

DATA BRIEF

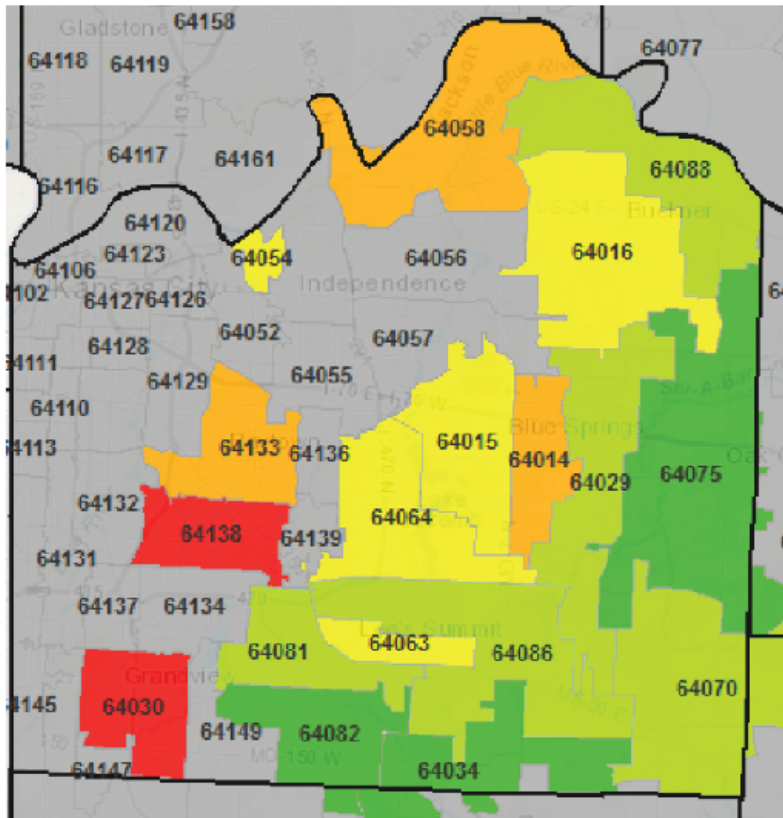
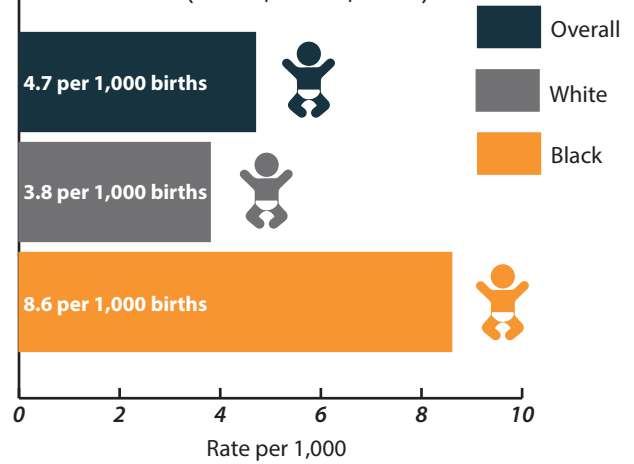


Examining Infant Mortality in Jackson County

What is Infant Mortality?

Infant mortality is the death of an infant before his or her first birthday. The infant mortality rate (IMR) is the number of infant deaths for every 1,000 births. This rate, while giving us key information about both maternal and infant health, also provides valuable information on the overall health of society. There are a variety of factors that may lead to infant deaths. According to the Centers for Disease Control and Prevention (CDC) birth defects are the leading cause of death for infants followed by preterm birth and low birth weight. Other leading causes of death are Sudden Infant Death Syndrome (SIDS), maternal pregnancy complications, and injuries.

Figure 2: EJC Infant Mortality Rate, 2012-2016 (DHSS, MICA, 2018)



Infant Mortality Rate per 1000 Births



Current Situation:

From 2012 - 2016, approximately five infants died for every 1,000 births in Eastern Jackson County (EJC). If we break this down by race, nine Black or African American infants died for every 1,000 births compared to only four White infant deaths. Although the infant mortality rate in EJC is below Missouri and the United States, the large gap between races is a growing concern. This large gap is a common trend that has been noticed throughout the county, state, and nation. This brief further explores the gap in rates between races, factors that contribute to infant mortality, and practices to address this public health concern.

Contributing Factors:

Infant mortality is more often due to prematurity and low birth weight but to fully understand the cause and risks we need to consider the impact of factors within preconception, prenatal, postpartum health, and the environment. For instance, the health of the mother before and during pregnancy impacts the health of an infant. In addition, conditions where people live, learn, work, and play affect health outcomes for infants. Listed below are factors that can contribute to an increased risk of infant death which include both individual behaviors and environmental/societal factors.

Prenatal/Preconception Infant Death Risk Factors:

- Inadequate Prenatal Care: women receiving fewer than recommended doctor's visits
- Maternal Age: women younger than 18
- Smoking: women who smoke during pregnancy
- Birth Spacing: women not waiting at least 18 months after giving birth to become pregnant again
- Alcohol/Drug use: women who use substances not approved by a nurse or physician during pregnancy

Environmental Infant Death Risk Factors:

- Sleep Environment: infants not sleeping alone, flat on their back in a bare crib for every sleep
- Secondhand Smoke Exposure: smoking in the same room or vehicle as an infant
- Social and Economic Factors
 - Low Educational Attainment of Mother
 - Income Inequalities and Poverty
 - Exposure to Toxic Stress
 - Racial Disparities
 - Poor Access to Care

Table 2: Infant Mortality Rates by Race, 2000-2015 (DHSS, MICA,2018)

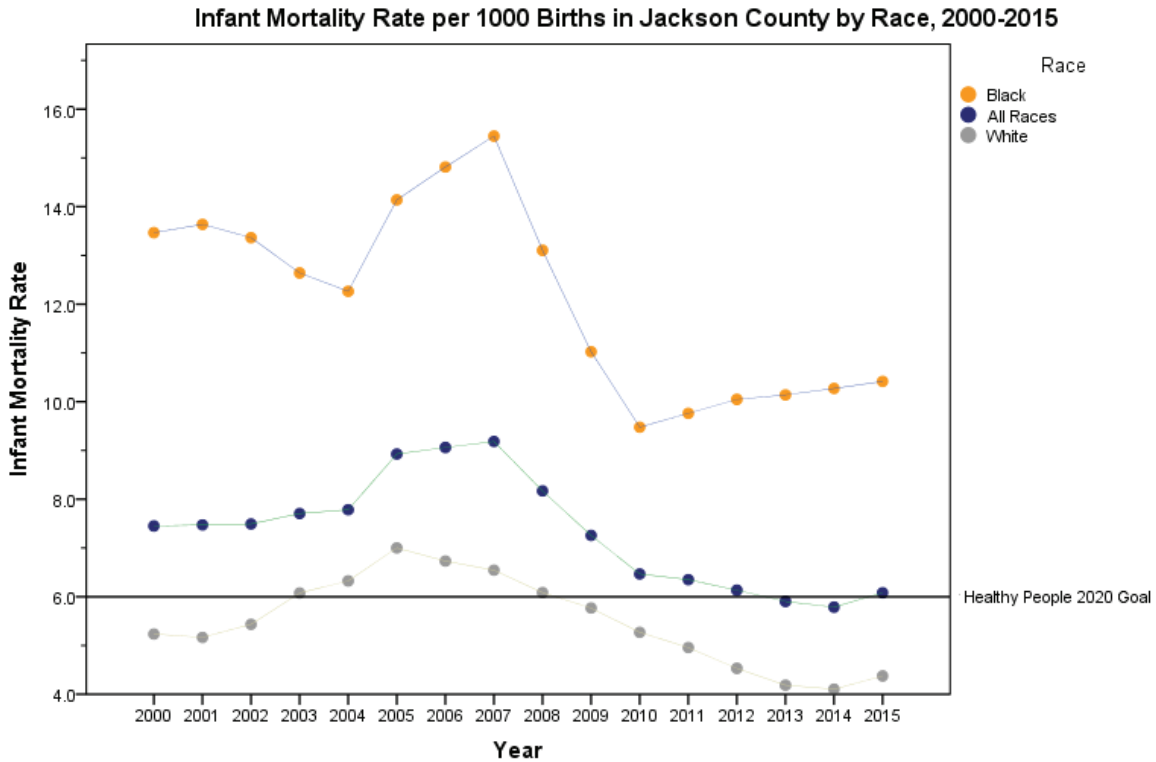
Location	Race	IMR 2000	IMR 2015	Reduction in IMR	Mean, IMR, 2000-2015, (95% CI)
Jackson County	White	5.2	4.4	16.4%	5.5 (4.5, 6.4)
	Black	13.5	10.4	22.6%	12.1 (10.2, 14.1)
Missouri	White	5.8	5.4	7.7%	5.9 (5.5, 6.4)
	Black	16.8	12.3	26.6%	14.2 (12.4, 16.0)

Table 3: Ratio Between White and Black IMR, 2000-2015 (DHSS, MICA,2018)

Location	Ratio between Black and White IMR, 2000	Ratio between Black and White IMR, 2015	Reduction in the Ratios between Black and White IMR	Rate Ratio Mean, 2000-2015 (95% CI)
Jackson County	2.6	2.4	7.5%	2.2 (2.0, 2.5)
Missouri	2.8	2.3	17.8%	2.4 (2.2, 2.6)

The Infant Mortality Gap:

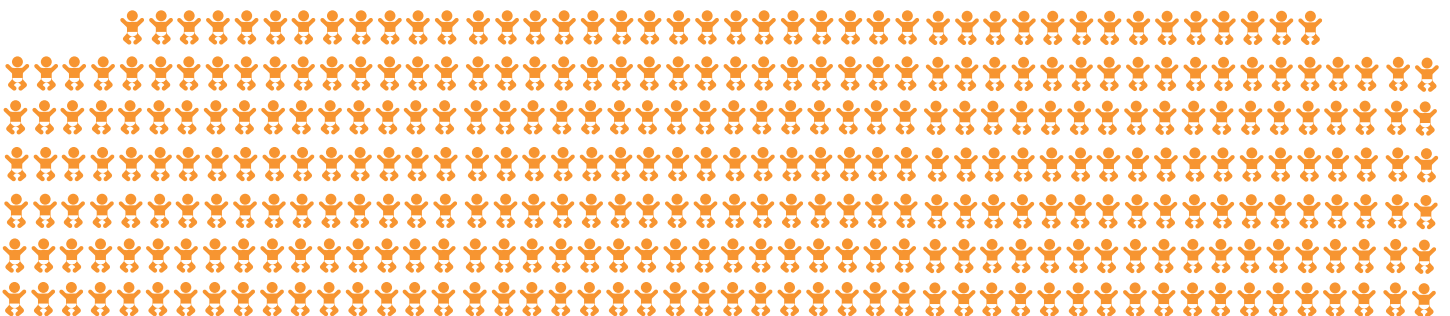
The disparities observed in infant mortality reflect further inequalities in health overall. These racial disparities result from inequities which includes social determinants of health, economic status, structural and relational racism, insurance coverage, and health care access. Health disparities between different racial/ethnic groups continue to persist throughout the United States despite Healthy People's ongoing goal to eliminate them. Even though the nation has seen a decline in infant mortality rates, the rates remain disproportionate for Black women. Additional research across Jackson County should be conducted to further explore the factors affecting women and infants in this geography.



IF

the Black Infant Mortality Rate was **equal** to the White Infant Mortality Rate, then **342** Black infants in Jackson County would have **survived** past their first birthday.

That's **17 FULL** Kindergarten classes of children.



Addressing Infant Mortality:

Jackson County Health Department (JACOHD) & WIC Programs:

Cribs for Kids: JACOHD partners with Infant Loss Resources to provide the National Infant Safe Sleep Initiative. This program provides education to parents and caregivers on the importance of practicing safe sleep for their babies and provides a Pack 'n Play portable crib to families who could, otherwise not, afford a safe place for their babies to sleep. All education is based on American Academy of Pediatrics Guidelines for Infant Sleep Safety.

Baby and Me Tobacco Free (BMTF): BMTF is an evidence based, smoking cessation program created to reduce the burden of tobacco on the pregnant and postpartum population. Pregnant women attend four prenatal cessation sessions to receive education and support for quitting and remaining smoke-free. After the baby's birth, women can return once a month to test and show they are smoke-free. If the mother is smoke-free, she will receive a diaper voucher for up to twelve months postpartum.

Women, Infants, and Children (WIC) Food and Nutrition Service: WIC helps pregnant women, new mothers, and young children learn about nutrition, eating well, and staying healthy. WIC provides eligible families with quality nutrition education and services, breastfeeding promotion and support, monthly food packages, and access to healthcare services.

Future Actions:

Reducing infant mortality lies at the intersection of adequate health services and improvement of social conditions for pregnant women. Interventions in the health care system include reducing cesarean births, establishing protocols to decrease preterm delivery, implementing sudden infant death prevention programs, and increasing breastfeeding. Opportunities at the community level exist as well. Interventions should focus on social, emotional, and nutritional support for pregnant women. Some specific interventions include nurse-family partnerships, parents as teachers programs, and home visiting programs for women with high-risk pregnancies. Eliminating the gap in infant mortality between races will most likely require a multidimensional approach encompassing social determinant factors, structural racism, and economic justice in addition to targeting health care and behaviors that influence the health of women and infants.

Methods:

Data for this report followed methods used by a previous study on infant mortality rates. Information on death of infants and number of births was accessed through the Missouri Information for Community Assessment from years 1999 to 2016. Due to the small number of cases, analysis for EJC rates could not be calculated by year requiring the analysis to be completed for all Jackson County. For yearly rates, three year averages for number of deaths and number of births were used to calculate infant mortality rates.

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