2018
The State of Health in New Mexico
New Mexico Department of Health

Lynn Gallagher, Cabinet Secretary
April 2018

Acknowledgments

New Mexico Department of Health
Lynn Gallagher, Cabinet Secretary
Dawn Hunter, Deputy Secretary
Gabriella Sanchez-Sandoval, Deputy Secretary

Epidemiology and Response Division
Michael G. Landen, MD, MPH, Division Director and State Epidemiologist
Lois M. Haggard, PhD, Community Health Assessment Program

Chapter Authors for the State of Health in New Mexico 2018 Report
Joaquin Baca, Angie Bartok, Susan Baum, Joan Baumbach, Susan Chacon, Eirian Coronado, Kim Faulkner, Rose Galbraith, Alex Gallegos, Andrew Gans, Ken Geter, Dan Green, Lois Haggard, Glenda Hubbard, Keaton Hughes, Garry Kelley, Carolyn Kirlin, Heidi Krapfl, Sandy Lam, Ihsan Mahdi, John McPhee, Carol Moss, Tierney Murphy, James Padilla, Lynn Ritchie, Abubakar Ropri, Toby Rosenblatt, Marla Sievers, Chad Smelser, Jaiju Thomas, Barbara Toth, Janine Waters, Christopher Whiteside, Diana Wilkerson

Graphic Design
André Walker, Art Director

NM-IBIS Indicator Report Authors
Content and data from NM-IBIS indicator reports were used extensively in developing the State of Health in New Mexico, 2018 report. For a list of current NM-IBIS indicator report authors, please visit the NM-IBIS Contributors page (https://ibis.health.state.nm.us/about/Contributors.html).

NMDOH Data Stewards
Most of the data used in the State of Health in New Mexico, 2018 report are maintained by data stewards across the NMDOH. For a list of current NM-IBIS data stewards, please visit the NM-IBIS Data Stewards page (https://ibis.health.state.nm.us/query/DataStewards.html).

Community Members
The State of Health in New Mexico, 2018 report content and format were reviewed by members of New Mexico's community health councils and other public and private sector community stakeholders. For information on quarterly conference calls of this broad-based community stakeholder group, visit the NM-IBIS Community Health Assessment Forum page (https://ibis.health.state.nm.us/resource/CHAF.html).

Table of Contents

Executive Summary

New Mexico's health status continues to evolve as demographics change and specific health issues become more or less prominent. For a state with a relatively small population, New Mexico's health status remains quite complex. This report aims to systematically review New Mexico's health status from various vantage points and allow certain key findings to emerge.

One key vantage point is the comparison to the United States. Unfortunately, the U.S. life expectancy has decreased over the last two years, mainly due to drug overdose, suicide and Alzheimer's disease. New Mexico's life expectancy decreased even more than that of the U.S. in 2016 - a drop of 0.3 years - due to drug overdose, motor vehicle injuries, heart disease and infant mortality.

For the three leading causes of death, New Mexico has lower death rates than those of the U.S. for heart disease and cancer, but much higher rates for unintentional injuries which includes drug overdose, motor vehicle injuries and older adult falls. New Mexico also has substantially higher death rates than those of the U.S. for suicide and for cirrhosis and chronic liver disease, which is primarily due to alcohol use.

Disability-adjusted life years, or DALYs (chapter 16), provide New Mexico with a broader health status measure by adding years lived with a disability to the picture. Among the top 10 causes of years of *healthy* life lost are three for which New Mexico has significantly higher rates than those found for the U.S. These are drug use disorders, motor vehicle injuries and self-harm (suicide). This finding confirms the developing picture that injury, substance use and mental illness are what sets New Mexico's health status apart from that of the U.S.

Disparities in health status within New Mexico are also striking and emerge from this report. Poverty is relatively common in New Mexico and those who live in poverty generally have worse health status. American Indians and Alaska Natives in New Mexico are the racial group with the highest overall death rates and the shortest life expectancy, which are driven by alcohol-related disease and injury. Rural areas in New Mexico are on the wrong end of many health disparities in New Mexico and, overall, persons living there have a shorter life expectancy due in part to higher smoking rates and less access to care.

New Mexico, like the U.S., is undergoing a crisis in that life expectancy is worsening due to substance use and injury. Public health and society as a whole have to become much more effective at dealing with these problems if these trends are to be reversed.

2018

The State of Health in New Mexico

New Mexico Department of Health

MATERNAL AND INFANT HEALTH

Healthy Babies Start with Healthy Mothers

The New Mexico Pregnancy Risk Assessment Monitoring Survey (PRAMS) provides data on maternal experiences before, during and shortly after pregnancy.

Maternal Health

Multivitamins

Folic acid supplementation before pregnancy and in the first 12 weeks of pregnancy reduces the risk of neural tube defects (spina bifida and anencephaly). In 2015, 32% of New Mexico mothers reported taking a multivitamin every day in the month prior to pregnancy which is close to the Healthy People 2020 goal of 33%. Also, 70% of New Mexico women were aware that folic acid can help prevent birth defects.

Pregnancy Intention

Unintended pregnancy is associated with a higher risk of health and economic problems for mothers and their children. Over half (55%) of New Mexico mothers in 2015 reported that they wanted to be pregnant, 26% of mothers had an unintended pregnancy, 43% of pregnancies were unintended. Another 27% reported they did not know what they wanted. The birth rate for adolescents of all racial/ethnic groups continues to decrease (Figure 1). The racial/ethnic disparity in teen childbearing in New Mexico remains wide. Hispanic and American Indian teens had birth rates at least twice as high as the rate among white teens during 2014-2016.

Smoking

Maternal cigarette smoking during pregnancy causes a shortage of oxygen during fetal development and places the infant at risk of prematurity, low birth weight (LBW), congenital heart defects, and Sudden Unexpected Infant Death (SUID). In New Mexico, 7% of mothers reported smoking in the last trimester of pregnancy in 2015. Prevalence of smoking during pregnancy was higher as maternal poverty level increased (Figure 2). A greater percentage of White mothers smoked (8%) than Hispanic mothers (6%) and American Indian mothers (6%). A greater percentage of mothers with less than a high school education smoked (13%) than mothers with a high school education (6%) or with some college or college degrees (5%).

Prenatal Care

Regular prenatal care reduces the risk of pregnancy complications. In 2015, 16% of mothers received inadequate prenatal care. The proportion of prenatal care that was inadequate was highest among American Indian mothers (27%), teenage mothers (21%), mothers with household incomes <100% of Federal Poverty Level (FPL) (24%), and Medicaid recipients (18%). Screening for gestational diabetes, which increases the risk of pregnancy complications, is a component of prenatal care. In 2015, 10% of mothers had gestational diabetes. American Indian mothers had the highest percent of gestational diabetes (18%).

Depression

Depression before pregnancy increases the risk of postpartum depression. In 2015, 11% of women reported having depression before pregnancy and 11% reported having postpartum depression. Among women who were depressed before pregnancy, 32% experienced postpartum depression compared to 9% of women who were not depressed before pregnancy.

Nutrition

Food Insecurity

Poor nutrition during pregnancy increases the risk of LBW babies, pre-term births, infant mortality, and mothers experiencing anemia. In 2015, 9% of mothers reported eating less than they should due to financial hardship. Fourteen percent of mothers with household incomes <100% of FPL reported eating less than they should have, as did 12% of American Indian mothers, 11% of mothers without a high school diploma and 12% of mothers with no more than a high school education, and 16% of mothers residing in New Mexico's most rural counties.

Breastfeeding

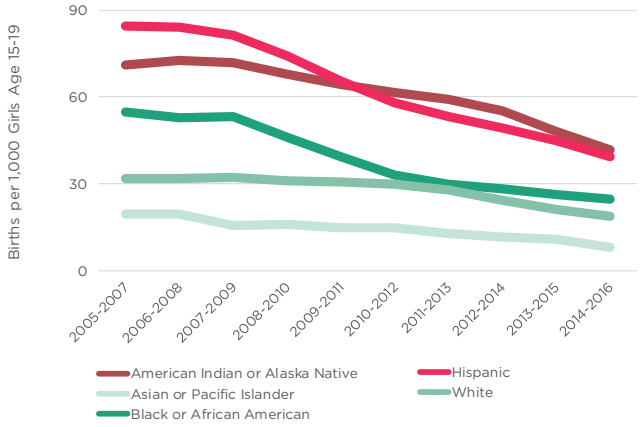
Breast milk is uniquely suited to the infant's nutritional needs and has unmatched immunological and anti-inflammatory properties that protect against many illnesses and diseases for both mothers and infants. Breastfeeding is essentially without cost. Exclusive breastfeeding for the first six months of the baby's life reduces the risk of developing gastroenteritis, asthma, allergies, respiratory and ear infections as well as obesity later in life. In 2015, 91% of New Mexico mothers initiated breastfeeding. The percentage of New Mexico mothers who initiated breastfeeding and continued to breastfeed for at least two months decreased as the level of family income decreased (Figure 2). In 2015, 86% of mothers with household incomes <100% FPL initiated breastfeeding compared to 93% of mothers with incomes between 101% and 185% of FPL and 96% of mothers with incomes > 185% FPL. In 2015, 79% of mothers were breastfeeding their infant for two or more months.

Infant Health

Infant Mortality

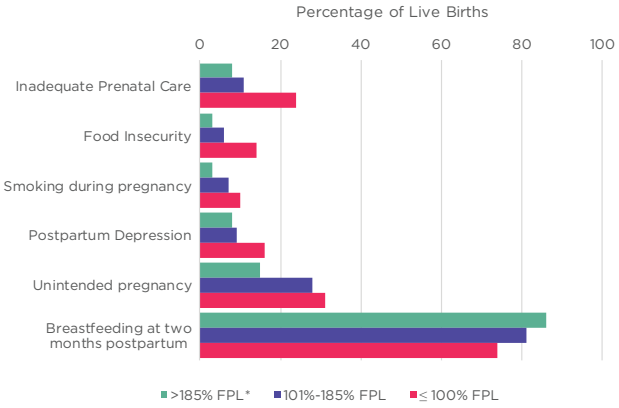
During 2007-2016, the mortality rate trend in New Mexico was flat while there was a slight downward trend in the U.S. infant mortality rate (Figure 3). The rate in New Mexico ranged from 5.0 to 6.3 deaths per 1,000 live births during the ten-year period. The leading causes of infant death in New Mexico were perinatal conditions, including LBW, premature births, complications during pregnancy, labor and delivery; birth defects, medical conditions, Sudden

Figure 1. Adolescent Birth Rate per 1,000 Females Aged 15 to 19 Years by 3-year Groups and Mother's Race/Ethnicity, New Mexico, 2005-2016



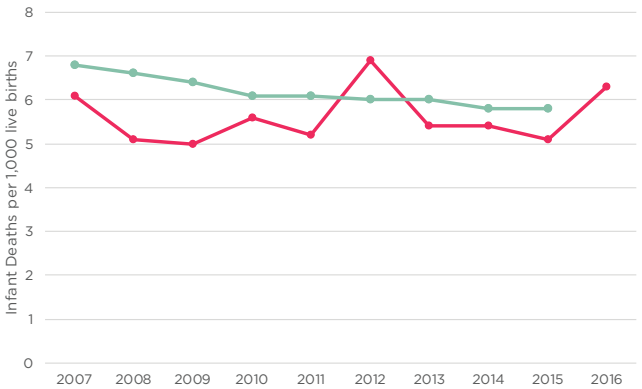
Sources: NMDOH BVRHS, UNM GPS Program

Figure 2. Maternal Risk and Protective Factors, New Mexico, 2015



*Household income as a percentage of the Federal Poverty Level.
Source: NMDOH PRAMS

Figure 3. Infant Mortality Rate, New Mexico and United States, 2007-2016



Source: NMDOH BVRHS

Unexpected Infant Death (SUID) which includes accidental suffocation and strangulation in bed, unknown or ill-defined causes and SIDS; and injuries.

Sudden Unexpected Infant Death (SUID)

Twenty-eight infants died from SUID in 2015[1]. According to the 2015 New Mexico PRAMS, 30% of infants did not sleep in a crib, cradle or bassinet. Most of those infants slept on an adult bed with another person (28% infants). Other sleep practices that place the infant at increased risk of SUID include sleeping with thick blankets (13%), sleeping with bumper pads (19%) and placing the baby on the side or stomach instead of on the back or using combinations of sleeping positions (22%).

Low Birth Weight and Preterm Births

During 2014-2016, 8.8% of infants in New Mexico were born with low birth weight (<2500 grams) and 9.5% of the births were preterm (<37 weeks of pregnancy). African American mothers had the highest percentage of LBW infants (14.4%) and the highest percentage of preterm births (12.8%).

Contributing Factors

Risk and Resiliency Factors

In New Mexico, 44% of mothers who gave birth in 2015 had a household income <100% of the Federal Poverty Level (FPL) and 23% had an income between 101% and 185% of FPL. Sixty-five percent of women used Medicaid or other government insurance to pay for prenatal care. In 2015, 20% of the mothers had less than a high school education and 22% had no more than a high school education. Teens aged 15 to 19 years accounted for 8.6% of the births to New Mexico women in 2015.

Health Disparities

Poverty is a major factor affecting the health of the mother and infant. Poverty is associated with unintended pregnancy, inadequate prenatal care, teen pregnancy, and being a single mother. Mothers living in poverty are more likely to smoke, to have food insecurity, less likely to breastfeed and have lower levels of education than women with higher incomes. And infant mortality is higher in rural areas of New mexico

Assets and Resources

Home visiting programs during and after pregnancy help mothers prepare for their new baby and promote child development among young children. The programs include New Mexico Children Youth and Families Department Home Visiting, St. Joseph's Children Home Visiting and First Born® Program.

WIC - Supplemental food program for Women, Infants and Children administered by USDA and NMDOH Public Health Division (PHD).
The Early Head Start programs provide child development services to eligible low-income families with children 0 to 3 years of age and pregnant women.

Families First - A program of the NMDOH, PHD and funded by Medicaid to provide case management to Medicaid-eligible pregnant women and children 0-3 years old. The purpose of case management is to provide a voluntary home visit, to establish a medical home, and to assist clients in gaining access to needed medical, social and educational services.

Summary

The top challenges facing mothers and infants in New Mexico include an infant mortality rate that is not declining and poverty. Over half of infants are born into low income families, where low income mothers are more likely to smoke during pregnancy, have food insecurity, have inadequate prenatal care and are less likely to initiate breastfeeding.

What is Being Done?

- The Baby-Friendly Hospital Initiative is a global program to change hospital policies and maternity services to support breastfeeding. Twelve birth hospitals in New Mexico are currently working to meet the criteria necessary for the Baby-Friendly designation.
- A survey, Levels of Care Assessment Tool (or LoCATe), of New Mexico birth hospitals was conducted recently assessing each hospitals level of neonatal and maternal levels of care. Currently, results are being shared with respondents and follow-up site visiting will be conducted. The data will be used to inform strategic work to address the need for adequate regionally-based risk-appropriate care to high risk mothers and newborn babies.
- The High Risk Prenatal Fund matches federal and state funding that is dispersed to clinics and hospitals in New Mexico to provide prenatal care to uninsured and insured women. Thirteen contracted sites receive funding for prenatal care related services.
- The full range of family planning services, including the most effective contraception (IUDs & implants) are available at 37 of the 44 public health offices that offer family planning clinical services. Title X clinical services are available at 14 school based health centers.
- Increased awareness from ads on social media with information on birth control and clinic locations; and BrdsNBz, a text-messaging system that offers teens free, confidential answers to sexual health questions in English or Spanish.

What Needs to be Done?

- Improve access to prenatal and birthing services in rural and less urban areas of the state.
- Provide telemedicine services to increase access to birth control for high risk populations in areas with clinician shortages.

References:
1. New Mexico Child Fatality Review, Office of Injury Prevention, New Mexico Department of Health.

HEALTHY CHILDREN

Child Health Depends on Access to Preventive Care and Early Detection of Risk Factors

The Challenge of Poverty

Poverty in New Mexico is a significant factor that presents challenges to health and wellness programs and affects the overall health and well-being of New Mexico families. Nearly one-third (30.1%) of New Mexico children grow up in poor households, that is, households whose annual income was below the federal poverty level (Figure 1). About two in five New Mexico children (38.4%) live in households that receive Supplemental Security Income (SSI), cash public assistance income, or Food Stamp/SNAP benefits. Despite, or perhaps because of the challenges, state, county and community programs continue to work aggressively to improve the life course trajectory for children in New Mexico.

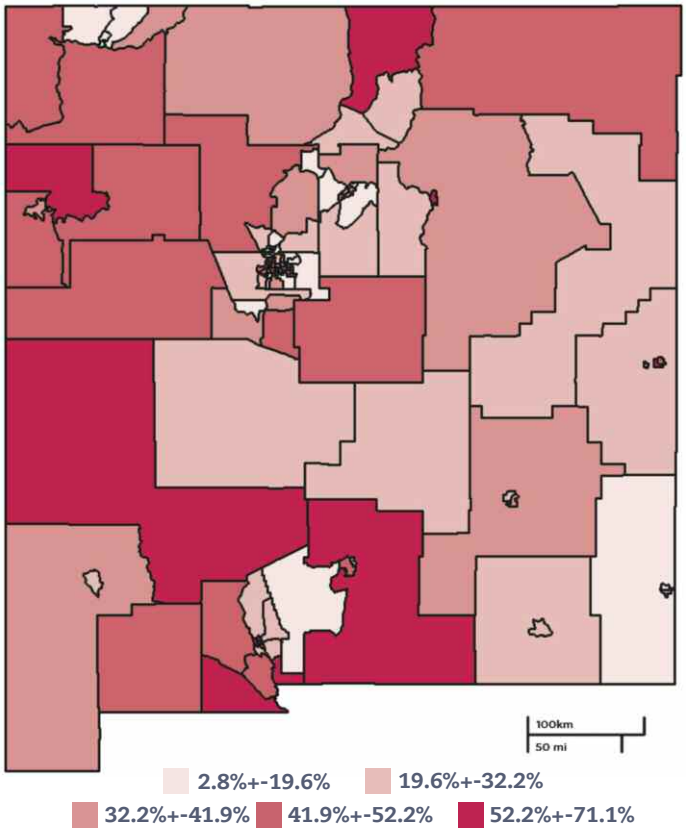
Children with Special Health Care Needs

Children with special health care needs are those who, "have or are at increased risk for chronic physical, developmental, behavioral or emotional conditions and who also require health and related services of a type or amount beyond that required by children generally."[1] Nine out of ten New Mexico parents (89.9%) rated their child's overall health excellent or very good in 2016 according to the National Survey of Children's Health,[2] just slightly higher than the national percentage of (89.7%) (Figure 2). Close to ninety percent (86.2%) of parents with public insurance for their child rated their child's health as excellent or very good compared to 95.1% of parents of children who have private health insurance. Children with special health care needs account for one in five New Mexico children. 75.5% of parents of children with special health care needs rated their child's health as excellent or very good compared to 93.4% who did not have a child with special health care needs.

Childhood Obesity and Impact of Environment

Keeping children physically fit and at a healthy weight helps ensure the health of children. About 67.4% of New Mexico kindergarteners and 61.6% of third graders had a healthy weight in 2016 according to the New Mexico Statewide

Figure 1. Percentage of Children Under Five Years of Age Living in Poverty* by Small Areas, New Mexico 2012-2016



* Children living in households with annual incomes under 100% of the Federal Poverty Level.
Sources: U.S. Census Bureau, American Community Survey

Childhood Obesity Surveillance System. About 31.8% of New Mexico children aged 6-11 years and 21.9% of children aged 12-17 years meet the CDC recommendation of at least one hour of physical activity every day. According to the CDC, creating or modifying environments to make it easier for people to walk or bike is a strategy that not only helps increase physical activity, but can make our communities better places to live. Children growing up in rural communities in New Mexico with scarce resources are at a disadvantage in their ability to access safe walking trails and playgrounds and need communities to come together to address these needs.

Eating healthy is another important way to keep children at a healthy weight. In 2015, the U.S. Department of Agriculture (USDA) Food Access Atlas[3] reported that 135 of 499 New Mexican census tracts are food deserts with low access to

healthy foods and 25% of children were considered food insecure at some time during the year. In 2014, it was estimated that three out of four families (75%) with low food security in New Mexico made the financial trade-off of purchasing inexpensive, unhealthy food in order to have some food at home.[4]

Child Mortality

Between 2014 and 2016, there were an average 82 deaths per year for children aged 1-14 years in New Mexico, a rate of 21.0 deaths per 100,000 children. The leading causes of death for this group were unintentional injury (31 deaths per year on average, 8.0 per 100,000 children), homicide (9 deaths per year on average, 2.2 per 100,000 children) and congenital malformations (8 deaths per year on average, 2.0 per 100,000 children).

Leading causes of unintentional injury death in this age group were motor vehicle traffic injuries, motor vehicle non-traffic injuries, drowning, falls, and suffocation.

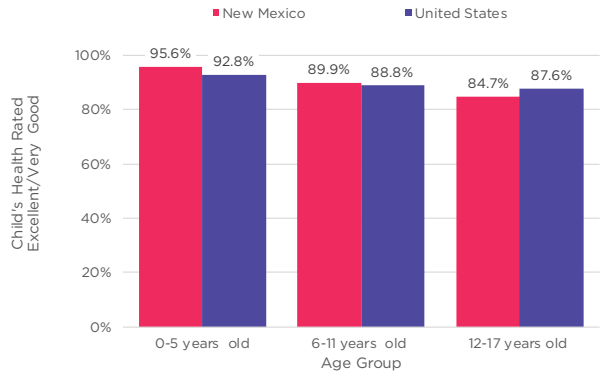
Boys aged 1-14 years had a higher death rate over the period than girls (23.2 vs. 18.6 per 100,000 population). Deaths from suicide were more common among boys than girls. American Indian children died at more than twice the rate (41.7 per 100,000) of the other racial/ethnic groups combined (18.6 per 100,000). Unintentional injuries accounted for nearly a third of all child deaths in the American Indian group. Hispanic children had the lowest child death rate at 18.0 per 100,000.

Mortality rates from 2014 through 2016 for children aged 1-14 years were highest in Rio Arriba, San Juan, McKinley, and Chaves counties, and lowest in Catron, Harding, Hidalgo, Lincoln, Los Alamos, Mora, Sierra, and Union counties.

Medical Home and Dental Health Home

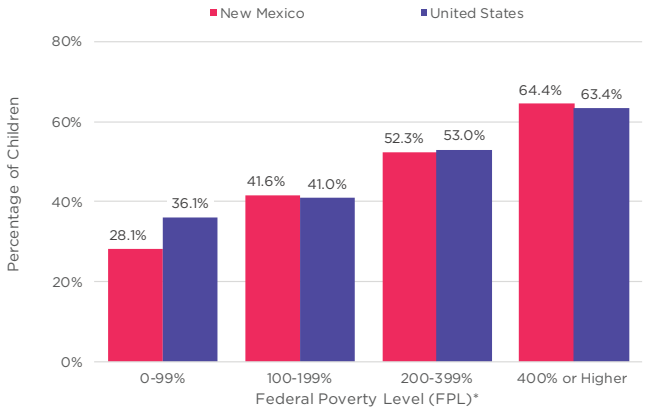
The Medical Home includes coordinated, accessible care delivered in a compassionate, culturally sensitive manner, with a family-centered approach. It is an evidence-based model for providing care for all children that has been shown to reduce costs and health-related complications. A child with a medical home has a primary care provider for both wellness and sickness care. A care coordinator for children with special health care needs addresses social determinants of health and links families to multiple service providers and supports. A medical home also promotes screening for early identification and treatment of conditions. In 2016, 32.8% of New Mexican children aged 10 months through 5 years of age received a developmental screening tool completed by the parent compared to 27.1% of children nationally. Fewer than half of New Mexico children (45.2%) in 2016 had a medical home compared to 50%,

Figure 2. Percentage of Parents Who Rated Their Child's Overall Health Excellent or Very Good, New Mexico, 2016



Source: 2016 National Survey of Children's Health (NSCH)

Figure 3. Percentage of Children With a Medical Home by Federal Poverty Level, New Mexico and U.S., 2016



*Household income as a percentage of the Federal Poverty Level.
Source: 2016 National Survey of Children's Health (NSCH)

nationally. Children in poverty were half as likely to have a medical home as those in households that earned more than 400% of the Federal Poverty Level (Figure 3). About half of children (52.8%) received needed treatment or counseling for their mental/behavioral health condition.

The Dental Health Home model coordinates the oral health needs of children by providing comprehensive oral health care including acute care and preventive services. About 85% of New Mexico children had at least one preventive dental visit in the past year, which is higher than the national percentage of 78.7% of children. Close to ninety percent of New Mexico children (88.4%) with special health care needs received a preventive dental visit. However, a higher percentage of New Mexico children had tooth decay (14.0%) than the national percentage of (11.7%).

Contributing Factors

Risk and Resiliency Factors

Many factors limit access to health care in New Mexico, including provider shortages, lack of affordable insurance, and lack of awareness of insurance availability. Expansive geographies create long travel distances to primary health clinics and hospitals. Cultural barriers to care are comprised of cultural relevance and lack of trust in health care providers and systems, which cause healthcare utilization disparities in some areas of the state. Thirty-two of New Mexico's 33 counties are designated "health professional shortage areas." New Mexico Medicaid provides many health care services for children under a federal Medicaid policy which requires that children received Early Periodic Screening, Diagnostic, and Treatment (EPSDT) services. This policy includes preventive health services, maintenance health services and treatment of medical conditions. It also includes dental and behavioral health services.

Health Disparities

The social determinants of health such as poverty, single parent households, education level of parents, race and ethnicity, access to health care and safe communities affect overall child well-being. In New Mexico, the high rates of child poverty, the rural nature of the state, and poorly-resourced communities call for health policy that addresses health equity.

Assets and Resources

The Office of Oral Health provides dental sealants at school based health centers. Children's Medical Services assures children with special needs have a medical and a dental health home and provides care coordination linking families to services and community resources.

The Developmental Screening Initiative at Envision New Mexico works to increase the rate of developmental screening using a standardized tool and promote earlier referral for children from birth to five years of age.

Healthy Kids New Mexico creates healthy environments and programs to give kids what they need to play well, eat well, learn well, and live healthy and full lives. The Women, Infants and Children (WIC) program provides supplemental food for woman, infants and children up to age 5 and educates families on healthy food choices.

Summary

New Mexico has seen some promising trends in the overall health of children; specifically, childhood obesity rates and the numbers of children without health insurance have both been declining, and the percentages of children with a primary source of medical and dental care are slightly above the national percentages. However, there are challenges that still need to be overcome, including high rates of childhood poverty and abuse and difficulty accessing pediatric specialty care. Efforts are needed to continue to address social determinants of health in childhood, including expanded use of care coordination in primary care practices to link families to community services and address risk factors.

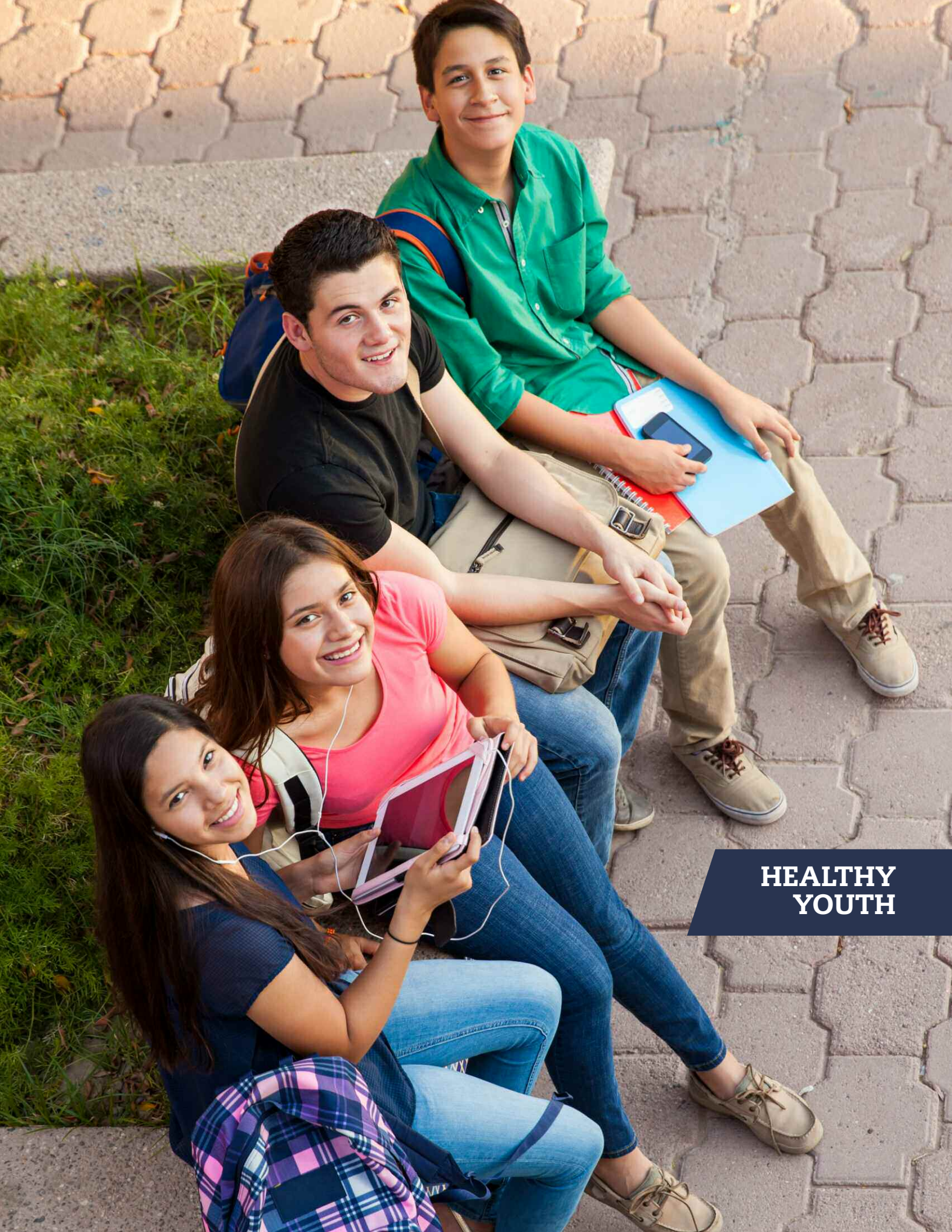
What is Being Done?

- Safer New Mexico holds car seat inspection clinics monthly in different cities across the State and reinforces seat belt use for all ages.
- Medicaid access has increased with Medicaid expansion and emphasizes the Medical Home and care coordination as standards of care.
- Communities around the State are partnering with local farmers and schools to offer fresh fruit and vegetable choices in school lunches and identifying walking trails and playgrounds to increase physical activity.
- The John Paul Taylor task force, a legislatively authorized group of public and private partners, is tasked with: creating a public health driven early childhood mental health action plan for infants and children to age eight and their families; developing a system to identify unserved and underserved at-risk children and families; promoting evidence based local community programs in New Mexico; and identifying current systems that can be used for the prevention of child abuse and neglect.

What Needs to be Done?

- Continue initiatives to address provider shortage areas.
- Increase the number of medical providers that use a standardized developmental screening tool for early identification of children requiring intervention.
- Expand use of care coordination in primary care practices to link families to community services to address socio-economic concerns.
- Understand the knowledge, attitudes and perceptions surrounding healthful eating and physical activity among New Mexicans and engage more communities in creating healthy environments for kids to grow up in.
- Ensure that all New Mexicans have access to affordable healthy foods.

References:
1. Children with Special Health Care Needs, Health Resources and Services Administration, Maternal and Child Health Topics. Accessed on Nov 28, 2017, at https://mchb.hrsa.gov/maternal-child-health-topics/children-and-youth-special-health-needs.
2. The National Survey of Children's Health, Data Resource Center for Child and Adolescent Health. http://childhealthdata.org/learn/NSCH.
3. Food Environment Atlas. https://www.ers.usda.gov/data-products/food-environment-atlas/. U.S. Department of Agriculture, Economic Research Service.
4. Why We Shouldn't Tax Food in New Mexico. Infographic prepared for 2017 NM Legislative Session by New Mexico Voices for Children.



HEALTHY YOUTH

Healthy Behaviors Foster Resilient Youth

The future success and health of New Mexico youth may be determined by the behaviors they engage in as young people. From 2014-2016, the five leading causes of death among New Mexicans aged 15-24 years were unintentional injury (predominantly motor vehicle crashes and drug overdoses), suicide, homicide, cancer, and congenital abnormalities.[1] These causes of death are associated with alcohol and drug use, suicidal behaviors, and physical violence. The three leading causes of death, unintentional injury, suicide, and homicide, are highly associated with behaviors that can be modified, such as alcohol and drug use, seat belt use and other driving behaviors, suicidal behaviors, and engaging in physical violence. For two of the leading causes of death, New Mexico has experienced decreases in death rates over the last decade. Unintentional injury deaths decreased from 55 per 100,000 youth aged 15-24 years from 2004-2006 to 45 per 100,000 from 2014-2016, and homicides decreased from 14 per 100,000 to 11 per 100,000 over the same time period. The chronic diseases that are among the leading causes of death for New Mexicans of all ages (cancer, heart disease, respiratory diseases, stroke, and diabetes) are associated with risk behaviors often initiated during adolescence, such as tobacco use, alcohol use, poor nutrition, and inadequate physical activity. Unsafe sexual behaviors put young people at risk of unplanned pregnancy and sexually transmitted infections. Strong relationships between youth and their families, schools, peers, and communities can encourage resiliency in young people and help them to avoid the many risks facing them. The 2015 New Mexico Youth Risk and Resiliency Survey (YRRS) examined these risk behaviors and resiliency factors among high school and middle school students.

Alcohol, Tobacco, and Other Drug Use

Alcohol use at an early age is associated with adverse outcomes later in life, such as alcohol dependence and abuse,[1] and is also associated with traffic-related fatalities and other injuries. Most alcohol related behaviors have decreased in prevalence in recent years among New Mexico high school students. Current drinking (at least one drink in the past 30 days) decreased from 50.7% in 2003 to 26.1% in 2015, and binge drinking decreased from 35.4% to 14.6% (Figure 1). Among middle school students, 8.5% were current drinkers and 5.0% were binge drinkers.

Figure 1. Binge drinking by Year, Grades 9-12, New Mexico and the United States, 2003-2015

Source: NM YRRS

Alcohol use varied with parent education, an indicator of socioeconomic status. High school students whose parents didn't finish high school had a higher rate of binge drinking than those parents with a college or professional school education (18.9% vs. 10.3%). There were no differences for most alcohol indicators by race/ethnicity.

Illicit drug use among adolescents is associated with heavy alcohol and tobacco use, violence, and suicide. In descending order, drugs with the highest current use rates among high school students were marijuana (25.3%), painkillers to get high (7.9%), ecstasy (4.6%), cocaine (4.5%), methamphetamines (3.2%), inhalants (4.2%), and heroin (2.8%). Among middle school students, lifetime use rates were 14.0% for marijuana, 6.7% for inhalants, 5.2% for prescription drug use without a prescription, 2.7% for cocaine, and 2.5% for pain killers to get high. While American Indian high school students had a higher rate of current marijuana use (33.9%) than other students, other differences in drug use by race/ethnicity were not statistically significant. In the case of every drug, the prevalence of use increased with decreasing levels of parent education.

Tobacco use increases the risk of several chronic diseases, such as heart disease, chronic obstructive pulmonary disease, acute respiratory illness, stroke, and various cancers.[2] The rate of current cigarette smoking among high school students decreased substantially from 2003 (30.2%) to 2015 (11.4%). The high school current spit tobacco use rate was 8.7%, with no trend in recent years. E-cigarette use was the most common current tobacco use behavior (24.0%), and one-third (33.4%) of all high school students were current users of at least one form of tobacco (cigarettes, cigars, hookah, spit-tobacco, or e-cigarettes). Among middle school students, 4.3% were current cigarette smokers, 12.0% were current e-cigarette users, and 14.1% used at least one form of tobacco. Among middle school students there was no difference between boys and girls for current use of at least one form of tobacco, while among high school students, boys were more likely than girls to use at least one form of tobacco (37.6% vs. 28.9%). High school students whose parents had more education were less likely to use at least one form of tobacco than those whose parents had less education.

Suicidal Behaviors

Past suicide attempts are a leading risk factor for future suicides. Past year suicide attempts among high school students have decreased over the past several years from a high rate of 14.5% in 2003 to 9.4% in 2015. In 2015, 8.8% of middle school students made at least one lifetime suicide attempt.

Suicide attempts were far more common among girls than boys. This is true in both middle school (12.0% vs. 4.4%) and high school (12.4% vs. 6.4%). Among high school students, American Indian students (13.9%) had higher rates than Hispanic (8.6%) or White (8.6%) students. Disparities by race/ethnicity were not apparent among middle school students.

Physical Activity

Regular physical activity can reduce body fat, maintain body weight, and reduce the risk of chronic diseases.[3] Obesity among adolescents is associated with a lack of physical activity and is a contributing factor for various chronic diseases. At least 60 minutes of daily physical activity is considered to be the adequate minimum for children aged 6-17 years. In 2015, 69.1% of high school students and 59.9% of middle school students failed to achieve this level of physical activity. In both middle and high school, boys were much more likely than girls to get adequate physical activity. Race/ethnicity was not associated with physical activity among high school students, but among middle school students, Hispanic and White students were more likely to exercise daily than were American Indian students.

Sexual Behaviors

Adolescents who initiate sexual intercourse at an early age are less likely to use contraception, are at higher risk for unplanned pregnancy, and are likely to have a greater number of lifetime sexual partners than those who wait until later to engage in sex.[4] In 2015, 39.0% of high school students and 6.5% of middle school students ever had sexual intercourse. Among the 25.1% of sexually active high school students (had sexual intercourse within the last 3 months), condom use decreased with grade level (as students got older), while the use of reliable birth control methods (birth control pills, IUDs, injectable birth control, or birth control ring) increased.

Contributing Factors

Risk and Resiliency Factors

Young people who have strong relationships with caring adults and friends are resilient and resistant to the risks facing them. The 2015 YRRS clearly demonstrated that students who had strong relationships across the domains of family, school, community, and peers were less likely than other students to engage in alcohol use, drug use, tobacco use, suicidal behaviors, unsafe sexual practices, and lack of physical activity (Figure 2).

Health Disparities

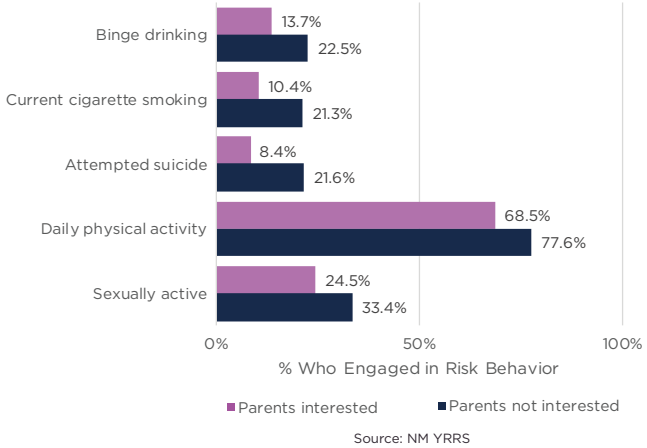
In addition to the disparities by sex, race/ethnicity, and parent education already mentioned, the YRRS identified specific groups of young people who are at extreme risk for almost all areas of risk behaviors in the survey. The three groups who consistently face the highest levels of risk are lesbian, gay, and bisexual (LGB) youth, youth in unstable housing (homeless), and youth with physical disabilities. The magnitude of the disparities faced by these young people are generally far greater than those associated with other demographic factors or characteristics (Figure 3).

LGB students made up 11.0% of public high school students in 2015, and those who were unsure of their sexual orientation made up 4.1%. Compared to straight students, LGB students had far higher rates of binge drinking (23.6% vs. 12.4%), current cigarette smoking (22.8% vs. 9.3%), current heroin use (10.9% vs. 1.2%), past year suicide attempts (29.2% vs. 6.7%), and forced sexual intercourse (19.3% vs. 5.6%).

Six percent (6.0%) of students were living in unstable housing. Compared to students in stable housing, these students had had far higher rates of binge drinking (42.5% vs. 12.2%), current cigarette smoking (43.1% vs. 9.1%), current heroin use (29.1% vs. 1.0%), past year suicide attempts (30.4% vs. 8.5%), and forced sexual intercourse (21.6% vs. 6.6%).

Students with physical disabilities made up 11.3% of students. Compared to students without

Figure 2. Selected Risk Behaviors by Resiliency Factor: Parents Interested in Homework, Grades 9-12, New Mexico, 2015



Source: NM YRRS

Figure 3. Suicide Attempts by Housing, Sexual Orientation, and Physical Disability, Grades 9-12, New Mexico, 2015

Source: NM YRRS

physical disabilities, these students had higher rates of binge drinking (17.7% vs. 13.4%), current cigarette smoking (15.3% vs. 10.3%), current heroin use (5.6% vs. 2.3%), past year suicide attempts (18.7% vs. 8.5%), and forced sexual intercourse (15.0% vs. 6.6%).

Assets and Resources

New Mexico has more than 70 school based health centers that provide quality, integrated, youth-friendly, and culturally responsive health care services to keep children and adolescents healthy, in school, and ready to learn. These centers offer services on or near school property, where students have easy access to them. They offer primary and behavioral health services such as immunizations; asthma and diabetes management; nutrition advice; and behavioral health services, such as grief therapy, help with peer pressure and bullying, and suicide prevention.

The Office of Substance Abuse Prevention (OSAP) of the New Mexico Human Services Department (HSD), provides funding and technical assistance to community groups throughout the state to offer local level evidence-based substance-use prevention interventions directed toward youth.

For each of New Mexico's 33 counties and in five American Indian tribal communities, there is a community health council. Each of these councils provide youth-based prevention programming.

Summary

New Mexico has seen encouraging trends among youth in recent years, including declines in health risk behaviors such as suicidal behaviors and alcohol use, and declines in deaths due to unintentional injury and homicide. However, serious concerns remain. While the rate of cigarette use has decreased substantially, new products such as e-cigarettes have meant that overall tobacco use rates have not decreased. Drug use rates, though not increasing, are extremely high relative to the rest of the U.S. Disparities in risk persist by gender, race/ethnicity, and parent education, but are most pronounced by sexual orientation, housing status, and physical disability status.

What is Being Done?

- Trends in youth health statistics are being monitored with the New Mexico Youth Risk and Resiliency Survey, and targeted evidence-based interventions are being implemented statewide.
- Substance abuse prevention programs at the state and local levels emphasize opioid use/misuse prevention.
- Fifty-one NMDOH-sponsored school based health centers provide integrated health care services and information throughout the state.
- Comprehensive suicide prevention programs addressing depression/anxiety, substance abuse, bullying, violence, and means restriction.
- Peer-to-peer mentoring stressing positive youth development and engagement, and building healthy relationships.

What Needs to be Done?

- Increase positive youth development and leadership programs, with meaningful engagement of youth to develop, implement, and evaluate them.
- Increase the number of school based health centers throughout the state, as these meet the healthcare needs of students where they spend a majority of their time.
- Increase healthy nutrition and physical activity interventions targeting middle school aged youth.

References:
1. Center for Behavioral Health Statistics and Quality. 2015 National Survey on Drug Use and Health: Detailed Tables. Substance Abuse and Mental Health Services Administration, Rockville, MD; 2016. «
2. U.S. Department of Health and Human Services. The Health Consequences of Smoking: A Report of the Surgeon General. US Department of Health and Human Services; Centers for Disease Control and Prevention; National Center for Chronic Disease Prevention and Health Promotion; Office on Smoking and Health; 2004.
3. Daniels SR, Arnett DK, Eckel RH, et. al. Overweight in children and adolescents: Pathophysiology, consequences, prevention, and treatment. Circulation 2005;111:1999-2012.
4. Santelli JS, Kaiser J, Hirsch L, Radosh A, Simkin L, Middlestadt S. Initiation of sexual intercourse among middle school adolescents: the influence of psychosocial factors. Journal of Adolescent Health 2004; 34(3): 200-208.

HEALTHY SENIORS

Aging Well through Healthy Lifestyles and Early Disease Detection

With aging comes a higher risk of health problems, including chronic disease, disability and death. To stay disease- and disability-free as long as possible, healthy lifestyles along with early detection and management of chronic diseases are needed.

Hospitalization

Older adults use more health care than their younger counterparts. In New Mexico, the top reasons for hospitalization among adults aged 65 years and older are heart disease, unintentional injury, septicemia, and influenza and pneumonia. The majority of injury hospitalizations are due to injuries from falls, and older adults hospitalized for injuries are likely to be transferred to another inpatient facility, such as a skilled nursing facility or an inpatient rehab facility, instead of being discharged to their home. A decrease in bone density increases the likelihood of serious injury from falls. Bone density, strength, and balance can be increased through physical exercise.[1] Other interventions that have been shown to be effective in preventing falls include doing Tai Chi, home safety assessment and modification, switching from multifocal lenses to single lens glasses, and gradual withdrawal of psychotropic medications such as sedatives.[2]

Influenza is highly contagious, as are most kinds of pneumonia. Older adults are more susceptible to complications if they become ill. The national goals for seasonal influenza and pneumococcal vaccination among adults aged 65+ are each 90%. In New Mexico in 2015-16 flu seasoin, 58.1% of older adults reported having an influenza vaccination in the last year and in 2016, 72.6% reported ever having had a pneumococcal vaccination.

Leading Causes of Death

The leading causes of death among adults aged 65 years and older are heart disease, cancer, chronic lower respiratory diseases and stroke (Figure 1). Four-fifths of all heart attacks in New Mexico occur in people aged 65 years and older, and 13.3% of New Mexico adults aged 65 years and older report that they have had a heart attack. Modifiable risk factors include high blood pressure, high cholesterol, cigarette smoking, and physical inactivity. Heart disease deaths have been decreasing in New Mexico and elsewhere. While changes in lifestyle have played a role in reducing heart disease deaths, advances in medical treatment have probably been a bigger factor.

Cancer was the second-leading cause of death from 2014-2016 for New Mexicans aged 65 years and older. The most common cancer deaths among older adults are lung and colorectal cancer. Cancer risk factors under our control include quitting smoking, drinking alcohol in moderation or not at all, eating a healthy diet, being physically active, keeping a healthy weight, and limiting exposure to the sun. Routine cancer screening, such as mammography and colonoscopy, allows cancer to be detected early and is an important step in reducing death and disability from cancer.

Chronic obstructive pulmonary disease, or COPD, is characterized by lung damage and breathing problems and includes conditions such as emphysema and chronic bronchitis. Chronic lower respiratory disease (CLRD), includes COPD and asthma. While asthma is typically reversible, COPD is not. COPD is a progressive disease and is more likely to be diagnosed among older adults.

Figure 1. Six Leading Causes of Death By Age Group, New Mexico, 2014-2016

	15-44 years	45-64 years	65+ years
1	Unintentional injuries	Cancer	Heart Disease
2	Suicide	Heart Disease	Cancer
3	Homicide	Unintentional injuries	Chronic Lower Respiratory Diseases
4	Cancer	Chronic Liver Disease & Cirrhosis	Stroke
5	Chronic Liver Disease & Cirrhosis	Diabetes Mellitus	Alzheimer's Disease
6	Heart Disease	Suicide	Unintentional injuries

Sources: NMDOH BVRHS, UNM GPS Program

In 2016, 12% of New Mexico adults aged 65 years and older (almost 41,000 adults) had been diagnosed with COPD. COPD is caused primarily by cigarette smoking, exposure to second-hand smoke and air pollution, although there are also some genetic components. COPD is more common among Black/African American and White adults.

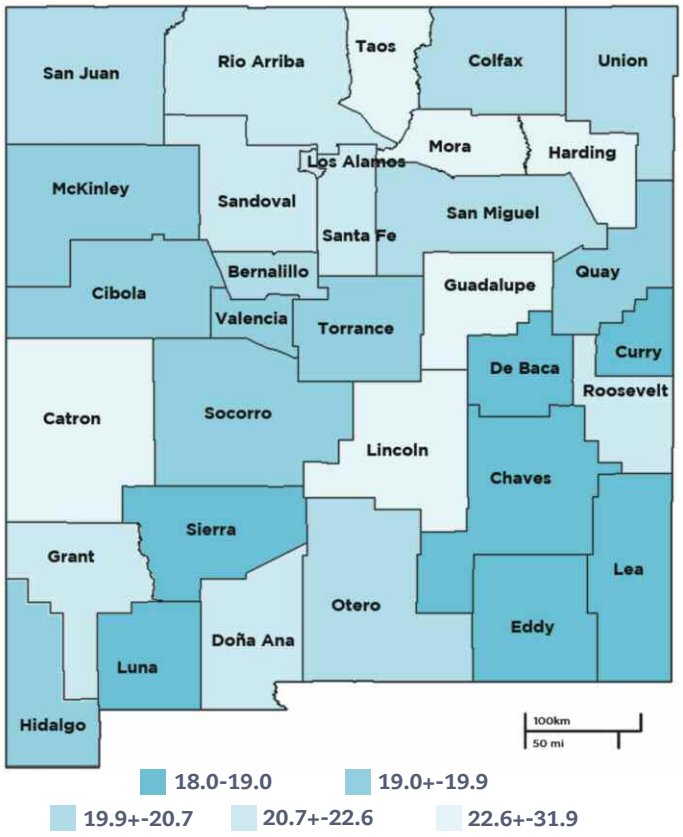
The risk of stroke increases with age. About one in 13 adults aged 65 years and older report they have had a stroke, compared with one in 53 for adults aged 18 to 64. Almost 90% of all stroke deaths in New Mexico are among adults aged 65 years and older. A stroke occurs when an artery in the brain is either ruptured or clogged. The affected area of the brain can be damaged within minutes, potentially causing long-term disability or impairment. Timely treatment by a medical professional is imperative, so if you are having symptoms of a stroke, call 9-1-1.

In 2016, two-thirds of all unintentional injury deaths among older adults were due to falls. Older adult deaths from fall injuries decreased from 2008 to 2013, but have increased in recent years.

Life Expectancy

Life expectancy from birth measures health status across all age groups. Life expectancy from age 65 is the number of years that a person who is age 65 can be expected to live and is often used as a measure of a healthy adult population. Life expectancy from birth is very sensitive to infant mortality and child injury deaths, life expectancy from age 65 largely reflects the burden that chronic disease mortality places on a population. Life expectancy from age 65 in New Mexico was 20.7 years in 2016, compared with 19.4 years in the U.S. Years of life expectancy from age 65 was lower in southeastern New Mexico and and generally higher in northern counties (Figure 2).

Figure 2. Life Expectancy from Age 65 by County, New Mexico, 2014-2016



Sources: NMDOH BVRHS, UNM GPS Program

Contributing Factors

Risk and Resiliency Factors

Older adults are more likely to report fair/poor health (Figure 3). But older adults also reported lower smoking rates and a lower prevalence of obesity. Cigarette smoking is a major risk factor for the leading causes of death and illness, including heart disease, stroke, cancer and chronic obstructive pulmonary disease.

The 2008 Physical Activity Guidelines for Americans report suggests healthy adults should have at least 150 minutes of moderate-intensity aerobic activity or 75 minutes of vigorous-intensity aerobic activity each week. The report also includes specific guidelines, including balance exercises, for adults age 65 and over. Physical inactivity is associated with heart disease, diabetes, high blood pressure, and colon cancer. Regular activity also builds and maintains healthy bones, muscles and joints. of older New Mexico adults were more likely to be inactive than their younger counterparts. In 2016, 28% of older adults had no leisure-time physical activity, compared with 20.7% among younger adults.

A healthy diet, one that contains less fat and more fresh fruits and vegetables, is associated with a reduction in obesity, heart disease, diabetes, and some cancers. Older New Mexicans were only slightly less likely (17.2%) than younger adults (18.1%) to eat five fruits and vegetables a day.

Health Disparities

Risk of death from various causes among older persons varies significantly by race/ethnicity. Heart disease death rates were highest among Whites and lowest for Asian and Pacific Islanders. The risk of death from cancer was highest among White, Black and Hispanic persons, and lower in American Indian and Asian/Pacific Islander groups. Risk of death from COPD was highest among Whites, and risk of death from diabetes was highest in the American Indian population.

Lower income and education levels put older adults at higher risk for a number of health problems. Older adults with annual incomes under $15,000 were more likely to have diabetes and be physically inactive. They were three times more likely to smoke cigarettes, twice as likely to be physically inactive, and four times as likely to report that their health is "fair" or "poor" compared to those with incomes over $50,000. Those with less than a high school education were more likely to have diabetes and more likely to be overweight or obese. They were more than twice as likely to smoke cigarettes, more than twice as likely to be physically inactive, and more than three times as likely to report that their health was "fair" or "poor" compared to those who were college graduates.

Assets and Resources

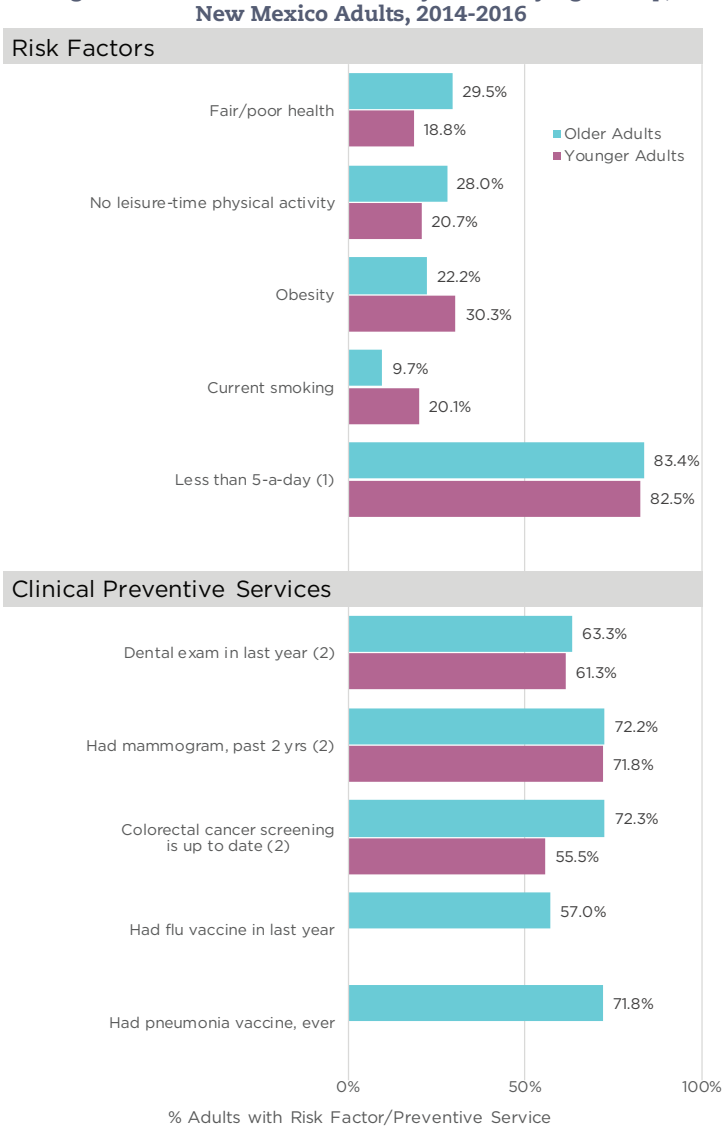
The New Mexico Aging and Long-Term Services Department (ALTSD) provides an array of services and supports to older adults that promote healthy and active lifestyles.

The ALTSD also supports the Healthy Aging Campaign - " Know Your Numbers, Change Your Numbers, Change Your Life". This campaign was created by the late NMDOH Secretary Retta Ward during her tenure as the ALTSD Secretary. She believed it was never too late to make changes that can improve your health.

ALTSD, through its contract providers, also supports services to assist family caregivers. Caregiver health can be at risk due to the stresses of caregiving tasks. At 1-800-432-2080 a resource specialist can direct caregivers to appropriate resources. You may also visit the Caregivers Information page to get started.

New Mexico's Area Agencies on Aging provide services throughout the state and support several evidence-based, community programs, such as

Figure 3. Health Risk and Resiliency Factors by Age Group, New Mexico Adults, 2014-2016



Younger adults were 18-64 years (colorectal screening & mammography age 50-64 years). Older adults were aged 65 years or more, (colorectal screening age 65-75 years, mammography age 65-74 years). * Data were not reported for adults under age 65 years. (1) 2015. (2) 2014 and 2016, combined.
Sources: NMDOH BRFSS

EnhanceFitness®, that provide health benefits and promote disease and injury prevention. Visit the Healthy Aging & Prevention page for a list of programs.

Paths to Health NM: Tools for Healthier Living / Caminos de Salud NM: Técnicas para Vivir Mejor uses a statewide referral system to connect older adults with evidence-based community programs that have been proven to work. These programs empower older adults with chronic conditions to develop essential disease management skills to prevent or manage chronic health conditions or injuries and have been shown to improve quality of life and reduce falls.

Summary

The contribution of unintentional injury, and specifically fall injury, to morbidity and impact on quality of life makes it an important health issue for older New Mexicans. Heart disease was the leading cause of death as well as the leading reason for inpatient hospitalization among this group, and cancer was the second leading cause of death among New Mexicans age 65 years and over, with lung cancer as the leading cause of cancer death and the second leading reason for cancer hospitalization among this age group. Factors contributing to falls, hearth disease and lung cancer incidence and death overlap to some degree. Physical activity is key for building bone density, balance, and strength to avoid life-threatening fall injuries and also for maintaining cardiovascular fitness. Use of clinical preventive health care is essential for early detection, treatment, and managment of heart disease as well as most types of cancer. Routine health screenings can also detect high blood pressure and cholesterol that contribute to heart disease and stroke. On balance, the evidence suggests that the top modifiable health issues for older adults are physical activity and getting routine clinical preventive care. A life history of cigarette smoking is a major contributor to heart disease and lung cancer (as well as chronic lower respiratory disease and stroke, the third and fourth leading causes of death). Cigarette smoking prevalence was relatively low among older New Mexicans, but for those who smoke, quitting smoking is the number one opportunity to improve their health.

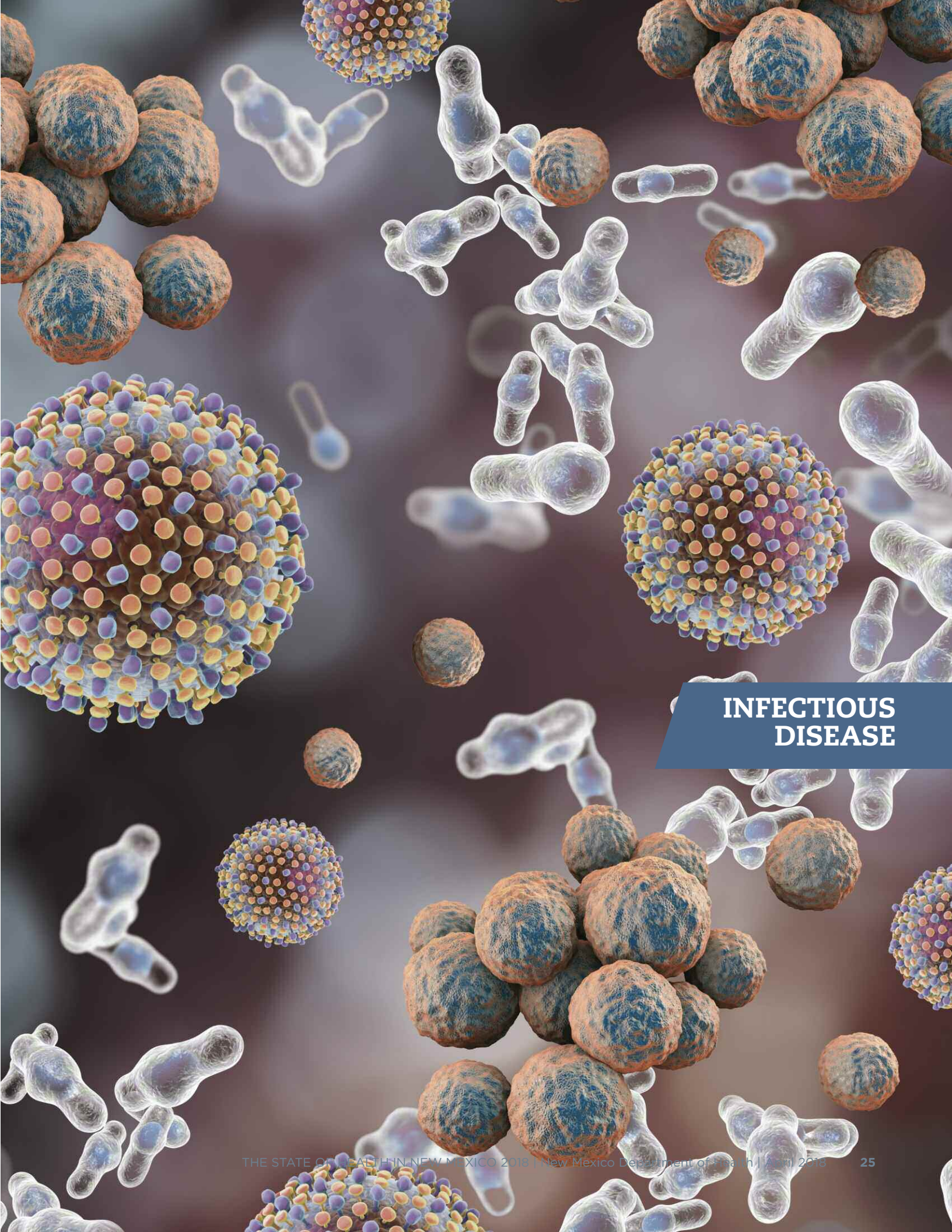
What is Being Done?

- Offering evidence-based programs such as the Tai Chi: Moving for Better Balance program, the Enhance Fitness program, the Chronic Disease Self Management program, the Strong Women (and men) Strong Bones program.
- Increasing awareness about fall risks and fall prevention at health fairs and other venues where older adults participate.
- Influenza and pneumonia surveillance and vaccination programs.

What Needs to be Done?

- Continue vigilance with clinical management of high blood pressure, high cholesterol, diabetes, arthritis, and other chronic diseases.
- Coordinate care between multiple health care providers, especially with regard to medications.
- Create a comprehensive coordinated approach to using evidence-based healthy aging programs and services statewide.
- Identify mechanisms for reimbursement for fall screening and prevention activities.

References:
1. John N. Morris, Elizabeth P. Howard, Knight Steel, Katherine Berg, Achille Tchalla, Amy Munankarmi, and Daniel David. Strategies to reduce the risk of falling: Cohort study analysis with 1-year follow-up in community dwelling older adults. BMC Geriatr. 2016; 16: 92.
2. Gillespie LD, Robertson MC, Gillespie WJ, Sherrington C, Gates S, Clemson LM, Lamb SE. Interventions for preventing falls in older people living in the community. Cochrane Database Syst Rev. 2012 Sep 12;(9):CD007146. doi: 10.1002/14651858.CD007146.pub3.



INFECTIOUS DISEASE

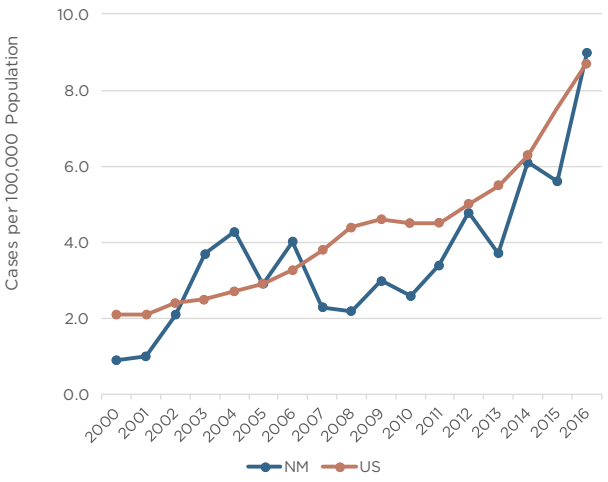
The Burden of Infectious Diseases, Including Common Preventable Infections in New Mexico

There are over 75 notifiable infectious diseases or conditions that are reported to NMDOH by law. Several New Mexico notifiable communicable diseases receive attention in the community and in the media, like hantavirus pulmonary syndrome and plague. While those infections can be severe and cause death in the individuals who become infected and sick, they only account for a small number of illnesses in New Mexico each year. Other types of pathogens cause more infections and lead to more healthcare visits, hospitalizations, and severe outcomes including death each year. Influenza and pneumonia top this list. This report will present information regarding some other infectious diseases that are a significant burden to the New Mexico population: sexually transmitted diseases; healthcare-associated infections; and hepatitis C virus infections.

Sexually Transmitted Disease

New Mexico has followed national trends that show significant increases in sexually transmitted disease (STD) including syphilis, gonorrhea and chlamydia. The 2016 national STD surveillance report from the Centers for Disease Control and Prevention (CDC) found that syphilis cases increased 17.6% from 2015 to 2016 nationally, including a 35% increase among women, to rates not seen since 1992. In New Mexico, the increases were even greater. From 2015 to 2016, there was a 61% increase in the rate of primary and secondary syphilis from 5.6 per 100,000 to 9.0 per 100,000 population (Figure 1). The 40% rise in rates of gonorrhea was similarly concerning.

Figure 1. Rates of Primary and Secondary Syphilis, New Mexico and U.S., 2000 - 2016



Sources: NMDOH PRISM, CDC NCHHSTP, UNM GPS Program

Increases in STD are of concern by themselves, as diseases such as chlamydia and gonorrhea can cause infertility and other medical complications. An additional concern is that rising STD rates often are precursors to an increase in new human immunodeficiency virus (HIV) infections, thus the rising rate of syphilis causes concern about new HIV infections. Of all cases of early syphilis in 2016 in New Mexico, 65.1% were among gay/bisexual men and other men who have sex with men.

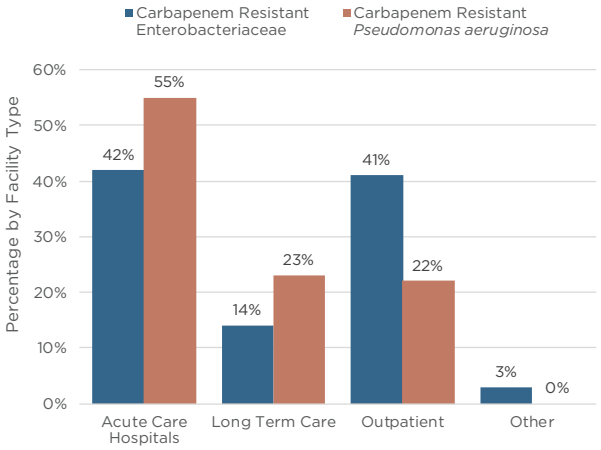
While rates of new HIV infections among gay/bisexual men have been relatively stable in New Mexico, rising rates of syphilis may signal that this could change. The NMDOH is responding by offering disease management and partner services for all newly diagnosed cases of HIV and syphilis to ensure timely treatment and referral to medical care. In addition, the department has several new projects to expand use of the newest prevention innovation, pre-exposure prophylaxis, particularly among younger persons, from the racial/ethnic groups with the highest HIV rates.

Healthcare-associated Infections

Healthcare-associated infections (HAIs) - infections patients can get while receiving medical treatment in a healthcare facility - are a major threat to patient safety. Although significant progress has been made in preventing some infection types, there is much more work to be done. On any given day, about one in 25 hospital patients has at least one HAI.

CDC's annual *National and State Healthcare-Associated Infections Progress Report*[1] describes national and state progress in preventing HAIs. Among New Mexico acute care hospitals, the most recent report found that central line-associated bloodstream infections (CLABSI) were 45% lower compared to the national baseline, hospital-onset methicillin-resistant *Staphylococcus aureus* (MRSA) bacteremia (bloodstream infections) were 58% lower

Figure 2. Percentage of Reported Cases for Two Carbapenem-resistant Bacteria by Pathogen and Facility Type, New Mexico, 2015-2017



Source: CDC AR Patient Safety Atlas

compared to the national baseline, and hospital-onset *Clostridium difficile (C. difficile)* infections remained 14% higher compared to the national baseline.

While progress has been made in reducing HAIs, antimicrobial resistance has emerged as a new and important threat. Antibiotics and similar drugs, together called antimicrobial agents, have been used for the last 70 years to treat patients who have infectious diseases. Since the 1940s, these drugs have greatly reduced illness and death from infectious diseases. However, these drugs have been used so widely and for so long that the infectious organisms have adapted to them, making the drugs less effective. Each year in the United States, at least 2 million people become infected with bacteria that are resistant to antibiotics and at least 23,000 people die each year as a direct result of these infections.[2]

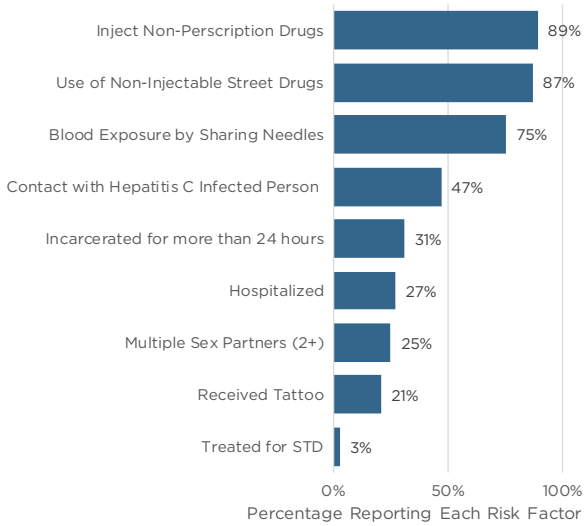
Some bacteria known as carbapenem-resistant Enterobacteriaceae, or CRE, have become resistant to most available antibiotics. Infections with these bacteria are very difficult to treat, and can be deadly in up to 50% of patients who become infected. Healthy people do not usually get CRE infections - infections occur most often in patients residing at hospitals, nursing homes, and other healthcare settings (Figure 2). Patients whose care requires devices like ventilators (breathing machines), urinary (bladder) catheters, or intravenous (vein) catheters, and patients who are taking long courses of certain antibiotics are at the highest risk for CRE infections.[3]

The New Mexico Department of Health and the University of New Mexico are collaborating to support and build Antimicrobial Stewardship Programs (ASPs) that can optimize treatment of infections and antibiotic use with the goal of providing every patient with the right antibiotics, at the right time, at the right dose, and for the right duration. The collaboration is designed to preserve the power of antibiotics and improve patient outcomes across New Mexico.

Hepatitis C

Hepatitis C (HCV) is the most common blood borne disease in the United States. In New Mexico, an estimate of 53,000 people, approximately 2.5% of the state's population, have evidence of prior HCV infection. There were total 91 cases of acute hepatitis C cases in New Mexico between 2014 and 2016. Of acute infections 75%-85% will develop to chronic HCV infection and 60%-70% of these people will develop chronic liver disease. Cirrhosis or liver cancer will develop in 1%-5% of patients with chronic liver disease.[4]
In 2016, Valencia, Rio Arriba, Socorro, Colfax,

Figure 3. Percentage of Cases that Reported Each Risk Factor, Acute Hepatitis C Cases in Persons Aged Less Than 30 Years, New Mexico, 2014-2016



Total 91 Cases of Acute Hepatitis C in New Mexico between 2014 and 2016.
Source: NMDOH NM-EDSS

Cibola and Santa Fe counties had the highest rates of HCV infections in the state in the population under 30 years of age. The primary risk factor for HCV infection in New Mexico is injection drug use. In a focused study of the New Mexico population under 30 years of age with acute and chronic HCV, injection drug use was the most common reported risk factor at almost 60% of those interviewed. Injection drug use was even more commonly-reported in patients with acute HCV infection (Figure 3). In 2016, 7,242 New Mexico residents visited an emergency department with the diagnosis of HCV, and of those 1,682 had an overdose as a reason for the emergency department visit. In 2016 there were 5,435 hospitalizations for HCV, and chronic liver disease was the eighth leading cause of death in the state.

Contributing Factors

Risk and Resiliency Factors

Using antibiotics only when necessary and minimizing the use of invasive medical devices where possible can reduce the risk of developing an HAI or antibiotic resistant infection.

Those in the U.S. at highest risk of contracting HCV are current or past injection drug users, people who come into contact with contaminated blood, children born to mothers infected with HCV, and people who have sex with an HCV-infected person.

Health Disparities

In New Mexico, gay/bisexual men, other men who have sex with men, and transgender persons with male sexual partners account for most cases of both HIV and syphilis in New Mexico.

HAIs tend to occur in older populations who spend more time as hospital inpatients. Rural and Hispanic populations of New Mexico are disproportionally affected by HCV infections.

Assets and Resources

NMDOH funds HIV testing services that target populations at greatest risk, ensuring that testing is available at over 50 locations. More than 10,000 confidential tests are delivered annually. The Centers for Disease Control and Prevention (CDC) has identified evidence-based HIV prevention strategies for populations at greatest risk. New Mexico has a syringe exchange program to foster safe injection practices. The U.S. Food and Drug Administration recently approved medications that, if taken appropriately, can cure most patients with HCV infection in 8 - 12 weeks.[5]

New Mexico has a syringe exchange program to foster safe injection practices.

NMDOH has Disease Prevention Teams (DPT) in each region of the state that conduct HIV and STD partner services and disease investigation. This work identifies persons who are risk of STD and helps assure that they obtain treatment quickly to minimize harm to them, and to avoid the further spread of disease.

HAIs are tracked through the National Healthcare Safety Network (NHSN). NHSN provides the data needed to identify problem areas, and measure progress of prevention efforts.

Summary

Pneumonia and influenza are the infectious diseases that provide the greatest burden to New Mexico. Sexually transmitted diseases, healthcare-associated infections and hepatitis C cause a large number of infections each year. Fortunately, these infections are curable and can be prevented. Improvements in primary prevention of sexually transmitted diseases and hepatitis C infections is achievable through educational campaigns advocating healthy behaviors and healthcare-associated infections can be minimized with evidence-based infection control practices. The NMDOH will continue its mission of improving the health status of all New Mexicans by working to prevent these infectious diseases.

What is Being Done?

- New Mexico law requires notification of NMDOH for over 75 infectious diseases and conditions and performs routine case investigation for any reports with potential to endanger the public's health and safety.
- NMDOH offers confidential testing for HIV and all sexually-transmitted diseases which includes risk reduction counseling and behavioral interventions to encourage individual risk reduction.
- NMDOH offers disease management and partner services in all newly diagnosed cases of HIV and syphilis.
- New Mexico has expanded its laboratory capacity to detect antibiotic resistance as well as its surveillance and response infrastructure to promote HAI prevention practices, respond to outbreaks, and monitor emerging HAI pathogens.
- New Mexico has a robust syringe exchange program to promote safe injecting practices and to reduce HCV transmission.

What Needs to be Done?

- With the advent of curative medications for hepatitis C infections New Mexico needs to focus efforts to assure that infected patients are linked to healthcare for treatment.
- New biomedical strategies are available to prevent new HIV infections, most notably Pre-Exposure Prophylaxis (PrEP). Additional resources are needed to increase awareness of and utilization of PrEP by those at greatest risk.

References:
1. Centers for Disease Control and Prevention. 2014 National and State Healthcare-Associated Infections Progress Report. Published March, 2016. Available at http://www.cdc.gov/hai/progress-report/index.html.
2. https://www.cdc.gov/hai/surveillance/index.html
3. https://www.cdc.gov/drugresistance/index.html"
4. Centers for Disease Control and Prevention. 2017. Hepatitis C FAQs for the Public. https://www.cdc.gov/hepatitis/hcv/cfaq.htm
5. U.S. Food and Drug Administration. 2017. Hepatitis C Treatments Give Patients More Options. https://www.fda.gov/ForConsumers/ConsumerUpdates/ucm405642.htm

TOBACCO USE

The Changing Tobacco Environment in New Mexico

Burden of Tobacco Use

Tobacco use is the leading preventable cause of death, resulting in over 2,600 deaths in New Mexico annually.[1,2] In addition, over 78,000 people live with tobacco-related diseases in the state. Cigarette smoking has a harmful impact on nearly every organ in the human body and is linked to conditions such as chronic bronchitis, heart disease, emphysema, stroke, pneumonia, and cancers of the lung, stomach, pancreas, cervix, and kidney. The leading causes of smoking-related death in New Mexico are chronic obstructive pulmonary disease and lung cancer.[3] Smoking-related illness in New Mexico costs the state $844 million in direct health care and $597 million in lost productivity every year.

Adult Tobacco Use

In 2016, 16.6% of New Mexico adults smoked cigarettes, slightly lower than the 17.1% across the United States. Adult smoking in the state has declined 23% since 2011, and it is now at an all-time low. However, when factoring in other types of tobacco use such as chew or spit tobacco, cigars, hookah, and e-cigarettes, about one in four adults, over 400,000 New Mexicans, currently uses some form of tobacco.

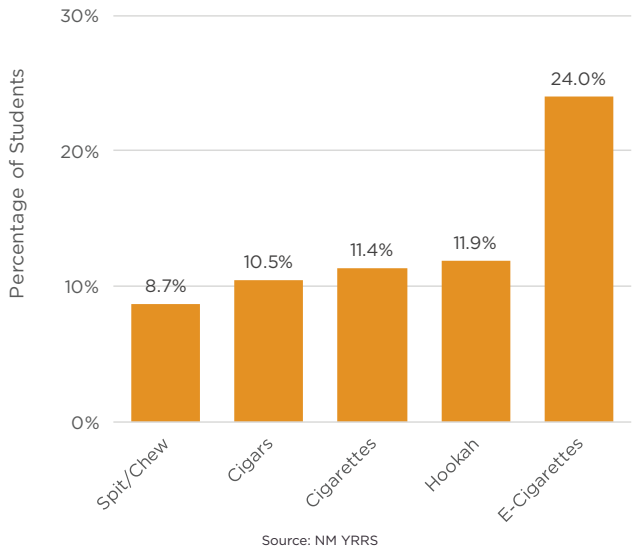
Youth Tobacco Use

In 2015, about one in nine (11.4%) New Mexico high school youth reported current cigarette smoking , which is the lowest rate ever measured in the state. Youth cigarette use has declined dramatically from its peak of 30.2% in 2003. The use of cigarettes is now lower than that of other tobacco products, including e-cigarettes (24.0%) and hookah tobacco (11.9%) (Figure 1). However, the overall burden of any tobacco use among high school students is one in three youth. Reductions in use of cigarettes, cigars, and hookah have been offset by increases in e-cigarette use. Use of multiple tobacco products is also commonplace among youth.

Secondhand Smoke Exposure

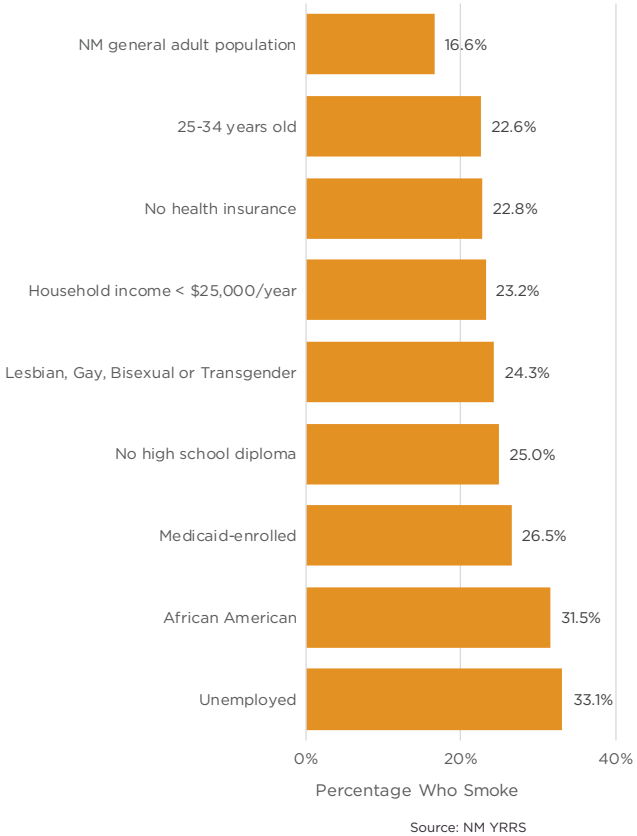
It has been 10 years since the Dee Johnson Clean Indoor Air Act (2007) took effect to protect New Mexicans from secondhand smoke in most public and work places. However, this law does not

Figure 1. Tobacco Product Use by High School Youth, New Mexico, 2015



Source: NM YRRS

Figure 2. Adult Cigarette Smoking Prevalence by Selected Population Groups, New Mexico, 2016



Source: NM YRRS

apply to tribal lands, nor does it include other places such as housing, cars, and certain outdoor venues. Fortunately, about 90% of adults completely prohibit smoking inside their homes and 85% prohibit smoking in their vehicles. However, people who live in multi-unit housing, especially in public or subsidized housing are at increased risk for exposure to secondhand smoke drift from their neighbors. No amount of secondhand smoke exposure is safe, and it is a known cause of sudden infant deaths syndrome (SIDS), lung problems, ear infections, and asthma in children, and heart disease and lung cancer in adults.[4]

Contributing Factors

Risk and Resiliency Factors

Although cigarette smoking continues to decline in the state and in the U.S., specific population groups smoke at higher rates than the general population. Higher smoking rates may result from complex factors, including social stressors, targeted marketing by the tobacco industry, or differences in community norms or tobacco-related health policies. In addition, socioeconomic characteristics, such as education, income, employment, and access to health care are highly correlated with a person's tobacco use status. Among youth, those who engage in other risk behaviors (e.g., alcohol use, drug use, etc) and have lower levels of resiliency or protective factors in their home, school, and community are at increased risk for tobacco use.

Health Disparities

New Mexicans at greater risk for smoking include those with lower levels of education, lower income, who are unemployed, or are uninsured or enrolled in Medicaid. In addition, higher smoking rates are also found among lesbian, gay, bisexual, and transgender New Mexicans, people with disabilities, and African Americans (Figure 2). Men are at significantly increased risk for use of spit or chew tobacco compared to women (7.1% vs. 0.9%).

Along with significant declines in youth cigarette use, there has been a substantial narrowing of disparities in smoking between youth racial/ethnic groups. For example, in 2003, cigarette smoking ranged from 24% among White youth to 52% among African American youth. However, in 2015 cigarette smoking ranged from 10% among African Americans to 17% among American Indians. Overall, tobacco use is highest among boys, 12th graders, those who earn mostly D's and F's, lesbian, gay or bisexual youth, those with a physical disability, youth whose parents have lower levels of education, and youth who are housing unstable.

In addition, there are differences in smoking-related death rates in New Mexico, with rates for males nearly double those of females. Among racial/ethnic groups, death rates are highest among Whites and Blacks, nearly double those of American Indian and Asian/Pacific Islander adults. Smoking-related death rates are also highest in the following Sierra, Lea, Quay, Curry, Eddy, and Torrance counties (Figure 3).

Figure 3. Youth Cigarette Smoking Prevalence by County, New Mexico, 2015

Source: NM YRRS

Assets and Resources

More than eight in ten adult smokers report that they are seriously considering quitting tobacco use within the next six months and about two-thirds made a quit attempt in the past year. The Department of Health offers telephone- and web-based tobacco cessation services, including quit coaching, customized quit plans, free nicotine patches, and text messaging support. Cessation services are available in English (1-800-QUIT NOW and www.QuitNowNM.com) and Spanish (1-855-DEJELO YA and www.DejeloYaNM.com). Interested health care providers and clinics can access training and technical assistance through the Health Systems Training and Outreach Project to develop the capacity to improve screening, provide brief interventions, and refer tobacco users to cessation services.

Efforts to prevent tobacco use among youth and young adults include a youth engagement program, Evolvement, which recruits interested high schools and youth to develop and implement local tobacco use prevention projects in their schools and communities. There is also ongoing work with the Public Education Department and individual school districts on the development, implementation, and enforcement of tobacco-free school policies through a campaign called 24/7, www.247newmexico.com.

The Campus Substance Abuse Prevention Program at the University of New Mexico is leading statewide efforts to develop and implement tobacco-free policies post-secondary educational campuses to protect young adults from the harms of secondhand smoke. The American Lung Association and Keres Consulting work with multi-unit housing owners, managers, and tenants to develop smoke-free policies in public housing, market-rate housing, and on tribal lands.

Summary

Great progress has been made in reducing cigarette smoking among youth and adults in New Mexico and the U.S. However, there remains room for improvement in reducing continued high smoking rates in specific population groups. Continuing to make free tobacco cessation resources, such as QUIT NOW, available to people who are low-income, uninsured, or enrolled in Medicaid is key in reducing smoking in these groups. E-cigarettes are now the most commonly used tobacco product among youth. Applying proven strategies in preventing tobacco use and nicotine addiction in young people will have to consider emerging products such as e-cigarettes. Examples of these strategies including increasing the price of tobacco products, hard-hitting media campaigns, and supporting the creating of tobacco-free environments.

What is Being Done?

- QUIT NOW telephone- and web-based tobacco cessation services, including quit coaching, free nicotine patches, and text messaging support in English and Spanish for New Mexico tobacco users.
- Health care providers and clinics are being trained on system changes to improve screening, brief interventions, and referrals for patients who use tobacco.
- Tobacco-free policy development and implementation efforts are moving forward in multi-unit housing and secondary and post-secondary campuses statewide.
- The youth engagement program, Evolvement, continues to recruit and train high school youth to develop and implement youth tobacco prevention programs in their schools and communities.

What Needs to be Done?

- Continuing to encourage tobacco users to quit completely using proven quit methods such as counseling, nicotine replacement products, and combination therapies.
- Ensuring enforcement of existing policies, including prohibiting minors from purchasing tobacco in the retail environment.
- Educating communities and the public on options for protecting young people from the harms of tobacco through regulation of the time, place, and manner in which tobacco can be advertised and sold.
- Addressing high smoking rates among people experiencing poverty, including those enrolled in Medicaid, through targeted allocation of resources and strategic partnering with other organizations who already serve this population.

References:
1. CDC, The Health Consequences of Smoking: 50 Years of Progress, https://www.surgeongeneral.gov/library/reports/50-years-of-progress/full-report.pdf. A Report of the Surgeon General, January 2014.
2. Campaign for Tobacco Free Kids Factsheet, https://www.tobaccofreekids.org/problem/toll-us/new_mexico, Updated 10/6/17.
3. New Mexico Substance Abuse Epidemiology Profile, https://nmhealth.org/data/view/substance/1982/, February 2017.
4. CDC. Secondhand Smoke Factsheet, https://www.surgeongeneral.gov/library/reports/secondhand-smoke-consumer.pdf, 2006.

SUBSTANCE USE

Substance Use Affects All New Mexicans

The Burden of Substance Use in New Mexico

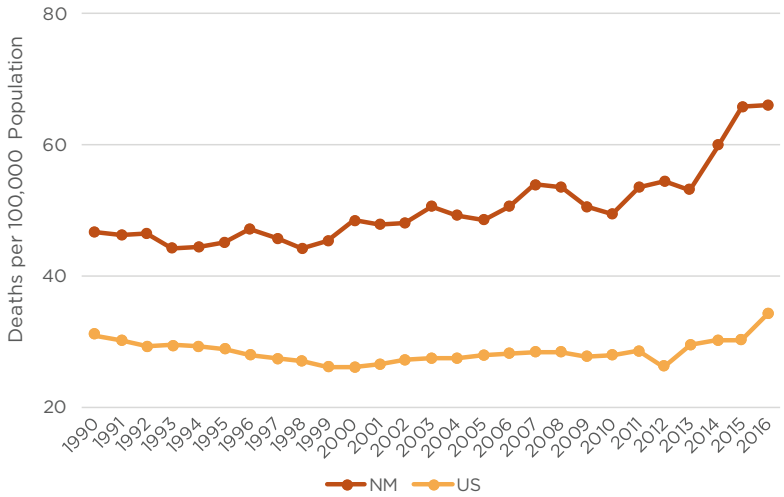
Substance use is a major issue in New Mexico. According to the 2014-2015 National Survey on Drug Use and Health (NSDUH) conducted by the Substance Abuse and Mental Health Services Administration, the prevalence of past year alcohol use disorder among adults in New Mexico was 7.3%. The 2014-2015 NSDUH also estimates the number of past year heroin users among New Mexico adults to be 3,000. However, this number is underestimated, as there were 9,649 enrollees in the NMDOH Syringe Services Program in 2016, and of those 6,976 indicated heroin use. Additionally, using data from the New Mexico Board of Pharmacy Prescription Monitoring Program (April-June 2017) and the published research literature, the number of chronic prescription opioid users in New Mexico who may need treatment is estimated at 12,400 (22% of chronic prescription opioid patients).

The alcohol-related death rate was 66.0 deaths per 100,000 population, and the drug overdose death rate was 24.8 deaths per 100,000 population in 2016. This compares to national rates of 34.0 and 19.8, respectively. All the ten leading causes of death in New Mexico are, at least partially, caused by the use of alcohol, tobacco, or other drugs. The negative consequences of substance use in New Mexico are not limited to death, but also include domestic violence, crime, poverty, and unemployment, as well as chronic liver disease, motor vehicle crash and other injuries, mental illness, and a variety of other medical problems.

Alcohol-Related Deaths and Hospitalizations

Over the past 30 years, New Mexico has consistently had among the highest alcohol-related death rates in the United States, and it has had the highest alcohol-related death rate since 1997. In 2010, the economic cost of excessive alcohol consumption in New Mexico was $2.2 billion ($2.77 per drink or an average of $1,084 per person).[1] New Mexico's rate of death due to alcohol-related chronic disease is more than twice the national rate, while it's rate of alcohol-related injury death is 1.6 times the national rate (Figure 1). Alcohol-related chronic liver disease (AR-CLD) accounts for the most deaths due to alcohol-related chronic disease. Many drug overdose deaths are also alcohol-related. Indeed, from 2012-2016, among alcohol-related injury deaths in New Mexico, drug overdose was the leading cause.

Figure 1. Alcohol-related Deaths per 100,000, New Mexico and United States, 1990-2016

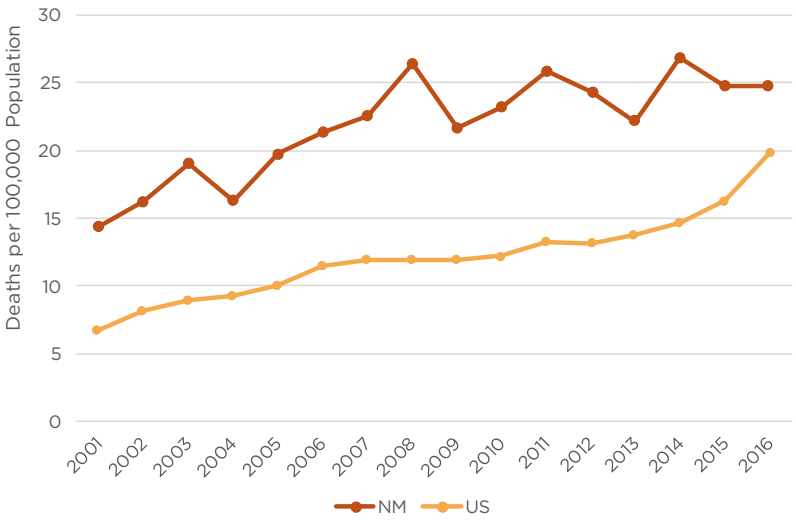


Note: Rates have been age-adjusted to the 2000 U.S. standard population.
Sources: NMDOH BVRHS, UNM GPS Program, CDC WONDER for U.S. data

Drug Overdose Death

New Mexico had the 12th highest drug overdose death rate in the nation in 2016. The consequences of drug use continue to burden New Mexico communities. Unintentional drug overdoses account for almost 86% of drug overdose deaths. The most common drugs causing unintentional overdose death in 2012-2016 were prescription opioids (i.e., methadone, oxycodone, morphine; 49%), heroin (33%), benzodiazepines (25%), methamphetamine (21%), and cocaine (13%) (not mutually exclusive). In New Mexico and nationally, overdose death has become an issue of enormous concern as potent drugs are widely available (Figure 2).

Figure 2. Drug Overdose Deaths per 100,000, New Mexico and United States, 2001-2016



Note: Rates have been age-adjusted to the 2000 U.S. standard population.
Sources: NMDOH BVRHS, UNM GPS Program, CDC WONDER for U.S. data

Contributing Factors

Risk and Resiliency Factors

Some substance use behaviors are more prevalent among New Mexico youth compared to the rest of the nation, including marijuana, methamphetamine, and tobacco use. On the other hand, results of the New Mexico Youth Risk and Resiliency Survey (NM-YRRS) revealed that youth with high levels of certain resiliency factors were less likely than others to engage in such behaviors as binge drinking, drug use, and tobacco use. Resiliency factors include elements like having a caring parent at home, an encouraging environment at schools with clear rules on what to do and what not to do, involvement in sports, clubs, and group activities, social support, and clear plans for the future.

Health Disparities

Death rates from alcohol-related causes increase with age. However, one in six deaths among working age adults (20-64) in New Mexico is attributable to alcohol. Male alcohol-related death rates are substantially higher than female rates. American Indians have higher alcohol-related death rates than other race/ethnicities. Rio Arriba and McKinley counties have extremely high alcohol-related death rates, driven by high rates in the American Indian and Hispanic male populations, respectively. The counties with the most deaths in 2012-2016, were Bernalillo, McKinley, San Juan, Santa Fe, and Dona Ana. Alcohol-related chronic liver disease (AR-CLD) death rates are extremely high among American Indians, both male and female, and Hispanic males. The high rates among American Indians and Hispanic males between the ages of 35 and 64 years represent a tremendous burden in terms of years of potential life lost (YPLL). While Bernalillo County had the highest number of deaths due to AR-CLD (617 for the years 2012-2016), two counties that stand out for their very high rates were Rio Arriba and McKinley, which have rates that are more than five times the national rate. Males are more at risk for alcohol-related injury death than females, with American Indian males at particularly elevated risk. Disparities remain in alcohol-impaired motor vehicle traffic crash death rates, both male and female American Indians have elevated rates, especially among middle aged males (age 25-64).

The highest drug overdose death rate was among Hispanic males, followed by White males. Rio Arriba County had the highest drug overdose death rate in the state (Figure 3). Bernalillo County continued to have the most deaths. Risky substance use behaviors such as binge drinking, heavy drinking, and current smoking are more prevalent among LGBT adults than straight adults in New Mexico (24% vs. 15%, 13% vs.6%, and 32% vs.20% respectively).[2]

Assets and Resources

New Mexico Department of Health (NMDOH) has a team of substance use epidemiologists dedicated to tracking and responding to substance use issues. Funding through CDC promotes use of evidence-based practices in preventing prescription drug overdose deaths, support of community health coalitions, evaluation of policies and programs, and partnership with health systems and law enforcement agencies to help prevent drug overdose deaths.

SAMHSA funding to the New Mexico Human Services Department has increased access to naloxone and medication-assisted treatment.

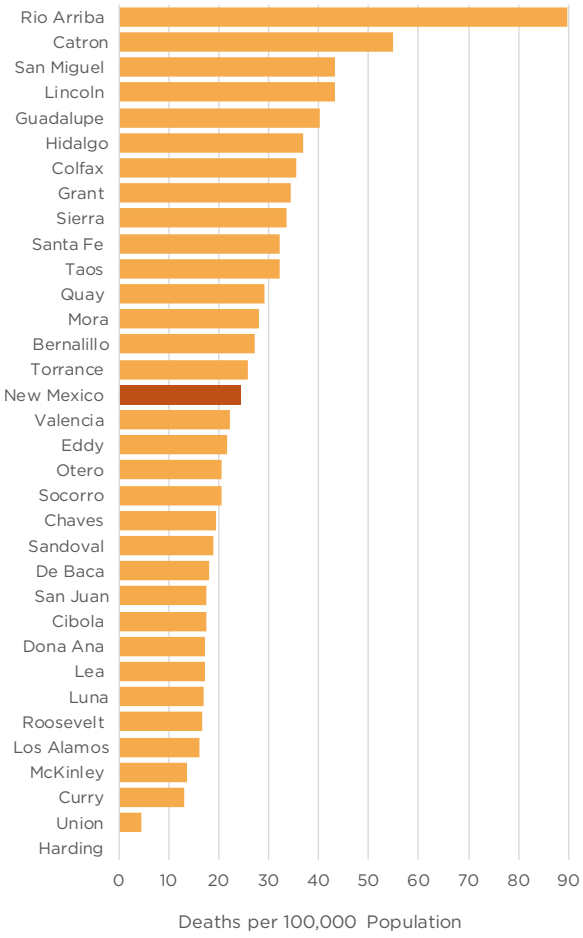
Through partnerships with professional licensing boards, pharmacies, community groups, academic institutions, health systems/hospitals, and a law enforcement training organization, NMDOH and NMHSD support a wide array of activities which address different aspects of drug overdose: reduce high-risk prescribing, improve emergency department reporting of drug overdoses and connections to treatment (including use of peer support workers), expand access to naloxone and medication-assisted treatment, prepare law enforcement and corrections officers to respond to overdoses, train pharmacists on naloxone billing requirements, and provide quarterly feedback reports to New Mexico clinicians who prescribe controlled substances.

Regional health promotion staff and community health councils focus on achieving equity in health, and ensuring equal opportunities and resources to enable all people to achieve their fullest health potential. Examples of their work include working with rural and tribal populations to address substance use in schools as well as community strengthening education and capacity, assisting partners to address substance use and its impact on quality of life, teaching youth about their rights to access care (behavioral, and reproductive) which holds promise as a strategy to develop preventive coping skills before substances are sought to escape the stress, trauma, or unhealthy relationships, and developing databases and maps exploring issues of substance use.

Summary

Substance use is a major public health issue in New Mexico. The major problems are excessive alcohol consumption resulting in the nation's highest alcohol-related death rate, and drug use resulting in the 12th highest overdose death rate nationally. The consequences of substance use constitute a huge burden on the state's economy as they are most prevalent among working aged adults (20-64 years), disproportionately affecting men and the American Indian population. The

Figure 3. Drug Overdose Deaths by County, New Mexico, 2012-2016



Note: Rates have been age-adjusted to the 2000 U.S. standard population.
Sources: NM HIDD, UNM GPS Program

New Mexico Department of Health's current efforts are focused on maximizing the use of the New Mexico Board of Pharmacy Prescription Monitoring Program, developing local responses to the prescription opioid and heroin epidemics, rigorously evaluating laws, policies, and regulations that have been recognized as "best practices" by both governmental and non-governmental public health authorities, and increasing the sharing of public health and public safety information with the goal of blocking access to diverted opioids and illicit drugs. Further strategies are being contemplated to address the substance use problem in New Mexico and limit its consequences.

What is Being Done?

- Enhancing the use of the New Mexico Board of Pharmacy Prescription Monitoring Program.
- Contracting multi-disciplinary work groups in high-burden communities to develop local responses to the drug overdose epidemic.
- Conducting rigorous evaluations of New Mexico laws, policies, and regulations that have been recognized as "best practices" by both governmental and non-governmental public health authorities.
- Increasing the sharing of public health and public safety information with the goal of blocking access to diverted opioids and illicit drugs.
- Increasing the use of medication assisted treatment

What Needs to be Done?

- Decrease alcohol outlet density in key areas.
- Increase alcohol screening and brief intervention in clinical settings.
- Increase the price of alcohol.
- Decrease alcohol sales hours.
- Encourage prescribers to adopt non-opioid based approaches to chronic pain management.
- Enhance the co-prescription, training, and dissemination of naloxone.

References:
1. Sacks, Jeffrey J., et al. 2010 National and State Costs of Excessive Alcohol Consumption. American journal of preventive medicine 49.5 (2015): e73-e79.
2. Greene, Naomi. Health Inequities by Sexual Orientation among New Mexican Adults, 2011-2014. NMTUPAC.com. October 2016. http://nmtupac.com/wp-content/uploads/2017/07/Health-Inequities-by-Sexual-Orientation-among-New-Mexican-Adults-2011-2014_062317.pdf

CHRONIC DISEASE

Chronic Conditions Pose Challenges for New Mexico

Chronic diseases including heart disease, cancer, emphysema, stroke, and diabetes account for five out of the six leading causes of death in New Mexico. Another common chronic disease, arthritis, is a leading cause of disability among adults. About 1 in 2 adults in the U.S. lives with a chronic disease.

Managing Multiple Chronic Conditions

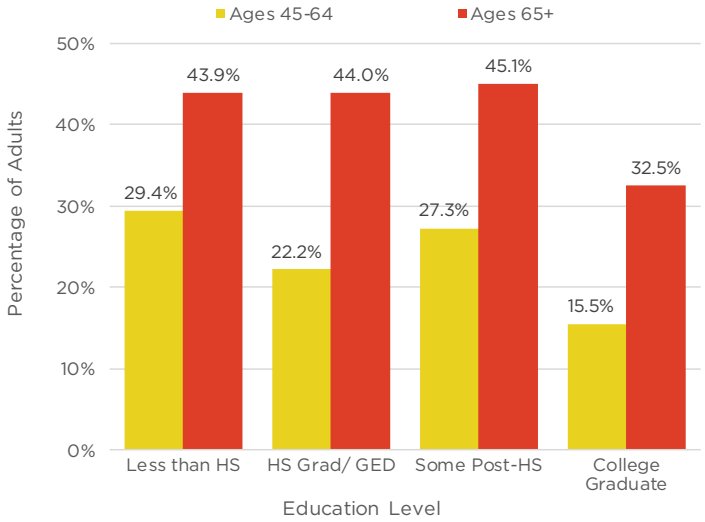
In this section, "multiple chronic conditions" means having been diagnosed with two or more of the following: cardiovascular disease (heart attack, angina or coronary heart disease, or stroke), current asthma, cancer (excluding skin cancer), COPD (emphysema and/or chronic bronchitis), arthritis, kidney disease, or diabetes.

Learning to successfully self-manage any chronic disease takes education, skill building, adequate time, dedication and resources. Many New Mexicans face the even greater challenge of trying to achieve long term control over more than one chronic condition. In New Mexico in 2016, over 23% of adults aged 45-64 had been diagnosed with multiple chronic conditions, and the rate was over 41% for those ages 65 and older. Lower educational attainment is associated with higher risk in both age groups (Figure 1). This means that many New Mexicans living with the challenge of multiple chronic conditions may not have the health literacy skills, income, community resources, time, or access to healthcare services that they need to take good care of themselves and reduce serious complications.

Recognizing Prediabetes: An Opportunity for Diabetes Prevention

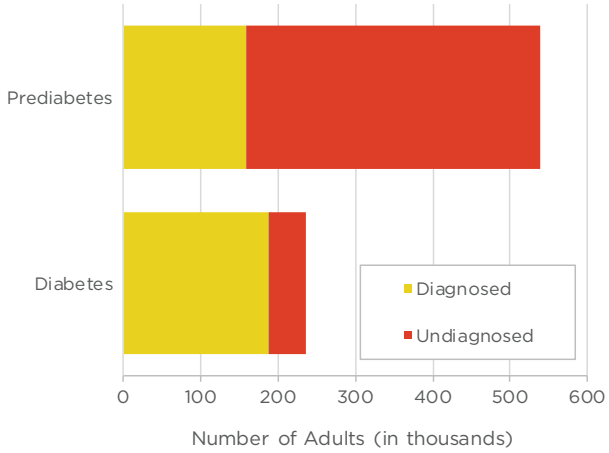
Prediabetes means a person's blood sugar is higher than normal but not yet high enough to be diagnosed with diabetes. People with prediabetes are at increased risk for heart disease, stroke, and developing Type 2 diabetes. In fact, 15-30% of people with prediabetes will develop Type 2 diabetes within 5 years in the absence of interventions. The good news is that this risk can be cut in half when people with prediabetes engage in structured lifestyle programs that result in improved eating habits, moderate physical activity, and a 5-7% weight loss.

Figure 1. Prevalence of Multiple Chronic Conditions among Adults Aged 45-64 and Aged 65+ by Educational Attainment, New Mexico, 2016



Source: NMDOH BRFSS

Figure 2. Estimated Numbers of Diagnosed and Undiagnosed Adults Aged 18+ with Prediabetes or Diabetes, New Mexico, 2016



Sources: NMDOH BRFSS, UNM GPS Program, NHANES

There are 1.6 million adults aged 18 years and over in New Mexico. About 235,000 adults in our state have diabetes and most of them, about 8 out of 10, are aware of it (Figure 2). A much larger group

of about 538,000 New Mexico adults are estimated to have prediabetes, but only about 3 in 10 are aware of it. This lack of awareness prevents adults with prediabetes from taking important steps to help prevent or delay developing Type 2 diabetes.

Contributing Factors

Risk and Resiliency Factors

Increasing age is the major risk factor for most chronic conditions. Many chronic diseases also share potentially modifiable risk factors such as physical inactivity, tobacco use, excessive alcohol consumption, unhealthy eating, and excess weight. These shared chronic disease risk factors, in turn, are strongly related to potentially modifiable social determinants that tend to cluster in communities, such as poverty, unsafe neighborhoods and housing, unemployment, discrimination, low educational attainment, lack of health insurance, unaffordable healthcare, and limited access to healthy, affordable foods. The chronic stress of these adverse living conditions contributes not only to unhealthy behaviors, but also results in persistently elevated cortisol levels that are believed to play a role in the development of numerous chronic conditions.

Just as adverse social determinants can increase the likelihood of risk factors for chronic conditions, communities that support healthy lifestyles can provide some protection and resilience. For example, creating or modifying environments to make it easier for people to walk or bike helps increase physical activity. Similarly, people who live in places with easy access to healthy, affordable foods are at an advantage compared to those who live where convenience stores and fast food venues are the primary resources for purchasing food.

Health Disparities

As previously noted, lower educational attainment, a marker for lower socio-economic status, is associated with an increased risk for multiple chronic conditions. Similarly, there is a stair step progression in adult diabetes rates in New Mexico from the lowest rates in the two wealthiest household income groups (>$50,000) to the highest rate in the poorest household income group (<$15,000).

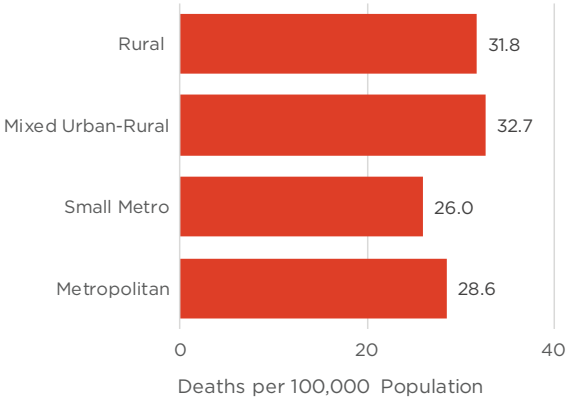
Heart disease death rates in New Mexico vary greatly by race and ethnicity. During the 3-year period 2014-2016, the rate for African Americans, 187.5 per 100,000, was statistically significantly higher than that of all other racial/ethnic groups. The next highest rate, that of Whites, 149.7 per 100,000, was statistically significantly different than all remaining racial/ethnic groups. The rates for American Indians and Hispanics were essentially the same. The population with the statistically significantly lowest heart disease death rate was the Asian/Pacific Islander group, with a rate of 84.4 per 100,000.

Lung cancer is the leading cause of cancer death among both men and women in New Mexico. Figure 3 demonstrates rates of lung cancer deaths for rural and urban counties during 2012-2016. The rates in mixed urban-rural counties, 32.7 per 100,000, were statistically significantly higher than in metropolitan (28.6 per 100,000) or small metro (26.0 per 100,000) counties; rates in rural counties (31.8 per 100,000) were statistically higher than in small metro counties. The association of greater rurality with higher rates of lung cancer deaths tracks with higher smoking rates among adults and youth in those areas.

Assets and Resources

Community programs linked to clinical services, called "community-clinical linkages," can help ensure people with or at high risk of chronic

Figure 3. Average Annual Lung Cancer Deaths per 100,000 Population by Urban and Rural Counties, New Mexico, 2012-2016



Age-adjusted to U.S. 2000 standard population
Sources: NMDOH BVRHS, UNM GPS Program

diseases have access to the resources they need to prevent, delay, or manage chronic conditions. The public health sector often leads efforts to build and improve these linkages between community and clinical sectors. A few examples of community-clinical linkages in New Mexico are provided below.

Paths to Health NM/Caminos de Salud NM uses an emerging statewide referral and data system to connect health care providers and individuals with evidence-based community programs. These programs have been developed for people with prediabetes to prevent or delay diabetes, for adults with diabetes or other chronic conditions to develop essential disease management skills, for people who have experienced cancer to address survival issues, and additional chronic disease related programs. Group classes are often held in non-clinical settings such as community and senior centers, as well as worksites. To expand availability, some programs are also offered online. Technical assistance and funding to launch Paths to Health New Mexico are being provided by the Department of Health.

Roadrunner Food Bank's Healthy Food Center is a medical referral food pantry at its headquarters in Albuquerque. Several participating health care centers ask patients about their food situations, and the medical professional gives those who are food insecure or consistently hungry a "prescription" for food. The food prescription provides the patient with a voucher to be used at the Healthy Foods Center to improve access to fruits, vegetables, dairy, milk and other healthy food items.

The Department of Health is sponsoring "office detailing" (onsite outreach and marketing of public health programs and resources) and online training for medical and oral health care providers across the state. This builds systematic tobacco screening and brief intervention efforts in clinical settings, and prompts referrals to effective phone- and web-based cessation services, e.g., the Department's QUIT NOW and DEJELO YA programs, which include free quit coaching in English and Spanish, as well as free nicotine patches and gum.

The Village of Cuba, New Mexico, and the University of New Mexico's Prevention Research Center have teamed up to fight diabetes and other obesity-related diseases through Step Into Cuba, an innovative walking program coordinated by the Nacimiento Community Foundation. Their efforts have created a healthier, more pedestrian friendly community with appealing opportunities for walking and hiking on surrounding scenic public lands. Local clinicians develop individually tailored walking plans with patients and write referrals to the Step Into Cuba walking program. This unique partnership also includes state, local and federal governments; the local school system, and many community volunteers.

Community Health Workers (CHWs), also known as Promotores de Salud and Community Health Representatives, are frontline public health workers who connect members of their own communities with crucial health care and social services. CHWs play a critical role in expanding access to care, reducing health disparities, and coordinating comprehensive care. The Department of Health has worked to build an infrastructure that ensures the training and sustainable integration of CHWs into care teams throughout New Mexico.

Summary

Among chronic diseases in New Mexico, cancer and heart disease account for the largest numbers of years of life lost before age 75. Those two diseases, along with diabetes, are chronic diseases with the greatest effect on health-related quality of life in New Mexico. Two high priorities around chronic disease are supporting New Mexicans in managing multiple chronic conditions and preventing prediabetes from progressing to diabetes. Community-based initiatives can help increase health-promoting assets and enhance resilience in otherwise resource deficient neighborhoods. Linking these community assets to clinical services creates bidirectional connections for individuals who can benefit most.

What is Being Done?

- Coalitions such as the New Mexico Chronic Disease Prevention Council, New Mexico Cancer Council, and New Mexico Diabetes Advisory Council engage public and private organizations and individuals statewide in shared strategic planning and working collaboratively toward population health goals.
- Chronic disease public health data are readily available to stakeholders and policy makers through queryable websites such as the Department of Health's Indicator-Based Information System.

What Needs to be Done?

- Creating sustainable funding mechanisms for effective community-clinical linkages, e.g., chronic disease prevention/self-management programs and CHW services, such as their incorporation into health care networks and health plans as covered benefits.
- Assessing the potential public health benefits and dangers of all proposed policies and legislation to make decisions that best support the long-term health of New Mexicans.
- Increasing access to affordable, healthy foods and safe places to be physically active in New Mexico's rural and frontier areas.

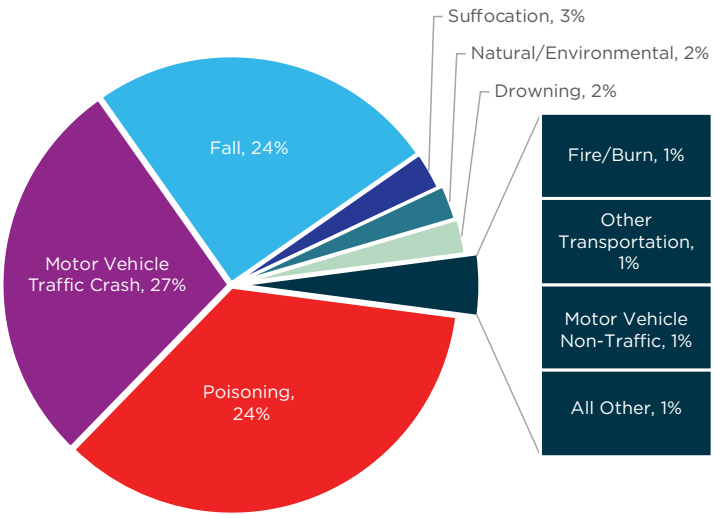
UNINTENTIONAL INJURIES

Injury Affects New Mexicans Across the Lifespan

Unintentional injury was the leading cause of death among New Mexicans aged 1 to 44 years in 2016 and the third leading cause of death among New Mexicans of all ages. In 2016 the unintentional injury death rate in New Mexico (69.5/100,000 population) was nearly 1.5 times the national rate (47.4). The leading causes of unintentional injury deaths in New Mexico are poisoning, motor vehicle traffic crashes, and falls (Figure 1). The vast majority of poisoning deaths (about 85%) are attributable to drug overdose, most of which are unintentional.

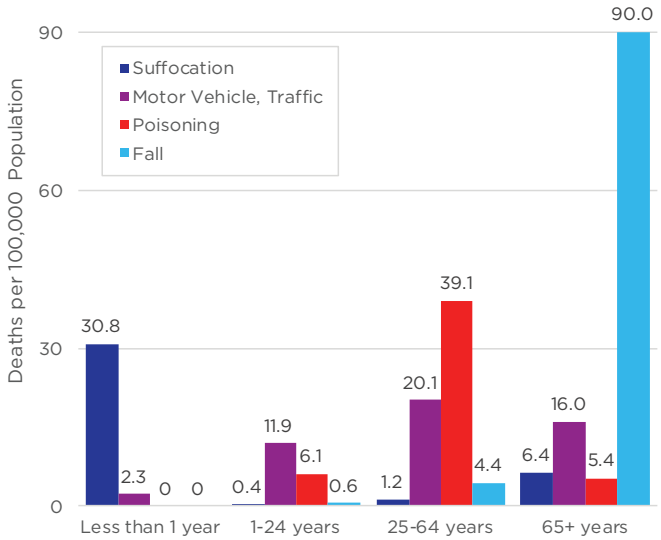
Leading causes of unintentional injury deaths vary significantly by age. Between 2012 and 2016, the leading cause of unintentional injury deaths for infants less than one year of age was suffocation; for children and young adults aged 1-24 years, it was motor vehicle traffic crashes; for persons aged 25-64 years, it was poisoning; and for persons aged 65 years and older, it was falls (Figure 2).

Figure 1. Leading Causes of Unintentional Injury Death by Cause of Injury, New Mexico, 2012-2016



Sources: NMDOH BVRHS

Figure 2. Unintentional Injury Deaths by Age Group and Mechanism of Injury, New Mexico, 2012-2016



Sources: NMDOH BVRHS, UNM GPS Program

Suffocation Among Infants (Aged Less than One Year)

Between 2012 and 2016, 41 infants died of suffocation in New Mexico, of whom 63% were male. The New Mexico suffocation death rate among infants from 2012-2016 (30.6) was 19% higher than the United States rate (25.7/100,000). Suffocation accounted for 87% of all New Mexico unintentional injury infant deaths between 2012 and 2016.

Suffocation deaths among infants have been increasing in New Mexico. During 2007 to 2011, there were 20 such deaths in New Mexico, compared to 41 between 2012 and 2016.

Motor Vehicle Traffic Injury Among 1-24 Year Olds

Motor vehicle traffic crashes are the highest-ranked cause of death for New Mexico children and young adults aged 1 to 24 years, with 96 deaths in 2016. Those between the ages of 15 and 24 years had the highest motor vehicle traffic crash death rates in 2016 (27.0/100,000). Among New Mexicans aged 1-24, the rate for males (18.8/100,000) was approximately double that for females (9.5/100,000).

Rates of New Mexico unintentional motor vehicle traffic crash deaths among persons aged 1 to 24 decreased by half in the decade from 2002 to 2011, from 21.1/100,000 to 10.3/100,000. The

reduction in motor vehicle traffic crash injury deaths during this time can be attributed to several factors, including but not limited to: the New Mexico Safety Belt Use Act of 2001; the New Mexico Child Restraint Act of 2005; and the 2005 Senate Bill 109, Interlocks for Juvenile DWI Offenders. Despite continued policy advances, the death rate rose from 2011-2013 (10.4/100,000) to 2014-2016 (12.9/100,000).

Drug Overdose (Poisoning) Deaths Among 25-64 Year Olds

In 2016, 427 of the 497 New Mexico drug overdose deaths (85.9%) were among residents aged 25-64 years. Most drug overdose deaths were unintentional (428 of 497, or 86.1%). Unintentional drug overdose death rates among persons aged 25-64 have been higher in the Northeast Health Region, but much variation exists among counties in that region.

Deaths due to drug overdose can result from drug misuse such as taking too much of a drug prescribed for medical reasons. The Centers for Disease Control and Prevention and the American Association of Poison Control Centers have developed safety tips for the public to follow while using prescription drugs. Patients should follow the directions on the label, only take prescription drugs that were prescribed to them by a health care provider, never take larger or more frequent doses of their medication, and never share or sell their medications.

Falls Among Older Adults (Ages 65 Years and Older)

Falls are the leading cause of unintentional injury death among adults 65 years of age and older in the United States and New Mexico. The older adult fall-related death rate in New Mexico was 91.6/100,000 in 2016, which was 52% higher than the national rate (60.2/100,000).

From 2012 to 2016, there were 1,444 adults aged 65 years and older who died of fall-related injuries, with likelihood of fall-related death increasing with age.

Most fall-related injuries leading to death among older adults are hip fractures and traumatic brain injuries. Injuries from a fall can limit mobility and independent living and increase the risk of serious injury and early death. Many people who fall develop a fear of falling and may become isolated and more sedentary, further increasing their fall risk.

Most older adult falls are preventable and not a normal part of aging. Most falls happen at home, where safety hazards can include rugs that are torn or do not lie flat, stairs that are in poor repair, broken or no handrails for stairs, poor lighting, and clutter on floors or in walkways. Effective strategies for preventing falls among older adults include annual screenings and any necessary follow-up for strength and balance issues; physical activity that serves to maintain strength and balance and to increase mobility; home safety modifications to reduce hazards; periodic reviews and management of all medications that have been associated with an increased risk of falling; and annual vision checks.

Contributing Factors

Risk and Resiliency Factors

Poverty is a risk factor for unintentional injuries. Compared to those with higher income levels, adults aged 45 years and older with lower annual incomes were more likely to have a fall and also more likely to be injured in a fall (Figure 3).

Age is considered a risk factor for unintentional fall injuries and death among the elderly. Additional risks can be attributed to chronic disease, social isolation, physical inactivity, decrease in vision, increase in misuse of prescribed medication, depression, and home safety.

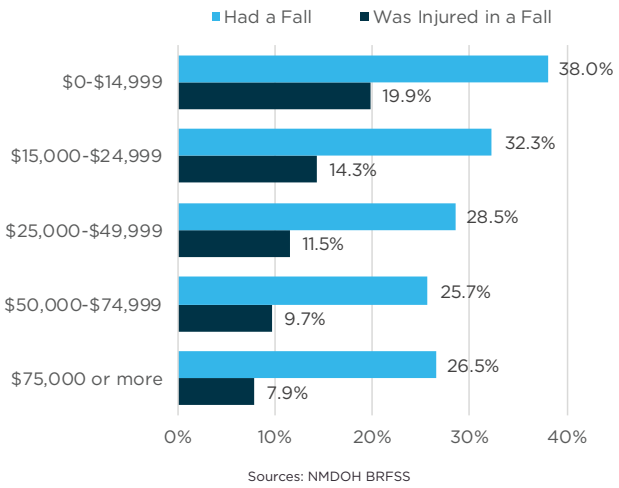
Infants are at highest risk for unintentional suffocation while they are sleeping. This can be attributed to unsafe sleeping practices, co-sleeping with a parent, a parent being sleep-deprived, or a parent being intoxicated. To reduce the risk of suffocation while sleeping, infants should be put to sleep alone, on their backs, in a crib (ABC). Loose bedding and soft toys should be removed from the crib prior to sleeping. Infants should not be in smoking environments.

Health Disparities

New Mexico adults aged 85+ years had the highest rate of unintentional injury death in 2016 (517.8/100,000) followed by those aged 75-84 years (154.7/100,000), and 35-44 years (83.3/100,000).

The number of New Mexico unintentional injury deaths per 100,000 population in 2016 was nearly twice as high among males (89.7) as females (50.9). The leading cause of unintentional injury death among males that year was drug overdose, which resulted in 280 deaths, followed by motor vehicle traffic crashes (270 deaths) and falls (178 deaths). The leading cause of unintentional injury death among females in 2016 was falls resulting in 179 deaths, followed by drug overdose (148 deaths), and motor vehicle traffic crashes (148 deaths).

Figure 3. Percentage of Adults Who Fell and Were Injured in a Fall by Annual Household Income, New Mexico Adults Aged 45+ Years, 2012, 2014, and 2016



Sources: NMDOH BRFSS

The 2016 rate of unintentional injury death rate was highest for American Indians (120.3), followed by Hispanics (68.5), Whites (56.5), and Black/African Americans (56.0). Asian or Pacific Islanders had the lowest unintentional injury death rate (27.7). In 2016, the leading cause of unintentional injury death for American Indians and Asian/Pacific Islanders was motor vehicle traffic crashes. Among Hispanics and African Americans, drug overdose was the leading cause of unintentional injury death, and falls was the leading cause of unintentional injury death among Whites.

Age-adjusted 2016 unintentional injury death rates were higher in rural (100.4) and mixed rural-urban (71.2) counties than urban counties (65.0), largely due to higher numbers of motor vehicle traffic crash-related deaths. The higher risk in rural and mixed rural-urban counties may be due to limited policing of speed limits, increased prevalence of two-lane roads, and longer response times of paramedics and other emergency responders after an injurious motor vehicle crash has occurred. Distracted driving, speeding, fatigue, and drunk driving are important causes of motor vehicle traffic crash-related injury deaths.

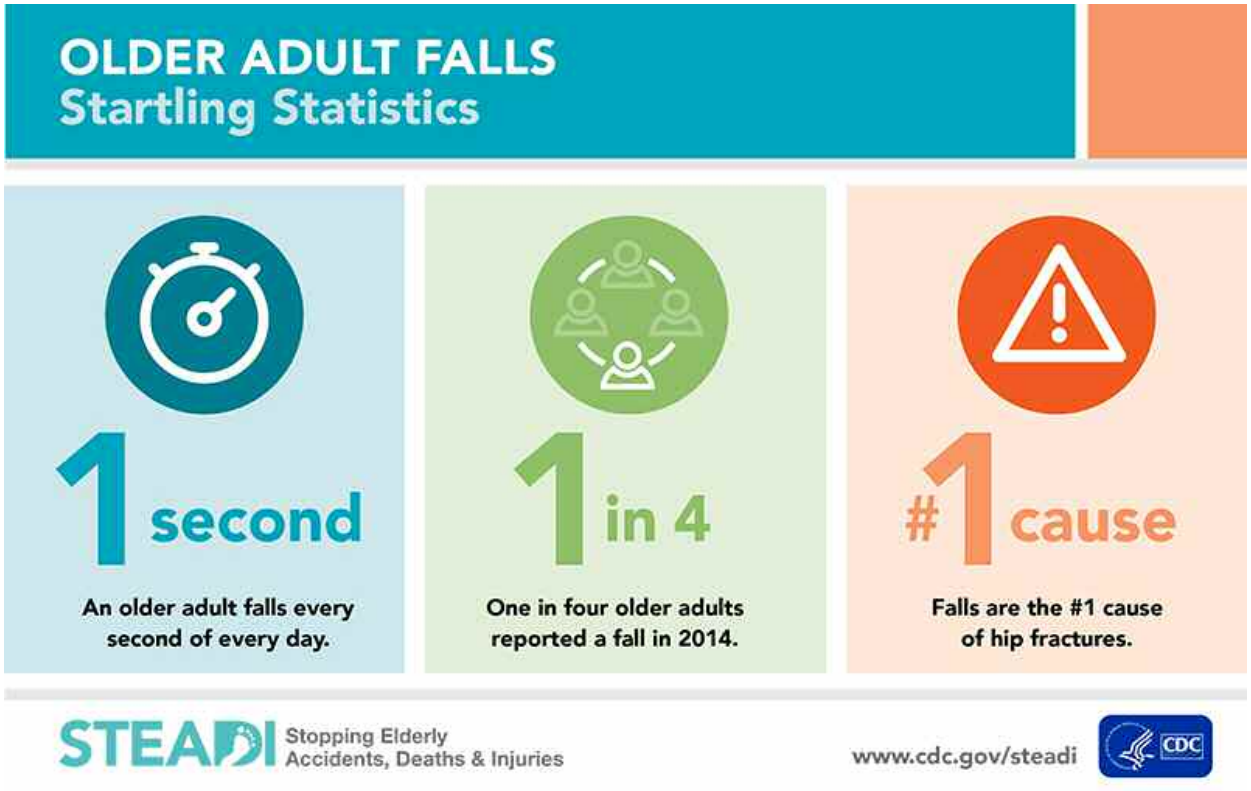
Assets and Resources

Support for health and family service professionals statewide from 2012 to 2017 through Safe Sleep education of approximately 3,000 staff members in over 150 trainings for Women, Infants and Children (WIC); Children's Medical Services; Families First; Health Promotion; Children Youth and Families Department (CYFD); registered home daycare programs; and early childhood home visitation programs for expecting and new parents is provided.

Peer-to-peer training for healthcare providers on the implementation of the Centers for Disease Control and Prevention's fall prevention toolkit, "Stopping Elderly Accidents, Deaths and Injuries" (STEADI) continues to be provided. The objective of STEADI is to address multiple risk factors for falls and to provide referrals to appropriate resources, including evidence-based falls preventions programs as appropriate.

Summary

Unintentional injury is the third leading cause of death among New Mexicans of all ages. The New Mexico rate has been higher than the national rate. But the four leading causes of unintentional injury deaths rank the same in New Mexico as in the U.S.; poisoning, motor vehicle traffic crashes, falls and suffocation. Most unintentional injuries are preventable, through investment in prevention strategies including better and safer roads, more effective laws, increased law enforcement, and more education. Prevention also starts by changing habits, changing attitudes and making better choices.



What is Being Done?

- Home safety inspections and modifications: NMDOH is encouraging public safety services to participate in improving home safety. Effective activities for fire departments and EMS include conducting home visits to community members at risk for falls and to provide education about how to make homes safer to prevent falls and other injuries including promoting safe infant sleep practices. Effective activities for police agencies include conducting similar activities when they are called to homes.
- The Adult Falls prevention partners are promoting exercise and balance falls prevention programs -- Otago, A Matter of Balance (MOB), Tai Ji Quan: Moving for Better Balance, and Tai Chi for Arthritis. The objectives of these programs are to improve strength, balance, mobility, and daily functioning to reduce one's risk of fall and related injuries.
- The NM Board of Pharmacy, NMDOH and healthcare licensing boards are working to enhance the effectiveness of the Prescription Monitoring Program.
- The Overdose Prevention Program is contracting with multi-disciplinary work groups in high-burden communities to develop local responses to the opioid epidemic.
- The Office of Injury Prevention is conducting hospital-based Safe Sleep training for parents of newborns before hospital discharge.

What Needs to be Done?

- Increase the provision of evidence-based Early Childhood Home Visiting programs to include at-risk families.
- Increase the use of child safety seats and safety belts by providing more seat installation training and improved enforcement.
- Address alcohol-impaired driving, which is among the most important preventive measures to reduce motor vehicle-related injuries and deaths. Increase and improve police traffic enforcement in high injury/death localities.
- Improve coverage of emergency medical services in rural areas.
- Improve opioid prescribing practices and availability of naloxone.
- Build sustainability of older adult falls programs throughout New Mexico among healthcare professionals, hospital based liaison services, program referral system, senior care centers, assisted living facilities and retirement centers.
- Expand hospital-based safe sleep training programs statewide.


VIOLENCE

The Violence Epidemic in New Mexico

Violence is a public health problem of epidemic proportions, both nationally and in New Mexico. In 2016, violence accounted for nearly 65,000 deaths in the United States. New Mexico had the second highest intentional injury death rate in the U.S. in 2016, 32.8 deaths per 100,000 population.[1]

Intentional Self-harm

For over two decades, suicide rates in New Mexico have been at least 50% higher than U.S. rates. In 2016, New Mexico had the fourth highest suicide rate among all U.S. states.[1] Over the last decade, the suicide rate in New Mexico increased 25%, from 17.7 per 100,000 in 2006 to 22.2 per 100,000 in 2016, mirroring a similar increase (21%) in suicides at the national level.[2]

In 2016, suicide was the ninth leading of cause of death in New Mexico, accounting for a total of 469 deaths. However, among persons 15-44 years of age, suicide was the 2nd leading cause of death. Suicide was responsible for 13,523 Years of Potential Life Lost (YPLL), fourth after unintentional injuries, cancer, and heart disease deaths.

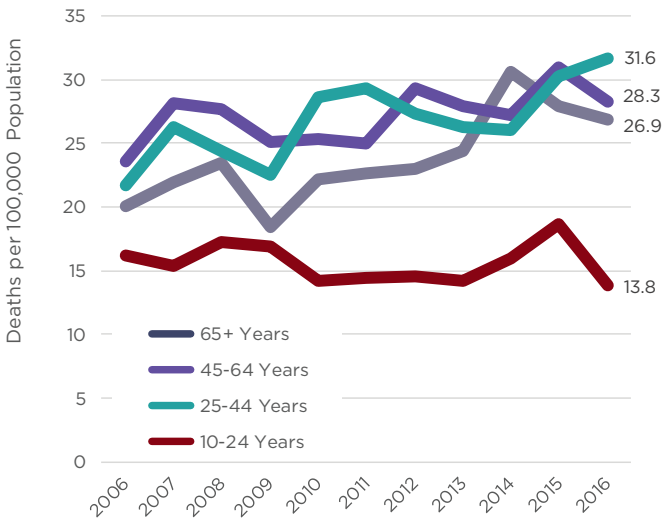
Most suicides were caused by firearm injuries (52.9%), followed by suffocation (25.5%), poisoning (16.8%), and other injury mechanisms (4.8%). Over the past 8 years, firearm suicide rates in New Mexico increased by 21% and suffocation suicide rates increased by 38%.

Assault

Homicide, or death caused by an injury purposely inflicted by other persons, is a significant public health problem in New Mexico. Annual homicide rates in New Mexico have consistently been higher than U.S. rates. In 2016, New Mexico had the sixth highest homicide rate (9.4 per 100,000) in the nation.[1] Recently, homicide rates in New Mexico increased by 42%, from 6.6 per 100,000 in 2013 to 9.4 per 100,000 in 2016, the highest homicide rate in New Mexico in the past 18 years.

Firearm injury was the leading cause of assault deaths, accounting for 59.8% of homicides, followed by other causes (21.9%), cut/pierce

Figure 1. Suicide Rates by Age Group, New Mexico, 2006-2016



Sources: NMDOH BVRHS, UNM GPS Program

(15.7%), and suffocation (2.7%). Between 2010-2012 and 2014-2016, firearm assault death rates in New Mexico increased by 20% and suffocation assault death rates tripled from 0.1 to 0.3 per 100,000 population.

Firearm Violence

Firearm-related violence is associated with significant morbidity and mortality. In the U.S., more than 36,000 persons died of a firearm injury in 2016. New Mexico had the eighth highest rate of firearm death among U.S. states.[1] Over the past 17 years, firearm death rates in New Mexico have been consistently higher than U.S. rates and have been increasing more steeply than the U.S. rate.

In 2016, the firearm death rate was 17.8 per 100,000, accounting for 381 deaths among New Mexico residents. From 2012-2016, most firearm deaths were due to intentional self-harm (69.0%), followed by assault (25.7%) and legal intervention (3.3%). Only 0.6% of firearm injury deaths were unintentional. During this 5-year period, firearm suicide rates increased by less than 2%, whereas firearm homicide rates increased by 35.7%.

Sexual Violence

Sexual violence is a major public health problem with serious long-term physical and mental health consequences that disproportionately impact young people. Nearly half of women, and nearly all men, who report ever having been forced to have sex were first raped as a child. Youth with a history of forced sex report lower emotional well-being and self-esteem and feelings of sadness and hopelessness. Numerous studies have documented the long-term impact of sexual violence victimization on mental health, suicide risk, and substance abuse.

Data from the National Intimate Partner and Sexual Violence Survey 2010-2012 State Report indicate that more than one third of women in New Mexico (37.8% or an estimated 296,000 women) experienced some form of contact sexual violence victimization during their lifetime; and one in five women (20.4%) experienced rape at some point in life.[3] In addition, 16.0% of New Mexico men (or an estimated 120,000 victims) experienced some form of contact sexual violence victimization during their lifetime; and 5.5% of New Mexico men were made to penetrate someone at some point in their life.

Contributing Factors

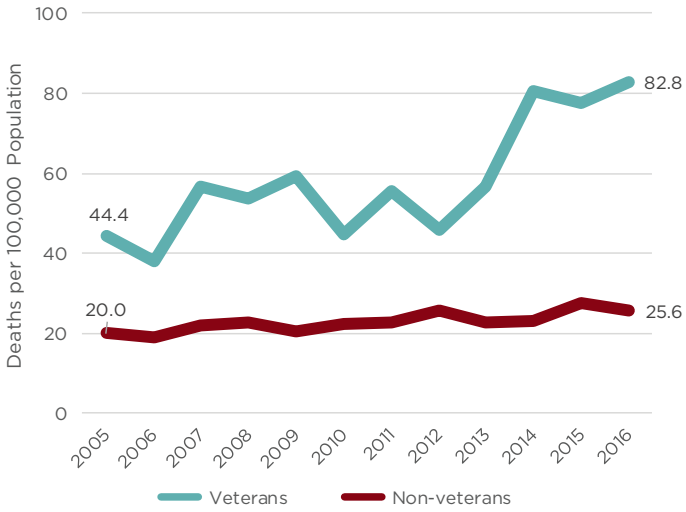
Health Disparities

Intentional Self-harm

From 2012-2016, the male suicide rate (33.5 per 100,000) was more than three times higher than the female suicide rate (9.9 per 100,000). Males tend to use more lethal means and do not typically disclose their intent to harm themselves. However, the sex disparity in New Mexico suicides has narrowed since 1999 due to a larger increase in death rates among females (55%) compared to males (14%). There was an almost threefold increase in suicides among American Indian females from 1999-2003 (3.6 per 100,000) to 2012-2016 (9.9 per 100,000).

According to U.S. Department of Veterans Affairs, the New Mexico veteran suicide rate was significantly higher than the U.S. rate after accounting for differences in age.[4] The suicide rate among New Mexico veterans has been on average 2.5 times higher than the suicide rate in the New Mexico non-veteran population (Figure 2).

Figure 2. Suicide Rates in the Adult Population 18 Years and Older by Veteran Status, New Mexico, 2005-2016



Data have been age-adjusted to the 2000 U.S. Standard Population.
Veteran status from the NM Death Certificate.
Sources: NMDOH BVRHS; U.S. Census Bureau, 2005-2016 American Community Survey, 1-Year population estimates.

Assault

From 2012-2016, the male homicide rate (11.7 per 100,000) was 3.6 times higher than the female homicide rate (3.2 per 100,000). During this 5-year period, the female homicide rate doubled, whereas the male homicide rate increased by 28%. Homicide rates increased with age until 25-34 years, then decreased with age through 65 years and older. The highest homicide rate (24.7 per 100,000) was among males 20-24 years of age.

From 2012-2016, homicide rates were highest among persons of color. American Indians and Blacks were disproportionately represented in assault deaths. The highest homicide rates were among Black males (26.4 per 100,000) and American Indian males (23.7 per 100,000).

Fifteen percent of assault deaths in New Mexico were intimate partner violence (IPV) related, i.e. the victim was killed by a current or former girlfriend/boyfriend, dating partner, ongoing sexual partner, or spouse. More than half (53.1%) of female homicides were IPV related compared to 3.6% of male homicides.

Firearm Violence

The firearm death rate among males (28.4 per 100,000) was nearly six times higher than among females (5.0 per 100,000). Males 85 years and older had the highest firearm death rate in the state. Blacks (20.1 per 100,000) and Whites (20.0 per 100,000) had the highest firearm death rates; the rate among Whites was significantly higher than the rates among Hispanics (13.5 per 100,000) and American Indians (9.6 per 100,000). White and Black males had the highest firearm death rates, 33.7 and 32.2 per 100,000, respectively.

Sexual Violence

According to results from the 2016 New Mexico Behavioral Risk Factor Surveillance System, 10.7% of New Mexico adults were raped or experienced attempted rape at some time in their lives. Sexual violence victimization was more common among females (17.0%) than males (4.0%); and among Whites (11.5%) compared to Hispanics (8.0%) and American Indians (6.8%). Adults living in households with an income <$15,000 (15.8%) were more likely to report a lifetime history of rape than adults living in households with an income of $75,000 or more (6.8%). Adults who identified as lesbian, gay, bisexual, transgender, or questioning (LGBTQ) were 2.5 times more likely to have experienced sexual assault in their lives (26.7%) compared to straight adults (10.2%). Among high school students in New Mexico, 10.1% of girls and 4.1% of boys reported having been physically forced to have sexual intercourse when they did not want to.

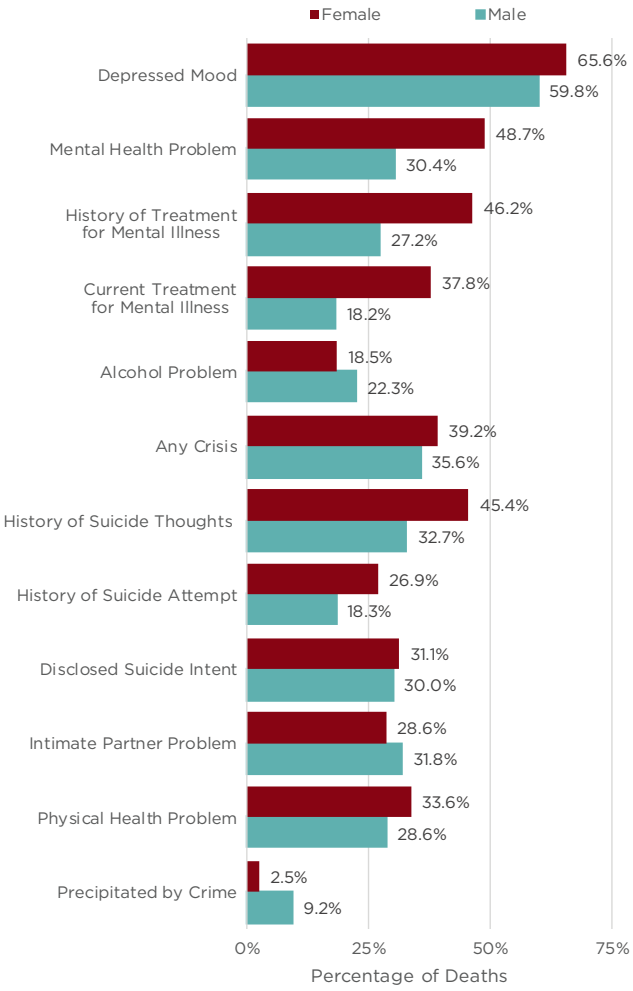
Risk and Resiliency Factors

Risk factors associated with suicide include mental disorders, previous suicide attempts, substance abuse, a history of child maltreatment, feelings of hopelessness, isolation, barriers to mental health treatment, loss (of relationships, social connections, work, finances), physical illness, and easy access to lethal means, such as firearms.

The most common circumstances associated with New Mexico suicides in 2015 were a depressed mood at the time of death (61.2%); a recent crisis in the person's life (36.5%); a history of suicidal thoughts (35.8%); and a current diagnosed mental health problem (34.9%). Female suicide victims were more likely to have a mental health problem, to have received mental health treatment, and to have previously attempted suicide than males (Figure 3). Male suicides were more likely to have been precipitated by a felony crime; and to have had a contributing intimate partner problem, such as a divorce, break-up, or relationship conflict.

Substance use, particularly alcohol use, was a common risk factor in suicides. Approximately one in five males (22.3%) and females (18.5%) had an alcohol problem or addiction at the time of

Figure 3. Circumstances Associated with Suicides by Sex, New Mexico, 2015



Source: NMDOH, New Mexico Violent Death Reporting System (NM-VDRS)

death. Toxicology results indicate that nearly one third of suicide victims (30.2%) who were tested for blood alcohol had a positive test. And, among those who tested positive, 70% of both males and females had a blood alcohol concentration (BAC) greater than or equal to the legal limit of 80 mg/dl or 0.08%.

Approximately 30% of both male and female suicide victims in New Mexico had disclosed their suicidal intent prior to their death (Figure 3). Raising public awareness about risk factors for suicide is an important component of a comprehensive suicide prevention strategy to identify persons with elevated suicide risk and refer them for needed treatment and support.[5]

From 2012-2016, 53% of suicides and 60% of homicides were caused by firearms. The presence of a household firearm is a known risk factor for firearm related death due to self-inflicted or assault injuries.[6] According to 2016 results from the New Mexico Behavioral Risk Factor Surveillance System, nearly 38% of New Mexico households had a firearm in or around the house. Among households with a firearm, one in five households (20.6%) had a loaded and unlocked firearm in or around the house; and among all New Mexico households, nearly 8%, or about one in 13 households, had a loaded and unlocked firearm in or around the house.

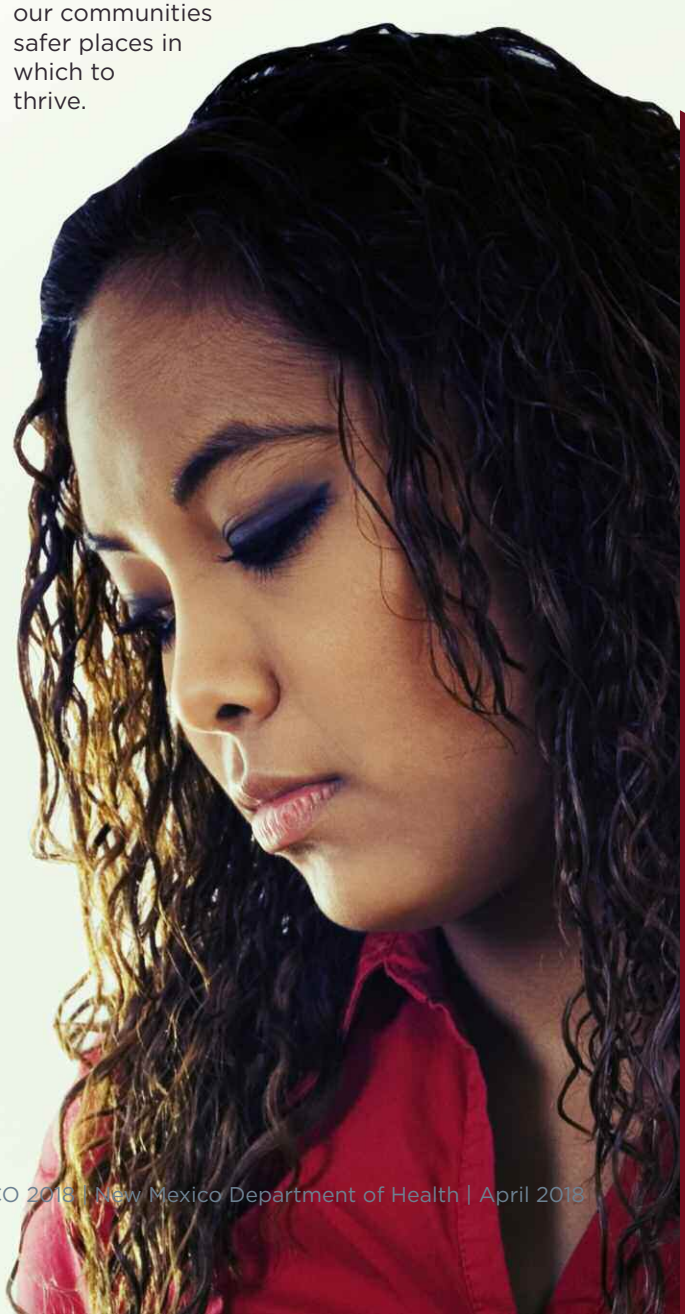
Temporarily removing a firearm from the homes of persons with increased suicidal risk has been shown to reduce suicides.[7] This strategy can be implemented by families, local communities, or through legislation that mandates temporary removal of a firearm by law enforcement or licensed firearm dealers.

Assets and Resources

The New Mexico Department of Health collaborates with many violence prevention stakeholders across the state to develop, implement, and evaluate evidence based suicide prevention programs. These partners include other state agencies, researchers, medical facilities and providers, schools, coalitions, and county community health councils.

Summary

The biggest violence problem in New Mexico is suicide. A comprehensive, coordinated approach to violence prevention is necessary to reduce intentional self-harm and interpersonal assault morbidity and mortality. These violence related health outcomes have many risk factors in common. By addressing these risk factors at the population and community levels, targeting population or geographic areas with heightened risks, and implementing and evaluating evidence based prevention strategies and policies, we can reduce and prevent violence related injury and death in New Mexico and make our communities safer places in which to thrive.



What is Being Done?

- NMDOH epidemiologists are analyzing and disseminating county level mental health and suicidal behaviors data to support local suicide prevention efforts; and working with suicide prevention stakeholders to support the development and implementation of evidence-based suicide prevention strategies.
- The NMDOH Office of School and Adolescent Health Behavioral Health Team provides youth suicide prevention and postvention training and technical assistance to schools and community partners. All behavioral health staff are trained in QPR (Question, Persuade, Refer), an evidence-based suicide prevention gatekeeper modality; and offer this training to local suicide prevention stakeholders.
- The NMDOH contracts with eleven community-based sexual violence prevention programs across the state to deliver primary prevention programs that focus on identifying and understanding healthy relationships, rape myth, gender norms, and bystander intervention. Some programs focus specifically on members of disparate communities, including people living with disabilities, the immigrant community, and lesbian, gay, bisexual, transgender, or questioning (LGBTQ) populations to reduce sexual violence victimization risk factors and promote protective factors.

What Needs to be Done?

- Strengthening economic supports to families. Strategies to strengthen household financial security and to provide family-friendly work policies, reduce parental stress and depression, and reduce child abuse and neglect.
- Strengthening access and delivery of behavioral health care through coverage of mental health conditions in health insurance policies and reduction of provider shortages in underserved areas, targeting high risk populations, such as veterans and older adults.
- Create protective environments by reducing access to lethal means among persons at risk of suicide. Storing firearms in a secure place, unloaded, and separate from ammunition; and keeping medications and other household products in a secure location away from people who may be at risk or who have made prior attempts.
- Teaching coping and problem-solving skills. Social-emotional learning programs address a range of suicide and intimate partner violence risk factors and provide children and youth with help seeking, conflict resolution, and coping skills that enable them to resolve problems and address negative behaviors. Parenting skill and family relationship programs can reduce anxiety, depression and substance use; and prevent intimate partner violence perpetration and victimization.
- Identifying and supporting people at risk of suicide, through gatekeeper training programs, crisis intervention, and treatment for people at risk of suicide, targeting high risk populations, such as veterans and older adults.
- Promoting family environments that support healthy development through early childhood home visitation programs, which have been shown to prevent youth violence and other adolescent health risk behaviors.

References:
1. Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. Web-based Injury Statistics Query and Reporting System (WISQARS) [online]. (2015) [accessed 2017 Nov 02]. Available from URL: www.cdc.gov/ncipc/wisqars.
2. Centers for Disease Control and Prevention, National Center for Health Statistics. Compressed Mortality File 1999-2015 on CDC WONDER Online Database, released December 2016. Data are from the Compressed Mortality File 1999-2015 Series 20 No. 2U, 2016, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Accessed athttp://wonder.cdc.gov/cmf-icd10.html on Sep 13, 2017 4:30:37 PM.
3. Smith, S.G., Chen, J., Basile, K.C., Gilbert, L.K., Merrick, M.T., Patel, N., Walling, M., & Jain, A. (2017). The National Intimate Partner and Sexual Violence Survey (NISVS): 2010-2012 State Report. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention.
4. New Mexico Veteran Suicide Fact Sheet. Available at: https://www.mentalhealth.va.gov/docs/data-sheets/Suicide-Data-Sheet-New-Mexico.pdf.
5. U.S. Department of Health and Human Services (HHS) Office of the Surgeon General and National Action Alliance for Suicide Prevention. 2012 National Strategy for Suicide Prevention: Goals and Objectives for Action. Washington, DC: HHS, September 2012.
6. Siegel M, Ross C, King C. The relationship between gun ownership and firearm homicide rates in the United State, 1981-2010. Am J Public Health. 2013; 103:2098-2105.
7. Barber CW, Miller MJ. Reducing a suicidal person's access to lethal means of suicide: a research agenda. Am J Prev Med. 2014;47(3S2):S264-S272.

MENTAL HEALTH AND MENTAL DISORDERS

Mental Disorders are Common, Serious, and Treatable

Mental illness is common in the United States and around the world. Mental disorders are generally characterized by "a combination of abnormal thoughts, perceptions, emotions, behavior and relationships with others."[1] They include depression, bipolar affective disorder, schizophrenia and other psychoses, dementia, intellectual disabilities and developmental disorders including autism, as defined in the Diagnostic and Statistical Manual of Mental Disorders, 5th Edition (DSM-5).[2]

Burden of Mental Illness

Mental illness is one of the main causes of years of healthy life lost to disability (YLD).[3] But the estimate of the burden of mental illness may be underestimated by more than a third.[4] Mental illness affects not only the mental and physical health and well-being of the individual but also has a tremendous impact on families and communities.

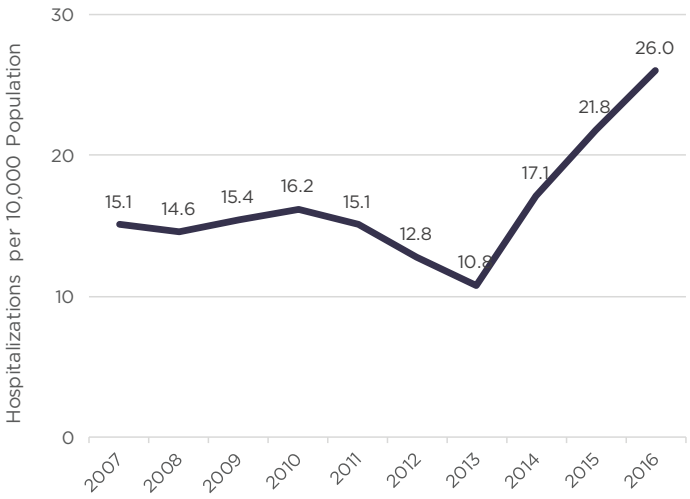
In the U.S. in 2015, excluding developmental and substance use disorders, there were an estimated 43.4 million adults aged 18 or older with any mental illness (AMI) within the past year.[5] This represents nearly one in five of all U.S. adults. AMI can range in impact from no or mild impairment to significantly disabling impairment, such as individuals with serious mental illness (SMI).

The burden of mental illness is particularly concentrated among those who experience disability due to SMI. In the U.S. in 2015, there were an estimated 9.8 million adults aged 18 years or older with SMI within the past year, or 4% of all U.S. adults.[6] Individuals with SMI have higher mortality rates and die earlier than the general population.

Mental disorders are also common in childhood and adolescence. Approximately one in five children either currently or at some point during their life have had a seriously debilitating mental disorder.[7] Adult mental illness is commonly preceded by psychiatric conditions that begin during childhood.

Treatment of mental illness can reduce the level of disability and improve quality of life. However, in 2014, only about 45% of U.S. adults who experienced a mental illness in the past year received mental health care[8]. Barriers to receiving treatment include cost and insurance coverage issues, not feeling a need for treatment or thinking that the problem can be handled without treatment, and stigma associated with mental illness. Those who haven't received mental health care on an outpatient basis as well as those who are experiencing a particularly severe episode of mental illness may require hospitalization. Hospitalizations in the U.S. due to mental disorders and substance use accounted for nearly 6 percent of all inpatient stays in 2014, up 20.1 percent from 2005.[9]

Figure 1. Hospitalizations for Depression by Year, New Mexico, 2007-2016



Non-federal hospitals only. ICD-9 codes 296.2, 296.3 and 311; ICD-10 codes F32 and F33. Data have been directly age-adjusted to the U.S. 2000 standard population.
Sources: NMDOH HIDD, UNM GPS Program

Depression

Depression is a common mental disorder characterized by sadness, loss of interest or pleasure, feelings of guilt or low self-worth, disturbed sleep or appetite, tiredness and poor concentration.[1] Depressive symptoms can be chronic, lasting over a long period of time, or episodic and recurring, impairing individuals' ability to function at work or school and to cope with daily life. In 2015, the World Health Organization (WHO) ranked depression as the single largest contributor to global disability (7.5% of all years lived with disability) and anxiety as sixth (3.4%).[10] When depression is severe, it can lead to suicide.

The New Mexico Behavioral Risk Factor Surveillance System (BRFSS) estimated 9.8% of New Mexico adults were suffering from depression in 2016. According to results from the 2014-2015 National Survey of Drug Use and Health, 11.5% of New Mexico youth 12-17 years had a major depressive episode in the last 12 months.[11]

Prevention programs have been shown to reduce depressive symptoms, both in children and adults, and there are also effective treatments. Mild to moderate depression can be effectively treated with talk therapies, e.g., cognitive behavior therapy, while antidepressant medications can be an effective form of treatment for moderate to severe depression. However, antidepressant medications should not be used for treating depression in children and should be used with caution in adolescents.[1]

Though depression is a very treatable disorder on an outpatient basis, it can be a chronic and debilitating disorder. Severely depressed individuals, people with treatment-resistant depression and those who are at risk of hurting themselves or others may also require short hospital stays so they can recover in a safe and stable environment. In New Mexico, from 2013-2016, hospitalizations of residents with depression as a first-listed diagnosis increased 241%, from an age-adjusted rate of 10.8/10,000 population in 2013 to 26.0/10,000 in 2016 (Figure 1).

Contributing Factors

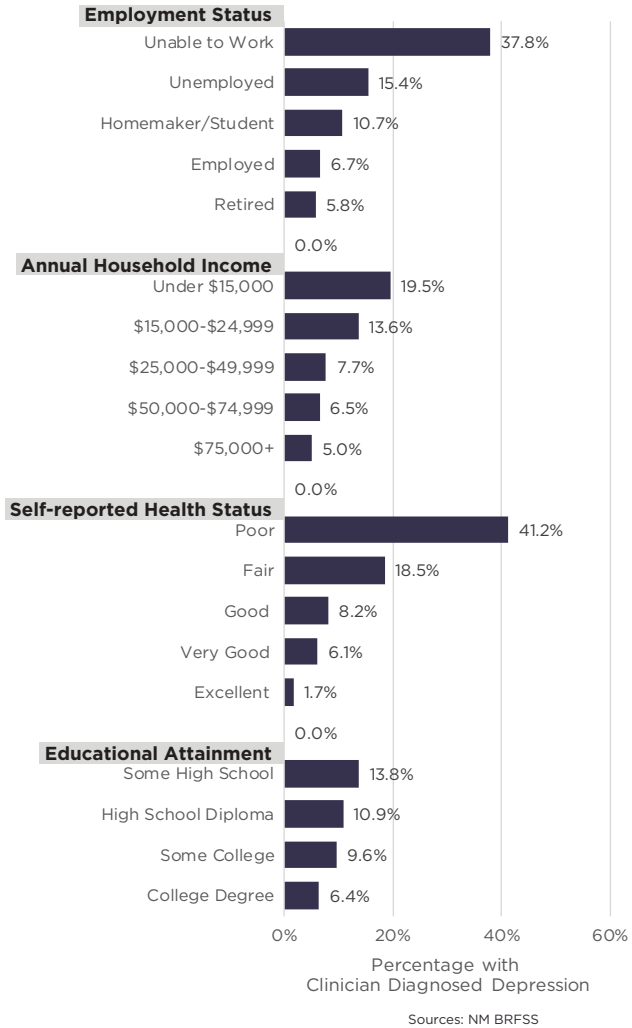
Risk and Resiliency Factors

In managing depression, it is important to address contributing psychosocial factors. These include the identification of factors leading to stress, e.g., financial problems, difficulties at work, physical or mental abuse, as well as sources of support available to the depressed individual, i.e., family members and friends. Maintaining or reactivating social networks and activities plays an important role in depression management.

Results from the BRFSS also show that depression is strongly related to education, employment and income (Figure 2). College graduates suffered from depression the least (6.4%) compared to those who did not complete high school (13.8%). People who were retired or employed had much lower rates of depression (5.8% and 6.7%, respectively) than those who were unemployed (15.4%) or unable to work (37.8%). Depression was much less common among adults with household incomes of $75,000 or more (5.0%) than among those with household incomes of less than $15,000 (19.5%).

Depression is often associated with other mental disorders, such as anxiety and substance use disorders. In 2016, more than one third of those respondents with current depression reported

Figure 2. Prevalence of Depression by Selected Sociodemographic Characteristics, Adults 18+ Years, New Mexico, 2016



Sources: NM BRFSS

having been told at some point in their life by a doctor or other healthcare provider that they had an anxiety disorder. Depression is also a risk factor for suicide. Among those New Mexico adults with current depression, nearly 60% reported thinking about suicide in the past year and more than one-third reported making a suicide attempt at some point in their lives. Notably, of those currently depressed individuals reporting at least one past suicide attempt, nearly two-thirds reported an attempt in the past year.

Depression has also been associated with an increased prevalence of chronic medical conditions such as heart disease, stroke, asthma, diabetes and obesity. In New Mexico in 2016, the prevalence of current depression was strongly and inversely related to self-reported general health (Figure 2). More than 40% of those reporting poor overall health had been told by a health professional at some point in their life that they had a depressive disorder compared to less than 2% of those reporting excellent health.

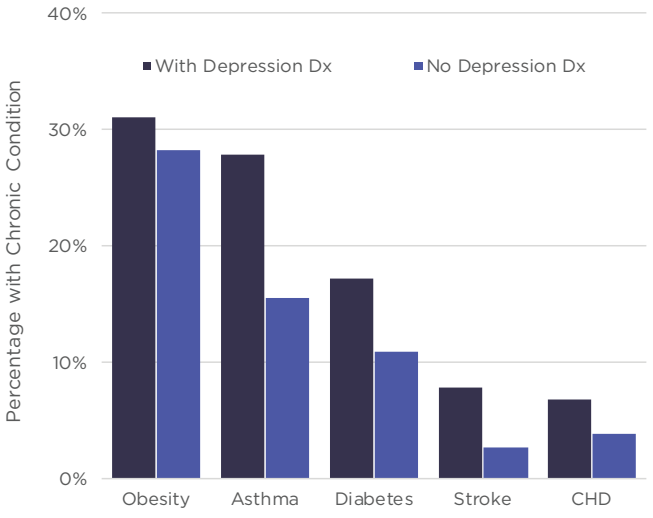
New Mexican adults with one or more chronic medical conditions were much more likely to suffer from depression than adults without these conditions (Figure 3). Rates of health care provider diagnoses of asthma (27.8%), diabetes (17.2%), coronary heart disease (6.8%), and stroke (7.8%) were much higher in those suffering from depression. In addition, adults with current depression had lower rates of exercise in the past month and were more likely to get insufficient, i.e., less than 7 hours per night, sleep.

Health Disparities

Depression Among Adults

2016 results from the New Mexico BRFSS indicate that the prevalence of current depression in New Mexico residents is 9.8%. Depression is significantly greater for men aged 18-24 years compared to those 65 years and older. Among women, the prevalence of current depression is significantly greater for those aged 25-64 years compared to those 65 years and older. Respondents who identified as lesbian or gay or bisexual were 2 1/2 to 3 times more likely to be currently depressed compared to those who identified as straight. There were no statistically significant differences in current depression by racial/ethnic group.

Figure 3. Prevalence of Chronic Health Conditions by Depression Diagnosis, Adults 18+ Years, New Mexico, 2016



Sources: NMDOH BVRHS, UNM GPS Program

Depression Among Youth

Persistent feelings of sadness and hopelessness are markers for depression in youth. Results from the 2015 New Mexico Youth Risk and Resiliency Survey indicated that 32.5% of high school students reported feeling sad or hopeless almost every day for two weeks or more in a row in the previous year, essentially the same as the national rate of 29.9%. New Mexico female students (42.3%) were more likely to report persistent feelings of sadness or hopelessness than male students (23%). The prevalence of feeling sad or hopeless was significantly higher in those students who described themselves as gay or lesbian (53.8%) or bisexual (62.6%) compared to straight students (28.4%). Students who reported housing instability were significantly more likely to report feelings of sadness or hopelessness (49.3%) than those with stable housing (31.6%).

Assets and Resources

Psychotherapy paired with medication and social support can promote recovery from mental illness. Not all therapies work for everyone. Choosing the right mix of treatments and supports is important, as is a person's empowerment and involvement in choosing his or her path to recovery.

Hotlines

- New Mexico Crisis Line: 1-855-NMCRISIS (662-7474)
- National Suicide Prevention Lifeline (http://www.suicidepreventionlifeline.org/): 1-800-273-TALK (8255).
  En Español: 1-888-628-9495
- Teen to Teen Peer Counseling Hotline: 1-877-YOUTHLINE (1-877-968-8454)
- Native Youth Crisis Hotline: 1-877-209-1266
- Veterans Peer Support Line: 1-877-Vet2Vet (1-877-838-2838)
- University of New Mexico Agora Crisis Line (http://www.unm.edu/~agora/): 505-277-3013 or 1-866-HELP-1-NM
- New Mexico State University Crisis Assistance Listening Line or The CALL: 1-575-646-CALL (2255) or 1-866-314-6841
- Graduate Student Hotline: 1-800-GRADHLP (1-800-472-3457)
- Postpartum Depression Hotline: 1-800-PPD-MOMS (1-800-773-6667)
- Trans Lifeline: 1/877-565-8860

To Seek Treatment

- SAMHSA Treatment Referral Helpline: 1-800-662-HELP (4357), also online at https://findtreatment.samhsa.gov/
- The SKY Center (http://nmsip.org/services/sky-center/): 1-505-473-6191
- Search Providers in Bernalillo County: http://cepr.unm.edu/tools/ABQ-Providers.html
- New Mexico Social Service Resource Directory (https://www.nmresourcedirectory.org/SitePages/Home.aspx): 1-800-432-2080
- SHARE New Mexico Resource Directory: http://www.sharenm.org/communityplatform/newmexico/directory/landing
- United Way Central New Mexico Referral Service (http://www.referweb.net/uwcnm/): 505-245-1735

Summary

Depression is a common mental disorder and a significant - perhaps the largest - contributor to years lived with disability. Depression is strongly related to social determinants such as education, employment and income, and is often associated with other chronic disorders, both mental (such as anxiety and substance use disorders) and physical (such as heart disease, stroke, asthma, diabetes and obesity). Depression is also an important risk factor for suicide. Treatment can reduce the level of disability and improve quality of life, but many New Mexicans do not receive such needed care on an outpatient basis and, along with those who are experiencing a particularly severe episode of illness, may require hospitalization. Expansion of the continuum of the behavioral health workforce, to include telemental health, the provision of incentives for providers to work in rural, frontier and tribal areas, and increased emphasis on early identification of those with mental illness, e.g., screening of adolescents and adults for depression, is needed to impact the overall burden of mental disorders in the state.

What is Being Done?

- Behavioral health services are included in essential benefits packages provided through health insurance exchanges.
- Behavioral health services for middle and high school students are offered at 70 school-based health centers throughout New Mexico.
- Core service agencies in local collaborative areas coordinate the continuum of mental health and substance abuse treatment for people with serious mental health needs.
- The Behavioral Health Services Division (BHSD) of the NM Human Services Department has instituted a social-emotional learning program, the PAX Good Behavior Game, in schools throughout the state to teach children coping and problem-solving skills.
- BHSD has worked to promote safer care through systems change by implementing effective clinical and professional practices for assessing and treating at-risk individuals.
- The Epidemiology and Response Division of the NM Department of Health has initiated county-based data presentations based on mental health indicators to identified at-risk communities in the state, providing them with capacity-building training and technical assistance.

What Needs to be Done?

- Support continued coverage of mental health conditions in insurance policies through mental health parity laws.
- Continue to improve youth and adult access to services through braided funding strategies.
- Expand the implementation of collaborative care for the management of depressive disorders as recommended by the U.S. Preventive Services Task Force.
- Increase the capacity to provide mental health and substance abuse assessment, crisis intervention and early intervention services at school-based health centers.
- Expand early recognition and intervention programs for young people with signs of serious mental illness.
- Expand the continuum of the behavioral health workforce, to include telemental health, and provide incentives for providers to work in rural, frontier and tribal areas.

References:

1. World Health Organization. Mental Disorders Fact Sheet, April 2017. Retrieved 11/14/17. http://www.who.int/mediacentre/factsheets/fs396/en/.
2. American Psychiatric Association, 2013. Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition.
3. World Health Organization, 2004. The Global Burden of Disease. 2004 update. Retrieved 11/14/17. http://www.who.int/healthinfo/global_burden_disease/GBD_report_2004update_full.pdf.
4. National Institute of Mental Health. Prevalence of Any Disorder Among Children, 2010. Retrieved 11/14/17. https://www.nimh.nih.gov/health/statistics/prevalence/any-disorder-among-children.shtml.
5. National Institute of Mental Health. Prevalence of Any Mental Illness (AMI) Among U.S. Adults, 2015. Retrieved 11/14/17. https://www.nimh.nih.gov/health/statistics/prevalence/any-mental-illness-ami-among-us-adults.shtml.
6. National Institute of Mental Health. Prevalence of Serious Mental Illness (SMI) Among U.S. Adults, 2015. Retrieved 11/14/17. https://www.nimh.nih.gov/health/statistics/prevalence/serious-mental-illness-smi-among-us-adults.shtml.
7. National Institute of Mental Health. Prevalence of Any Disorder Among Children, 2010. Retrieved 11/14/17. https://www.nimh.nih.gov/health/statistics/prevalence/any-disorder-among-children.shtml.
8. Substance Abuse and Mental Health Services Administration (SAMHSA), September 2015. More Americans continue to receive mental health services, but substance use treatment levels remain low. Retrieved 11/14/17. https://www.samhsa.gov/newsroom/press-announcements/201509170900.
9. McDermott KW, Elixhauser A, Sun R. Trends in Hospital Inpatient Stays in the United States, 2005-2014. HCUP Statistical Brief #225. June 2017. Agency for Healthcare Research and Quality, Rockville, MD. Retrieved 11/20/17. http://www.hcup-us.ahrq.gov/reports/statbriefs/sb225-Inpatient-US-Stays-Trends.pdf.
10. World Health Organization, 2017. Depression and Other Common Mental Disorders. Global health estimates. Retrieved 11/14/17. http://apps.who.int/iris/bitstream/10665/254610/1/WHO-MSD-MER-2017.2-eng.pdf.
11. Substance Abuse and Mental Health, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2014 and 2015. Retrieved on 11/15/17. http://samhda.s3-us-gov-west-1.amazonaws.com/s3fs-public/field-uploads/2k15StateFiles/NSDUHsaeExcelTabs2015.xlsx.

HEALTH EQUITY AND HEALTH DISPARITIES

Advancing Health Equity Benefits All New Mexicans

An overarching goal of Healthy People 2020 is to "achieve health equity, eliminate disparities, and improve the health of all groups."[1] Health equity is defined as "the absence of unfair and avoidable or remediable differences in health interventions and outcomes among groups of people."[2] Achieving health equity means that all people have the opportunity to reach their full health potential and it depends on understanding health disparities among different populations and the factors that create those disparities.

Health disparities are preventable differences in the quality and quantity of health care that negatively impact specific population groups.[3] Some populations experience a greater burden of disease due to a variety of factors including education, income level, cultural and linguistic barriers, racism, historical trauma, and inadequate access to timely and appropriate healthcare.

There is strong evidence to support the significance of health disparities. Research also supports the conclusion that despite the development and implementation of interventions that address individual-level determinants, health disparities continue to be persistent and significant. Thus, advancing health equity requires looking beyond individual-level determinants to those social, economic, and policy factors that are beyond an individual's control, and focusing on the social determinants of health and on development of population-level solutions.

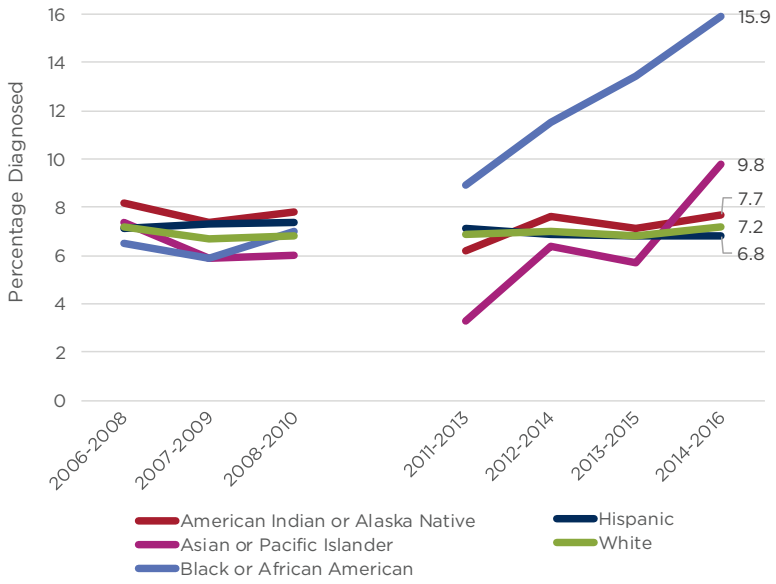
Health Disparities in New Mexico

Information on health disparities has been incorporated throughout this report, but selected health disparities in New Mexico warrant special attention.

Cardiovascular Disease

In 2016, the overall death rate in New Mexico for heart disease was 143.8 per 100,000 people. African American adults had the highest heart disease death rate. This rate was statistically significantly higher than the overall rate for the state and that of all other racial/ethnic groups. The heart disease death rate of White New Mexicans was statistically significantly higher than the rates of all other racial/ethnic groups except those who were African American.

Figure 1. Diagnosed Cardiovascular Disease* by Race/Ethnicity, New Mexico Adults Aged 18 Years and Older, 3-Year Moving Averages from 2006-2016



Age-adjusted to U.S. 2000 standard population
*Doctor-diagnosed Stroke, Heart Attack, or Coronary Heart Disease. Data from 2010 and earlier may not be comparable to later data. 2003-2010 A/PI rates were omitted because they were unstable.
Source: NM BRFSS, NMDOH

Influenza & Pneumonia Deaths

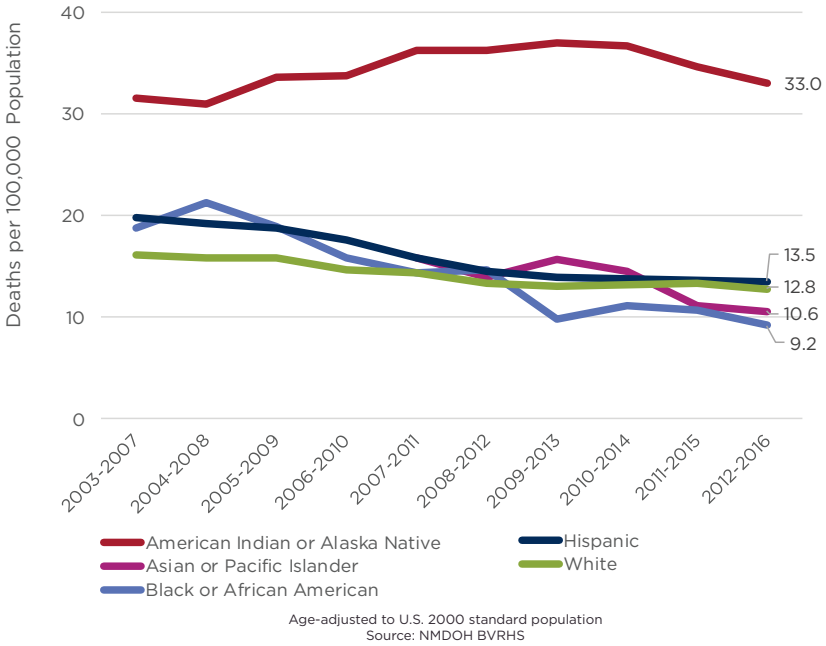
American Indians in New Mexico experience the highest rate of pneumonia and influenza (P&I) deaths (Figure 2), approximately double the New Mexico and U.S. rates, and at 34.6 deaths per 100,000 persons, is higher than the combined rates of New Mexico's other racial and ethnic groups (14.6 per 100,000). According to the CDC, persons whose race is American Indian/Alaska Native are at a higher risk of complications from the flu and are more likely to be hospitalized from the flu than the general U.S. population. The reason for higher flu complications is not well understood; however, social and economic factors in American Indian populations may result in reduced access to healthcare and crowded living conditions (Figure 3) and thus a higher risk for flu complications.

The CDC recommends that all persons who are American Indian receive the annual influenza vaccination. Additionally, the CDC recommends

antiviral treatment as soon as possible for any American Indian patient with confirmed or suspected influenza illness.

The NMDOH developed the Pneumonia and Influenza Death Rate Reduction Initiative Among Native Americans in New Mexico. This initiative aims to reduce P&I death rates by 1) enhancing understanding about the issue; 2) creating and strengthening collaborations among numerous stakeholders; and 3) ensuring the sustainability of key elements of this initiative among all stakeholders.

Figure 2. Deaths from Pneumonia and Influenza by Race/Ethnicity, New Mexico, 5-Year Moving Averages from 2003-2016



Age-adjusted to U.S. 2000 standard population
Source: NMDOH BVRHS

Diagnosed Diabetes in Adults

In 2016, diabetes prevalence was significantly higher among American Indian/Alaska Native adults than among Hispanic and White adults, and was significantly higher among Hispanic adults than among White adults. Diabetes was the 6th leading cause of death overall in New Mexico in 2016, but there were differences in rank order by race/ethnicity. Diabetes was the 4th leading cause among Asian/Pacific Islanders, 5th among Hispanics and American Indians, 7th among Black/African Americans, and 8th among Whites.

Disparities exist for overall health in both New Mexico and the U.S. More than 20% of the population has reported a health status of fair or poor, with greater disparities among Hispanics, Blacks or African Americans, and American Indians, and well over the national average of 16.7%. Specifically, individuals with less than a high school education, and those making less than $15,000 a year report fair or poor health status more often than any other group.[4]

Contributing Factors, Risk and Resiliency

Health disparities occur across many dimensions, including: socioeconomic status, race/ethnicity, age, gender, sexual orientation, disability status, primary language, and location. New Mexico is a minority-majority state where greater than 60% of the population self-identifies as a racial or ethnic minority. According to 2016 U.S. Census Bureau estimates, 2,082,669 people lived in New Mexico. Of these, 48.5% self-identified as Hispanic, 37.8% self-identified as White and 10.1% self-identified as American Indian. Almost 25% of the population lives in a rural area (with the percentage of the state's population living in a Primary Care Health Professional Shortage Area estimated at over 40%), 15.1% had a disability, 34.5% of the state's population over the age of four speaks a language other than English at home, and nearly 20% of the population lives below the poverty level.[5] Additionally, approximately 3% of New Mexico adults identified as lesbian, gay, or bisexual. In other words, the majority of New Mexicans belong to at least one population group at high risk of experiencing health disparities. Accordingly, to improve health for New Mexico overall, public health must have in its core principles and values the advancement of health equity and the elimination of health disparities.

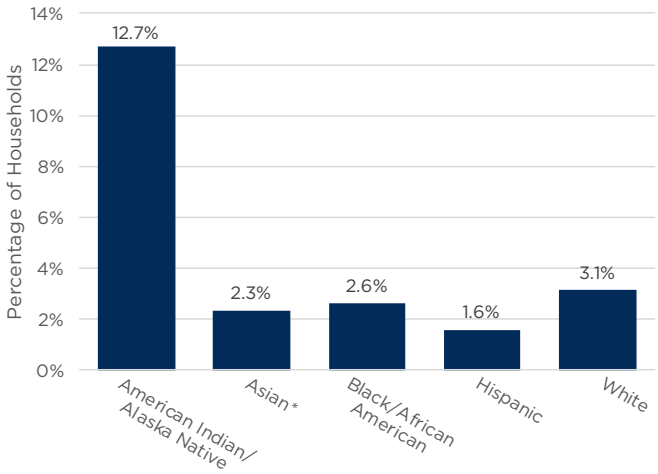
Assets and Resources

There are numerous efforts to address Health Equity. Foundations such as Con Alma, The McCune, Kellogg, Robert Wood Johnson, Notah Begay III, Santa Fe Community and others have grant funded programs with health equity as a goal. Many of the colleges and universities across the state have programs and efforts to address health equity, and the University of New Mexico's Health Science Center includes health equity in their vision. Organizations like the New Mexico Public Health Institute, Health Equity Partnership, Presbyterian Healthcare, New Mexico Community Health Worker Association, the YWCA New Mexico, and the New Mexico Public Health Association have mobilized around health equity. Further, there are other state agencies, county and city offices that focus on health equity. These are all assets and resources dedicated to health equity in New Mexico.

NMDOH Office of Health Equity (OHE) is committed to improving the health of all diverse communities in New Mexico and raising awareness of health disparities through collaboration, education and advocacy. The NMDOH Office of the Tribal Liaison works to strengthen tribal health and public health systems through on-going collaboration with American Indian tribes, pueblos, and nations, respecting the tenets of sovereignty and self-determination held by indigenous nations in the state. The NMDOH Office of Border Health (OBH) works to improve health status and health services in the U.S.-Mexico Border Region and other border-impact areas of New Mexico. The NMDOH Office of Community Health Workers (OCHW) has strong ties to New Mexico communities and is focused on increasing access to high-quality, cost-effective, and integrated health care and social services.

In addition to improving the health status of New Mexicans, increasing health equity has a positive impact on the economy by reducing unnecessary health care spending. At the national level, it is estimated that the elimination of health disparities among racial/ethnic minority groups would have saved nearly $230 billion in direct expenditures for medical care and more than $1 trillion in indirect costs associated with premature death and illness between the years of 2003 and 2006.[6]

Figure 3. Percentage of Households with a Ratio of Occupants per Room Over 1.0 by Race/Ethnicity, New Mexico, 2016



Race defined as "race alone" - persons reporting two or more races were not included.
*Estimate for Asian, alone. Data were not available for Native Hawaiian/Other Pacific Islander.
Source: U.S. Census Bureau, ACS 1-year estimates

Summary

Three notable health disparities in New Mexico involve three high-ranking causes of death: deaths from heart disease, influenza and pneumonia, and diabetes. Health disparities exist along a variety of social dimensions in New Mexico, to the extent that the majority of New Mexicans may be affected. Advancing health equity is likely going to improve health for New Mexico overall, as well as provide economic benefits to the state. But we cannot rely on individual-level interventions to make gains in health equity. Instead, population-based approaches that reduce poverty, improve the health care safety-net, and address racial discrimination will be necessary to reap the health and economic benefits of health equity in New Mexico.

What is Being Done?

- Improved language access through translated materials and interpretation.
- Health literacy training at New Mexico Public Health Association targeting community health workers and public health practitioners.
- Addressing limited English proficiency by providing over 700 documents in languages other than English.

What Needs to be Done?

- Develop intersectoral and non-traditional partnerships in communities across the state.
- Develop health equity capacity.
- Replace community deficit models with strengths-based or equity model that capitalizes on community resources and strengths.
- Implement a branding strategy to build better health literacy, especially with documents geared to limited English profeciency populations

References:
1. The Vision, Mission, and Goals of Healthy People 2020, A Report of the U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Accessed on 11/3/2017 from https://www.healthypeople.gov/sites/default/files/HP2020Framework.pdf.
2. About the Health Equity Monitor. World Health Organization (2017) Accessed on 11/3/2017 from http://www.who.int/gho/health_equity/about/en/.
3. The Henry J. Kaiser Family Foundation, Disparities in Health and Health Care: Five Key Questions and Answers (2016) Accessed on 11/7/2017 from https://www.kff.org/disparities-policy/.
4. Health Equity in New Mexico, 11th edition. NMDOH Office of Health Equity (2016). Accessed on 11/7/2017 from https://nmhealth.org/publication/view/report/2045/.
5. LaVeist, TA, Gaskin, D, Richard, P. Estimating the economic burden of racial health inequalities in the United States. International Journal of Health Services. 2011;41(2):231-8.
6. The Economic Case for Health Equity. Association of State and Territorial Health Officials (ASTHO). Accessed on 11/7/2017 from http://www.astho.org/Programs/Health-Equity/Economic-Case-Issue-Brief/.

ENVIRONMENTAL HEALTH

Interacting with Our Physical and Social Environments

Environmental health addresses the interaction between human health and the chemical, physical, biological, and social factors in the environment. It also refers to the theory, science, and practice of assessing, correcting, and preventing those factors in the environment that may adversely affect the health of present and future generations of New Mexicans. Healthy People 2020 has a goal of promoting health for all through a healthy environment because it is central to increasing quality of life and years of healthy life.[1]

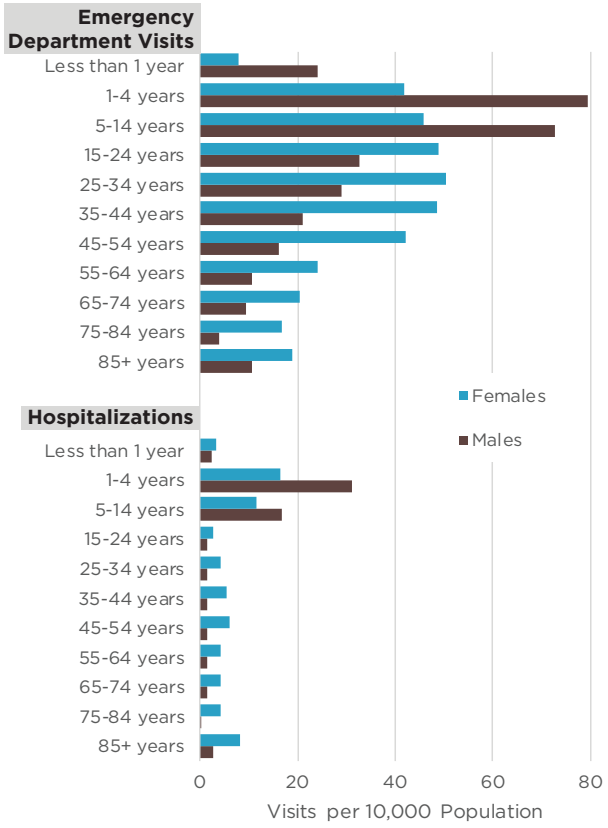
Toxic Substances

Exposure to many toxic substances can be determined through testing biological samples, such as blood, urine, or hair. As part of New Mexico's notifiable disease surveillance, laboratory reports that indicate exposure to mercury, arsenic, uranium, lead, pesticides, nitrates, and carbon monoxide are collected and investigated. Lead exposure, for example, can be determined through blood testing. Even small amounts of lead can affect brain development in fetuses, infants, and children, while high levels in adults can contribute to high blood pressure and other health problems. Thus, lead testing combined with case management, in which the NMDOH helps families find and control the sources of lead exposure, for lead-poisoned children and adults are very important to public health. In recent years, the percentage of children tested for lead has increased from 7.1% of children under age 6 years of age tested in 2008 to 12.8% of children tested in 2016. Children with a blood lead level >5 mcg/dL, the level at which families are offered case management, has decreased from 6.2% of children screened in 2008 to 2.0% of children screened in 2016. The Northwest and Southwest New Mexico health regions had the highest rates of elevated lead levels in young children.

Air Quality and Health

Air pollution has been linked to many health problems, such as heart disease, asthma, and other respiratory diseases. Two types of air pollution with dangerous health effects are ozone and particle pollution. Wildfires can generate high levels of particulate matter pollution, which refers

Figure 1. Asthma Hospitalizations and Emergency Department Visits by Sex and Age, New Mexico, 2016



Sources: NMDOH HIDD and ED Database

to particles suspended in air, such as dust, dirt, soot and smoke, and little droplets of liquid. Particles can range in size from large, such as soot or dense smoke, to too small to be seen. Industries adversely affecting air quality include power plants, oil and gas exploration, and confined animal feeding operations. Short-term exposure to high particle pollution contributes to increased mortality from cardiovascular events and may result in increased hospital admissions for several cardiovascular and pulmonary diseases, including heart attacks, congestive heart failure, stroke, asthma, and chronic obstructive pulmonary disease. The cardiovascular disease (CVD) death rate is highest in the Southeast region of the state and particle pollution may play a role. Long-term exposure to high levels of particle pollution can reduce overall life expectancy by a few years.[2] However, the state has not installed air quality

monitors in every county. Areas of the state with high CVD risk where air quality is not monitored are being prioritized for installation of an NMDOH air quality monitor.

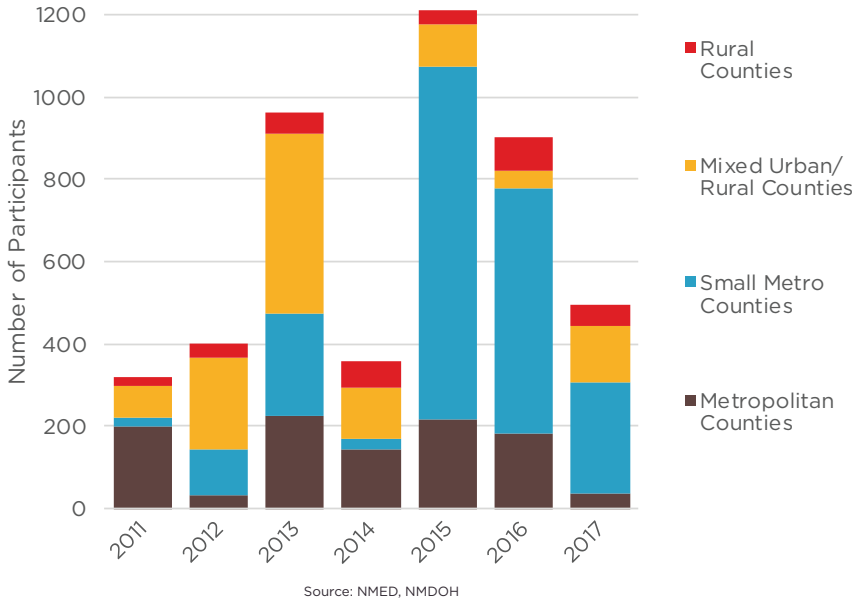
Water Quality and Health

Water quality can negatively affect health if it contains unsafe levels of certain biological organisms or chemicals. Most New Mexicans have access to drinking water that meets standards under the national Safe Drinking Water Act and many get their drinking water from community water systems, for which the U.S. Environmental Protection Agency (EPA) sets regulations for a variety of microorganisms, chemicals and radionuclides.

Routine sampling and analysis of the state's water reveals that the quality is generally good, but problems can occur. When a public water system has a violation exceeding the Maximum Contaminant Level for a contaminant such as nitrates or *E. coli*, the New Mexico Environment Department's Drinking Water Bureau (NMED-DWB) issues a water/boil water advisory that is in place until the water system's testing results meet the drinking water standard. Those advisories are listed on the NMTracking.org Alerts and Hazard Warnings page. In 2017, six boil water advisories were issued. During such advisories, educational materials and public health expertise to prevent illness and be on heightened alert for potentially related cases are provided.

An estimated 400,000 people in New Mexico (about 20% of the population) receive their water from a private well. The water quality of a private well is unregulated in New Mexico. Owners of private water wells are the best protection of their water supply. Private well water quality can be influenced by natural sources, man-made sources, and/or natural disasters.

Figure 2. Water Testing Event Participation by County, New Mexico, 2011-2017



Source: NMED, NMDOH

Asthma

Asthma is a chronic condition with symptoms that can occur or worsen with triggers (e.g., flu, stress, and cold air), and environmental irritants (e.g., cigarette smoke, smog, and dust), and allergens (e.g., pollen, mold, and dust mite).[3] These irritants and triggers can exist in both the indoor and outdoor environment.

In New Mexico, 189,868 adults in 2016 and 45,503 children in 2015 reported having asthma. The burden of asthma may best be illustrated by the emergency department visits and hospitalizations for asthma (Figure 1). These rates tend to be highest among children and in the Southeast and Northwest regions of the state. Some of the efforts to address the disparities in asthma burden include: 1) providing asthma self-management education for children with asthma and their families, 2) by training healthcare providers and improving the asthma registry, 3) referring families of children with uncontrolled asthma to quality healthcare and educational resources, and 4) addressing the needs of low literacy and underserved communities to eliminate barriers to accessing quality healthcare.

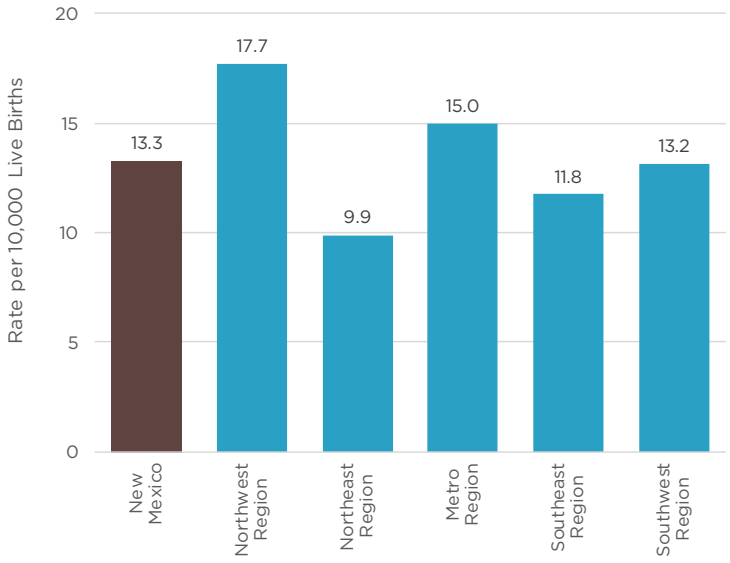
Tracking Environmentally-related Disease

Linking environmental hazard or human exposure data with health data is needed to better understand how the environment may affect health. Examples include the connections between air quality and asthma emergency room visits, between extreme heat events and heat-related illness, and between arsenic levels in drinking water and bladder cancer incidence.

The NMDOH has been tracking prevalence rates for major birth defects since 1998. The causes of some birth defects are understood, and for these doctors and public health scientists can help women prevent their occurrence. However, the causes for many birth defects are not clearly understood. It is likely that most birth defects happen as a result of the interaction among various factors including the environment. The prevalence of cleft lip with or without cleft palate (Figure 3) varies by health region. Cleft lip with or without cleft palate is the most common craniofacial birth defect identified in newborns, affecting around 6 to 10 infants per 1,000 in the United States.[4,5] The differences by health region may be connected to a variety of risk factors, including air pollution and maternal smoking.[6,7]

The Environmental Public Health Tracking website has been developed to disseminate this type of information to New Mexicans. This information can help residents avoid potentially harmful exposures by providing important actionable data for New Mexico communities and public health practice. These data are readily available through Community Environmental Health Profiles. The profiles describe the health, risk, and resilience factors of New Mexico communities, including various socio-economic, environmental, and health indicators and outcomes in individual New Mexico counties.

Figure 3. Cleft Lip with or without Cleft Palate by Health Region, New Mexico, 2011-2016



Sources: Birth Defects Surveillance Database, NMDOH

Contributing Factors

Risk and Resiliency Factors

Housing affects health both directly, through physical, chemical, and biological exposures, and indirectly, through psychological effects. Lower quality housing can increase asthma exacerbation, lead poisoning and radon and mold exposure. There is evidence that indoor environmental exposures are common in low-income housing and usually there are multiple hazards in such homes.[8] There are disparities in the quality of housing conditions across New Mexico. For instance, from 2011-2015, 83.3% of the houses in Lea County were built before 1980, giving them a higher likelihood of lead paint and asthma triggers. And Lea County also had the highest asthma childhood hospitalization rate among all New Mexico counties in 2016.

Despite these risks, New Mexico is fortunate that overall outdoor air and water quality tend to be good, which reduces the overall risk of harmful environmental exposures.

Health Disparities

Racial and ethnic minority populations in the United States are at higher risk for being exposed to indoor pollutants such as lead, allergens, and pesticides and are more likely to live in those counties with the highest levels of outdoor pollution.[9] Socioeconomic factors such as

income, education, and recent immigration to the U.S., are associated with the quality of housing, which impacts exposure to indoor pollutants. Those same socioeconomic facts are also associated with outdoor pollutants because lower income communities live near facilities and industries that have made the land less desirable and thus cheaper.

Disparities in asthma hospitalizations and emergency room visits exist among various age and health insurance status groups, between sexes (Figure 1) and geographic locations. For instance, in 2016, the children insured by Medicaid were the group most likely be admitted to a hospital for asthma (10.3 visits per 10,000 children compared to 0.0 visits per 10,000 with self-pay).

Assets and Resources

The New Mexico Council on Asthma (NMCOA) members include public and community-based organizations, physician and health insurance provider groups, community members, academia. The NMCOA focuses on statewide asthma education and outreach, policy development, and members' collaboration to enhance the availability of quality healthcare and education, and to effectively reduce asthma rates among groups with a high burden of asthma.

Schools in New Mexico play an important role with asthma control as well. In many schools, nurses can provide self-management education to children with asthma. The state has a voluntary Stock Asthma Emergency Medications in School Act that was implemented in many schools, so that asthma emergencies can be treated on site. Additionally, the collaboration among the Office of School and Adolescent Health, the University of New Mexico, school districts and nurses, NMCOA, and the Asthma Control Program resulted in a standardized asthma action plan that is currently used in all schools in the state.

Head Start is a federal program that promotes the school readiness of children from birth to age five from low-income families by enhancing their cognitive, social, and emotional development. Head Start (and Early Head Start) programs in the state require a blood-lead test when a child is enrolled, which can provide early management of children being exposed to lead.

Water testing events provide a baseline for understanding individual educational needs and testing barriers. The partnership with New Mexico Environment Department (NMED) on water fairs began in 2013 with participation in joint NMDOH/NMED well water testing fairs and NMDOH water testing events (Figure 2). Both events provide free well water testing and education.

Summary

Environmental factors that may adversely affect human health include but are not limited to air, food, and water contaminants, radiation, toxic chemicals, wastes, disease vectors, safety hazards, and habitat alterations. An assessment of the health outcomes that are a) associated with environmental factors and b) can be tracked indicate that the top priorities include cardiovascular disease, chronic obstructive pulmonary disease (COPD), and asthma. COPD is one outcome that requires more attention and resources to characterize how it is distributed in the state geographically, which residents are most at risk, and potential interventions.

What is Being Done?

- Developing multilingual videos (on healthy homes principles), licensing curricula, and in-person training for local community health workers who conduct home visits to assess asthma triggers.
- The New Mexico Environmental Public Health Tracking website provides current data and educational and other resources related to environmental health, including air and water quality.
- In partnership with the Four Corners States Biomonitoring Consortium, free well-water testing events are being provided to better understand environmental sources of exposure to metals.

What Needs to be Done?

- Expand reimbursement for asthma self-management education policies to include out of healthcare settings (in-home) and para-professional providers (e.g., community health workers).
- Continue to conduct outreach to domestic wells drinking water users to overcome barriers to testing and provide well owners with needed resources.
- Provide higher geographic resolution and more timely, and accurate environmental health surveillance data and information to better support public health actions and needs of New Mexico communities.

References:
1. Healthy People 2020: Environmental Health Overview. U.S. Public Health Service. Accessed 11/14/2017 from: https://www.healthypeople.gov/2020/topics-objectives/topic/environmental-health.
2. Brook, R.D. et al. (2004). Air Pollution and Cardiovascular Disease: A Statement for Healthcare Professionals from the Expert Panel on Population and Prevention Science of the American Heart Association. Circulation; 109: 2655-2671.
3. What Causes or Triggers Asthma? Accessed 11/28/2017 from: http://www.aafa.org/page/asthma-triggers-causes.aspx.
4. Parker SE, Mai CT, Canfield MA, Rickard R, Wang Y, Meyer RE, Anderson P, Mason CA, Collins JS, Kirby RS, Correa A; National Birth Defects Prevention Network. 2010. «
5. Updated National Birth Prevalence estimates for selected birth defects in the United States, 2004-2006. Birth Defects Research Part A: Clinical and Molecular Teratology;88(12):1008-16).
6. Yeyi Zhu, Cuilin Zhang, Danping Liu, Katherine L. Grantz, Maeve Wallace, and Pauline Mendola, 2015. Environ Res. Jul; 140: 714-720.
7. Xuan Z1, Zhongpeng Y1, Yanjun G1, Jiaqi D1, Yuchi Z1, Bing S2, Chenghao L. 2016. Maternal active smoking and risk of oral clefts: a meta-analysis. Oral Surg Oral Med Oral Pathol Oral Radiol. Dec;122(6):680-690).
8. Environmental Conditions in Low-Income Urban Housing. Harvard T.H. Chan School of Public Health, The Center for Health and the Global Environment. Accessed 11/14/2017 from:https://chge.hsph.harvard.edu/resource/environmental-conditions-low-income-urban-housing.
9. Committee Opinion: Exposure to Toxic Environmental Agents. The American College of Obstetricians and Gynecologists Committee on Health Care for Underserved Women, American Society for Reproductive Medicine Practice Committee. The University of California, San Francisco Program on Reproductive Health and the Environment. Accessed 11/14/2017 from:https://www.acog.org/Resources-And-Publications/Committee-Opinions/Committee-on-Health-Care-for-Underserved-Women/Exposure-to-Toxic-Environmental-Agents.

OCCUPATIONAL HEALTH

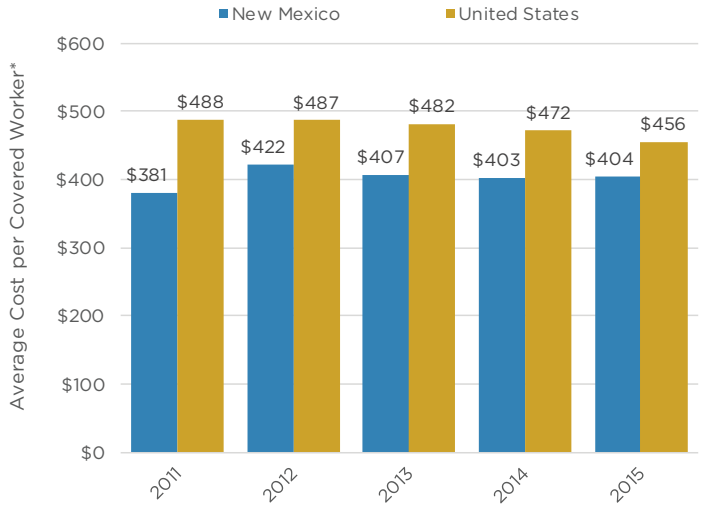
Healthy Workplaces Save Life, Limb, and Livelihood

It is estimated that over 800,000 New Mexicans work in a full-time job. People spend a quarter of their lifetime working for income in some capacity. As such, one's health can be directly or indirectly affected by their job. Occupational injuries and illnesses due to work are costly to workers, employers, and society, both economically and in terms of human suffering. In 2016, there were 5,000 injury or illness incidents at work reported by employers involving days away from work in New Mexico which involved nearly 17,000 work-related injuries and illnesses.[1]

Workplace Injuries and Illnesses are Costly

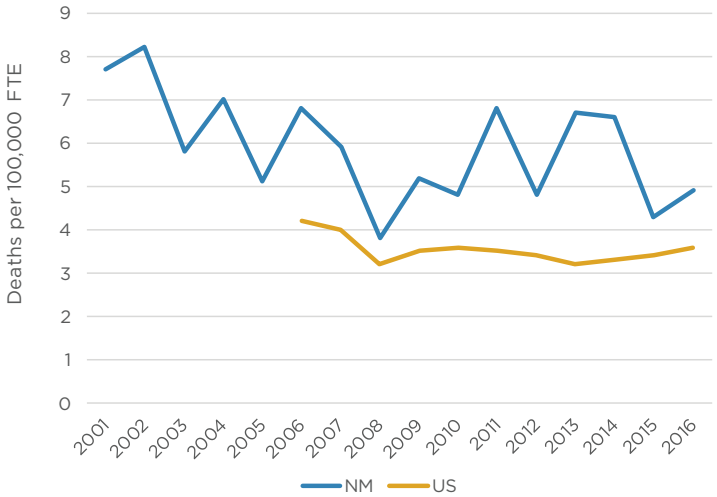
Work-related illnesses, injuries and deaths have decreased by over 60% since the passing of the Occupational Safety and Health (OSH) Act of 1970, but have not been eliminated.[2] In New Mexico, over $304 million, or $404 for each covered worker, was paid out in benefits for workers' compensation insurance in 2015 (Figure 1). This likely represents a fraction of the costs of work-related illnesses and injuries, as costs are often shifted to insurance systems other than workers' compensation. The transportation and moving industry accounted for the highest workers' compensation claims, almost 15% in 2015.[3]

Figure 1. Workers' Compensation Costs, New Mexico and United States, 2011-2015



*All workers who are eligible for compensation should they sustain work-related injuries or illnesses are considered "covered" workers
Source: National Academy of Social Insurance

Figure 2. Occupational Injury Fatalities per 100,000 Full-Time Equivalents (FTEs), Workers Age 16 and Over, New Mexico and U.S., 2001-2016



Source: U.S. Bureau of Labor Statistics

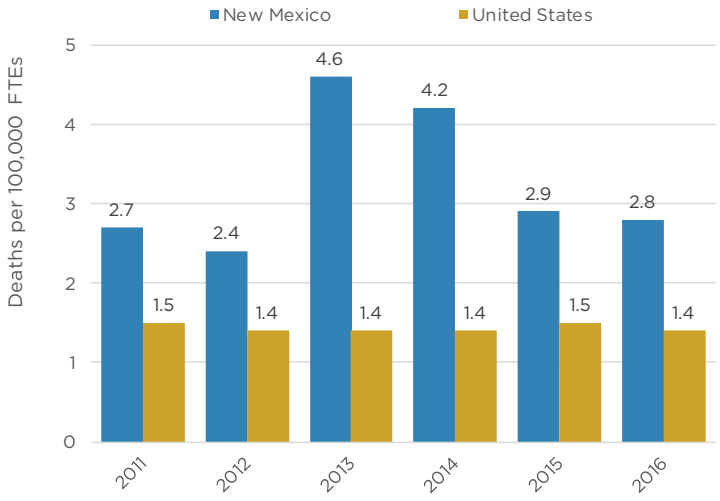
Workplace Injury Fatalities

Workplace fatalities are of significant concern in New Mexico, with a fatality rate considerably higher than that of the United States. While the rate of work-related fatalities in New Mexico appears to be declining, as are rates for the US, New Mexico's rate remains well above the US rate (Figure 2). The majority of workplace fatalities in New Mexico are due to transportation incidents. In 2016, there were 41 workplace fatalities, of which 56.1% were transportation-related. From 2011 through 2016, New Mexico's occupational transportation fatality rates have been considerably higher (two to three times) than that of the U.S. (Figure 3). The second highest cause of death was contact with objects and equipment, comprising 17%. Falls were noted as the cause in 7.3% of deaths. Mining, quarrying, and oil and gas extraction was the single industry with the largest percentage of fatalities with 31.9% of deaths.

The causes for the transportation-related fatalities can be many; however, it has been

observed that seat belt usage is low in the transportation industry. Out of the 31 occupational-related transportation fatalities in 2014, 63% of the decedents were not wearing their seat belts at the time of the accident.[4] Additionally, oil- and gas-related fatalities are also among the most common in the state, occurring most frequently as a result of motor vehicle accidents, falls, struck-by-object injuries, or electrocutions. The crude fatality rate for the oil and gas industry in New Mexico for 2016 was 31.9 per 100,000 FTEs (ages 16 and over) - over three times the US rate of 10.1 per 100,000 FTEs.[5]

Figure 3. Occupational Transportation Fatalities per 100,000 FTEs, Workers Aged 16 and Over, New Mexico and US, 2013-2016



Sources: BLS, CFOI and NIOSH Employed Labor Force Query

Notifiable Conditions

Public health surveillance of required, or "notifiable" conditions, helps to track various diseases and conditions and their effects. It also allows for trend analyses which can improve public health prevention and control measures if needed. When occupational illnesses and injuries are reported to NMDOH, we are able to identify at-risk populations and areas of concern, thus allowing us to strategize interventions, allocate resources and develop public health policies. In New Mexico, certain occupational illnesses that are almost always associated with workplace exposure are directly reportable to NMDOH, including asbestosis, coal worker's pneumoconiosis, mesothelioma (cancer due to asbestos exposure), occupational asthma, occupational burn hospitalizations, occupational injury death, occupational pesticide poisoning, occupational traumatic amputation, and silicosis. Other reportable conditions which can be associated with work include hypersensitivity pneumonitis and noise-induced hearing loss.

Contributing Factors

Risk and Resiliency Factors

Working in a high-risk industry or occupation is a major risk for occupational injuries and fatalities. Jobs considered high-risk are those with at least twice the national rate of illness and injury.[6] In 2015, only 3.9% of all New Mexico workers were employed in industries at high-risk for occupational morbidity; however, 17.4% of these workers had high-risk jobs. Thus, while there were not that many high-risk industries in New Mexico, there were still high-risk jobs within those industries. Exposure to occupational hazards can have adverse affects on the human body. For example, mesothelioma and asbestosis are due to exposure to asbestos. Silicosis and coal workers' pneumoconiosis are ailments exclusive to miners, and are almost always caused by exposure to harmful or toxic contaminants.

Other risk factors for work-related injuries include increasing age, excessive alcohol consumption, physical inactivity, and substance abuse. Workers in construction/extraction occupations reported a binge drinking (5 or more drinks for men or 4 for women on an occasion), prevalence (26.5%) in 2016 which was significantly higher than that reported by workers in sales, service, office, or business/management occupations. Workers in transportation occupations had the highest prevalence of obesity (25%). Males are also at risk for occupational injuries and fatalities because they are more likely to occupy high-risk morbidity jobs. Increasing age also has a negative effect on work-related injuries and fatalities. For example, in the construction industry, older workers had higher rates of fatal falls, when compared to their younger counterparts.[7]

Most occupational illnesses and injuries are preventable. Appropriate measures can provide some protection and worker resilience if taken appropriately. Workplace policies, procedures and programs focusing on worker health and safety, and including adequate training is essential in promoting a healthy workforce. It is also important to recognize hazards specific to their job and to take precautionary actions to prevent exposure, such as wearing proper personal protective equipment (PPE). Certain behavioral risk factors, if modified, can have a positive impact on the risk of occupational injuries. For example, lower or no consumption of alcohol and getting adequate sleep can improve one's cognitive function. Wearing seat belts while driving, whether for work or pleasure, can significantly reduce fatalities. Increasing physical activity also has a positive effect on the health, including reduced body weight, resulting in a healthier worker population.

Health Disparities

Immigrant workers are at a disadvantage when it comes to jobs. They are employed in hazardous industries such as construction, manufacturing, agriculture, moving, and cleaning,[8] thus exposing them to dangerous working conditions, such as exposure to heat, pesticides, hazardous chemicals, and cleaning agents, as well as physical hazards such as falls. They are at increased risk for occupational injury and fatality due to the nature of the work they traditionally perform, a lack of enforced safety regulations, and limited access to health care or worker's compensation benefits.[9]

For example, Latino immigrants face significantly higher rates of workplace fatalities, almost 50% higher than the rate of workplace fatalities among all workers, and two-thirds of occupational-related deaths among Latinos included foreign-born individuals.[10] Language, cultural differences, social structures and lack of training are all factors that work against immigrant populations.

Assets and Resources

The New Mexico Occupational Health Surveillance Program (NMOHSP) receives almost real-time notification of worker exposure to toxins, chemicals, or pesticides by the New Mexico Poison and Drug Information Center (NMPDIC).

The NMOHSP partners with the New Mexico Occupational Health and Safety Bureau (NMOHSB, also known as NMOSHA). NMOHSB is responsible for enforcement of the New Mexico Occupational Health and Safety Act, and providing safety and health assistance to employers. Workers can anonymously report to NMOHSB about unfavorable working conditions, and the employer may be investigated. With the assistance of NMOHSB, we are able to quickly identify exposed workers and identify trends. Additionally, the NMOHSP participates in events such as National Safety Stand Down to prevent falls in the construction industry, and health fairs alongside NMOHSB. With the strong partnership, we are able to provide health and safety awareness to all of New Mexico.

NMOHSP also partners with industry leaders to promote safety among workers. For example, our partnership with the New Mexico Oil and Gas Association (NMOGA) is focused on the safety of workers in the oil and gas industry.

Expert occupational health advice is provided by our partners in other states, the Centers for Disease Control and Prevention's National Institute for Occupational Safety and Health (NIOSH), and the Council of State and Territorial Epidemiologists (CSTE).

Summary

Workplace injuries are very costly, not only to the individual, but to the employer and the economy of the state. Occupational fatality rates are high in New Mexico when compared to the United States. The top two areas of concern for occupational health in New Mexico are high rates of transportation-related injuries and fatalities in two industries, oil and gas and construction. Many risk factors and behaviors can impact the rate of work-related injuries and fatalities; however, recognizing the industrial hazards and acquiring proper training, personal protective equipment, and proper seat belt usage can prevent injuries and potential fatalities. The NMDOH is committed to ensuring all New Mexicans are safe at work and able to return to their families each night.

What is Being Done?

- Provide quick response to investigate injuries at the worksite and provide guidance to prevent future injuries.
- A safety campaign aimed toward the transportation and oil and gas workers in New Mexico is being developed.
- Occupational health conditions and their determinants are tracked annually and data are submitted to NIOSH for further analysis and compiling of national data and statistics.

What Needs to be Done?

- Reach a broader range of employers and workers via social media.
- More discussion with various industry leaders to provide informed interventions with an emphasis on transportation safety.
- Long-term efforts in partnerships with various state agencies, such as Department of Transportation and Worker's Compensation Administration, to collect and share data.
- Development and distribution of occupational safety materials to improve outreach.

References:

1. US Department of Labor. US Bureau of Labor Statistics. (2016). Injuries, Illnesses, and Fatalities. Fatal occupational injuries in New Mexico. Retrieved Dec 22, 2017 from https://www.bls.gov/iif/oshwc/cfoi/staterate2016.htm
2. US Department of Labor. Occupational Safety & Health Administration. (2012). Injury and Illness Prevention Programs: White Paper. Retrieved Nov.8,2017 from https://www.osha.gov/dsg/InjuryIllnessPreventionProgramsWhitePaper.html
3. State of New Mexico Workers' Compensation Administration. (2015). Workers' Compensation Administration 2015 Annual Report. Albuquerque: Author.
4. Irobi, EO. New Mexico Epidemiology. (2016). Occupational-related transportation fatalities in New Mexico, 2013 and 2014. Santa Fe: New Mexico Department of Health.
5. US Department of Labor. US Bureau of Labor Statistics (2016). Injuries, Illnesses, and Fatalities. Fatal occupational injuries. Retrieved Jan 5, 2018 from https://www.bls.gov/iif/oshwc/cfoi/staterate2016.htm.
6. Council of State and Territorial Epidemiologists. (n.d). Occupational health indicators. Retrieved Nov.7, 2017 from http://www.cste.org/general/custom.asp?page=OHIndicators.
7. Dong, XS, Wang X, & Daw C. (2012). Fatal falls among older construction workers. Human Factors, 54(3), 303-315. doi:10.1177/0018720811410057
8. Gany F, Novo P, Dobslaw R, & Leng J. (2014) Urban occupational health in the Mexican and Latino/Latina immigrant population: a literature review. Journal of Immigrant and Minority Health, 16(5), 846-855. Doi:10.1007/s10903-013-9806-8
9. Pransky G, Moshenberg D, Benjamin K, Portillo S, Thackrey JL, & Hill-Fotouhi C. (2002). Occupational risk and injuries in non-agricultural immigrant Latino workers. American Journal of Industrial Medicine, 42(2), 117-123. Doi:10.1002/ajim.10092
10. Flynn, M. (2014). NIOSH Science Blog: Safety and health for Immigrant workers. Retrieved from Centers for Disease Control and Prevention website: https://blogs.cdc.gov/niosh-science-blog/2014/12/04/immigrant-osh/

ACCESS TO HEALTH CARE

Access to Care is Key to Reducing Disease Severity

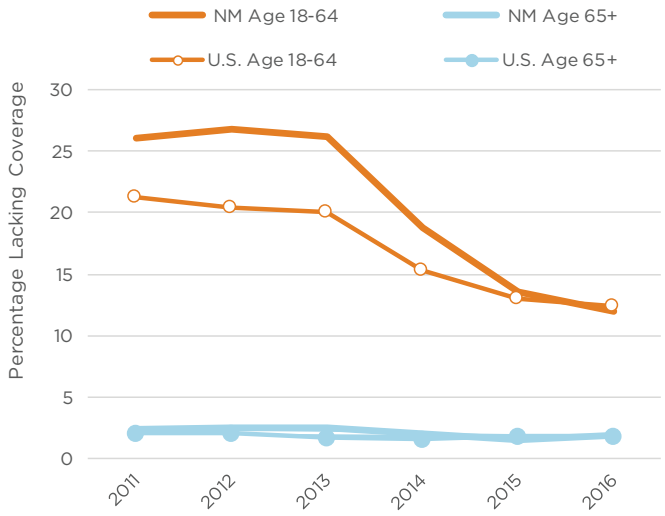
In 1978, nearly all nations of the world signed the World Health Organization Declaration of Alma Ata,[1] proclaiming the right of all people to primary care. Primary care is defined as basic or general health care focused on the access point where a patient ideally first seeks assistance from the medical care system. All or parts of 32 of New Mexico's 33 counties have been designated "primary care health professional shortage areas" by the U.S. Health Resources and Services Administration - indicating inadequate supplies of primary care providers considering the population size.

Important health maintenance information and tools and access to clinical preventive services (CPS) such as mammograms, PAP tests, measurements of blood cholesterol, and many others, are only available through health care providers. For most individuals and families, the high cost associated with accessing health care can only be managed through some form of health care plan, be it private health insurance, employer-provided insurance, or some form of public-sponsored coverage such as Medicare.

Individuals without health care coverage are much less likely than those with coverage to receive recommended CPS, are less likely to have access to regular care by a personal physician, and are less able to obtain needed medication or health care services.[2] Consequently, the uninsured are more likely to develop preventable illnesses, more likely to suffer complications from those illnesses, and are more likely to die prematurely.[3,4]

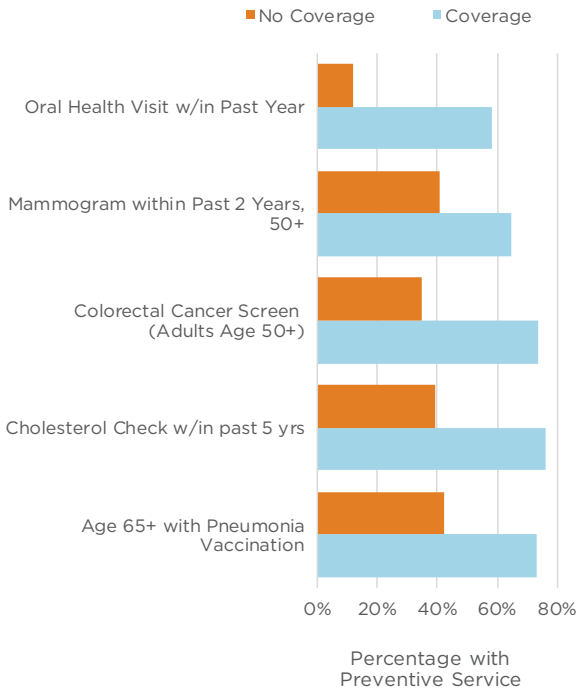
The New Mexico Department of Health routinely monitors health care coverage. Over the past 6 years, the health care coverage gap between New Mexico and the rest of the county has narrowed significantly. Among adults aged 18-64 years, 26.1% in New Mexico lacked health care coverage compared to 21.3% in the United States (Figure 1). In 2016, the gap had virtually disappeared (12.0% New Mexico, 12.4% U.S.). Among children under the age of 18, the gap was similarly narrow: 6.1% of New Mexico children and 6.0% of U.S. children were without any form of health care

Figure 1. Lack of Healthcare Coverage by Year, Age 18-64 and 65+, New Mexico and U.S., 2011-2016



Source: NMDOH BRFSS

Figure 2. Access to Important Preventive Health Care by Health Care Coverage Status, New Mexico, 2015-2016



Source: NMDOH BRFSS

coverage in 2016. Most adults aged 65 years or more qualify for federally sponsored Medicare, and predictably, nearly all (98.1%) New Mexicans in that age group had health care coverage in 2016.[5]

The percentage of adults who had received selected preventive health services varied by health care coverage status. Adults who were covered by a health plan were significantly more likely to have received each form of potentially life-saving service by the recommended age and within the recommended time frame than those without coverage (Figure 2). In 2015-2016, 73.2% of adults aged 65 or older who had coverage had received the recommended pneumococcal vaccination while only 42.5% of those without coverage had. In 2016, 37.8% of adults without coverage experienced a time in the previous 12 months when they needed medical care but could not get it because of the cost, while cost prevented only 10.1% of adults with coverage from obtaining needed medical care.[6]

Community-Based Primary Care

The community-based primary care sector in New Mexico is a major public health success story. Few other states have such a widespread system caring for such a large percentage of the state's underserved population. Primary care centers are serving a significant portion of the unmet need in New Mexico. Under the Federal Primary Care Cooperative Agreement, the Office of Primary Care & Rural Health (OPCRH) of the NMDOH works to facilitate the expansion of primary care centers by providing support to the New Mexico Primary Care Association and individual community groups and primary care centers seeking to initiate or expand community-based primary care centers in underserved parts of the state. The OPCRH will develop and disseminate information about areas of highest need and will promote coordinated planning to meet local needs, including coordination between primary care centers, rural hospitals, local health councils and public health offices.

The Rural Primary Health Care Act (RPHCA) program provides financial support for the operations of 100 community-based primary health clinics throughout the state ensuring the provision of basic health care. The RPHCA Program documented more than 330,000 patients and over 1,000,000 primary care encounters in state fiscal year 2016. Primary Care Provider Recruitment and Retention supports a clearinghouse for recruitment and retention of primary care providers for underserved and rural areas of the State: 62 health professionals have been placed in 19 counties in 26 different communities for state fiscal year 2016. The Primary Care Capital Fund, in cooperation with the New Mexico Finance Authority, offers low-interest rate loans to community-based primary care centers and hospices. There are 10 active loans for primary care center facilities state fiscal year 2016. The Primary Care Cooperative Agreement (PCO) supports the coordination of state primary care center program activities with those of the Federal Health Resources and Services Administration (HRSA). The PCO works to foster collaboration, provide technical assistance, assess needs, develop workforce for National Health Service Corps (NHSC) and safety net programs, coordinate Health Professional Shortage Area (HPSA), there are 187 NHSC clinicians serving at 100 sites in the state of New Mexico for fiscal year 2016.

While the focus of these centers is on medical services, there is an increased emphasis on expansion of dental services in the primary care setting. Fewer than half of primary care clinic sites have dental service capacity. But even with this limited capacity, primary care centers provide more than 21% of all Medicaid dental services in New Mexico.

Affordable Care Act

The implementation of the Affordable Care Act (ACA) in 2014 expanded insurance coverage in New Mexico, most notably by expanding eligibility for New Mexico Medicaid programs. Medicaid enrollment increased significantly after the implementation of the ACA with an increase of 24 percent in 2014 among all age groups.[7] Among adults 18-64 who say Medicaid is a source of coverage, the percentage increased by 97.1% going from 10.5% in 2013 to 20.3% in 2016.[8] The percentage of New Mexico adults without healthcare coverage dropped by over 54% between 2011 (26.2%) and 2016 (12.0%). The

percentage of adults who say they are unable to get needed medical care due to cost dropped significantly as well, going from 22.0% in 2011 to 14.4% in 2016.

The Affordable Care Act has provided some important benefits for residents of New Mexico. ACA includes a small business tax credit designed to support small businesses in providing health care coverage to employees providing health care coverage to employees. As of September 2017, New Mexico was one of five states with a state-based health insurance exchange that used the federal web platform. Enrollment in plans offered on the exchange amounted to about 45,000 in 2017. Of individuals enrolled, 73 percent were eligible for premium tax credits, which averaged $283 per month. In addition, 47 percent were eligible for reductions in their cost-sharing responsibilities. Frequently, adults who retire early will lose employer-provided coverage but will be too young to receive coverage through Medicare. Through ACA, the Early Retiree Reinsurance Program provides support to employers to ensure continuation of coverage of employees who retire early. ACA allows children to be covered through their parent's plan through age 26. ACA made available to New Mexico $37.5 million to provide coverage for uninsured residents with pre-existing medical conditions through a new transitional high-risk pool. Additionally, the ACA includes many consumer protections, including: eliminating lifetime limits on coverage; restrictions against denial of coverage based on pre-existing conditions; regulation of use of annual limits to coverage; requirement of appeals processes to ensure pathways to dispute denial of medical claims; and, increased flexibility in choice of physician.

Contributing Factors

Risk and Resiliency Factors

A major risk factor is limited access to healthcare in New Mexico, which is related to primary care provider shortages and lack of awareness of insurance availability. Another risk factor is that the rurality of New Mexico creates long travel distances to primary health clinics and hospitals. Healthcare affordability in New Mexico remains a risk factor although the implementation of the ACA has made healthcare more accessible to those who couldn't previously afford insurance.

Health Disparities

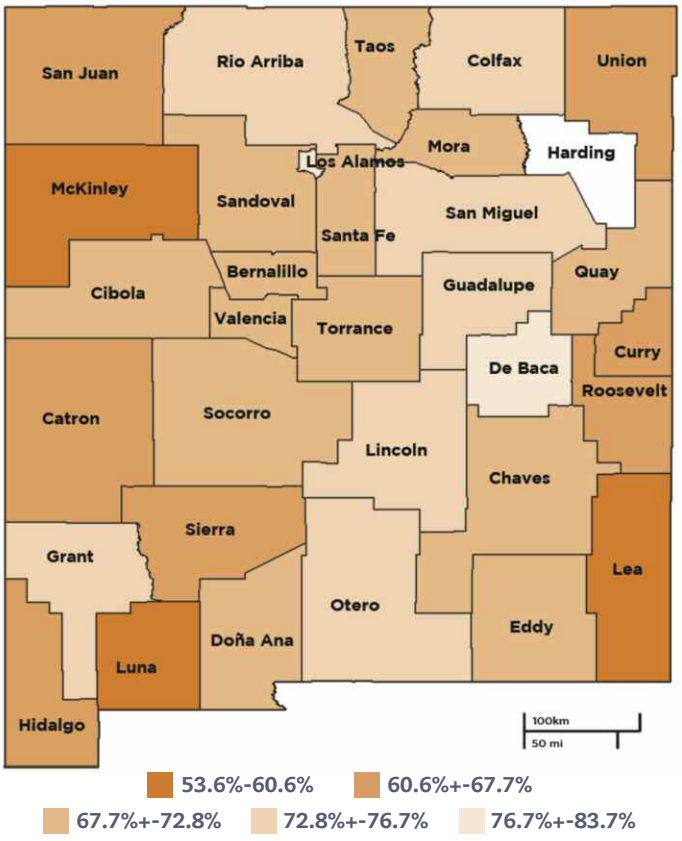
Ideally, all individuals would have effective access to health care. However, health insurance coverage varies by gender, race/ethnicity, education level, annual household income, employment status, and region of residence. In 2016, adult men were slightly less likely than adult women to have health care coverage (88.6% vs. 91.8%). Asian or Native Hawaiian/Pacific Islander (100.0%) and White (94.8%) adults were more likely than American Indian (92.5%), Black or African American (88.4%), and Hispanic (85.3%) adults to have health care coverage. Hispanic adults were least likely of all racial/ethnic groups to have health care coverage. However, cost was

more likely to have prevented Asian or Native Hawaiian/Pacific Islander adults from getting care when needed compared to White adults (16.2% vs 8.6%).

Adults with more education were significantly more likely to have health care coverage. At each level of completed education, the prevalence of health care coverage was significantly higher. Adults with a household income of $15,000 to $24,999 had significantly lower coverage than those with incomes over $25,000 and slightly lower than adults with incomes less than $15,000. Adults who were employed were significantly more likely to have coverage than adults who were unemployed (96.7% vs. 83.3%). Retired adults were most likely to have coverage (98.2%). Of course, most retired adults are 65 or older and qualify for Medicare. Adults living in the southeast region of New Mexico (86.1%) were less likely to have coverage than adults living in other regions. Adults living in New Mexico's Metro Region had the highest coverage (91.4%) of any region.

New Mexico adults living in Los Alamos County were the most likely to report having a usual primary care provider (83.7%), while those living in McKinley (53.6), Luna (60.0%) and Lea (60.6%) counties were least likely to report having a primary care provider (Figure 3). Having a usual primary care provider depends on affordability (e.g., income, health care coverage and the quality of health care benefits provided by the health plan) as well as physical proximity to an appropriate provider.

Figure 3. Percentage of Adults Aged 18+ Years With a Usual Primary Care Provider by County, New Mexico, 2012-2016



Source: NMDOH BRFSS

Assets and Resources

New Mexico's health insurance exchange bewellnm.com is a marketplace where New Mexicans can learn about health insurance, compare plans and get ready to enroll.

The New Mexico Primary Care Association (NMPCA) is a non-profit 501 (c) 3 corporation, representing 19 member organizations that operate over 160 primary care, dental, school-based and behavioral health clinics, throughout New Mexico. Many NMPCA members are among the dozens of Federally-qualified Health Centers (FQHCs) located throughout the state. FQHCs receive federal support to provide comprehensive primary care and preventive care to persons of all ages, regardless of their health insurance status or ability to pay.

Summary

Factors limiting access to healthcare in New Mexico are availability, accessibility, and utilization of health insurance. Limited access is a major factor due to primary care provider shortages and rural areas in New Mexico. New Mexico has seen a sharp decrease in the percentage of the population lacking healthcare coverage due to the implementation of the Affordable Care Act.

What is Being Done?

- $1.38 million from U.S. Department of Health & Human Services was provided to the New Mexico Medical Insurance Pool to support coverage of those who have been denied coverage due to pre-existing conditions
- Analysis of the New Mexico Behavioral Risk Factor Surveillance System healthcare access supplemental questions to assess the impact of the Affordable Care Act.
- Planning assistance and low-interest loans are being given to community groups and agencies developing or expanding community-based primary care centers.
- Tax incentives and education loan repayment programs encourage medical professionals to settle and work in under served areas

What Needs to be Done?

- Careful study of and integration of New Mexico primary care and other medical resources with the federal Affordable Care Act.
- Monitor distribution of medical professionals and services across the state to identify geographic areas of need.
- Expansion of primary care centers to meet the needs of more underserved people.
- Expansion of services provided by primary care centers to include dental services, behavioral health services, health promotion and disease prevention services, and chronic disease management.
- Continue, and expand, monitoring of access to and utilization of health care across the entire population of New Mexico.

References:
1. World Health Organization, http://www.who.int/publications/almaata_declaration_en.pdf
2. Ayanian JZ, Weissman JS, Schneider EC, Ginsburg JA, Zaslavsky AM. Unmet health needs of uninsured adults in the United States. JAMA. 2000; 284:2061-9. [PMID: 11042754.
3. See reference #2.
4. McWilliams JM, Meara E, Zaslavsky AM, Ayanian JZ. Use of health services by previously uninsured Medicare beneficiaries. N Engl J Med. 2007;357:143-53.
5. National Survey of Children's Health, http://childhealthdata.org/browse/survey/results?q=4807&r=1&r2=33
6. U.S. Department of Health & Human Services, http://www.healthreform.gov/reports/statehealthreform/newmexico.html
7. RAND, "The Affordable Care Act in Depth," accessed October 10, 2017

DISABILITY-ADJUSTED LIFE YEARS (DALYS)

A Comprehensive Measure of Health

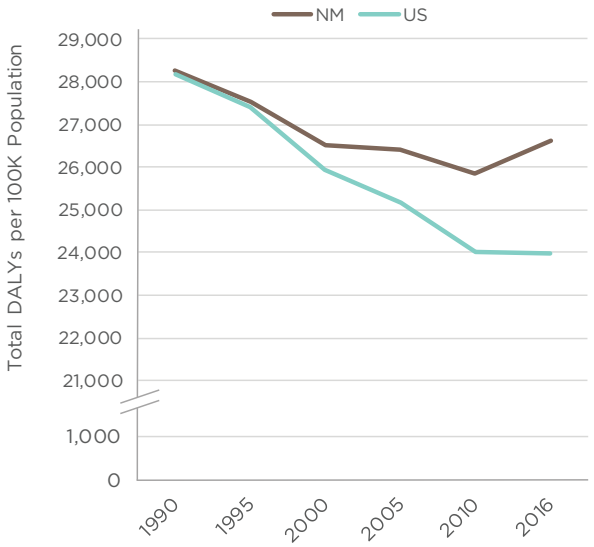
What are DALYs?

Disability-Adjusted Life Years (DALYs) represent a new and innovative way of measuring health and disease burden at a state level. Traditionally, prioritizing conditions for state level health status improvement has been guided largely by mortality rates, where conditions with high mortality rates like heart disease and cancer are given higher priority than low-mortality conditions. However, there are many low-mortality health conditions that profoundly impact quality of life. DALYs combine a morbidity component (Years Lived with Disability) and a mortality component (Years of Life Lost due to a given cause of death or disability), to provide a more complete picture of the burden of disease and disability. DALYs are calculated with this equation:

> DALY = Years of Life Lost due to premature mortality (YLL) + Years Lived with Disability (YLD)

The YLL is based on remaining life expectancy when compared with a reference standard life table at age of death, and the YLD is calculated by multiplying the prevalence of a disease or injury by its weighted level of severity. One DALY represents 1 year of healthy life lost. It is a measure of the gap between current health status and an ideal situation where everyone lives into old age free from disease and disability. DALYs are typically reported as a rate per 100,000 population.

Figure 1. Total Disability-adjusted Life Years (DALYs) New Mexico and United States, 1990-2016



Values have been age-standardized to the U.S. 2000 population.
Source: University of Washington Institute for Health Metrics & Evaluation

Disability-Adjusted Life Years (DALYs) are widely available for the first time at a sub-national level. The DALYs calculations are part of the larger Global Burden of Disease (GBD) studies conducted by the World Health Organization and their partners. Data sources for DALYs are primarily meta-analyses of health status studies published in peer-reviewed journals.

DALYs Trends in New Mexico

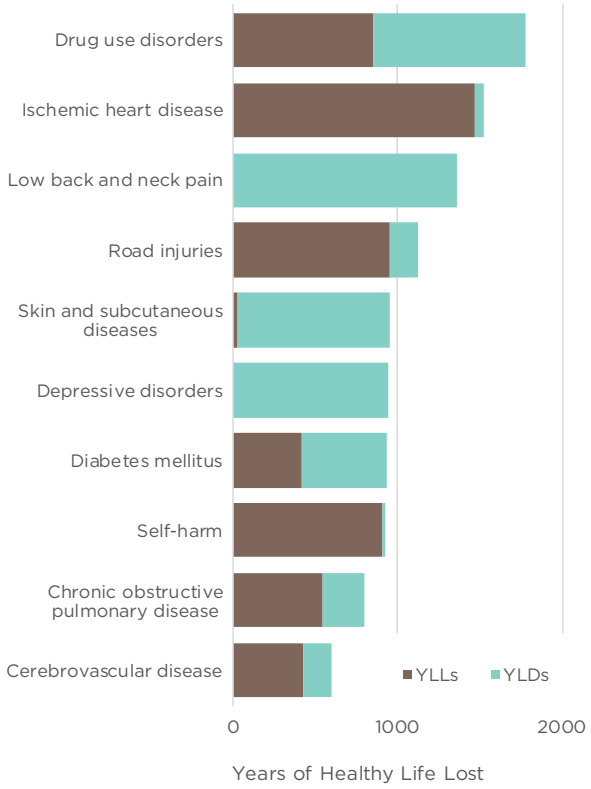
From 1990-2010, total DALYs for New Mexico and the United States declined. This was from a high of 28,264 per 100,000 population for New Mexico in 1990 to a low of 25,841 in 2010 (Figure 1). This represents an 8.6% decrease. However, from 2010 to 2016 there was a slight increase in the total DALYs rate in New Mexico to the

current level of 26,620 per 100,000 population (a 3% increase). New Mexico's total DALYs rates were very similar to the United States' rates in the 1990s. Since then, New Mexico has had higher rates compared to the U.S., with the current difference being approximately 2600 DALYs per 100,000 population.

The highest DALYs rates for New Mexico in 2016 were found for the following conditions (starting with the highest): drug use disorders, ischemic heart disease, low back and neck pain, road injuries, skin and subcutaneous diseases, depressive disorders, diabetes mellitus, self-harm, chronic obstructive pulmonary disease, and cerebrovascular disease (Figure 2). The highest ranked condition, drug use disorders, is an aggregate rate comprised of opioid, cocaine, amphetamine, cannabis, and other drug use disorders. For low mortality conditions such as low back and neck pain the DALYs rate is primarily comprised of the YLD, i.e., the morbidity component. For high mortality conditions such as ischemic heart disease, the DALYs rate is primarily comprised of the YLL, i.e., the mortality component (Figure 2). These top 10 DALYs rates can be compared directly to the DALYs rates for the same conditions in the United States for 2016 (Figure 3). For most of these conditions the DALYs rates for New Mexico are similar to those of the United States. However, for drug use disorders, road injuries, and self-harm the DALYs rates in New Mexico are significantly higher than those found in the U.S.

The conditions with the highest DALYs rates overlap with several conditions with the highest mortality rates such as heart disease (ranked #1), unintentional injuries (#3), chronic lower respiratory diseases (#4), and intentional self-harm (#9). Drug use disorders are not present in the top ten highest mortality rate conditions, however drug overdose death is the largest component of unintentional injury death. This is an excellent example of the value of including DALYs in assessing population health status over using mortality rates alone. Low-mortality conditions that greatly impact quality of life, such as low back/neck pain, skin diseases, and depressive disorders, may be neglected entirely in allocating health resources if focusing on mortality rates alone.

Figure 2. Leading Causes of Disability-adjusted Life Years by Disease/Condition, Years of Life Lost (YLL) versus Years Lived with Disability (YLD), New Mexico, 2016



Values have been age-standardized to the U.S. 2000 population.
Source: University of Washington Institute for Health Metrics & Evaluation

Assets and Resources

General information on DALYs can be found on the Metrics: Disability-Adjusted Life Year page on the World Health Organization website.[1] The Institute for Health Metrics and Evaluation at the University of Washington is the primary WHO collaborator responsible for analyses and providing online tools for exploring the 2016 Global Burden of Disease study results. Resources available through the University of Washington include:

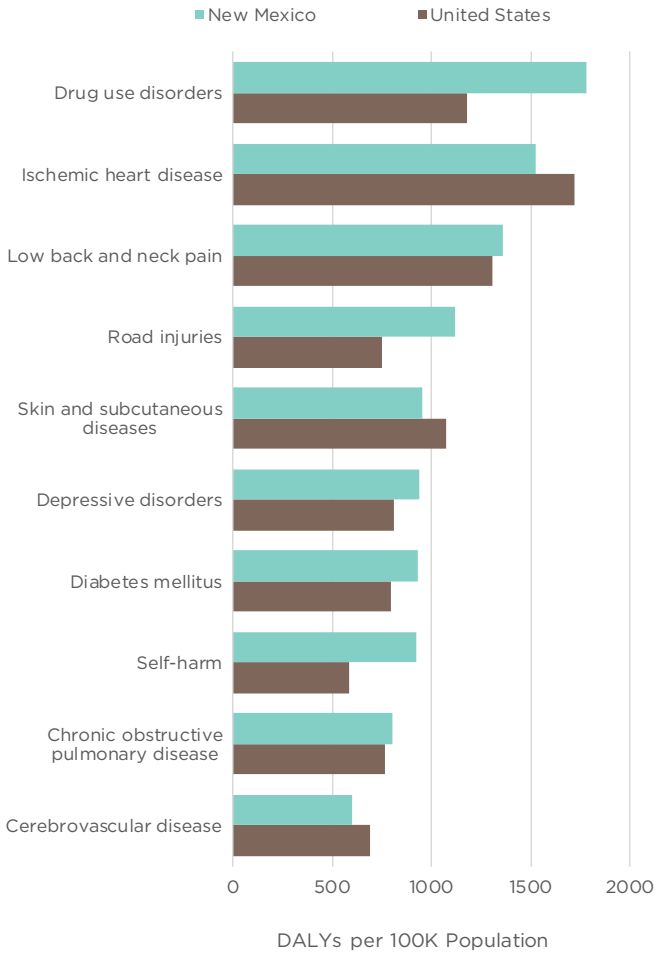
- The complete list of online resources for the Global Burden of Disease 2016 study.[2]
- The GBD Compare tool provides several different data visualization tools for comparing DALYs, YLDs, and death rates across different geographic areas, time periods, age, and sex.[3]

- The GBD Results tool provides an easy way to query and download DALYs, YLDs, YLLs, death, prevalence, and incidence rates from GBD 2016 by geographic area, time period, age and sex.[4]
- The guidelines and methodology standards used in GBD 2016 can be found at the Guidelines for Accurate and Transparent Health Estimates Reporting (GATHER) website.[5]

Summary

DALYs can be used in conjunction with other information, such as mortality and morbidity rates and health surveys, to arrive at a more complete picture of the burden of disease in New Mexico. Examination of levels and trends of DALYs facilitates quick comparison between different diseases and injuries across different geographies and time periods. The total DALYs rate for New Mexico has generally been trending downward since 1990 and tracking closely with the total U.S. rate, although in 2016 the New Mexico rate has increased, diverging from the U.S. rate. Three conditions with high DALYs in New Mexico, drug use disorders, road injuries, and self-harm, are significantly different from the U.S. rates for 2016. The inclusion of DALYs in state health assessment will help to emphasize low-mortality conditions that have great impact on citizens' quality of life.

Figure 3. Leading Causes of Disability-adjusted Life Years by Disease/Condition, New Mexico and United States, 2016



Values have been age-standardized to the U.S. 2000 population.
Source: University of Washington Institute for Health Metrics & Evaluation

References:
1. World Health Organization. Metrics: Disability-Adjusted Life Year (DALY). Accessed 11/14/2017 from: http://www.who.int/healthinfo/global_burden_disease/metrics_daly/en/.
2. Global Burden of Disease Study 2016 (GBD 2016) Data Resources. Accessed 11/14/2017 from: http://ghdx.healthdata.org/gbd-2016.
3. Institute for Health Metrics and Evaluation, Global Burden of Disease, 2016. University of Washington. Accessed 11/14/2017 from: https://vizhub.healthdata.org/gbd-compare/.
4. Global Burden of Disease Tool. Institute for Health Metrics and Evaluation, Global Burden of Disease, 2016. University of Washington. Accessed 11/14/2017 from: http://ghdx.healthdata.org/gbd-results-tool.
5. Guidelines for Accurate and Transparent Health Estimates Reporting (GATHER) Accessed 11/14/2017 from: http://gather-statement.org/.

SOCIAL DETERMINANTS OF HEALTH

Healthy Social Conditions Support Healthy Populations

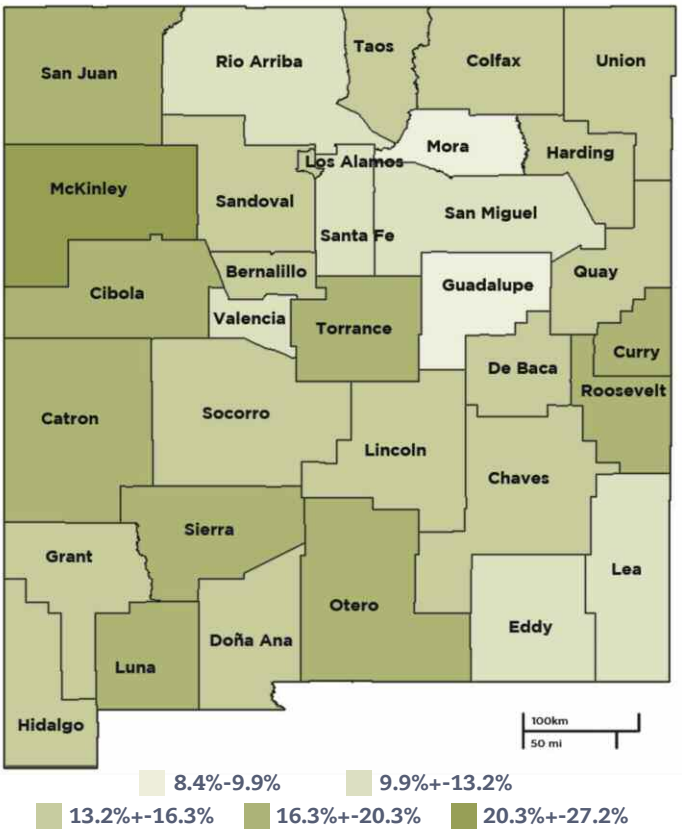
Social Determinants of Health

Social determinants of health are demographic conditions in the communities in which people live, work, play, and age that affect a wide range of health outcomes. New Mexico faces significant challenges in this area on such highly important factors as economic security, education, crime, and access to health care.[1]

Economic Stability

Economic stability is associated with many health conditions and risk factors and is thought to influence health through a variety of pathways, including access to care, chronic stress, environmental exposures and health behavior. Median household income in New Mexico ($46,884) was only about 81% of that found in the U.S.,overall ($57,617). In 2016, 19.1% of New Mexicans were living in households with incomes beneath the poverty threshold, compared with 14.0% in the U.S. New Mexico has had among the highest child poverty rates over the years, and in 2016 was ranked 48th among all states with 27.8% of our children under age 18 living in poverty, compared with 19.5% in the U.S. overall.[2] Food insecurity is one outcome of economic insecurity. The highest rates of child food insecurity in 2015 were found in McKinley (34.8% food insecure), Luna (33.6%), and Cibola (32.7%) counties (Figure 1).[3]

Figure 1. Percentage of Persons in Food Insecure Households by County, All Persons, New Mexico 2015



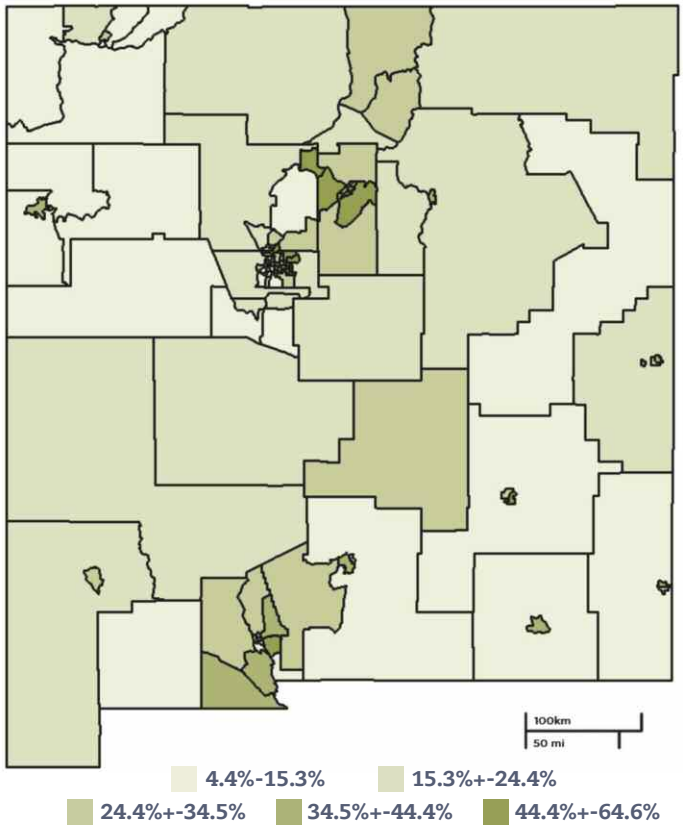
Sources: U.S. Census Bureau, American Community Survey

Education

Higher educational attainment is associated with better health outcomes. Low educational attainment has been identified as a problem in the U.S. The Robert Wood Johnson Foundation reports that "The United States is the only industrialized nation where young people currently are less likely than members of their parents' generation to be high-school graduates."[4] New Mexico's 2016 high school completion rate (85.4%) gives us a rank of 45 among U.S. states, and we rank at the bottom (50th) for percentage of third graders able to read at a basic level (54%, compared with 69% nationally).[5] The highest percentage of persons with a 4-year college degree were found in Los Alamos, Santa Fe and Bernalillo counties (Figure 2).[6]

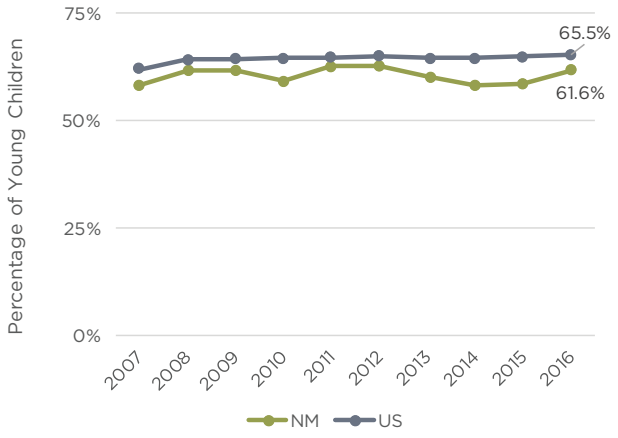
Parents and families are characteristically the earliest educators of young children, and the level of parental interaction during formative years is linked to a variety of academic outcomes. However, the degree of parental involvement may be influenced by the labor-force participation of the parents, particularly in single-parent households. An increased need for quality child care is found in family settings where all parents are employed full-time. In New Mexico, the percentage of young children with both parents or their only parent in the labor force (61.6%) is similar to that in the U.S. (65.5%) (Figure 3). Counties with the highest percentage (2012-2016) of working parents of children under age 6 were Cibola, Socorro and Quay counties.

Figure 2. The Percentage of Adults Aged 25 or Over Who Have a Bachelor's Degree or Higher by Small Area, New Mexico, 2012-2016



Sources: U.S. Census Bureau, American Community Survey

Figure 3. Percentage of Children Aged 5 Years and Under With Both Parents or Their Only Parent in the Labor Force, New Mexico and U.S., 2007-2016



Sources: UNM GPS Program, U.S. Census Bureau

Employment

The U.S. unemployment rate was higher than the New Mexico rate during the height of the recent recession (2007-2010). But beginning in 2010, the U.S. rate saw dramatic improvement and was at 4.9% in 2016; lower than the 2016 New Mexico rate of 6.7%. In 2016, the highest unemployment rates were found in Luna, McKinley, Lea and Torrance counties.

Crime

The impact of crime on an individual victim, their loved ones, and their community depends on a variety of factors, but often crime victimization has significant emotional, psychological, physical, financial, and social consequences. In 2016, every day on average, 224 New Mexicans were victims of property crimes, 32 of which were motor vehicle thefts, and 40 were victims of violent crimes, 4 of which were rapes and 7 were robberies. New Mexico had the highest property crime rate among all 50 states, and the second-highest violent crime rate.[7]

Health Disparities

Health status is strongly related to educational attainment, income and poverty status. Families with high incomes can afford to live in nicer neighborhoods, further away from high-crime areas and industrial pollution, where the housing is newer, and the schools are better-funded. In 2016 in the U.S., the following characteristics were associated with a higher percentage of persons in poverty: households with children, especially children under age 6, females, persons under age 18, foreign-born non-citizens, and persons who were unemployed, had a disability, or lacked a high school diploma.[8] In New Mexico, the percentage of persons in poverty is higher among American Indian/Alaska Native, Black, and Hispanic populations.

Assets and Resources

The Special Supplemental Nutrition Program for Women, Infants and Children (WIC) is for low-income pregnant and post-partum women, infants, and children up to age 5 who are at nutritional risk. WIC provides nutritious foods to supplement their diets, provides healthy eating information, health counseling, breastfeeding

support, cooking classes, and referrals to health care providers and social services.

The Supplemental Nutrition Assistance Program (SNAP), formerly known as the Food Stamp Program, provides financial assistance to eligible New Mexicans with low income and limited resources to purchase food products. SNAP benefits are simple to use to purchase qualifying food products at participating grocery stores.

The New Mexico Public Education Department uses an early warning system (EWS) designed to reduce dropping out by using routinely available data to identify students at risk of dropping out. Once identified, students at risk of habitual truancy and dropping out can be served with a spectrum of interventions, including truancy and dropout prevention coaches, to get them back on track to graduation.

The Child Care Assistance Program subsidizes the cost of child care for low-income families that are working and/or in school and have a need for child care. The subsidy amount varies depending upon the age of the child, the type of child care, the location of the program, and the quality rating of the child care program. Regional offices are located throughout the state and are staffed by eligibility interviewers who work with families to determine the amount of subsidy for which they qualify.

The New Mexico Coalition for Literacy (NMCL) works to coordinate, expand, and enhance New Mexico programs so adults can read and write to achieve their goals. NMCL maintains a statewide directory of adult education and literacy programs.

Summary

New Mexico has relatively poor health outcomes for suicide, unintentional injury deaths and alcohol deaths, which are likely related to our social determinants of health. Yet despite our relatively poor showing on key social determinants of health, New Mexico fares remarkably well compared to other states in a number of areas, including deaths from cancer and heart disease. Improving social conditions will improve New Mexico's health outcomes, but these social conditions do not change quickly or easily. New Mexico must focus on reducing poverty and improving education, to reap both immediate and long-term benefits to the state.

What is Being Done?

- New Mexico does not tax groceries.
- New Mexico has the Earned Income Tax Credit.
- Lottery scholarship for college students.
- New Mexico Workforce Solutions counseling, referral and job listings.
- Increased collection and broad dissemination of socioeconomic status related information in health surveys and datasets.

What Needs to be Done?

- Intervene in early childhood to support the health and educational development of low SES children.
- Increase resources for public education and access to higher education.
- Focus interventions toward low-health-status populations with the fewest resources.
- Continue to use and promote proven, evidence-based interventions.

References:
1. U.S. Census Bureau Small Area Income and Poverty Estimates. Accessed 01/04/2018 from: https://www.census.gov/data-tools/demo/saipe/saipe.html.
2. The Institute of Medicine. Disparities in Health Care: Methods for Studying the Effects of Race, Ethnicity, and SES on Access, Use, and Quality of Health Care, 2002. As cited in Social Determinants of Health Overview, U.S. Public Health Service, Healthy People 2020. Accessed 11/15/2017 from: https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health.
3. Feeding America, Map the Meal Gap Report. Accessed 10/03/2017 from: http://www.feedingamerica.org/hunger-in-america.
4. Why Does Education Matter So Much to Health? Robert Wood Johnson Foundation Health Policy Snapshot, December 2012. Accessed 12/20/2017 from: https://files.eric.ed.gov/fulltext/ED541163.pdf.
5. National Assessment of Educational Progress: 2015 Mathematics & Reading Assessments. Accessed 1/8/2018 from: https://www.nationsreportcard.gov/reading_math_2015/#reading/state/scores?grade=4.
6. U.S. Census Bureau, American Community Survey. Accessed 12/20/2017 from: https://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml.
7. Federal Bureau of Investigation (FBI), Crime in the U.S. Accessed 12/20/2017 from: https://ucr.fbi.gov/crime-in-the-u.s.
8. Income and Poverty in the United States: 2016. Accessed 12/20/2017 from: https://www.census.gov/library/publications/2017/demo/p60-259.html.

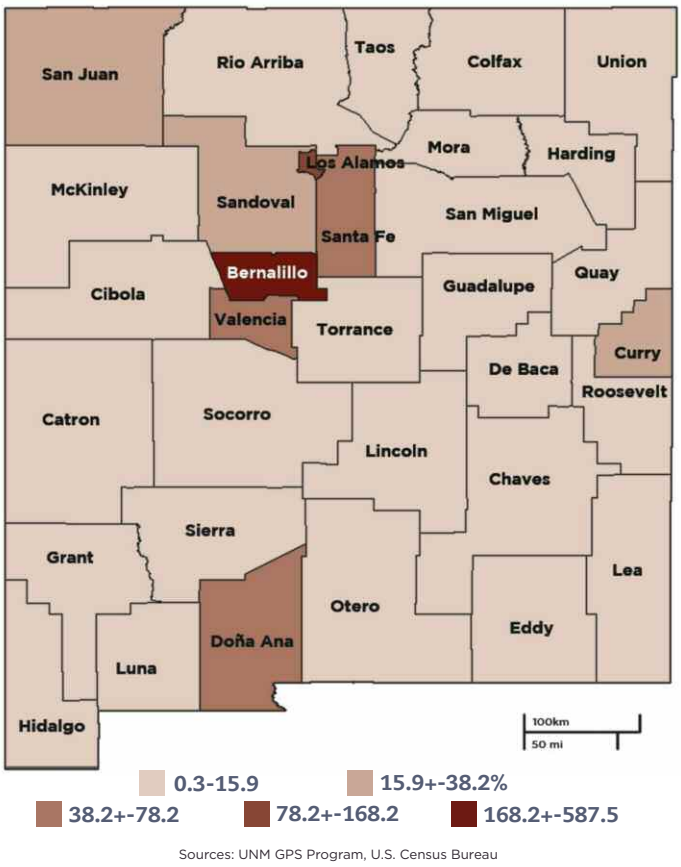
DEMOGRAPHIC CHARACTERISTICS

New Mexico's People

Urban and Rural

New Mexico is the fifth largest U.S. state in terms of land area, but in 2016, was only the 36th most populous state. New Mexico's population is not evenly distributed across the state geographically. In 2016, two-thirds of New Mexico's estimated 2,103,586 residents lived in the six most populous counties (Bernalillo, Los Alamos, Santa Fe, Valencia, Dona Ana and Sandoval counties). Those six counties have an average population density of 80.9 persons per square mile, compared with 6.9 persons per square mile in the remaining 27 counties (Figure 1). Providing health care and public health services in rural areas poses challenges such as the ability to hire and maintain full-time clinicians and specialists, and the great distances that many people have to travel to get care.

Figure 1. Population Density by County, New Mexico, 2016

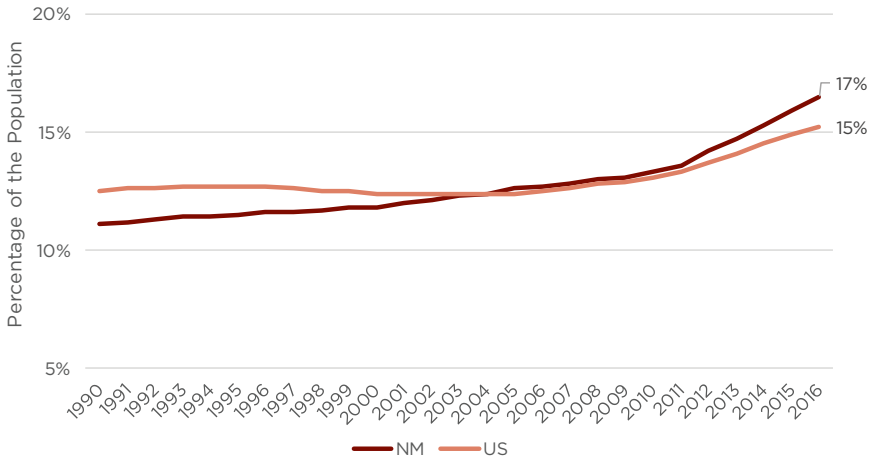


Sources: UNM GPS Program, U.S. Census Bureau

Age Distribution

Continued growth of our older adult population in New Mexico is expected. Based on population estimates provided by the University of New Mexico Geospatial and Population Studies Program, in 1990, 11.1% of people in New Mexico were aged 65 years or older. By 2010, 13.3% of New Mexico's population was 65 years or older, and by 2016, the figure was 16.5% (Figure 2). According to the U.S. Bureau of the Census, by 2030, persons in this age group will comprise over 20% of the U.S. population. And the proportion of New Mexico's aged 65 and over population is outpacing that of other states. In 2000, New Mexico ranked 37th highest among all states for percentage of the population aged 65 or over. By 2016 we'd moved up 23 spots to 14th.

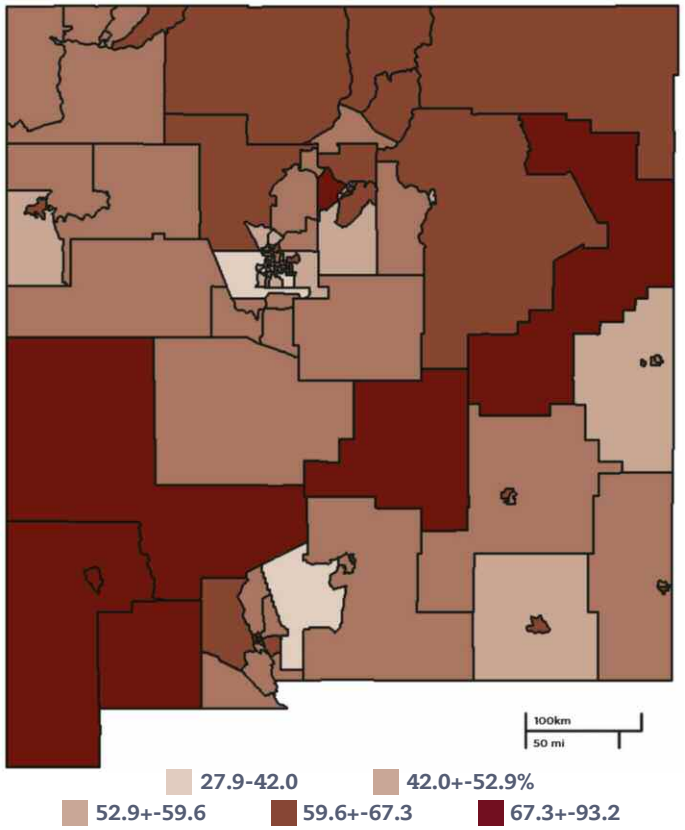
Figure 2. Percentage Aged 65 and Over by Year, New Mexico, 1990-2016



Sources: UNM GPS Program

The age dependency ratio is an indicator of the amount of burden that non-working individuals in society place on the working-aged population. A high ratio indicates a high proportion of non-working individuals compared to working-aged individuals. Working-aged individuals tend to pay much more in taxes, while seniors aged 65 or older and children younger than age 15 are likely to be socially and/or economically dependent on the working-age population, putting additional demands on New Mexico families and health services. New Mexico's age dependency ratio in 2016 was 56.1, compared with 51.8 in the U.S. The age dependency ratio in both New Mexico and the U.S. has been on the rise since 2011. The highest age dependency ratios are primarily in rural areas of New Mexico (Figure 3).

Figure 3. Age Dependency Ratio by Small Area, New Mexico, 2016



Sources: UNM GPS Program

Race and Ethnicity

New Mexico's population distribution by race and ethnicity is strikingly different from that of the United States overall, with smaller proportions of persons who are Black or Asian, and larger proportions of persons who are American Indian or Hispanic. White persons comprised a minority (39%) of the state's population in 2016.

New Mexico's American Indian population includes part of the Navajo Nation, 19 pueblos, and two Apache tribes (Jicarilla and Mescalero Apache). Most of New Mexico's American Indian tribes have lived on their current lands for hundreds or thousands of years - since before Francisco Vásquez de Coronado arrived in 1541 - and disparities in health status between American Indians and other groups in the United States have persisted throughout the 500 years since.[1] Some have argued that American Indian health disparities are the product of the disrupted social conditions of colonization, while others emphasize socioeconomic conditions or access to health care,[2] though the two explanations are not mutually exclusive. American Indian and Alaska Native New Mexicans have relatively poor health outcomes on a number of important measures of health status, including life expectancy and deaths due to unintentional injuries, diabetes and alcohol. However, compared to the state, overall, American Indian/Alaska Native New Mexicans are more likely to consume fruits and vegetables, and have lower death rates from heart disease and cancer - the state's two leading causes of death.

Assets and Resources

Community health centers serve as a comprehensive and cost effective primary health care option for New Mexico's most underserved communities. Health centers serve everyone regardless of ability to pay or insurance status. In 2015, community health centers provided health services to over 300,000 New Mexicans at 171 sites across the state. [3]

Summary

New Mexico's geographically sparse and aging population puts pressure on its health care system. The racial and ethnic diversity of the state compared to the U.S. poses challenges in providing culturally-sensitive health care. Although health disparities sometimes bend in favor of New Mexico's non-White populations, especially for the state's two leading causes of death, cancer and heart disease, more often non-White New Mexicans suffer higher rates of death, injury and disease and lower life expectancies than Whites.

References:
1. Jones, David S. (2006) The Persistence of American Indian Health Disparities. Am J Public Health.96(12); Dec 2006 Accessed 12/20/2017 from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1698152/.
2. Nicholas Mascie-Taylor, C.G., Peters, J., and McGarvey, S.T. (2004) The Changing Face of Disease: Implications for Society. Boca Raton: CRC Press. As cited in Jones, David S. (2006) The Persistence of American Indian Health Disparities. Am J Public Healthv.96(12); Dec 2006.
3. National Association of Community Health Centers (2016) Key Health Center Data by State, 2015. Accessed 12/26/2017 from: http://www.nachc.org/wp-content/uploads/2016/10/Key-Health-Center-Data-by-State_2015.pdf.

Afterword: Health Assessment and Health Improvement in New Mexico

The State of Health in New Mexico 2018 report was designed to support community health assessment and health improvement efforts in New Mexico. The report provides data and information on the health status of New Mexicans so that we may focus our efforts, identify the health factors that contribute to priority health outcomes, and plan ways to promote better health in New Mexico.

The New Mexico State Health Improvement Plan resulted from this process of assessing our state's health status, focusing our efforts, planning interventions, and implementing them in public health programs across the department. New Mexico counties and tribes also have community health councils that conduct their own health assessments and develop and implement community health improvement plans.

Various versions of this basic model for community health assessment and improvement exist, but all seem to embrace three components: assessment, planning and implementation (Figure 1).

Assessment is accomplished through reports like this one, the NM-IBIS website, data reports published by DOH programs and epidemiologists, and activities of community health councils. Assessment data and information are compiled and used to construct a health promotion or health improvement plan.

The New Mexico State Health Improvement Plan, or SHIP, is a statewide health improvement plan that is updated every three years. A statewide process to update the SHIP will progress during 2018, with local and regional community engagement meetings and other opportunities for citizen input and response. One important aspect of a health improvement plan is to set priorities. That is, the planning process should identify the health issues, risk factors, or outcomes that should receive the most resources and attention.

Implementation of the plan takes place through a number of methods, including activities of official, state-sponsored programs in the NMDOH, initiatives undertaken by community health councils, actions of the private health services sector, and others. The SHIP document will be available publicly on the NMDOH website (nmhealth.org).

Figure 1. Basic Community Health Assessment and Improvement Model

NEW MEXICO
DEPARTMENT OF
HEALTH

New Mexico Department of Health
1190 S. Saint Francis Drive
P.O. Box 26110
Santa Fe, NM 87502
Telephone: (505) 476-3564