, and a free, portable crib to families in need. During the pandemic portable cribs were delivered to the family's door by CCBH. Safe sleep education was done by texts, videos, and occasionally in person with masking and social distancing. In 2020, CCBH served over 400 families.

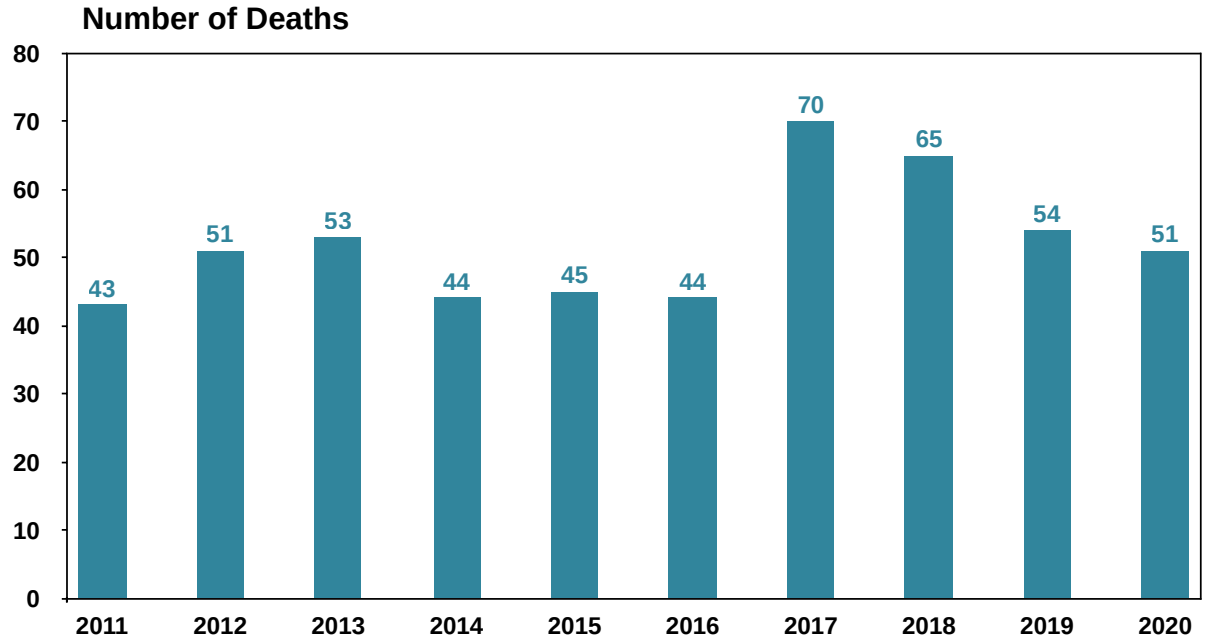
- CCBH provides safe sleep education for childbirth educators and the nursing staff at maternity and pediatric hospitals. Education is also made available for family serving agencies and for staff and clients of home visiting programs. During the pandemic these trainings are being done virtually.
- CCBH offers safe sleep cards with the message, "I sleep Alone, on my Back, in an empty Crib, and Don't smoke around me". This also includes local data about sleep related deaths and a picture of a safe sleep environment. These cards continue to be distributed throughout Cuyahoga County to hospitals, home visiting programs, community centers, neighborhood clinics, churches, and family serving agencies.

Child Deaths (1 to 17 years)

51 child deaths in 2020; number of deaths decreased for third consecutive year.

Fifty-one children aged 1 to 17 died in 2020, which was 3 fewer deaths than 2019 **(Figure 11)**. The 2020 county child death rate (1 to 17 years) of 20.6 per 100,000 was lower than the 2019 rate for the state of Ohio (21.0) but slightly higher than the United States rate (19.8) (most recent data available).[35-37]

Figure 11: Total Child Deaths per Year (age 1-17)



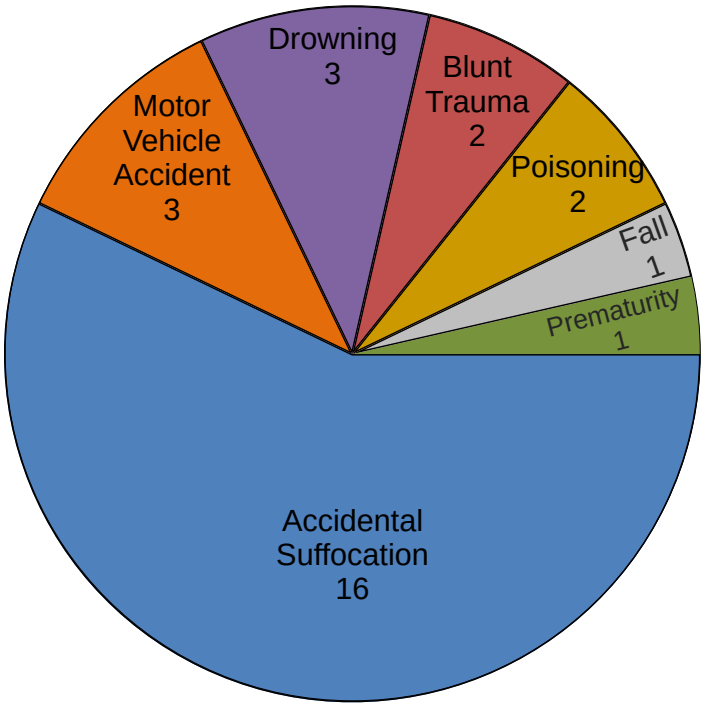
In 2020, 35 injury related deaths accounted for nearly 70% of all fatalities among 1- to 17-year-olds and was the second-highest total in the last ten years (Table 10). The 2020 Cuyahoga County injury death rate of 14.1 per 100,000 children 1- to 17 years was higher than the 2019 rates for the state of Ohio (12.3) and the United States (10.6) (most recent data available).[38-40] Injury related deaths were attributed to: homicide (17), accident injury related (5), suicide (4), drowning (3), undetermined other (3), poisoning (2), and motor vehicle accident (1) (Table 2). The number of children who died as a result of homicide, accident injury related, and suicide increased, while deaths due to drowning, motor vehicle accident, undetermined other, and poisoning decreased in 2020.

The number of medical related deaths (16) was the lowest in ten years (Table 10). The causes of death included other medical causes (6), birth defects (4), cancer (4), infection (1), and prematurity (1) (Table 2). Cancer, prematurity, and birth defect deaths increased in 2020, while infection and other medical causes decreased during the same time period.

Unintentional Injury Deaths

Second-highest number of unintentional injury deaths in the last ten years.

Figure 12: Unintentional Injury Deaths in Cuyahoga County in 2020 [n=28]



In 2020, 28 children of all ages died as a result of unintentional injuries; the second-highest number in the last ten years. Of the 28 children, 19 were black (68%), 18 were male (64%) and 15 were city of Cleveland residents (54%). The causes for the 28 unintentional injury deaths are illustrated in **Figure 12**. Fourteen of the 16 accidental suffocation deaths were related to unsafe infant sleep. The 2020 rate for unintentional deaths was 10.7 per 100,000.[41] This rate was higher than the 2019 rates (most recent data available) for Ohio (9.8), and the United States (7.2).[42-43]

Case reviews revealed risk factors identified in at least 50% of these deaths include poverty (23), history of maternal mental health illness (19), parental suspected history of abuse/neglect as a child (16), child suspected history of abuse/neglect or domestic violence in the home (15), parental history of abuse or neglect as a child (15), parental illicit drug use (14), and unsafe sleep arrangement (14).

Unintentional Injury Deaths

Figure 13: Total Motor Vehicle Deaths by Age Group per Year

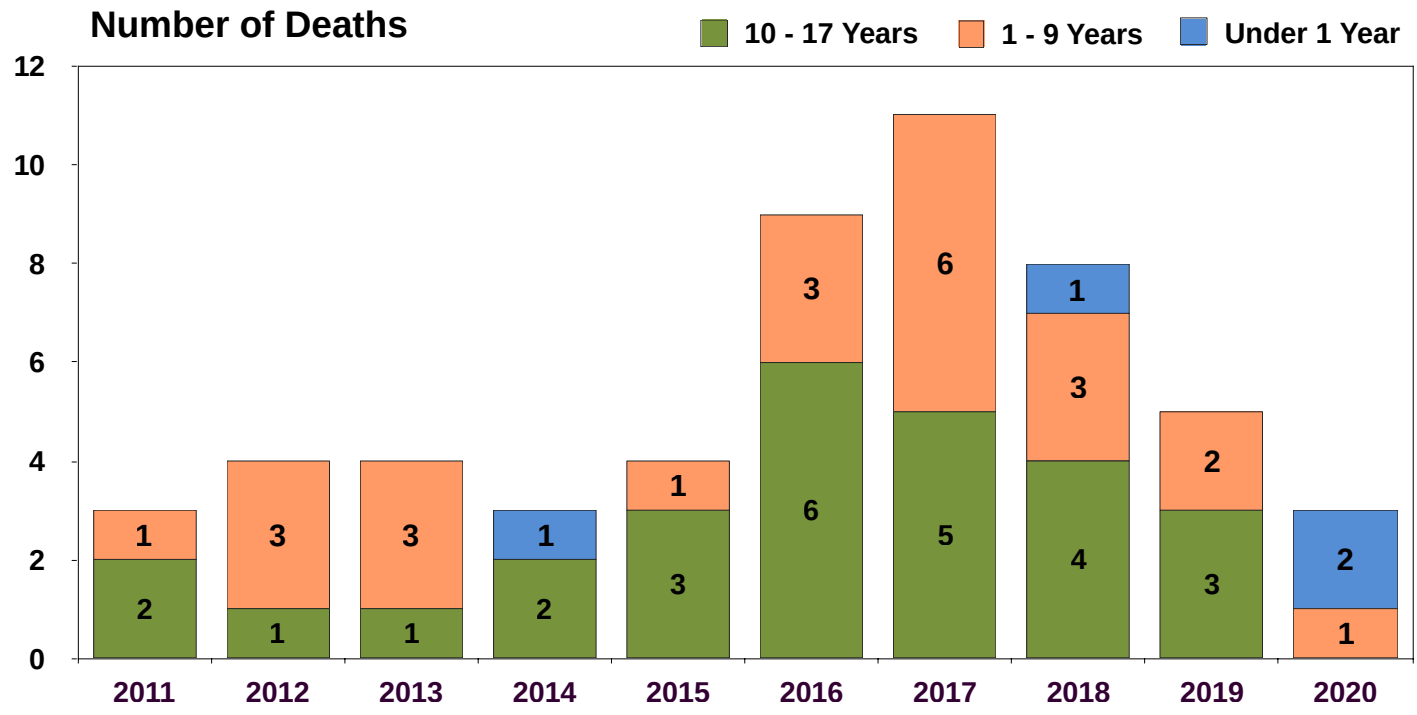


Figure 13 gives a historical perspective of the age distribution for traffic related fatalities. This year tied with 2011 and 2014 for the lowest number of motor vehicle accidents in the last ten years. The 2020 total number of infants that died was the highest in the last ten years. There were no deaths in the 10- to 17-year age group, which was the first time in the last ten years.

Of the 3 motor vehicle deaths, 1 was a passenger and 2 were infants who died shortly after birth following injuries to their mothers. The passenger was not in a car seat at time of the accident.

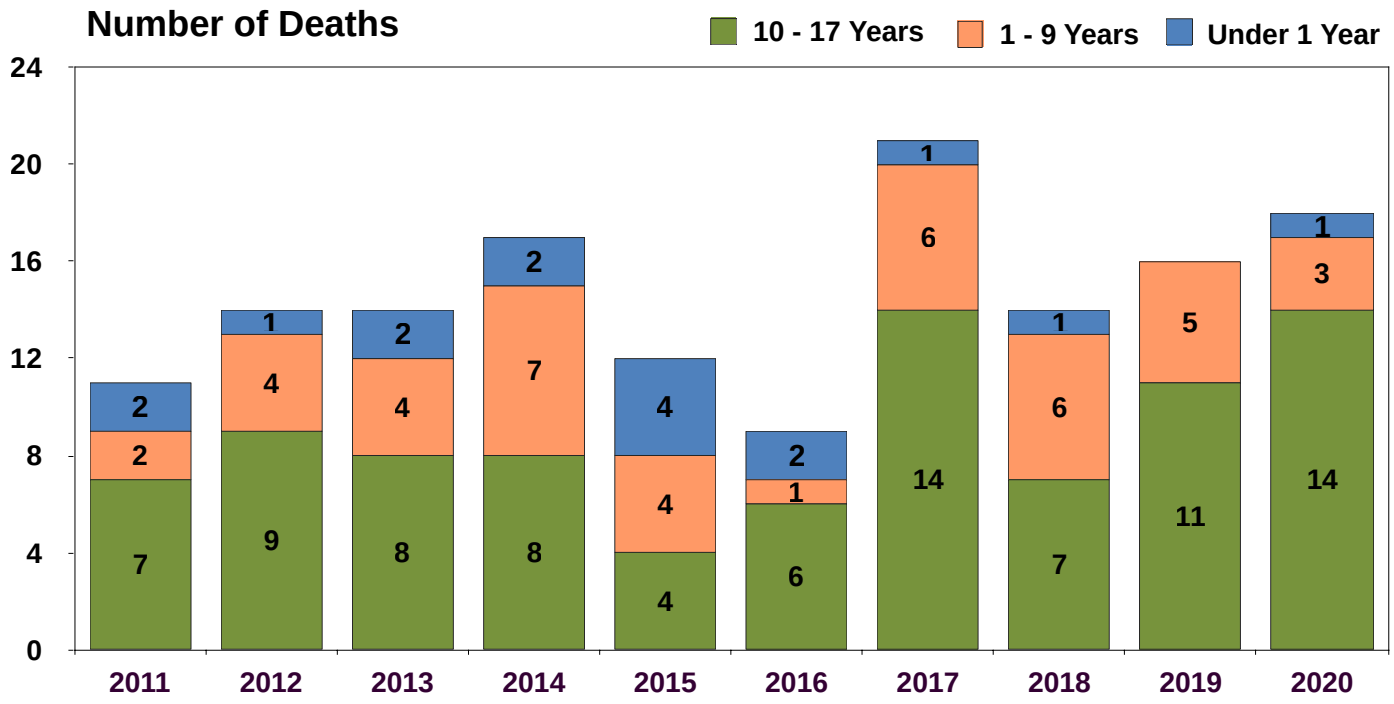
Cuyahoga County's rate for children (1.1 per 100,000) was significantly lower than the 2019 state of Ohio (3.3) and the national rate (2.2) (the most recent data available).[44-45] Motor vehicle accident related deaths in the state of Ohio accounted for 34% of all unintentional injury deaths for children, while the US rate accounted for 44% of these deaths.[46]

Accidental fire deaths and drownings are two other types of unintentional injuries. In 2020, Cuyahoga County had 3 drownings and no accidental fire deaths. In two of the three drowning deaths, lack of adequate supervision was a contributing risk factor. The Cuyahoga County 1-to-17 year olds drowning death rate (1.2 per 100,000) was higher than the 2019 state of Ohio (1.0) and US rate (1.0) (most recent data available).[47-48]

Intentional Injury Deaths

Highest number of gun related homicides in the last ten years.

Figure 14: Total Child Homicide Deaths by Age Group per Year



Intentional injury deaths include homicide and suicide. Eighteen homicides were the second-highest total in the last ten years. **Figure 14** illustrates that 1 infant, 3 children ages 1 to 9 years, and 14 children ages 10 to 17 years, died due to homicide. The 14 child deaths among children aged 10 to 17 years was tied for the highest in the last ten years.

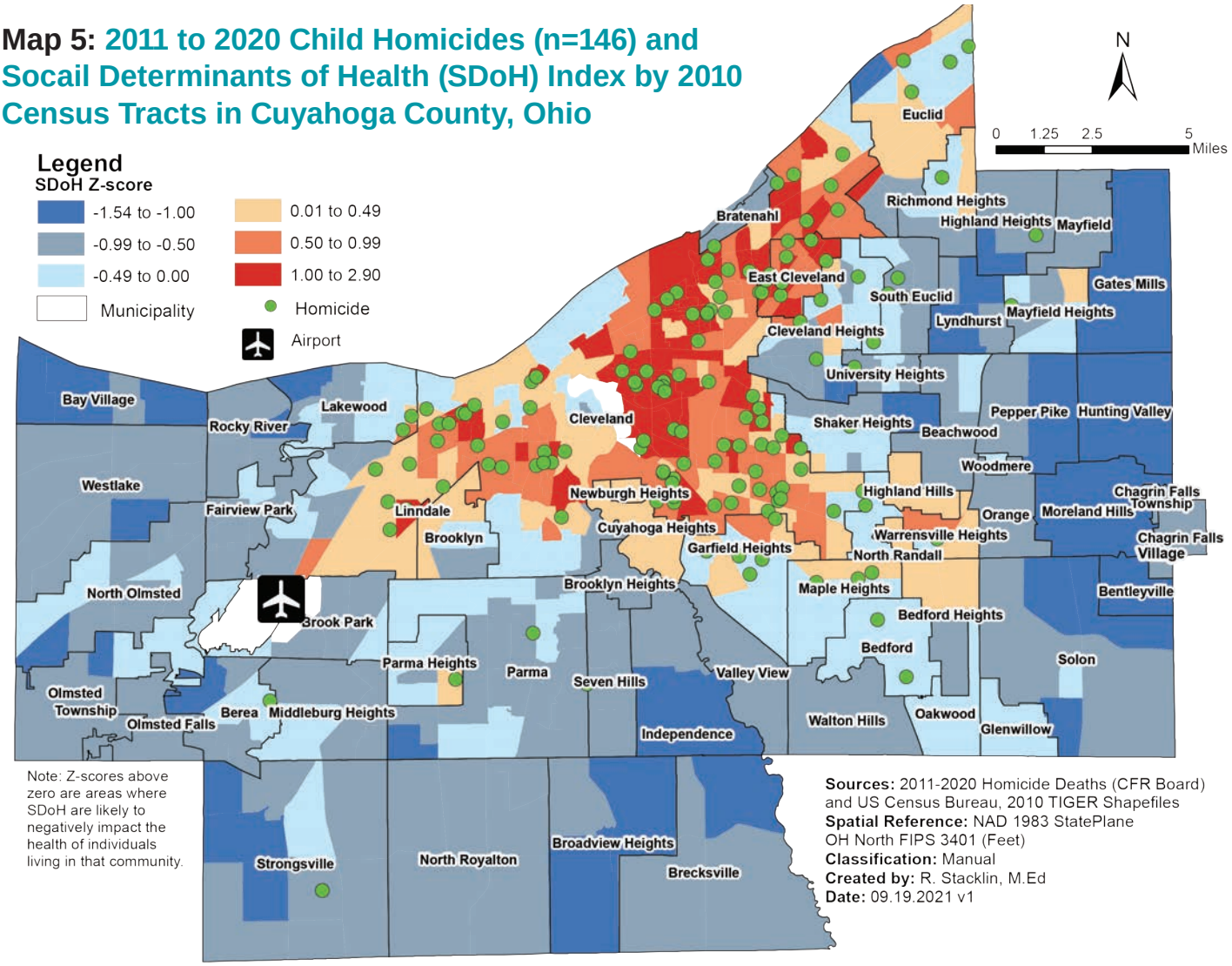
For the 1-17 years age group, homicide was the leading cause of death in Cuyahoga County. Homicide was the fourth-leading cause of death in Ohio and the United States in 2019 (most recent data available).[49] The county child homicide rate (6.9 per 100,000) was more than three times as high as the US rate (1.9) in 2019 (most recent data available).[50-51]

Of the 18 homicide victims this year, 12 lived in the city of Cleveland, 14 were boys, and 14 were Black non-Hispanic children. The ages of the children were 0 to 2 years (4), 12 to 14 years (4), and 15 to 17 years (10). Six homicides were to children 15 years of age. All but one of the 14 homicides in the 10-17 years age group was gun related. All four homicides to children under 10 years of age were due to physical abuse.

Case reviews revealed the top five risk factors associated with homicide were poverty (13), child suspected history of abuse/neglect or domestic violence in the home (12), gun access (12), history of child abuse (12), and negative influence of family and/or friends (11).

Intentional Injury Deaths

Map 5: 2011 to 2020 Child Homicides (n=146) and Socail Determinants of Health (SDoH) Index by 2010 Census Tracts in Cuyahoga County, Ohio

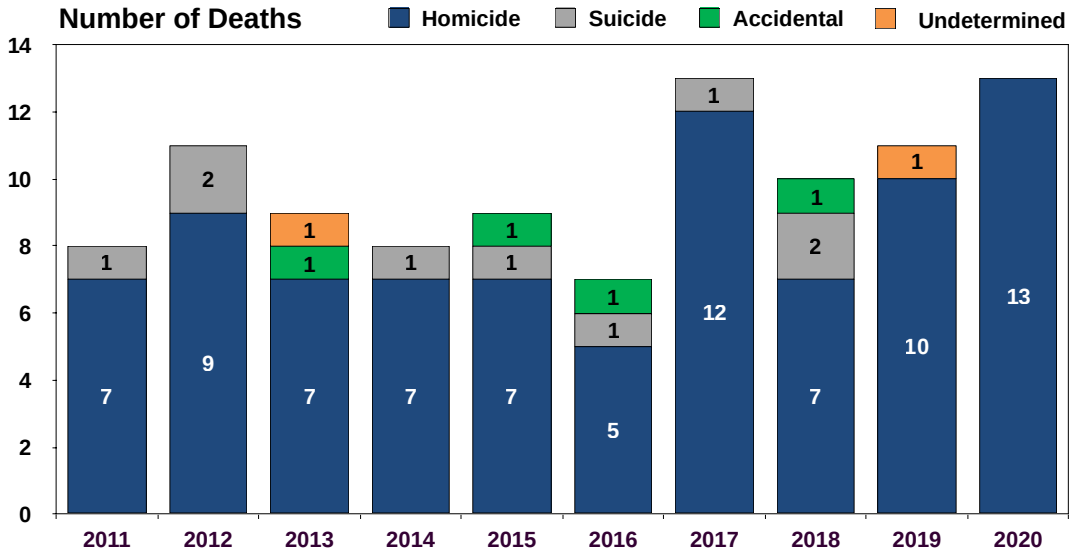


Map 5 displays the association between social determinants of health (SDoH) and child homicides. The SDoH index consisted of seven variables that included households without internet access, education less than high school, income spent on rent, households with no vehicle, people receiving supplemental nutrition assistance program (SNAP), unemployment rate, and percent of people who rent. These variables are at the census tract level within Cuyahoga County. For each variable, the rate for each census tract was compared to the average and was given a Z-score. An average of the scores was calculated. The census tracts with values below zero (areas in blue or gray) receive the benefit of favorable SDoH and the tracts with values above zero are burdened (areas in red or orange) by unfavorable SDoH. For example, a census tract in red is likely to have high rates for many of the SDoH variables. The child homicides were placed on top of SDoH scores to see if an association existed. Areas in red and orange (areas with higher SDoH burden) had 59% of all child homicides in the last ten years. Conversely, areas in with medium or dark blue had only 8% of child homicides during the same time period. No child homicides occurred in areas with the lowest SDoH scores (-1.0 or less). This map can assist in targeted prevention efforts to reduce child homicides.

Intentional Injury Deaths

Figure 15: Total Firearm Deaths by Manner per Year

Figure 15 portrays the number of firearm deaths by manner (homicide, suicide, accidental, and undetermined) over a ten-year span. In 2020 there were 13 firearm deaths, which tied for the highest number in the last ten years. All of the gun deaths were ruled as homicide. The child firearm death rate in Cuyahoga County (6.5 per 100,000)[52] was more than twice as high as the state of Ohio (2.8) and the United States (2.4).[53,54]



Community Actions:

Northern Ohio Trauma System, MetroHealth Medical Center and the Cleveland Peacemakers Alliance have a program to use violence interrupters in the hospital to provide conflict resolution, case management, and referrals to outreach workers.

In 2021, the Cleveland Peacemakers Alliance received a grant from Everytown for Gun Safety to support community violence intervention programs. The grant will be used to increase the number of outreach workers, especially in neighborhoods with a high incidence of violence.

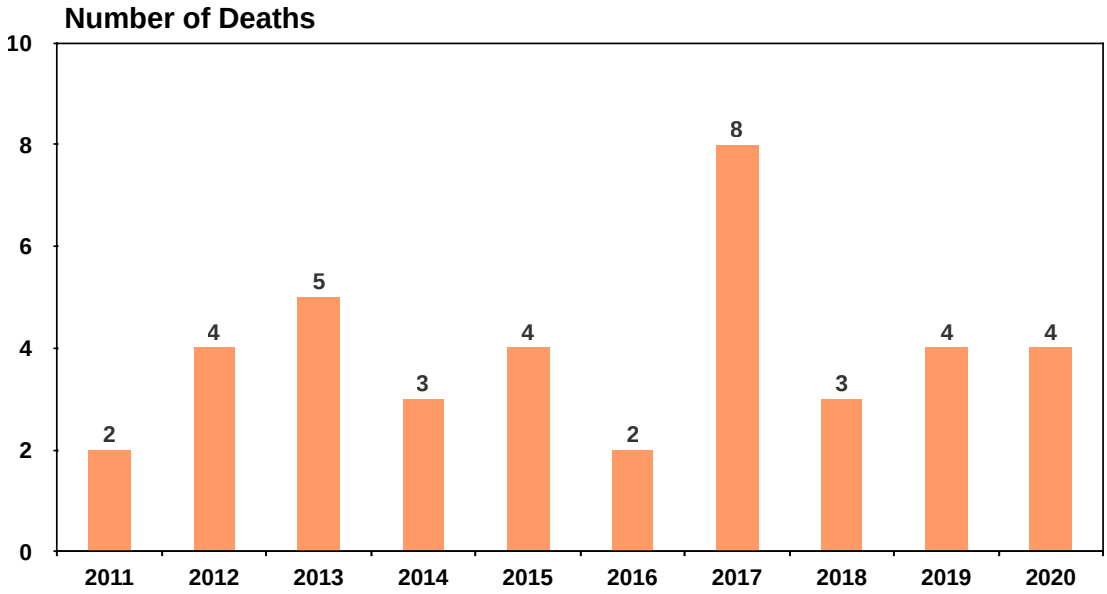
Rainbow Babies and Children's Pediatric Trauma Center continues to use the Antifragility Initiative in collaboration with the Center on Urban Poverty and Community Development at the Mandel School of Applied Social Sciences, Cleveland Peacemakers Alliance, and Frontline Services. This is a hospital-based violence intervention program to reduce violent injury recidivism using trauma-informed care principles from bedside engagement through 12 months of holistic, person-centered care. The program also seeks to improve academic and psychological outcomes for children receiving the intervention.

The Cuyahoga County Juvenile Court opened the Intervention Center to direct youth who have been charged with lesser offenses away from the detention center and the juvenile court system. The youth will be assessed for mental health disorders and other issues. Once the needs are identified, the court will connect the youth and family to appropriate resources.

The **Violence Innovation Program** is a diversion program in the **Cuyahoga County Common Pleas Court.** It is for young adults charged with a gun felony, who did not use the gun in a crime. The program uses mentoring and teaches conflict resolution and de-escalation skills. It includes mental health and drug treatment in addition to educational and employment opportunities.

Intentional Injury Deaths

Figure 16: Total Child Suicide Deaths per Year



There were 4 suicides in 2020, which was the same as 2019 **(Figure 16)**. Three children were White non-Hispanic and the ages ranged from 13 to 16 years old. Three suicides were by hanging and one by jumping off a structure.

According to the CDC, in 2019 (most recent data available), suicide was the second-leading cause of death among 10- to 17-year-olds in Ohio and the United States.[55] The Ohio rate (5.9 per 100,000) and US rate (4.9) were more than 30% higher than the 2020 Cuyahoga County rate (3.3).[56-58] According to the Cuyahoga County Youth Risk Behavior Survey in 2019, about one in six high school students had seriously considered attempting suicide and nearly one in eleven had attempted suicide within the last year.[59]

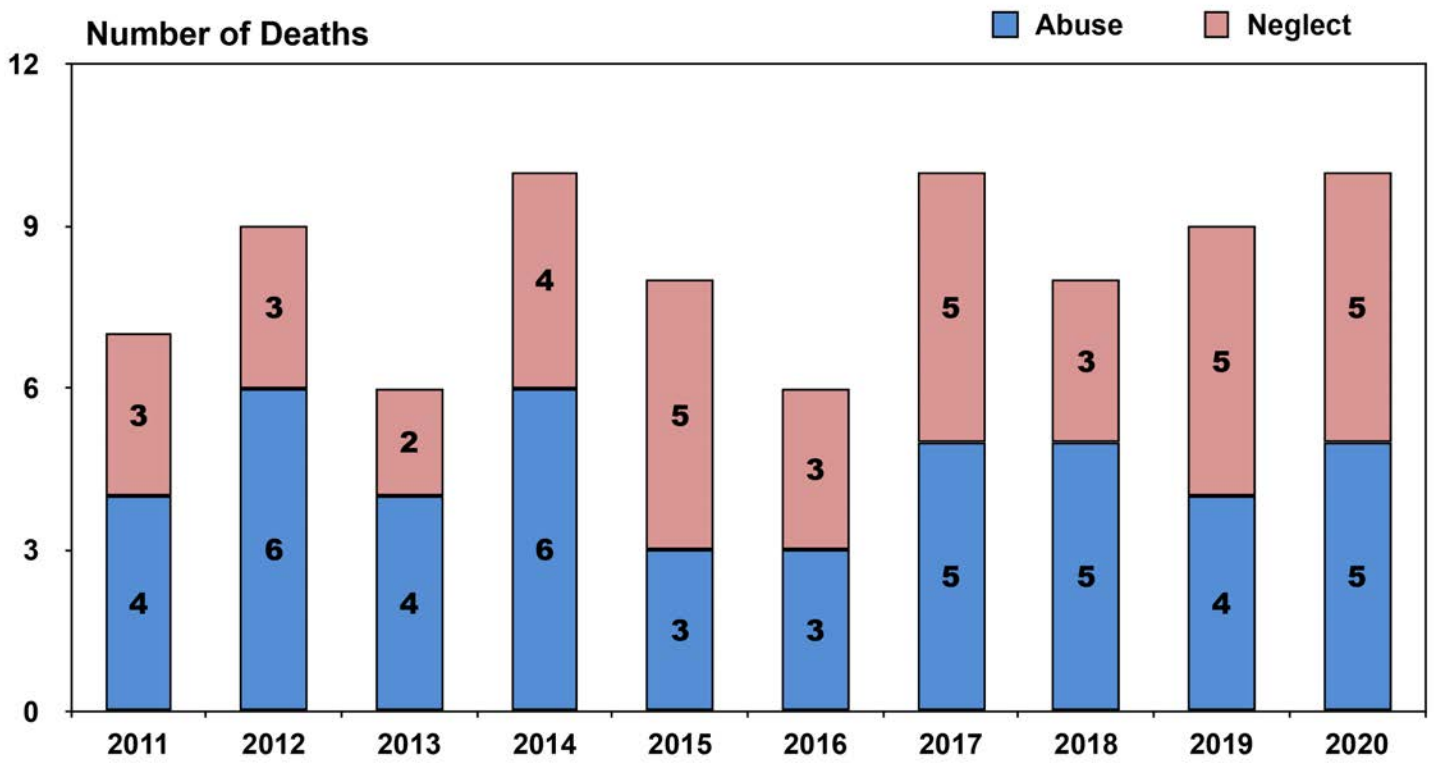
Community Actions:

The **Alcohol, Drug Addiction and Mental Health Services (ADAMHS) Board** of Cuyahoga County promotes the 24-hour Suicide Prevention Hotline, Crisis Text, Crisis Chat, and online behavioral health screenings. During the pandemic there was a crisis text campaign that targeted youth. It involved art created by teens for teens and was used in a #MondayMotivation series. The school-based services also engaged youth in prevention groups and/or individual counseling sessions via virtual platforms. Students presenting in crisis situations were seen in person.

Child Abuse and Neglect

In 2020, there were 10 abuse or neglect related child deaths, which tied with 2014 and 2017 for the highest number in the last ten years **(Figure 17)**. In the last ten years, an average of 8 children per year died due to child abuse or neglect. The national rate for child fatalities due to abuse or neglect was 2.50 per 100,000 children (federal fiscal year 2019 [October 2018 – September 2019]).[60] This rate is significantly lower than the 2020 county child abuse or neglect fatality rate of 3.8.[61]

Figure 17: Child Deaths due to Abuse and Neglect



Of the 10 child abuse or neglect victims, 7 were Black non-Hispanic, 6 were males, and 5 were Cleveland residents. The ages ranged from 2 weeks to 15 years old, with 6 of the deaths occurring to children 4 years of age or younger. Of the 5 neglect cases, 4 were due to lack of adequate supervision. All 5 of the abuse cases were ruled as homicides. The top 5 risk factors are poverty (8), maternal history of mental health illness (7), suspected history of neglect or abuse of victim or domestic violence in the home (7), suspected history of neglect or abuse to a victim's parent as a child (6), paternal criminal history (5), history of abuse and neglect to a victim's parent as a child (5), and history of domestic violence (5).

Child Abuse and Neglect

Community Actions:

The Special Investigation Unit at the **Cuyahoga County Division of Children & Family Services (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 result in changes to procedure and service delivery and contribute to ongoing staff development throughout the agency, particularly in the areas of safety planning and prevention.

- Strategies were developed including an agency-wide campaign to identify, engage, and involve fathers called "DadsMatter2".
- The new intake process that was established for children 5 years old and younger that includes an assessment tool is currently in practice.
- 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 **Cuyahoga County Safe Babies Court Team** has been implemented. The goal is to minimize the impact of trauma on babies and children aged 0-3 years and their families that are involved in the child welfare system through an interdisciplinary, collaborative, and proactive teamwork approach. The urgent developmental needs of infants and toddlers will be at the center of the decision making. It will also enable communities to be non-adversarial, racially and culturally equitable, and collaborative as they address the problems that interfere with the health and well-being of children and families.

Building a strengthened child protection system

In late 2019, the **Cuyahoga County Child Fatality Review Board** made a recommendation for enhanced coordination among agencies providing services to children experiencing, or at risk for, abuse or neglect. The DCFS Community Advisory Committee followed up on this and after doing research, made a recommendation for a Child Protect Team program. Cuyahoga County responded by releasing a Request for Proposals to identify and fund a coordinating agency to set up a Child Protection Team program. It is expected an award will be made later this year.

A child protection team is made up of pediatricians, nurses, law enforcement, and mental health care providers with specialized training who provide consultation to child welfare agencies in cases of suspected child abuse and neglect, and in some cases, provide medical services to victims from within their hospital system. Child Protection Teams offer lifesaving opportunities, including the possibility of referrals for immediate service in cases of physical, mental, or emotional abuse -- and/or medical neglect.

Previously identified barriers to an effective system-wide coordinated approach to child protection have included confidentiality, data sharing issues, organizational conflicts, and communication challenges. A formally organized child protection team program will be able to transcend these barriers and ensure timely coordination of care and services.

Table 6: Demographic Profiles and Cause Specific Rates

	2019 Census Data[1]	
	Population Under 18 Years	Percent of Population Under 18
Cuyahoga County (Total)	261,154	21
Cuyahoga County (Black)	91,967	25
Cuyahoga County (White)	135,887	17
City of Cleveland	85,098	22

Annual Birth Data[2]	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Cuyahoga County	14,993	14,783	14,920	15,079	14,843	14,747	14,558	13,871	13,937	13,204
% Black non-Hispanic	38.4	38.7	38.8	37.8	38.0	38.1	38.8	37.7	38.2	37.9%
% Hispanic	6.3	6.5	6.3	6.5	6.6	6.9	7.3	7.4	7.2	77%
% White non-Hispanic	50.4	49.7	49.9	50.3	50.2	49.6	48.7	49.9	49.4	49.4%

Annual Death Data	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Annual Child Deaths	187	182	186	165	200	172	188	185	174	151
Annual Infant Deaths	144	131	133	121	155	128	118	120	120	100
% Deaths to Infants	77.0	72.0	71.5	73.3	77.5	74.4	62.8	64.9	69.0	66.2
Child Mortality/ 100,000 Children	64.4	62.7	64.1	56.8	68.9	62.5	69.2	69.1	67.5	57.8
Annual Total Medical Death Rate	49.3	46.5	47.5	40.7	50.3	45.4	44.9	47.1	44.6	34.8
Cancer	1.4	2.1	1.4	1.7	1.7	1.1	0.7	3.0	0.8	1.5
Annual Total Injury Death Rate	15.2	15.2	16.5	16.5	18.6	17.1	24.3	22.0	22.9	23.0
Homicide	3.8	4.8	4.8	5.9	4.1	3.3	6.6	4.1	5.0	6.5
Motor Vehicle Accident	1.0	1.4	1.4	0.7	1.0	3.3	4.1	3.0	1.9	1.1
Fire	0.3	0.3	0.3	0.0	0.0	0.0	0.7	1.1	0.0	0.0
Drowning	0.7	0.7	1.4	0.3	1.0	0.4	0.7	1.5	1.6	1.1
Suicide[3]	1.4	3.6	3.6	2.2	2.9	1.6	6.4	2.4	2.5	3.3
Infant Mortality/ 1,000 Births	9.6	8.9	8.9	8.0	10.4	8.7	8.1	8.7	8.6	7.6
Neonatal Mortality/ 1,000 Births	6.4	6.5	6.7	6.2	7.3	6.1	6.0	5.9	5.7	4.7
Postneonatal Mortality/ 1,000 Births	3.2	2.4	2.2	1.8	3.2	2.6	2.1	2.8	2.9	2.9
Prematurity	5.3	5.1	5.5	5.5	5.9	4.7	5.6	4.4	5.0	3.6
SIDS Only	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
SIDS and Sleep Related	1.3	1.2	1.1	1.1	1.8	1.4	0.9	1.4	1.7	1.7

[1] 2016-2020 rates use American Community Survey estimates, 2011-15 rates use 2010 decennial census count.

[2] Ohio Department of Health, Ohio Public Health Information Warehouse. Available at https://odhgateway.odh.ohio.gov/EDWS/DataCatalog (accessed Aug 10, 2021). 2020 birth count includes 2 births that the state file geocoded to another county.

[3] Suicide rate is for children 10-to-17 years. 2011-2019 rates were recalculated.

Data Tables

Table 7: Cause of Death by Age Group and Year

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total per Cause
Prematurity											**735**
Under 1 Year	80	76	82	76	87	69	82	61	70	47	
1 - 9 Years	1	0	1	0	0	0	0	1	0	1	
10 - 17 Years	0	1	0	0	0	0	0	0	0	0	
Birth Defect											**267**
Under 1 Year	35	25	23	13	21	22	12	23	15	12	
1 - 9 Years	2	9	9	2	4	4	4	3	3	2	
10 - 17 Years	2	1	3	3	1	4	5	3	0	2	
SIDS and Sleep Related Deaths											**199**
Under 1 Year	19	18	16	19	27	21	13	19	24	23	
Cancer and Other Medical Conditions											**259**
Under 1 Year	7	10	10	9	15	13	6	11	10	16	
1 - 9 Years	11	11	7	5	11	5	8	14	10	4	
10 - 17 Years	5	5	3	10	6	8	5	10	7	7	
Homicide											**136**
Under 1 Year	2	1	2	2	4	2	0	0	0	0	
1 - 9 Years	2	4	4	7	4	1	5	5	4	3	
10 - 17 Years	7	9	8	8	4	6	13	6	9	14	
Suicide											**38**
1 - 9 Years	0	0	0	0	0	0	0	0	0	0	
10 - 17 Years	2	4	5	3	4	2	8	3	3	4	
Motor Vehicle Accident											**52**
Under 1 Year	0	0	0	1	0	0	0	1	0	2	
1 - 9 Years	1	3	3	0	0	3	6	3	2	1	
10 - 17 Years	2	1	1	1	3	6	5	4	3	0	
Accidental Suffocation											**4**
Under 1 Year[1]	0	0	0	0	0	0	0	0	0	0	
1 - 9 Years	0	0	0	0	0	0	0	0	2	2	
10 - 17 Years	0	0	0	0	0	0	0	0	0	0	
Drowning											**26**
Under 1 Year[1]	0	1	0	0	0	0	1	0	0	0	
1 - 9 Years	1	1	3	0	2	0	0	0	2	2	
10 - 17 Years	1	0	1	1	1	1	1	4	2	1	
Fire											**8**
Under 1 Year	0	0	0	0	0	0	0	0	0	0	
1 - 9 Years	1	1	1	0	0	0	2	3	0	0	
10 - 17 Years	0	0	0	0	0	0	0	0	0	0	
Other Accidents[2]											**66**
Under 1 Year	1	0	0	1	1	1	4	5	1	0	
1 - 9 Years	4	1	3	4	4	2	6	4	3	5	
10 - 17 Years	1	0	1	0	1	2	2	2	4	3	
Total per Year	**187**	**182**	**186**	**165**	**200**	**172**	**188**	**185**	**174**	**151**	**1,790**

[1] Excludes those related to sleep environment.

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

Table 8: Annual Number of Infant Deaths by Ethnicity or Race

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
Black non-Hispanic	94	82	84	82	104	82	88	78	82	70	**846**
Hispanic	6	11	11	4	9	7	9	11	3	6	**77**
White non-Hispanic	42	37	36	34	41	35	20	31	33	23	**332**
Subtotal	**142**	**130**	**131**	**120**	**154**	**124**	**117**	**120**	**118**	**99**	**1,255**
All Other Races	2	1	2	0	1	3	1	0	2	1	**13**
Missing Race Info	0	0	0	1	0	1	0	0	0	0	**2**
Total	**144**	**131**	**133**	**121**	**155**	**128**	**118**	**120**	**120**	**100**	**1,270**
Rates of Death											
Black non-Hispanic Infant Mortality / 1,000 Births[1]	16.3	14.3	14.5	14.4	18.5	14.6	15.6	14.9	15.4	14.0	**15.3**
Hispanic Infant Mortality / 1,000 Births[2]	6.3	11.4	11.7	4.1	9.2	6.9	8.5	10.7	3.0	5.9	**7.7**
White non-Hispanic Infant Mortality / 1,000 Births[3]	5.6	5.0	4.8	4.5	5.5	4.8	2.8	4.5	4.8	3.5	**4.6**
Ratio of Black to White IMR	2.9	2.8	3.0	3.2	3.4	3.1	5.5	3.3	3.2	4.0	**3.3**

[1] Total Infant Black non-Hispanic deaths/total Black non-Hispanic live births x 1,000 (annual birth data in Table 6)
[2] Total Hispanic deaths/total Hispanic live births x 1,000 (annual birth data in Table 6)
[3] Total Infant White non-Hispanic deaths/total White non-Hispanic live births x 1,000 (annual birth data in Table 6)

Table 9: Annual Number of Child Deaths by Race and Age Group

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
Race and Age Group											
Black											
Under 1 Year	97	84	86	83	107	83	89	80	82	73	**864**
1 - 9 Years	12	17	25	10	15	9	17	21	17	13	**156**
10 - 17 Years	14	14	13	16	10	16	23	19	16	17	**158**
Total	**123**	**115**	**124**	**109**	**132**	**108**	**129**	**120**	**115**	**103**	**1,178**
White											
Under 1 Year	45	46	45	37	47	40	28	40	36	24	**388**
1 - 9 Years	11	13	6	8	9	6	13	12	9	7	**94**
10 - 17 Years	6	7	9	9	9	12	16	12	12	13	**105**
Total	**62**	**66**	**60**	**54**	**65**	**58**	**57**	**64**	**57**	**44**	**587**
Other											
Under 1 Year	2	1	2	0	1	4	1	0	2	2	**15**
1 - 9 Years	0	0	0	0	1	0	1	0	0	0	**2**
10 - 17 Years	0	0	0	1	1	1	0	1	0	1	**5**
Total	**2**	**1**	**2**	**1**	**3**	**5**	**2**	**1**	**2**	**3**	**22**
Missing Race Info	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**1**	**3**
Rates of Death											
Black Crude Death Rate[1]	115.5	108.0	116.4	102.4	124.0	109.5	132.1	125.2	131.2	112.0	**117.6**
White Crude Death Rate[2]	40.1	42.7	38.8	34.9	42.0	39.0	39.6	45.4	42.0	32.4	**39.7**
Ratio of Black to White	2.9	2.5	3.0	2.9	2.9	2.8	3.3	2.8	3.1	3.5	**3.0**
Black Death Rate (excl Infants)[3]	25.8	30.8	37.8	25.8	24.8	26.9	43.5	44.5	40.1	34.5	**33.5**
White Death Rate (excl Infants)[4]	11.6	13.6	10.2	11.6	12.2	12.8	21.3	17.9	16.4	15.5	**14.3**
Ratio of Black to White (excl Infants)	2.2	2.3	3.7	2.2	2.0	2.1	2.0	2.5	2.4	2.2	**2.4**

[1] Total Black deaths/91,947 x 100,000 (2019 census data)
[2] Total White deaths/135,887 x 100,000 (2019 census data)
[3] Total Black deaths (exclude Infants)/91,947 minus Black live births x 100,000 (2019 census data)
[4] Total White deaths (exclude Infants)/135,887 minus White live births x 100,000 (2019 census data)

Data Tables

Table 10: Annual Number of Child Deaths Due to Injury and Medical Causes by Age Group

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
Total Injury Related Deaths											
Under 1 Year	22	20	18	23	31	24	18	25	25	25	**231**
1 - 9 Years	9	10	14	11	10	6	19	15	11	13	**118**
10 - 17 Years	13	14	16	13	13	17	29	19	23	22	**179**
Total	**44**	**44**	**48**	**47**	**54**	**47**	**66**	**59**	**59**	**60**	**528**
Total Deaths from Medical Causes											
Under 1 Year	122	111	115	98	124	104	100	95	95	75	**1,039**
1 - 9 Years	14	20	17	7	15	9	12	18	15	7	**134**
10 - 17 Years	7	7	6	13	7	12	10	13	5	9	**89**
Total	**143**	**138**	**138**	**118**	**146**	**125**	**122**	**126**	**115**	**91**	**1,262**
TOTAL ALL CAUSES	**187**	**182**	**186**	**165**	**200**	**172**	**188**	**185**	**174**	**151**	**1,790**

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

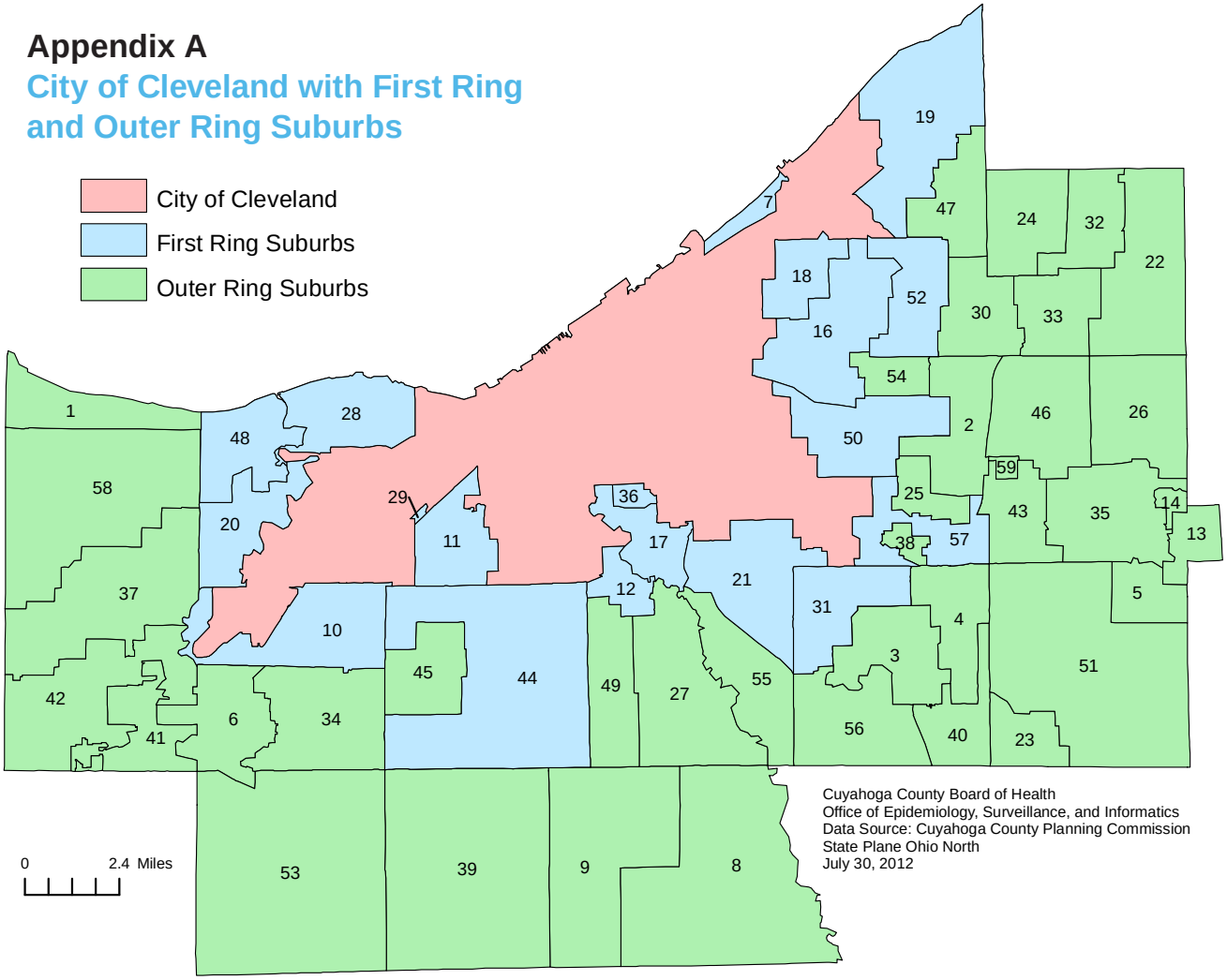
Table 11: Annual Number of Child Deaths by Sex and Age Group

	2011*	2012*	2013	2014*	2015	2016	2017	2018	2019*	2020	Total
Sex and Age Group											
Female											
Under 1 Year	63	52	64	49	70	57	52	43	54	43	**547**
1 - 9 Years	11	18	15	10	6	8	13	17	9	8	**115**
10 - 17 Years	5	10	8	10	7	11	9	7	10	12	**89**
Total	**79**	**80**	**87**	**69**	**83**	**76**	**74**	**67**	**73**	**63**	**751**
Male											
Under 1 Year	81	78	69	71	85	71	66	77	65	57	**720**
1 - 9 Years	11	12	16	8	19	7	18	16	17	12	**136**
10 - 17 Years	15	11	14	16	13	18	30	25	18	19	**179**
Total	**107**	**101**	**99**	**95**	**117**	**96**	**114**	**118**	**100**	**88**	**1,035**
TOTAL ALL	**186**	**181**	**186**	**164**	**200**	**172**	**188**	**185**	**173**	**151**	**1,786**

* In 2011, 2012, 2014, and 2019 one infant had unknown sex.

Appendix A

City of Cleveland with First Ring and Outer Ring Suburbs



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 Village	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				

Appendix B

CUYAHOGA COUNTY FIMR
FETAL INFANT MORTALITY REVIEW

Program Description:

The Cuyahoga County Board of Health (CCBH) implemented the first county-wide **Fetal Infant Mortality Review (FIMR) Program** in 2014. The FIMR Program examines local infant mortality issues through the review of infant deaths and fetal deaths 20 weeks or more gestation.

Figure 1: Number of Fetal Deaths in Cuyahoga County (2016-2020) [n=470]

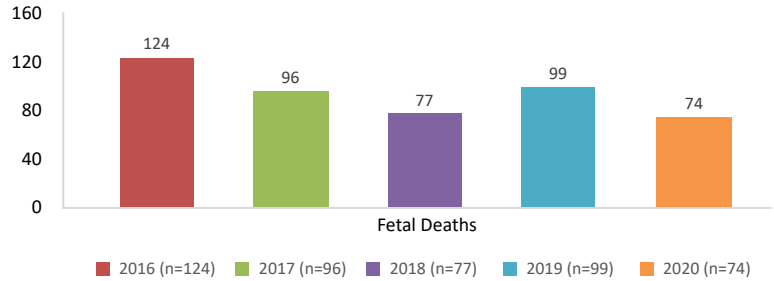


Figure 1 shows that since 2016, there has been a net decrease of 40.3% in fetal deaths. The 2020 Cuyahoga County fetal mortality rate (FMR) was 5.6 per 1,000 live births plus fetal deaths which is lower than the 2019 Ohio rate of 6.3 and the 2019 US rate of 5.7 (most recent data available).

Figure 2: Gestational Age of Fetal Deaths (2016-2020) [n=470]

Figure 2 shows the gestational age of all fetal deaths from 2016 to 2020. Almost 40% of fetal deaths occurred before the age of viability (24 weeks gestation). Looking closer, 33% of fetal losses occurred in the third trimester (beginning at 28 weeks), a time when babies have a high survival rate.

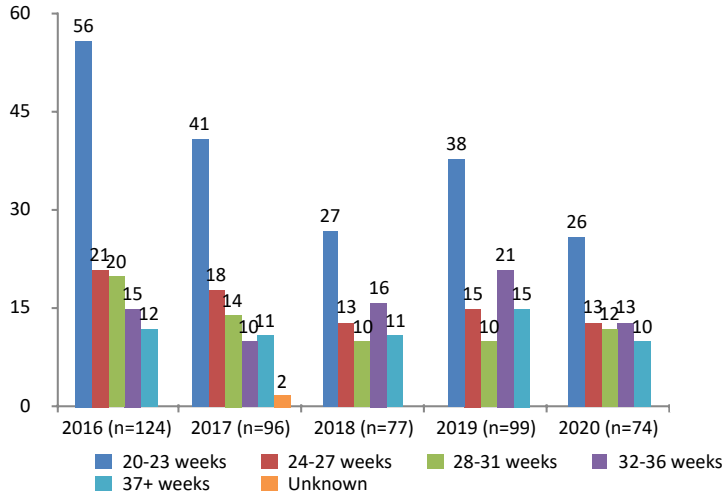


Figure 3: Fetal Deaths by Race of Mother (2016-2020) [n=470]

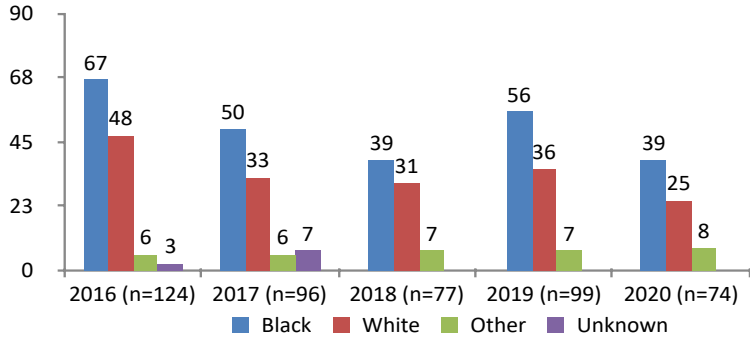


Figure 3 illustrates fetal deaths by race in Cuyahoga County. The Black fetal mortality rate (7.7) was more than twice as high as the White fetal mortality rate (3.8) in 2020.

Appendix B

Table 1: FIMR Reviewed Cases

Demographics in 2014-2020	
Type of Loss	
Fetal	53
Infant	26
Insurance*	
Medicaid	42
Private	34
Mother's Race**	
Black	36
White	33

* 3 Moms were uninsured
** 4 Moms were of Hispanic ethnicity and 6 Moms were of another race.

Table 1 shows the demographics of the 79 FIMR cases that have been reviewed from 2014-2020.

Table 2: FIMR Community Initiatives

Initiative	Action
Encourage maternity patients to use emergency rooms with labor and delivery services, when needed, for better pregnancy outcomes.	A palm card was created and provided to pregnant women to increase awareness of labor and delivery locations in Cuyahoga County.
Eliminate transportation barriers for maternity and pediatric appointments.	The Baby On Board Project provides bus vouchers and improvements to transit waiting areas in targeted communities.

Table 2 displays two FIMR community initiatives that have been developed and implemented in 2020-2021.

COVID-19 Pandemic Impact

The impact of the COVID-19 pandemic on infant and fetal mortality will take time to truly assess. In May of 2020, the CCBH, in partnership with several community organizations, conducted a community health assessment to evaluate access and quality of inter-conception and preconception health services in Cuyahoga County. Nearly 40% of respondents reported that COVID-19 made access to healthcare more difficult. Some of the responses as to how healthcare access was negatively impacted can be seen in **Table 3.**

Table 3: Patient Responses to the Negative Impact of COVID-19 On the Accessibility or Quality of Healthcare Services

Longer wait time, partner can't attend most visits.	Everything (has to be done) online or over the phone.
I lost my job because of COVID and money is limited.	Not seeing a doctor in person is not as effective.
Made things more confusing (about) where to go for services.	COVID exposure prevented me from attending a prenatal appointment.

Footnotes

Footnotes

[1] US Census Bureau. 2019 TIGER/Line® Shapefiles: US county subdivisions. https://www.census.gov/cgi-bin/geo/shapefiles/index.php

[2] Ohio Department of Health (ODH), Bureau of Vital Statistics. Preliminary 2020 Ohio child mortality data. The Department specifically disclaims responsibility for any analyses, interpretations, or conclusions.

[3] US Census Bureau. 2015-2019 American Community Survey (ACS) 5-year estimates. https://data.census.gov/cedsci/

[4] US Census Bureau. 2019 Population estimates. https://data.census.gov/cedsci/

[5] The Cuyahoga County Child Fatality Review Board. Protecting our future: Child fatalities for 2018 (22nd ed.). (2019). https://hhs.cuyahogacounty.us departments/invest-in-children/child-fatality-review-board

[6] Ibid.

[7] Columbus Public Health, Bureau of Epidemiology. 2019 Infant and child deaths.

[8] Hamilton County Public Health. 2019 Infant and child deaths.

[9] Ohio Department of Health (ODH). 2019 Ohio infant mortality data. The Department specifically disclaims responsibility for any analyses, interpretations, or conclusions.

[10] ODH. 2019 Child death data. https://wonder.cdc.gov

[11] ODH. 2019 Ohio infant mortality data.

[12] Xu J, Murphy SL, Kochanek KD, Arias E. Deaths: Final data for 2019. National Vital Statistics Reports, vol 70 no 8. Hyattsville, MD: National Center for Health Statistics. https://www.cdc.gov/nchs/data/nvsr/nvsr70/nvsr70-08-508.pdf

[13] US Census Bureau. 2020 TIGER/Line Shapefiles: US census tracts. https://www.census.gov/cgi-bin/geo/shapefiles/index.php

[14] US Census Bureau. 2015-2019 estimates.

[15] Ibid.

[16] US Department of Health and Human Services (HHS). The 2020 HHS poverty guidelines. https://aspe.hhs.gov/topics/poverty-economic-mobility/poverty-guidelines/prior-hhs-poverty-guidelines-federal-register-references/2020-poverty-guidelines

[17] US Census Bureau. 2015-2019 estimates.

[18] ODH, Bureau of Vital Statistics. 2020 Infant birth data. The Department specifically disclaims responsibility for any analyses, interpretations, or conclusions.

[19] ODH. Quarterly infant mortality scorecard for Ohio. July 2021. https://odh.ohio.gov/wps/wcm/connect/gov/c3f72479-5a00-43e0-a979-b10506a7a39f/Quarterly+Infant+Mortality+Scorecard+for+Ohio+15.pdf?MOD=AJPERES&CONVERT_TO=url&CACHEID=ROOTWORKSPACE.Z18_M1HGGIK0N0JO00QO9DDDDM3000-c3f72479-5a00-43e0-a979-b10506a7a39f-nFEski

[20] Xu J, Murphy SL, Kochanek KD, Arias E. Deaths: Final data for 2019.

[21] Cleveland State University (CSU), Northern Ohio Data and Information Service (NODIS). 2010 TIGER/Line Shapefile: 2012 city of Cleveland neighborhoods and suburban municipalities.

[22] ODH, Bureau of Vital Statistics. 2020 Infant birth data.

[23-27] Ibid.

[24] Ibid.

[25] Ibid.

[26] Ibid.

[27] Ibid.

[28] The Cuyahoga County Child Fatality Review Board, Child Fatalities for 2019.

[29] ODH, Bureau of Vital Statistics. 2020 Infant birth data.

Footnotes

[30] Ibid.

[31] Martin JA, Hamilton BE, Osterman MJK, Driscoll, AK. (2021). Births: Final Data for 2019. National Vital Statistics Reports, vol 70 no 2. Hyattsville, MD: National Center for Health Statistics. https://www.cdc.gov/nchs/data/nvsr/nvsr70/nvsr70-02-508.pdf

[32] ODH, Bureau of Vital Statistics. 2020 Infant birth data.

[33] Ibid.

[34] Ibid.

[35] Ibid.

[36] US Census Bureau. 2015-2019 estimates.

[37] CDC, WISQARS, Fatality injury reports, 1999-2019, for national, regional, and states (restricted). https://webappa.cdc.gov/cgi-bin/broker.exe

[38] ODH, Bureau of Vital Statistics. 2020 Infant birth data.

[39] US Census Bureau. 2015-2019 estimates.

[40] CDC, WISQARS, 2019 Fatality injury reports.

[41] US Census Bureau. 2015-2019 estimates.

[42] Ibid.

[43] CDC, WISQARS, 2019 Fatality injury reports.

[44] US Census Bureau. 2015-2019 estimates.

[45] CDC, WISQARS, 2019 Fatality injury reports.

[46] Ibid.

[47] Ibid.

[48] US Census Bureau. 2015-2019 estimates.

[49] Ibid.

[50] Ibid.

[51] CDC, WISQARS, 2019 Fatality injury reports.

[52] US Census Bureau. 2015-2019 estimates.

[53] Ibid.

[54] CDC, WISQARS, 2019 Fatality injury reports.

[55] Ibid.

[56] US Census Bureau. 2015-2019 estimates.

[57] CDC, WISQARS, 2019 Fatality injury reports.

[58] US Census Bureau. 2015-2019 estimates.

[59] Prevention Research Center for Healthy Neighborhoods. 2019 Cuyahoga County Youth Risk Behavior Survey: Trend data. http://prchn.org/ccyrbs/

[60] HHS, Administration for Children and Families, Children's Bureau. Child maltreatment 2017. (2019). Available online at https://www.acf.hhs.gov/cb/research-data-technology/ statistics-research/child-maltreatment (accessed August 30, 2019).

[61] US Census Bureau. 2015-2019 Population estimates.

Review Board Membership

Cuyahoga County Child Fatality Review Board Membership 2020

Board Chairperson

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Lt. Maurice Brown
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Daralynn Constant, LISW-S
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Thomas Gilson, MD
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https://hhs.cuyahogacounty.us/departments/invest-in-childern/child-fatality-review-board

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