EVERY BABY, EVERY DAY
Infant and Maternal Health in Cincinnati and Hamilton County
Our community has an infant mortality problem.

From 2012-2016, we lost 486 tiny lives at some point between their first breath and their first birthday. That’s a rate that puts us well behind national and state averages.*

Our community has reason for hope.

But, amidst our grief, there is good news too. With our lowest infant mortality rate on record, we have lost 123 fewer babies in the past 5 years. In fact, after more than a decade of stagnant rates, our recent 16% drop is double the national pace of change and we are the fastest improving community in Ohio.**

Our community needs to keep up the fight.

While our rates over the past five years are far better than earlier years, we still rank among the worst 10% for infant mortality in the country. Our work is not finished.***

EXTREME PRETERM BIRTH

Preterm birth that happens before the end of the second trimester is the leading cause of infant death in our community. Spacing pregnancies at least 12 months from birth to conception and quitting smoking can greatly reduce infant deaths of this type. We’ve seen a 15% decrease in extreme preterm birth in recent years.**

SLEEP-RELATED DEATHS

Babies sleep safest alone, on their back and in a crib. Anything else puts them at risk for sleep-related death. The number one cause of local sleep-related deaths has been babies sharing a bed with an adult. Thanks to hundreds of partners, we’ve seen an encouraging 24% decrease in sleep-related deaths in recent years.**

BIRTH DEFECTS

This cause of death is on the rise locally. Heart defects are the number one congenital anomaly causing infant deaths in our county.

OTHER DEATHS

Includes homicides, infections, accidents and other causes.

MORE TO LEARN

While we know more than ever before, there are still many unknown causes of infant death. Cradle Cincinnati is proud to partner with The March of Dimes, national research leaders in the fight to better understand the causes of preterm birth and birth defects. Learn more at marchofdimes.org

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*US infant mortality rate = 5.82 (2014); Ohio infant mortality rate = 7.21 (2015)
**Comparing 2007-2011 rates to 2012-2016 rates in Ohio’s 9 largest counties
***Ohio Vital Statistics, Fetal and Infant Mortality Review, 2016 data based on preliminary findings
****CDC Wonder, comparing our 2012-2016 rate to the 2011-2013 rate of counties with populations of greater than 250,000 throughout the US

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*Source: Fetal and Infant Mortality Review
**2007-2011 vs. 2012-2016
Who are these babies?

In 2016, fewer black babies died than ever before in Hamilton County. However, a continued and dramatic disparity in outcomes is unacceptable. Nationally and locally, any fight for fewer infant deaths must begin with a fight for racial equity.

The average age of a mom who lost her baby in 2016 was 28 years old. The majority of babies are dying on their very first day of life.

What can our community do?

Infant mortality is a complex issue. To understand the problem more fully, we’ll look at the health of Communities • Families • Mothers • Infants and the action being taken by many committed partners to improve the chance of survival for all babies in our area.

*We track infant deaths from families of every racial background. The local infant mortality rates for families of races not listed here are based on a very small number of deaths each year. These small numbers make a rate less useful and, as such, 5 year rates are only presented for the 3 racial categories that make up the vast majority of our deaths.

*Photo by Jon Willis
COMMUNITIES • Families • Mothers • Infants

Health in Our Communities
Where we live, work and play has a significant impact on our wellbeing. These social factors are often even more important than genetic or medical factors.

Two Communities, Vastly Different Outcomes
From 2011-2015, there were 231 births in one local neighborhood. Only 6% of those babies were born too soon and 0 died before their first birthday.

During that same time, less than 15 miles away, another local neighborhood saw a very similar number of births with 238, but very different outcomes. Here, 16% of babies were born too soon and 10 lost their lives.

Hamilton County Infant Mortality Rate by Zip Code, 2012-2016*

Investing in Social Support
This year Cradle Cincinnati is partnering with Ohio Department of Medicaid, 5 local social service agencies, and 5 Medicaid Managed Care Plans to hire 13 new community health workers for our community. This frontline staff supports moms and advocates for better health outcomes for both mom and baby. Together they make the family and community thrive.

*For more detailed neighborhood-level data visit cradlecincinnati.org

PARTNER SPOTLIGHT | Health Care Access Now
Health Care Access Now is a leader in working with women to solve any social needs and connections to behavioral health services that they might face during pregnancy. Using their expertise in implementing the Community Health Worker model, they are now working with a variety of agencies in town to provide a standardized pathway process that helps every woman achieve success.

Know someone who is pregnant or parenting and could use support? Call 211 to get them connected.
The Importance of Families
Every baby needs their entire family to thrive. Depending on the family, that might include grandparents, aunts and uncles, older siblings along with Dad and Mom.

Spacing, a family decision
Waiting at least 12 months between pregnancies lowers the risk of preterm birth.

FREQUENTLY ASKED QUESTIONS ABOUT SPACING
Why is short spacing a higher risk?
Pregnancy is a marathon. Mom’s body needs time to replace nutrients lost during pregnancy before she’s ready to carry another child.

My siblings and I were born close together and we were just fine; is this real?
Yes. Bad outcomes are thankfully rare and many families with short spacing will deliver healthy babies. However, extremely short spacing can increase a family’s risk for infant death by as much as three-fold. Healthy babies are worth the wait.

How long exactly should we be waiting?
12 month spacing means 12 months from delivery of one child to conception of the next.
Mothers' Health Matters

The leading cause of infant death in our county is preterm birth, so mom’s health is of utmost importance.

The Hidden Impact of Tobacco

More women are exposed to nicotine during pregnancy than we ever knew. Data about cigarette smoking during pregnancy has always relied on self-reported information. In 2016, we conducted a study to test how accurate this data is. We found more than twice as many women are exposed to nicotine as reported smoking. In fact, nearly 1 in 4 pregnant women seems to have exposure from either personal use or secondhand smoke. High rates of tobacco use may play a larger role in our high preterm birth rates than we thought.

Better Care for Women

The Cincinnati Learning Collaborative

Significant research suggests a lag between what science knows to be true and the daily practice of medicine. The Cradle Cincinnati Learning Collaborative aims to close this gap through integrating best practice in a uniform manner across health and community-based systems. The collaborative includes 28 prenatal care teams collectively serving more than 90% of Medicaid-insured moms. The team atmosphere is conducive to sharing learnings, failures, new ideas and successes. Through sharing data and open communication, the Learning Collaborative is improving health outcomes in Hamilton County.

PARTNER SPOTLIGHT | Christ Hospital Family and Community Medicine

Under the thoughtful and skilled leadership of Dr. Montiel Rosenthal, the team at the Christ Hospital is simplifying processes, making innovative changes to prenatal care, and following up more quickly with patients. As a key partner in the Cradle Cincinnati Learning Collaborative, their new improvements in helping women quit smoking during pregnancy will lead to better outcomes for families.

*Ohio Vital Statistics
**Interact for Health

*Photo by Jon Willis
All of Our Babies Should Sleep

Infant Health is in Your Hands

A | B | C

ALONE
Stuffed animals, other people, crib bumpers, pillows or blankets are not appropriate for babies when they sleep. Alone does not mean lonely. Babies can sleep in a crib right next to their parent’s bed.

ON THEIR BACK
Sleeping on their back helps babies continue to breathe during deep sleep and keep their airways clear.

IN A CRIB
Bassinet or Pack ‘N Play
Adult beds are never safe for infant sleep. Swings, car seats and other items are not safe places for regular sleep. A crib with a tight-fitting sheet and no other bedding is the safest place for a baby to sleep.

More Babies are Sleeping Safely
Average Sleep-Related Deaths Per Year

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<tr>
<td>2007-2011</td>
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<td>2012-2016</td>
<td>13</td>
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PARTNER SPOTLIGHT | Cincinnati Health Department
Since beginning their crib program in 2014, the Cincinnati Health Department has distributed hundreds of Pack ‘N Plays to families in Hamilton County. Through a small, but mighty three-person team, they have developed countless partnerships with local hospitals, healthcare and social service providers - all with the goal of ensuring every baby born in our county has a safe space to sleep. In 2016, the Cincinnati Health Department began offering free cribs to women prenatally, easing a burden for local moms-to-be.

Need a crib? Just call 211.
After suffering the loss of her own infant, it was important to Danielle Jones to find a way to help more babies in Ohio survive their first year. With the support of her husband Chris, she played an instrumental role in the passage of Senate Bill 332 – a first step toward reaching that goal. She testified in front of the Health and Human Services committee and urged the Finance Subcommittee to pass the bill. Her testimony received an enthusiastic response from the Ohio Senate.

Danielle believes reaching as many families as possible will one day reduce Ohio’s abnormally high infant mortality rate and eventually eradicate infant mortality. Senate Bill 332, now Ohio law, improves data access and reporting, and ensures healthcare providers are using only the best evidence-based practices. Learn more about how Chris and Danielle use their unique voices to help at angelbabynetwork.org.

Lisa Hyde-Miller is the community relations coordinator at the Villages at Roll Hill, where she manages 30 different programs for residents, including a GED training, prenatal and parenting class, Big Brother program and a food pantry. Known as “Mama Lisa” or “Ms. Lisa” to most, her love of people transcends every part of the job. In 2016 Lisa and her team completed a Safe Sleep Training for the families she serves. This training included safe sleep demonstrations, supervised practice, and baby items (sleep sack, book, Pack ‘N Play) for participants. A Mom’s Group and Mother’s Day event are some of the family-focused initiatives Lisa has planned in the months to come. Every day Lisa uses her unique voice to help more babies in her neighborhood survive.

Lisa is one of many community leaders partnering with the team at Cradle Cincinnati Connections. In four neighborhoods on the West Side of Cincinnati, the Cradle Cincinnati Connections team is helping families and babies from pregnancy through the second year of life by connecting families to needed resources and solving systematic problems that are keeping families from achieving better health.
Community Impact Over Five Years
Hundreds of partners are making a difference. Every area we’ve prioritized as a community is improving. More babies are living to see their first birthday.

- **12%** decline in short pregnancy spacing*
- **19%** decline in smoking during pregnancy*
- **24%** decline in sleep-related deaths*
- **92** fewer babies born extremely preterm* less than 28 weeks gestation
- **123** fewer infant deaths*

*2007-2011 vs. 2012-2016

**Our Funding Partners**

- 84.51
- Amegis Foundation
- Anonymous
- Carol Ann and Ralph V. Haile, Jr./U.S. Bank Foundation
- Cincinnati Children’s Hospital Medical Center
- Cincinnati Marathon, Inc.
- The Christ Hospital
- The Clement and Ann Buenger Foundation
- The de Cavel Family SIDS Foundation/eat. play. give.
- Deskey
- Donna L. Schiff
- Greater Cincinnati Chapter of the National Pan-Hellenic Council
- The Greater Cincinnati Foundation
- GBBN Architects
- Hamilton County
- Interact for Health
- The Jacob G. Schmidlapp Trust Foundation
- LISC of Greater Cincinnati and Northern Kentucky
- LPK
- Mercy Health Foundation
- Ohio Department of Medicaid
- Ohio Department of Health
- rEVO Biologics
- TriteHealth
- UC Health
- United Way of Greater Cincinnati
- US Health Resources and Services Administration
- Xavier University Community Building Institute
## WOMEN'S HEALTH

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<td><strong>Pre-pregnancy Body Mass Index</strong> (among women who had live births)</td>
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<td>Underweight (BMI &lt; 18.5)</td>
<td>3.2</td>
<td>3.8</td>
<td>4.1</td>
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<td>Obese (BMI ≥ 30)</td>
<td>25.9</td>
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<td>25.1</td>
<td>21.4</td>
<td>36.3</td>
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<td><strong>Sexually Transmitted Infection</strong> (among women who had live births)</td>
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<tr>
<td>Syphilis</td>
<td>0.7</td>
<td>0.8</td>
<td>0.1</td>
<td>0.2</td>
<td>1.7</td>
<td>0.3</td>
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<td>Gonorrhea</td>
<td>1.2</td>
<td>1.3</td>
<td>0.5</td>
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<td>Chlamydia</td>
<td>4.8</td>
<td>2.9</td>
<td>2.9</td>
<td>2.3</td>
<td>9.7</td>
<td>4.2</td>
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<td><strong>Unintentional Pregnancy</strong> (among women who had live births)</td>
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<td>Inadequately Spaced Pregnancy (among non-first time moms who had live births)</td>
<td>44.1 (2013)</td>
<td>45.8 (2012)</td>
<td>47.5 (2013)</td>
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<tr>
<td>&lt;6 month interpregnancy Interval</td>
<td>5.4</td>
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<td>&lt;12 month interpregnancy Interval</td>
<td>17.5</td>
<td>18.1</td>
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<td>16.4</td>
<td>20.8</td>
<td>12.0</td>
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<tr>
<td>&lt;18 month interpregnancy Interval</td>
<td>32.2</td>
<td>32.9</td>
<td>33.1</td>
<td>34.1</td>
<td>32.1</td>
<td>22.9</td>
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<td><strong>Mental Health</strong> (among all adult women)</td>
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<td>Reported 8 or more days with poor mental health in the past 30 days</td>
<td>22.6 (2013)</td>
<td>19.8 (2010)</td>
<td>-</td>
<td>23.9 (2013)</td>
<td>24.0 (2013)</td>
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<td><strong>Substance Abuse Rates</strong> (among all women)</td>
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<td>Excessive Drinking</td>
<td>15.8 (2013)</td>
<td>15.4 (2010)</td>
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<td>17.6</td>
<td>12.7</td>
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## PREGNANCY HEALTH

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<td><strong>Preterm Birth Rate</strong></td>
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<tr>
<td>&lt;37 Weeks</td>
<td>10.9</td>
<td>10.9</td>
<td>10.4</td>
<td>9.2</td>
<td>13.0</td>
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<td>&lt;28 Weeks</td>
<td>9.6/1,000</td>
<td>10.1/1,000</td>
<td>8.4/1,000</td>
<td>9.8/1,000</td>
<td>16.8/1,000</td>
<td>3.0/1,000</td>
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<tr>
<td>&lt;23 Weeks</td>
<td>3.2/1,000</td>
<td>3.4/1,000</td>
<td>2.3/1,000</td>
<td>1.5/1,000</td>
<td>6.7/1,000</td>
<td>1.5/1,000</td>
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<td><strong>Prenatal Care</strong> (among women who had live births)</td>
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<td>Accessed Care in the 1st Trimester</td>
<td>68.6</td>
<td>65.7</td>
<td>63.4</td>
<td>74.9</td>
<td>61.1</td>
<td>54.8</td>
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<td>Accessed Care in the 3rd Trimester</td>
<td>3.7</td>
<td>4.5</td>
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<td>2.6</td>
<td>4.8</td>
<td>5.4</td>
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<td>No Prenatal Care</td>
<td>3.2</td>
<td>3.5</td>
<td>1.4</td>
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<td>4.9</td>
<td>2.1</td>
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<td><strong>Drug Exposure during Pregnancy</strong> (among women who had live births)</td>
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<td>Drug Exposure during Pregnancy</td>
<td>10.8</td>
<td>8.3 (2014-2015)</td>
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<td>Opioid Exposure during Pregnancy</td>
<td>3.6</td>
<td>3.6 (2014-2015)</td>
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<td><strong>Chronic Illness During Pregnancy</strong> (among women who had live births)</td>
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<td>Gestational Diabetes</td>
<td>9.1</td>
<td>8.4</td>
<td>6.7</td>
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<td>8.7</td>
<td>11.2</td>
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<td>Hypertension</td>
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<td>Stillbirth rate</td>
<td>7.4/1,000 (2010-2014)</td>
<td>8.2/1,000 (2010-2014)</td>
<td>6.0/1,000</td>
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## INFANT HEALTH

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<td><strong>Breastfeeding Rates</strong> (upon hospital discharge)</td>
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<td>Postpartum Checkup</td>
<td>90.7 (2013)</td>
<td>87.5 (2010-12)</td>
<td>91.4 (2013)</td>
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<td>Postpartum Depression</td>
<td>9.3 (2013)</td>
<td>8.4 (2012)</td>
<td>10.0 (2013)</td>
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<td>Multiple Births (twins, triplets, etc.) (among women who had live births)</td>
<td>4.2</td>
<td>4.1</td>
<td>3.7</td>
<td>4.0</td>
<td>4.7</td>
<td>3.0</td>
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<tr>
<td><strong>Birth Defect/Congenital Anomaly Deaths</strong> (deaths per 1,000 live births)</td>
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<tr>
<td>Birth Defect</td>
<td>2.3/1,000</td>
<td>1.6/1,000</td>
<td>1.2/1,000</td>
<td>(US 2014)</td>
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<tr>
<td>Sleep-Related Deaths</td>
<td>1.2/1,000</td>
<td>1.3/1000</td>
<td>1.1/1000</td>
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<td><strong>Hospital Maternal Leave</strong> (among women who had live births)</td>
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<td>Paid Maternity Leave</td>
<td>51.1 (2013)</td>
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<td>46.6 (2013)</td>
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## Community Health

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<td><strong>Housing and Neighborhood Conditions</strong> (among all adults)</td>
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<tr>
<td>Renters (among all adults)</td>
<td>41.7 (2011-2015)</td>
<td>33.7 (2011)</td>
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<td>Vacancy Rate</td>
<td>12.1 (2011-2015)</td>
<td>10.8 (2011-2015)</td>
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<td>Reported neighborhood housing conditions as fair or poor (among all adult women)</td>
<td>22.3 (2013)</td>
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<td>18.2 (2013)</td>
<td>32.6 (2013)</td>
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<td>Reported lacking the ability to purchase healthy foods in current neighborhood (among all adult women)</td>
<td>14.0 (2013)</td>
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<td>8.9 (2013)</td>
<td>29.0 (2013)</td>
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<td>Reported feeling safe always or often in current neighborhood (among women who had live births)</td>
<td>87.1 (2013)</td>
<td>85.0 (2010-2012)</td>
<td>88.3 (2013)</td>
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<td><strong>Transportation</strong> (among all adults)</td>
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<td>Reported no vehicle availability in household</td>
<td>12.4 (2011-2015)</td>
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<td>8.5</td>
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## Sources

Funding for this report was provided by The United Way of Greater Cincinnati.

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James Greenberg, MD, Infant Health Lead, Cradle Cincinnati
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www.cradlecincinnati.org