

Infant Mortality

Montgomery County & Ohio, 2018

Infant mortality – or the death of a live-born baby before his/her first birthday – is a critical indicator of a community’s overall health and well-being. The **infant mortality rate (IMR)** is the number of infant deaths per 1,000 live births.

In 2018, forty-four (44) Montgomery County babies died before their first birthday; a decrease from 53 in 2017. As a result, the county’s IMR decreased from 7.8 deaths per 1,000 live births to 6.8. Additionally, Montgomery County’s Black IMR decreased from 16.9 deaths per 1,000 live births to 10.5, while the White IMR increased from 4.2 deaths per 1,000 live births to 5.5.

Infant Mortality by Race, Montgomery County, 2017 & 2018

	2017			2018			% Change IMR
	Births	Deaths*	IMR	Births	Deaths*	IMR	
Black	1,896	32	16.9	1,897	20	10.5	38%↓
White	4,337	18	4.2**	4,176	23	5.5	31%↑
Montgomery	6,754	53	7.8	6,470	44	6.8	13%↓

IMR – Infant Mortality Rate per 1,000 Live Births

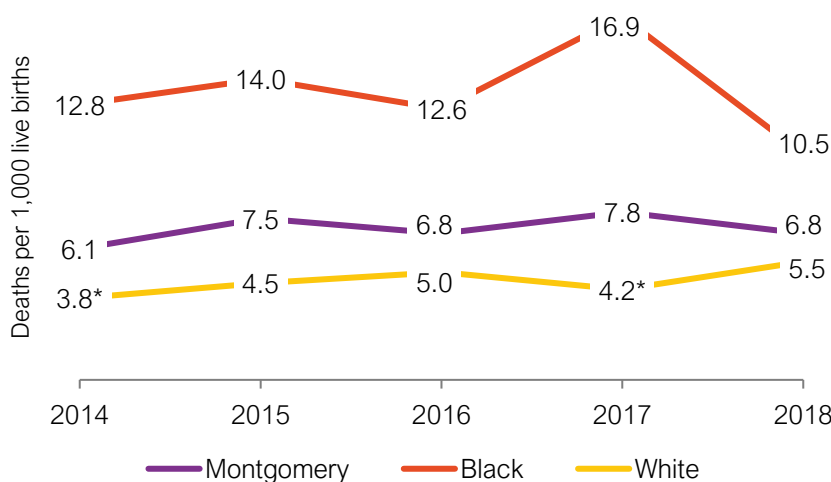
*Infant deaths categorized as “other” or “unknown” races are included in Montgomery County calculations only

**Rates based on fewer than 20 infant deaths should be interpreted with caution

Note: **Bold** IMRs meet the Healthy People 2020 goal of 6.0 deaths per 1,000 live births or fewer

Source: Ohio Department of Health, Bureau of Vital Statistics, Birth & Death Files (2017-2018)

Infant Mortality Rate by Race, Montgomery County, 2014-2018



*Rates based on fewer than 20 infant deaths should be interpreted with caution

Source: Ohio Department of Health, Bureau of Vital Statistics, Birth & Death Files (2014-2018)

All data collected and analyzed were derived from the Ohio Department of Health, Bureau of Vital Statistics Resident Birth and Death files. All Analyses, interpretations, and conclusions were developed by the Department of Epidemiology at Public Health - Dayton & Montgomery County. For more information: Epi@phdmc.org

Since 2014, the Black IMR **decreased** (by 11%), while the county IMR and White IMR **increased** (by 11% and 45% respectively).

In 2018, Black babies died at a rate nearly **two times higher** than White babies. Although the disparity persists, it **decreased** by 52% from 2017 to 2018 (4.1 to 1.9).

In 2018, both the county and the Black IMR were **higher** than the Healthy People 2020 goal of 6.0 deaths per 1,000 live births or fewer.



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Infant Mortality Task Force

Infant Deaths by Age and Race, Montgomery County, 2018

	Black	White	Montgomery*
Neonatal Death (0-27 days)	13	16	30
Post-neonatal Death (28-364 days)	7	7	14
Total	20	23	44

*Infant deaths categorized as "other" or "unknown" races are included in Montgomery County calculations only

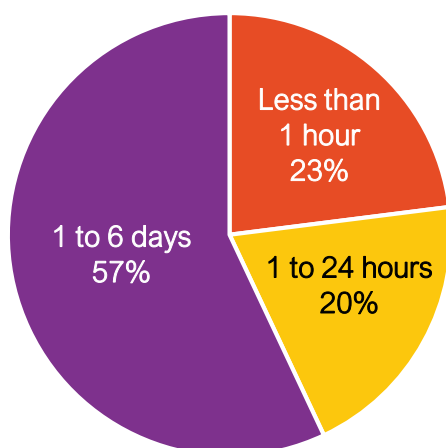
Source: Ohio Department of Health, Bureau of Vital Statistics, Death File (2018)

Of the 44 infant deaths, **30** (or **68%**) were **neonatal deaths** (between 0-27 days of age).

Neonatal deaths were **more likely** to occur among White babies (70%) compared to Black babies (65%).

Post-neonatal deaths were **more likely** to occur among Black babies (35%) compared to White babies (30%).

Neonatal Deaths by Age Type, Montgomery County, 2018



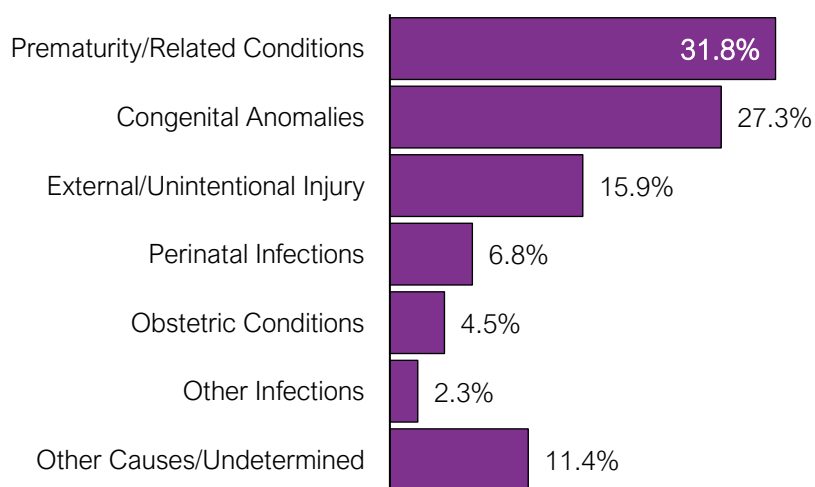
Source: Ohio Department of Health, Bureau of Vital Statistics, Death File (2018)

Among all neonatal deaths, most babies (**57%**) died between 1 and 6 days.

Among Black neonatal deaths, most babies (**54%**) died between 1 and 24 hours (data not shown).

Among White neonatal deaths, most babies (**63%**) died between 1 and 6 days (data not shown).

Infant Cause of Death, Montgomery County, 2018



Source: Ohio Department of Health, Bureau of Vital Statistics, Death Files (2018)

In 2018, nearly two thirds (**32%**) of all Montgomery County infant deaths were due to babies being born too early (gestation <37wks.) or too small (<2,500g or 5.5lbs).

Congenital anomalies (or birth defects) accounted for **27%** of all infant deaths and external or unintentional injuries accounted for **16%** of all infant deaths.

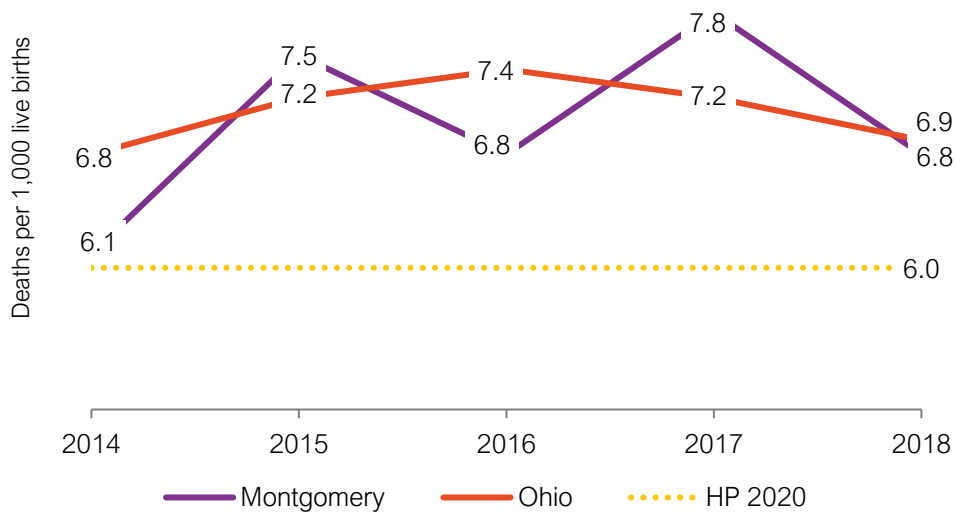
Note: Underlying causes of death by race can be found in the Montgomery County Infant Cause of Death Report.

Infant Mortality Rate per 1,000 Live Births by Race, Montgomery County and Ohio, 2018

	Montgomery	Ohio
Black	10.5	13.9
White	5.5	5.4
All Races	6.8	6.9

Source: Ohio Public Health Data Warehouse, Ohio Resident Birth and Mortality Data (2018)

Infant Mortality by Race, Montgomery County and Ohio, 2014-2018



HP 2020 – Healthy People 2020

Source: Ohio Public Health Data Warehouse, Ohio Resident Birth and Mortality Data (2018)

In 2018, Montgomery County's White IMR (5.5) was slightly **higher** than the state rate (5.4). The overall IMR (6.8) and Black IMR (10.5) were **lower** than the state rates (6.9 and 13.9 respectively).

Both Montgomery County's overall (6.8) and Black (10.5) IMRs remain **higher** than the Healthy People 2020 goal of 6.0 deaths per 1,000 live births or fewer.

Ohio Equity Institute

Historically, Ohio ranks near the bottom in Black infant deaths and overall infant mortality nationwide. Additionally, Ohio Black babies die at a disproportionately higher rate than White babies. The state recognized this as unacceptable and established the Ohio Equity Institute (OEI) in 2012. OEI is a collaboration between the Ohio Department of Health (ODH) and nine Ohio counties to address racial disparities in birth outcomes. The nine counties account for nearly all Ohio Black infant deaths. In 2018, Ohio Black infants died at a rate **two and half times** higher than White infants. Among all Black infant deaths, **88%** occurred within the nine OEI counties.

Infant Mortality Rate Ranking OEI Counties and Ohio, 2018

Rank	County	IMR*
1	Stark	6.4
2	Montgomery	6.8
3	Mahoning	6.8**
4	Ohio	6.9
5	Summit	7.1
6	Lucas	7.4
7	Franklin	7.6
8	Butler	8.4
9	Cuyahoga	8.6
10	Hamilton	8.7

*IMR: Number of infant deaths per 1,000 live births
 **Rates based on fewer than 20 infant deaths should be interpreted with caution.
 Source: Ohio Public Health Data Warehouse, Ohio Resident Birth and Mortality Data (2018)

Black Infant Mortality Rate Ranking OEI Counties and Ohio, 2018

Rank	County	IMR*
1	Stark	5.8**
2	Montgomery	10.5
3	Franklin	12.4
4	Lucas	13.7
5	Ohio	13.9
6	Summit	14.4
7	Mahoning	14.7**
8	Cuyahoga	15.6
9	Hamilton	16.2
10	Butler	23.7**

*IMR: Number of infant deaths per 1,000 live births
 **Rates based on fewer than 20 infant deaths should be interpreted with caution.
 Source: Ohio Public Health Data Warehouse, Ohio Resident Birth and Mortality Data (2018)

White Infant Mortality Rate Ranking OEI Counties and Ohio, 2018

Rank	County	IMR*
1	Mahoning	1.9**
2	Cuyahoga	4.6
3	Hamilton	4.6
4	Lucas	4.7
5	Summit	5.2
6	Franklin	5.3
7	Ohio	5.4
8	Montgomery	5.5
9	Butler	6.4
10	Stark	6.7

*IMR: Number of infant deaths per 1,000 live births
 **Rates based on fewer than 20 infant deaths should be interpreted with caution.
 Source: Ohio Public Health Data Warehouse, Ohio Resident Birth and Mortality Data (2018)

Infant Mortality Racial Disparity Ranking OEI Counties and Ohio, 2018

Rank	County	IM Ratio*
1	Stark	0.9
2	Montgomery	1.9
3	Franklin	2.3
4	Ohio	2.6
5	Summit	2.8
6	Lucas	2.9
7	Cuyahoga	3.4
8	Hamilton	3.6
9	Butler	3.7
10	Mahoning	7.8**

*IM Ratio: Black infant mortality rate to White infant mortality rate
 **Rates based on fewer than 20 infant deaths should be interpreted with caution.
 Source: Ohio Public Health Data Warehouse, Ohio Resident Birth and Mortality Data (2018)

In 2018, Montgomery County's overall IMR (6.8 deaths per 1,000 live births) ranked **second lowest** among all OEI counties and Ohio. Additionally, Montgomery County had the:

- Second **lowest** Black IMR at 10.5 deaths per 1,000 live births;
- Third **highest** White IMR at 5.5 deaths per 1,000 live births; and
- Second **lowest** infant mortality racial disparity (1.9).