INFANT HEALTH DATA SNAPSHOT

LOW BIRTH WEIGHT, PRE-TERM BIRTH, AND INFANT MORTALITY, DANE COUNTY, 2010-2023

Updated February 2024



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A note on statistical significance

Throughout this snapshot, we use the terms "significant" and "statistically significant" interchangeably to emphasize important trends. Statistical significance testing is one way we look at data. Testing for statistical significance is standard practice in assessing whether the data show a pattern that we wouldn't expect by chance alone. Statistical significance is influenced by both sample size (the amount of data we have) and effect size (the size of the difference we're interested in). Sometimes we see patterns in data that may be important even if they don't reach the level of statistical significance.

For example, low birth weight among non-Hispanic Asian and Pacific Islander babies was 6.4% during 2010-2012 and 8.0% during 2018-2020. This increase over time means more Asian and Pacific Islander babies were born with low birth weight regardless of the statistics. In a second example, mortality among Black and African American babies was 13.8 deaths per 1,000 live births in 2013-2015 and 12.9 deaths per 1,000 live births in 2021-2023. The mortality rate for Black babies did not change significantly over this time period, instead remaining persistently high, especially compared to Dane County babies overall and the <u>Healthy People 2030 national goal of 5.0 infant deaths or less per 1,000 live births</u>. Statistical significance alone (or lack thereof) cannot tell us what is meaningful or important for a community.



LOW BIRTH WEIGHT

Low birth weight (LBW) is when a baby is born weighing less than 2,500 grams (5 pounds, 8 ounces). There were more than 1,200 LBW babies among more than 16,000 births in Dane County from 2021-2023. Table 1 shows the 3-year rates for each subgroup and Dane County overall. The figures on pages 3-7 show 3-year trends in LBW by race and ethnicity in Dane County. From 2010 to 2023, the percentage of LBW babies increased significantly for non-Hispanic Black and Hispanic/Latino babies. During this time frame, the percentage of all LBW babies born in Dane County increased significantly as well.

Years	Dane County	AI/AN	NH Asian	NH Black	Hispanic	NH White
	Percent	Percent	Percent	Percent	Percent	Percent
	(%)	(%)	(%)	(%)	(%)	(%)
2010-12	6.7	4.6	6.4	12.9	5.1	6.3
2011-13	6.8	8.6	6.6	12.0	6.2	6.2
2012-14	6.7	9.7	6.7	11.1	6.8	6.1
2013-15	6.9	9.9	7.8	12.4	7.4	6.0
2014-16	7.0	5.5	8.0	12.5	6.4	6.3
2015-17	7.1	3.7	8.5	12.9	6.8	6.2
2016-18	6.9	5.8	8.3	12.0	7.2	6.1
2017-19	7.0	5.4	8.0	13.1	7.7	6.1
2018-20	7.2	5.7	8.0	13.9	7.2	6.2
2019-21	7.1	4.5	7.3	14.3	6.8	6.2
2020-22	7.1	5.3	6.5	14.5	6.9	6.2
2021-23	7.2	7.3	6.1	14.7	7.6	6.4

*2023 data are provisional. Estimates for 2021-2023 may change when 2023 data are finalized.

AI/AN=American Indian/Alaska Native, NH=Non-Hispanic.

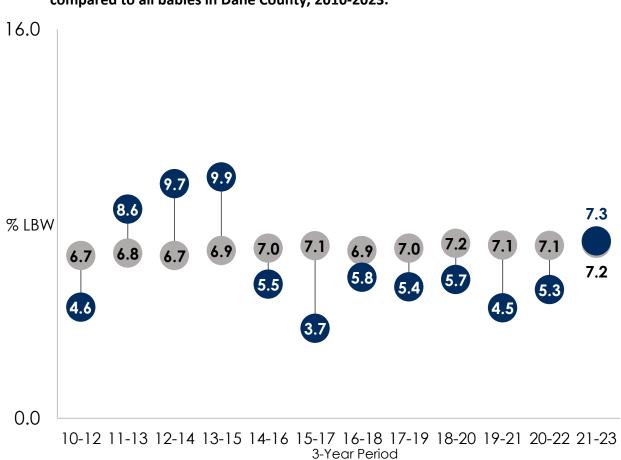
Prior to 2011, only one race and one ethnicity could be reported for each birthing person. Al/AN is not a mutually-exclusive category and includes persons identified as Al/AN alone or in combination with any other reported race/ethnicity per the <u>Urban</u> <u>Indian Health Institute's Best Practices for American Indian and Alaska Native Data Collection</u>. Al/AN 3-year rates meet Public Health Madison & Dane County's guidelines for releasing aggregate population data, but are more unstable due to smaller underlying population sizes.

CLICK THE LINKS BELOW TO JUMP TO:

- American Indian and Alaskan Native low birthweight
- Asian and Pacific Islander low birthweight
- Black low birthweight
- Hispanic low birthweight
- White low birthweight



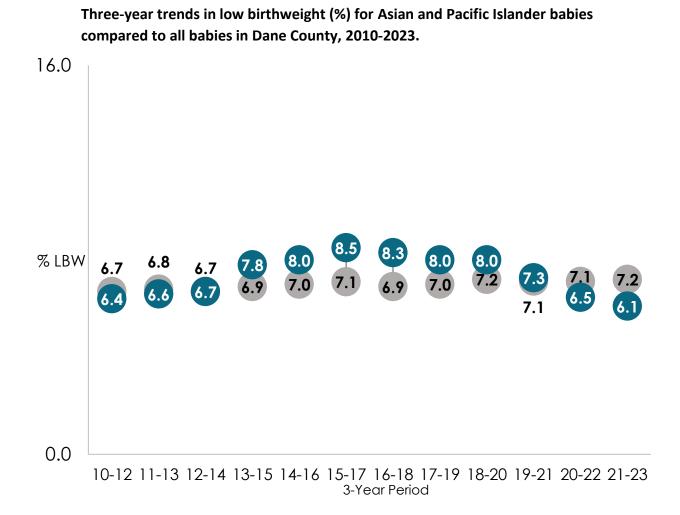
American Indian and Alaska Native babies have similar rates of low birth weight to Dane County babies overall.



Three-year trends in low birthweight (%) for American Indian and Alaska Native babies compared to all babies in Dane County, 2010-2023.

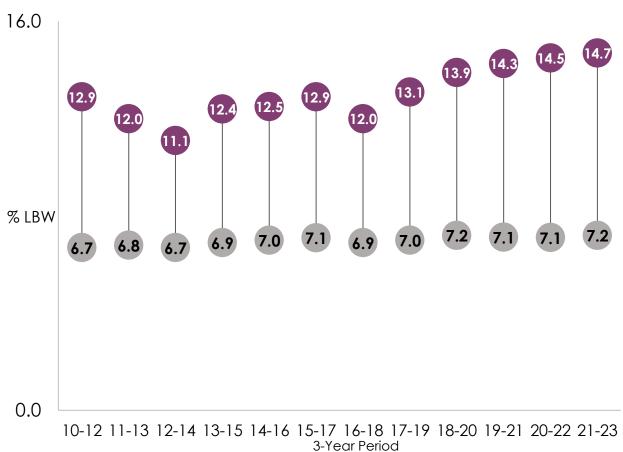


publichealthmdc.com Page **4** of **20** Asian and Pacific Islander babies have similar rates of low birth weight to Dane County babies overall.





Black and African-American babies have higher rates of low birth weight compared to **Dane County babies overall**.

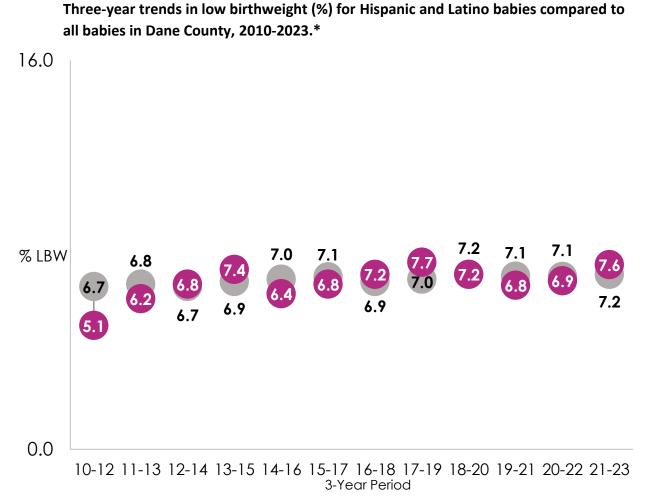


Three-year trends in low birthweight (%) for Black and African-American babies compared to all babies in Dane County, 2010-2023.*

*From 2010 to 2023, the increase in the percentage of Black and African-American babies born with LBW increased significantly.



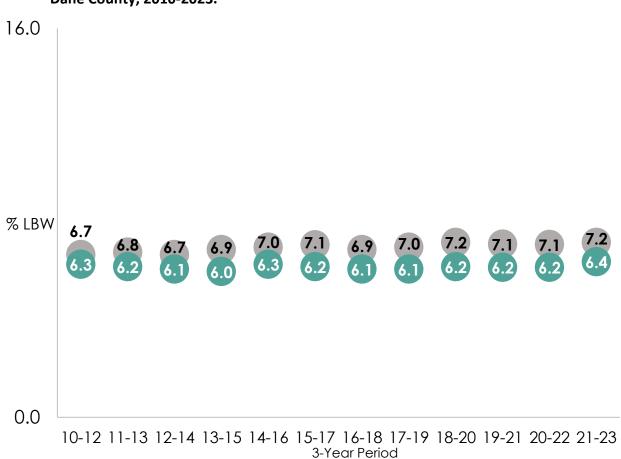
publichealthmdc.com Page **6** of **20** Hispanic and Latino babies have similar rates of low birth weight to Dane County babies overall.



*From 2010 to 2023, the increase in the percentage of Hispanic/Latino babies born with LBW increased significantly.



publichealthmdc.com Page **7** of **20** White babies have similar rates of low birth weight to Dane County babies overall.



Three-year trends in low birthweight (%) for white babies compared to all babies in Dane County, 2010-2023.



PRETERM BIRTH

Preterm birth (PTB) is when a baby is born before the 37th week of pregnancy. There were nearly 1,500 preterm babies among more than 16,000 births in Dane County from 2021-2023. Table 2 shows the 3-year rates for each subgroup and Dane County overall. The figures on pages 9-13 show trends in preterm birth rates by race and ethnicity. From 2010 to 2023, the percentage of preterm babies increased significantly for Hispanic/Latino and non-Hispanic white babies. During this time frame, the percentage of all preterm babies in Dane County increased significantly as well.

Years	Dane County	AI/AN	NH Asian	Black	Hispanic	NH White
	Percent	Percent	Percent	Percent	Percent	Percent
	(%)	(%)	(%)	(%)	(%)	(%)
2010-12	8.0	7.8	6.0	12.3	7.1	7.9
2011-13	8.3	10.6	6.3	10.7	8.3	8.2
2012-14	8.3	7.6	6.3	10.2	8.4	8.4
2013-15	8.6	9.9	7.7	11.3	9.0	8.4
2014-16	8.9	8.6	7.8	11.7	8.7	8.7
2015-17	9.0	9.9	9.0	12.1	9.2	8.6
2016-18	8.9	11.0	8.3	12.2	9.3	8.5
2017-19	9.0	11.5	8.4	13.1	10.0	8.4
2018-20	9.0	10.7	7.8	14.2	10.0	8.3
2019-21	8.7	10.6	7.2	13.2	9.1	8.3
2020-22	8.8	9.7	6.3	13.4	9.5	8.4
2021-23	8.8	11.4	5.8	12.9	9.4	8.6

*2023 data are provisional. Estimates for 2021-2023 may change when 2023 data are finalized.

AI/AN=American Indian/Alaska Native, NH=Non-Hispanic.

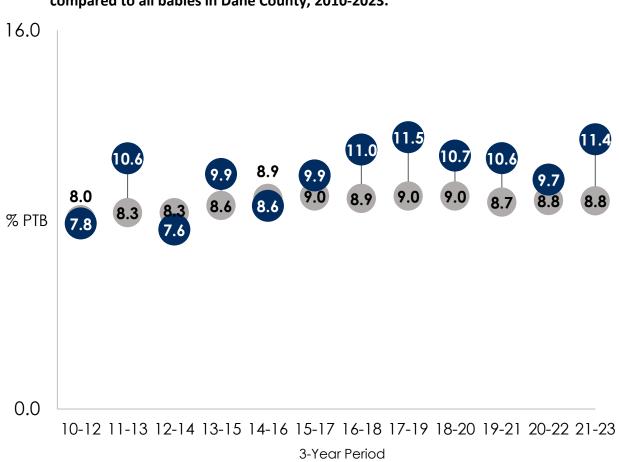
Prior to 2011, only one race and one ethnicity could be reported for each birthing person. AI/AN is not a mutually-exclusive category and includes persons identified as AI/AN alone or in combination with any other reported race/ethnicity per the <u>Urban</u> <u>Indian Health Institute's Best Practices for American Indian and Alaska Native Data Collection</u>. AI/AN 3-year rates meet Public Health Madison & Dane County's guidelines for releasing aggregate population data, but are more unstable due to smaller underlying population sizes.

CLICK THE LINKS BELOW TO JUMP TO:

- American Indian and Alaskan Native preterm birth
- <u>Asian and Pacific Islander preterm birth</u>
- Black preterm birth
- <u>Hispanic preterm birth</u>
- White preterm birth



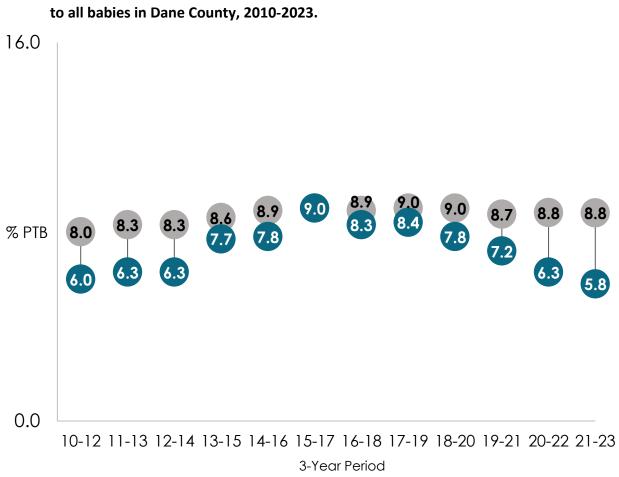
American Indian and Alaska Native babies have similar rates of preterm birth to Dane County babies overall.

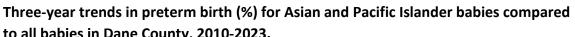


Three-year trends in preterm birth (%) for American Indian and Alaska Native babies compared to all babies in Dane County, 2010-2023.



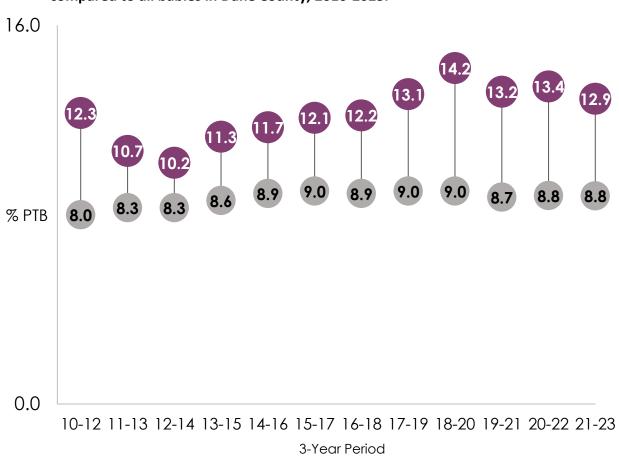
publichealthmdc.com Page **10** of **20** Asian and Pacific Islander babies have lower rates of preterm birth compared to Dane County babies overall.

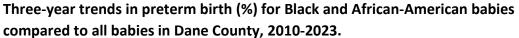






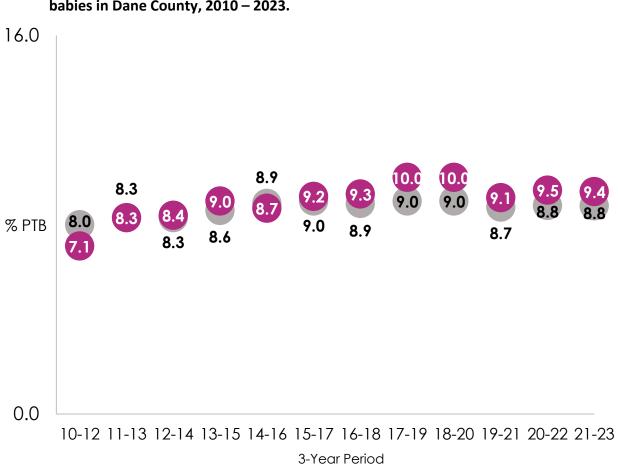
Black and African-American babies have higher rates of preterm birth compared to **Dane County babies overall**.







Hispanic and Latino babies have similar rates of preterm birth compared to Dane County babies overall.

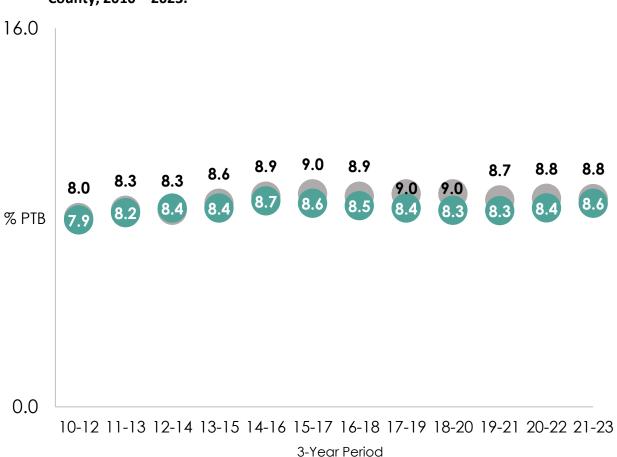


Three-year trends in preterm birth (%) for Hispanic and Latino babies compared to all babies in Dane County, 2010 – 2023.

*From 2010 to 2023, the increase in the percentage of Hispanic/Latino babies born preterm increased significantly.



publichealthmdc.com Page **13** of **20** White babies have similar rates of preterm birth to Dane County babies overall.



Three-year trends in preterm birth (%) for white babies compared to all babies in Dane County, 2010 – 2023.

*From 2010-2023, the increase in the percentage of white babies born preterm increased significantly.



INFANT MORTALITY

Infant mortality is when a baby dies before their first birthday. From 2021-2023, more than 70 babies died before their first birthday. Table 3 shows the 3-year rates for each subgroup and Dane County overall. The figures on pages 15-19 show trends in infant mortality by race and ethnicity. The increase in infant mortality among Hispanic/Latino babies from 2010 to 2023 is statistically significant.

	Dane County	AI/AN	NH Asian	Black	Hispanic	NH White
Years	Deaths per	Deaths	Deaths	Deaths	Deaths	Deaths
Tears	1,000 live	per 1,000				
	births	live births	live births	live births	live births	live births
10-12	5.1	13.1	3.6	13.2	2.3	4.7
11-13	5.4	13.2	2.9	13.8	2.4	4.8
12-14	4.4	6.9	3.4	8.8	4.4	3.7
13-15	5.2	13.2	3.3	13.8	6.2	3.8
14-16	5.4	12.3	3.2	13.0	6.6	4.3
15-17	5.6	12.3	5.2	12.3	5.0	4.3
16-18	5.6	12.9	4.6	10.6	7.7	4.6
17-19	4.7	13.5	3.4	10.0	8.5	3.3
18-20	5.1	14.3	1.4	10.6	11.2	3.9
19-21	4.3	7.6	3.7	9.3	7.8	3.0
20-22	4.7	8.8	5.7	8.6	9.2	3.6
21-23	4.9	16.3	5.0	12.9	8.0	3.2

Table 3 – Infant mortality by race and ethnicity, Dane County, 2010-2023.*

*2023 data are provisional. Estimates for 2021-2023 may change when 2023 data are finalized.

AI/AN=American Indian/Alaska Native, NH=Non-Hispanic.

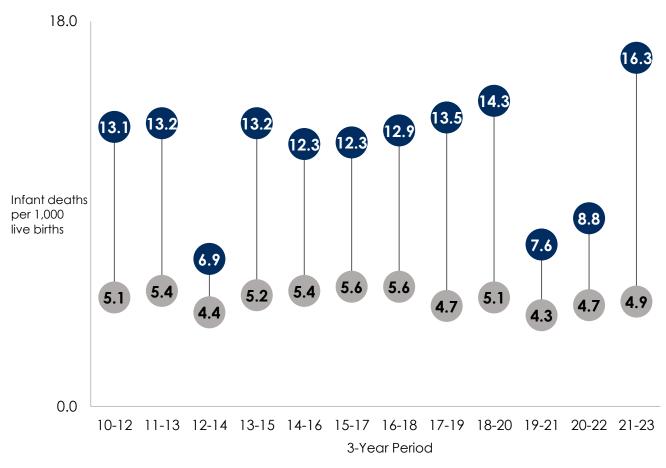
Prior to 2011, only one race and one ethnicity could be reported for each birthing person. Al/AN is not a mutually-exclusive category and includes persons identified as Al/AN alone or in combination with any other reported race/ethnicity per the <u>Urban</u> <u>Indian Health Institute's Best Practices for American Indian and Alaska Native Data Collection</u>. Al/AN 3-year rates meet Public Health Madison & Dane County's guidelines for releasing aggregate population data, but are more unstable due to smaller underlying population sizes.

CLICK THE LINKS BELOW TO JUMP TO:

- American Indian and Alaskan Native infant mortality
- <u>Asian and Pacific Islander infant mortality</u>
- Black infant mortality
- Hispanic infant mortality
- White infant mortality



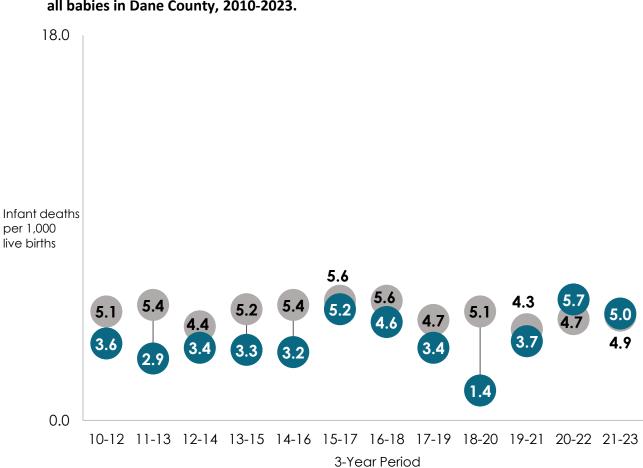
American Indian and Alaska Native babies experience higher mortality compared to Dane County babies overall.



Three-year trends in infant mortality for American Indian and Alaska Native babies compared to all babies in Dane County, 2010 – 2023.



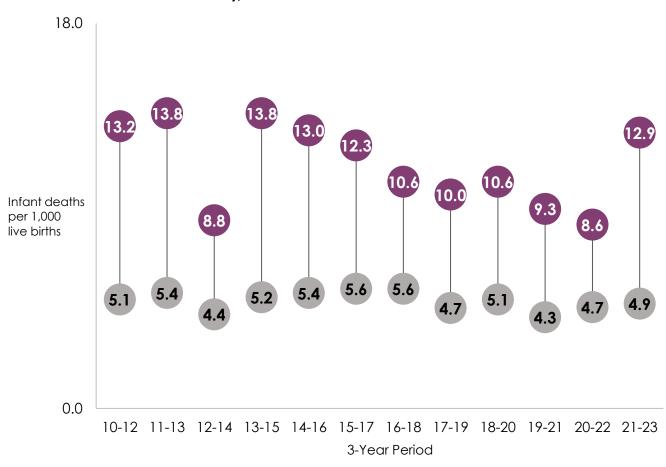
publichealthmdc.com Page **16** of **20** Asian and Pacific Islander babies experience a similar level of mortality compared to Dane County babies overall.







Black and African-American babies experience higher mortality compared to Dane County babies overall.



Three-year trends in infant mortality for Black and African-American babies compared to all babies in Dane County, 2010-2023.



Hispanic and Latino babies experience higher mortality compared to Dane County babies overall.

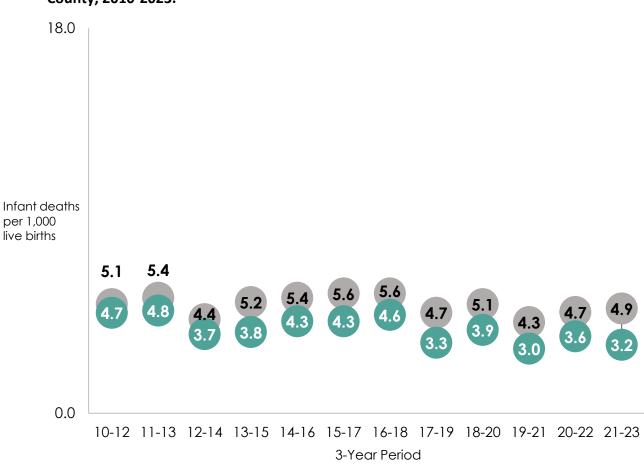


Three-year trends in infant mortality for Hispanic and Latino babies compared to all babies in Dane County, 2010-2023.*

*The increase in infant mortality among Hispanic/Latino babies from 2010 to 2023 is statistically significant.



White babies experience similar mortality to Dane County babies overall.



Three-year trends in infant mortality for white babies compared to all babies in Dane County, 2010-2023.

