

Infant Mortality

Infant Mortality: National Challenges, Progress and Disparities

Infant mortality is defined as the number of infant deaths during the first year of life. Infant mortality also includes neonatal mortality, deaths at less than 28 days of age, and postneonatal mortality, deaths between 28 days and 1 year. The leading causes of death among infants are birth defects, pre-term delivery, low birth weight (LBW), Sudden Infant Death Syndrome (SIDS), and maternal complications during pregnancy. According to the Centers for Disease Control and Prevention, SIDS and congenital malformations rank as the leading causes of infant deaths during the postneonatal period. Disorders related to short gestation and LBW and congenital malformations are the leading causes of death during the neonatal period. The rate of infant deaths among the total population has decreased from 7.2 per 1,000 live births in 1998 to 6.8 per 1,000 in 2001. However, the infant

mortality rate increased from 6.8 in 2001 to 7.0 per 1,000 in 2002. This was the first year since 1958 that the rate had not declined or remained unchanged. Trends from preliminary data are indicating a small, non-significant decline in 2003. This rise in infant deaths in 2002 was concentrated among neonatal deaths occurring in the first week of life. After further analysis, this increase was found to be linked to the number of infants born weighing less than 750

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Disparities In Infant Mortality at the Local Level

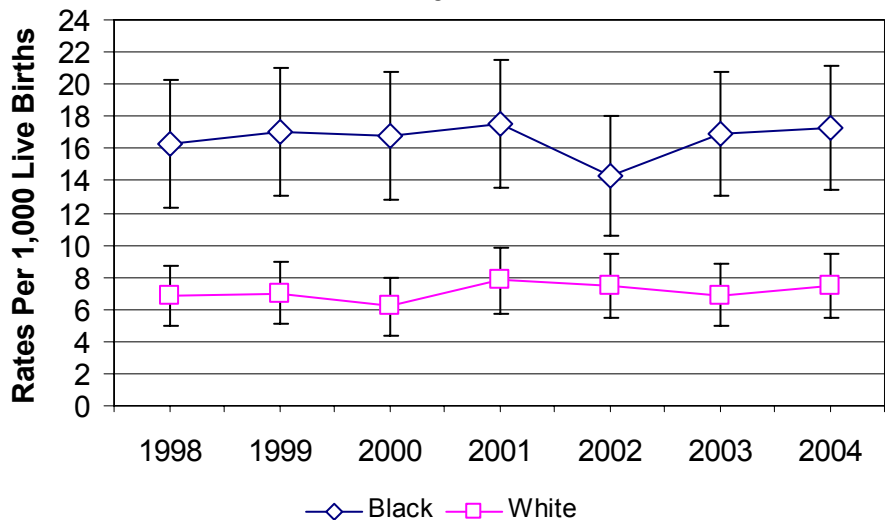
One of the two goals of Healthy People 2010 is to eliminate health disparities among different segments of the population. Since this goal's inception, along with the implementation of other nation, state, and local initiatives to curb health disparities, small improvements have been made. However, racial disparities are still at the forefront of differences in health outcomes in Duval County. Disparate populations are especially pronounced in the area of

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Figure 1 Infant Mortality Rates by Race, Duval County, 1998-2004



95% Confidence Intervals provide statistical markers to gauge real trends versus differences that are more likely to reflect insignificant variation of data from year to year.

Source: Florida Department of Health, Office of Vital Statistics, 1998-2004
Prepared by: DCHD, Institute for Health, Policy and Evaluation Research, February, 2006

Jacksonville Infant Mortality Report Card

Obj. #	Objective	U.S. (2003)	FL (2004)	Duval (2004)	2010 Target
16-1	Reduction in Fetal and Infant Deaths. - Per 1,000 Live Births				
<i>16-1c</i>	All infant deaths (within 1 year)	7.0 ⁴ (2002)	7.0 ¹	10.9 ¹	4.5
<i>16-1d</i>	Neonatal deaths (within the first 28 days of life)	4.7 ⁴ (2002)	4.5 ¹	7.0 ¹	2.9
<i>16-1e</i>	Postneonatal deaths (between 28 days and 1 year)	2.3 ⁴ (2002)	2.5 ¹	3.9 ¹	1.2
<i>16-1h</i>	Reduce deaths from sudden infant death syndrome (SIDS)	.57 ⁴ (2002)	.4 ¹	.5 ¹	.25
16-4	Reduce maternal deaths (rate per 100,000 live births)	12.1 ⁴ (1997)	16.5 ¹	15.75 ¹	3.3
16-5	Reduce maternal illness and complications due to pregnancy				
<i>16-5a</i>	Maternal complications during hospitalization labor and delivery (rate per 100 deliveries)	31.5 (2002)	33.4 ⁸	41.1 ⁸	24.0
16-6	Increase in Maternal Prenatal Care – Percent of Live Births				
<i>16-6a</i>	Care beginning in first trimester of pregnancy	84.1 ⁵	81 ¹ (2003)	81.2 ¹	90
<i>16-6b</i>	Early and adequate prenatal care	75 (2002)	67.7 ² (2003)	63.2 ²	90
16-9	Reduction in Cesarean Births Among Low-Risk Women. – Percent of Live Births				
<i>16-9a</i>	Total cesarean births	27.6 ⁷	32.0 ¹	27.2 ¹	15

Data Report Card Overview

The data report card provides an overall comparison of national, state, and local data for infant mortality objectives. The objectives shown are those for which data could be obtained. Data shows that Duval County had a higher rate in 2004 than the state of Florida for all infant deaths, neonatal deaths, postneonatal deaths, and SIDS deaths. While SIDS deaths was not statistically different between Flor-

ida and Duval County, infant deaths, neonatal deaths, and postneonatal deaths indicated a significant difference. With the exception of SIDS deaths, the state rates tend to mimic the national data; however, national, state, and local rates were all above the Health People 2010 targets. For LBW, the percentage for Duval County was 10.0%, 16% higher (95% CI=9.4-10.6) than the rate of Florida, 8.6 % (95% CI=8.5-8.7). Confidence intervals for LBW between Florida and Duval County indicate a statis-

tical difference. Both Duval County and Florida, 27% and 9% respectively, are higher than the national rate. In terms of Very Low Birth Weight (VLBW), the Duval County rate, 2.1 per 1,000 live births, is 31% higher (95% CI=1.8-2.4) than the rate for Florida, 1.6 per 1,000 live births, (95% CI=1.55-1.65) and 89% higher than the national rate, 1.11 per 1,000 live births. Confidence intervals for very low birth weight between Florida and Duval County indicate a statistical differ-

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Jacksonville Infant Mortality Report Card (continued from page 2)

Obj. #	Objective	U.S. (2003)	FL (2004)	Duval (2004)	2010 Target
16-10	Reduce low birth weight (LBW) and very low birth weight (VLBW) (Percent of pregnant women)				
16-10a	Low birth weight (LBW)	7.9 ⁵	8.6 ¹	10.0 ¹	5.0
16-10b	Very low birth weight (VLBW)	1.11 ⁵	1.6 ¹	2.1 ¹	0.9
16-11	Reduction in pre-term births – Percent of Live Births				
16-11a	Total pre-term births	12.3 ⁵	13.0 ⁵ (2003)	13.0 ²	7.6
16-17	Increase in report of abstinence from alcohol, cigarettes, and illicit drugs among pregnant women – Percent of pregnant women				
16-17a	Alcohol	DNA	99.5 ² (2003)	99.0 ² (2003)	94
16-17c	Cigarette smoking	89.3 ⁵	91.0 ¹	89.1 ¹	99
16-19	Increase the proportion of mothers who breastfeed their babies				
16-19a	In early postpartum period	70.3 ⁶ (2004)	DNA	DNA	75
16-19b	At 6 months	36.2 ⁶ (2004)	DNA	DNA	50
16-19c	At 1 year	17.8 ⁶ (2004)	DNA	DNA	25
9-7***	Reduce births among adolescent females. – Rate per 1,000 females aged 15-17	22.4 ⁵	21.9 ¹	25.5 ¹	DNA
9-7a**	Reduce teen births to women who were already mothers.— Rate per 1,000 females age 15-19	8.9 ⁵	8.8 ² (2003)	10.6 ²	DNA

¹ Source: Florida CHARTS

² Source: Florida Department of Health, Vital Statistics, Birth, Fetal and Death Files

³ Source: Florida Department of Health, Vital Statistics, Birth, Fetal and Death, Linked Files

⁴ Source: National Center for Health Statistics, CDC

⁵ Source: National Vital Statistics Report, CDC, Sept. 8, 2005

⁶ Source: Centers for Disease Control & Prevention, Breastfeeding Data, 2004

⁷ Source: National Vital Statistics Report, CDC, Sept. 22, 2005

⁸ Source: Agency for Health Care Administration (AHCA), Hospital Files

* Reformulated. Considers births instead of pregnancies.

** Not a Healthy People 2010 Objective

DNA = Data Not Available

Data Report Card Overview (continued from page 2)

ence. Other objectives for which Duval and Florida are notably different are maternal complications during hospitalization labor and delivery with Duval County being 23% higher than Florida; early and adequate prenatal care with Duval County being 6.6% lower than Flor-

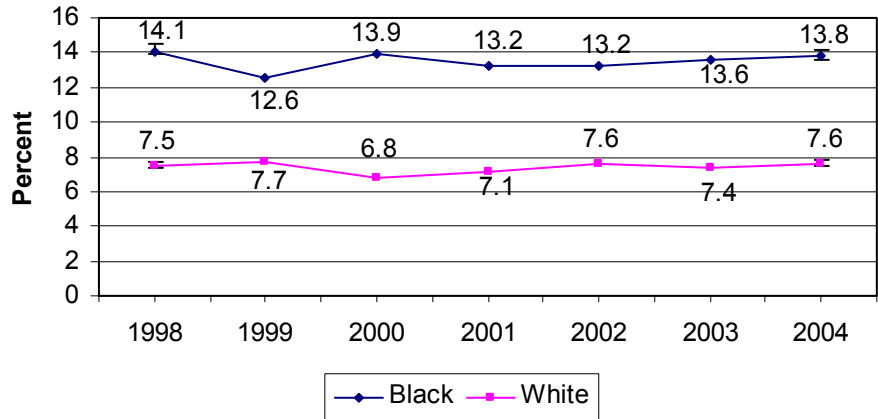
ida; total cesarean sections with Duval County being 15% lower than Florida and relatively the same as the nation; cigarette smoking with Duval County being 2% lower than Florida but relatively the same as nation; and births among adolescent females ages 15-17 with Duval County being 16% higher

than Florida and 20% higher than the nation. Breastfeeding data is not available as there is no local or state registries for this information. While some improvements have been made, all objectives are still below the Healthy People 2010 targets.

Disparities in Infant Mortality at the Local Level (continued from page 1)

of infant mortality. The infant mortality rate for the black population from 2002-2004 is 16.2 per 1,000 live births (95% CI = 14.0, 18.4). This rate is 122% higher than for the white population, with a rate of 7.3 per 1,000 live births (95%CI = 6.2, 8.4) and 20% higher than the black infant mortality rate for the state of Florida with a rate of 13.5 per 1,000 live births (95%CI =12.4, 14.6) for these same years. The confidence intervals indicate a statistical difference in infant mortality between the black and white population for Duval County and the black Duval and black Florida populations. However, the black infant mortality rate for the years 2002-2004 has decreased by 5.3% from the years 1999-2001 with a rate of 17.1 while the white population has shown a slight increase of 4.3% over these same years, yielding a rate of 7.0 per 1000 live births. (See Figure 1 on page 1 for 10 year trends in infant mortality for the black and white populations in Duval County). For neonatal mortality, the rate for the black popula-

Figure 2 Percent of Low Birth Weight Babies, Duval County, 1998-2004



I 95% Confidence Intervals

*Note: Confidence Intervals are small for these statistics, and do not graph well.

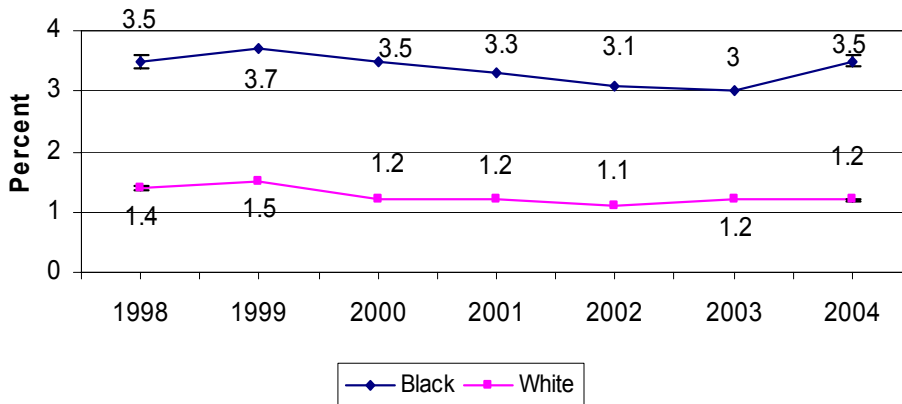
Source: Florida Department of Health, Office of Vital Statistics, 1998-2004
 Prepared by: DCHD, Institute for Health, Policy and Evaluation Research, February, 2006

tion in Duval County in the years 2002-2004 was 10.9 per 1,000 live births (95% CI = 9.1, 12.7) compared to a rate of 4.5 per 1,000 live births for the white

population (95% CI = 3.6, 5.8). Confidence intervals indicate a statistical difference. This yields a 142% higher rate for the black population. The rates for both the white and black population for neonatal mortality has remained relatively unchanged since the years 1999-2001. While still a problem, disparities in postneonatal rates are smaller between the black and white populations in the years 2002-2004 yielding 5.3 (95% CI = 4.0, 6.6) and 2.7 (95% CI = 2.0, 3.4) per 1,000 live births respectively, with blacks being 96% higher than whites. Confidence intervals indicate a statistical difference. However, the rate for the black population has decreased by 13% since the years 1999-2001 while the white population has increased slightly.

Disparities are prominent in many of the risk factors for infant mortality including LBW and VLBW, pre-
 (continued on pg. 5)

Figure 3 Percent of Very Low Birth Weight Babies, Duval County, 1998-2004



I 95% Confidence Intervals

*Note: Confidence Intervals are small for these statistics, and do not graph well.

Source: Florida Department of Health, Office of Vital Statistics, 1998-2004
 Prepared by: DCHD, Institute for Health, Policy and Evaluation Research, February, 2006

Disparities in Infant Mortality at the Local Level (continued from page 4)

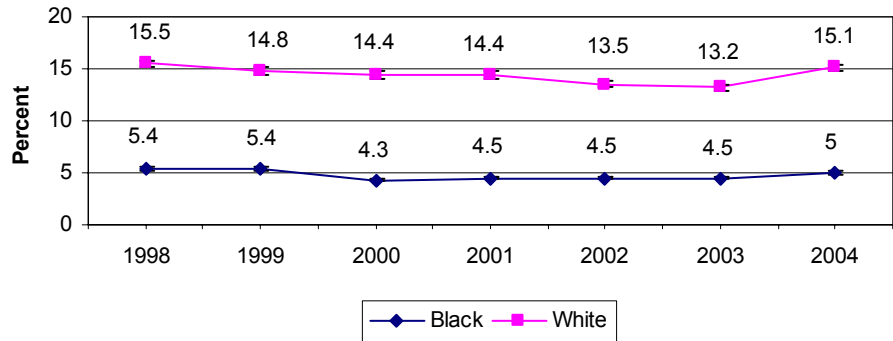
term births, no prenatal care, early prenatal care, birth to women with no high school education, smoking during pregnancy, and births to women ages 15-19. In terms of LBW and VLBW for the years 2002-2004, the black population percents are 13.6 (95% CI=13.3,13.8) and 3.2 (95% CI=3.1,3.3), respectively. This is a statistically significant difference from the white population with percents of 7.5 (95% CI=7.4,7.6) for LBW and 1.2 (95% CI=1.17, 1.2) for VLBW. (See Figure 2 and 3 on page 4 for trends in percent of LBW and VLBW in the black and white population from years 1998-2004).

Smoking during pregnancy also presents a notable disparity between white and black populations with whites having a higher percent of births to mothers who smoke during pregnancy at 13.9% (CI=13.7, 14.1) than black mothers at 4.7% (CI= 4.6, 4.74) from the years 2002-2004. Figure 4 shows trends from 1998 to 2004 by race for births to mothers who smoked during pregnancy.

Rates for births to black women aged 15-19 is considerably higher than for the white population. For the years 2002-2004, the rate for the black population is 76 per 1,000 live births (95% CI=75.7,77.4) and 39 per 1,000 live births for the white population (95% CI=39.1,39.8). See Figure 5 for rates in teen pregnancy by race for the years 1998 to 2004.

Progress: Due to substantial efforts being made by programs such as Healthy Start and the Fetal and Infant Mortality Review process, progress is being made in the areas of teen births and prenatal care disparities. Confidence intervals indicate statistically significant reductions from 1998 to 2004 in teen births and “no prenatal care” for the black population (See Figures 5 and

Figure 4 Percent Live Births to Mothers Who Smoked During Pregnancy, Duval County, 1998-2004



I 95% Confidence Intervals

*Note: Confidence Intervals are small for these statistics, and do not graph well.

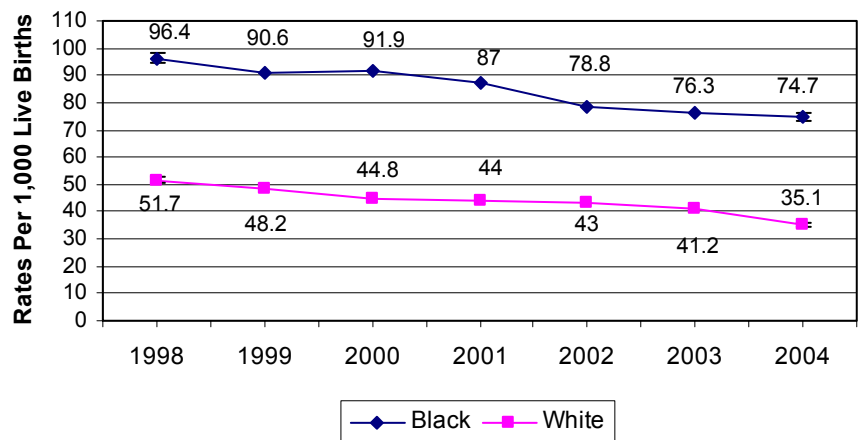
Source: Florida Department of Health, Office of Vital Statistics, 1998-2004
 Prepared by: DCHD, Institute for Health, Policy and Evaluation Research, February, 2006

7). In addition, while black mothers smoke less than white mothers during pregnancy, there is also a statistically significant decrease in smoking during pregnancy among the black population from the years 1998 to 2004. For more informa-

tion on infant mortality disparities, visit the State of Florida Maternal and Infant Health website at <http://www.doh.state.fl.us/family/mch/index.html>

Source: Florida Department of Health, Office of Vital Statistics, 1995-2004

Figure 5 Rates of Births to Mothers Age 15-19 Duval County, 1998-2004



I 95% Confidence Intervals

*Note: Confidence Intervals are small for these statistics, and do not graph well.

Source: Florida Department of Health, Office of Vital Statistics, 1998-2004
 Prepared by: DCHD, Institute for Health, Policy and Evaluation Research, February, 2006

The Azalea Project Strengthening Families Through Prevention

By Faye A. Johnson and Carol Brady, The Azalea Project, Northeast Florida Healthy Start Coalition

The Northeast Florida Healthy Start Coalition established the Azalea Project in 2002 to expand substance abuse and HIV prevention services for African American women of childbearing age and their families. This population is disproportionately impacted by substance abuse associated transmission of HIV. The intervention focused on the window of opportunity created by pregnancy to address substance abuse and other risk taking behavior in a predominantly African American population. The prevention intervention used by The Azalea Project also expands the current target population served by Healthy Start to include children in the household, particularly adolescent girls. Healthy Start case management activities were extended through the establishment of a multidisciplinary team to serve pregnant

and parenting substance abusing women and their families. The multidisciplinary team consists of employees of Gateway Community Services, Duval County Health Department-Healthy Start, River Region Human Services, Minority AIDS Coalition and the Bridge of Northeast Florida. Substance abuse and HIV prevention strategies were integrated into case management services. At-risk women were recruited through the Healthy Start prenatal screen, community outreach at the jail and hospital emergency room, and referrals from the court and child protection systems.

Substance abuse among women of childbearing age places them at a disproportionate risk for acquiring HIV. African American women account for 87% of AIDS cases and 80% of HIV

cases in Jacksonville. More than 90% of female HIV cases and 75% of AIDS cases in Jacksonville are in women of childbearing age (15-44 years old). Citywide, 40% of the female HIV cases reported during the last 18 months involved pregnant women.

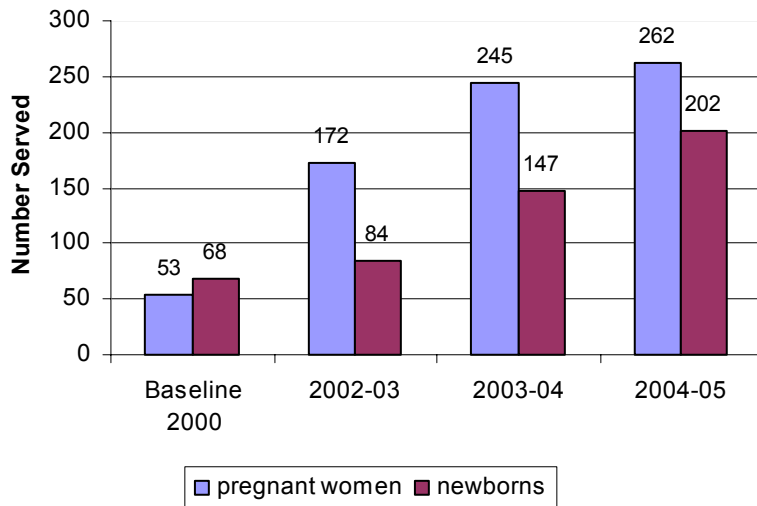
In 2000, about 3,800 pregnant women in Jacksonville were eligible for Healthy Start services annually based on their screening scores. Nearly 750 of these women self-reported substance abuse (19.7%).

Figure 6 shows the increase in the number of substance abusing pregnant women and substance-exposed newborns in Jacksonville served by Healthy Start at pre and post Azalea Project implementation. There was a four-fold increase (394%) in substance abusing pregnant women identified and linked to services, and a two-fold increase (197%) in substance-exposed newborns. This increase is likely due to Azalea Project efforts to develop a network of prevention and treatment services in the city.

Table 3, on page 10, provides information on birth outcomes for babies born to project graduates and other participants who completed at least half of the 18-month intervention. Twenty-five (89%) of the babies born to program graduates weighed 2,500+ grams; there were three (11%) low birth weight babies. No babies were born very low birth weight (<1,500g). Two of the babies born to graduates were born substance-exposed. Five additional babies born to graduates tested positive for methadone or were enrolled in the program post-delivery. No babies born to graduates were born HIV+.

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Figure 6 Substance Abusing Women and Substance-Exposed Newborns Served by Healthy Start Pre-and Post Azalea Project Implementation



Source: The Azalea Project, Northeast Florida Healthy Start Coalition, 2000-2005

Healthy Start Program

By Carolyn Arnister, Healthy Start Coordinator, Maternal and Child Health, DCHD

Healthy Start varies across the country in terms of program design and funding streams but all programs share common goals: the reduction of infant mortality, and improvement in maternal and infant health. In Florida, Healthy Start is a collaboration between regional coalitions and contracted community groups or agencies to provide various services to pregnant women and their infants. Since 1991, The Duval County Health Department has maintained a partnership with the Northeast Florida Healthy Start Coalition (NEFHSC) to provide case management services to pregnant women and infants up to three years of age, specifically disparate populations. See Figure 7 for disparities in pregnant women receiving no prenatal care in Duval County from 1998-2004. This graph shows the statistically significant progress that is being made in no prenatal care among the black population.

Existing state mandates require that all pregnant women and infants be screened for the Healthy Start program. The nature of the screening process has translated into a referral system that has had widespread effects on the DCHD Healthy Start program. During 2003-2004, of 12,573 pregnant women in Duval County, 7,602 women and 4,959 infants received a Healthy Start service. Healthy Start services include emotional support and counseling, case management, home visits, childbirth education, information and referrals, and substance abuse counseling. For each contract year 2003-2004 and 2004-2005, Healthy Start was contracted to serve a total of approximately 6,000 pregnant women and

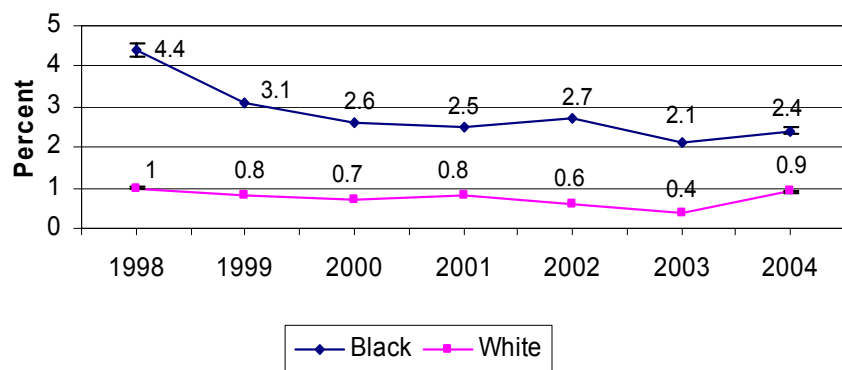
infants. From July 2004 to March 2005 alone, there were approximately 9,767 pregnant women of which 6,590 women had already received at least one Healthy Start service. The sheer volume meant that some care coordinators had caseloads well over 100 participants and services could not be effectively rendered. In spring of 2005, the Duval County Healthy Start program was redesigned due to increased volume of overall incoming referrals to the Healthy Start program, steady numbers of low risk participants, high caseloads, and no increase to funding. It was determined that the 'serve all' philosophy of 'giving everyone a little' of Healthy Start does not have the desired impact on the goals aforementioned. The model was designed based on creative input by all levels of Healthy Start staff as well as input from the Northeast Florida Healthy Start Coalition. For the first time in the history of Healthy Start in Duval County, an evidenced based design of

service delivery focused on the highest need was created to shift services from mainly *low risk* prenatal participants to those of *moderate to high risk*. The new model aims to serve 2,400 prenatal and 800 postnatal participants of the risk type described for 2005-2006. In addition to serving identified participants, another component of the model included a cap on caseloads ranging from 35 to 60 participants at any given time. Services would continue to be delivered by care coordination staff consisting of nurses, social service counselors, family support workers, and program consultants (who provide counseling).

This ambitious shift was predicated on considerations such that there are certain risk factors vs. others which have a greater impact on low birth rate (a primary cause of infant mortality), and that intensity of the appropriate services in addition to

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Figure 7 Percent of Births to Black and White Mothers with No Prenatal Care, Duval County, 1998-2004



I 95% Confidence Intervals

*Note: Confidence Intervals are small for these statistics, and do not graph well.

Source: Florida Department of Health, Office of Vital Statistics, 1998-2004

Prepared by: DCHD, Institute for Health, Policy and Evaluation Research, February, 2006

Healthy Start Program

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duration of time with participants matter more than giving information in a one time encounter, especially with higher risk participants. By using the existing state Healthy Start risk assessment which contains a variety of risks that were identified as affecting birth outcomes, as well as Fetal Infant Mortality Review information it was determined that DCHD would be able to triage participants either to its program or to First Coast Family Center (FCFC), a new community Healthy Start low risk provider. Thus, after consideration of local and national data, the DCHD Healthy Start program decided to focus on the following risks: maternal health/ medical conditions (includes nutrition), prior pregnancy problems (includes low birth weight), smoking, substance use/abuse, depression/mental health issues, and teen pregnancy (includes first time pregnancy). Low risk participants previously served by DCHD are now identified as those who can benefit most by FCFC.

The redesigned program has been operational for four challenging months. During this time, several goals have been accomplished. The new model was translated to all

levels of staff. Training was completed with selected staff. An educational effort regarding screening and the DCHD model directed at area OB-GYN providers was initiated in conjunction with the NEFL Healthy Start Coalition. A connection was initiated between DCHD and an area hospital regarding care coordination of services for neonatal and post neonatal participants. Within the health department, working relationships with Community Nutrition Services, Health Services, and School Health have been reinvigorated. Other Healthy Start partner agencies have participated in a DCHD Providers group whereby issues related to providing seamless Healthy Start services without duplication are discussed. Already, several hundred low risk participants have been referred to the new low risk provider, First Coast Family Center. Program evaluation is also under way. The Healthy Start Program hopes to continue on a course of connecting with the community. Feedback that inspires the program staff to do so are best summed up in the words of one participant. In response to the question, *the most valuable thing that the Healthy Start worker did for me was*, a participant replied, *"...helped build self-esteem among myself and be a responsible mother."*

It is anticipated that the Healthy Start

model described in this article will continue to yield lower caseloads whereby care coordinators can assist the most at risk participants. With more time to spend in personal encounters, the goals of encouraging reduction in smoking, increasing duration of breastfeeding, adequately spacing between planned pregnancies, and improving maternal health and nutrition during pregnancy will continue to be a primary focus. For more information about the Healthy Start Program, contact Carolyn Arnister at 904-665-3115.

Sources:

¹Florida Department of Health, Healthy Start Reports, Executive Summary Devaney B, Howell E., McCormick M, Moreno, L. Reducing Infant Mortality: Lessons Learned from Healthy Start. July 2000. Available from: <http://www.mathematica-mpr.com/publications/pdfs/healthyfinal.pdr>
Lee, Laurie. Project Impact 2004-2005 Community Report, Fetal & Infant Mortality Review Project
Northeast Florida Healthy Start Coalition, Inc. Proposed Service Delivery Plan 2005-2007. Presented by the Ad Hoc Planning Committee. April 2005
National Healthy Start Association, Inc. Strategic Plan 2002-2005. Available from http://www.healthystartassoc.org/sp02_05.pdf
Pettiford B, Frazier D, Synkewecz C. A Healthy Start Guide to Program Excellence and Community Based Interventions. AMCHP Disparities Action Learning Lab. May 20, 2004

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grams, the majority of whom die during the first year of life¹. According to the Institute of Medicine, low birth weight is most often associated with premature birth, with an incidence of about 1 in 8 infants, showing an increase over the past twenty years². The percent of premature birth in 2002 was 12.1 compared to 9.4 in 1981¹.

Of the racial and ethnic groups for which data are available, the death rate for non-Hispanic black infants in 2001 was highest at 13.5 per 1,000 compared with 4.1 for Asians. The Healthy People 2010 target is 4.5 per 1,000. In general, the highest death rates (9.0 or more per 1,000) from 1998 to 2000 occurred in a band of southeastern states extending from

Louisiana to North Carolina and in the District of Columbia. Racial and ethnic disparities are evident among LBW infants and very low birth weight (VLBW) infants. In 2001, 13% of black infants had LBW and 3 percent had VLBW, compared with LBW and VLBW percentages of 6.7 % and 1.2 %,

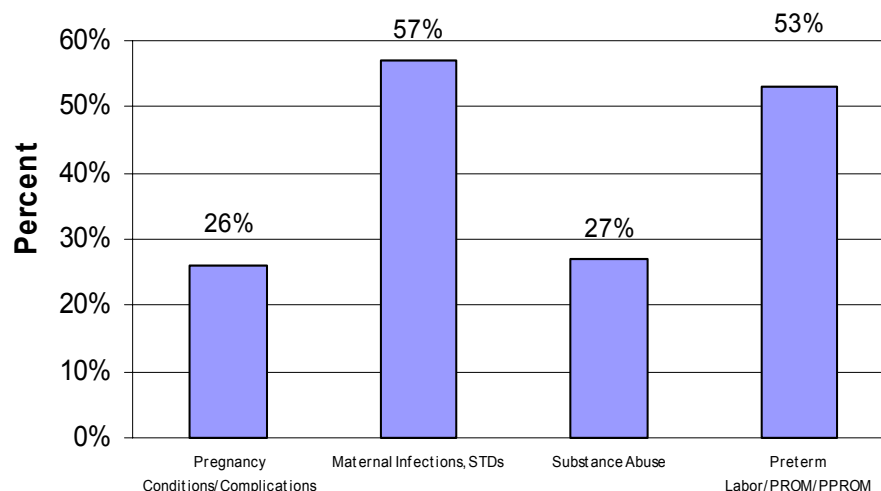
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Fetal and Infant Mortality

Review by Laurie Lee, FIMR Coordinator, Northeast Florida Healthy Start Coalition

The Fetal and Infant Mortality Review (FIMR) is the process by which a multi-disciplinary team is brought together to examine fetal and infant deaths in a community. Project Impact is the FIMR project for Baker, Clay, Duval, Nassau and St. Johns Counties. This process is instrumental in understanding the specific deaths and community health and social issues associated with poor birth outcomes. Project Impact was started in 1995 in the Jacksonville area and carried out by the Northeast Florida Healthy Start Coalition with funding from the Florida Department of Health. A case review team selects fetal and infant deaths each month based on specific criteria such as age at death, gestational age, birth weight, location, and cause of death. The process involves using birth, death, prenatal care, hospital, Healthy Start and autopsy records as

Table 1 Maternal Medical Conditions During Pregnancy Contributing Death Factors, 2000-2005

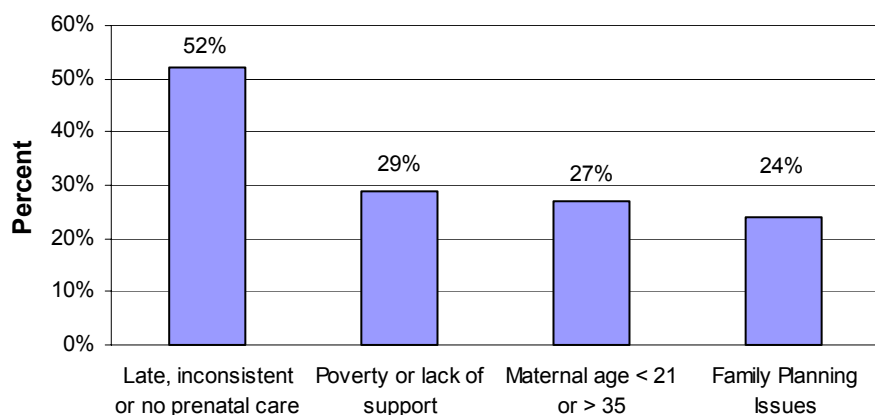


Source: FIMR Case Reviews, (n=157). January 2000-2005. Project Impact 2004-2005 Community Report, FIMR Project. Note: Multiple factors may be present in individual cases. PROM = Premature Rupture of Membranes. PPROM = Pre-term Premature Rupture of Membranes.

well as family interviews to solicit more detailed information. Each case is reviewed by a Case Review Team (CRT) in order to determine any medical, social, financial, commu-

nity education or service issues that may have contributed to the loss and develops recommendations for the Community Action Team (CAT).

Table 2 Social Issues Contributing Death Factors, 2000-2005



Source: FIMR Case Reviews, (n=157). January 2000-2005. Project Impact 2004-2005 Community Report, FIMR Project. Note: Multiple factors may be present in individual cases. PROM = Premature Rupture of Membranes.

An intensive review on 29 cases is performed each year although data is collected on all fetal and infant deaths throughout the Northeast 5 county region. From 2000-2005, 157 cases have been reviewed. In addition to reviewing cases and making recommendations, the FIMR process attempts to identify factors that account for fetal and infant deaths. Some common factors identified related to maternal medical conditions and social issues can be seen in Tables 1 and 2. Other common factors include general health of the mother, previous poor outcome, life course, and no Healthy Start or other screening. As a result of FIMR findings and CRT recommendations, various

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The Azalea Project
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An additional 19 babies were born to participants who completed at least half of the project intervention. Thirteen (68%) of the babies born to these participants weighed 2,500+ grams; there were five (26%) low birth weight babies and one (5%) very low birth weight baby. Three of the babies born to other participants were born substance-exposed. No babies born were born HIV+.

In addition to case management, outreach education and support services provided to at-risk women of child-bearing age, the Azalea Project also served youth in the women’s households. In 2004, 12% of all births in Duval County were to women ages 15-19. This unique inter-generational approach was designed to break the cycle of substance-use and other risk-taking behavior. The Azalea Project provided case management, education and support to 48 youth during the three-year project period. Some of the most frequent risk factors associated with youth addressed by the project was lack of

sex/STD education (100%), lack of drug/alcohol education (100%), lack of family planning skills (64.6%), poor academics (66.7%), lack of non-school activities (45.8%), lack of a positive role model (43.8%) and excessive school absences (39.6%).

The Azalea Project represents a “Promising Practice” for providing substance abuse and HIV prevention services to at-risk women of child-bearing age and their families. Since inception, the project provided services to more than 400 at-risk women and children, including linkages to appropriate community agencies, intensive case management, education, and support and youth development. Community linkages have been strengthened through the collaborative approach used by the project. Additional resources have been brought to bear on this important issue. The Azalea Project has effectively established itself in the community it serves.

For more information, contact Faye Johnson at the Northeast Florida Healthy Start Coalition at 904-279-0880.

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programs have been implemented in the Northeast 5 county region. Some of these projects include: The Moses Project, a faith based project to make free basinetts available for families that don’t have a crib for their baby; Nightclub outreach, programs in local nightclubs to provide education, testing and referrals for care such as safe sex, STDs, and family planning; Safe Sleep brochures aimed at providing information for older care givers; The Magnolia Project, a free standing clinic serving the women in specified zip codes for interconceptional care, bereavement counseling, and some prenatal care; and Cooking with Sisters, a community based healthy cooking and eating program that stresses the importance of getting healthy before pregnancy. The majority of these interventions are implemented in target areas, specifically zip codes, 32202, 32204, 32206, 32208, and 32209, because of their high infant mortality rates, specifically in the black population. (See Figure 1 for infant mortality disparities). For more information on the FIMR process, contact Laurie Lee at 904-543-8255.

Sources:
Florida Association of Healthy Start Coalition, <http://www.healthystartflorida.com/directory/coalition.asp?CoalitionID=HSNEF>
Huddleston, K, & Brady, C., (2001) Racial disparities in birth outcomes, *Northeast Florida Medicine*, 52. Cited from <http://www.dcmsonline.org/jax-medine/2001journals/Jan2001/birthoutcomes.htm>
Project Impact, 2005-2005 Community Report, Fetal & Infant Mortality Review Project

Table 3 Birth Outcomes For Azalea Project Participants, October 2002 – September 2005

Birth Outcomes	Graduates (18 months)	Other Participants (9-17 months)
Total Births	28	19
Desired Weight (>=2500 grams)	89%	68.4%
Low Birthweight (<2500g)	10.7%	26.3%
Very Low Birthweight (<1500g)	0.0%	5.3%
Substance Exposed (excludes methadone & pre-enrollment exposure)	7.1%	5.2%
HIV+	0.0%	0.0%

Source: Azalea Project database, University of North Florida Center for Community Initiatives, 2005

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respectively, for white infants. The Healthy People 2010 target is 5.0 % for LBW and 0.9 % for VLBW.

When aggregated, LBW and VLBW accounted for 293.5 deaths of black infants per 100,000 live births in 2001, compared with 77.5 deaths per 100,000 among white infants.

Favorable progress has been shown in the area of SIDS with a dramatic decrease from the years 1988 to 2002. The rate of SIDS in 1988 was 1.5 deaths per 1,000 live births compared to .57 in 2002. The Healthy People 2010 target is .25. The major factor in this improvement was the increase in the percentage of infants who were put to sleep on their backs – from 13% in 1992 to 71% in 2002³. The proportion of pregnant women who receive prenatal care beginning in the first trimester has shown little change in recent years. The percentage of mothers receiving prenatal care in their first trimester of pregnancy increased slightly from 2002 to 2003, from 83.7% to 84.1%. Overall this figure has risen 11 percent since 1990, when only 75.8 percent of women received first trimester care. Longstanding racial and ethnic disparities among the recipients also remain much the same. Although a positive trend was observed among most racial/ethnic groups, there are still great disparities among these groups in the likelihood of entering care early in pregnancy. In 2003, 89.0% of non-Hispanic white women entered care in the first trimester, followed by Asian/Pacific Islander women at 85.4%, Hispanic women at 77.4 %, non-Hispanic black women at 76.0%, and American Indian women at 70.9%. Since 1990 the percentage of all women receiving late or no care has dropped from 6.1% to 3.5% although the rate of late or no care remains high among American In-

dian/Alaska Native women (7.6%), non-Hispanic black women (6.0%), and Hispanic women (5.3%)⁴.

The proportion of pregnant women aged 15 to 44 years who had abstained from alcohol in the month preceding the data collection was 90.9% in 2002, with little variance by race or ethnicity. The Healthy People 2010 target is 94%. The proportion of pregnant women who had abstained from cigarette smoking during the preceding month increased from 87% in 1998 to 88% in 2001. The 2001 proportions were highest among Asians (98%) and Hispanics (97%), with a Healthy People 2010 objective of 99%.

Breastfeeding of infants showed increases from 1998 to 2002: in the early postpartum period. It rose from 64 to 70% of mothers over this period; at 6 months, from 29 to 33%; and at 1 year, from 16 to 20%. In 2002, the highest percentages at each of the three stages were recorded for Asians and the lowest for blacks, with whites and Hispanics in between³.

The incidence of Spina Bifida and other neural tube defects decreased from 6 per 10,000 live births in 1998 to 4.8 in 2000. The target is 3 per 10,000. The decrease was due in large part to increased consumption of folic acid from fortified foods or dietary supplements, as evidenced by the rise in the median red blood cell folate levels in non-pregnant women (aged 15 to 44 years) from 160 nanograms per milliliter (ng/ml) between 1991 and 1994 to 255 ng/ml between 1999 to 2000. This level surpasses the target of 220 ng/ml. Of the racial and ethnic groups for which data were available, 1999 to 2000, non-Hispanic blacks (at 206 ng/ml) were the only group whose level fell below the target³.

Cited from:

1. CDC, National Center for Health Statistics, National Vital Statistics System
2. Institute of Medicine, Understanding Premature Birth and Assuring Healthy Outcomes, 2005
- 3 Cited from Healthy People 2010
4. U.S. Department of Health and Human Services, Health Resources and Services Administration. Women's Health USA 2005. Rockville, Maryland: U.S. Department of Health and Human Services, 2005

Acknowledgements:

Contributions to this report of the following individuals for their knowledge and support is acknowledged:

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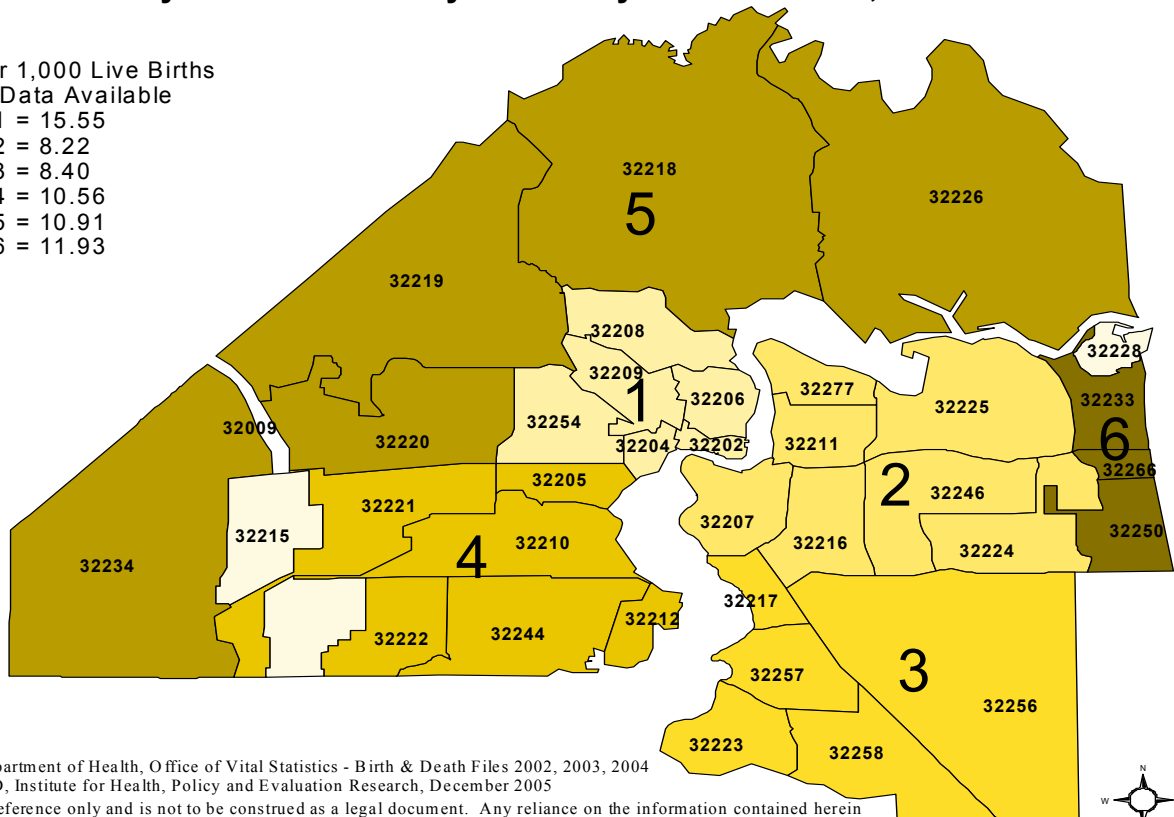


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Duval County Infant Mortality Rates by Health Zone, 2002 - 2004

Rates per 1,000 Live Births

- No Data Available
- HZ1 = 15.55
- HZ2 = 8.22
- HZ3 = 8.40
- HZ4 = 10.56
- HZ5 = 10.91
- HZ6 = 11.93



Source: Florida Department of Health, Office of Vital Statistics - Birth & Death Files 2002, 2003, 2004
Prepared by: DCHD, Institute for Health, Policy and Evaluation Research, December 2005

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