

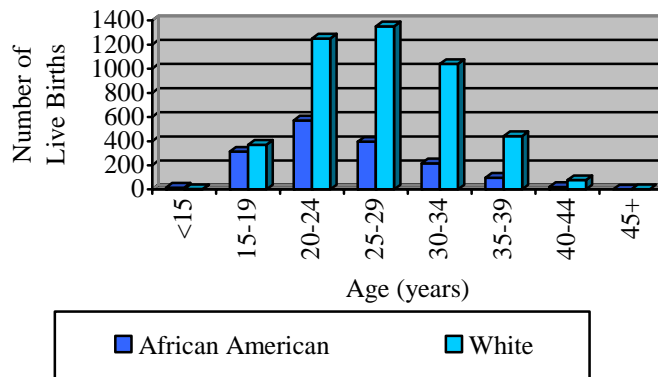
CHAPTER 8:

Maternal and Child Health

The health status of mothers and children is often considered one of the most important indicators of a community’s health. This chapter presents data on births and birth outcomes, as well as infant and child mortality data. Measures of access to and utilization of prenatal care are also presented. In the area of maternal and child health, Genesee County still faces many challenges. Disparities in birth outcomes, particularly in low birthweight births and infant mortality, exist. Rates of teen pregnancy in Genesee County continue to be higher than State of Michigan rates, although they are decreasing.

BIRTHS

Fig. 8.1 Live Births by Age and Race of Mother, Genesee County Residents, 2003



Source: Michigan Department of Community Health

- ◆ In 2003, there were 6,264 live births in Genesee County and 2,480 (40%) of those were to City of Flint residents.
- ◆ Figure 8.1 shows the distribution of live births by age and race of the mother. Due to small numbers, live births to American Indians (11 births) and Asian and Pacific Islanders (77 births) are not shown in the figure above.

Selected Birth Characteristics

Fig. 8.2 Selected Birth Characteristics, Genesee County and Michigan, 2003

Maternal Characteristics	Genesee County	Michigan
Under 20 years	11.3%	9.5%
First births	37.4%	39.0%
Fourth and higher order births	12.6%	11.4%
Less than 12 years of education	18.6%	16.9%
Cesarean delivery rate	30.7%	26.3%
Weight gained while pregnant less than 16 pounds	11.6%	11.8%
Smoked while pregnant	17.5%	14.4%
Unmarried	46.1%	34.6%
Received prenatal care during first trimester	84.2%	84.1%

Source: Michigan 2003 Resident Birth files, Vital Records & Health Data Development Section, Michigan Department of Community Health

- ◆ Figure 8.2 shows that Genesee County has a higher percentage of births to women younger than 20 years, those with less than 12 years of education, women who smoked while pregnant, and women who were unmarried, than the State of Michigan. There is also a higher percentage of Cesarean section deliveries in the County than the State.

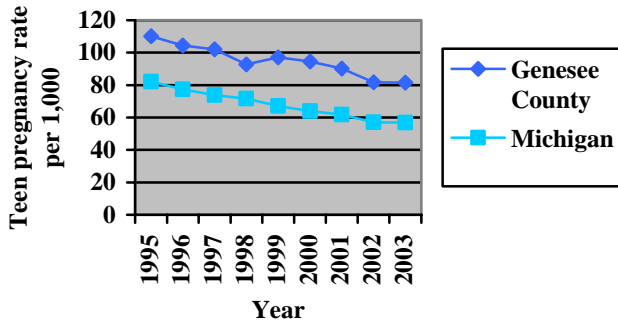
TEEN PREGNANCY

- ◆ The 2003 estimated teen pregnancy rate for Genesee County was 81.5 per 1,000 females ages 15-19 years. The Michigan rate for the same year was 56.9 per 1,000 females ages 15-19 years.

Fig. 8.3 Number of Live Births for Teens <19 years old, Flint and Genesee County Residents, 2003						
	White		African American		Other	
	<15 years	15-19 years	<15 years	15-19 years	<15 years	15-19 years
City of Flint	2	131	11	271	0	3
Genesee County	3	369	14	313	0	5

Note: City of Flint live births are also a part of the Genesee County numbers. Source: Michigan 2003 Resident Birth files, Vital Records & Health Data Development Section, Michigan Department of Community Health.

Fig. 8.4 Estimated Teen Pregnancy Rates, Genesee County and Michigan, 1995-2003



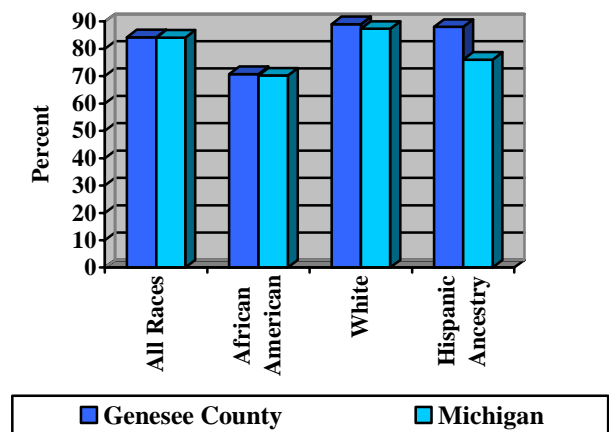
- ◆ Teen pregnancy in Genesee County and Michigan has generally been decreasing from 1995-2003.
- ◆ However, Genesee County’s teen pregnancy rate is still higher than the State rate.

Note: All rates are per 1,000 age and sex specific population. Source: Live Births, Abortions, and Population Estimates Obtained from Vital Records & Health Data Development Section, Michigan Department of Community Health

PRENATAL CARE

- ◆ In 2003, a higher percentage of White women (89.0%) in Genesee County entered prenatal care in the first trimester of pregnancy than African American women (70.7%) and women of Hispanic ancestry (88.0%).
- ◆ Overall, Genesee County’s rates of prenatal care beginning in the first trimester are slightly higher than the State of Michigan’s rates.

Fig. 8.5 Percent of Live Births with Prenatal Care Beginning in the First Trimester, Genesee County and Michigan, 2003



Source: 2003 Michigan Resident Birth File, Vital Records & Health Data Development Section, Michigan Department of Community Health

BIRTHWEIGHT

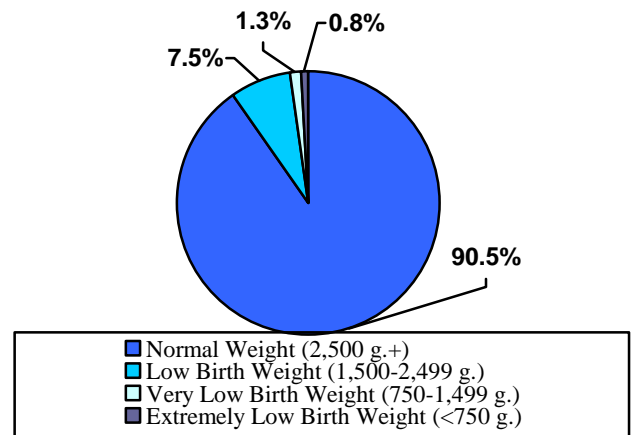
Birthweight is an important indicator of child health, as infants born below a certain birthweight are more likely to have serious health problems as newborns, are at risk for long-term disabilities, and are at higher risk for infant death.

There are several categories of low birth weight:

- ◆ Low weight births are less than 2,500 grams
- ◆ Very low weight births are less than 1,500 grams
- ◆ Extremely low weight births are less than 750 grams

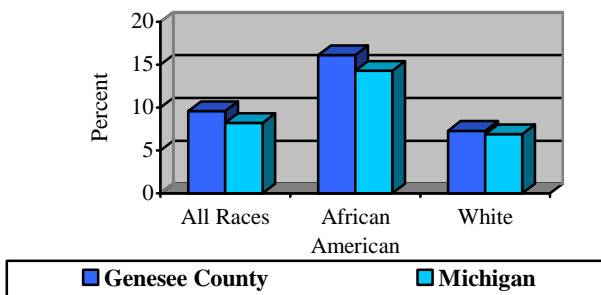
- ◆ In 2003, Genesee County had a higher proportion (9.6%) of live births that were low birthweight (below 2,500 grams) than Michigan (8.2%).

Fig. 8.6 Percent of Live Births by Birthweight, All Races, Genesee County Residents, 2003



Source: 2003 Michigan Resident Birth File, Vital Records & Health Data Development Section, Michigan Department of Community Health

Fig. 8.7 Percent of Live Births that are Low Birthweight (<2,500 g) by Race, Genesee County and Michigan, 2003



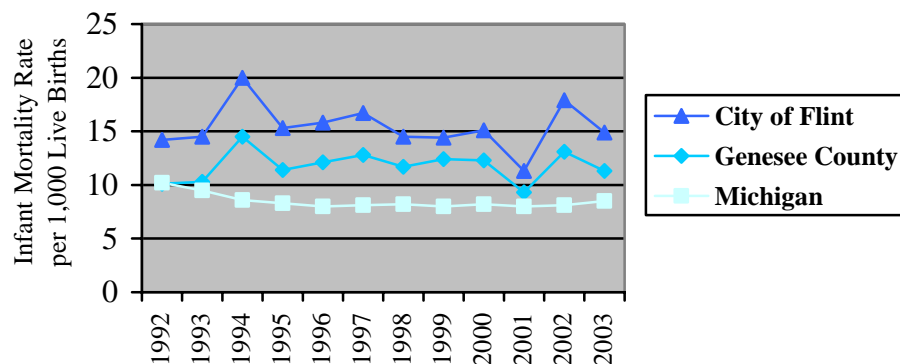
Source: 2003 Michigan Resident Birth File, Vital Records Health Data Development Section, Michigan Department of Community Health

- ◆ In Genesee County, in 2003, 16.1% of live births to African American mothers were low birthweight (any birth less than 2,500 grams) compared to 7.3% of live births to White mothers. This difference by race is similar for Michigan and the United States.

INFANT MORTALITY

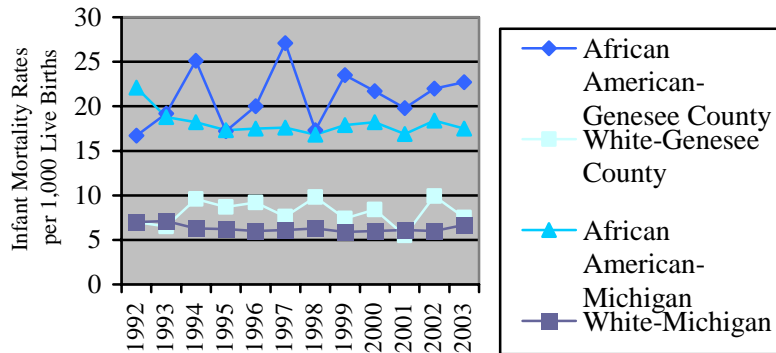
- ◆ Infant mortality is defined as the death of an infant under the age of 1 year.
- ◆ With the exception of 1992, infant mortality rates in Genesee County have been greater than the State of Michigan rate for all years shown below. The infant mortality rate in the City of Flint was higher than both the County rate and State rate for each of the years shown in Figure 8.8.
- ◆ The infant mortality rate in Genesee County has fluctuated during the period 1992-2003 from a high of 14.5 infant deaths per 1,000 live births in 1994 to a low of 9.3 infant deaths per 1,000 live births in 2001.
- ◆ In 2003, the infant mortality rate in the City of Flint was 14.9 per 1,000 live births, 11.3 per 1,000 live births in Genesee County, and 8.5 per 1,000 live births in the State of Michigan.

**Fig. 8.8 Infant Mortality Rates,
City of Flint, Genesee County and Michigan,
1992-2003**



Source: 1992-2003 Michigan Resident Death Files and Michigan Resident Birth Files, Epidemiology Services Division, Vital Records and Health Data Development Section, Michigan Department of Community Health

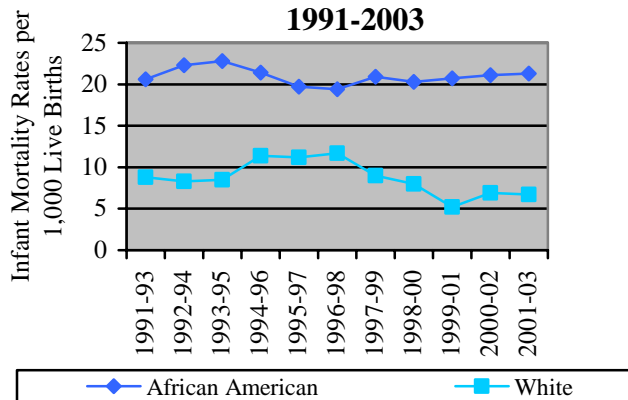
Fig. 8.9 Infant Mortality Rates by Race, Genesee County and Michigan, 1992-2003



Source: 1992-2003 Michigan Resident Death Files, Vital Records and Health Data Development Section, Michigan Department of Community Health

- ◆ Racial disparities in infant mortality exist in both Genesee County and Michigan, with African Americans having higher infant mortality rates than Whites for the years 1992-2003.
- ◆ Figure 8.10 depicts infant mortality by race for the City of Flint. Because of small numbers, infant mortality rates are calculated for three years rather than by individual year.

Fig. 8.10 Three-Year Moving Average Infant Mortality Rates by Race, City of Flint, 1991-2003



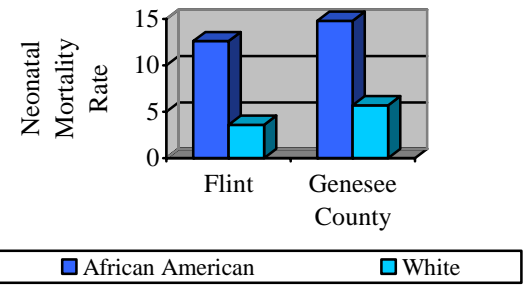
Source: 1992 - 2003 Michigan Resident Death Files and Michigan Resident Birth Files, Vital Records and Health Data Development Section, Michigan Department of Community Health

NEONATAL, POST-NEONATAL, AND CHILD MORTALITY

Neonatal Infant Mortality

- ◆ Infant deaths during the neonatal period (death during the first 27 days of life) are disparate by race and location. African American neonatal mortality rates are higher than White neonatal mortality rates in Flint and Genesee County as a whole.
- ◆ In 2003, the overall neonatal infant mortality rate for Genesee County was 8.0 per 1,000 live births and 8.5 per 1,000 live births in Flint.

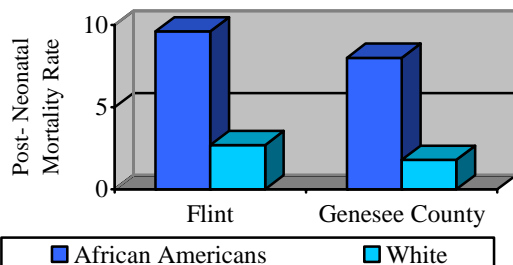
Fig. 8.11 Neonatal Infant Mortality Rates by Race, Flint and Genesee County, 2003



*Rate per 1,000 Live Births. Source: Michigan Department of Community Health and Genesee County Health Department

Post-Neonatal Infant Mortality

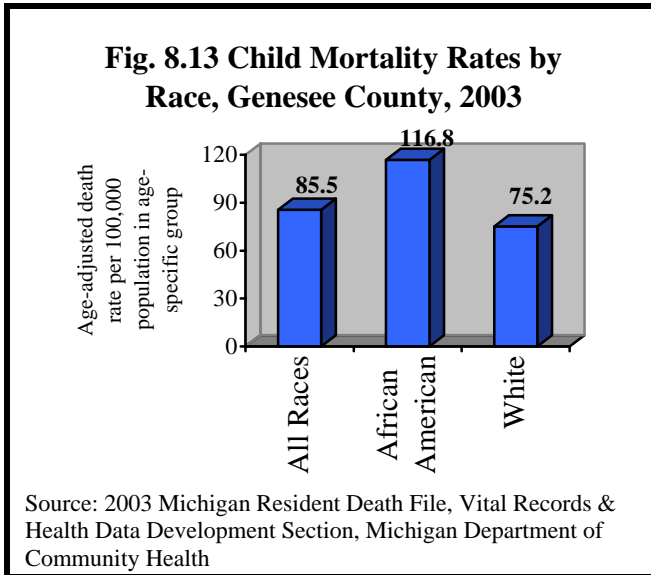
Fig. 8.12 Post-Neonatal Infant Mortality Rates by Race, Flint and Genesee County, 2003



*Rate per 1,000 Live Births. Source: Michigan Department of Community Health and Genesee County Health Department

- ◆ Infant deaths during the post-neonatal period (28 days-364 days of life) are also disparate by race and location.
- ◆ The 2003 Genesee County post-neonatal infant mortality rate was 3.4 per 1,000 live births. In 2003, the Flint rate was 6.5 per 1,000 live births.

Child Mortality

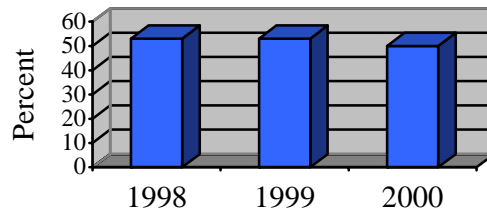


- ◆ In 2003, the child mortality rate (ages 1-14 years) was 85.5 per 100,000 population in the specified age and race group.
- ◆ Child deaths are disparate by race in Genesee County, with African Americans having a higher death rate than Whites.

WOMEN, INFANTS, AND CHILDREN (WIC)

- ◆ In 1998-2000, approximately one-half of live births to Genesee County residents were enrolled in WIC (the Women, Infants, and Children program).

Fig. 8.14 Percent of Live Births Enrolled in WIC, Genesee County, 1998-2000



Source: Michigan WIC Program Data, Michigan Department of Community Health