

Infant Mortality 2007 Update

Infant Mortality in Duval County, 2007

This report provides an overview of infant mortality and the major health indices related to infant mortality for 2007. This is a follow-up report to one published in early 2008 based on 2006 data. It highlights the progress that has been made at the local level and the challenges Duval County still faces with this significant public health issue. The Florida Department of Health Office of Vital Statistics defines infant mortality as the number of infant deaths during the first year of life. Infant mortality is an important measure used to compare the health and well-being of populations across various geographical regions and among races. In general, the leading causes of death among infants are birth defects, pre-term delivery, low birth weight (LBW), and Sudden Infant Death Syndrome (SIDS).¹

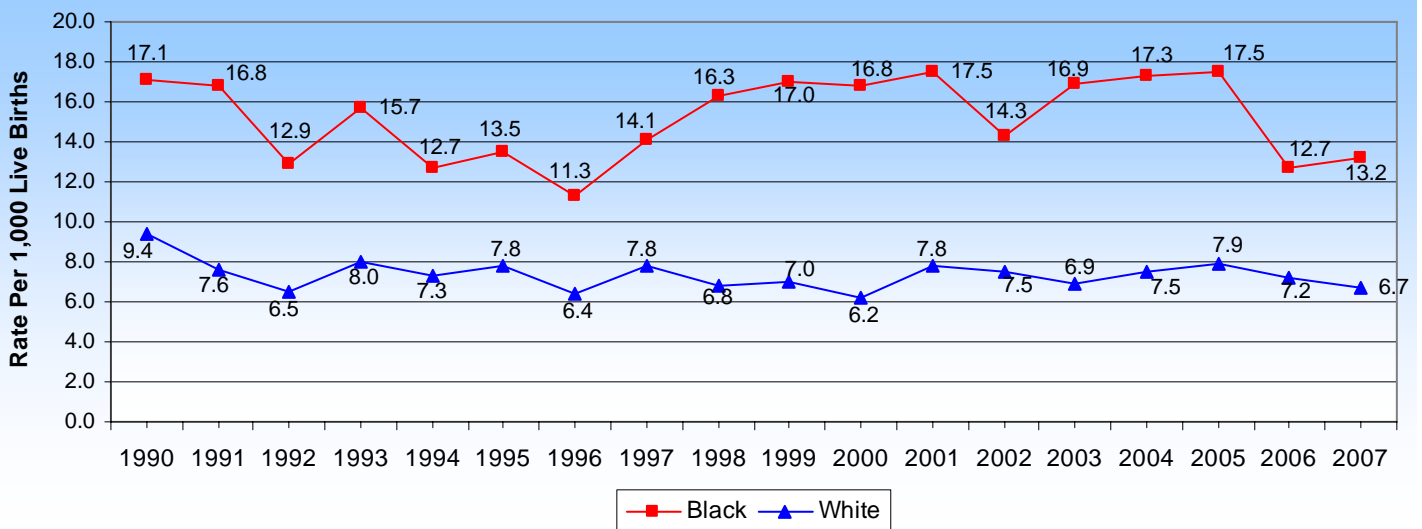
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Duval County experienced decreasing infant mortality for much of the 1990s, but experienced an upswing in the late 1990s with the increased rates persisting through the early 2000s. Although two few years to consider a trend, the last two years are very promising for closing the gap between black and white disparities in infant mortality, which continues to be a major problem in Duval County, Florida and the nation.

¹QuickStats: Infant Mortality Rates for 10 Leading Causes of Infant Death --- United States, 2005. Morbidity and Mortality Weekly Report. Centers for Disease Control and Prevention. <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5642a8.htm>

Figure 1 Infant Mortality Rate by Race, Duval County, 1990-2007



International Comparison of Infant Mortality

Infant mortality is an important measure both nationally and internationally as it is used to compare the health and well-being of populations across and within countries. The U.S. ranked 29th in the world in infant mortality in 2004 (the latest year that data are available for all countries). The U.S. ranking has fallen from 12th in 1960 to 23rd in 1990, and to 29th in 2004.¹ The infant mortality rate in the U.S. has remained relatively unchanged since 1998, with a current rate of 6.8 per 1,000 live births (2004)² but has declined dramatically since the 1960s. Among selected industrialized countries, U.S. ranks the lowest (see Figure 2). Data suggests that this ranking is due in large part to the significantly higher rate of infant mortality among African American mothers in the U.S. than white mothers.¹ In addition, differences in infant mortality rates among industrialized countries may also reflect disparities in the health status of women before and during pregnancy, as well as the quality of and accessibility to primary care for pregnant women and their infants.³

Sources:

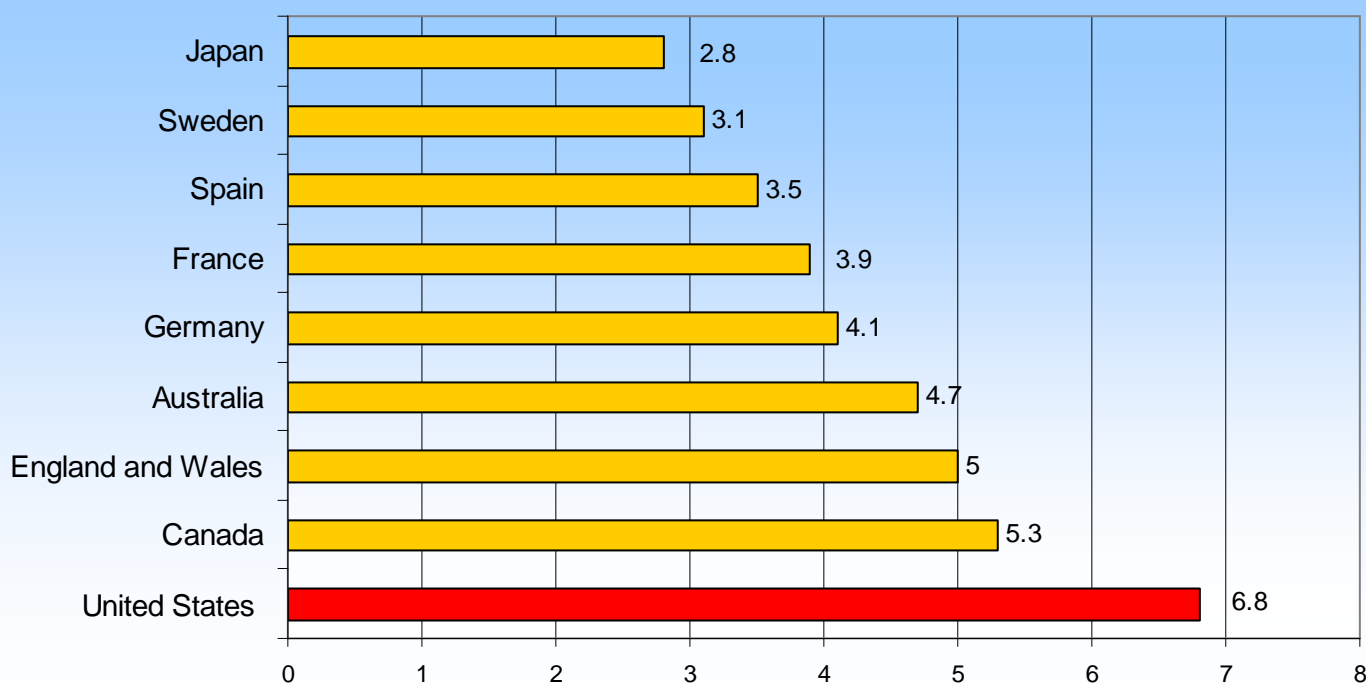
¹National Center for Health Statistics. Health, United States, 2007 with Chartbook on Trends in the Health of Americans. Hyattsville, MD: 2007.

²CDC Wonder, <http://wonder.cdc.gov/data2010/>

³U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau. *Child Health USA 2004*. Rockville, Maryland: U.S. Department of Health and Human Services, 2004.

Figure 2

Infant Mortality Rates: Selected Countries, 2004



Source: Health, United States, 2007, Table 25, <http://www.cdc.gov/nchs.data.hus/hus07.pdf#listtables>
 Recreated from NCHS Data Brief, No. 9, October 2008, CDC, December 2008

Jacksonville Infant Mortality Report Card

Obj. #	Objective	U.S. (2004)	FL (2007)	Duval (2007)	2010 Target
16-1	Reduction in Fetal and Infant Deaths. —Per 1,000 live births				
16-1c	All infant deaths (within 1 year)	6.8 ²	7.1 ¹	9.0 ¹	4.5
16-1d	Neonatal deaths (within the first 28 days of life)	4.5 ²	4.4 ¹	5.8 ¹	2.9
16-1e	Postneonatal deaths (between 28 days and 1 year).	2.3 ²	2.6 ¹	3.2 ¹	1.2
16-1h	Reduce deaths from sudden infant death syndrome (SIDS).	.55 ²	.339 ¹	.653 ¹	.23
16-6	Increase in Maternal Prenatal Care. —Percent of live births				
16-6a	Care beginning in first trimester of pregnancy	***84 ²	77.0 ¹	75.4 ¹	90
16-6b	Early and adequate prenatal care	***75 ²	70.1 ⁵	65.1 ⁵	90
16-10	Reduce low birth weight (LBW) and very low birth weight (VLBW) – Percent of live births				
16-10a	Low birth weight (LBW)	8.1 ²	8.7 ¹	9.7 ¹	5.0
16-10b	Very low birth weight (VLBW)	1.5 ²	1.6 ¹	2.0 ¹	0.9
16-11	Reduction in pre-term births. – Percent of live births				
16-11a	Total pre-term births	12.5 ²	14.1 ¹	15.1 ¹	7.6
16-17	Increase in reported abstinence from alcohol, cigarettes, and illicit drugs among pregnant women. – Percent of pregnant women				
16-17a	Alcohol	88.0 ² (2004- 2005)	99.7 ¹	99.7 ¹	95
16-17c	Cigarette smoking	***+90 ²	92.9 ¹	91.6 ¹	99
16-19	Increase the proportion of mothers who breastfeed their babies.				
16-19a	In early postpartum period	74.0 ²	71.1 ⁴ (2005)	DNA	75
16-19b	At 6 months	42.0 ²	35.0 ⁴ (2005)	DNA	50
16-19c	At 1 year	21.0 ²	16.5 ⁴ (2005)	DNA	25
9-7**	Reduce births among adolescent females. – Rate per 1,000 females aged 15-17	21.4 ³	22.6 ¹	25.3 ¹	DNA
9-7a**	Reduce teen births to women ages 15-19 who were already mothers.—Rate per 1,000 teens with previous births	DNA	16.2 ¹	18.1 ¹	DNA

¹ Source: Florida CHARTS

² Source: National Center for Health Statistics, CDC Wonder

³ Source: National Vital Statistics Reports, Volume 56, Number 6

⁴ Source: U.S. Department of Health & Human Services, Office of Women's Health, Quick Health Data Online

⁵ Source: Florida Department of Health, Office of Vital Statistics, 2007

*Reformulated. Considers births instead of pregnancies.

** Not a Healthy People 2010 Objective

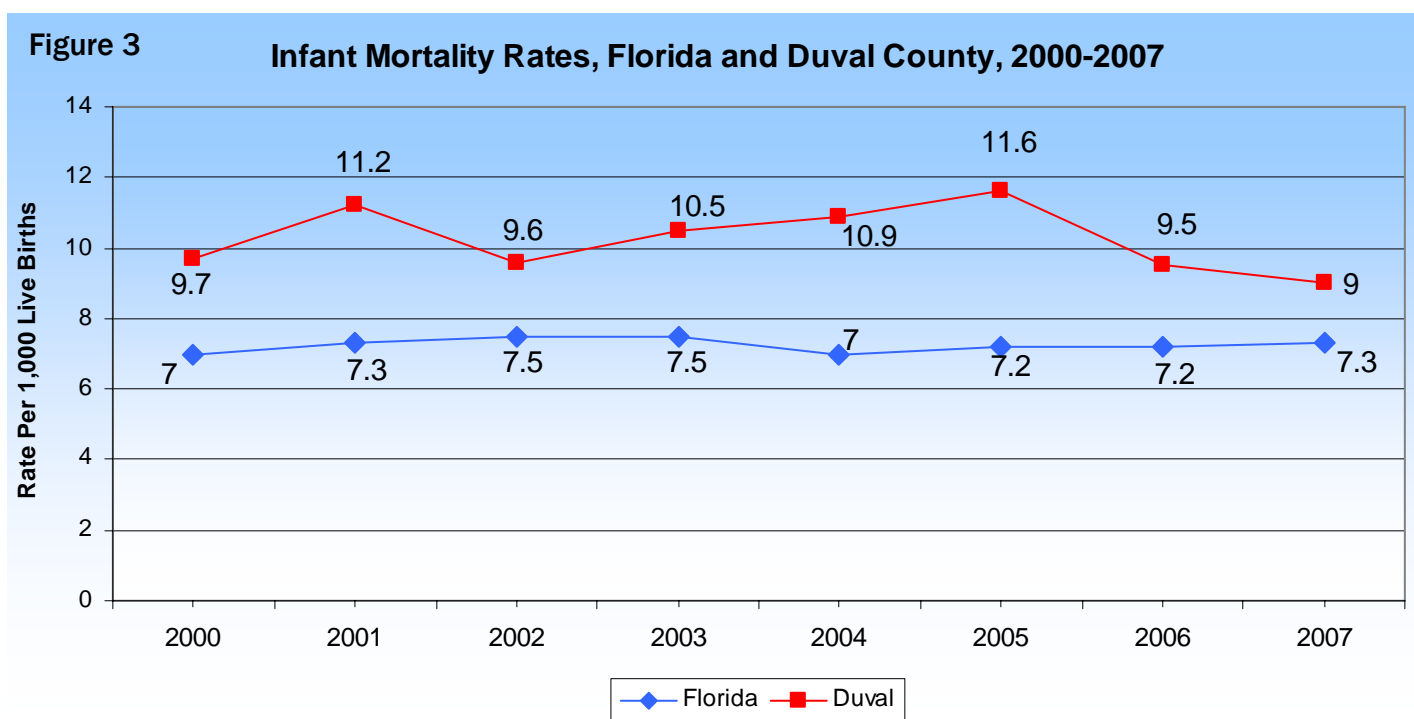
***Excludes data for ID, FL, KY, NH, NY (not incl. NYC), PA, SC, TN, WA

+Excludes data for CA

Jacksonville Infant Mortality Report Card

The data report card provides an overall comparison between local, state, and national data for infant mortality and related risk factors from the Healthy People 2010 objectives. The majority of data in this report card was provided by the Florida Department of Health's Office of Planning, Evaluation, and Data Analysis. Other data sources include the National Center for Health Statistics and the U.S. Department of Health & Human Services Office of Women's Health.

Duval County had a higher rate than Florida and the U.S. for all infant deaths, neonatal deaths, postneonatal deaths, and SIDS deaths. The county's rates were at least 2 times higher than all of the Healthy People 2010



Source: Florida Department of Health, Office of Vital Statistics, 2007

Prepared by: DCHD, Institute for Health, Policy and Evaluation Research, November 2008

target rates for the same objectives. Only 75% of mothers received prenatal care during their first trimester of pregnancy. Likewise, only 65.1% received early and adequate prenatal care, as calculated by the Kotelchuck Index which measures adequacy of prenatal care utilization. The state and nation had higher percentages of women receiving early and adequate prenatal care, at 70.1% and 75%, respectively. However, all were below the Healthy People 2010 target of 90%.

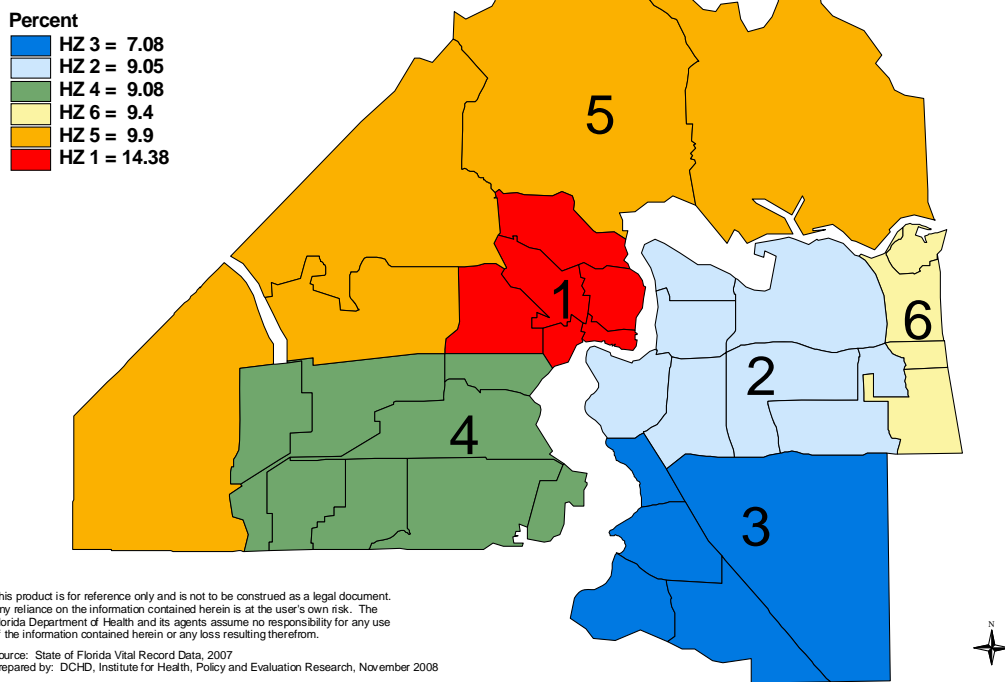
Low birth weight and very low birth weight are also factors related to infant mortality. In Duval County, 9.7% of babies born weighed less than 2500g "low birth weight" whereas 2% were less than 1500g "very low birth

Local Disparities in Infant Mortality

Despite progress in eliminating health disparities, differences in outcomes for infant mortality are still significant. While the infant mortality rate for blacks dropped substantially from 2005 to 2006 (27.4%) and increased only slightly in 2007 (4%), it is still 97% higher than the rate for whites (see Figure 1). The infant mortality rates for blacks and whites have remained fairly stable since 2000, with the exception of a sharp decline from 2005 to 2006 for blacks. The decline, however, was not statistically significant. Certain areas of Duval County are also more likely to have increased infant mortality. For the year 2007, Health Zone 1, also referred to as the urban core, had the highest infant mortality in the county with a rate of 15.04 per 1,000 live births (see Figure 8).

Figure 4

Low Birth Weight by Health Zone, Duval County, 2007

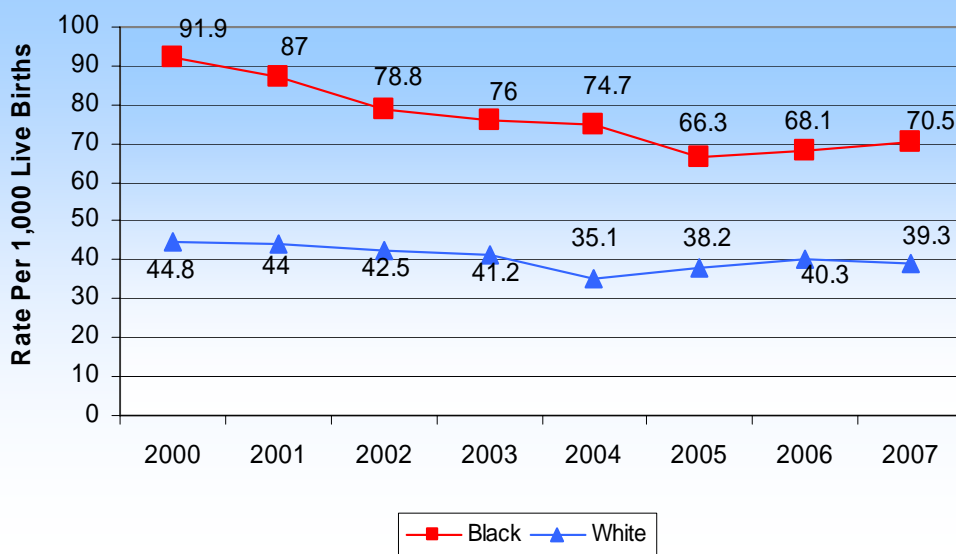


Low birth weight (LBW) also disproportionately affects black babies as compared to white babies. The percent of LBW babies in 2007 for blacks (13.8%) was 91.7% higher than whites (7.2%). Similar to infant mortality rates, the LBW percent was highest in Health Zone 1 with 14.38% followed closely by Health Zone 5 with 9.9% (see Figure 4). Teen births, which are at increased risk for infant mortality, vary greatly by race. In 2007, the teen birth rate for blacks ages 15-19, in Duval County, was 79.4% higher than for whites. However, significant progress has been made related to black teen births with the rate for blacks decreasing by 23.3% from 2000 to 2007. This dramatic decrease has not been as notable for whites. The rate for whites decreased 12.3% over these same years (see Figure 5).

Disparities in Infant Mortality Locally (continued from page 5)

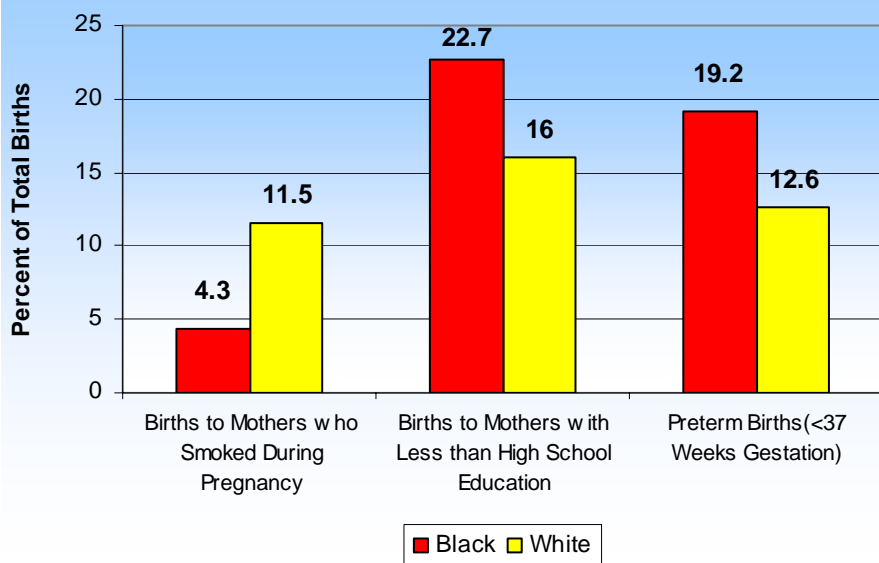
Inadequate prenatal care, also considered a factor impacting infant mortality, is more prevalent in blacks in Duval County than whites. In 2007, 26.7% of blacks received inadequate prenatal care compared to 15.2% of whites. Unfortunately, inadequate prenatal care has increased for both races since 2006, up 10% for whites and 13.6% for blacks. Other risk factors for infant mortality in which notable disparities exist include preterm birth, smoking, using illegal substances, drinking alcohol during pregnancy, and a mother with less than a high school education (see Figure 6).

Figure 5
Teen Birth Rate Ages 15-19 by Race, Duval County, 2000-2007



Source: Florida Department of Health, Office of Vital Statistics, 2007
Prepared by: DCHD, Institute for Health, Policy and Evaluation Research, November 2008

Figure 6
Risk Factors for Poor Pregnancy Outcomes by Race, Duval County, 2007



Source: Florida Department of Health, Office of Vital Statistics, 2007
Prepared by: DCHD, Institute for Health, Policy and Evaluation Research, November 2008

In Duval County, in 2007, blacks were more likely to have preterm births (<37 weeks gestation) than whites, 19.2% and 12.6%, respectively. In addition, mothers living in Health Zone 1 had the highest rate of pre-term births with 18% than any other health zone (see Figure 7). Black mothers were also more likely to have less than a high school education compared to whites, 22.7% and 16%, respectively. In contrast, white women were over 2 times more likely to smoke during pregnancy than blacks. Smoking during pregnancy decreased by 20% for whites from 2000 to 2007 but has remained relatively unchanged among blacks.

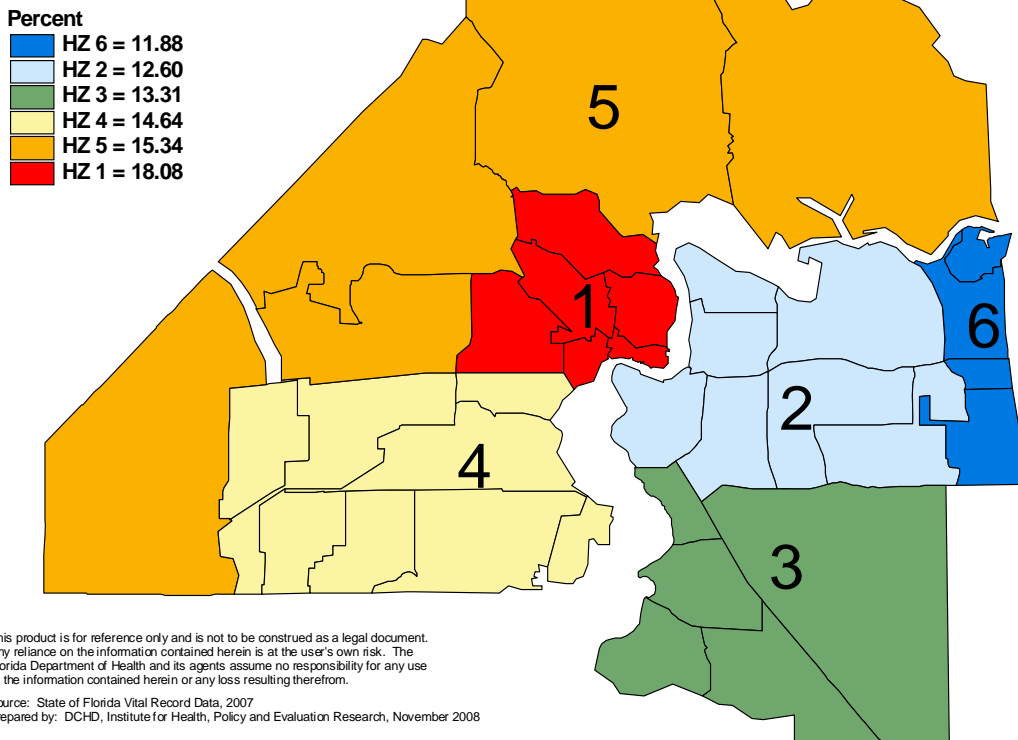
Report Card Overview (continued from page 4)

weight.” The targets for each objective are 5% and .9%, respectively. Analysis of the Healthy People 2010 target for the objective, reduction of pre-term births, reveals Duval County also had higher rates for this infant mortality risk factor. In Duval County in 2007, the percentage of live births that were pre-term was 15.1 which was 7% higher than Florida, 20.8% higher than the U.S. and 98.6% higher than the Healthy People 2010 target.

In the county, the rate for births among adolescent females between the ages of 15-17 was 25.3 per 1,000. It was 11.9% higher than the state and 18.2% higher than the country. Duval County does not always drastically differ from the nation, state, and target goal. For example, 99.7% of pregnant women reported abstaining from alcohol while pregnant. Florida’s percentage is identical and both are higher than the nation and Healthy People 2010 target. On the other hand, cigarette smoking during pregnancy was done more often in the county and state. Over 8% of mothers in Duval County reported smoking while pregnant; over 7% of mothers in Florida also smoked while pregnant.

Figure 7

Preterm Birth by Health Zone, Duval County, 2007



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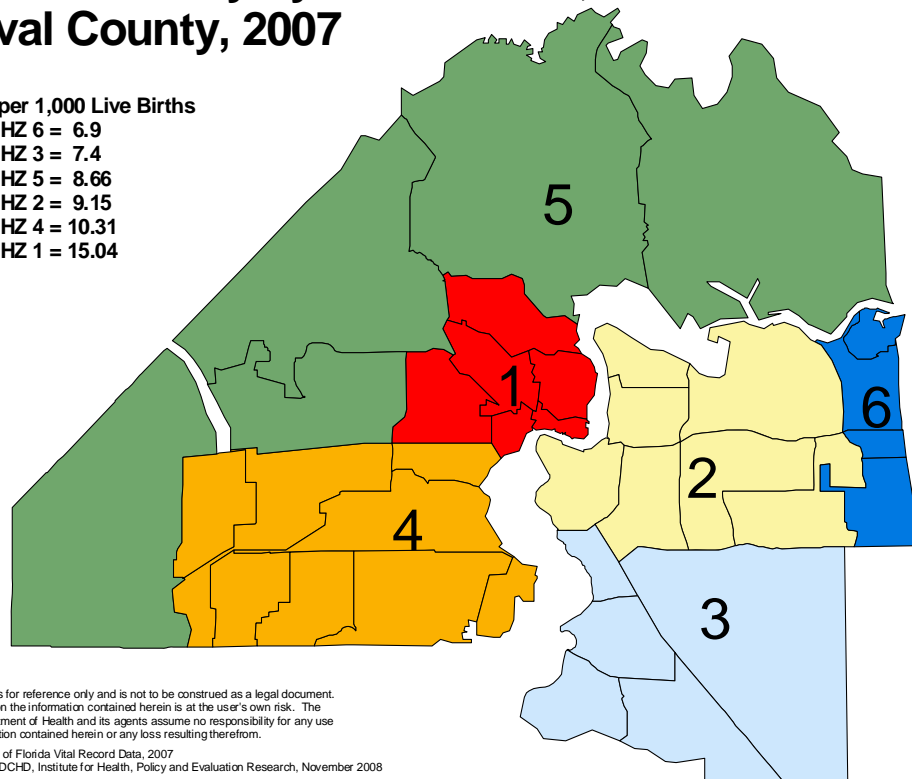
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Figure 8

Infant Mortality by Health Zone, Duval County, 2007

Rate per 1,000 Live Births

HZ 6 = 6.9
HZ 3 = 7.4
HZ 5 = 8.66
HZ 2 = 9.15
HZ 4 = 10.31
HZ 1 = 15.04



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Source: State of Florida Vital Record Data, 2007
Prepared by: DCHD, Institute for Health, Policy and Evaluation Research, November 2008