# New Mexico Epidemiology

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# Highlights of New Mexico Vital Statistics, 2014

New Mexico's Bureau of Vital Records and Health Statistics has been collecting birth and death statistics for almost 100 years. Since its establishment in the formation of the New Mexico Department of Health as a planning and monitoring tool, the vital records system has remained the state's premier database and cornerstone for state public health needs assessment and data driven health policy and program development. This report presents basic birth and death facts for 2014 with comparisons to national data.

The birth rates in New Mexico and the U.S. were the lowest rates ever recorded; 12.6 births per 1,000 population in New Mexico in 2014 and 12.4 in the U.S. for 2013. Birthrates in the U.S. and New Mexico peaked between the 1950's and 1960's. The highest rate in the U.S. was in 1950 at 24.1 and in NM in 1960 at 32.3 per 1,000 population. There has been a 61% decrease in the birthrate in NM from 1960 to 2014. Comparatively there has been a 40% decrease in the U.S. birthrate between 1950 and 2013

Teen birth rates also continue to decrease in both New Mexico and the United States. There was a 57% decrease in birthrates among teens ages 15-17 years between 2000 and 2014 in New Mexico. Fertility rates have decreased overall in New Mexico almost 17% since 1990. The fertility rates for 20-24 year olds, traditionally the age group with the highest rates, fell almost 30% since 1990. While fertility rates among the youngest women, 15-29 years, fell between 1990 and 2014, rates increased for women ages 30-44 years.

The proportion of low birthweight births has increased by almost 20% between 1990 and 2014 with 44.5 % of all preterm births born weighing less than 2,500 grams. Infant mortality rates remained the same in New Mexico at 5.4 per 1,000 live births in both 2013 and 2014, lower than the U.S. rate of 6.1 in 2013.

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Death rates have traditionally been lower in NM than in the U.S. Beginning in 2012 and continuing in 2014 death rates in NM surpassed those of the U.S. In 2014 the NM all-cause mortality rate was 784.5 per 100,000 compared to the U.S. rate of 731.9 for 2013.

In 2014 in New Mexico, 48.0% of all deaths were attributable to the three leading causes; heart disease, cancer and unintentional injuries. Heart disease had the highest rate at 151.7 per 100,000 population in 2014 followed by cancer (148.8) and unintentional injury death at 71.3, with an almost 23% increase since 2013. The three top causes of unintentional injury death showed marked rate increases from 2013 to 2014. The fall death rate increased 33.1%, the motor vehicle traffic death rate increased 24.1% and the poisoning death rate increased 16.7%.

#### **Methods**

The New Mexico statistics in this report are based on information from birth and death certificates collected since 1918 by the Bureau of Vital Records and Health Statistics. National statistics are from the Centers for Disease Control's National Center for Health Statistics (NCHS). Population estimates used as the denominators in calculating birth and death rates in this report were produced by the University of New Mexico's Center for Geospatial and Population Studies. Death rates for all ages were age-adjusted to the 2000 U.S. standard population.

#### **Results** — Births

New Mexico birth rates decreased in all racial/ethnic categories between 2013 and 2014 except among Hispanic women. The highest decrease was among White

women with a 4.5% decrease in birth rates. Although there was a drop in birth rates among Hispanics, there was a 2.4% increase in the number of births.

Fertility rates. In the past five years, 2000-2014, fertility rates (number of births divided by numbers of females ages 15-44 years), have declined among all racial/ethnic groups in NM. Although fertility rates for all racial/ethnic groups fell among women ages 15-29 years they increased for ages 30-44 years in all groups except White women.

Geographic Variation. The largest number of births, 7,967, were to mothers living in Bernalillo County, while the lowest was in Harding County, with only 6 births. The highest birth rate was in Curry County at 18.1 per 1,000, the second highest was in Roosevelt County at 16.7, and the lowest was in De Baca County at 6.2.

Racial and Ethnic Composition. Hispanics were the only NM group showing an increase in birth rate between 2013 and 2014 – from 14.6 to 14.9. Black or African Americans and Hispanics were the only groups with an increase in the numbers of births from 2013 to 2014. American Indians continue to have the highest birth rates but there has been no increase in rates since 2006.

Age-Specific Birth Rates. There has been a decline in birth rates for the three youngest age groups: 15-17, 18 -19, and 20-24 years in 2014. The decrease in rates for 25-29 year olds was not steady from 1990 to 2014 nor as dramatic as the other age groups, but there was a net substantial decrease of 30.9% from 1990-2014. In the past 20 years, birth rates in New Mexico for those 18-19 years have gone from a high of 110.1 in 2007 to a low of 61.2 in 2014. This is a 44.4 % decrease in the birthrate for this age group. There has been a steady decrease in birthrates for the past 20 years for teens aged 15-17 years in New Mexico (66.3% between 1995 and 2014). In the U.S. teen birthrates follow a similar pattern with a decrease of 54.3% in birth rates for 15-17 year olds and a decrease of 39.7% for 18-19 year olds between 2000 and 2013.

*Unmarried Mothers*. The proportion of single mothers declined in the U.S. and in the state for the second consecutive year. Since 1990 the proportion of births to single women increased steadily from 35.4% to a high

of 53.5% in 2009. From 2009 until 2014 the percent of births to unmarried women declined by 7.1%. In the U.S. the percent of all births to unmarried women declined from 41.0 % in 2009 to 40.6 % in 2013. In New Mexico in 2014, the percent of births to unmarried women ranged from 84.0% among 15-19 year olds to 12.9% among women aged 45-49 years. The percentage of births to single mothers ranged from a low of 12.1% in Los Alamos County to a high of 71.7% in McKinley County.

Birthweight. In 2014 the percent of low birthweight births fell from 8.9% in 2013 to 8.8%. However, the proportion of low birthweight births increased since 1990 from 7.4% to 8.8% in 2014. The proportion of infants weighing less than 2,500 grams has increased at both the state and national levels since the 1980s, with New Mexico at 8.8% and the U.S. at 8.0% in 2013. The percentage of very low birthweight (less than 1,500 grams) births has increased only slightly from 1.0 in 1990 to 1.3% in 2014 in NM, which was slightly lower than that for the U.S. at 1.4% in 2013.

### **Results** — **Deaths**

There were 17,564 deaths to New Mexico residents in 2014. New Mexico's death rate was 784.5 deaths per 100,000 population, compared to the national rate of 731.9 in 2013. In 2012 for the first time since 1999, death rates in New Mexico were higher than the national rates and remained higher in 2014.

Cancer and heart disease have continued to be the leading causes of death and make up 39.1% of deaths to New Mexicans in 2014 and 46.5% of deaths to U.S. residents in 2013. In 2014 cancer became the leading cause of death in NM with heart disease a close second. Unintentional injury deaths were the third leading cause of death in NM and the fourth in the U.S. Chronic liver disease and cirrhosis (CLD) and suicide were among the top 8 leading causes of death in New Mexico that were not included in the national list.

For the top two leading causes of death in the U.S. and NM, cancer and heart disease, the rates and the proportions of all deaths were higher in the U.S. than in NM. For instance, heart disease comprised 24% of all deaths in the US with a rate of 193.3 (2013) while in New Mexico 19.4% of all deaths were due to heart disease with a rate of 151.7.

The most notable rate increases between 2010 and

2014 were for CLD (24.8 %), Alzheimer's disease (19.0 %), unintentional injury (16.8%), and suicide (5.7%) (Figure on back page).

Chronic liver disease and cirrhosis (CLD) ranked 7<sup>th</sup> in New Mexico with a rate of 22.2 in 2014, compared to the 2013 U.S. rate of 11.5 which ranked 12<sup>th</sup>. There was a 26% increase in rates in NM between 1999 and 2014 with a notable increase between 2013 and 2014 of 15%. The AIAN population had disproportionally higher mortality rates of CLD (53.3) with rates 2.4 times higher than Hispanics, who had the second highest rate (23.8). Although deaths due to CLD occur among ages as young as 20-24, most deaths (85.8 %) were among ages 35-74 years.

There was a 29.7% increase in the rate of Alzheimer's disease death in New Mexico between 2013 and 2014 from 15.8 to 20.5. Although U.S. rates have exceeded New Mexico rates since 2003, the 2014 New Mexico rate was much more similar to the U.S. rate. Alzheimer's disease is one of the few diseases with a higher rate among females. Ninety-two percent of Alzheimer's deaths are to adults over 74 years of age.

The proportion of unintentional injury deaths in New Mexico is almost twice that of the U.S. with 5.0% of deaths in the US attributable to unintentional injuries compared to 8.6% in New Mexico. It is the third leading cause of death in New Mexico with a rate of 71.3 per 100,000 in 2014 compared to 39.4 in the US in 2013. The unintentional injury death rate in 2013 in New Mexico (58.2) was one and a half times higher than the U.S. rate (39.4). The unintentional injury death rate increased 22.5% between 2013 and 2014 in New Mexico. The three leading cause-specific unintentional injury death rates in New Mexico were poisoning (29.4), motor vehicle (17.5) and fall deaths (16.9). Poisoning death rates surpassed MVC death rates in 2006 and have continued to remain higher than both MVC and fall deaths rates since then. Although the greatest number of unintentional injury deaths are among the white population, the highest unintentional injury death rates for both NM and the U.S. were among the American Indian/Alaska Native (AIAN) population with over double the mortality rate (AIAN, 132.3; White, 60.0).

Suicide rates in NM were between 1.5 and 2 times higher than US rates since 1999. In 2014 NM suicide

rates were the highest since 1999 at 21.1. The male suicide rate (34.0) in NM was almost 4 times that of female rates (9.1). For years 2000-2014 the highest suicide rates were among Whites (25.3) and AIAN (21.4) and the largest proportion of suicide deaths occurred among ages 15-64 years (81.8%). In 2014, 54% of suicides were by firearm.

The highest death rates in New Mexico in 2014 were among AIAN males. The second highest rates were among AIAN females. With the exception of Asian or Pacific Islanders, male death rates were substantially higher than female death rates. The highest death rate increases in NM between 2013 and 2014 were in age groups 15-24 years (19.8%) and 25-34 years (16.1%).

Infant Mortality. New Mexico's infant mortality rate was 5.4 infant deaths per 1,000 live births in 2014 which was the same as in 2013 and below the national preliminary 2012 rate of 6.0. The majority (67.4%) of infant deaths occurred in the neonatal period (less than 28 days old) at a rate of 3.7 deaths per 1,000 live births.

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# Mortality Rates for Selected Causes of Death, New Mexico, 1999-2014

