NCHS Dataline

New reports from the National Center for Health Statistics, Centers for Disease Control and Prevention, present the latest birth statistics for the United States, analyze the declining birth rate among very young mothers, and summarize the data on infant mortality from the linked file of birth and infant death records.

PRELIMINARY BIRTH STATISTICS FOR 2003

Preliminary birth data for 2003 indicate that the birth rate for women aged 40–44 years rose more than 5% from 2002 to 2003, more than doubling in the past 20 years. Birth rates to women in their thirties also increased significantly in 2003, while birth rates for women aged 20–29 remained relatively stable and the teen birth rate dropped for a 12th consecutive year. These findings are in a new NCHS report, "Births: Preliminary Data for 2003."[1] The birth rates for women aged 40–44 years rose 5% between 2002 and 2003, from 8.3 to 8.7 births per 1,000 women. The rate for women aged 45–54 years remained unchanged at 0.5. Birth rates for women aged 30–34 years increased by 4% from 2002 to 2003, while the rate for women aged 35–39 years rose 6%. Birth rates for women aged 20–24 years decreased slightly (by 1% in 2003), while for women aged 25–29 years the rates increased slightly (by 2%). The teen birth rate fell for the 12th straight year, from 43.0 births per 1,000 teens aged 15–19 years in 2002 to 41.7 in 2003.

The proportion of births to unmarried women increased from 34% in 2002 to 34.6% in 2003, while the birth rate for unmarried women grew 3% over the same period. Meanwhile, births to unmarried teenagers declined for the fifth straight year, though the decline was slight.

The report includes other important health information, such as:

- The percent of mothers who smoked during pregnancy decreased from 11.4% in 2002 to 11.0% in 2003.
- The percent of women who received prenatal care within the first three months of pregnancy increased from 2002 to 2003, continuing a pattern that began in the early 1990s. Slightly more than 84% percent of women received early prenatal care in 2003.
- The cesarean delivery rate rose for the seventh straight year. Preliminary 2003 data show that 27.6% of all births were cesarean deliveries, a marked 6% increase from 2002.
- The percent of babies born preterm (less than 37 weeks of gestation) rose from 12.1% in 2002 to 12.3% in 2003, continuing its steady increase since the mid-1990s.
- The percent of babies born at low birthweight (under 2,500 grams) rose from 7.8% in 2002 to 7.9% in 2003. Low birthweight has gradually increased since the mid-1980s.

The data in the report are based on over 95% of birth records reported to vital statistics offices in all 50 states as part of the National Vital Statistics System. The report is available at www.cdc.gov/nchs.

BIRTH RATES DOWN FOR THE YOUNGEST TEENS

The birth rate among young adolescents aged 10–14 has fallen to the lowest level since 1946, according to a new analysis of trends in "Births to 10 to 14 Year-Old Mothers, 1990–2002: Trends and Health Outcomes,"[2] the first extensive analysis of births to this group of very young mothers. From 1990 to 2002, almost 137,000 of these young mothers delivered a live birth. This number has declined steadily, from a peak of 12,901 in 1994 to the current low of 7,315. If the 1990 rate had held through 2002, there would have been 34,336 additional births to the youngest teens. The 43% decline in the number of births occurred despite the 16% rise in the female population aged 10–14 years.

In 2002, the birth rate per 1,000 females aged 10–14 years was 0.7 live births, one-half that of 1990 (1.4 per 1,000) and the lowest level since 1946 (0.7). The 2002 rates were highest among non-Hispanic black (1.9 per 1,000) and Hispanic adolescents (1.4 per 1,000). Though this represents a significant decrease from 1990 rates for non-Hispanic blacks (5.0) and Hispanics (2.4), their rates remained consistently higher than for other groups. The rates for Asian or Pacific Islander and non-Hispanic white young teens continued to be the lowest, 0.3 and 0.2 per 1,000, respectively. The rate for Asian or Pacific Islander young teens reflected a decrease from their rate of 0.7 per 1,000 in 1990, while the rate for non-Hispanic white young teenagers decreased from 0.5 per 1,000.

Across the United States, birth rates to the youngest teenagers from 2000–2002 ranged from the national low of 0.2 per 1,000 in Maine to a high of 2.0 in Mississippi and the District of Columbia.

About two-fifths of the pregnancies among 10–14 year olds in 2000 ended in a live birth, two-fifths ended in induced abortion, and about one in six ended in a fetal loss. These proportions have been fairly stable since national pregnancy estimates began in 1976.

The report compares the outcomes for these very young mothers compared with all women or those in other age groups. The analysis includes all women with single births but excludes those who gave birth to twins or other multiple births. Births to very young mothers are associated with increased health risks to the mother. The report documents that these mothers:

- Had the lowest levels of timely prenatal care (47.1%) in the first trimester, in contrast to the overall rate of 83.3%.
- Were more likely to receive late or no prenatal care (16.1%) as compared to an overall rate of 3.8%.

- Were at a higher risk for pregnancy-associated hypertension (5.3%) and eclampsia (0.7%). Their rate of pregnancy-associated hypertension was over 40% higher than that experienced by all mothers (3.7%) and their rate of eclampsia was over twice the overall rate (0.3%).

Health risks were not limited to the mother, however. The report documents that infants of mothers aged 10–14:

- Were more likely to be born preterm—before 37 weeks gestation—(21.3%) than the overall rate of 10.3%, and their rate was 33% higher than the rate for infants of mothers aged 45 and older (16.0%), the next highest risk group.
- Were more likely to be born very preterm—before 32 weeks gestation—(5.3%), a rate more than triple the overall rate of 1.6% and more than twice the rate experienced by mothers aged 45 and older (2.6%).
- Were more likely to be born with low birthweight—less than 2,500 grams. Their rate of low birthweight for single births (12.6%) was the highest for any age group. It was more than twice the overall rate of 6.1% and 27% higher than the rate for mothers aged 45 and older (9.9%).
- Were more than three times as likely to die during their first year (15.4 per 1000) than the overall rate of 6.1 per 1,000 and at a rate that was two to three times higher than that for infants of mothers aged 20–44 years.

The report can be viewed or downloaded from the website at www.cdc.gov/nchs where more information on the source of the data is also available.

DETAILED INFANT MORTALITY ANALYSIS PUBLISHED

An analysis of data based on birth and death records filed and linked by state vital statistics offices and reported to NCHS through the National Vital Statistics System confirms that the 2002 infant mortality rate in the United States increased slightly to 7.0 from the record low in 2001 of 6.8 per 1,000 live births, following a long period of decline. Overall, 27,970 infants died in the first year of life in 2002, compared with 27,523 in 2001. This increase was first reported in the preliminary 2002 mortality data release.

"Infant Mortality Statistics from the 2002 Period Linked Birth/Infant Death Data Set"[3] presents detailed data on infant mortality rates by race and ethnicity, leading causes of death, infant characteristics such as birthweight, and maternal factors such as receipt of prenatal care. In order to conduct more detailed analyses of infant mortality patterns and provide more comprehensive data for research and prevention, the report uses information from the death certificate linked to the corresponding birth certificate for each infant younger than 1 year of age who died in 2002.

In 2002, the three leading causes of infant death were congenital malformations, low birthweight, and sudden infant death syndrome, which together accounted for 45% of all infant deaths. While nearly all groups showed improvement from 1995 to 2002, major disparities by race and ethnicity still exist. In 2002, rates ranged from 3.0 per 1,000 live births for Chinese mothers to 13.8 for black mothers. Between 1995 and 2002, the overall infant mortality rate declined by 7.9%, but rates were down 9.4% for infants of Asian or Pacific Islanders, and 11.1% for infants of Hispanic mothers.

The report documents other significant patterns in infant mortality:

- From 2001 to 2002, the infant mortality rate among mothers who smoked during pregnancy increased by 6%. In 2002, the rate among smokers was 68% higher than for mothers who did not smoke during pregnancy.
- Infant mortality rates were higher for infants whose mothers had no prenatal care, were teenagers, had less education, or were unmarried.
- Infant mortality rates were higher for infants of women who were born in the United States, compared with women born outside the United States.
- Infant mortality rates were higher for male infants, multiple births, and infants born preterm or at low birthweight.
- Infant mortality rates also varied greatly by state. Rates were generally higher for states in the South and lowest for states in the West and Northeast. Infant mortality rates for 2000–2002 among states ranged from 10.5 for Mississippi to 4.8 for Massachusetts.

Preliminary data for 2003 indicate that the increase—the first after a long downward trend—may not be continuing. A more detailed report intended to describe the 2002 rise in infant mortality is forthcoming.

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