



Indiana
Department
of
Health

INDIANA LINKED BIRTH AND DEATH DATA, 2017-2021

FAMILY HEALTH DATA AND FATALITY
PREVENTION DIVISION

September 2024

OUR MISSION:

**To promote, protect, and improve
the health and safety of all Hoosiers.**

OUR VISION:

**Every Hoosier reaches optimal health
regardless of where they live, learn,
work, or play.**



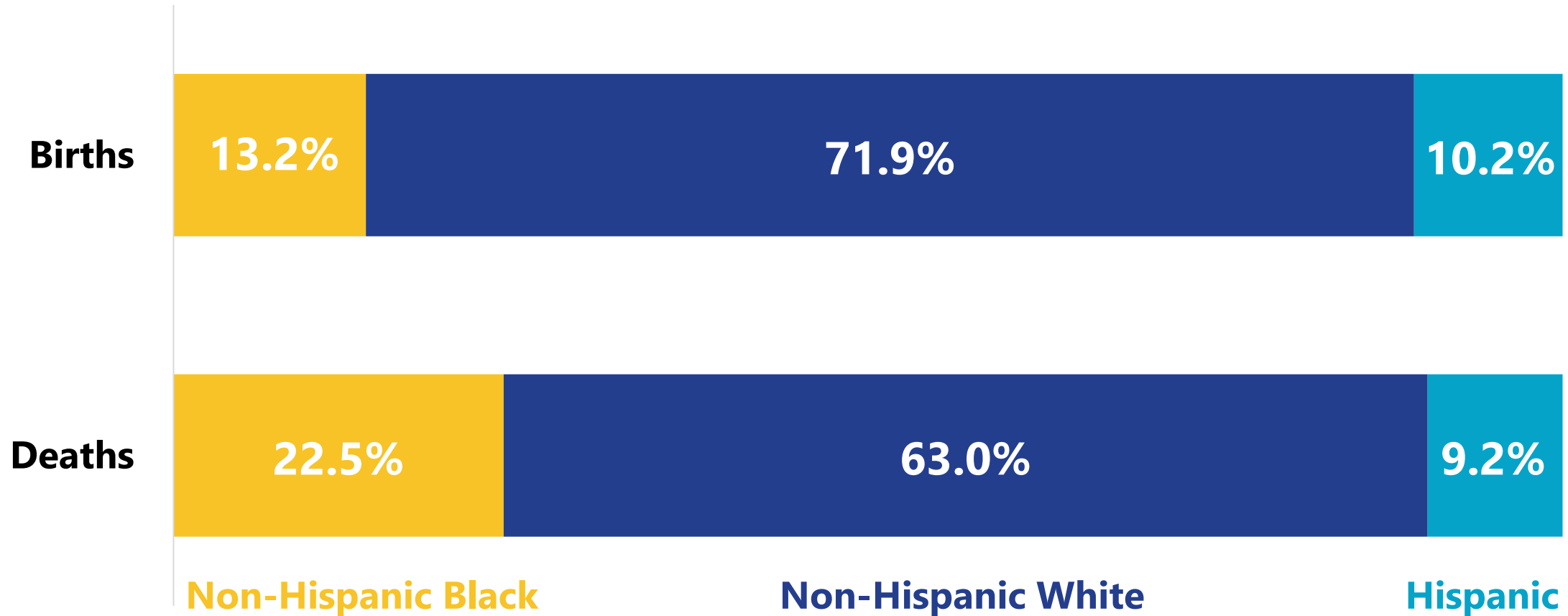
Data Description

- Based on Indiana births that were linked to Indiana infant death records
- 2017-2021 describes the infant birth year
- The infant death year spans 2017-2022
- Gives us the ability to analyze the relationships between risk factors and infant mortality rather than the two pieces independently
- The data points in this presentation should not be compared to other materials and statistics based on only birth or death records

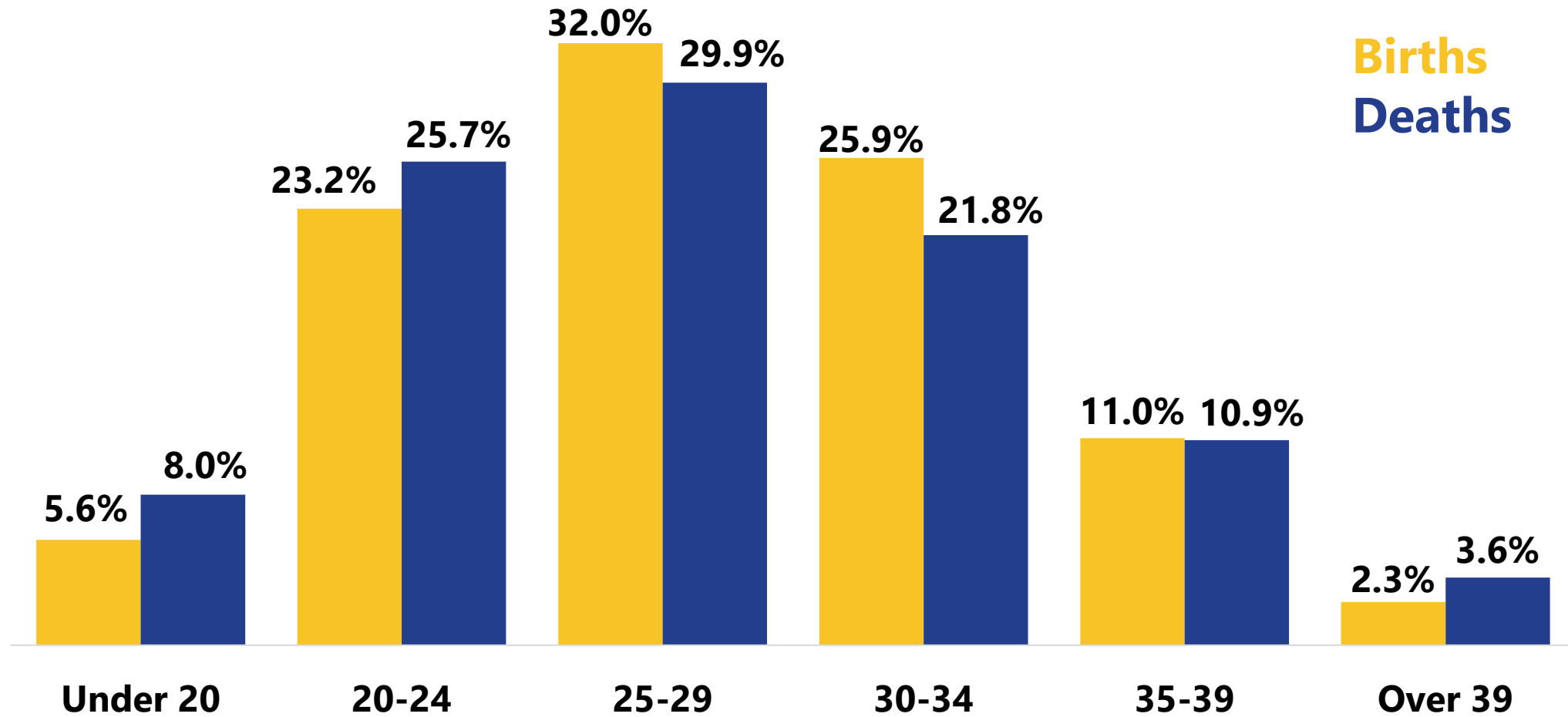
Limitations

- Not all Indiana infant death records were linked with a birth record
 - This means that the infant mortality rates provided based on this analysis might be an underestimate of the true rates for Indiana
- 2,604 records were matched ~ 94.8%
- Matching varies by cause of death, all causes matched between 90% and 97%
- Race and ethnicity may differ on birth and death records. We use data from the birth certificate to match the CDC's method
 - This means that race/ethnicity infant mortality rates may differ when compared to annual reports

Indiana Linked Births and Infant Deaths by Race and Ethnicity



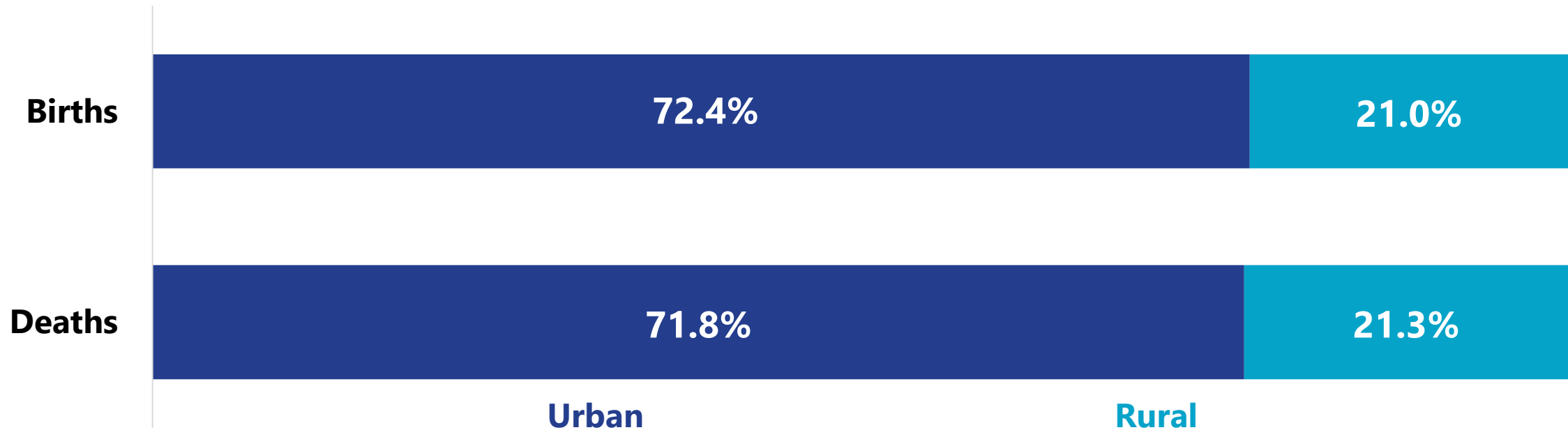
Indiana Linked Births and Infant Deaths by Age of Mom



Comparisons should not be made to unlinked data sources.

Source: Indiana State Department of Health, Family Health Data and Fatality Prevention Division [September 2024]
Indiana Original Source: Indiana Department of Health, Vital Records, ODA

Indiana Linked Data by Rural/Urban



Service availability is designated at the county-level.



Birth Outcome Indicators



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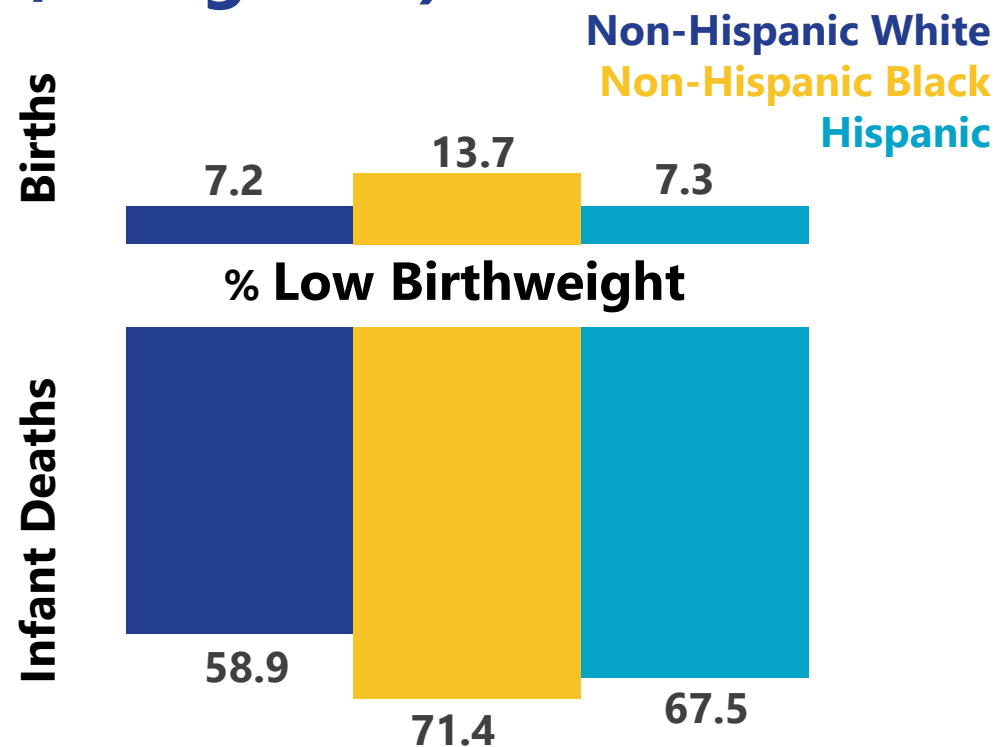
Low Birthweight

62.6%

of infants who died had a **low birthweight (< 2,500 grams)**

Over 5%

of low birthweight births resulted in an infant death



Comparisons should not be made to unlinked data sources.

Source: Indiana State Department of Health, Family Health Data and Fatality Prevention Division [September 2024]

Indiana Original Source: Indiana Department of Health, Vital Records, ODA

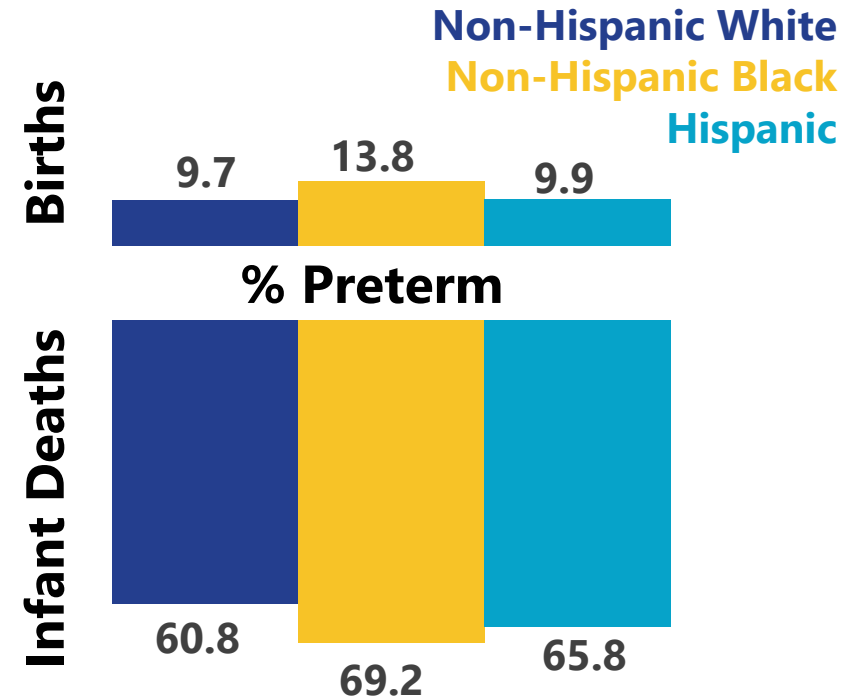
Preterm

63.3%

of infants who died were born preterm (< 37 weeks gestation)

Over 4%

of preterm births resulted in an infant death



Comparisons should not be made to unlinked data sources.

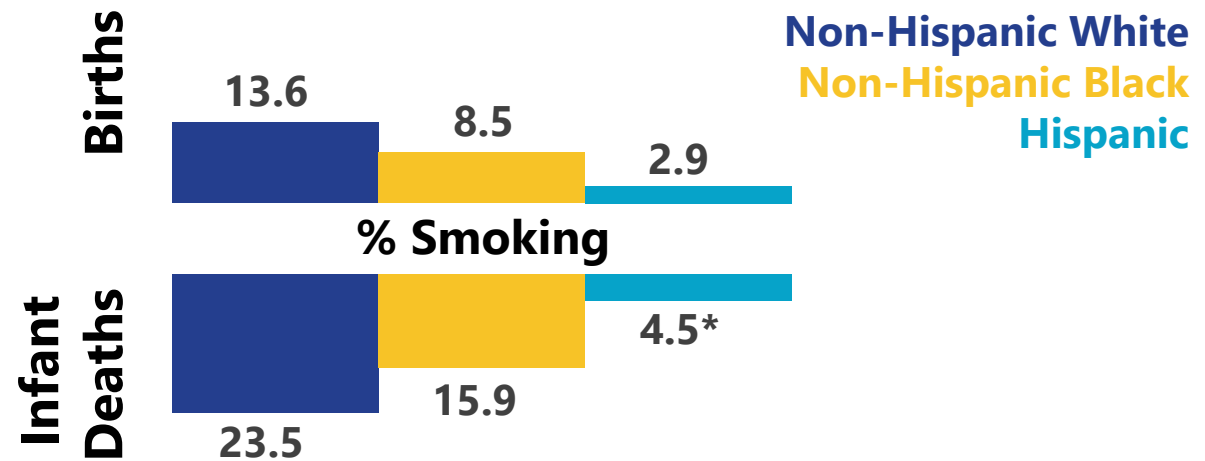
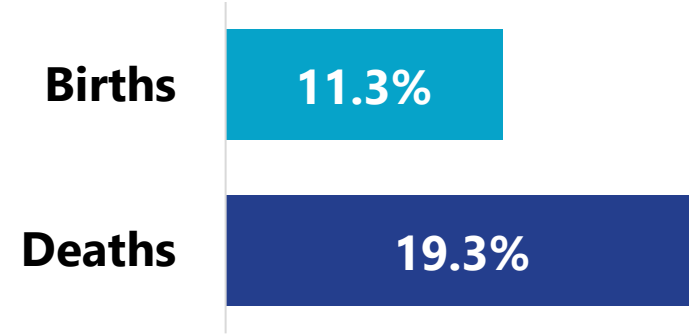
Source: Indiana State Department of Health, Family Health Data and Fatality Prevention Division [September 2024]

Indiana Original Source: Indiana Department of Health, Vital Records, ODA

Smoking During Pregnancy

19.3%

of the infants who died were born to a mom who reported smoking during pregnancy



* Percentages based on counts less than 20 are unstable and should be interpreted with caution.

Comparisons should not be made to unlinked data sources.

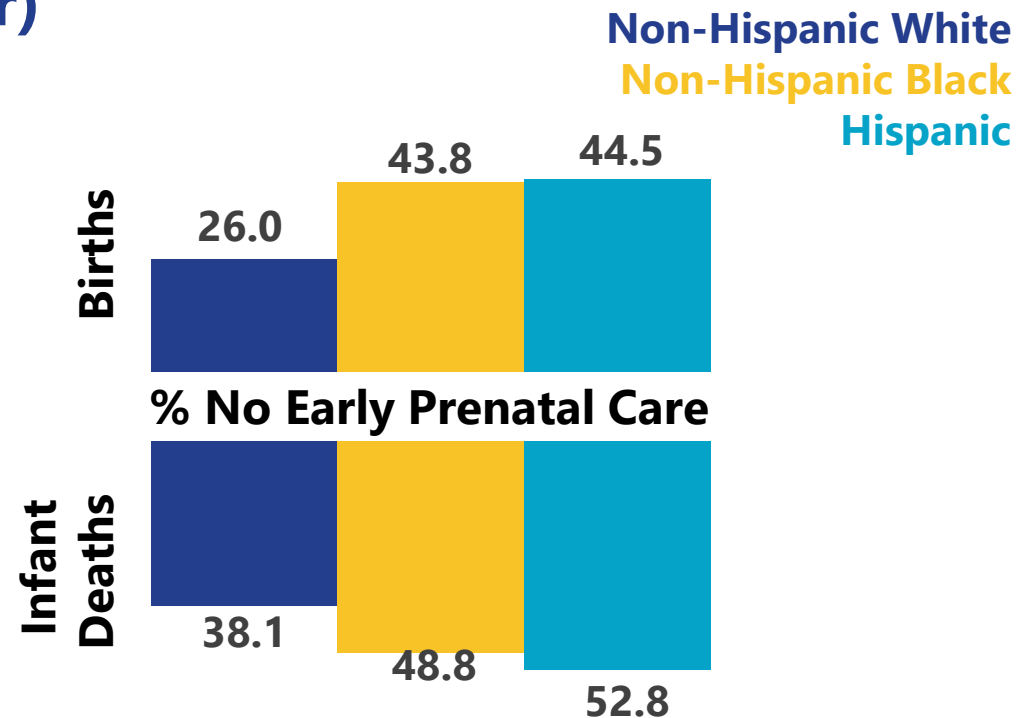
Source: Indiana State Department of Health, Family Health Data and Fatality Prevention Division [September 2024]

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Early Prenatal Care

2 out of every 5

infants who died received no early prenatal care (1st trimester)



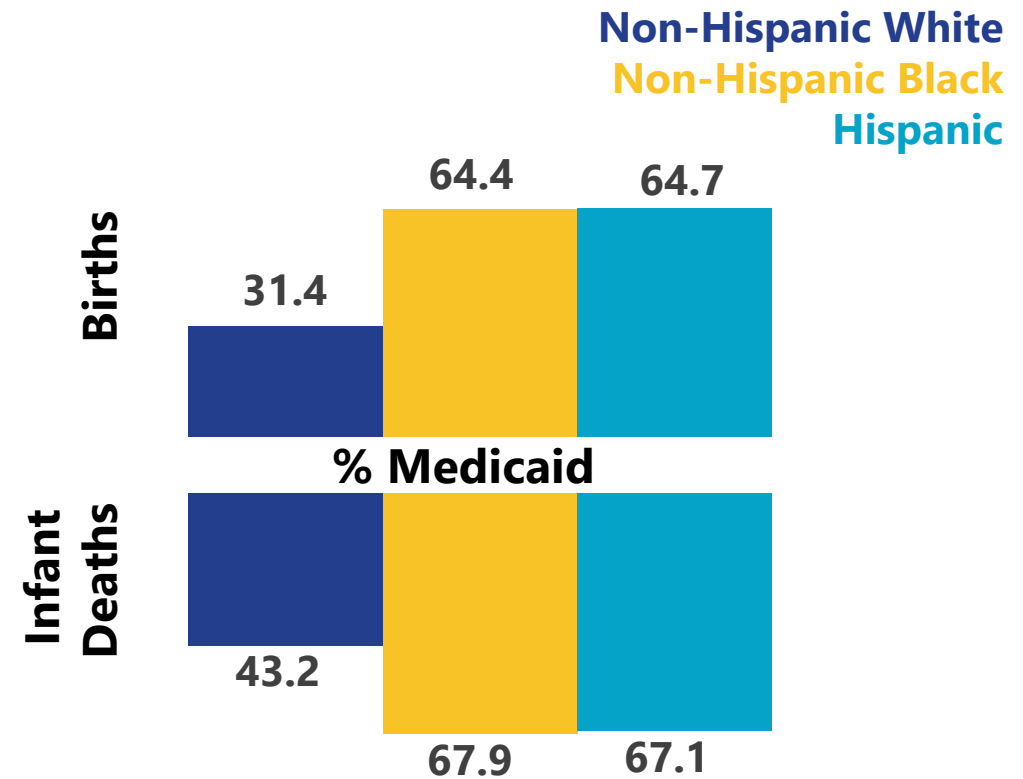
Comparisons should not be made to unlinked data sources.

Source: Indiana State Department of Health, Family Health Data and Fatality Prevention Division [September 2024]

Indiana Original Source: Indiana Department of Health, Vital Records, ODA

Medicaid

51.1% of infants who died were born to a mother on Medicaid



Comparisons should not be made to unlinked data sources.

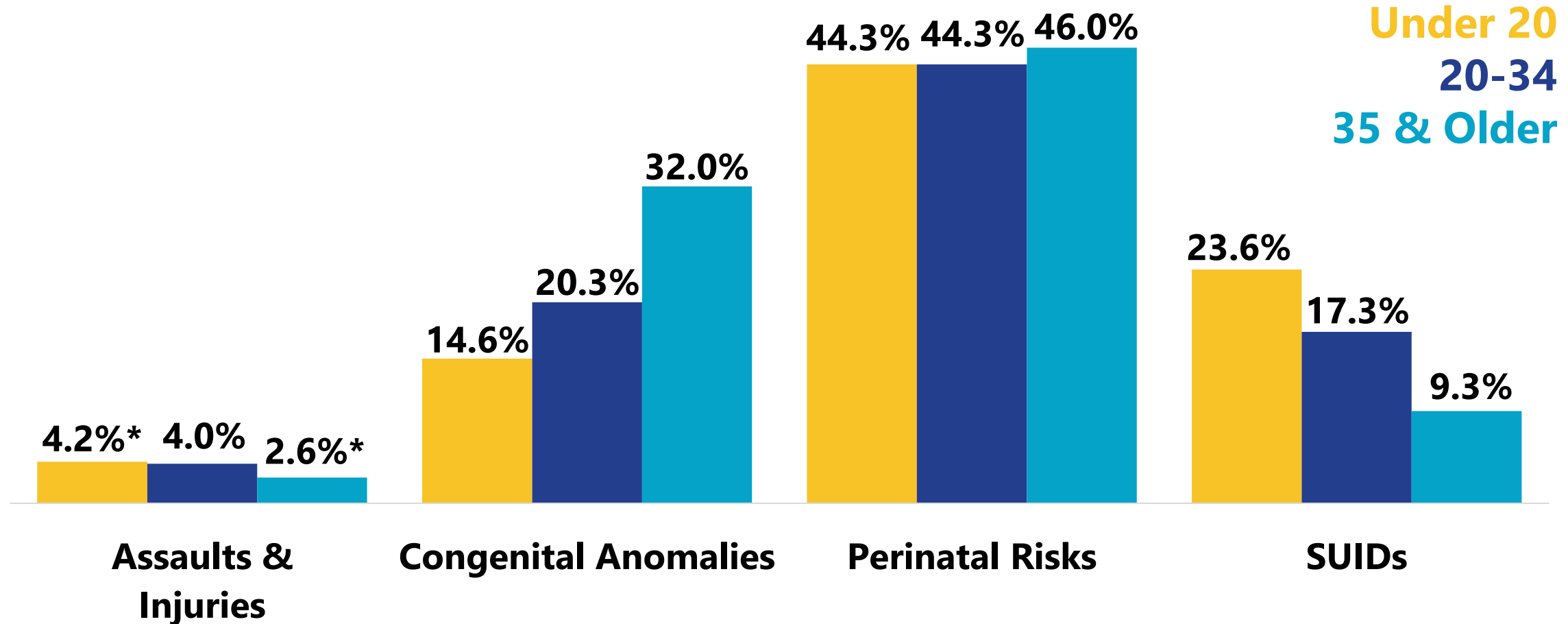
Source: Indiana State Department of Health, Family Health Data and Fatality Prevention Division [September 2024]

Indiana Original Source: Indiana Department of Health, Vital Records, ODA



Causes of Infant Death in Indiana, 2017-2022

Cause of Death by Age of Mom



*Percentages based on low counts should be interpreted with caution

Comparisons should not be made to unlinked data sources.

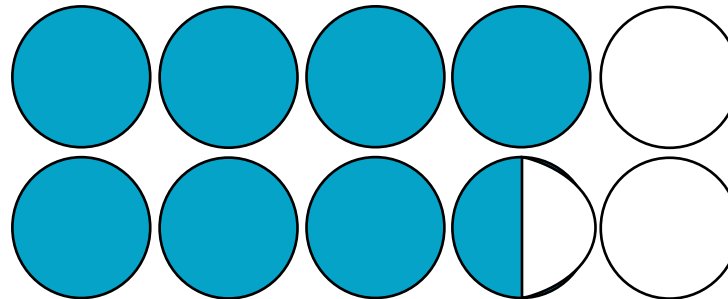
Source: Indiana State Department of Health, Family Health Data and Fatality Prevention Division [September 2024]
Indiana Original Source: Indiana Department of Health, Vital Records, ODA

Assaults & Injuries

1.6x greater risk of infant death due to **assaults or injuries** when mothers are **age 19 or younger**

73.5%

of infant deaths from **assaults or injuries** were babies born to mothers on **Medicaid**

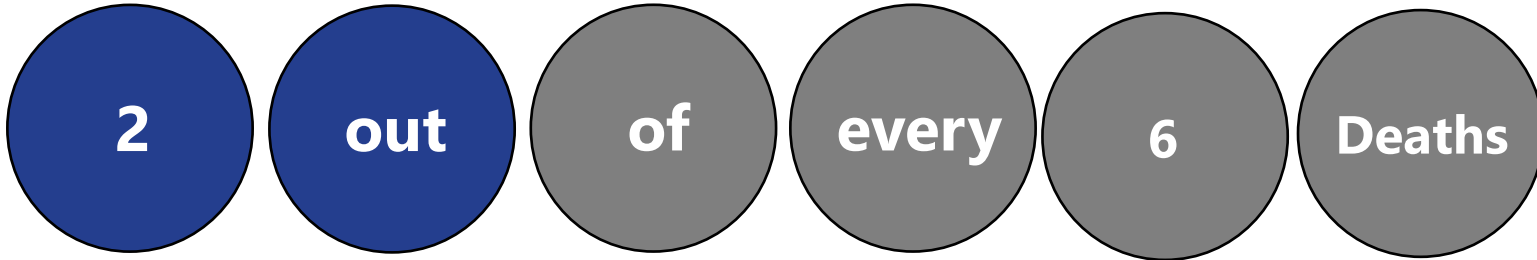


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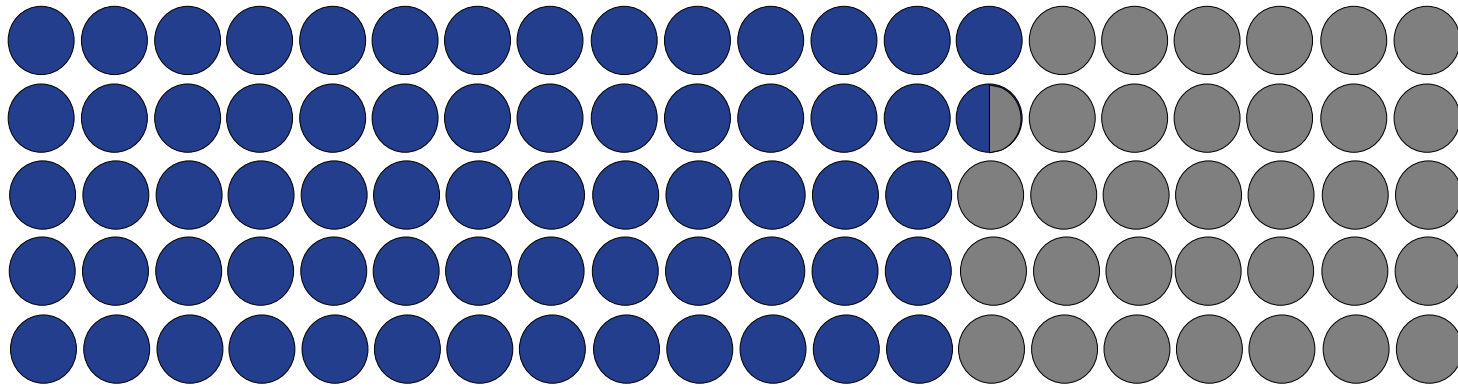
Source: Indiana State Department of Health, Family Health Data and Fatality Prevention Division [September 2024]

Indiana Original Source: Indiana Department of Health, Vital Records, ODA

Sudden Unexpected Infant Deaths (SUIDs)

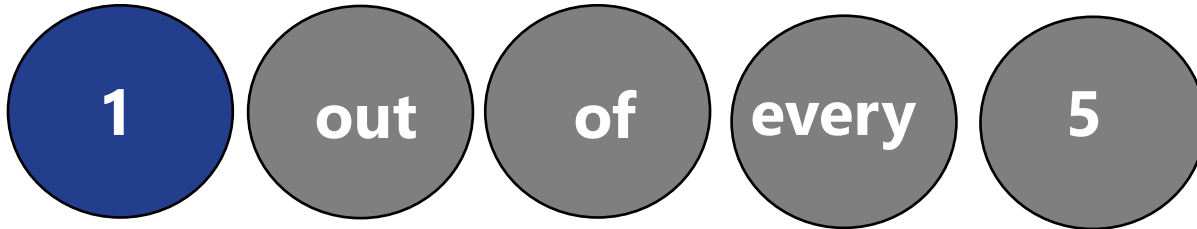


SUIDs were linked to a mother who reported **smoking during pregnancy**



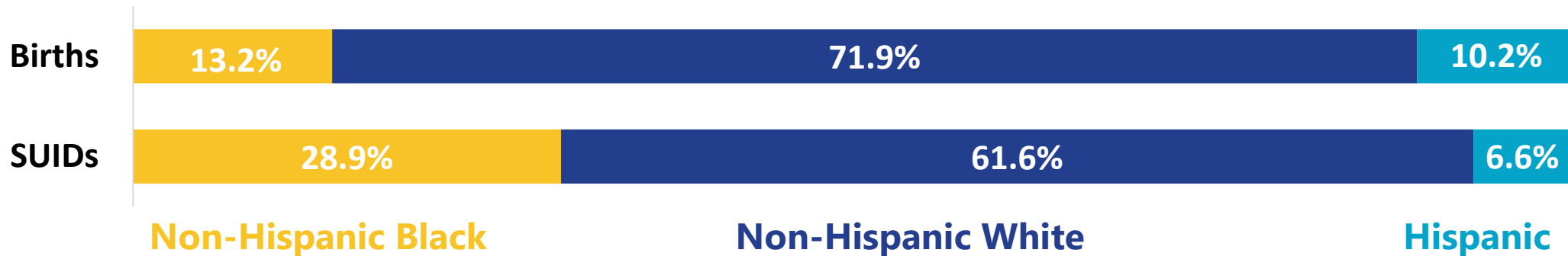
Comparisons should not be made to unlinked data sources.
Source: Indiana State Department of Health, Family Health Data and Fatality Prevention Division [September 2024]
Indiana Original Source: Indiana Department of Health, Vital Records, ODA

Preterm or Low Birthweight Births and SUIDs



19.1% of SUIDs were linked to a baby who was born **preterm or low birthweight**

Births and SUIDs by Race and Ethnicity



Comparisons should not be made to unlinked data sources.

Source: Indiana State Department of Health, Family Health Data and Fatality Prevention Division [September 2024]

Indiana Original Source: Indiana Department of Health, Vital Records, ODA

Summary

- Linked data allows us to analyze the relationships between risk factors and infant mortality rather than the two pieces independently
- Most Indiana infant deaths were either premature or low birthweight babies
- Smoking and no early prenatal care during pregnancy are linked to higher percentages of infant death
- Trends exist between cause of infant death and the age of mom
- Large disparities exist in indicators and outcomes

Questions?

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