# Grant County Substance Abuse Epidemiology Profile - 2014

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## **Executive Summary**

- In 2012, Grant County ranked first in the state for adult binge drinking.
  - Binge drinking (defined as 4+ drinks on one occasion among women, or 5+ drinks on one occasion among men) is primarily associated with alcohol-related injury, such as suicide, homicide, and motor-vehicle traffic crash death.
- In 2012, Grant County ranked third in the state for adult heavy drinking.
  - Heavy drinking (defined as 2+ drinks per day among women, or 3+ drinks per day among men) is primarily associated with alcohol-related chronic disease, such as alcoholic liver disease and alcohol dependence syndrome.
- Among youth, alcohol consumption in Grant County was high. A total of 21.5% of youth in Grant County reported binge drinking in 2013 (versus 17.1% for New Mexico), and 27.9% of youth reported that they began regularly consuming alcohol before age 13 (versus 22.3% for New Mexico).
  - Youth who start drinking before age 15 years are five times more likely to develop alcohol dependence or abuse later in life than those who begin drinking at or after age 21 years.
- Controlled substance prescribing rates, especially for opioids, were concerning for Grant County. In addition, there were high rates of both opioid and benzodiazepine use in the entire Southwest region of the state.
- Grant County had the fourth highest amount of opioids dispensed per person in 2013.
- Certain prescribing patterns put patients at high risk for drug overdose death. These
  include: prescribing high doses of opioids (>120 morphine milligram equivalent [MME] per
  day), prescribing benzodiazepines and opioids together, and "doctor-shopping" (filling
  prescription from multiple providers and/or with multiple pharmacies).
  - Of these prescribing patterns, high dose opioid prescriptions among Grant County residents were particularly concerning. A total of 8.4% of patients in Grant County who received opioid prescriptions filled prescriptions for over 120 MME/day, versus 7.4% statewide.

- Illicit drug use at a county level in New Mexico is measured primarily in youth and is not regularly measured among adults. Measures include marijuana use, cocaine use, prescription misuse, injection drug use, and methamphetamine use among youth, grades 9-12. Prevalence of illicit drug use among Grant County youth was similar to the state rate for the measures listed here.
- In 2012, over 20,000 hospitalizations in New Mexico were attributable to alcohol and other drugs. In Grant County, 306 hospitalizations were due to alcohol and other drugs.
  - Grant County is a major service provider for other southwestern New Mexico counties. A total of 47.8% of alcohol and other drug hospitalizations among Catron County residents occurred in Grant County and 72.7% of alcohol and other drug hospitalizations among Hidalgo County residents occurred in Grant County.
- Neonatal abstinence syndrome (NAS) is a constellation of conditions that occur in a newborn who was exposed to addictive illegal or prescription drugs while in utero. The rate of NAS hospitalizations among infants in Grant County was very similar to that of New Mexico (6.5 vs. 6.9 hospitalizations per 1,000 live births, 2011 and 2012 combined data).
- Alcohol-related mortality rates were very similar between Grant County (56.0 deaths per 100,000 population) and New Mexico (52.3 deaths per 100,000). This is twice the national rate (27.9 deaths per 100,000 population for 2006-2010 combined).
- Grant County ranked seventh in New Mexico for total drug overdose death, which may be related to high rates of prescription drug use.

## Evidence-Based Recommendations

#### Drug Overdose:

- Increase access to effective treatment for drug dependence and abuse. Appropriate treatment can greatly reduce the consumption of drugs and reduce the risk of overdose and other consequences.
- Assure that naloxone is available to all at high risk of drug overdose. Naloxone is a safe and effective way to reverse opioid overdose, and can be administered by almost anyone with minimal training.
- Ensure that prescribers and pharmacies use the Prescription Monitoring Program to monitor prescription drug consumption among patients and reduce high-risk prescribing.

#### Alcohol:

- Increase access to effective treatment for alcohol dependence and abuse. Appropriate treatment can help reduce excessive consumption and the associated negative consequences for individuals and the community.
- Promote evidence-based strategies, such as screening and brief intervention and local control over alcohol outlet densities. These and other strategies in the Community Guide (<u>http://www.thecommunityguide.org/alcohol/index.html</u>) have been shown to be effective in reducing excessive consumption.
- Reduce the consumption of alcohol, particularly in high risk areas, using evidence-based prevention strategies. Use data on deaths and alcohol sales to target high risk areas. A reduction in excessive consumption (heavy drinking, binge drinking) can reduce the harms associated with alcohol.

## **Technical Notes**

#### **Data Sources**

- Behavioral Risk Factor Surveillance System (BRFSS). It is the nationwide surveillance system, developed and conducted annually to monitor state-level prevalence of the major behavioral risks among non-institutionalized adults associated with premature morbidity and mortality. BRFSS updated its surveillance methods in 2011, when cell phone surveys were included in the public release data set. Comparison of estimates from 2010 and prior to those from 2011 onwards must be interpreted with caution, as it may be partially due to change in methods necessary to keep up with changes in cell phone use in the U.S. and take advantage of improved statistical procedures.
- Hospital Inpatient Discharge Data (HIDD). Information included in the HIDD was collected by the Health Policy Commission until 2011 and since then, the system has been managed by New Mexico Department of Health (NMDOH). HIDD contains information collected when patients are discharged from a hospital in New Mexico. Federal facilities are not required to report information to the HIDD. However, the Indian Health Service (IHS) has voluntarily provided data to the HIDD, but with major limitations. This will create a more population-based dataset. New Mexico statute (New Mexico Administrative Code [NMAC] 7.1.27) specifies the information to be reported by hospitals on a quarterly basis. Variables include: patient's gender, age, county of residence, diagnosis (coded using the International Statistical Classification of Diseases and Related Health Problems, version 9, Clinical Modification [ICD-9CM]), procedure codes, and admission and release dates. Additional diagnosis information can be collected from the external cause of injury codes (E-codes).
- New Mexico Death Data. Death rates were calculated by the NMDOH, Epidemiology and Response Division (ERD), Injury and Behavioral Epidemiology Bureau, Substance Abuse Epidemiology Section (SAES) using final death data from NMDOH-ERD Bureau of Vital Records and Health Statistics (BVRHS), New Mexico's annual estimates of population

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(2000-2012) from the University of New Mexico (UNM), Geospatial and Population Studies (GPS). For the estimation of alcohol-related deaths and alcohol-related death rates the Center for Disease Control's (CDC's) revised Alcohol-Related Disease Impact (ARDI) Alcohol-Attributable Fractions (AAFs) were used. AAFs are the proportion of a given cause of death that can be attributed to excessive alcohol use. The revised CDC ARDI AAFs are the standard AAFs recommended for use by the CDC.

- New Mexico Prescription Monitoring Program (PMP). It was established in 2005 in response to the increase in prescription drug overdose. The PMP is operated by the New Mexico Board of Pharmacy under the board's authority to regulate pharmacies and has been in place since July 2005. All controlled substance prescriptions filled by pharmacies (including refills) are required to be reported to the PMP within seven days. The information collected by the PMP is similar to the information on a prescription label, and identifies the prescriber, the patient, the pharmacy, the drug and includes details of the prescription such as quantity and number of days of supply.
- Youth Risk and Resiliency Survey (YRRS). It is the New Mexico tool to assess the health
  risk behaviors and resiliency (protective) factors of New Mexico high school and middle
  school students. The YRRS is part of the national CDC Youth Risk Behavior Surveillance
  System (YRBSS). The YRRS is offered to a selection of high schools and middle schools in
  each school district in the fall of odd-numbered years. All data are self-reported by
  students who voluntarily complete the survey during one class period.

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#### Data Suppression

- New Mexico's Department of Health (NMDOH) 'Small Numbers Rule' establishes suppression of reporting only for estimates based on three or fewer events coming from a population of fewer than 20 people.
- For survey-based measures of risk behaviors (i.e., BRFSS and YRRS), rates based on fewer than 50 respondents for a given table cell have been removed from this report. While prevalence estimates can be calculated based on very small numbers of respondents, estimates based on fewer than 50 respondents can be unstable and are often misleading.

## Consumption

#### Alcohol

#### Adult Binge Drinking

Binge drinking is defined as a pattern of alcohol consumption that brings the blood alcohol concentration (BAC) level to 0.08% or above. This pattern of drinking usually corresponds to 5 or more drinks on a single occasion for men or 4 or more drinks on a single occasion for women, generally within about 2 hours. According to the latest estimates from the Centers for Disease Control and Prevention (CDC), about 47% of homicides, 32% of fall injury deaths, and 29% of drug overdose deaths are attributable to alcohol. These statistics are generally more attributable to binge patterns of alcohol consumption rather than chronic heavy drinking.

Likewise, binge drinking is the primary causal factor in roughly 45% of motor vehicle crash deaths among males aged 20-44, and in more than a third of motor vehicle crash deaths among females aged 20-44. Binge drinking is also associated with a wide range of other social problems, including domestic and sexual violence, crime, and risky sexual behavior. Binge drinking rates tend to decrease with age and tend to be higher among males. Figure 2 shows that binge drinking rates were higher in Grant County than in New Mexico overall, and higher than the U.S. total. Data from American Indian, Asian/Pacific Islander, and Black populations in Grant County were suppressed following NMDOH's 'Small Numbers Rule'. Binge drinking was slightly lower among Hispanic populations, but higher in White populations in Grant County (Figure 1).

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Figure 1: Binge drinking\* (past 30 days) by county, adults aged 18+,

New Mexico, 2012

#### Source: BRFSS, 2012

\*Binge Drinking: 5 or more drinks on a single occasion for men or 4 or more drinks on a single occasion for women.

\*\*Data for Union, Mora, Hidalgo, Guadalupe, Harding, De Baca, and Catron counties data are suppressed due to small numbers

Figure 2: Binge drinking\* (past 30 days) by race/ethnicity, adults aged 18+,



Grant County and New Mexico, 2012

\*Binge Drinking: 5 or more drinks on a single occasion for men or 4 or more drinks on a single occasion for women.

Source: BRFSS, 2012

#### Youth Binge Drinking

Among youth, binge drinking is defined as five or more drinks on at least one occasion in the past 30 days. Binge drinking is a major risk factor for the three leading causes of death for this age group: motor vehicle crashes, suicide, and homicide. It is also associated with poor academic performance and risky behaviors such as impaired driving, riding with a drinking driver, physical fighting, increased number of sexual partners, and other substance use. Although the percent of youth who binge drink in Grant County was slightly higher than the percent for New Mexico overall, the difference was not statistically significant. Grant County ranked 8<sup>th</sup> in the state for rates of youth binge drinking.



Figure 3: Youth binge drinking\*, grades 9-12,

\*Binge drinking: five or more drinks on at least one occasion in the past 30 days.

New Mexico, 2013

Source: YRRS, 2013



Figure 4: Youth binge drinking\* by county, grades 9-12,

\*Binge drinking: five or more drinks on at least one occasion in the past 30 days.

\*\*Harding, Union, and Chavez counties data are suppressed due to small numbers

Source: YRRS, 2013

#### Adult Heavy Drinking

Heavy drinking (defined as having more than 2 drinks/day, for males; and more than 1 drink/day, for females) is a pattern of excessive alcohol consumption that can lead to alcohol-related chronic disease and death. Numerous chronic disease conditions such as alcoholic liver disease and alcohol dependence syndrome are strongly associated with heavy drinking. A significant proportion of many other conditions (e.g., unspecified liver cirrhosis, pancreatitis) are due in part to patterns of heavy alcohol consumption. For each of these causes, it is chronic heavy drinking (as opposed to acute episodic, or binge drinking) that is considered primarily responsible for the incidence and progression of alcohol-related chronic disease. Heavy drinking is also associated with a wide range of other social problems, including alcoholism (also known as alcohol dependence), domestic violence and family disruption.

The total rate for heavy drinking in Grant County was higher than in New Mexico and the United States as a whole. Although the percent of adults who drink heavily in Grant County was higher than the percent for New Mexico overall, the difference was not statistically significant.



Figure 5: Heavy drinking (past 30 days) by race and ethnicity, adults 18+,

Source: BRFSS, 2012

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San Miguel 10.6 Lincoln 8.3 Grant 7.8 Chaves 7.8 Santa Fe 7.5 McKinley 6.9 Dona Ana 6.7 6.3 Lea Eddy 5.9 Sandoval 5.8 New Mexico 5.5 Valencia 5.5 Bernalillo 5.4 County Los Alamos 5.3 Colfax 5.0 4.8 Quay Torrance 4.2 Curry 4.0 San Juan 4.0 Socorro 3.8 Sierra 3.6 Cibola 3.4 Taos 3.0 Otero 2.0 Rio Arriba 1.5 Luna 1.3 Roosevelt 0.0 US 6.1 0.0 2.0 4.0 6.0 10.0 8.0 12.0 Percent of Adults

Figure 6: Heavy drinking (past 30 days) by county, adults 18+,

New Mexico, 2012

\*Data for Union, Mora, Hidalgo, Harding, Guadalupe, De Baca, and Catron counties data are suppressed due to small numbers

Source: BRFSS, 2012

#### Youth Early Alcohol Initiation

Alcohol use by persons under age 13 is a major public health problem. Youth who drink alcohol are more likely to experience academic, social, and physical health problems. Youth who start drinking before age 15 years are five times more likely to develop alcohol dependence or abuse later in life than those who begin drinking at or after age 21 years. Grant County was ranked 10<sup>th</sup>, with rates above both the state rate and the national rate.

Figure 7: First drink before age 13, by county, grades 9-12,



New Mexico, 2013

\*Harding, Union, and Chavez counties data are suppressed due to small numbers

Source: YRRS, 2013

#### Controlled Substance Prescription Consumption

Prescription drug use and abuse has been an increasing trend both nationwide and in New Mexico. More than 3 million prescriptions for controlled substances are reported to the NM PMP each year. Controlled substances are a special class of prescription drugs that are considered substantially more dangerous than other prescription drugs. This section of the report is drawn from these data.

#### Opioids

Opioids are powerful pain relievers. Opioids have a significant risk of causing overdose death. Examples are morphine, oxycodone and hydrocodone. Because opioids vary widely in strength, a factor is applied to each opioid prescription to compute the morphine milligram equivalent (MME) quantity of that prescription. This allows computing a measure of the total amount of opioids dispensed taking into account the different strengths of the drugs. Table 1 shows a few examples of common opioid prescriptions and their respective MME for reference.

Table 1. Examples of common opioid prescriptions and the morphine milligram equivalent
(MME) quantity for the prescription

Prescription	Total daily MME
Fentanyl transdermal, 25 mcg per patch, each patch used for three days	60.0
Oxycodone, 15 mg, four times per day	90.0
Tramadol, 100 mg, four times per day	40.0
Methadone, 10 mg, two times per day	60.0
Acetaminophen/hydrocodone, 325 mg/5 mg, four times per day	20.0

As seen in Figure 8, more opioids were dispensed in Grant County per patient that the overall rate for New Mexico. Grant County was fourth highest in the state for rates of opioid dispensation per patient. As Figure 9 shows, not only did Grant County have high rates of opioid prescription MME, but it is surrounded by other counties that also had a high rate of consumption.

Figure 8: Opioid morphine milligram equivalents (MME) per patient,



Grant County and New Mexico, 2013

Source: New Mexico Prescription Monitoring Program (PMP), 2013

Figure 9: Opioid morphine milligram equivalents (MME) per patient by county,



New Mexico, 2013

## mme per patient



#### Benzodiazepines

Benzodiazepines are anti-anxiety drugs. Benzodiazepines are frequently involved in overdose deaths, but they are very rarely the only drug involved. In these data, the benzodiazepine-like drugs, which are insomnia drugs like Ambien, are included in the benzodiazepine category. Like opioids, benzodiazepines vary in strength, so a factor is applied to each prescription to compute the valium milligram equivalent (VME). Grant County was again higher than the New Mexico average. Grant County was 5<sup>th</sup> highest in New Mexico for benzodiazepine dispensation per patient.

#### Figure 10: Benzodiazepine valium milligram equivalent (VME),



#### Grant County and New Mexico, 2013

#### Colfax 2,497 Taos San Juan **Rio**Arriba Union 2,112 2,171 2.992 1,931 Mora 3,155 Los Alamos 1,991 Harding 2,264 **McKinley** Sandoval 1,322 Santa Fe San Miguel 3,109 2,149 2,223 Bernalillo Quay 2,673 Cibola 2,481 2,498 Guadalupe 2,702 Valencia Torrance 2,365 Curry 2,475 2,452 De Baca 3,188 Socorro 3,063 Roosevelt 2,611 Catron 1,729 Lincoln 2,581 Chaves 2,499 Sierra 3,370 Grant 3,077 Lea 2,288 Otero 2,531 Eddy 3,054 Doña Ana 2,518 Luna 2,680 Hidalgo 2,829

#### Figure 11: Benzodiazepine valium milligram equivalents (VME) per patient by county,

New Mexico, 2013

# vme per patient



#### **Prescribing Patterns**

There are several prescribing practices that are associated with increased risk of overdose death and are targeted by prevention efforts. These include high dose opioid prescriptions, and certain drug combinations (e.g. opioids plus benzodiazepines). Also of concern are patients receiving prescriptions from multiple providers or filling prescription at multiple pharmacies in a small period of time ("doctor shopping"). For the purposes of this report, high dosage of opioid was defined as 120 MME/day per patient and co-prescription of opioids and benzodiazepines was defined as percent of opioid patients receiving any benzodiazepine prescription. "Doctor shopping" was defined as receiving prescriptions from five or more providers or filling prescriptions from five or more pharmacies.

Of these prescribing practices, the 2013 PMP data indicate that prescriptions for high doses of opioids may be an area of concern for Grant County. 8.4% of patients receiving opioid prescriptions received prescriptions for greater than 120 MME. Nearly 16% of patients receiving opioid prescriptions received prescriptions for both opioids and benzodiazepines in the same month, and 3.5% of patients in Grant County filled prescriptions at multiple pharmacies or from multiple prescribers.

#### Figure 12: Patients prescribed over 120 morphine milligram equivalents (MME)



per day by county, New Mexico, 2013



Figure 13: Patients with prescriptions of opioids and benzodiazepines by county,

New Mexico, 2013

Source: PMP, 2013



New Mexico, 2013

Figure 14: Patients using multiple practitioners by county,

Source: PMP, 2013

#### **Illicit Drugs**

#### Youth Marijuana Use

New Mexico marijuana use rates among high school students have held relatively steady over recent years (New Mexico Substance Abuse Epidemiology Profile, 2014). Statewide, marijuana use tends to be higher among American Indians than for Hispanics or Whites. Grant County ranks below New Mexico rates for marijuana use.



Figure 15: Marijuana use (past 30 days) by county, grades 9-12,

New Mexico, 2013

\*Harding, Union, and Chavez counties data are suppressed due to small numbers

Source: YRRS, 2013

#### Youth Cocaine Use

Since 2003, New Mexico has consistently had a higher rate of youth cocaine use than for the United States. Statewide, there was not a significant difference between use by sexes, although rates were higher as students aged, and were higher statewide for African Americans and Asian/Pacific Islanders. Grant County had rates of cocaine use below the overall rate for New Mexico for 2013, but higher than the United States overall rate.



New Mexico, 2013

Figure 16: Cocaine use (ever) by county, grades 9-12,

#### Source: YRRS, 2013

\*Harding, Union, and Chavez counties data are suppressed due to small numbers

#### Youth Prescription Drug Use

Grant County youth had higher rates of taking prescription drugs without a prescription than either New Mexico or the United States youth. Statewide, there was no significant difference for sex or age, although African Americans were more likely to report use that Hispanics or Whites.



Figure 17: Prescription drug use (ever) by county, grades 9-12,

Source: YRRS, 2013

\*Harding, Union, and Chavez counties data are suppressed due to small numbers

#### Youth Injectable Drug Use

Nationally and statewide, there was not much variation in reported lifetime use of injectable drugs. New Mexico consistently has rates higher than the national rate. Young males were more likely to report use than young females, and Black/African American and Asian/Pacific Islander students were more likely to report use as well. For 2013, Grant County ranked below the New Mexico overall rate.



Figure 18: Injectable drug use (ever) by county, grades 9-12,

New Mexico, 2013

\*Harding, Union, and Chavez counties data are suppressed due to small numbers

Source: YRRS, 2013

#### Youth Methamphetamine Use

New Mexico rates for methamphetamine use among youth have been consistently higher than national rates. There was no statistical difference between sexes in usage, but Black/African American and Asian/Pacific Islanders students were more likely to report use. There was no statistical difference in grade level. Grant County students had higher rates of methamphetamine use than the United States students , but lower than those of New Mexico overall.

Figure 19: Methamphetamine use (ever) by county, grades 9-12,



New Mexico, 2013

\*Harding, Union, and Chavez counties data are suppressed due to small numbers

Source: YRRS, 2013

### Consequences

#### Hospitalizations for Alcohol and Other Drugs

Hospitalization data can help create a more complete picture of the burden of substance abuse in New Mexico. Hospitalizations for alcohol and other drugs encompass a number of diagnoses. These include: alcohol withdrawal, alcohol dependence syndrome, alcoholic cirrhosis of liver, fetal alcohol syndrome, alcohol poisoning, drug dependence, neonatal abstinence syndrome (NAS), and drug poisoning. Table 2 shows the number of hospitalizations for alcohol and other drugs in any diagnosis field. This means that if a patient's primary complaint is not specific to substance abuse (e.g. injury) but the physician feels that substance use or misuse was involved, the hospitalization will also be included in the count below. In addition, hospitalization data were measured in terms of hospital discharges, not individual patients. So a patient could be included multiple times in the counts below. In 2012, there were 306 hospitalizations among Grant County residents where substance abuse was diagnosed.

Table 3 shows the percent of hospitalizations involving alcohol and other drugs where services were received in a hospital within Grant County among five Southwestern counties in New Mexico: Catron, Grant, Hidalgo, Luna, and Sierra. Grant County is a major service area for Catron and Hidalgo counties for substance abuse related hospitalizations. However, residents of Luna and Sierra counties do not primarily seek services in Grant County.

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## Table 2: Number of hospitalizations involving alcohol and other drugs

County	Number	
Bernalillo	6898	
Catron	23	
Chaves	894	
Cibola	364	
Colfax	133	
Curry	411	
De Baca	12	
Dona Ana	1463	
Eddy	668	
Grant	306	
Guadalupe	41	
Harding	1	
Hidalgo	22	
Lea	448	
Lincoln	209	
Los Alamos	69	
Luna	208	
McKinley	629	
Mora	58	
Otero	477	
Quay	66	
Rio Arriba	949	
Roosevelt	91	
Sandoval	642	
San Juan	1532	
San Miguel	424	
Santa Fe	1855	
Sierra	164	
Socorro	206	
Taos	371	
Torrance	102	
Union	28	
Valencia	533	
Total	20297	

by county of patient residence, New Mexico, 2012

Source: NMDOH HIDD, 2012

#### Table 3: Number of hospitalizations involving alcohol and other drugs (AOD)

by county of patient residence, select Southwestern counties, New Mexico, 2012

County of	Number of AOD	Total Number of	Percent of AOD
Patient	hospitalizations receiving	AOD	hospitalizations receiving
Residence	services in Grant County	Hospitalizations	services in Grant County
Catron	11	23	47.8%
Grant	251	306	82.0%
Hidalgo	16	22	72.7%
Luna	4	208	1.9%
Sierra	1	164	0.6%

Source: NMDOH HIDD, 2012

#### Neonatal Abstinence Syndrome

NAS is a constellation of conditions that occur in a newborn who was exposed to addictive illegal or prescription drugs while in utero. NAS hospitalizations are inpatient hospitalizations with any diagnosis of drug withdrawal syndrome in a newborn born to a drug-dependent mother, but do not include fetal alcohol syndrome.



Figure 20: Neonatal Abstinence Syndrome (NAS) hospitalization rates,

Grant County and New Mexico, 2011-2012

As can be seen in Figure 20, there was little substantive difference between the rate for New Mexico overall and the rate for Grant County for 2011 and 2012. These were the most recent years for which data are available.

Source: NMDOH HIDD, 2012

#### **Alcohol-Related Death**

The consequences of excessive alcohol use constitute a heavy burden in New Mexico. New Mexico is ranked first in the nation for alcohol- attributable death and thus alcohol is a concern for all areas of the state. 1 in 6 deaths among working age adults (20-64 years) in the state is attributable to alcohol. The negative consequences of excessive alcohol use 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. There are two principal components of alcohol-related death: deaths due to chronic diseases (such as chronic liver disease), which are associated with chronic heavy drinking; and deaths due to alcohol-related injuries, which are strongly associated with binge drinking.

#### Figure 20: Total alcohol-related deaths,



Grant Coun, New Mexico, and the United States, 2008-2012

Sources: NMDOH Bureau of Vital Records Health Statistics (BVRHS) death files and UNM-GPS population files; CDC ARDI; SAES

Figure 20 (using combined mortality data from 2008-2012) indicates that the difference between Grant County and New Mexico rates were not statistically significant. Grant County ranked 12<sup>th</sup> in New Mexico in total alcohol-related deaths, with twice the national rate of 27.9 deaths per 100,000 population (for 2006-2010 combined).



## Figure 21: Total alcohol-related deaths by county, New Mexico, 2008-2012

#### Alcohol-Related Chronic Disease

Chronic heavy drinking is often associated with alcoholism or alcohol dependence, and can cause or contribute to a number of diseases, the most common of which is alcoholic liver cirrhosis. For the past 15 years, New Mexico's death rate from alcohol-related chronic disease has consistently been first or second in the nation, and 1.5 to 2 times the national rate. This means that alcohol-related chronic disease is a concern everywhere in New Mexico. A comparison between Grant County and New Mexico by race/ethnicity is difficult since population numbers for certain groups in Grant County are small; although the rates among American Indians and Asian/Pacific Islanders look elevated, it may in fact be due to a very small percentage of the population in Grant County belonging to these two racial/ethnic groups. Grant County ranked 12<sup>th</sup> in New Mexico for alcohol-related chronic disease. This is particularly notable, because chronic diseases impose not only a substantial monetary cost, but also severely compromise quality of life and productivity, often during prime adulthood years.



Figure 22: Alcohol-related chronic disease deaths by race/ethnicity,

Sources: NMDOH BVRHS death files and UNM-GPS population files; CDC ARDI; SAES

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Figure 23: Alcohol-related chronic disease deaths by county,

New Mexico, 2008- 2012

#### Alcohol- Related Chronic Liver Disease

Alcohol-related chronic liver disease is a chronic disease caused by chronic alcohol abuse. It is the leading cause of alcohol-related death in New Mexico. Over the past 30 years, New Mexico's chronic liver disease rate has trended upward, while the national rate has decreased. New Mexico has consistently been at or near the top of the country for chronic liver disease rates. If the disease progresses to chronic liver disease or cirrhosis of the liver, however, the cost (both in terms of monetary amount and the decrease in quality of life) is significant.

As can be seen from the graph, Grant County had approximately equivalent rates of chronic liver disease compared to New Mexico overall.









Figure 25: Alcohol-related chronic liver disease deaths by county,

New Mexico, 2008-2012

#### Alcohol-Related Injury Death

Binge drinking is a high-risk behavior associated with many types of injury, including motor vehicle fatalities, homicide, and suicide. Since 1990, New Mexico's death rate for alcohol-related injury has consistently been among the highest in the nation.

In general, total death rates from alcohol-related injuries tend to increase with age. However, there were substantially high numbers and rates of alcohol-related injury death among young people (up to 24 years of age) with especially high rates among American Indian and Hispanic males. Deaths in this age category represent a very large burden of premature mortality. As can be seen from Figure 26, Grant County rates were somewhat higher than New Mexico's and the US, but again, caution should be used in interpreting these figures due to small numbers among some racial/ethnic populations.



Figure 26: Alcohol-related injury death,

#### Grant County and New Mexico, 2008-2012

Figure 27: Alcohol-related injury death by county,



New Mexico, 2008-2012

#### **Total Drug Overdose**

New Mexico has historically had one of the highest drug overdose death rates in the nation. Drug use can result in overdose death, and is also associated with other societal problems including crime, violence, homelessness, loss of productivity and spread of blood-borne disease such as HIV and hepatitis. Poisoning has been the leading cause of unintentional injury in New Mexico since 2007, surpassing motor vehicle crash, largely as a result of increased unintentional drug overdose deaths associated with prescription drug use.

During 2012, more than half of drug overdose deaths were caused by prescription drugs. Medical examiner data indicate that the most common drugs causing unintentional overdose death were prescription opioids (i.e., methadone, oxycodone, and morphine), heroin, tranquilizers/muscle relaxants, cocaine, and antidepressants. Use of these drugs is not mutually exclusive, people will frequently combine them. In New Mexico and nationally, overdose death from prescription opioids has become an issue of enormous concern as these potent drugs are widely available.

#### 50 43.9 45 40 Rate Per 100,000 35 31.2 30 25.4 25.2 24.3 22.5 25 20.3 20 14.2 15 7.3 10 5 0 Totale Rate American Asian/Pacific Black Hispanic White Indian Islander ■ NM ■ Grant County

#### Grant County and New Mexico, 2008-2012

Figure 28: Total drug overdose deaths,



Figure 29: Total drug overdose deaths by county, New Mexico, 2008-2012

Sources: NMDOH BVRHS death files and UNM-GPS population files; CDC ARDI; SAES

\*Harding and De Baca counties data are suppressed due to small numbers

#### Adult Mental Health

#### Frequent Mental Distress

Mental health refers to an individual's ability to negotiate the daily challenges and social interactions of life without experiencing undue emotional or behavioral incapacity. Mental health and mental disorders can be influenced by numerous conditions including biologic and genetic vulnerabilities, acute or chronic physical dysfunction, and environmental conditions and stresses. Figure 30 shows responses to the question "Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health NOT good?"

Statewide, for both sexes and all races, adults between 25 and 64 are most likely to experience frequent mental distress. In New Mexico, American Indian and Alaska Native women and Hispanic men are the subgroups with the highest prevalence. Grant County was 4<sup>th</sup> in New Mexico for frequent mental distress in the past 30 days.

Figure 30: Frequent Mental Distress (Past 30 Days) by county,



New Mexico, 2012

\*Catron, De Baca, Guadalupe, Harding, Hidalgo, Mora, and Union counties data are suppressed due to small numbers

Source: BRFSS, 2012

#### **Current Depression**

Depression is one of the most prevalent and treatable mental disorders. Major depression is usually associated with co-morbid mental disorders, such as anxiety and substance use disorders, and impairment of a person's ability to function in work, home, relationship, and social roles. Depression is also a risk factor for suicide and attempted suicide. In addition, depressive disorders have been associated with an increased prevalence of chronic medical conditions, such as heart disease, stroke, asthma, arthritis, cancer, diabetes, and obesity.

The depression questions were last asked in the 2011 BRFSS and that data are presented here. In New Mexico, current depression was highest among the age-group 25-64 years (11.8%), slightly higher among females than males across the age range, and higher among Black (12.1%) and Hispanic adults (10.8%) than White adults (9.7%). Depression was more common among American Indian females (13.6%) and Hispanic females (13.2%) than among White females (11.1%).



Figure 31: Current Depression by county,

New Mexico, 2011

\*Catron, De Baca, Guadalupe, Harding, Hidalgo, Mora, and Union counties data are suppressed due to small numbers

Source: BRFSS, 2012

#### Youth Mental Health

#### Youth Persistent Feelings of Sadness or Hopelessness

Persistent feelings of sadness or hopelessness are a risk factor for depression. Students who reported these feelings of sadness or hopelessness were more likely than other students to report suicide attempts, cigarette smoking, binge drinking and illicit drug use.

In New Mexico, 10th and 11th grades showed the highest rates. Statewide, girls (40.0%) had higher prevalence than boys (21.4%). Although Hispanic youth had a slightly higher prevalence (33.1%) than White youth (26.8%). Figure 32 showed that the prevalence of persistent feeling of sadness or hopelessness was similar between Grant County and New Mexico.

Figure 32: Youth Feelings of Sadness or Hopelessness by county,



New Mexico, 2013

#### Source: YRRS, 2013

\*Chaves, Harding, and Union counties data are suppressed due to small numbers

#### Youth Seriously Considered Suicide

Suicide is a complex behavior, with no single determining cause. Suicidal ideation refers to thoughts of suicide or wanting to take one's own life. Suicidal ideation is a risk factor for attempted/completed suicide.

In New Mexico, girls (19.9%) had a higher percentage than boys (11.6%). The prevalence is fairly similar by race/ethnicity, but slightly higher in 9<sup>th</sup> and 10<sup>th</sup> grade compared to 11<sup>th</sup> and 12<sup>th</sup>.



Figure 33: Youth Seriously Considered Suicide by county,

Source: YRRS, 2013

\*Chaves, Harding, and Union counties data are suppressed due to small numbers

#### Youth Attempted Suicide

In 2013, suicide was the second leading cause of death in NM among youth. In the United States, in 2011 (last year for which information is available), suicide was also the second cause leading cause of death for youth between the ages of 15 and 24. While girls are more likely than boys to attempt suicide, boys are more likely than girls to die of suicide. Cultural variations in suicide rates also exist, with American Indian/Alaskan Native youth having the highest rates of suicide-related fatalities in New Mexico. A previous suicide attempt is among the strongest risk factors for completed suicide.

Figure 34: Youth Percent of Youth Attempted Suicide by county,



New Mexico, 2013

\*Chaves, Harding, and Union counties data are suppressed due to small numbers

Source: YRRS, 2013