

# INDIANA LINKED BIRTH AND DEATH DATA, 2018-2022

FAMILY HEALTH DATA AND FATALITY PREVENTION DIVISION

May 2025

### **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**

- These are based on Indiana births that were linked to Indiana infant death records
- 2018-2022 describes the infant birth year
- The infant death year spans 2018-2023
- Looking at the data this way 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

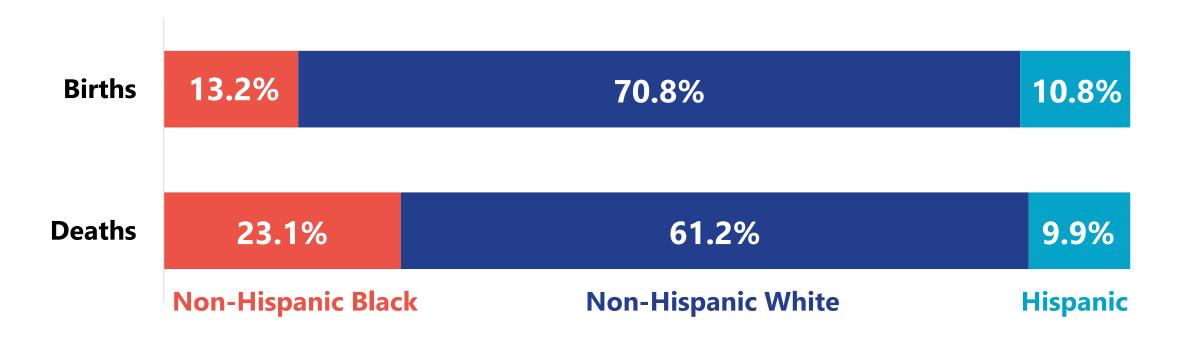


# Limitations

- 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
- 2,584 records were matched ~ 95%
- 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



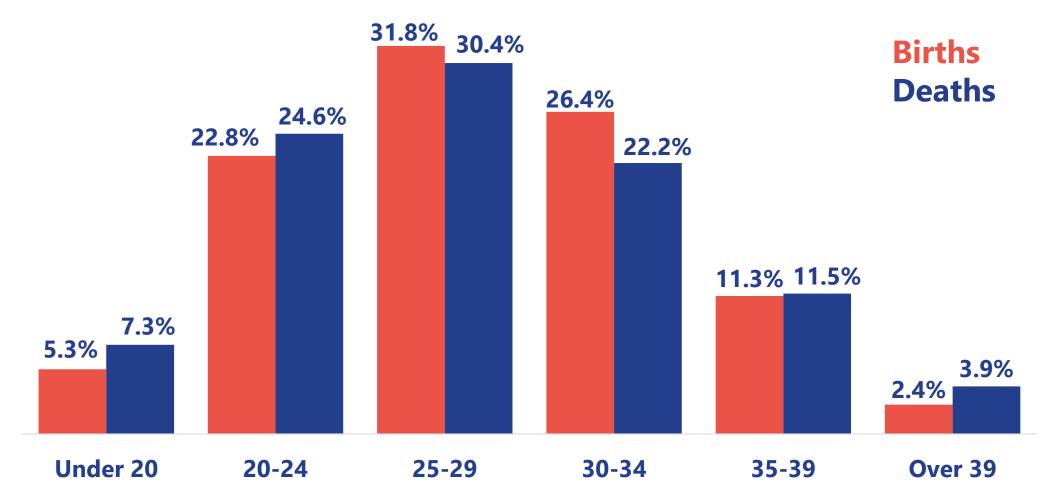
# Indiana linked births and infant deaths by race and ethnicity



- □ Non-Hispanic Black infants experience death at a **2** times higher rate than the Non-Hispanic White infant population.
- ☐ Hispanic infants experience death at a **1.1** times higher rate than the Non-Hispanic White infant population.

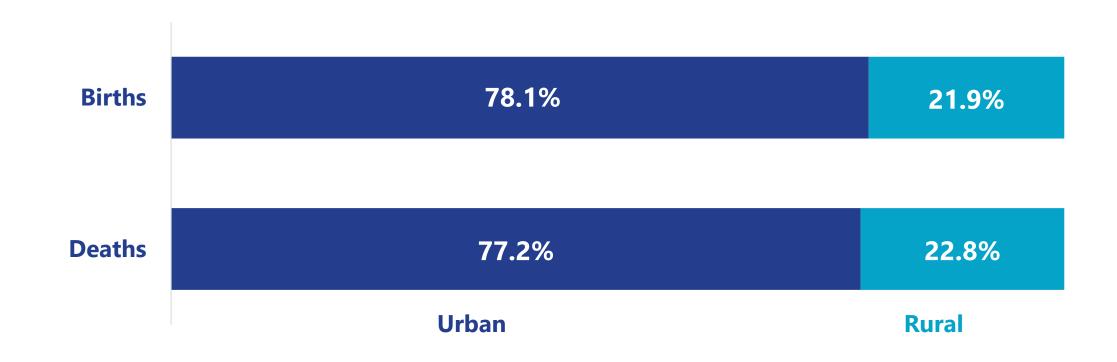


# Indiana linked births and infant deaths by age of mom



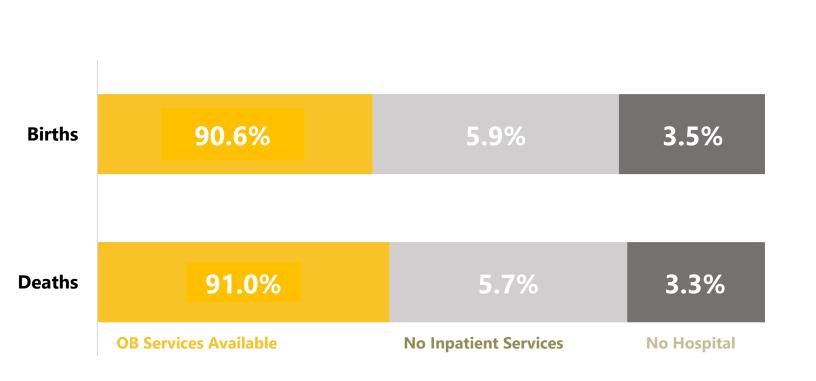


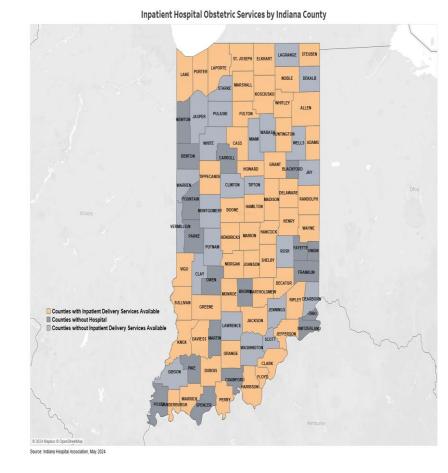
# Indiana linked data by rural/urban





# Indiana linked data by hospital access









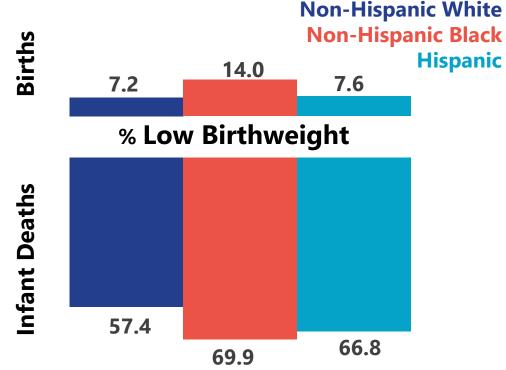
# Birthweight

61.4%

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

Over 4%

of low birthweight births resulted in an infant death.

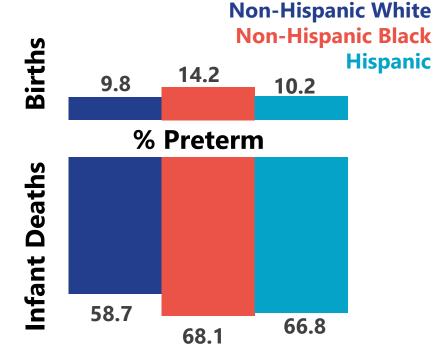


# Preterm

62% of infants who died were born preterm (< 37 weeks gestation).

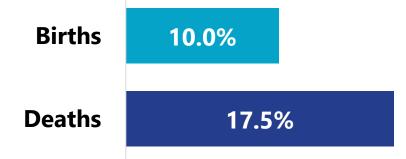
Over 3%

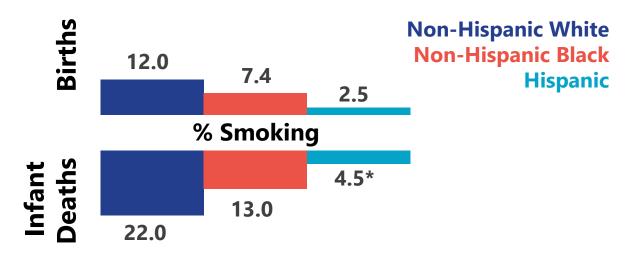
of preterm births resulted in an infant death.



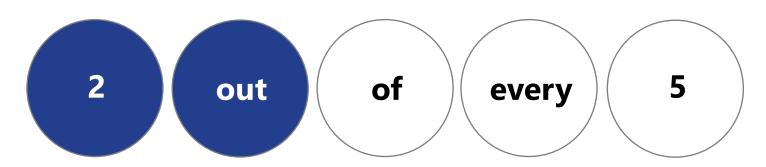
17.5%

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



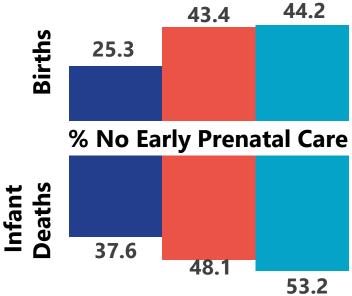


<sup>\*</sup> Percentages based on counts less than 20 are unstable and should be interpreted with caution.



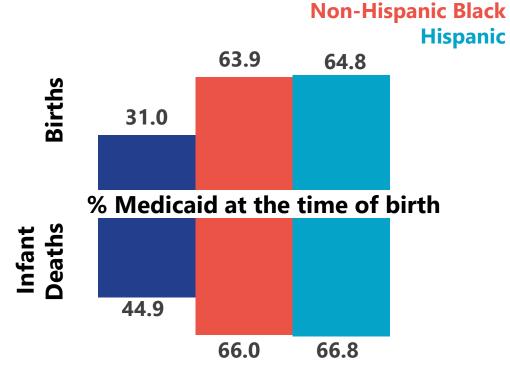
infants who died received no early prenatal care (1<sup>st</sup> trimester).

Non-Hispanic White Non-Hispanic Black Hispanic



**52.2%** of infants who died were born to a mother on Medicaid at the time of birth.

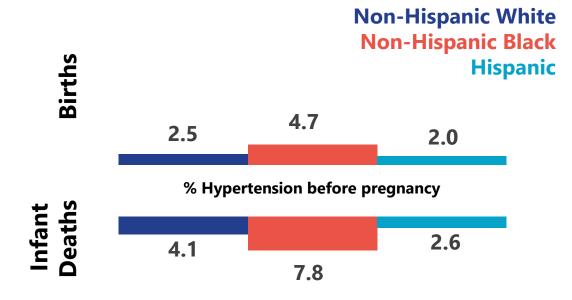
Non-Hispanic White



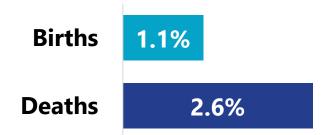


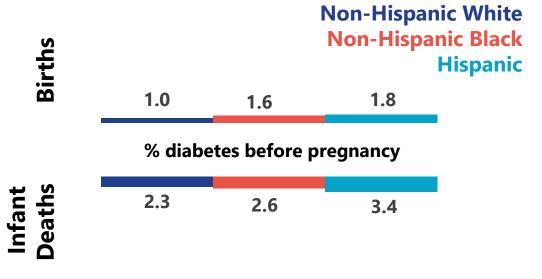


4.8% of infants who died were born to a mother who experienced hypertension before pregnancy.



2.6% of infants who died were born to a mother who experienced diabetes before pregnancy.

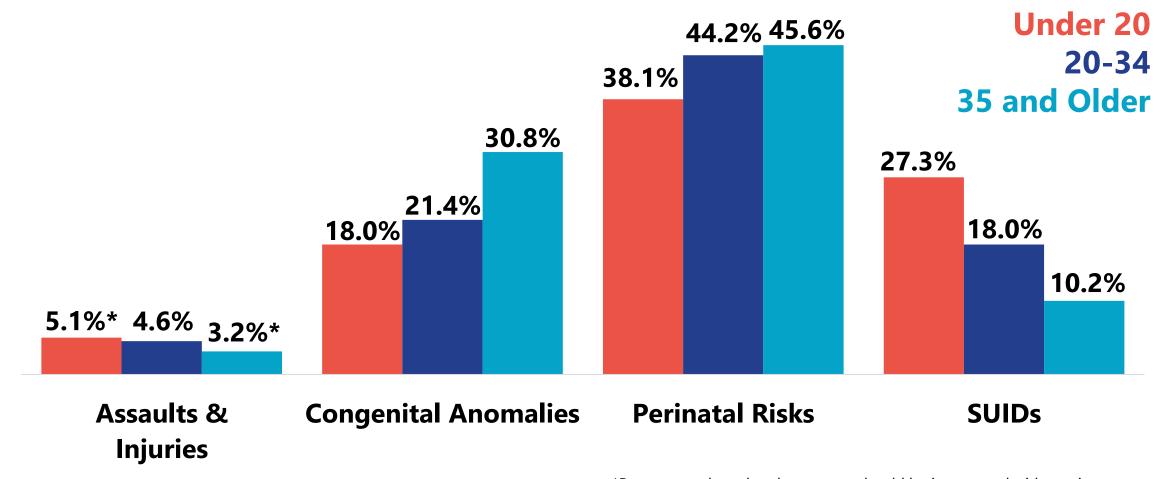








# Cause of death by age of mom





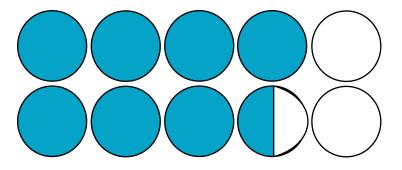
\*Percentages based on low counts should be interpreted with caution

Comparisons should not be made to unlinked data sources.

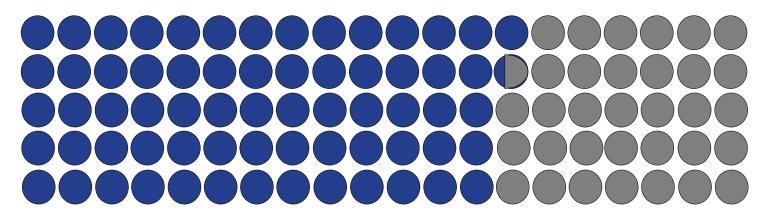
greater risk of infant 1.6x death due to assaults or injuries when mothers are ages 19 or younger.

74.6%

of infant deaths from assaults or injuries were babies born to mothers on Medicaid at the time of birth.

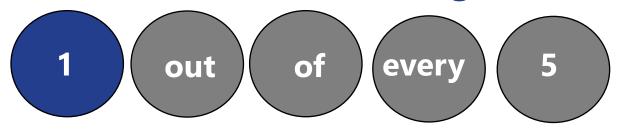


greater risk of infant death due to SUIDs when mothers reported smoking during pregnancy.



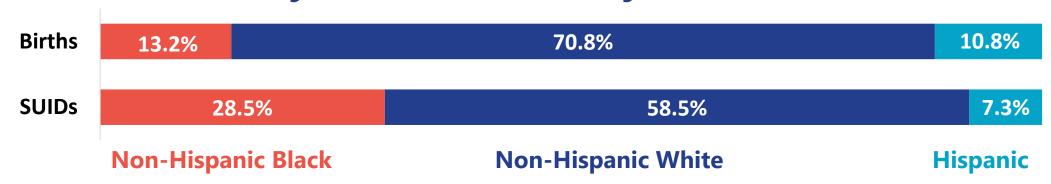
66.1% of all SUIDs were babies born to mothers

# **Preterm or Low Birthweight Births and SUIDs**



19.6% of SUIDs were linked to a baby who was born preterm or low birthweight.

# **Births and SUIDs by Race and Ethnicity**



# **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.
- Disparities exist in indicators and outcomes



# Questions?

# **CONTACT**:

Family Health Data and Fatality Prevention Division <a href="mailto:IDOHMCH@health.in.gov">IDOHMCH@health.in.gov</a>

