



# Infant Mortality

JOHNSON COUNTY, KANSAS

## 2008



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Johnson County Health Department

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Prevent. Promote. Protect.

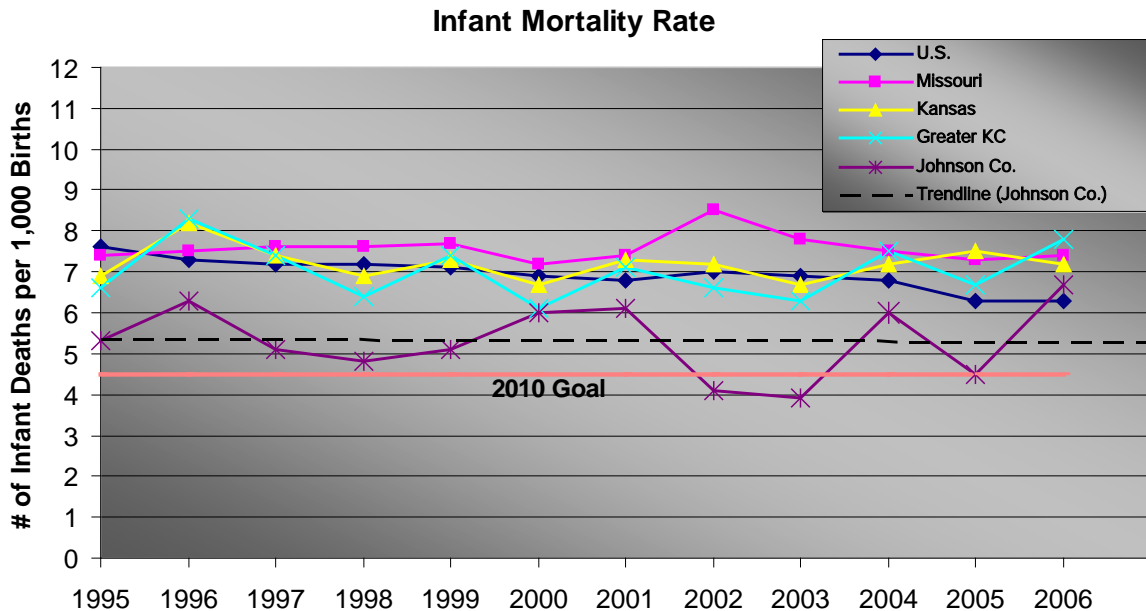
# Infant Mortality Johnson County, Kansas

## Infant Mortality -- Johnson County:

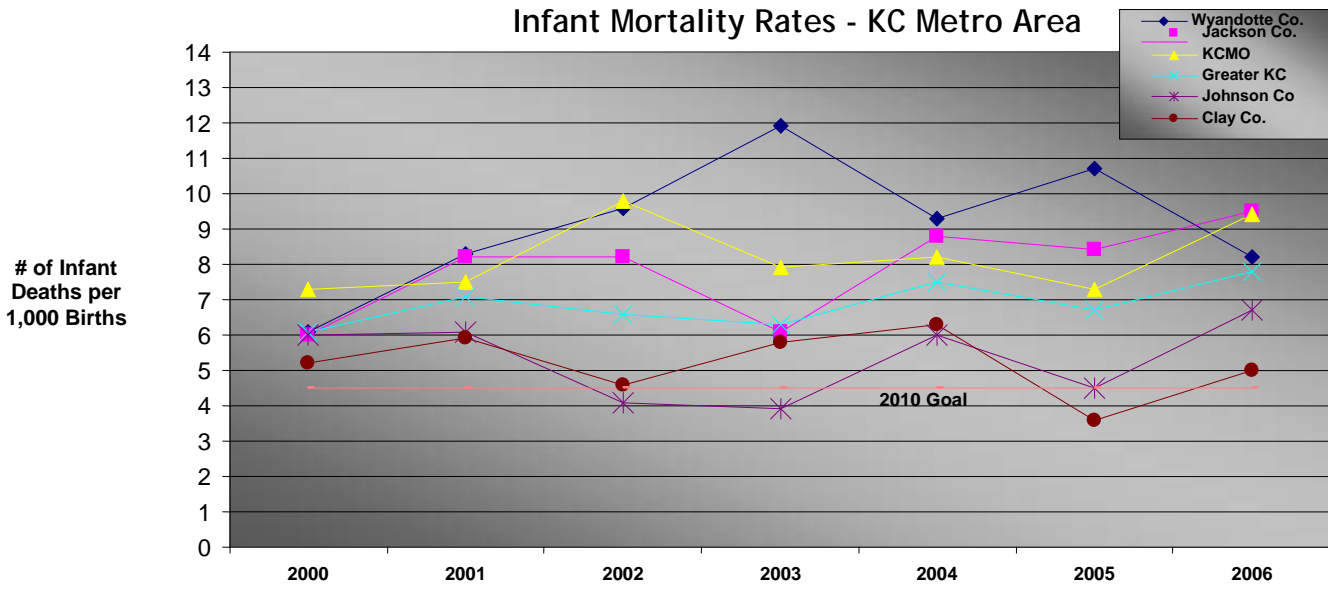
“Infant Mortality” refers to the death of an infant less than one year old. The Infant Mortality Rate (IMR) is expressed as the number of infant deaths per 1,000 live births in the same calendar year. The IMR is used to compare the health and well-being of populations across and within countries. It is also a universal measure considered among the best indicators of a community’s overall quality of life.

- In 2006, the IMR in Johnson County was 6.7, rising from 4.5 (2005). The Johnson County rate remains below metro Kansas City at 7.8, the state of Kansas 7.2 and Missouri at 7.4. However, it was above the United States infant mortality rate of 6.3.
- Kansas’ ten-year IMR average had an annual 7.2, compared to Missouri’s 7.6 IMR.
- Johnson County’s downward trend over the last five years met the U.S. Department of Health and Human Services’ Healthy People 2010 Goals three out of five years, with a rate increase in 2006.

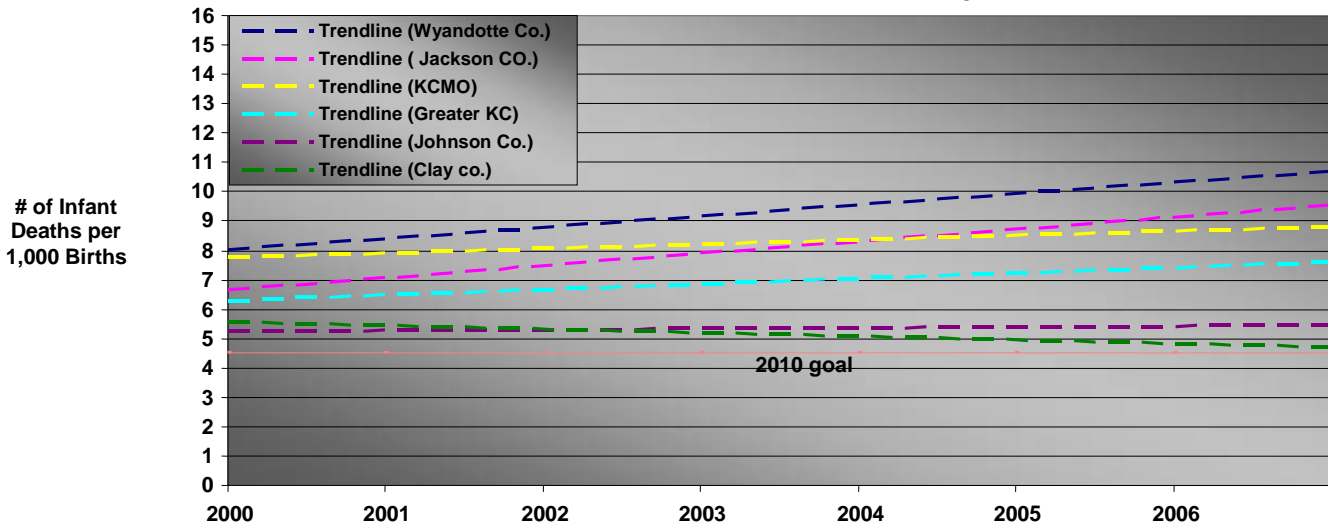
**YEAR 2010 GOAL:** Reduce the death rate for infants to no more than 4.5 deaths per 1,000 live births.



# Infant Mortality -- A Community Snapshot:

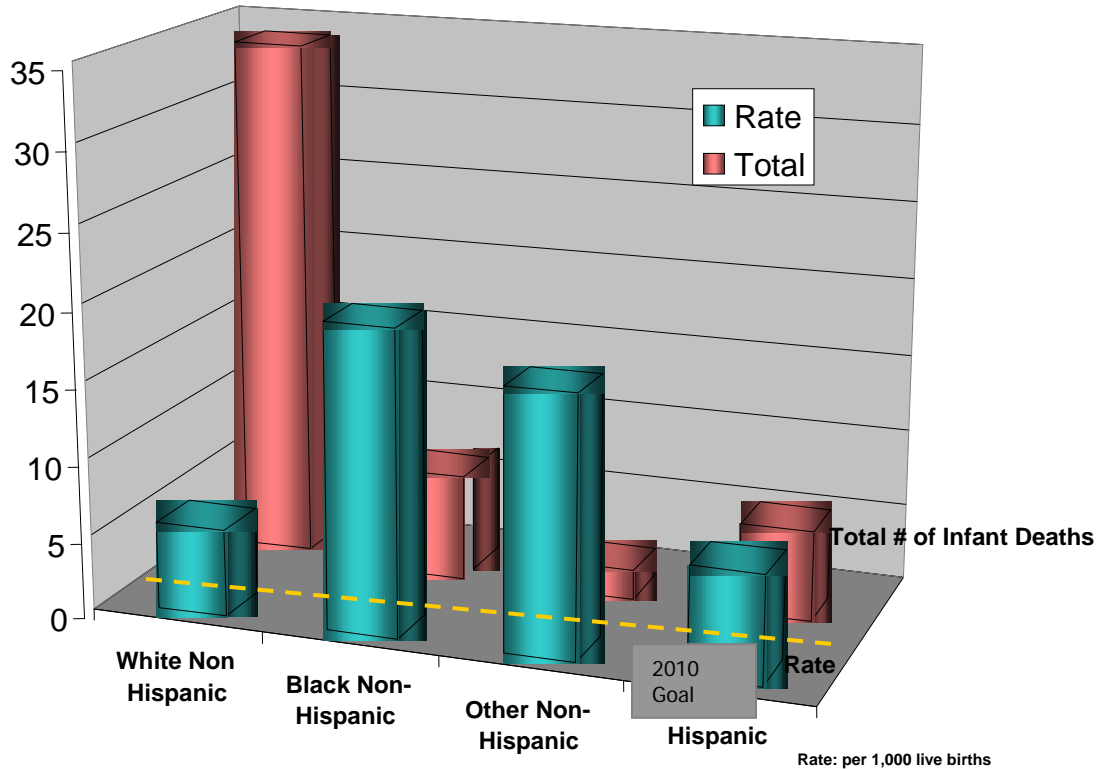


### Trends in Infant Mortality - KC Metro Area



Note: Platte County was not included in the KC Metro Area representation as the Platte County population numbers are too small to be statistically relevant.

## Infant Mortality: Racial/Ethnic Gap Still Exists



Infant Mortality rate according to race and ethnicity-Johnson County, 2006

	Rate	Total
White Non-Hispanic	5.7	34
Black Non-Hispanic	19.9	7
Other Non-Hispanic	17.0	2
Hispanic	7.1	6

Rate per 1,000 live births

Despite substantial reductions in the infant mortality rate in the U.S., the State of Kansas and Johnson County during the past several decades, racial and ethnic disparities in infant mortality rates persist. Although the trend in infant mortality rates among non-Hispanic blacks and non-Hispanic whites has been on an overall decline, the proportional discrepancy rates between these populations remain a concern.

One of the *Healthy People 2010* National objectives is to reduce deaths among infants aged <1 year to  $\leq 4.5$  per 1,000 live births among all racial/ethnic groups (objective 16-1c).

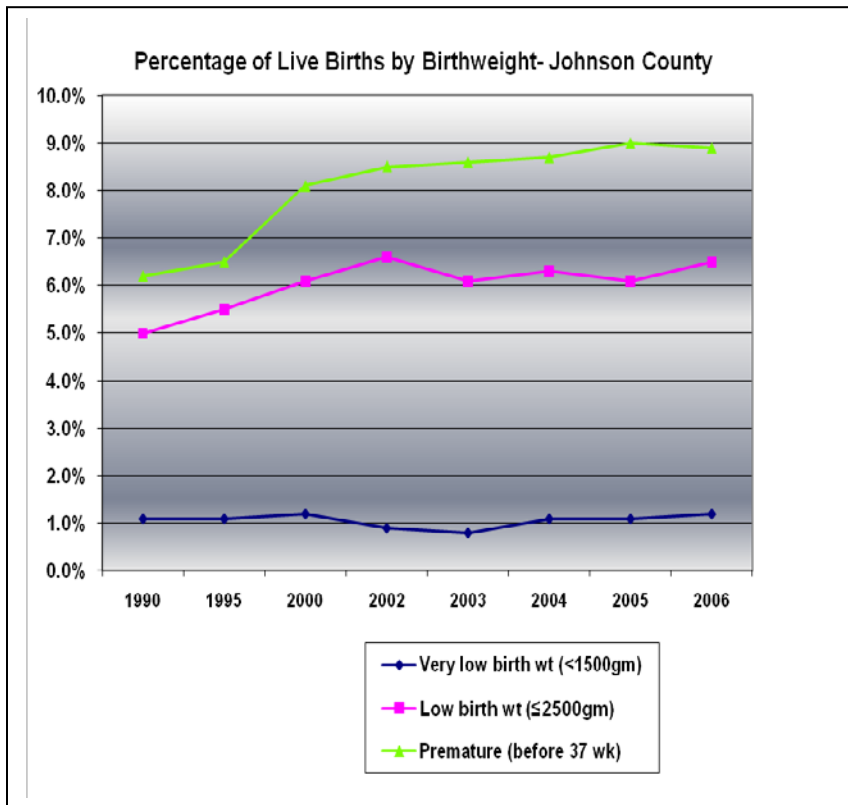
## Maternal and Infant Risk Factors

1. Prematurity and low birthweight (birth before 37 weeks of gestation and weight less than 5 ½ pounds at birth, respectively)
2. Birth defects
3. Sudden Infant Death Syndrome (SIDS) (SIDS rates for State of Kansas remained within 1.5-1.7/100,000)

Research has identified some key risk factors contributing to high-risk pregnancies and infant deaths:

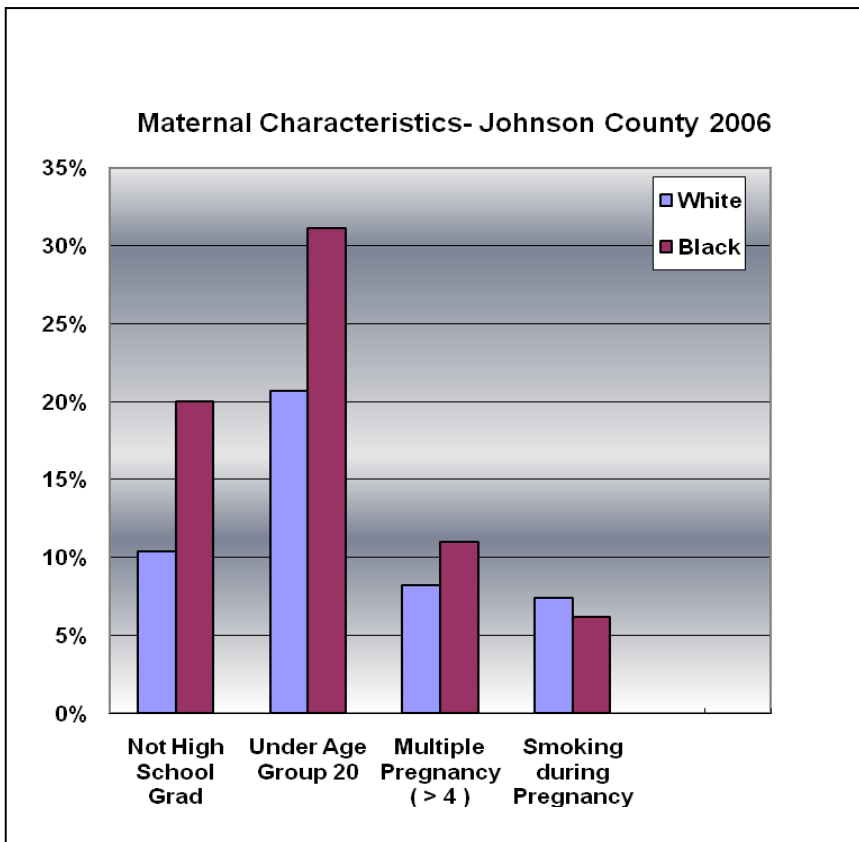
- Previous premature or low birth weight baby
- Less than optimal health before a woman becomes pregnant
- Maternal age
- Prenatal Care
- Maternal education
- Smoking during pregnancy
- Exposure to secondhand smoke during pregnancy
- Exposure to secondhand smoke after birth
- Inadequate nutrition and insufficient intake of folic acid (a B vitamin) before and during pregnancy
- Using street drugs and alcohol during pregnancy
- Infant sleeping on its stomach
- Close spacing between pregnancies
- Infections - including reproductive tract infections, sexually transmitted diseases and periodontal (oral) infections during pregnancy
- Sex of infant
- Multiple pregnancy

## Birth Weight and Period of Gestation



Birth weight and period of gestation are the two most important predictors of an infant's subsequent health and survival. Infants born too small or too soon have a much greater risk of death than those born at term. In 2005, infants born weighing less than 1,000 grams accounted for nearly one-half of all infant deaths in the United States.

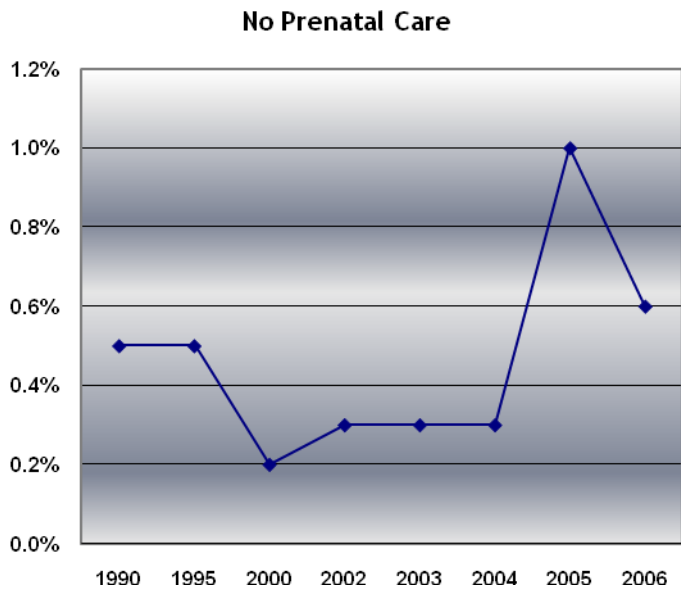
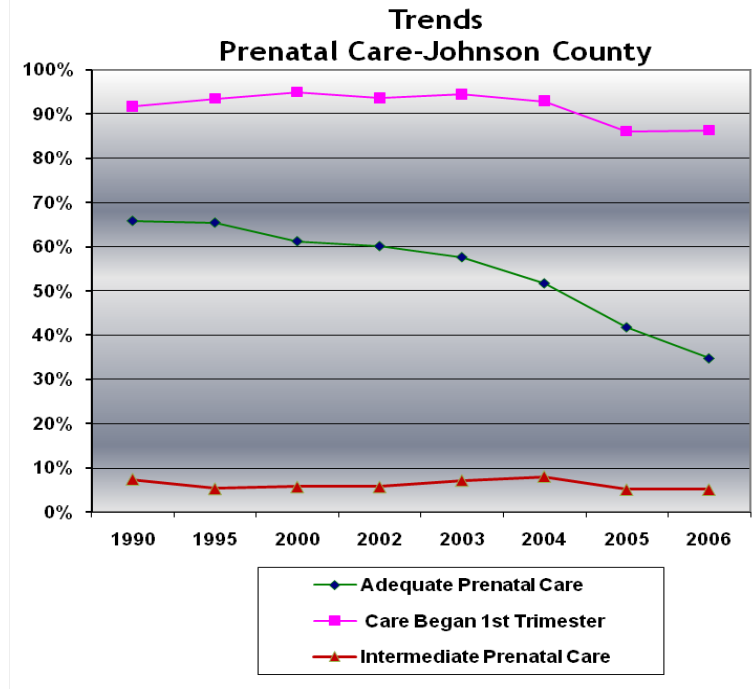
In Johnson County, the trend for premature birth has consistently increased for the last six years. Low birth weight deliveries and very low birth weight deliveries are following the same trend but in slower increments.

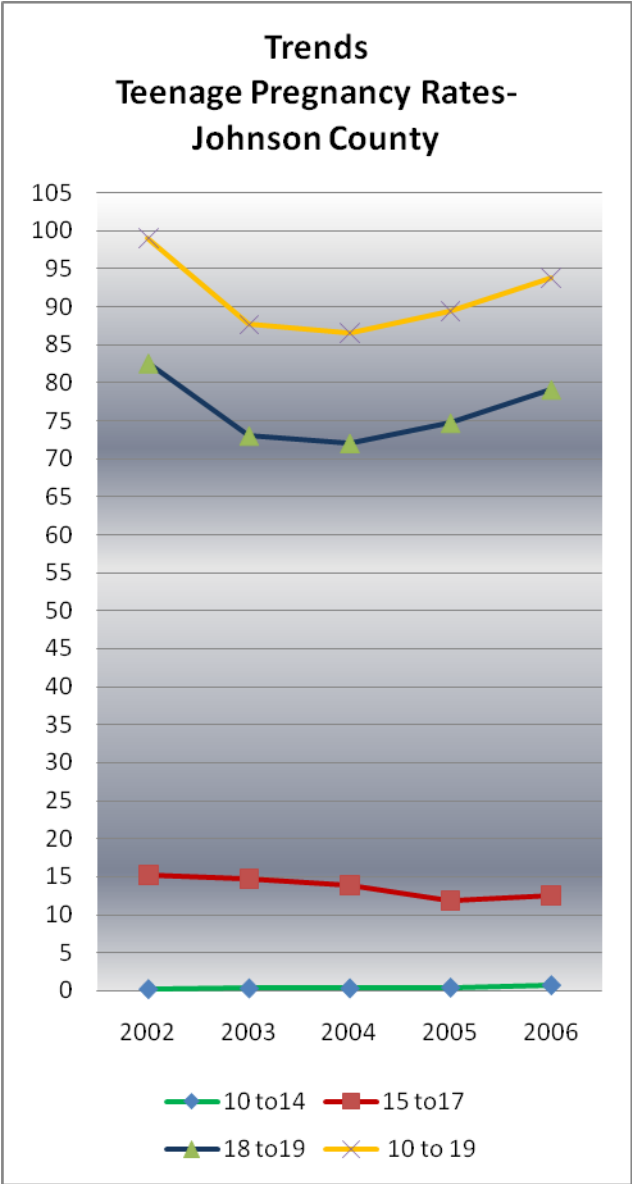


Maternal characteristics which are known to be associated with higher infant mortality rates are shown in the figure for Johnson County, 2006. These characteristics vary significantly by race, which could be contributing factors for a higher infant mortality rate in African Americans.

## Prenatal Care

The timing and quality of prenatal care received by the mother during pregnancy can be important to the infant's subsequent health and survival. Early comprehensive prenatal care can promote healthier pregnancies by providing health behavior guidance, monitoring, and early detection and treatment of risk factors and symptoms. The Infant Mortality Rate for infants of mothers who began prenatal care after the first trimester of pregnancy or had no care at all is 40% higher than the rate for infants of mothers whose care began in the first trimester (National Vital Statistics Reports, CDC).





Rate per 1,000 female age-group population

