

Maternal and Infant Health Quarterly Report

January-June 2016

Thomas Boeshart, MPH, Senior Epidemiologist





INTRODUCTION

The Maternal and Infant Health Quarterly Surveillance Reports are part of the work throughout Hamilton County to improve the health of women and infants, and to lower the number of infant deaths. In order to improve the health and safety of infants in Hamilton County, it is important to identify, describe, and track the problems and people at risk. This report shows the current state of infant mortality in Hamilton County.

In order to see if the health of women and infants are improving in Hamilton County, 2015 data for the same time frame (January-June) is shown next to 2016 data. Hamilton County baseline data, and Healthy People 2020 Goals are shown at the bottom of each page, when possible, to show if the health of women and infants in Hamilton County is improving.

The Maternal and Infant Health Quarterly Surveillance Report will include the following topics:

- Infant Mortality
- Preterm Birth
- Small for Gestational Age
- Pregnancy Spacing

- Maternal Smoking
- Prenatal Care
- Breastfeeding
- Safe Sleep

Infant mortality is one of the most important indicators of the health of a community.

Read on to learn more about maternal and infant health in Hamilton County.



INFANT MORTALITY

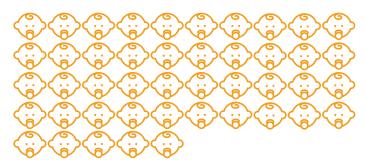
Infant mortality is the death of a child before his or her first birthday¹. An infant mortality rate is used as a way to show the health of a community, poverty in a community, the quality of health services and if the health services are available to all residents in a community².

FY I Infant Mortality = # of infant deaths x 1,000 Rate # of live births

What is the infant mortality rate in Hamilton County?

2016 January-June)

Number of Infant Deaths



= 1 infant death

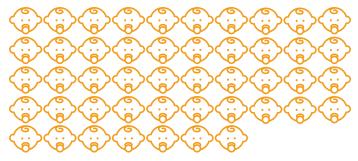
Number of Live Births
5,221

Infant Mortality Rate

8.6 per 1,000

2015 anuary-June

Number of Infant Deaths



= 1 infant death

Number of Live Births 5,438

Infant Mortality Rate

8.6 per 1,000

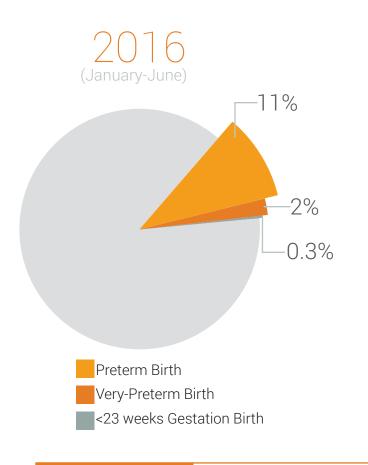
PRETERM BIRTH

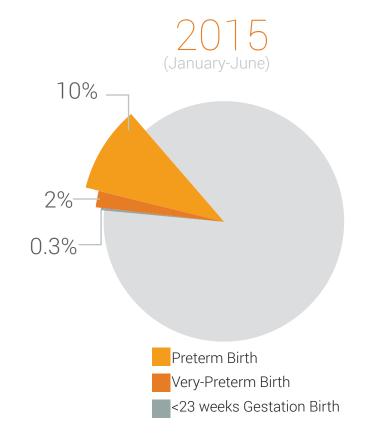
Preterm birth is a significant risk factor for infant mortality and many other adverse health outcomes.



Preterm birth rate is the percent of babies born before the start of the 37th week of pregnancy Very-preterm birth rate is the percent of babies born before the start of the 32nd week of pregnancy <23 weeks birth rate is the percent of babies born before the start of the 23rd week of pregnancy

What is the preterm birth rate in Hamilton County?





DID YOU KNOW?

81

of infant deaths from January-June 2016 were preterm births.

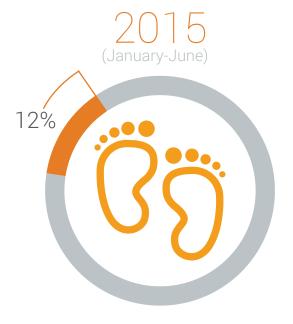
SMALL FOR GESTATIONAL AGE

Small for gestational age (SGA) is the percent of births where only one baby was born whose weight at birth is at or below a set value (10th percentile) for the week of pregnancy they were born at³. Babies who are born small for their gestational age have an increased risk for infant death and illness, permanent lack in growth, reduction or impairment of cognitive function, and the development of adult chronic disease³.

What is the small for gestational age birth rate in Hamilton County?



% of babies born small for gestational age



% of babies born small for gestational age

DID YOU KNOW?

27

of infant deaths from January-June 2016 were small for their gestational age.

PREGNANCY SPACING

Pregnancy spacing is the number of months between the live birth of a previous child and the conception of the next pregnancy. It has been shown that short spacing between pregnancies, less than 18 months from the previous live birth to conception of the next pregnancy, can lead to harmful outcomes for both moths and newborns. Mothers with short pregnancy spacing have an increased risk for developing preeclampsia (a condition that can cause blood pressure to rise and put mothers at risk for health issues including death), while the infant is more likely to be born prematurely. Pregnancies spaced between 18 and 59 months are considered optimal pregnancy spacing, which can lead to better outcomes for both the mother and the baby.

What is pregnancy spacing like in Hamilton County?





DID YOU KNOW?

30%

of infant deaths from January-June 2016 were to mothers with short pregnancy spacing.

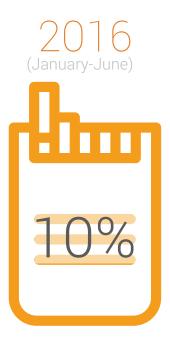
MATERNAL SMOKING

Smoking, tobacco use, and other forms of substance use and abuse during pregnancy can be extremely harmful to a developing baby. Women who smoked during pregnancy in Hamilton County were more likely to have an infant death.

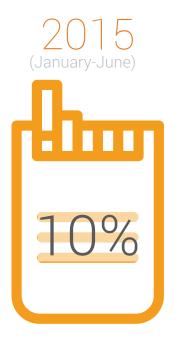
FYI

Maternal smoking is the percent of mothers who smoked during the 2nd or 3rd trimester of pregnancy.

What is the maternal smoking rate in Hamilton County?



% of births to mothers who smoked during their 2nd or 3rd trimester



% of births to mothers who smoked during their 2nd or 3rd trimester

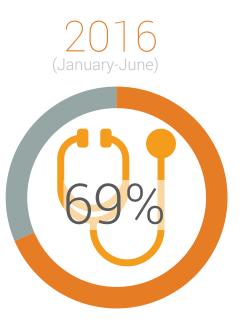
DID YOU KNOW?

If you want to quit smoking and need help, you can call the Ohio Quitline at 1-800-QUIT-NOW

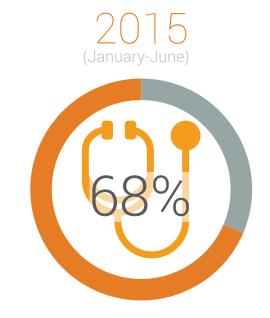
PRENATAL CARE

Having a healthy pregnancy is one of the best ways a mother can have a healthy birth. Getting early and regular prenatal care can improve the chance a mother has of having a healthy pregnancy. Early prenatal care access is the percent of mothers who began prenatal care within the first three months of pregnancy (1st trimester). Mothers who do not access prenatal care can have the risk that complications during pregnancy are not found, which can increase the risk for poor health outcomes for both mom and her baby⁴.

What is prenatal care access like in Hamilton County?



% of pregnancies to mothers who began prenatal care in the 1st trimester



% of pregnancies to mothers who began prenatal care in the 1st trimester

DID YOU 65%

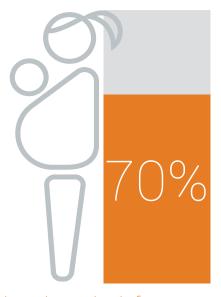
of infant deaths from January-June of 2016 were to mothers who did not begin prenatal care in the 1st trimester.

BREASTFEEDING

Breastfeeding impacts both babies and mothers in the immediate time after pregnancy and throughout the child's first year of life⁵. Babies, who are only breastfed or have been breastfed, even for a short amount of time, experience less infections and illnesses than babies who were never breastfed or were fed baby formula⁵. It has also been found that breastfeeding can lower the risk for infant death and Sudden Unexplained Infant Death (SUID)6.

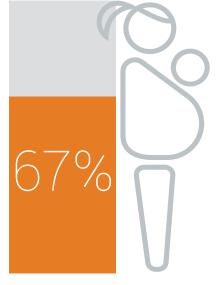
Breastfeeding initiation rate is the percent of births where the baby was reported to be breastfeeding when leaving the hospital.

What is the breastfeeding initiation rate in Hamilton County?



to be breastfeeding at discharge

(January-June)



% of births where the infant was reported | % of births where the infant was reported to be breastfeeding at discharge

SAFE SLEEP

A safe sleeping environment is one where a baby is sleeping alone, on his or her back, in a crib. A sleep-related death is the death of a baby that was due to unsafe sleeping environments. An unsafe sleeping environment can be when a baby is co-sleeping (a parent, adult, or older child shares a bed with a baby during sleep and/or nap time), a baby sleeping on a couch or in a bouncer/rocker, a baby sleeping in a crib filled with blankets or pillows, or a baby being put to sleep on his or her stomach or side. Safe sleep should always be followed, even during nap time.

How many sleep-related deaths have occurred in Hamilton County?

2016 (January-June)



2015 (January-June)



ALWAYS FOLLOW THE ABCs OF SAFE SLEEP, EVEN DURING NAP TIME.



Alone

Back

Crib



Baby sleeps safest alone, on his/her back, in a crib.



Do you want to learn more about maternal and infant health in Hamilton County?

Visit us on-line for more information and additional reports on maternal and infant health in Hamilton County.

http://www.hamiltoncountyhealth.org/en/resource_library/reports.html

www.cradlecincinnati.org/our-work/facts-and-data/

JOIN US ON SOCIAL MEDIA @HamCoHealth













@cradlecincy







This report was prepared by Hamilton County Public Health, Department of Community Health Services, Division of Epidemiology and Assessment in collaboration with Cradle Cincinnati.

- 1. Centers for Disease Control and Prevention. (2015, August 12). Infant Mortality. Retrieved June 19, 2016, from http://www.cdc.gov/reproductivehealth/maternalinfanthealth/infantmortality.htm
- 2. Association of Maternal & Child Health Programs. (n.d.). State Infant Mortality Toolkit: Why Focus on Infant Mortality?. Retrieved June 9, 2016, from http://www.amchp.org/programsandtopics/data-assessment/InfantMortalityToolkit/Documents/Why%20Focus%20on%20IM.pdf
- 3. Oken E, Leinman KP, Rich-Ewards J, Gillman MW (2003, June 8). *A nearly continuous measure of birth weight for gestational age using a United States reference*. BMC Pediatric. 2003; 3:6. doi: 10.1186/147-2431-3-6.
- 4. U.S. Department of Health and Human Services. (n.d.). Prenatal First Trimester Care Access. Retrieved June 19, 2016, from http://www.hrsa.gov/quality/toolbox/measures/prenatalfirsttrimester/
- 5. Association of Maternal & Child Health Programs (2013). Life Course Indicator: Breastfeeding Support. Retrieved June 19, 2016, from http://www.amchp.org/programsandtopics/data-assessment/LifeCourseIndicatorDocuments/LC-04_BFSupport_Final-2-14-2015.pdf
 6. Hauck F, Thompson J, Tanabe K, Moon R, Vennemann M. Breastfeeding and reduced risk of sudden infant death syndrome: A meta-analysis.
- 6. Hauck F, Thompson J, Tanabe K, Moon R, Vennemann M. *Breastfeeding and reduced risk of sudden infant death syndrome: A meta-analysis*. Pediatrics, 2011; 128:1. doi: 10.1542/peds.2010-3000.

Images courtesy of: Kelvin Murray via Getty Images | @iStockphoto.com/ArtisticCaptures | @iStockphoto.com/Christopher Futcher | @iStockphoto.com/bo1982 | @iStockphoto.com/TatyanaGI | @iStockphoto.com/Bruno Monteny | @iStockphoto.com/Izabela Habur | @iStockphoto.com/CareyHope | @iStockphoto.com/AleksandarNakic | @iStockphoto.com/michaeljung