INDIANA INFANT MORTALITY & BIRTH OUTCOMES, 2020

MATERNAL & CHILD HEALTH EPIDEMIOLOGY

March 2022
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.
Infant Mortality Quick Facts

• Infant Mortality is defined as the death of a baby before his/her first birthday.

• **Infant Mortality Rate** is an estimate of the number of infant deaths for every 1,000 live births.

• Infant Mortality is the **#1 indicator** of health status in the world.
Infant Mortality in Indiana

• 522 Hoosier babies died before their 1\textsuperscript{st} birthday in 2020:
  • Nearly 44 babies EVERY month
  • About 10 babies EVERY week

• More than 2,800 infant lives lost in the last 5 years:
  • Over 39 school buses at maximum capacity

Source: Indiana Department of Health, Maternal & Child Health Epidemiology Division (November 5, 2021)
Original Source: Indiana Department of Health, Vital Records, ODA, Data Analysis Team
Infant Mortality Rates (IMRs)
2011-2020

Rate per 1,000 live births

<table>
<thead>
<tr>
<th>Year</th>
<th>Indiana</th>
<th>U.S.</th>
<th>HP 2020 Goal</th>
<th>HP 2030 Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>7.7</td>
<td>6.1</td>
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<tr>
<td>2012</td>
<td>6.7</td>
<td>6.0</td>
<td>6.0</td>
<td>5.0</td>
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<tr>
<td>2013</td>
<td>7.1</td>
<td>6.0</td>
<td>6.0</td>
<td>5.0</td>
</tr>
<tr>
<td>2014</td>
<td>7.1</td>
<td>5.8</td>
<td>6.0</td>
<td>5.0</td>
</tr>
<tr>
<td>2015</td>
<td>7.3</td>
<td>5.9</td>
<td>6.0</td>
<td>5.0</td>
</tr>
<tr>
<td>2016</td>
<td>7.5</td>
<td>5.9</td>
<td>6.0</td>
<td>5.0</td>
</tr>
<tr>
<td>2017</td>
<td>N = 623</td>
<td>7.3</td>
<td>N = 602</td>
<td>5.0</td>
</tr>
<tr>
<td>2018</td>
<td>7.3</td>
<td>6.8</td>
<td>N = 559</td>
<td>5.0</td>
</tr>
<tr>
<td>2019</td>
<td>6.8</td>
<td>6.5</td>
<td>N = 527</td>
<td>5.0</td>
</tr>
<tr>
<td>2020</td>
<td>N = 522</td>
<td>6.6</td>
<td>N = 522</td>
<td>5.0</td>
</tr>
</tbody>
</table>

Source: Indiana Department of Health, Maternal & Child Health Epidemiology Division (January 11, 2022)
United States Original Source: Centers for Disease Control and Prevention National Center for Health Statistics
Indiana Original Source: Indiana Department of Health, Vital Records, ODA, DAT
Indiana IMRs by Race and Ethnicity
2011-2020

Source: Indiana Department of Health, Maternal & Child Health Epidemiology Division [October 13, 2021]
Indiana Original Source: Indiana Department of Health, Vital Records, ODA, DAT
Infant Mortality by Race and Ethnicity
2020

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Rate per 1,000 live births</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indiana</td>
<td>6.6</td>
<td>522</td>
</tr>
<tr>
<td>Non-Hispanic Black</td>
<td>13.2</td>
<td>139</td>
</tr>
<tr>
<td>Non-Hispanic White</td>
<td>5.5</td>
<td>309</td>
</tr>
<tr>
<td>Hispanic</td>
<td>6.0</td>
<td>51</td>
</tr>
</tbody>
</table>

Source: Indiana Department of Health, Maternal & Child Health Epidemiology Division [November 5, 2021]
Indiana Original Source: Indiana Department of Health, Vital Records, ODA, Data Analysis Team
Infant Mortality by Geography
## Infant Mortality by Indiana Hospital Region 2016-2020

<table>
<thead>
<tr>
<th>Region</th>
<th>Total</th>
<th>Non-Hispanic White</th>
<th>Non-Hispanic Black</th>
<th>Hispanic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central</td>
<td>6.7</td>
<td>5.2</td>
<td>11.6</td>
<td>5.8</td>
</tr>
<tr>
<td>Central Southwestern</td>
<td>8.3</td>
<td>8.0</td>
<td>9.0*</td>
<td>**</td>
</tr>
<tr>
<td>Eastern</td>
<td>8.1</td>
<td>7.4</td>
<td>15.5</td>
<td>6.0*</td>
</tr>
<tr>
<td>Midwestern</td>
<td>7.5</td>
<td>7.3</td>
<td>**</td>
<td>8.8*</td>
</tr>
<tr>
<td>Northeastern</td>
<td>6.7</td>
<td>5.7</td>
<td>15.0</td>
<td>8.7</td>
</tr>
<tr>
<td>Northern</td>
<td>8.1</td>
<td>6.3</td>
<td>16.6</td>
<td>7.2</td>
</tr>
<tr>
<td>Northwest</td>
<td>7.3</td>
<td>4.5</td>
<td>13.9</td>
<td>7.5</td>
</tr>
<tr>
<td>Southeastern</td>
<td>6.7</td>
<td>7.0</td>
<td>19.4*</td>
<td>**</td>
</tr>
<tr>
<td>Southern</td>
<td>6.4</td>
<td>6.3</td>
<td>15.0*</td>
<td>8.0*</td>
</tr>
<tr>
<td>Southwest</td>
<td>6.4</td>
<td>5.5</td>
<td>17.3</td>
<td>7.6*</td>
</tr>
<tr>
<td>Western</td>
<td>5.9</td>
<td>5.4</td>
<td>12.3*</td>
<td>6.6*</td>
</tr>
</tbody>
</table>

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

**Rates based on counts less than 5 have been suppressed.

Source: Indiana Department of Health, Maternal & Child Health Epidemiology Division [October 28, 2021]
Indiana Original Source: Indiana Department of Health, Vital Records, ERC, Data Analysis Team
County Infant Mortality Rates Compared to the State 2016 - 2020

Highest Stable Infant Mortality Rates
Adams, 9.6  Cass, 8.8
Delaware, 8.7  Grant, 8.6
LaPorte, 8.4  Vigo, 8.4
Elkhart, 8.3  Noble, 8.3
Shelby, 8.3  Lake, 8.2

Counties with Stable Rates Achieving HP2020 Goals
Porter, 4.2  Hendricks, 4.5
Johnson, 4.8  Hamilton, 4.9
Tippecanoe, 5.7  Floyd, 5.8
County-Level Rates by Race/Ethnicity
2016 – 2020

Stable NH Black Infant Mortality Rates
Elkhart, 23.4  Vanderburgh, 16.9  St. Joseph, 15.3
Allen, 15.2  Lake, 13.9  Marion, 12.0

Stable NH White Infant Mortality Rates*
Adams, 10.4  Shelby, 9.1  Grant, 8.8  Noble, 8.0
Vigo, 7.8  LaPorte, 7.7  Clark, 7.5  Delaware, 7.4

Stable Hispanic Infant Mortality Rates
Allen, 8.9  Elkhart, 8.3  Lake, 7.2  Marion, 6.1

* Stable rates are only shown if they are above the state average of 7.0 for 2016–2020.

NH = Non-Hispanic
Infant Mortality Rates are per 1,000 live births.

Source: Indiana Department of Health, Maternal & Child Health Epidemiology Division (October 26, 2021)
Indiana Original Source: Indiana Department of Health, Vital Records, ERC, Data Analysis Team
<table>
<thead>
<tr>
<th>Zip Code</th>
<th>County</th>
<th>Births</th>
<th>Deaths</th>
<th>IMR</th>
<th>NH White IMR</th>
<th>NH Black IMR</th>
<th>Hispanic IMR</th>
</tr>
</thead>
<tbody>
<tr>
<td>46404</td>
<td>Lake</td>
<td>1121</td>
<td>20</td>
<td>17.8</td>
<td>U</td>
<td>17.7*</td>
<td>U</td>
</tr>
<tr>
<td>46516</td>
<td>Elkhart</td>
<td>2823</td>
<td>40</td>
<td>14.2</td>
<td>7.7*</td>
<td>34.9*</td>
<td>11.7*</td>
</tr>
<tr>
<td>46628</td>
<td>St. Joseph</td>
<td>2050</td>
<td>26</td>
<td>12.7</td>
<td>5.2*</td>
<td>18.5*</td>
<td>U</td>
</tr>
<tr>
<td>47302</td>
<td>Delaware</td>
<td>1583</td>
<td>20</td>
<td>12.6</td>
<td>10.7*</td>
<td>26.7*</td>
<td>U</td>
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<tr>
<td>46219</td>
<td>Marion</td>
<td>2396</td>
<td>26</td>
<td>10.9</td>
<td>7.9*</td>
<td>17.7*</td>
<td>U</td>
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<tr>
<td>46806</td>
<td>Allen</td>
<td>2399</td>
<td>26</td>
<td>10.8</td>
<td>17.8*</td>
<td>11.8*</td>
<td>8.1*</td>
</tr>
<tr>
<td>46312</td>
<td>Lake</td>
<td>2068</td>
<td>22</td>
<td>10.6</td>
<td>U</td>
<td>17.0*</td>
<td>6.8*</td>
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<tr>
<td>46410</td>
<td>Lake</td>
<td>2164</td>
<td>23</td>
<td>10.6</td>
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<td>14.5*</td>
<td>U</td>
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<tr>
<td>46514</td>
<td>Elkhart</td>
<td>2842</td>
<td>30</td>
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<td>8.1*</td>
<td>26.8*</td>
<td>11.3*</td>
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<td>46260</td>
<td>Marion</td>
<td>2471</td>
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<td>10.5</td>
<td>U</td>
<td>18.9</td>
<td>U</td>
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<td>46222</td>
<td>Marion</td>
<td>3033</td>
<td>31</td>
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<td>U</td>
<td>19.6</td>
<td>4.3*</td>
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<td>46218</td>
<td>Marion</td>
<td>2482</td>
<td>25</td>
<td>10.1</td>
<td>U</td>
<td>12.6</td>
<td>U</td>
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<td>46203</td>
<td>Marion</td>
<td>2785</td>
<td>28</td>
<td>10.1</td>
<td>7.9*</td>
<td>15.6*</td>
<td>10.9*</td>
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<tr>
<td>46241</td>
<td>Marion</td>
<td>2587</td>
<td>26</td>
<td>10.1</td>
<td>10.2*</td>
<td>12.8*</td>
<td>U</td>
</tr>
</tbody>
</table>

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

**Rates based on counts less than 5 have been suppressed.

NH = Non-Hispanic


Source: Indiana Department of Health, Maternal & Child Health Epidemiology Division [October 29, 2021]
Indiana Original Source: Indiana Department of Health, Vital Records, ERC, Data Analysis Team
Highest Infant Mortality Rates by ZIP Code

2016-2020

Source: Indiana Department of Health, Maternal & Child Health Epidemiology Division [November 5, 2021]

Original Source: Indiana Department of Health, Vital Records, ODA, Data Analysis Team

Map Author: Indiana Department of Health, ODA, PHG
Cause-Specific Infant Mortality
2020 Cause-Specific IMR by Race/Ethnicity

Infant Mortality Rates (IMRs) are per 1,000 live births. Cause-specific IMRs may not add up to the overall IMR for each group due to rounding.

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

NH = Non-Hispanic

Source: Indiana Department of Health, Maternal & Child Health Epidemiology Division [October 26, 2021]
Indiana Original Source: Indiana Department of Health, Vital Records, ODA, Data Analysis Team
Causes of Indiana Infant Mortality

Infant Mortality Rates (IMRs) are per 1,000 live births. Cause-specific IMRs may not add up to the overall IMR for each year due to rounding.

Source: Indiana Department of Health, Maternal & Child Health Epidemiology Division [October 26, 2021]
Indiana Original Source: Indiana Department of Health, Vital Records, ODA, Data Analysis Team
Causes of Indiana NH Black Infant Mortality

Infant Mortality Rates (IMRs) are per 1,000 live births.

Cause-specific IMRs may not add up to the overall IMR for each year due to rounding.

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

* NH = Non-Hispanic

The 2020 rate of perinatal risks is significantly different than the 2019 rate at the 0.05 level.

Source: Indiana Department of Health, Maternal & Child Health Epidemiology Division [November 5, 2021]
Original Source: Indiana Department of Health, Vital Records, ODA, Data Analysis Team
Causes of Indiana NH White Infant Mortality

Infant Mortality Rates (IMRs) are per 1,000 live births.

Cause-specific IMRs may not add up to the overall IMR for each year due to rounding.

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

NH = Non-Hispanic

Source: Indiana Department of Health, Maternal & Child Health Epidemiology Division [November 5, 2021]
Original Source: Indiana Department of Health, Vital Records, ODA, Data Analysis Team
Causes of Indiana Hispanic Infant Mortality

Infant Mortality Rates (IMRs) are per 1,000 live births.

- Other: 0.6* (2019), 0.4* (2020)
- SUIDs: 1.4* (2019), 1.8* (2020)
- Perinatal Risks: 3.0 (2019), 2.2* (2020)

Cause-specific IMRs may not add up to the overall IMR for each year due to rounding.

* Rates based on counts less than 20 are considered unstable and should be interpreted with caution.
SUIDs Rates by Cause
Indiana, 2011-2020

Combined SUIDs Rate
- 86.0 (2011)
- 78.1 (2012)
- 86.6 (2013)
- 102.5 (2014)
- 98.8 (2015)
- 102.3 (2016)
- 121.6 (2017)
- 94.3 (2018)
- 122.4 (2019)
- 133.7 (2020)

Sudden Infant Death Syndrome (SIDS) (R95)
- 60.9 (2011)
- 56.5 (2012)
- 57.8 (2013)
- 54.8 (2014)
- 48.8 (2015)
- 48.2 (2016)
- 64.4 (2017)
- 58.8 (2018)
- 68.0 (2019)
- 70.0 (2020)

Accidental Suffocation and Strangulation in Bed (W75)
- 22.7* (2011)
- 20.5* (2013)
- 42.9 (2014)
- 40.5 (2015)
- 45.7 (2016)
- 40.1 (2017)
- 29.4 (2018)
- 43.3 (2019)
- 39.5 (2020)

Unknown (R99)
- 2.4* (2011)
- 8.4* (2012)
- 8.4* (2013)
- 4.8* (2014)
- 9.5* (2015)
- 8.4* (2016)
- 17.0* (2017)
- 6.1* (2018)
- 24.2* (2020)

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

Source: Indiana Department of Health, Maternal & Child Health Epidemiology Division [October 28, 2021]
Indiana Original Source: Indiana Department of Health, Vital Records, ODA, Data Analysis Team

**SUIDS = W75, R95, R99**
SUIDs Rates by Race & Ethnicity
Indiana, 2011-2020

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

Source: Indiana Department of Health, Maternal & Child Health Epidemiology Division [March 3, 2022]
Indiana Original Source: Indiana Department of Health, Vital Records, ODA, Data Analysis Team
Sudden Unexpected Infant Deaths
By Hospital Region
2016 - 2020

Per 100,000 Live Births

* Denotes unstable rate (<20 events)

Data Source: IDOH MCH, CODA DAT, VR | Map Author: IDOH ODA PHP, 12.16.21

State:
114.7
Infant Mortality by Age
2020 Infant Deaths by Age of the Baby

- Of Indiana infant deaths occurred during the neonatal (0-27 days) period: 60.0%
- Total Neonatal = 313
- Total Post-Neonatal = 209

Source: Indiana Department of Health, Maternal & Child Health Epidemiology Division [October 28, 2021]

Indiana Original Source: Indiana Department of Health, Vital Records, ODA, Data Analysis Team
<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neonatal</td>
<td></td>
</tr>
<tr>
<td>Congenital Anomalies</td>
<td>25.6%</td>
</tr>
<tr>
<td>Other</td>
<td>3.8%*</td>
</tr>
<tr>
<td>SUIDs</td>
<td>4.5%*</td>
</tr>
<tr>
<td>Assaults &amp; Injuries</td>
<td>0.3%*</td>
</tr>
<tr>
<td>Perinatal Risks</td>
<td>65.7%</td>
</tr>
<tr>
<td>Post - Neonatal</td>
<td></td>
</tr>
<tr>
<td>Congenital Anomalies</td>
<td>22.5%</td>
</tr>
<tr>
<td>Other</td>
<td>17.2%</td>
</tr>
<tr>
<td>SUIDs</td>
<td>9.6%</td>
</tr>
<tr>
<td>Assaults &amp; Injuries</td>
<td>7.2%*</td>
</tr>
</tbody>
</table>

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

Source: Indiana Department of Health, Maternal & Child Health Epidemiology Division (November 23, 2021)
Original Source: Indiana Department of Health, Vital Records, ODA, Data Analysis Team
2020 SUIDs by Age of the Baby

58.0%

of Indiana SUIDs occurred between 1 month and 4 months

<table>
<thead>
<tr>
<th>Time</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birth – 2 Weeks</td>
<td>3.8%</td>
</tr>
<tr>
<td>2 Weeks – 1 Month</td>
<td>9.5%</td>
</tr>
<tr>
<td>1 Month</td>
<td>27.6%</td>
</tr>
<tr>
<td>2 Months</td>
<td>17.1%</td>
</tr>
<tr>
<td>3 Months</td>
<td>13.3%</td>
</tr>
<tr>
<td>4 Months</td>
<td>8.6%</td>
</tr>
<tr>
<td>5 Months</td>
<td>9.5%</td>
</tr>
<tr>
<td>At Least 6 Months</td>
<td>10.5%</td>
</tr>
</tbody>
</table>

Time-specific percentages may not add up to 100% overall due to rounding.

Source: Indiana Department of Health, Maternal & Child Health Epidemiology Division [November 9, 2021]
Original Source: Indiana Department of Health, Vital Records, ODA, Data Analysis Team
Contributing Factors to Infant Mortality
Factors Contributing to Infant Mortality, Indiana 2020

• **Obesity**
  - Indiana is 11th most obese state in U.S. (35.3% of adults).
  - 33.8% of Indiana births in 2020 were to pregnant persons who have obesity (additional 26.2% overweight).
  - Pregnant persons who have obesity have an increased risk of preterm birth (11.8% of Indiana births to those who have obesity were preterm compared to 9.1% of births to those in the normal BMI range).

• **Smoking**
  - 10.9% of births to individuals who smoke during pregnancy.
  - 20.1% of births to individuals on Medicaid smoke (5.2% of individuals not on Medicaid smoke).

• **Limited Prenatal Care**
  - Only 69.3% of births were to persons receiving prenatal care during the 1st trimester.

• **Unsafe Sleep Practices**
  - 20.1% of infant deaths in 2020 can be attributed to SUIDs.
Self-Reported Demographics
Indiana 2020

• **Average Age** = 28 years (Range: 13 - 51)

• **Education**
  - 14.8% have less than a high school diploma.
  - 29.8% have a high school diploma or GED.
  - 18.4% have some college education, but no degree.
  - 36.9% have an associate's degree or higher.

• **Income** – 38.5% of births to persons on Medicaid.

• **Marital Status** – 55.0% to married parents

Source: Indiana Department of Health, Maternal & Child Health Epidemiology Division [November 9, 2021]
Original Source: Indiana Department of Health, Vital Records, ODA, Data Analysis Team
Births to Persons on Medicaid

2020
Percent of Live Births

2016 – 2020
Percent of Live Births

5-Year Change
Linear Trend Line, 2016 to 2020

Only stable county percentages are labeled (> = 20 events). Counties with less than 5 events are suppressed.

Data Source: IDOH IRCM, Data Clear, IN | Map Author: IDOH CDC, EPD, 12/18/21
Age-Specific Birth Rates for Teens, Indiana and U.S., 2011-2020

Source: Indiana Department of Health, Maternal & Child Health Epidemiology Division [February 7, 2022]
Original Source: Indiana Department of Health, Vital Records, ODA, Data Analysis Team
Births to Teens Ages 15 to 19

2020
Rate per 1,000 Live Births

2016 – 2020
Rate per 1,000 Live Births

5-Year Change
Linear Trend Line, 2016 to 2020

Only stable county percentages are labeled (>20 events). Counties with less than 5 events are suppressed.

Data Source: Indiana Data Lab, 2020
Map Author: Indiana Data Lab, 12.18.21
Birth Outcomes
## Indiana Birth Outcomes

<table>
<thead>
<tr>
<th>Category</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preterm (&lt; 37 weeks gestation)</td>
<td>10.2%</td>
<td>10.1%</td>
<td>10.4%</td>
</tr>
<tr>
<td>Low Birthweight (&lt; 2500 g)</td>
<td>8.1%</td>
<td>8.2%</td>
<td>8.1%</td>
</tr>
<tr>
<td>Very Low Birthweight (&lt; 1500 g)</td>
<td>1.4%</td>
<td>1.3%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Not Breastfeeding (at discharge)</td>
<td>18.1%</td>
<td>18.0%</td>
<td>18.0%</td>
</tr>
<tr>
<td>No Early Prenatal Care (1st Trimester)</td>
<td>31.9%</td>
<td>31.1%</td>
<td>30.7%</td>
</tr>
<tr>
<td>Smoking during Pregnancy</td>
<td>11.5%</td>
<td>11.8%</td>
<td>10.9%*</td>
</tr>
<tr>
<td>Births Covered by Medicaid</td>
<td>39.2%</td>
<td>38.5%</td>
<td>38.5%</td>
</tr>
<tr>
<td>Teen Pregnancy</td>
<td>5.9%</td>
<td>5.7%</td>
<td>5.3%</td>
</tr>
</tbody>
</table>

* 2020 smoking data may be influenced by updates to the birth worksheet.

Percentages are significantly different than the previous year at 0.05 level.

Source: Indiana Department of Health, Maternal & Child Health Epidemiology Division [October 29, 2021]
Indiana Original Source: Indiana Department of Health, Vital Records, ODA, Data Analysis Team
<table>
<thead>
<tr>
<th></th>
<th>Indiana</th>
<th>Non-Hispanic Black</th>
<th>Non-Hispanic White</th>
<th>Hispanic</th>
</tr>
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<tbody>
<tr>
<td>Preterm (&lt; 37 weeks gestation)</td>
<td>10.4%</td>
<td>14.7%</td>
<td>9.8%</td>
<td>9.8%</td>
</tr>
<tr>
<td>Low Birthweight (&lt; 2500 g)</td>
<td>8.1%</td>
<td>14.2%</td>
<td>7.2%</td>
<td>7.1%</td>
</tr>
<tr>
<td>Very Low Birthweight (&lt; 1500 g)</td>
<td>1.4%</td>
<td>3.1%</td>
<td>1.1%</td>
<td>1.3%</td>
</tr>
<tr>
<td>Not Breastfeeding (at discharge)</td>
<td>18.0%</td>
<td>26.7%</td>
<td>17.0%</td>
<td>14.8%</td>
</tr>
<tr>
<td>No Early Prenatal Care (1&lt;sup&gt;st&lt;/sup&gt; Trimester)</td>
<td>30.7%</td>
<td>43.7%</td>
<td>25.9%</td>
<td>44.9%</td>
</tr>
<tr>
<td>Smoking during Pregnancy</td>
<td>10.9%</td>
<td>7.8%</td>
<td>13.2%</td>
<td>2.7%</td>
</tr>
<tr>
<td>Births Covered by Medicaid</td>
<td>38.5%</td>
<td>61.7%</td>
<td>30.5%</td>
<td>62.6%</td>
</tr>
<tr>
<td>Teen Pregnancy</td>
<td>5.3%</td>
<td>8.4%</td>
<td>4.4%</td>
<td>8.7%</td>
</tr>
</tbody>
</table>
% Low Birthweight (< 2,500 grams)
Indiana, U.S. and Healthy People Goal, 2011-2020
% Low Birthweight (<2,500 grams)
Indiana by Race and Ethnicity, 2011-2020

Source: Indiana Department of Health, Maternal & Child Health Epidemiology Division [November 9, 2021]
Original Source: Indiana Department of Health, Vital Records, ODA, Data Analysis Team
Low Birth Weight Births

2020
Percent of Live Births

2016 – 2020
Percent of Live Births

5-Year Change
Linear Trend Line, 2016 to 2020

Only stable county percentages are labled (>=20 events). Counties with less than 5 events are suppressed.

Data Source: IDOH MCH, DBA DAT, VR | Map Author: IDOH DBA PhD, 12/16/21
% Very Low Birthweight (< 1,500 grams)
Indiana, U.S. and Healthy People Goal, 2011-2020

Source: Indiana Department of Health, Maternal & Child Health Epidemiology Division [February 7, 2022]
United States Original: Centers for Disease Control and Prevention National Center for Health Statistics
Indiana Original Source: Indiana Department of Health, Vital Records, ODA, Data Analysis Team
% Very Low Birthweight (< 1,500 grams)  
Indiana by Race and Ethnicity, 2011-2020

Source: Indiana Department of Health, Maternal & Child Health Epidemiology Division [November 9, 2021]  
Original Source: Indiana Department of Health, Vital Records, ODA, Data Analysis Team
% Preterm (Obstetric Estimate < 37 weeks)
Indiana, U.S. and Healthy People Goals, 2011-2020

Source: Indiana Department of Health, Maternal & Child Health Epidemiology Division [November 5, 2021]
United States Original: Centers for Disease Control and Prevention National Center for Health Statistics
Indiana Original Source: Indiana Department of Health, Vital Records, ODA, Data Analysis Team
% Preterm (Obstetric Estimate < 37 weeks)
Indiana by Race and Ethnicity, 2011-2020

Source: Indiana Department of Health, Maternal & Child Health Epidemiology Division [November 5, 2021]
Original Source: Indiana Department of Health, Vital Records, ODA, Data Analysis Team
Preterm Births

2020
Percent of Live Births

2016 – 2020
Percent of Live Births

5-Year Change
Linear Trend Line, 2016 to 2020

Only stable county percentages are labeled (≥20 events). Counties with less than 5 events are suppressed. 

Data Source: IDOH MCH, IDOA DAT, VR | Map Author: IDOH IDA Prod, 12/16/21
Low Birthweight and Preterm by BMI, Indiana 2020

Source: Indiana Department of Health, Maternal & Child Health Epidemiology Division [November 29, 2021]
Original Source: Indiana Department of Health, Vital Records, ODA, Data Analysis Team

Low Birthweight = < 2,500 grams  Preterm = Gestation < 37 weeks

- Low Birthweight (% of Live Births)
  - Underweight: 5.0%
  - Normal: 36.2%
  - Overweight: 24.9%
  - Obese: 33.9%

- Not Low Birthweight (% of Live Births)
  - Underweight: 2.6%
  - Normal: 37.3%
  - Overweight: 26.3%
  - Obese: 33.8%

- Preterm (% of Live Births)
  - Underweight: 3.6%
  - Normal: 32.8%
  - Overweight: 25.1%
  - Obese: 38.5%

- Not Preterm (% of Live Births)
  - Underweight: 2.7%
  - Normal: 37.8%
  - Overweight: 26.3%
  - Obese: 33.3%

Source: Indiana Department of Health, Maternal & Child Health Epidemiology Division [November 29, 2021]
Original Source: Indiana Department of Health, Vital Records, ODA, Data Analysis Team
% Pregnant Persons Smoking
Indiana, U.S. and Healthy People Goals, 2011-2020

<table>
<thead>
<tr>
<th>Year</th>
<th>United States</th>
<th>Indiana</th>
<th>Healthy People 2020</th>
<th>Healthy People 2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>8.9</td>
<td>16.6</td>
<td>1.4</td>
<td>4.3</td>
</tr>
<tr>
<td>2012</td>
<td>8.7</td>
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<td>1.4</td>
<td>4.3</td>
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<td>7.8</td>
<td>14.3</td>
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<td>4.3</td>
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<td>2016</td>
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<td>1.4</td>
<td>4.3</td>
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<td>2017</td>
<td>6.9</td>
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<td>2018</td>
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<td>11.5</td>
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<td>6.0</td>
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<tr>
<td>2020</td>
<td>5.5</td>
<td>10.9</td>
<td>1.4</td>
<td>4.3</td>
</tr>
</tbody>
</table>

Source: Indiana Department of Health, Maternal & Child Health Epidemiology Division [February 7, 2022]
United States Original: Centers for Disease Control and Prevention National Center for Health Statistics
Indiana Original Source: Indiana Department of Health, Vital Records, ODA, Data Analysis Team
% Pregnant Persons Smoking
Indiana by Race and Ethnicity, 2011-2020

Source: Indiana Department of Health, Maternal & Child Health Epidemiology Division [November 9, 2021]
Original Source: Indiana Department of Health, Vital Records, ODA, Data Analysis Team
Low Birthweight and Preterm by Smoking Status, Indiana 2020

Low Birthweight = < 2,500 grams     Preterm = Gestation < 37 weeks

- **Low Birthweight**
  - Not Smoking During Pregnancy: 81.5%
  - Smoking During Pregnancy: 18.5%

- **Not Low Birthweight**
  - Not Smoking During Pregnancy: 89.8%
  - Smoking During Pregnancy: 10.2%

- **Preterm**
  - Not Smoking During Pregnancy: 85.3%
  - Smoking During Pregnancy: 14.7%

- **Not Preterm**
  - Not Smoking During Pregnancy: 89.5%
  - Smoking During Pregnancy: 10.5%

Source: Indiana Department of Health, Maternal & Child Health Epidemiology Division (November 29, 2021)
Original Source: Indiana Department of Health, Vital Records, ODA, Data Analysis Team
% Receiving PNC 1<sup>st</sup> Trimester
Indiana, U.S. and Healthy People Goals, 2011-2020

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>73.7</td>
<td>74.1</td>
<td>74.2</td>
<td>76.7</td>
<td>77.0</td>
<td>77.1</td>
<td>77.3</td>
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<tr>
<td>Indiana</td>
<td>68.1</td>
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<td>67.4</td>
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<td>69.3</td>
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</tr>
<tr>
<td>Healthy People 2020</td>
<td>84.8</td>
<td>84.8</td>
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<tr>
<td>Healthy People 2030</td>
<td>80.5</td>
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<td>80.5</td>
<td>80.5</td>
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<td>80.5</td>
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</tr>
</tbody>
</table>

% Receiving PNC 1st Trimester
Indiana by Race and Ethnicity, 2011-2020

Source: Indiana Department of Health, Maternal & Child Health Epidemiology Division [November 9, 2021]
Original Source: Indiana Department of Health, Vital Records, ODA, Data Analysis Team
1st Trimester PNC by Insurance Type, Indiana 2020

% of Births to Mothers Receiving Early PNC

<table>
<thead>
<tr>
<th>Insurance Type</th>
<th>% Receiving Early PNC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>80.8</td>
</tr>
<tr>
<td>Champus/Tricare</td>
<td>78.8</td>
</tr>
<tr>
<td>Other Government</td>
<td>63.6</td>
</tr>
<tr>
<td>Other</td>
<td>62.9</td>
</tr>
<tr>
<td>Indian Health Service</td>
<td>62.7</td>
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<tr>
<td>Medicaid</td>
<td>57.7</td>
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<tr>
<td>Unknown</td>
<td>48.3</td>
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<tr>
<td>Self-Pay</td>
<td>43.0</td>
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</tbody>
</table>

Healthy People 2020 Goal, 84.8

PNC = Prenatal Care

Source: Indiana Department of Health, Maternal & Child Health Epidemiology Division [November 29, 2021]
Original Source: Indiana Department of Health, Vital Records, ODA, Data Analysis Team
Low Birthweight and Preterm by Prenatal Care, Indiana 2020

- Low Birthweight = < 2,500 grams
- Preterm = Gestation < 37 weeks

Early Prenatal Care = 1st trimester
Late Prenatal Care = After the 1st trimester
No Prenatal Care

<table>
<thead>
<tr>
<th></th>
<th>Early Prenatal Care</th>
<th>Late Prenatal Care</th>
<th>No Prenatal Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Birthweight</td>
<td>63.9%</td>
<td>31.0%</td>
<td>4.7%</td>
</tr>
<tr>
<td>Not Low Birthweight</td>
<td>69.8%</td>
<td>28.9%</td>
<td>1.2%</td>
</tr>
<tr>
<td>Preterm</td>
<td>66.0%</td>
<td>29.0%</td>
<td>4.6%</td>
</tr>
<tr>
<td>Not Preterm</td>
<td>69.7%</td>
<td>29.1%</td>
<td>1.1%</td>
</tr>
</tbody>
</table>
Low Birthweight and Preterm by Insurance, Indiana 2020

Low Birthweight = < 2,500 grams  Preterm = Gestation < 37 weeks

Source: Indiana Department of Health, Maternal & Child Health Epidemiology Division [November 29, 2021]
Original Source: Indiana Department of Health, Vital Records, ODA, Data Analysis Team
% Infants Breastfed at Hospital Discharge
Indiana, U.S. and Healthy People Goal, 2011-2020

United States

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<tr>
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</thead>
<tbody>
<tr>
<td></td>
<td>75.8</td>
<td>77.5</td>
<td>78.8</td>
<td>81.0</td>
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</table>

Indiana

<table>
<thead>
<tr>
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<tbody>
<tr>
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<td>72.1</td>
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<td>81.9</td>
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<td>82.0</td>
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</tbody>
</table>

Healthy People 2020

<table>
<thead>
<tr>
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<tbody>
<tr>
<td></td>
<td>81.9</td>
<td>81.9</td>
<td>81.9</td>
<td>81.9</td>
<td>81.9</td>
<td>81.9</td>
<td>81.9</td>
<td>81.9</td>
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<td>81.9</td>
<td>81.9</td>
</tr>
</tbody>
</table>

** National data for breastfeeding not reported due limited state adoption.

Source: Indiana Department of Health, Maternal & Child Health Epidemiology Division [February 7, 2022]
United States Original: Centers for Disease Control and Prevention National Center for Health Statistics
Indiana Original Source: Indiana Department of Health, Vital Records, ODA, Data Analysis Team

59
Infants Breastfed at Hospital Discharge

2020
Percent of Live Births

2016 – 2020
Percent of Live Births

5-Year Change
Linear Trend Line, 2016 to 2020

Only stable county percentages are labeled (≥20 events). Counties with less than 5 events are suppressed.

Data Source: IDOH MCH, ODA DAT, VH | Map Author: IDOH ODA PrD, 12/16/21
Summary

• **522 infants** in Indiana died before their first birthday.
• Over 20% of infant deaths can be attributed to **SUIDs**.
• Much **higher percentage** of **smoking** during pregnancy when compared to the nation.
• **Lower percentages** of **early prenatal care** when compared to the U.S.
• **Large disparities** in all indicators make prevention efforts complex.

Source: Indiana Department of Health, Maternal & Child Health Epidemiology Division [November 5, 2021]

Original Source: Indiana Department of Health, Vital Records, ODA, Data Analysis Team
Questions?

Division of Maternal & Child Health

*Indiana Department of Health*

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