DATA SPOTLIGHT:

Infant mortality

By looking deeply at data, we can shape the future of Kansas.

If we address the barriers facing children of color in our state, we can improve economic, health, education, and social outcomes across the board. Kansas Action for Children's Data Spotlight series examines how race and ethnicity shape the issues affecting Kansas children and identifies ways policymakers can help every Kansas child succeed.

Last year, Kansas marked a significant achievement: a record-low infant mortality rate. However, a closer look at the infant mortality information reveals that Black Kansas babies remain roughly three times as likely to die as white babies, due to a variety of systemic barriers. We cannot be satisfied until these infant mortality reductions are realized for every Kansas child.

We can, and we must, do better.

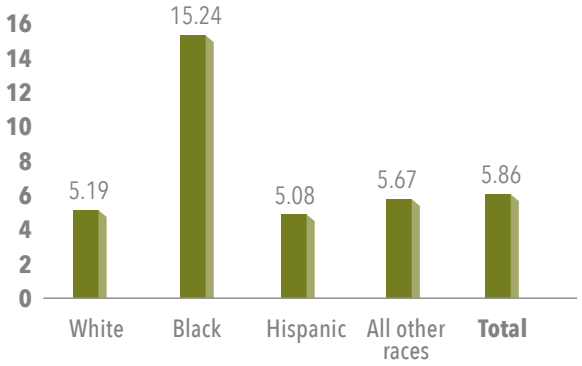
Black Kansas babies are nearly three times more likely to die before their first birthday than white Kansas babies.

In 2016, the infant mortality rate[i] in the state was 5.86. Most racial and ethnic groups in Kansas had similar infant mortality rates. However, with an infant mortality rate of 15.24, Black Kansas babies remain roughly three times as likely to die before their first birthday than white Kansas babies (5.19). While infant mortality rates among Hispanic and white babies were comparable in 2016, there has been fluctuation in infant mortality rates among Hispanic babies over the years. We do not have enough information to determine whether the relatively low rate reflects a trend.

Research shows stress of racial discrimination linked to higher rates of infant mortality.

There are many indicators that relate to infant mortality, including preterm birth, low birth weight, and access to health care. However, the National Center for Health Statistics states that "race is a stronger indicator of infant mortality than socioeconomic status, maternal educational level, or smoking during pregnancy."[ii]

KANSAS INFANT MORTALITY RATES DIFFER BY RACE DUE TO STRESS AND OTHER FACTORS



Source: Annual Summary of Vital Statistics, Kansas Department of Health and Environment. 2016.
Definition: Infant Mortality Rate is defined as single-year infant deaths divided by single-year live births and multiplied by 1,000.

An increasingly recognized factor for heightened instances of infant mortality among Black families is stress, particularly stress brought on by racial discrimination. Racial discrimination includes discriminatory policies and actions at the institutional level as well as the interpersonal racism that occurs every day.

Revving the engine of everyday racism

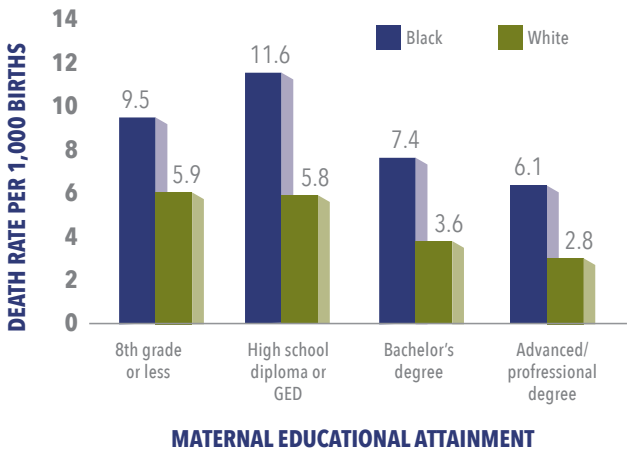
Racial discrimination takes many forms, including internalized, interpersonal, institutional, and structural racism.[iii] Racial discrimination is not just the action of individuals, but systems. The cumulative effects of this racism have health consequences. Dr. Camara Jones describes the impact of racism as the following:

"Every day racism is like gunning the engine of a car, without ever letting up. In fact, people who have looked at blood pressures, measuring ambulatory blood pressures, for white folks and black folks, young folks, see that the blood pressures might be the same during the day, but at night white folks' blood pressure would drop and the black folks' blood pressures would stay the same. And so it is gunning the engine of that car and wearing it out, wearing it out without a rest. And I think that the stresses of every day racism are doing that."[iv]

As recent coverage has documented, racial discrimination experienced by Black women throughout their lifetime increases their likelihood of having babies preterm.[v] Class is not a protective factor from the effects of racial discrimination. Racial discrimination, and the stress it causes, affects Black Americans at all income levels.[vi]

Due to historical and current barriers, Black Americans are more likely than white Americans to live below the federal poverty level and have less education (stressful factors also associated with infant mortality). However, research shows that even educated and middle-class Black women are more likely to have "smaller, premature babies with a lower chance of survival."[vii] In fact, "babies born to well educated, middle-class black mothers are more likely to die before their first birthday than babies born to poor white mothers with less than a high school education."[viii] This finding suggests the particular stress of racism affects Black women of all income and education levels.

INFANT MORTALITY HIGHER FOR MIDDLE-CLASS BLACKS THAN LOWER-CLASS WHITES



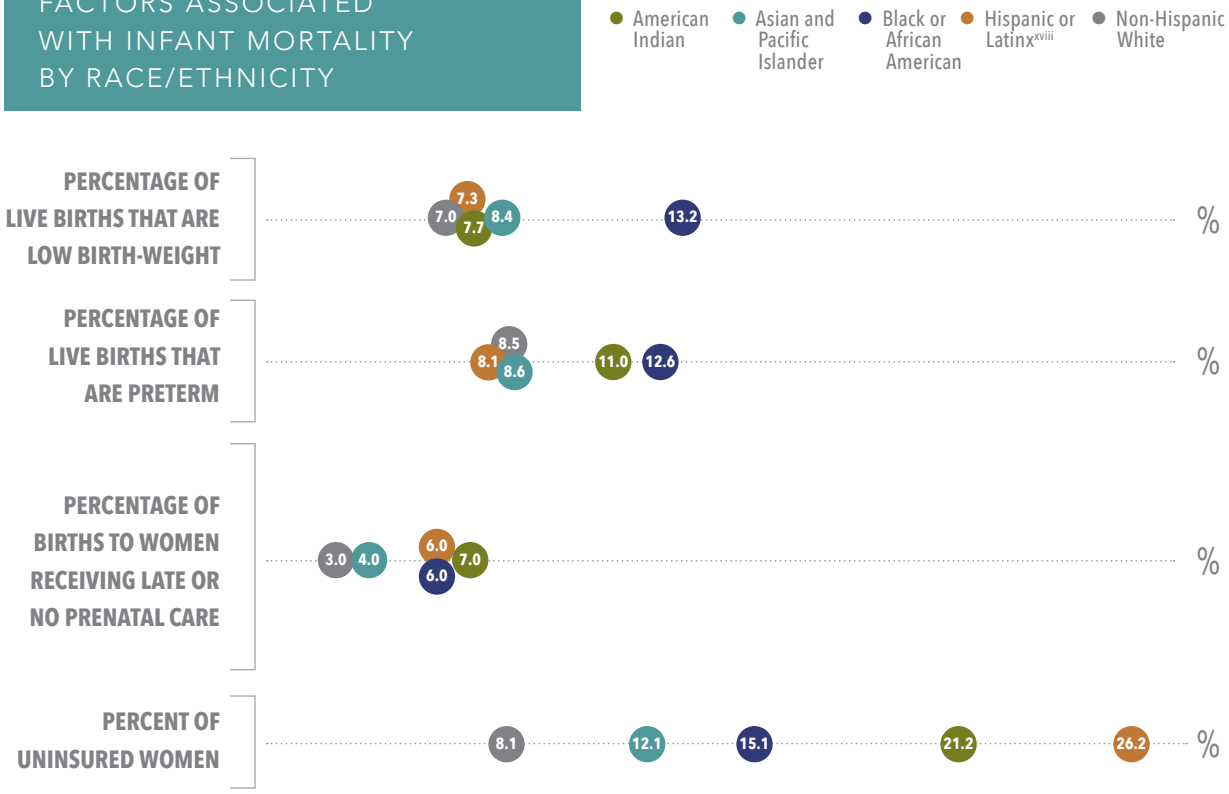
Source: Centers for Disease Control and Prevention (Wonder), Linked Birth/Infant Death Records, 2007–2013.

Engaging in the health care system itself can be a stressful experience for women of color. Black women often face implicit bias and microaggressions[ix] [x] from the professionals responsible for caring for them. Nearly one-third of black women surveyed say they have been discriminated against in a physician's office.[xi]

A mother's health insurance plays an important role in her access to prenatal care, which affects infant mortality rates. In 2015, 15.1 percent of Black women were uninsured, compared with 8.1 percent of white women in Kansas.[xii] Similarly, Black women are twice as likely as white women to receive late or no prenatal care in Kansas (6 percent versus 3 percent).[xiii]

Low birth-weight is also a major factor in infant mortality.[xiv] In 2015, 6.8 percent of babies born in Kansas had low birth weight.[xv] However, nearly twice as many Black Kansas babies were born with low birth weights (11.2 percent), compared with white Kansas babies (6.5 percent).[xvi] Research shows "women without medical insurance coverage had babies with the lowest mean birth weights, as well as significantly fewer prenatal visits."[xvii]

FACTORS ASSOCIATED WITH INFANT MORTALITY BY RACE/ETHNICITY



Sources:
Low Birth-Weight: Annie E. Casey Foundation. Kids Count Data Center. 2016. http://datacenter.kidscount.org/data#KS PRB analysis of Centers for Disease Control and Prevention data: National Center for Health Statistics, CDC Wonder 2016 birth data.

Preterm: March of Dimes. 2017 Premature Birth Report Card. https://www.marchofdimes.org/peristats/tools/reportcard.aspx?frmodrc=1&reg=20 2013-2015.

Prenatal Care: Annie E. Casey Foundation. Kids Count Data Center. 2015. http://datacenter.kidscount.org/data#KS 2007–2015 Population Reference Bureau analysis of Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS).

Uninsurance Rates for Women: Kansas Health Institute. "Chartbook: Racial and Ethnic Health Disparities in a Changing Kansas." http://www.khi.org/policy/article/17-39. KHI analysis of data from the U.S. Census Bureau's American Community Survey Public Use Microdata Sample 2015 (2011–2015) 5-Year Estimates.

Similarly, preterm deliveries are associated with infant mortality. According to the Mayo Clinic, babies who are born preterm are at a higher risk for problems with their breathing, blood, brains, hearts, immune systems, and gastrointestinal systems.[xix] In Kansas, 12.6 percent of live births in 2013-2015 for Black babies were preterm,[xx] compared with 9.1 percent overall. This difference highlights that "the preterm birth rate among black women is 48 percent higher than the rate among all other women,"[xxi] placing Black babies at a higher risk for death.

Policy Recommendations

We cannot effectively make Kansas the best place to raise and be a child without closing racial gaps. Research tells us that, for children to reach their full potential, we must start investing in them before they are born. We can develop policy responses that will both continue the reduction in overall infant mortality rates *and* eliminate the gap in outcomes that exist between Black babies and their white counterparts.

With race being a primary predictor of the risk of infant mortality, it is essential to examine how institutions, policies, and culture further racial discrimination and inequity. Kansas should:

» **Ensure medical professionals and other health care providers receive training that comprehensively addresses cultural competence.** Culturally adapted health care[xxii] training for medical professionals can help to address implicit bias,[xxiii] which can lead to disparities in medical treatment and outcomes.[xxiv] However, research also shows not all diversity training programs are effective,[xxv] so programs must be evaluated to ensure success.

» **Expand KanCare to parents and other adults to ensure all mothers have access to strong perinatal care.** Expansion of the state's Medicaid program is one of the strongest tools available to address barriers to health insurance access and improve birth outcomes for Kansas babies. Broader access to health care can bolster prenatal care and ensure better care for mothers and children. States that have expanded Medicaid under the Affordable Care Act (ACA) option have seen greater declines in overall infant mortality rates compared with states such as Kansas, that did not expand coverage. The declines have been even more pronounced for Black babies.[xxvi]

» **Ensure newborns are automatically enrolled in available health coverage.** Currently, when a mother is covered by Kancare, her child is automatically enrolled in coverage. However, if the mother is not covered, then her child would not be automatically covered, though if they are likely eligible for Medicaid or CHIP. Policymakers should make it easier for children to enroll in Medicaid. Streamlining the application process for new mothers and newborns recognizes the importance of health care in the beginning years of a child's life, when brain development and physical growth build the foundation for lifelong health.[xxvii]

» **Invest in evidence-based home visiting programs.** Home visiting programs, which provide services to at-risk pregnant women and parents with young children,[xxviii] aim to give new parents the tools to best care for their children. Nurses or other trained community-based professionals visit pregnant or new parents in their homes on a regular basis. Practitioners should focus on the whole woman, expanding beyond clinical needs of the pregnant woman and recognizing that women's needs vary "by where they live, their lifestyle and many other factors."[xxix] Research has shown that evidence-based home visiting models improve child and maternal health, especially in high-need and at-risk communities. These programs allow families to identify and access resources that support healthy outcomes. In addition to investing state funds into these preventive programs, Kansas can explore using Medicaid as a funding source to support some services provided as part of home visits, since many families are also Medicaid-eligible.

» **Promote healthy and sustainable food initiatives to ensure mothers and infants have access to affordable, nutritious foods.** Poor nutrition contributes to low birth weight and other, related, medical complications for mothers and children. Maintaining and expanding federal programs such as the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) and the Supplemental Nutrition Assistance Program (SNAP) can help growing and young families maintain the healthy diets needed for pre-natal and breastfeeding nutrition.

» **Adopt paid parental leave.** Research shows an increase in paid maternity leave is correlated with a reduction in infant mortality rates[xxx] and other health benefits.[xxxi] Encouraging employers to provide paid parental leave strengthens the health of both parents and children.

TO LEARN MORE ABOUT INFANT MORTALITY AND RACE:

- Read more about the Fetal Infant Mortality Review (FIMR) program at KAC's website.[xxxii]
- The Kansas Infant Death & SIDS Network's "Zero to One: Disparities in Infant Mortality" video series[xxxiii] and the "H.E.A.T. (Health Equity Action Transformation)" report.[xxxiv]
- Check out the presentations from the 2017 FIMR Conference on Race and Infant Mortality.[xxxv]
- Explore Kansas Health Institute's issue briefs on health disparities in Kansas, including infant mortality.[xxxvi]

[i] Infant Mortality Rate is defined as single-year infant deaths divided by single-year live births and multiplied by 1,000. Annual Summary of Vital Statistics, Kansas Department of Health and Environment. 2016.

[ii] Zero to One: Disparities in Infant Mortality video series. http://www.kidsks.org/professional-resources.html

[iii] Race Forward: The Center for Racial Justice Innovation. "Moving the Race Conversation Forward." https://www.raceforward.org/research/reports/moving-race-conversation-forward

[iv] "Unnatural causes: is inequality making us sick?" Episode 2-When the Bough Breaks. https://www.unnaturalcauses.org/episode_descriptions.php?page=2

[v] Chatterjee, Rhitu and Rebecca Davis. "How Racism May Cause Black Mothers To Suffer The Death Of Their Infants." National Public Radio. December 20, 2017. https://www.npr.org/sections/health-shots/2017/12/20/570777510/how-racism-may-cause-black-mothers-to-suffer-the-death-of-their-infants.

[vi] Demby, Gene. "How Black Americans See Discrimination." National Public Radio. October 25, 2017. https://www.npr.org/sections/codeswitch/2017/10/25/559015355/how-black-americans-see-discrimination

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[viii] Richard V. Reeves and Dayna Bowen Matthew. "6 charts showing race gaps within the American middle class." The Brookings Institution. 2016. https://www.brookings.edu/blog/social-mobility-memos/2016/10/21/6-charts-showing-race-gaps-within-the-american-middle-class/

[ix] Chuck, Elizabeth. "How training doctors in implicit bias could save the lives of black mothers." NBC News. May 2018. https://www.nbcnews.com/news/us-news/how-training-doctors-implicit-bias-could-save-lives-black-mothers-n873036

[x] According to the Merriam-Webster dictionary, microaggression is defined as "a comment or action that subtly and often unconsciously or unintentionally expresses a prejudiced attitude toward a member of a marginalized group (such as a racial minority)."

[xi] Chuck, Elizabeth. "How training doctors in implicit bias could save the lives of black mothers." NBC News. May 2018. https://www.nbcnews.com/news/us-news/how-training-doctors-implicit-bias-could-save-lives-black-mothers-n873036

[xii] Kansas Health Institute. "Chartbook: Racial and Ethnic Health Disparities in a Changing Kansas." http://www.khi.org/policy/article/17-39. KHI analysis of data from the U.S. Census Bureau's American Community Survey Public Use Microdata Sample 2015 (2011-2015) 5-Year Estimates.

[xiii] Annie E. Casey Foundation. Kids Count Data Center. 2015. http://datacenter.kidscount.org/data#KS 2007-2015 Population Reference Bureau analysis of Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS).

[xiv] Schwartz, I.L. "Low-birth-weight effects of demographic and socioeconomic variables and prenatal care in Pima County, Arizona." Western Journal of Medicine. June 1990, 152(6): 725-728. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1002453/

[xv] Low birth-weight is defined as live births weighing less than 2,500 grams (5.5 pounds).

[xvi] Low Birth-Weight: Annie E. Casey Foundation. Kids Count Data Center. 2015. http://datacenter.kidscount.org/data#KS Centers for Disease Control and Prevention, National Center for Health Statistics.

[xvii] Schwartz, I.L. "Low-birth-weight effects of demographic and socioeconomic variables and prenatal care in Pima County, Arizona." Western Journal of Medicine. June 1990, 152(6): 725-728. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1002453/

[xviii] With the exception of referring to specific data sources, when discussing people of Hispanic or Latin origin, KAC will use the term "Latinx" (pronounced "La-teen-ex") in order to be gender neutral.

[xix] Mayo Clinic. “Premature Birth.” https://www.mayoclinic.org/diseases-conditions/premature-birth/symptoms-causes/syc-20376730

[xx] Preterm birth is defined as a birth less than 37 weeks gestation based on the obstetric estimate of gestational age.

[xxi] March of Dimes. 2017 Premature Birth Report Card. https://www.marchofdimes.org/peristats/tools/reportcard.aspx?frmodrc=1&reg=20

[xxii] County Health Rankings and Roadmaps. “Culturally adapted health care.” http://www.countyhealthrankings.org/take-action-to-improve-health/what-works-for-health/policies/culturally-adapted-health-care

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[xxxi] Burtle, Adam and Stephen Bezruchka. “Population Health and Paid Parental Leave: What the United States Can Learn from Two Decades of Research.” Healthcare. June 2016, 4(2). https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4934583/

[xxxii] Kansas Action for Children. “Fetal Infant Mortality Review (FIMR).” https://kac.org/fetal-infant-mortality-review-fimr/

[xxxiii] Zero to One: Disparities in Infant Mortality video series. Kansas Infant Death & SIDS Network. http://www.kidsks.org/professional-resources.html

[xxxiv] H.E.A.T. (Health Equity Action Transformation). Kansas Infant Death & SIDS Network. http://www.kidsks.org/uploads/4/9/1/4/49142465/chc_heatreport_lr.pdf

[xxxv] 2017 FIMR Conference on Race and Infant Mortality. http://webs.wichita.edu/?u=conferences&p=/fimr_conference/

[xxxvi] Corbett, Steve, Lawrence John Panas, Wen-Chieh Lin. “Issue Brief—Infant Mortality: Disparities in the Sunflower State.” Kansas Health Institute. 2018. http://www.khi.org/policy/article/18-08