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Epi Monthly Report

Highlights in Miami-Dade County 2004 Maternal and Infant Health Indicator Areas

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Vital records data is a very useful source of information on maternal and infant health indicators. The following is a summary of select maternal and infant health indicators. It should be noted that the standard birth certificate was revised in 2003; the State of Florida began to use the revised certificate in March 2004. This revision may affect the comparability of items between the 2003 version and previous versions (the most recent revision occurred in 1989). This difference is seen when evaluating prenatal care utilization. In the 2003 version, the exact date of the first prenatal care visit is recorded. In previous versions, however, only the month is recorded. In addition, the recent revision process resulted in the recommendation that information on prenatal care be gathered either directly from the prenatal care provider or from medical records. The 1989 revision did not recommend a source for this data. Because of these differences, data on prenatal care utilization may not be comparable between years.

Live Births

The number of live births in Miami-Dade County decreased slightly from 32,504 in 2003 to 32,004 in 2004. The fertility rate in Miami-Dade County in 2004 was 62.5 live births per 1,000 women aged 15-44 years (compared to 63.6 per 1000 live births in 2003).

Births to Teens

The birth rate for young teens (ages 10-14) has decreased consistently since 1991. The number of live births among teens ages 10-14 declined to 47 in 2004 from 58 in 2003. The 2004 young teen birth rate was 0.57 per 1,000 women ages 10-14 years. This is 74.1% lower than the 2.2 live births per 1,000 observed among women in this age group in 1991. The current birth rate in this age group is consistent with state and national averages (Figure 1).

The 2004 birth rate for teens ages 15-19 decreased to 34.8 live births per 1,000 women ages 15-19. This is a decrease from 36.7 in 2003 and 61.6 in 1991 (Figure 2). This rate has declined 43.5% since 1991.

Prenatal Care Utilization

Prenatal care utilization changed slightly due to the 2003 birth certificate revision. The percentage of women beginning prenatal care in the first trimester of pregnancy changed to 85.9 in 2004 from 89.0 in 2003 (Figures 3a-3b). The proportion of pregnant women with late or no prenatal care changed to 5.7% in 2004 from 1.6 % in 2003. These changes were observed across all race/ethnicity groups, particularly in Hispanic women. The percentage of Hispanic women beginning prenatal care in the first trimester of pregnancy changed to 86.8 from 91.6; the proportion of Hispanic pregnant women with late or no prenatal care changed to 5.9% in 2004 from 0.9% in 2003.

Low Birthweight

The percentage of newborns with low birthweight (less than 2,500 grams) slightly declined to 8.4% in 2004 after peaking to 8.6% in 2003 over the last decade. (Figures 3a-3b). This slight decrease varied by maternal race/ethnicity. Among Non-Hispanic White, Non-Hispanic Black and Haitian women, the 2004 low birth weight

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Inside this issue:

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New Year, New Look

Happy New Year!

As you may have noticed, the *Epi Monthly Report* is back in 2006 with a new look. We've added some colors and changed a few fonts to provide you with a fresh look at the work that we do. With this new look, we are planning for a year of new ideas, new opportunities, and new challenges.

Although our look may have changed, our focus on public health prevention and preparedness remains the same. In 2006, we plan to continue to provide the community with public health services of the highest quality. But, we only do this with your help. Our partnerships with health care providers and other public health professionals are the backbone of our disease control program. Whether it's investigating an unexplained death or battling West Nile Virus season together, we know that the Office of Epidemiology and Disease Control can count on the public health community for unconditional support. We thank you for all of your hard work and look forward to working with you in upcoming months.

Let's make 2006 a safer and healthier year for all Miami-Dade County residents!

All the best in the new year,

Fermin

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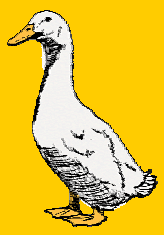
AVIAN FLU WATCH



Unless otherwise noted, all information is current as of February 9, 2006

- **Since 2003, 166 human cases of avian influenza (H5N1) have been confirmed** by the World Health Organization (WHO). Of these, 88 have been fatal.
- **Countries with confirmed *human* cases** include Cambodia, China, Indonesia, Thailand, Vietnam, Iraq, and Turkey.
- **The most recent WHO-confirmed case occurred in China.** The case is a 26-year-old female farmer. She developed symptoms on January 10 and was subsequently hospitalized with pneumonia. She remains under treatment in stable condition. Like many of the other cases in China, this one occurred in an area where no recent poultry outbreaks have been officially reported.
- **No human cases of avian influenza (H5N1) have been reported in the United States.**
- **An outbreak of H5N1 in birds was recently reported in Nigeria.** No clear information about the source of the Nigerian outbreak is presently available, but the country is known to lie along a flight route for birds migrating from central Asia.
- **H5N1 has been confirmed in *birds* in several other countries in 2005-2006**, including Cambodia, China, Croatia, Hong Kong, Indonesia, Japan, Kazakhstan, Korea, Malaysia, Mongolia, Romania, Russia, Thailand, Turkey, Ukraine, and Vietnam (Current as of 02/0806).
- **No restrictions on travel to affected countries have been imposed.** Travelers should avoid contact with live poultry and monitor their health for ten days after returning from an affected country.

SOURCES: World Health Organization; World Organisation for Animal Health; Centers for Disease Control and Prevention

Highlights in Miami-Dade County 2004 Maternal and Infant Health Indicator Areas

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percentages decreased to 7.5, 12.8 and 11.1 respectively (from 7.8, 13.6 and 12.4, respectively, in 2003). Among Hispanic mothers, the percentage increased to 7.0 in 2004 from 6.8 in 2003.

Principal Source of Payment for Delivery

Private insurance accounted for 36.6% of delivery payment sources in 2004, while 37.8% of deliveries were paid for by Medicaid, Medicaid combined with other insurance, or local government. Self-pay accounted for 7.7% of 2004 payment sources. Payment source was unknown for 18% of deliveries. Payment sources varied by maternal race/ethnicity. Among women in the Non-Hispanic White and Non-Hispanic Other age groups, private insurance paid for 58-60% of deliveries. Other sources included Medicaid, Medicaid and other insurance combination or local government (17-19%), self-payment (5-10%) and unknown (13-18%) (Figure 4).

Infant Mortality Rate

The infant mortality rate decreased to 5.2 in 2004 from 5.9 deaths per 1,000 live births in 2003. This is the first decrease seen in 4 years (Figures 5a-5b). Neonatal deaths accounted for 62.5% and 59.3% of infant deaths in Miami-Dade in 2003 and 2004. The neonatal mortality rate declined to 3.1 in 2004 from 3.7 per 1,000 live births in 2003. The post-neonatal mortality rate was 2.1 in 2004, 2.2 in 2003, 1.8 in 1999, 1.8 in 2000, 2.0 in 2001 and 1.9 in 2002. Due to incomplete race/ethnicity information in birth certificate records (20.8% of race/ethnicity information is unknown), it was impossible to ascertain whether the decrease in the total number of infant deaths was due to factors related to non-Hispanic Black mothers or Haitian mothers (Table1) .

Discussion

The data presented in this report show improvements in several maternal and infant health indicator areas in Miami-Dade County. There was a decrease in infant mortality this year, and teen birth rates continue to decline. There have also been slight decreases in low birthweight. However, disparities along racial and ethnic lines persist. More investigation into reasons for these disparities may prove useful for further improvements.

As the 2003 version of the live birth certificate continues to be used, the ability to accurately compare prenatal care data across years will improve. Additionally this birth certificate revision includes important additions that will allow for analysis of several other indicators, including treatment of sexually transmitted diseases (STDs) during pregnancy, utilization of infertility treatments, and use of WIC services during pregnancy. Analyses of these indicators will increase understanding of maternal and infant health indicators in Miami-Dade County.

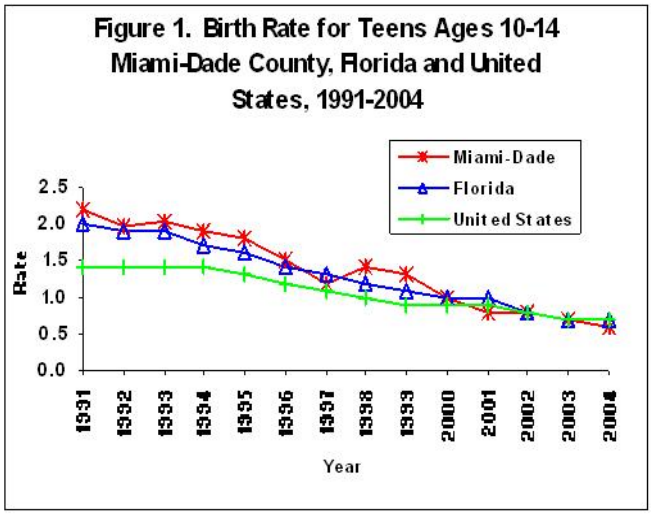
References

1. Martin JA, Hamilton BE, Ventura SJ, Menacker F, Park MM, Sutton PD. Births: Final data for 2001. National vital statistics reports; Vol. 21 No.

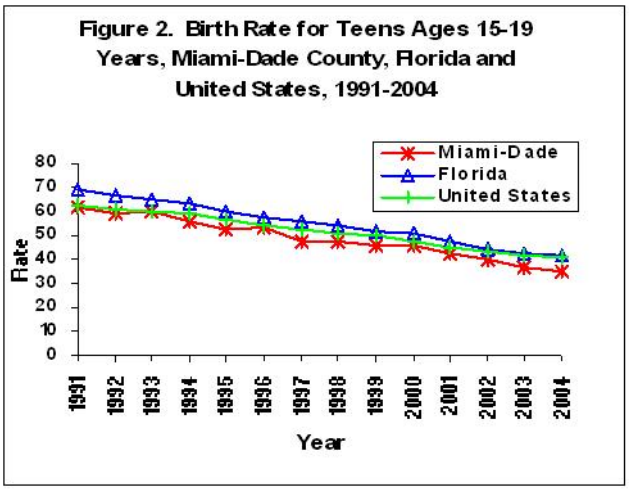
2. Hyattsville, Maryland: National Center for Health Statistics. 2002.Martin JA, Hamilton BE, Sutton PD, Ventura SJ, Menacker F, Munson ML. Births: Final data for 2002. National vital statistics reports; vol 52 no 10.

3. Hyattsville, Maryland: National Center for Health Statistics. 2003. Hamilton BE, Martin JA, Sutton PD. Births: Preliminary data for 2003. National vital statistics reports; vol 53 no 9. Hyattsville, Maryland: National Center for Health Statistics. 2004.

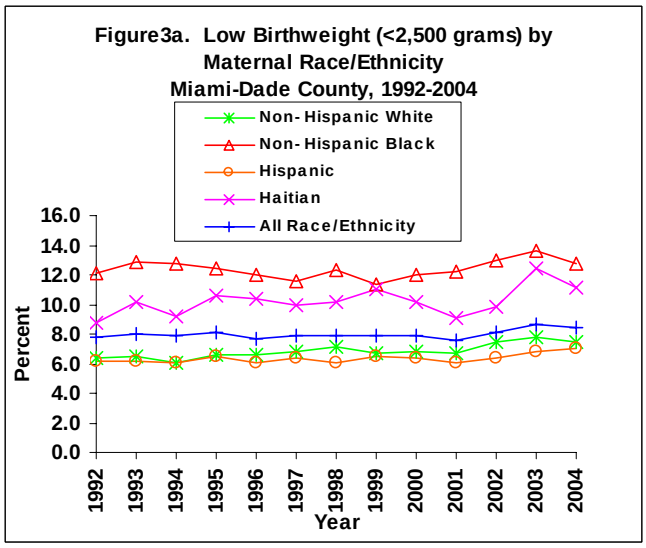
4. Hamilton BE, Martin JA, Ventura SJ, Sutton PD, Menacker F. Births: Preliminary data for 2004. National vital statistics reports; vol 54 no 8. Hyattsville, Maryland: National Center for Health Statistics. 2005.

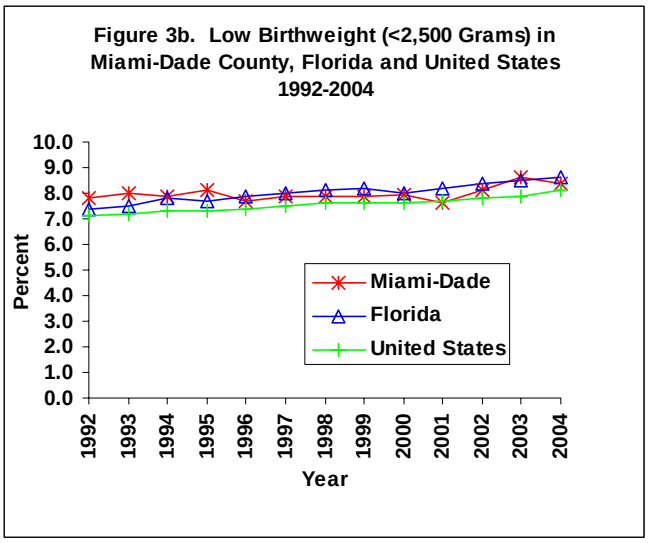


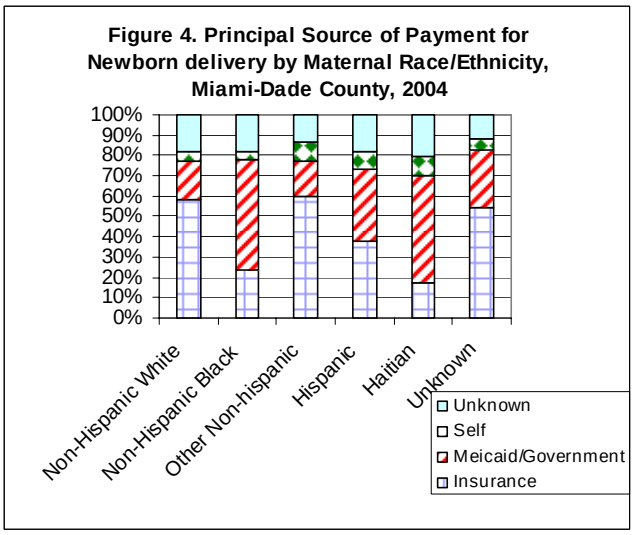
Rate is per 1,000 women ages 10-14.

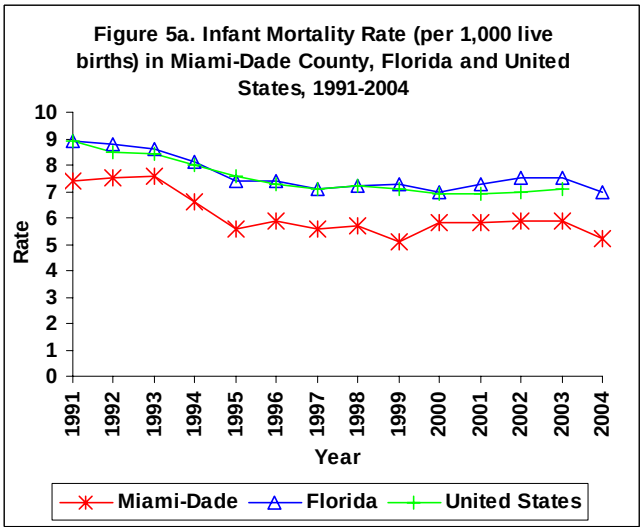


Rate is per 1,000 women ages 15-19.









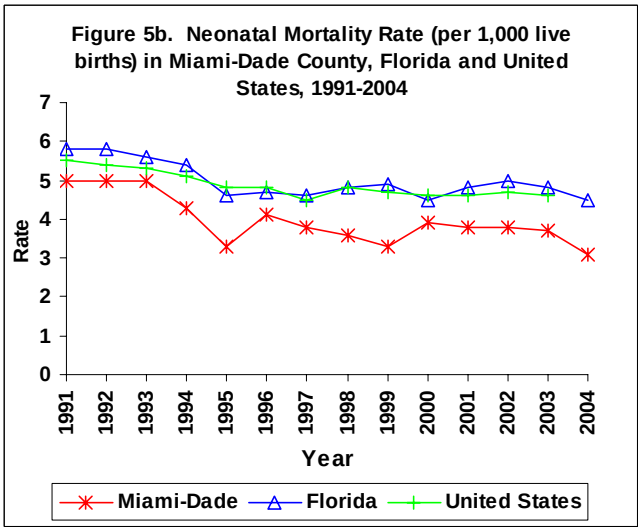


Table-1 Infant Mortality Rates* (per 1,000 live births) by Mother's Race/Ethnicity, Miami-Dade County, 1999-2004**

Race/Ethnicity	1999			2000			2001			2002			2003			2004		
	Live Births	Deaths	Rate	Live Births	Deaths	Rate	Live Births	Deaths	Rate	Live Births	Deaths	Rate	Live Births	Deaths	Rate	Live Births	Deaths	Rate
Non-Hispanic White	4872	19	3.9	4787	34	7.1	4135	26	6.3	3948	23	5.8	3945	22	5.6	3611	23	6.4
Non-Hispanic Black	6819	49	7.2	6934	66	9.5	6611	83	12.6	6287	65	10.3	6106	69	11.3	5862	39	6.7
Hispanic	17335	56	3.2	18074	48	2.7	19244	52	2.7	19538	55	2.8	20003	52	2.6	19929	58	2.9
Cuban	6795	29	4.3	6852	26	3.8	7191	23	3.2	7448	23	3.1	7629	21	2.8	7624	25	3.3
Puerto Rican	1259	6	4.8	1273	6	4.7	1204	3	2.5	1224	3	2.5	1308	3	2.3	1183	3	2.5
Central/South American	8036	17	2.1	8652	12	1.4	9475	20	2.1	9445	21	2.2	9789	22	2.2	8883	23	2.6
Mexican/Other Hispanic	1245	4	3.2	1297	4	3.1	1374	6	4.4	1421	8	5.6	1277	6	4.7	2239	7	3.1
Haitian	1939	8	4.1	1932	10	5.2	1845	2	1.1	1777	8	4.5	1896	9	4.7	1802	8	4.4
Non-Hispanic Others	466	3	6.4	473	1	2.1	485	2	4.1	478	1	2.1	496	0	0.0	602	3	5.0
Unknown	56	26		97	27		75	24		51	38		58	40		198	36	
All	31487	161	5.1	32297	186	5.8	32395	189	5.8	32079	190	5.9	32504	192	5.9	32004	167	5.2

*: Mortality rates based on neonatal, postneonatal and infant deaths by race/ethnicity of decedent, live births by race/ethnicity of mother.

**:The number of infant deaths by race/ethnicity may be changed after reviewing original chart

NOTE: Due to technical problems with our electronic notifiable disease reporting system, the summary of Selected Reportable Diseases/Conditions in Miami-Dade County does not appear in this issue of the Epi Monthly Report. Please check future issues for this data.

TO REPORT ANY DISEASE AND FOR INFORMATION CALL:

Office of Epidemiology and Disease Control

Childhood Lead Poisoning Prevention Program	(305) 470-6877
Hepatitis	(305) 470-5536
Other diseases and outbreaks	(305) 470-5660
HIV/AIDS Program	(305) 470-6999
STD Program	*(305) 325-3242*
Tuberculosis Program	*(305) 324-2470*