

PRAM-O-GRAM

Fact Sheet Series: Number 1, 2007

Introducing the *PRAM-O-GRAM*

The *PRAM-O-GRAM* fact sheet is a new series published by the North Dakota State Data Center for the North Dakota Department of Health. It highlights findings from the Centers for Disease Control and Prevention's Pregnancy Risk Assessment Monitoring System (PRAMS) study conducted in North Dakota.

The overall goal of PRAMS is to improve the health of mothers and babies by examining mothers' experiences before, during and after pregnancy. The survey, completed between two and four months after delivery by 909 randomly selected North Dakota mothers who gave birth in 2002, covered issues ranging from the mother's feelings about becoming pregnant, to her prenatal care, to her behaviors and experiences.⁴

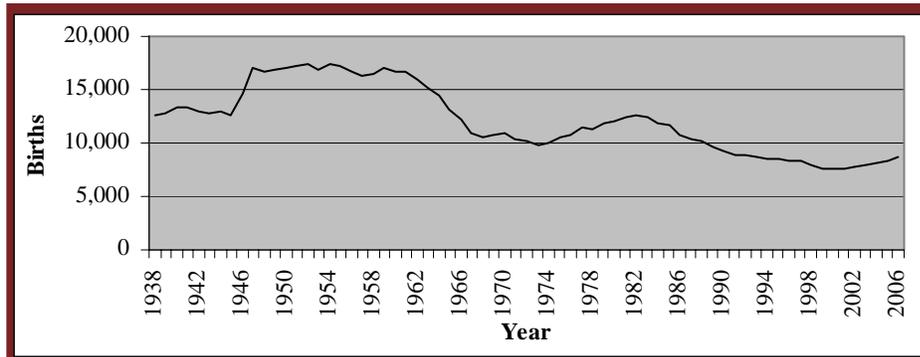
The *PRAM-O-GRAM* fact sheet series will include nine publications in 2007 and 2008. This issue introduces PRAMS and offers an overview of current birth trends in North Dakota. Future topics include pregnancy intendedness, maternal health services utilization, maternal lifestyle/health characteristics, prenatal stress and complications, infant health services/characteristics, injury prevention, and breastfeeding. While PRAMS is the primary data source, additional sources will be used as needed.

North Dakota Birth Trends

On average, a baby is born in North Dakota every hour (8,616 live births in 2006). Every three hours, a baby is born to an unwed mother (2,738 births); every 14 hours, a baby is born to a teenage mother (638 births); and every 15 hours, a baby is born with a low birthweight (576 births). Every week, a baby dies (51 deaths) and a fetus dies (50 fetal deaths).¹

North Dakota saw a dramatic increase in the number of births beginning in 1946 with the baby boom and peaking in 1954 with 17,432 births (28.13 births per 1,000 people) (see Figure 1). The "echo" of the baby boom (i.e., children of the baby boomers) explains the increase in births in the 1970s, peaking in 1982 with 12,655 births (19.39 births per 1,000). The number of births in North Dakota declined steadily from 1983 through the 1990s, reaching a low of 7,635 births in 1999 (11.95 births per 1,000). The impact of the "echo of the echo" (i.e., baby boomers' grandchildren) can be seen starting in 2002, when the number and rate of births started to increase, reaching 8,616 births in 2006 (13.42 births per 1,000).¹

Figure 1. Number of Resident Live Births in North Dakota: 1938-2006 ¹



In general, births occur among mothers ages 15 to 44, but the majority of births are to women in their 20s (61% of all births in 2006) followed by women in their 30s (30% in 2006).² Recent growth in the number of births can be attributed to two key demographic trends: increases in the number of women in their 20s (i.e., the "echo of the echo") and increases in the fertility rate among women in their 30s (i.e., more women in their 30s having babies).

The number of women in their 20s grew 10 percent between 2000 and 2006. The fertility rate among women in their 20s increased 9 percent (from a rate of 103.87 per 1,000 women ages 20 to 29 in 2000 to 113.34 in 2006).^{2,3} While the number of women in their 30s decreased 18 percent, the fertility rate for women in their 30s increased 29 percent (from 57.99 births per 1,000 women ages 30 to 39 in 2000 to 74.71 in 2006).^{2,3}

Although the number of births in North Dakota increased overall between 2005 and 2006 (from 8,381 in 2005 to 8,616 in 2006), 22 of 53 counties had fewer births. More than one-third of the births in 2006 occurred in Cass and Burleigh counties (35%); 37 counties in the state had fewer than 100 births each and accounted for 15 percent of all the births in 2006.¹

Profile of North Dakota Mothers

A profile of mothers who responded to the 2002 North Dakota PRAMS survey (“weighted” so the results can be generalized) offers insight into the 7,755 mothers who gave birth in 2002: ⁴

- 8 percent were teenagers and 58 percent were in their 20s; the average age was 27.
- One-third (34%) had a high school degree or less.
- One-fourth (24%) were not married.
- 90 percent were white and 8 percent were American Indian.
- 27 percent were Medicaid recipients.
- 36 percent were recipients of the Women, Infants, and Children program.
- 43 percent were first-time mothers.
- 60 percent were in school or employed outside the home at the time of the survey.



For more information about the PRAMS program, the *PRAM-O-GRAM* fact sheets, and the detailed report *North Dakota PRAMS – 2002 Survey Results*, visit www.ndsu.edu/sdc/ndprams.htm and www.ndhealth.gov.

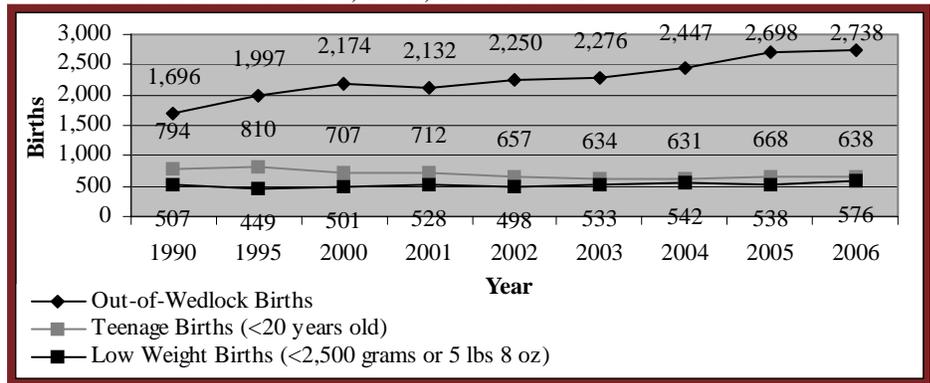
Sources: **1.** North Dakota Department of Health, Division of Vital Records. www.ndhealth.gov/vital/; **2.** National Vital Statistics System. www.cdc.gov/nchs/VitalStats.htm; **3.** U.S. Census Bureau, Population Division. www.census.gov/popest/estimates.php; **4.** North Dakota PRAMS. 2002 data. www.ndsu.edu/sdc/ndprams.htm; **5.** KIDS COUNT, The Right Start Online. www.kidscount.org/sld/rs_whatIs.jsp

North Dakota Birth Trends, continued

- 2,738 infants were born to unmarried mothers in 2006 (32% of all live births), as shown in Figure 2. In 1990, 1,696 infants were born to unmarried mothers (18% of all live births).¹
- 638 infants were born to teenage mothers in 2006 (7% of all live births). In 1990, 794 infants were born to teenage mothers (9% of all live births).¹
- 576 infants were born low birthweight (less than 2,500 grams or 5 pounds 8 ounces) in 2006 (7% of all live births). In 1990, 507 infants were born low birthweight (6% of all live births).¹

“The circumstances and conditions under which a baby is born have lifelong implications.” ⁵

Figure 2. Number of Out-of-Wedlock, Teenage, and Low-Weight Resident Live Births in North Dakota: 1990, 1995, 2000-2006 ¹



- 51 infants (fewer than 365 days old) died in 2006 (5.92 per 1,000 live births), as shown in Figure 3. Though infant deaths increased between 2004 and 2006, the number has decreased compared to 1990, when there were 75 infant deaths (8.11 per 1,000).¹
- There were 50 fetal deaths (generally, deaths of fetuses of 20 weeks or more gestation) in 2006 (5.80 per 1,000 live births). In 1990, there were 68 fetal deaths (7.35 per 1,000).¹
- There were 776 induced terminations among residents in 2006, down from 919 in 2005.¹
- There were 9,443 pregnancies in 2006 (14.70 per 1,000 people), up from 9,347 in 2005 (14.55 per 1,000). Pregnancies are calculated as live births + fetal deaths + induced terminations.¹

Figure 3. Number of Resident Infant and Fetal Deaths in North Dakota: 1990, 1995, 2000-2006 ¹

