

New Mexico Epidemiology

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Highlights of New Mexico Vital Statistics, 2006

Each year the Bureau of Vital Records and Health Statistics (BVRHS) publishes a report analyzing New Mexico birth and death data. The *2006 Selected Health Statistics* has been posted on the Department of Health website (<http://www.health.state.nm.us>) and the hard-copy will be available soon. This article gives a brief overview of some of the major health outcomes in the 2006 annual report and some national comparisons. The topic of teen birth is highlighted and trends over time are examined.

Methods

The statistics in this report are based on the 2006 birth and death certificates of New Mexico residents. National birth and death data are from the Centers for Disease Control's National Center for Health Statistics (NCHS). Most of New Mexico's birth records are received electronically. Paper certificates are received from other states for births to mothers who live in New Mexico but give birth in another state and for births not occurring in a hospital, such as home births. Physicians and the funeral industry work jointly to complete death certificates. Unexpected or unattended deaths are referred to New Mexico's Office of the Medical Investigator (OMI), which completes the cause of death on the death certificate. Approximately a fourth of New Mexico death certificates are completed by the OMI. Cause of death is coded by BVRHS to ICD-10.¹ Death certificates are received from other states for New Mexico residents who die outside of New Mexico.

Results

Demographics. The estimated population of New Mexico was 2,010,787 in 2006. New Mexico was the 6th least populated state in the United States with 16.6 persons per square mile.² The most densely populated state in United States was New Jersey with 1,176.3 persons per square mile and the least densely populated state was Alaska with 1.2 persons per square mile.

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The largest proportion of New Mexico's population was between the ages of 20 and 44, which was the same as the United States. In New Mexico in 2006, racial/ethnic group proportions were White, 43.2%; Hispanic, 41.4%; American Indian or Alaska Native, 11.1%; Black or African American, 2.7%; Asian or Pacific Islander, 1.7%. For the United States these were White, 67.2%; Hispanic, 13.8%; American Indian or Alaska Native, 1.0%; Black or African American, 13.5%; Asian or Pacific Islander, 4.6%.

New Mexico's per capita income was \$29,929, ranking 43rd in the United States. For the years 2000 to 2005, New Mexico has ranked between 45th to 47th in annual per capita personal income. The United States annual per capita income was \$36,276 in 2006.³ The state with highest per capita income was Connecticut and the state with the lowest per capita income was Mississippi.

New Mexico ranked third highest among states for children under 18 living at or below poverty.⁴ Mississippi had the highest percent of children under 18 living at or below poverty and Connecticut had the lowest.

Natality. There were 29,918 births to New Mexico residents in 2006. The birth rate was 14.6 births per 1,000 population in 2006 and 15.0 in 2005. The U.S. birth rate was 14.0 in 2005. Utah had the highest birth rate, 20.9, and Vermont had the lowest, 10.1, in the United States in 2005.⁵

More than half of New Mexico births were to single mothers in 2006. The proportion of births to single mothers increased 92.4% in the 20 years between 1985 and 2005. Comparatively, within that same time period

in the United States, the increase in births to single mothers was 67.7%. Utah had the lowest percent of births to single mothers (17.7%) and New Mexico had the highest percent of births to single mothers (50.8%) in 2005.

Mortality. There were 15,231 deaths to New Mexico residents in 2006. New Mexico's 2006 age-adjusted death rate was 761.2 per 100,000 standard population, compared to 770.3 in 2005. The United States age-adjusted death rate in 2005 was 798.8 per 100,000 standard population.⁶

The five leading causes of death in New Mexico for 2005 and 2006 were: 1) Heart disease, 2) Malignant neoplasms (cancer), 3) Accidents (unintentional injury), 4) Chronic lower respiratory diseases, and 5) Cerebrovascular diseases (stroke). The five leading causes of death in the United States in 2005 were the same although the order was different with unintentional injury in 5th place and stroke in 3rd place.

New Mexico's 2006 infant mortality rate was 5.7 infant deaths per 1,000 live births. The 2005 infant mortality rate for the United States was 6.9 infant deaths per 1,000 live births and the 2005 infant mortality rate for New Mexico was 6.1. In 1930 New Mexico's infant mortality rate was 55.6% higher than the national rate. By 2005 New Mexico's rate was 11.6% lower. Mississippi had the highest infant mortality rate at 11.4, and Utah had the lowest at 4.5.⁷

Teen Birth Rates. In 2006, the national teen (15-19 years) birth rate rose for the first time since 1991.⁸ New Mexico was tied with Texas for the highest teen birth rate in the country in 2005 (the most recent year the state comparison is available). In 2004, New Mexico had the third highest teen birth rate in the United States at 60.8 per 1,000 women aged 15-19 years. Since 1990 New Mexico has had between the first and fifth highest teen birth rates in the United States.

The trend in middle teen (15-17 years) birth rates for New Mexico and the United States follow the same pattern from 1980 to 2005, increasing from 1980 until the early 1990's and then decreasing until 2004. Rates for births to older teens (18-19 years) followed a similar curve. For mothers ages 10 to 14 years the trend for New Mexico was more erratic rising from 1.2 in 1980 to a high of 1.9 in 1994, and then descending to a low of 0.9 in 2006.

The United States has substantially higher teen (15-19 years) birth rates than other western industrialized countries. Studies comparing the U.S. to other industrialized countries show the U.S. with teen birth rates at least 66 % higher than other comparable countries.⁹

A review of the literature links teen births to poverty and poor birth outcomes. For instance, teen mothers are less likely to graduate from high school. Only 40% of mothers who have children before age 18 graduate from high school or receive a GED compared to 75% of 20-24 year old mothers.¹⁰ Pregnancy is the leading cause for girls to drop out of school; it is estimated that 30-40% of female high school dropouts are mothers. Teen mothers are also less likely to complete college. Education is a strong predictor of health with more years of education predicting a healthier and longer life.¹¹

Marital status is also linked to low income and child poverty. Single households are more likely to receive some form of public assistance¹⁰. Nationally only a small percent of the fathers of these children pay any type of child support. Younger fathers who pay child support pay considerably less than their older and married counterparts.¹²

Timely initiation of prenatal care is important for infant health and late or no prenatal care is a risk factor for poor infant outcomes.¹³ According to NCHS, teen mothers had the lowest levels of first trimester prenatal care compared to all other age groups. For 2000 to 2002, 83.3% of all mothers in the U.S. received prenatal care in the first trimester whereas only 47.1% of 10-14 year-old and 68.5% of 15-19 year old mothers initiated prenatal care in the first trimester. In New Mexico for the period 2005 to 2006, 38.9% of younger teens (10-14), 58.1% of middle teens (15-17) and 61.9% of older teens (18-19) received prenatal care in the first trimester. However, comparing two 4-year periods, 1980-1984 and 2000-2004, initiation of prenatal care shows improvement with the proportion of teens ages 15-17 years who received first trimester prenatal care increasing 121.7%.

Infants born prematurely (prior to 37 weeks of gestation) are at greater risk for newborn health complications and death.¹⁴ Infants born to the youngest teen mothers are at greater risk for preterm birth.¹³ For

2005-2006, the percent of preterm births in New Mexico for teens aged 10-14 years was 16.8%, 38.8% higher than teens aged 18-19 years and 52.7% higher than mothers aged 20-24 years. In the U. S. for 2000-2002, the rate of preterm births for teens aged 10-14 years was 21.3%; for teens aged 15-17 years 14.7%; and for teen aged 18-19 years 12.3%.

Conclusion

New Mexico is one of the least populated states in the nation and has a unique racial/ethnic composition. It is a poor state with a per capita income among the lowest in the United States and one of the highest proportions of children living at or below poverty. The overall birth rate is close to the national rate while the teen (15-19) birth rate is among the highest. New Mexico also has one of the highest proportions of single mothers.

New Mexico's infant mortality rate has been lower than the national rate since the 1980's. The age-adjusted death rate continues to be lower than the national rate. The leading causes of death in New Mexico are the same as those of the United States, although unintentional injury is ranked higher and stroke lower in New Mexico.

With such a high teen birth rate, it is important for public health workers to identify the many factors that determine the consequences of teen childbirth. For instance, younger teens aged 10-14 years are the least likely to receive timely prenatal care, are more likely to give birth to preterm infants, are at greater risk for sexually transmitted disease and are more likely to have a history of childhood physical or sexual abuse.¹⁵ Age, however, is not the only factor affecting poor outcomes for teen births. Poverty and health care access greatly affect child and parent outcomes.

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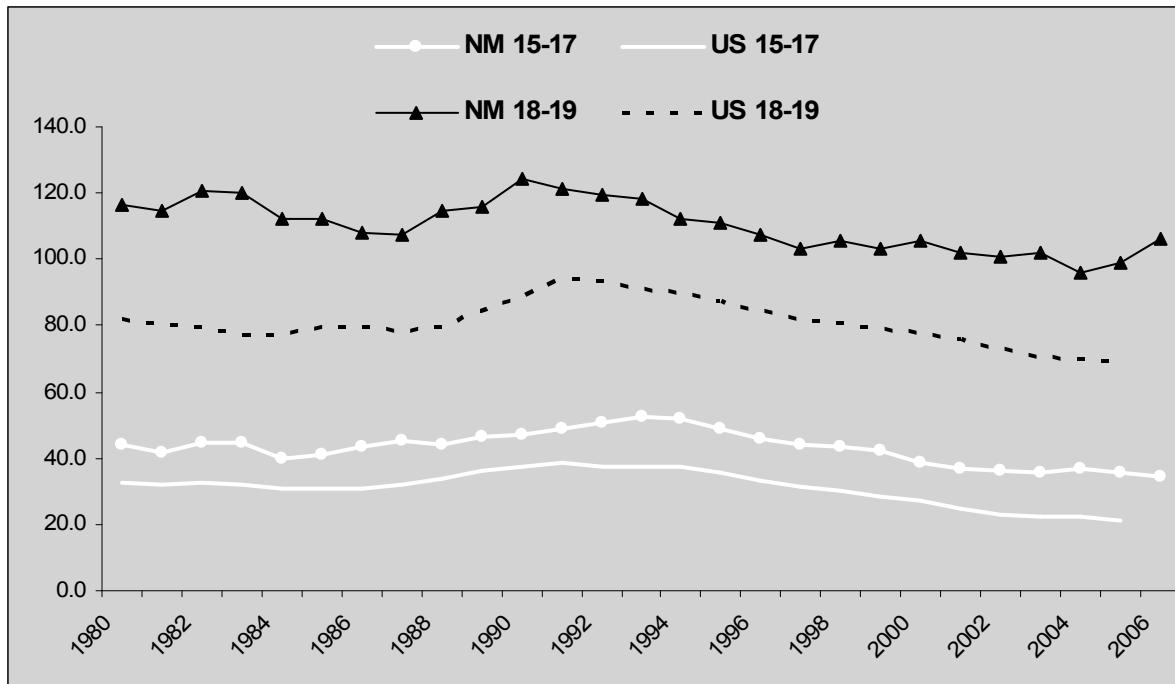
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Figure. Teen Birth Rates Ages 15-17 and 18-19, New Mexico, 1980—2006, United States, 1980—2005



Population Source: New Mexico, BBER; United States, U.S. Census

Data Source: New Mexico, NMBVRHS; NCHS