2020 Infant Mortality Data

Ohio | Department of Health

Infant Mortality Surveillance

- The infant mortality rate is:

(No. infant deaths/number of live births) * 1,000

- An infant death is defined as death prior to an infant's first birthday (0-364 days old).
- The number of infant deaths and live births are obtained from Vital Statistics (birth and death certificates).
- Causes of death are also determined from the death certificate.

Key Findings

- Black infants die at a rate almost three times as that of White infants.
- Thirty percent of infants who died were born before 24 weeks gestation despite only accounting for 0.2% of all live births.
- Prematurity-related conditions remain the leading cause of death among all infants.
- Prematurity-related conditions are the largest contributor to the Black/White infant mortality disparity.

2020 Infant Mortality Rates (IMR)

864 Ohio infants died before their first birthday in 2020

- **493** White infant deaths
- **326** Black infant deaths

6.7 Overall infant mortality rate—the lowest it has been in the last decade

- **5.1** White infant mortality rate
- **13.6** Black infant mortality rate

4.4 Overall neonatal mortality rate

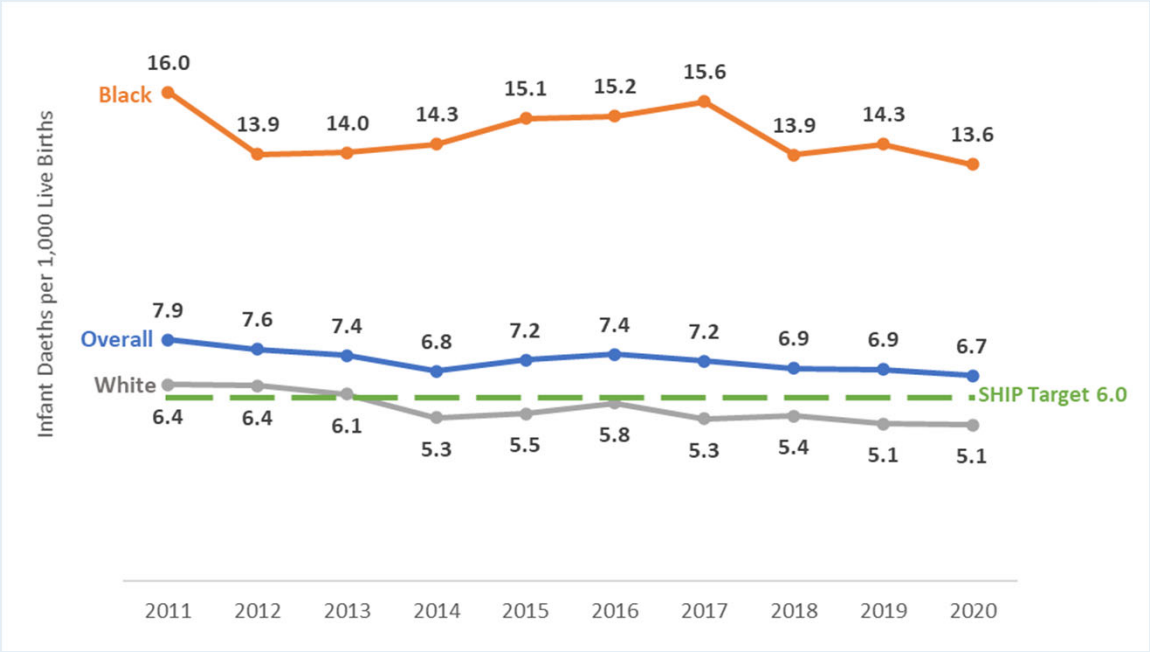
- **3.4** White neonatal mortality rate
- **8.9** Black neonatal mortality rate

2.2 Overall postneonatal mortality rate

- **1.6** White postneonatal mortality rate
- **4.7** Black postneonatal mortality rate

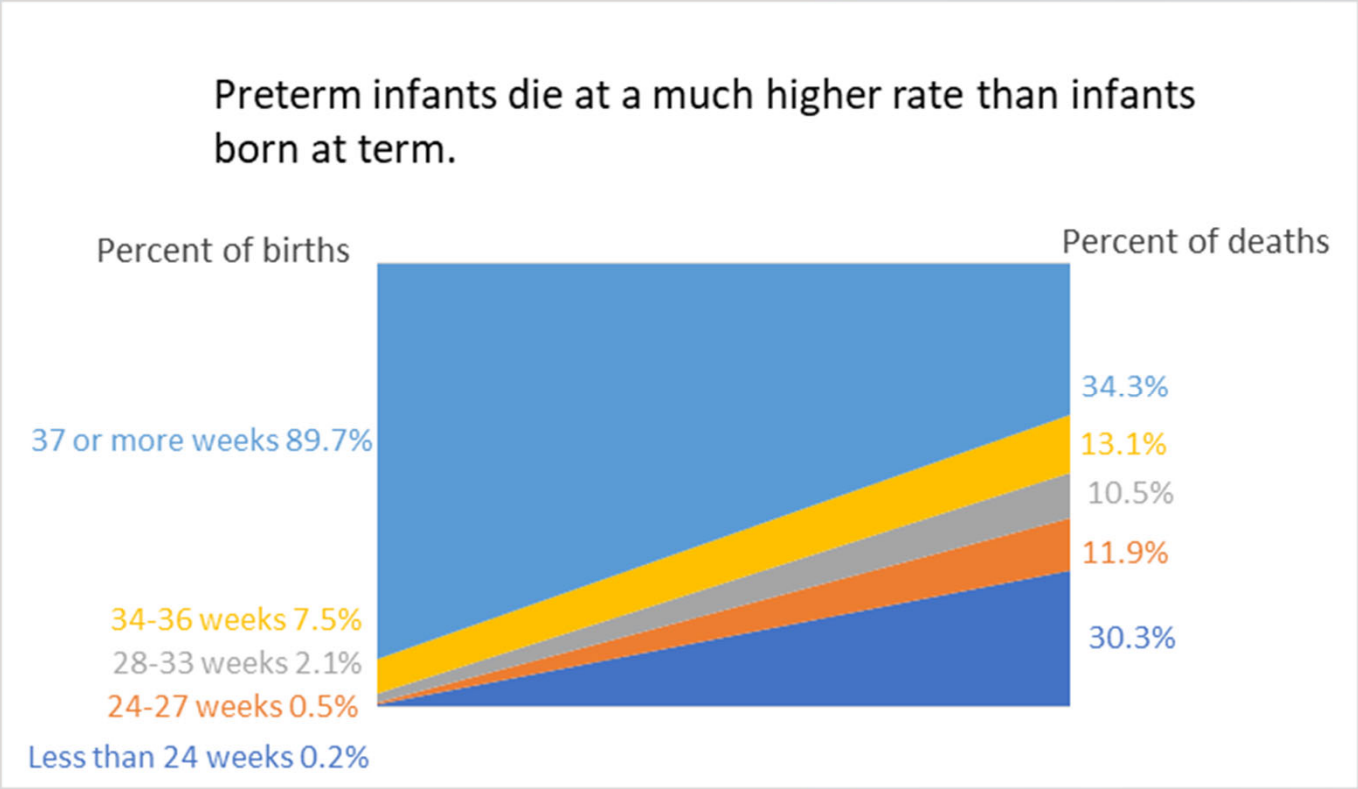
2.7 Black/White Infant Mortality Ratio

Infant Mortality Rates by Race (2011-2020)

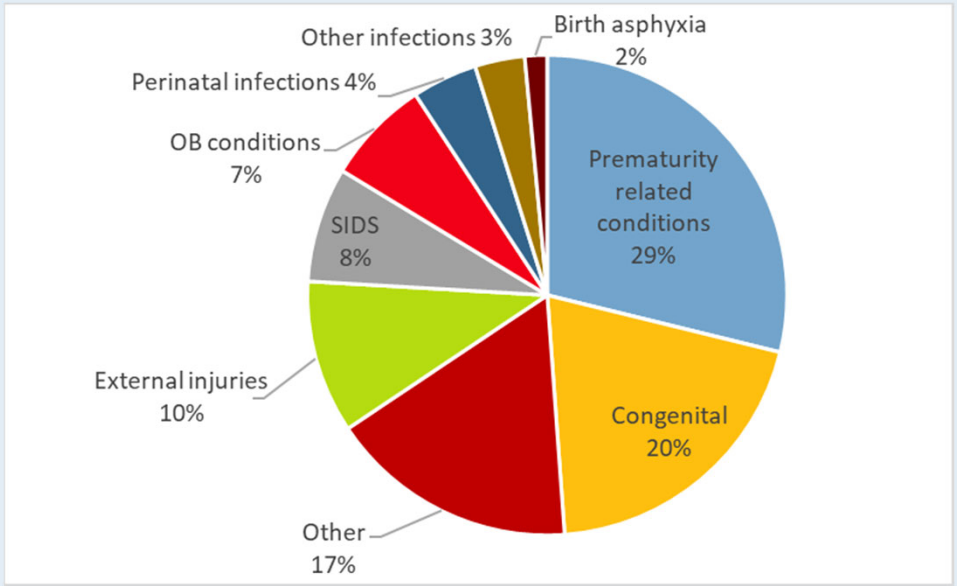


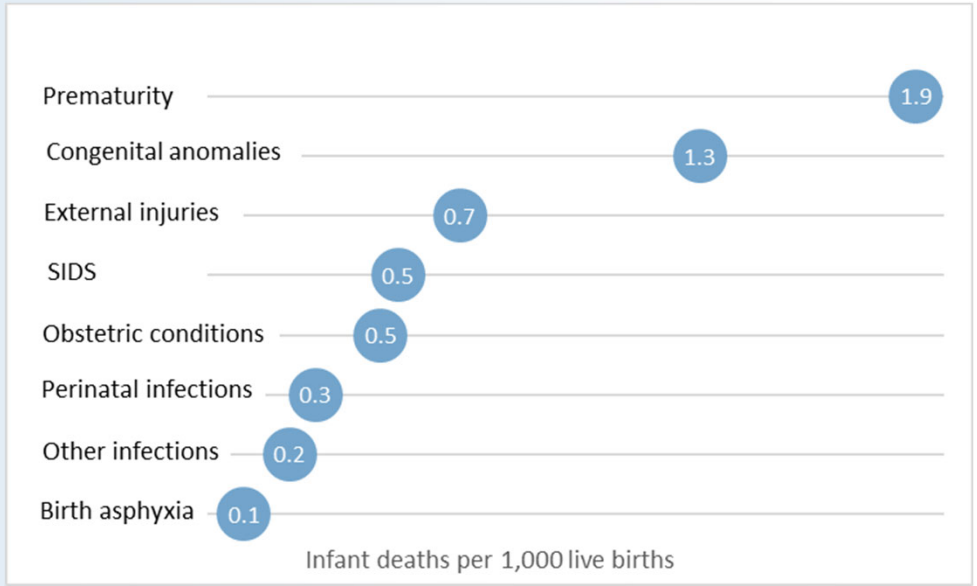
- Ohio's overall Infant Mortality Rate (IMR) was 6.7 per 1,000 live births in 2020.
- From 2011-2020, Ohio's IMR decreased an average of 1.4% per year.
- The White IMR was 5.1 in 2020.
- The Black IMR was 13.6 in 2020. The Black IMR consistently remains about 2.5 times greater than the White IMR.

Preterm Infants die at a much higher rate than infants born at term.

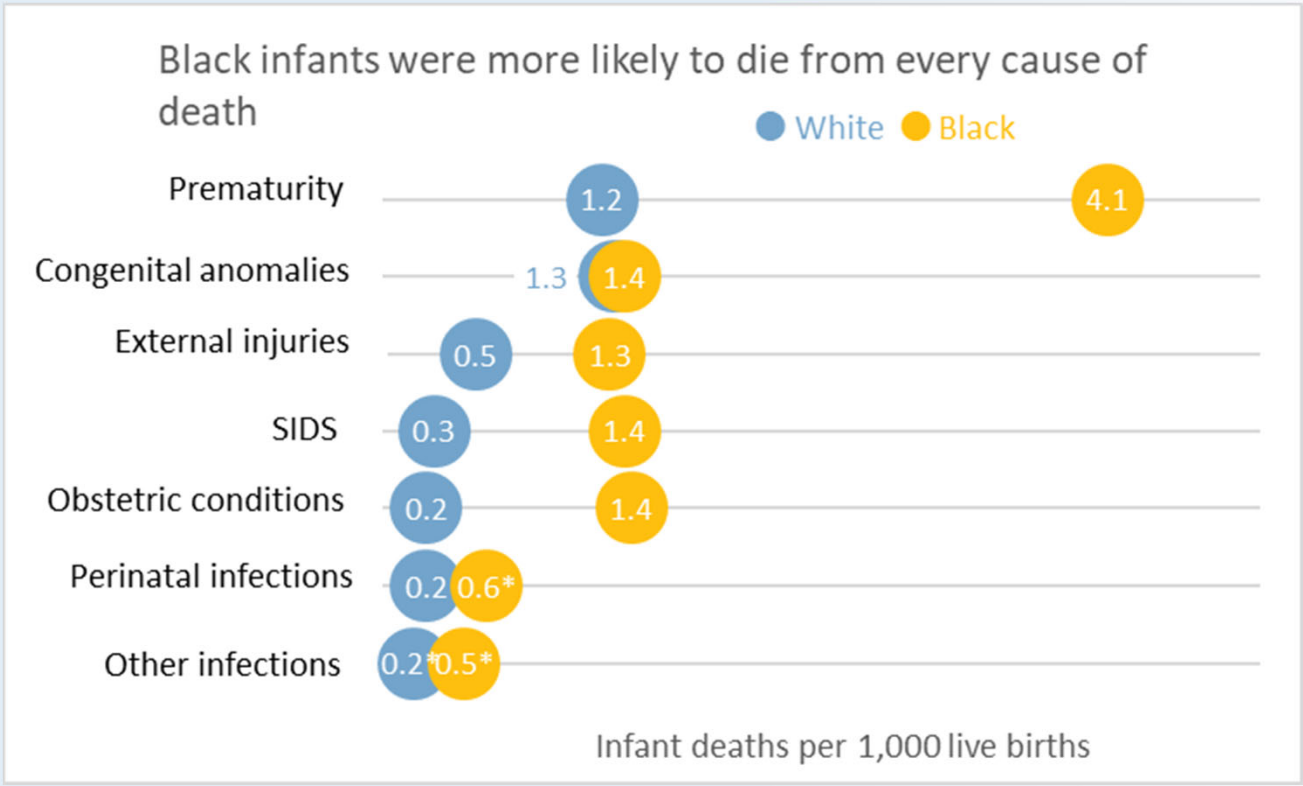


Prematurity related conditions are the leading cause of infant death.





Racial Disparity in Infant Mortality by Cause



Preliminary 2021 Infant Mortality Rates (IMR)

↑ **912** Ohio infants died before their first birthday in 2021
- 528 White infant deaths
- 332 Black infant deaths

↑ **7.0** Overall infant mortality rate
- 5.4 White infant mortality rate
- 14.2 Black infant mortality rate

↑ **4.7** Overall neonatal mortality rate (NMR)
- 3.8 White NMR
- 8.6 Black NMR

↑ **2.3** Overall post-neonatal mortality rate (PMR)
- 1.6 White PMR
- 5.5 Black PMR

↓ **2.6** Black/White Infant Mortality Ratio

Fetal Infant Mortality Review (FIMR) in Ohio

Ohio | Department of Health

FIMR History & Overview

- A multidisciplinary, multi-agency, community-based program.
- Goal: Identify local fetal and infant mortality issues.
  - Review fetal and infant deaths.
    - Fetal death –Death of a fetus at 20 wks. of gestation or more
    - Infant death – death at any time from live birth up to, but not including, one year of age (364 days, 23 hours, 59 minutes from the moment of birth).
  - Develop recommendations and initiatives to reduce infant deaths.

FIMR History & Overview

- Established in Ohio in 2014.
- Currently over 160 FIMR programs in 27 states, the District of Columbia, and two U.S. territories.
- Ohio's FIMR program is funded through the Ohio Equity Initiative.
- As of 2019, legislation became effective in Ohio regarding the work of FIMR teams.
  - Ohio Revised Code § 3707.71 allows any board of health to establish a FIMR review board.
  - Ohio Administrative Rules have been developed and are being reviewed for approval to guide FIMR teams on best practices surrounding FIMR.

Ohio FIMR Teams

▪ Butler County	▪ Hamilton County
▪ Canton City	▪ Lorain County
▪ Columbus City	▪ Lucas County
▪ Cuyahoga County	▪ Mahoning County
▪ Dayton-Montgomery County	▪ Summit County

FIMR and Infant Mortality

FIMR	Infant Mortality
▪ Focuses on why (causes of death)	▪ Focuses on what (data trends and comparisons)
▪ In-depth review of a **sample** of fetal and Infant deaths in the participating county	▪ Data collected from birth and death certificates
▪ Data collected is not representative of all the fetal and infant deaths in the state of Ohio.	▪ Data collected is inclusive of all infant deaths in the state of Ohio

Summary of FIMR Process

- Local programs.
  - Intent not to gather comprehensive data for state use.
- Selection of a subset of all cases (a sampling) based on the infant mortality issues of the community.
- Records collection from medical, social service, and other providers.
- Maternal interview.
- Records abstraction to produce a de-identified case summary.
- Present de-identified case summary to review team.
- Develop data-driven recommendations.
- Implement recommendations to prevent future deaths.

Key Components of FIMR

Case Review Team (CRT)

- Reviews case summaries.
- Develops recommendations.
- Members: Those who provide services for families and community advocates.

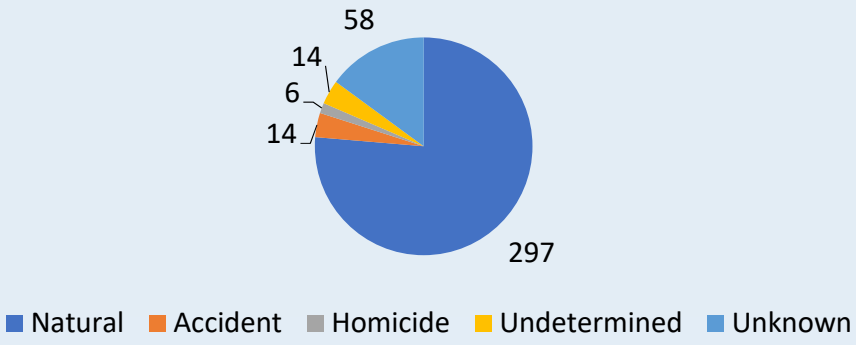
Community Action Team (CAT)

- Reviews recommendations presented by CRT.
- Develops a plan to implement interventions.
- Members: An existing community group (e.g., community advisory board, Healthy Mothers/Healthy Babies program).

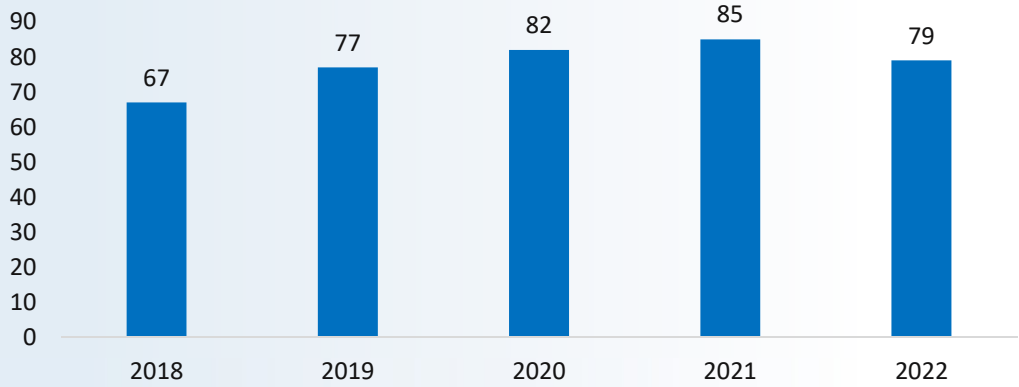
Summary of FIMR Case Data, 2018-2022

- Total number of cases reviewed = 390
  - Infants (n=210)
  - Fetuses (n=180)

Distribution of Causes of Deaths Among Cases Reviewed, 2018-2022



Number of Cases Reviewed per Year, 2018-2022



Natural – due solely or nearly totally to disease.
Accident – when an injury or poisoning causes death and there is little or no evidence that the injury or poisoning occurred with intent to harm or cause death. In essence, the fatal outcome was unintentional.
Homicide – when death results from a volitional act committed by another person to cause fear, harm, or death.
Undetermined – used when the information pointing to one manner of death is no more compelling that one of more other completing manners of death in thorough consideration of all available information.

Recommendations, 2018-2022

- Safe sleep practices.
- Birth spacing.
- Smoking cessation.
- Mother/caregiver mental health screenings.
- Home visits.
- Earlier prenatal care.

Questions?

Contact Information

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