Consequences of Substance Abuse In New Mexico & Rio Arriba County

for the
Behavioral Health Subcommittee
of the
Legislative Health and Human Services Committee
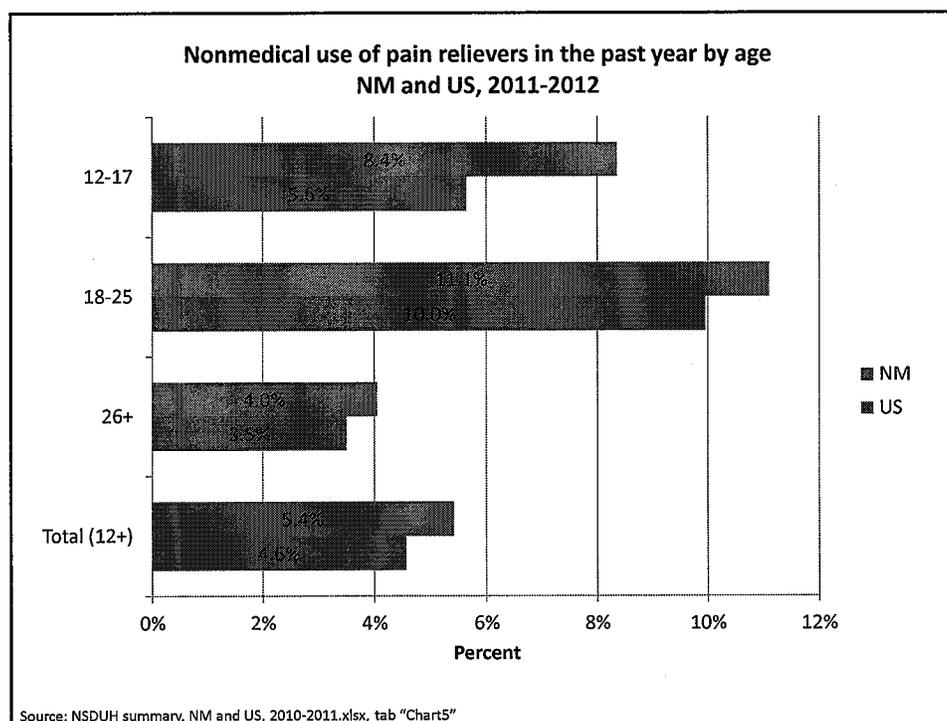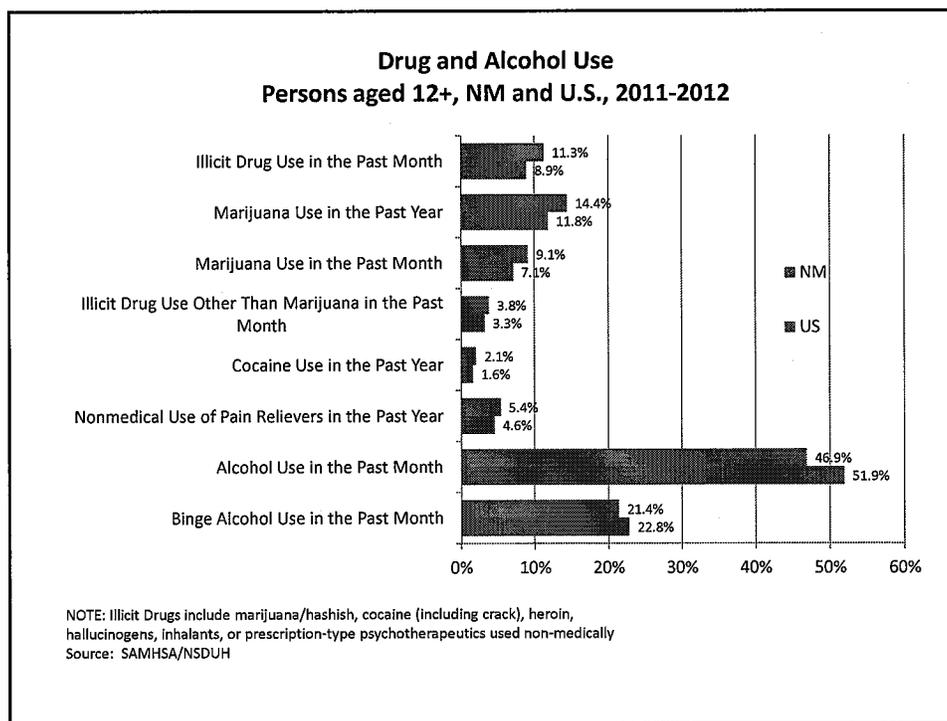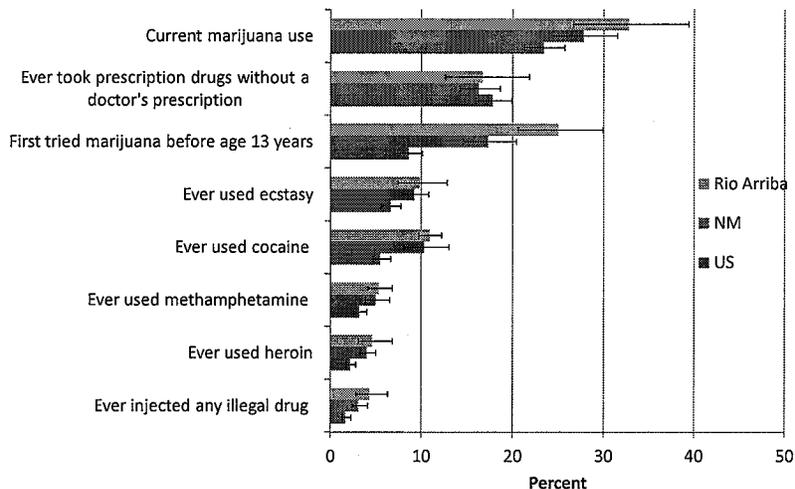
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State Epidemiologist NEW MEXICO

DEPARTMENT OF

July 24, 2014 HEALTH

PREVALENCE OF DRUG AND ALCOHOL USE

Drug and Alcohol Use
Persons aged 12+, NM and U.S., 2011-2012

Category	NM	US
Illicit Drug Use in the Past Month	11.3%	8.9%
Marijuana Use in the Past Year	14.4%	11.8%
Marijuana Use in the Past Month	9.1%	7.1%
Illicit Drug Use Other Than Marijuana in the Past Month	3.8%	3.3%
Cocaine Use in the Past Year	2.1%	1.6%
Nonmedical Use of Pain Relievers in the Past Year	5.4%	4.6%
Alcohol Use in the Past Month	46.9%	51.9%
Binge Alcohol Use in the Past Month	21.4%	22.8%

NOTE: Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used non-medically
Source: SAMHSA/NSDUH

Nonmedical use of pain relievers in the past year by age
NM and US, 2011-2012

Age	NM	US
12-17	8.4%	5.6%
18-25	11.1%	10.0%
26+	4.0%	3.5%
Total (12+)	5.4%	4.6%

Percent

Source: NSDUH summary, NM and US, 2010-2011.xlsx, tab "Chart5"

Drug Use Indicators, Grades 9-12, Rio Arriba County, NM and U.S., 2013

Current marijuana use

Ever took prescription drugs without a doctor's prescription

First tried marijuana before age 13 years

Ever used ecstasy

Ever used cocaine

Ever used methamphetamine

Ever used heroin

Ever injected any illegal drug

Legend: Rio Arriba, NM, US

X-axis: 0, 10, 20, 30, 40, 50 — Percent

Source: NM Youth Risk and Resiliency Survey (YRRS), NM DOH and PED

Past 30-day Painkiller Use to Get High Grades 9-12, New Mexico, 2007-2013

Y-axis: Percent — 0, 5, 10, 15, 20, 25

X-axis: 2007, 2009, 2011, 2013
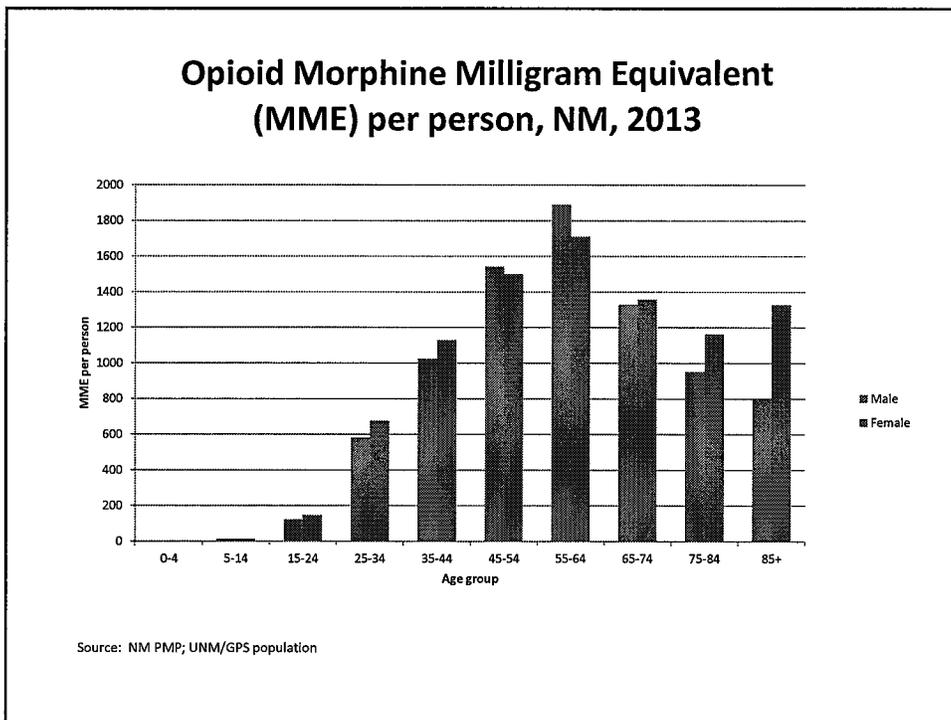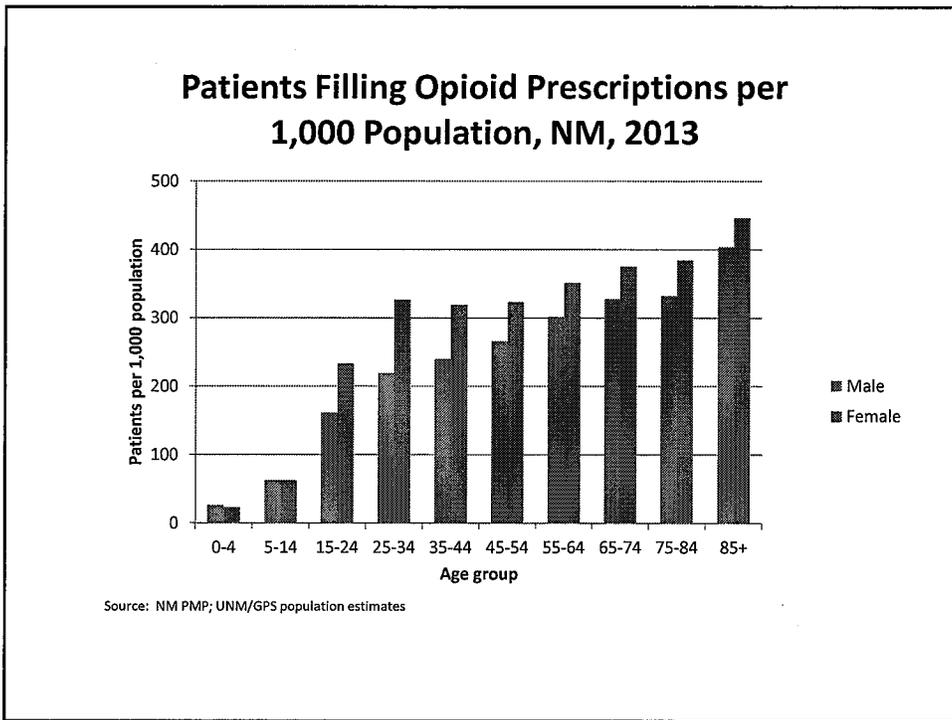
Data points: 11.7, 14.3, 11.3, 8.5

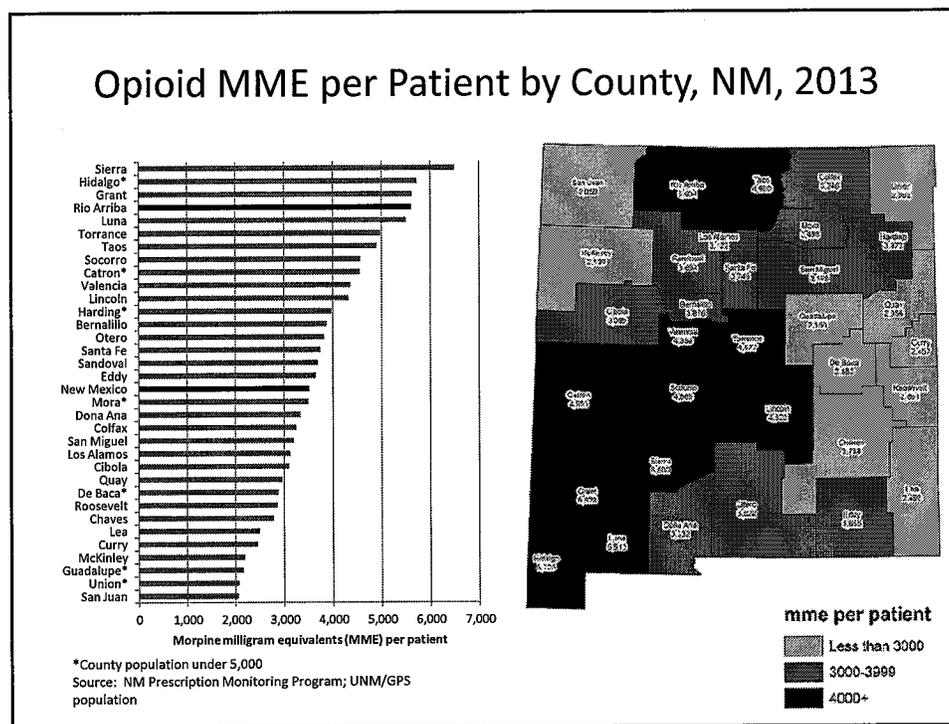Source: NM Youth Risk and Resiliency Survey (YRRS), NM DOH and PED

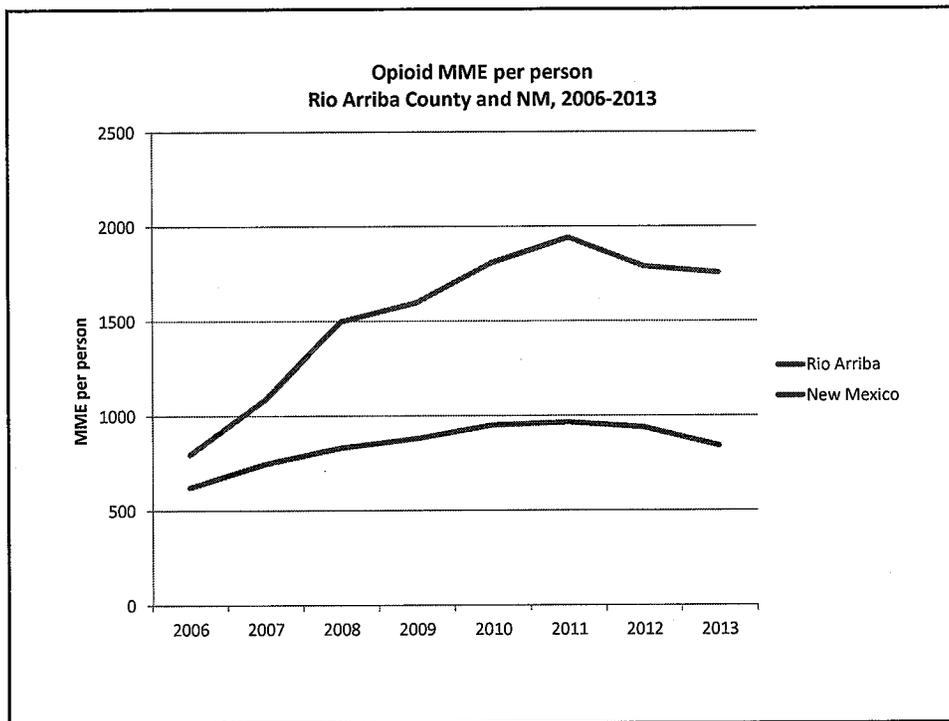# CONTROLLED SUBSTANCE PRESCRIBING
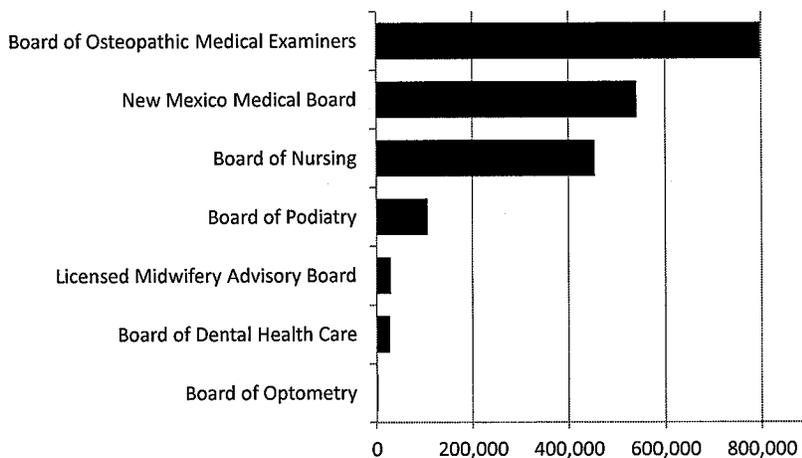
Prescriptions Reported to the PMP
NM, 2013

Opioids

Benzodiazepines

Stimulants

Barbiturates

Muscle Relaxants

Other

0   500,000   1,000,000   1,500,000   2,000,000

Number of Prescriptions filled

Source: NM PMP

Patients Filling Opioid Prescriptions per 1,000 Population, NM, 2013

Source: NM PMP; UNM/GPS population estimates

Opioid Morphine Milligram Equivalent (MME) per person, NM, 2013

Source: NM PMP; UNM/GPS population

Opioid MME per person
Rio Arriba County and NM, 2006-2013

Opioid MME per Patient by County, NM, 2013

*County population under 5,000
Source: NM Prescription Monitoring Program; UNM/GPS population

Benzodiazepine VME per Patient by County, NM 2013

Opioid MME dispensed, by Board NM, 2013

Opioid MME per prescriber, by Board, NM, 2013

Board	
Board of Osteopathic Medical Examiners	
New Mexico Medical Board	
Board of Nursing	
Board of Podiatry	
Licensed Midwifery Advisory Board	
Board of Dental Health Care	
Board of Optometry	

0   200,000   400,000   600,000   800,000
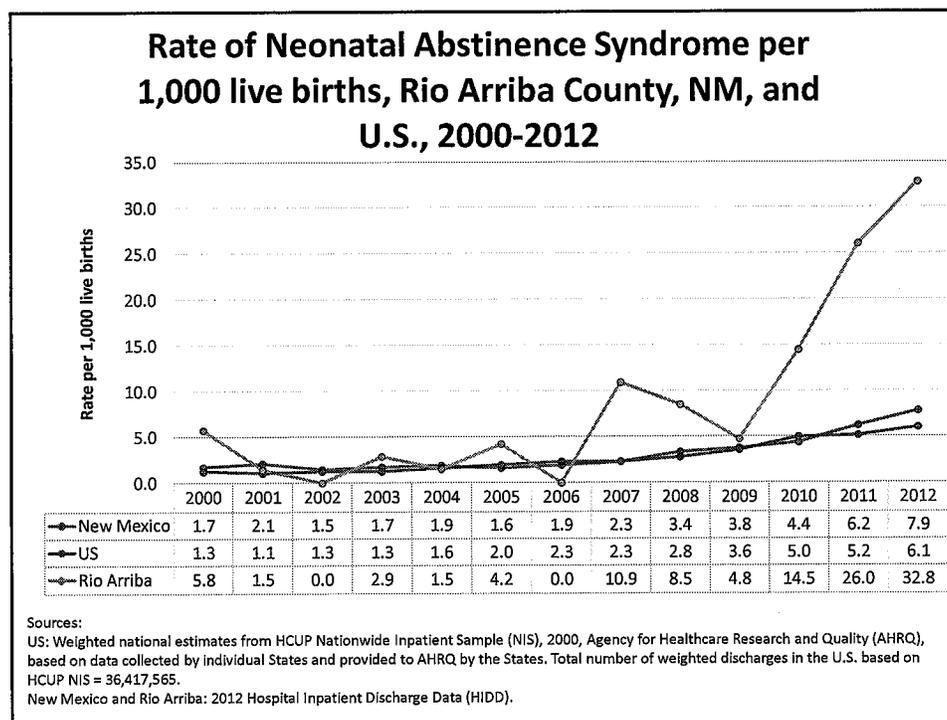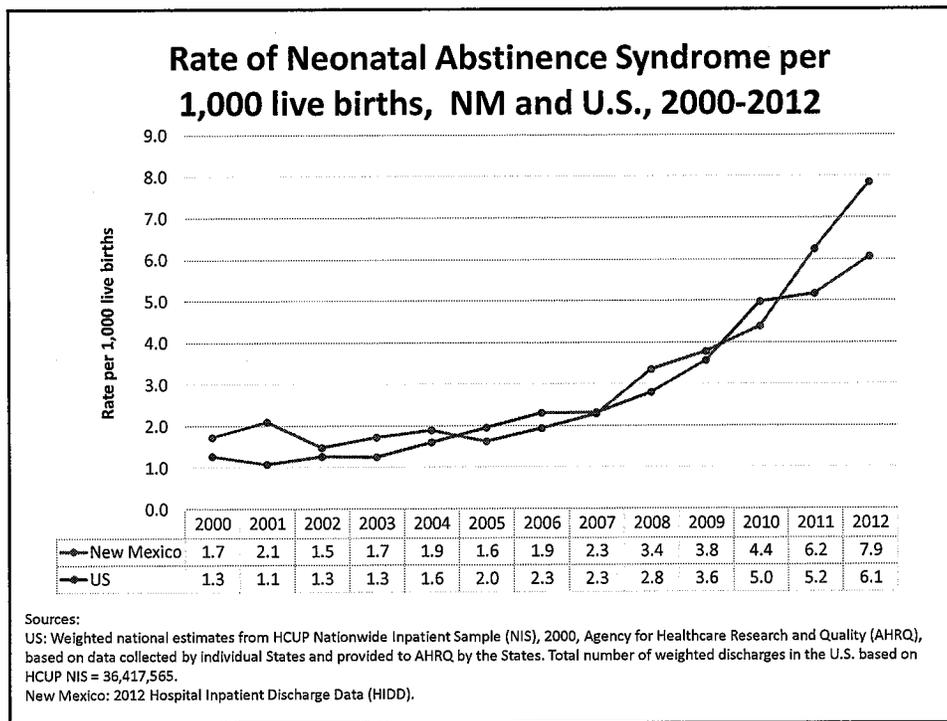
Percent of opioid prescribers who prescribed the Trio: an opioid, a benzodiazepine and carisoprodol , by Board, NM 2009-2013

40.0%
35.0%
30.0%
25.0%
20.0%
15.0%
10.0%
5.0%
0.0%

2009   2010   2011   2012   2013

Nursing
Osteopathic
Medical
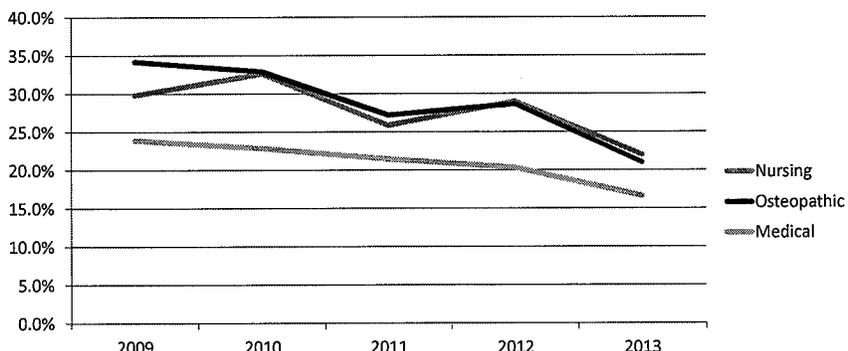
Trio is the prescription of an opioid a benzodiazepine and carisoprodol to a
patient in the same calendar month.

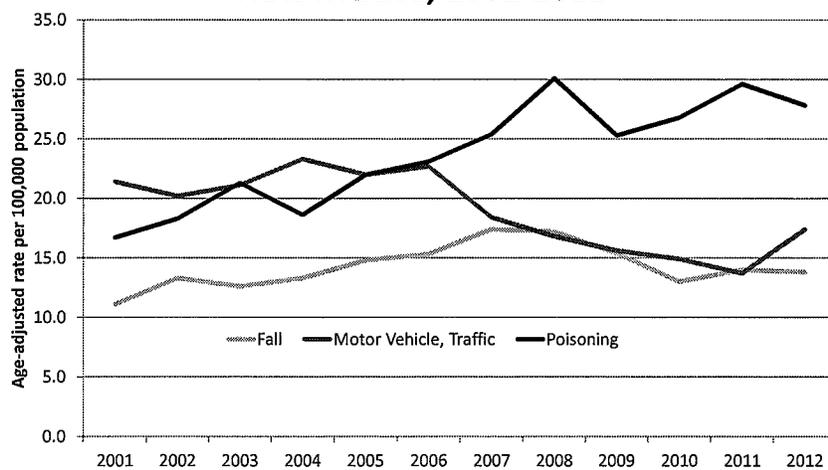**Percent of opioid prescriptions filled that were high dosage, NM 2009-2013**

NEONATAL ABSTINENCE SYNDROME

Rate of Neonatal Abstinence Syndrome per 1,000 live births, NM and U.S., 2000-2012

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
New Mexico	1.7	2.1	1.5	1.7	1.9	1.6	1.9	2.3	3.4	3.8	4.4	6.2	7.9
US	1.3	1.1	1.3	1.3	1.6	2.0	2.3	2.3	2.8	3.6	5.0	5.2	6.1

Sources:
US: Weighted national estimates from HCUP Nationwide Inpatient Sample (NIS), 2000, Agency for Healthcare Research and Quality (AHRQ), based on data collected by individual States and provided to AHRQ by the States. Total number of weighted discharges in the U.S. based on HCUP NIS = 36,417,565.
New Mexico: 2012 Hospital Inpatient Discharge Data (HIDD).

Rate of Neonatal Abstinence Syndrome per 1,000 live births, Rio Arriba County, NM, and U.S., 2000-2012

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
New Mexico	1.7	2.1	1.5	1.7	1.9	1.6	1.9	2.3	3.4	3.8	4.4	6.2	7.9
US	1.3	1.1	1.3	1.3	1.6	2.0	2.3	2.3	2.8	3.6	5.0	5.2	6.1
Rio Arriba	5.8	1.5	0.0	2.9	1.5	4.2	0.0	10.9	8.5	4.8	14.5	26.0	32.8

Sources:
US: Weighted national estimates from HCUP Nationwide Inpatient Sample (NIS), 2000, Agency for Healthcare Research and Quality (AHRQ), based on data collected by individual States and provided to AHRQ by the States. Total number of weighted discharges in the U.S. based on HCUP NIS = 36,417,565.
New Mexico and Rio Arriba: 2012 Hospital Inpatient Discharge Data (HIDD).
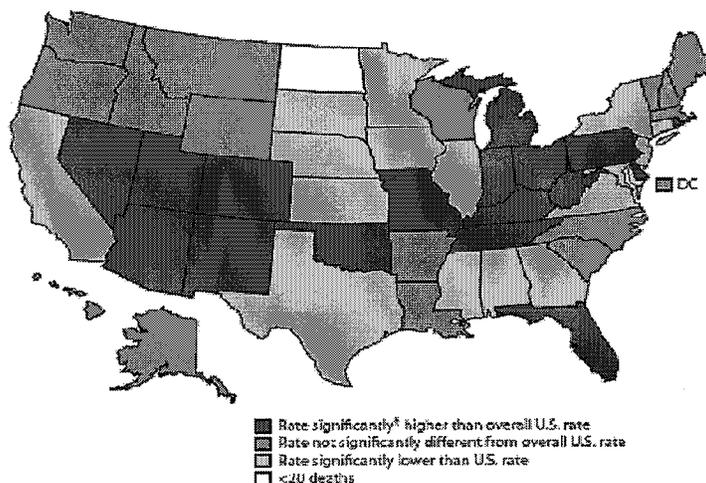
DRUG OVERDOSE DEATH

Leading Causes of Injury Death
New Mexico, 2001-2012

Source: NMDOH BVRHS

Drug Poisoning Death Rates by State, US, 2011

Rate significantly* higher than overall U.S. rate
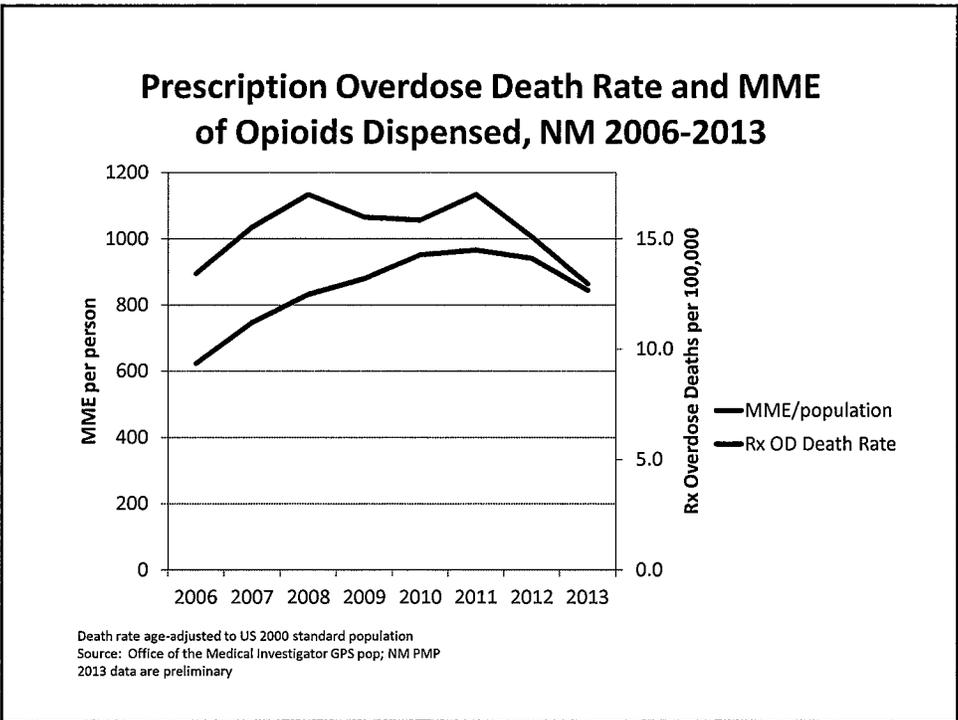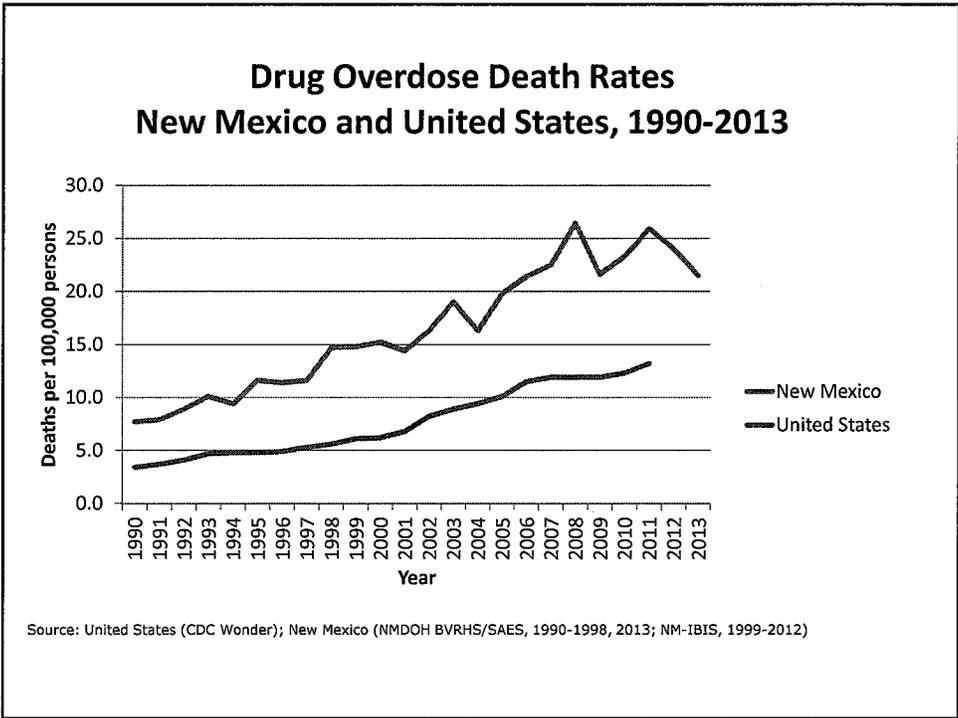Rate not significantly different from overall U.S. rate
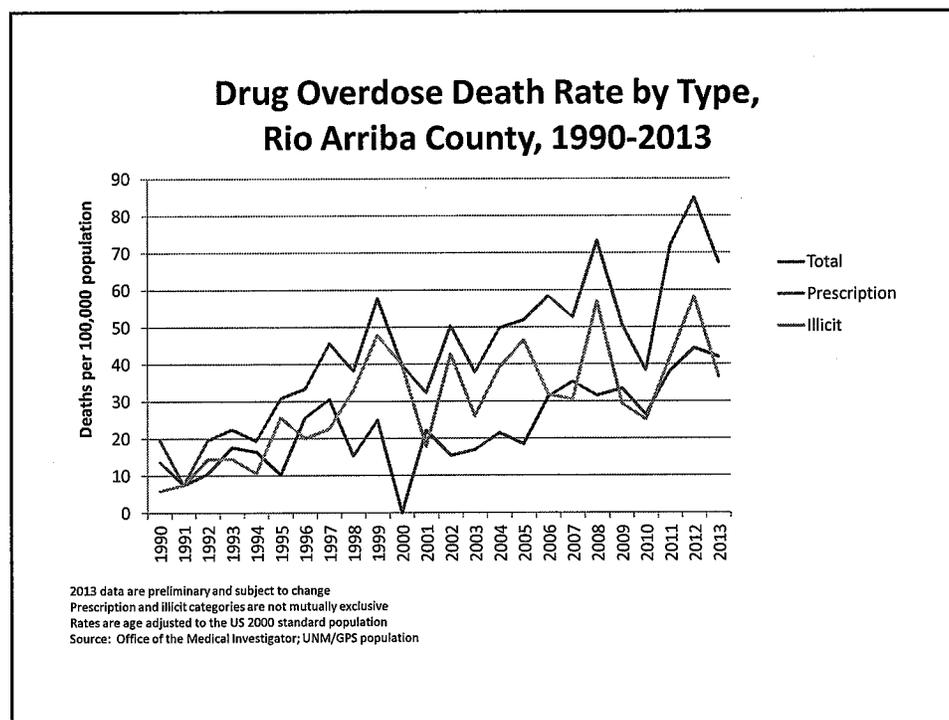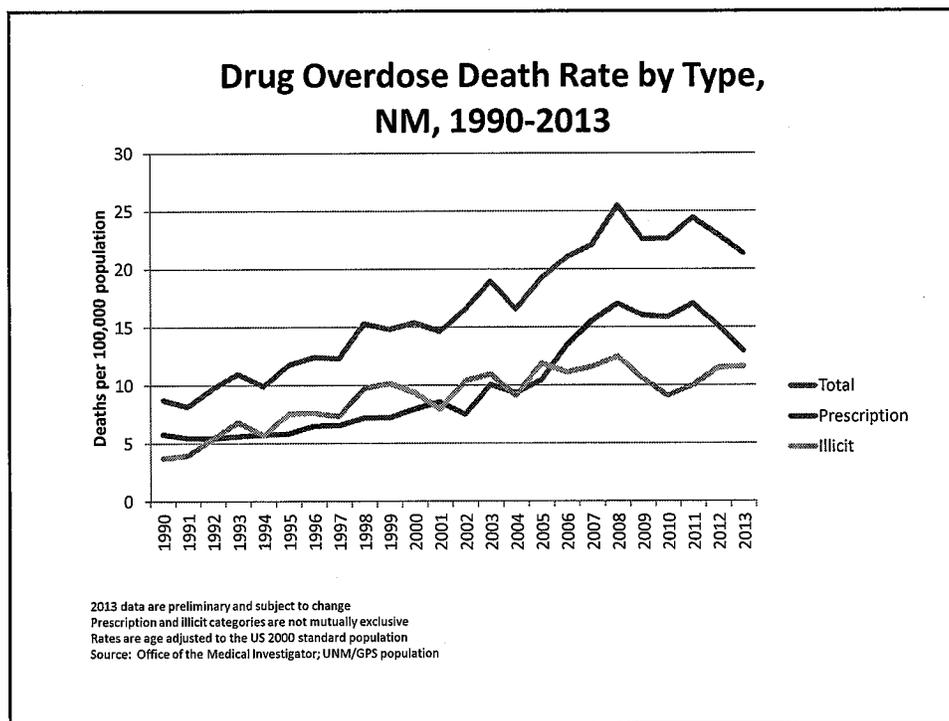Rate significantly lower than U.S. rate
<20 deaths

Source: CDC MMWR 63(26) p. 577

Drug Poisoning Death Rates Leading States, U.S., 2011

Rank	State	Deaths per 100,000
1	West Virginia	36.3
2	New Mexico	26.3
3	Kentucky	25.0
4	Nevada	22.8
5	Utah	19.5
	U.S.	13.2

Sources: CDC MMWR 63(26)
Rates are age-adjusted to the 2000 US Standard Population.

Drug Overdose Death Rates
New Mexico and United States, 1990-2013

Source: United States (CDC Wonder); New Mexico (NMDOH BVRHS/SAES, 1990-1998, 2013; NM-IBIS, 1999-2012)

Prescription Overdose Death Rate and MME
of Opioids Dispensed, NM 2006-2013

Death rate age-adjusted to US 2000 standard population
Source: Office of the Medical Investigator GPS pop; NM PMP
2013 data are preliminary

Drug Overdose Death Rate by Type, NM, 1990-2013

2013 data are preliminary and subject to change
Prescription and illicit categories are not mutually exclusive
Rates are age adjusted to the US 2000 standard population
Source: Office of the Medical Investigator; UNM/GPS population

Drug Overdose Death Rate by Type, Rio Arriba County, 1990-2013

2013 data are preliminary and subject to change
Prescription and illicit categories are not mutually exclusive
Rates are age adjusted to the US 2000 standard population
Source: Office of the Medical Investigator; UNM/GPS population

Drug Overdose Death Rate by Drug NM, 1990-2013

2013 data are preliminary and subject to change
Missing data for specific drugs in 2010 and 2011 omitted
Prescription and illicit categories are not mutually exclusive
Rates are age adjusted to the US 2000 standard population
Source: Office of the Medical Investigator; UNM/GPS population

Drug Overdose Death Rates by County, New Mexico, 2008-2012 and U.S., 2006-2010

County (# of deaths; % of statewide deaths)

Top 5 Counties for Drug Overdose Death Rate, NM, 2013

County	Deaths	Death Rate
Sierra	8	70.4
Rio Arriba	26	67.4
Mora	2	57.0
Colfax	6	47.3
Lincoln	8	39.6

Drug Overdose Death Rates by Age, Sex, and Race
New Mexico, 2008-2012
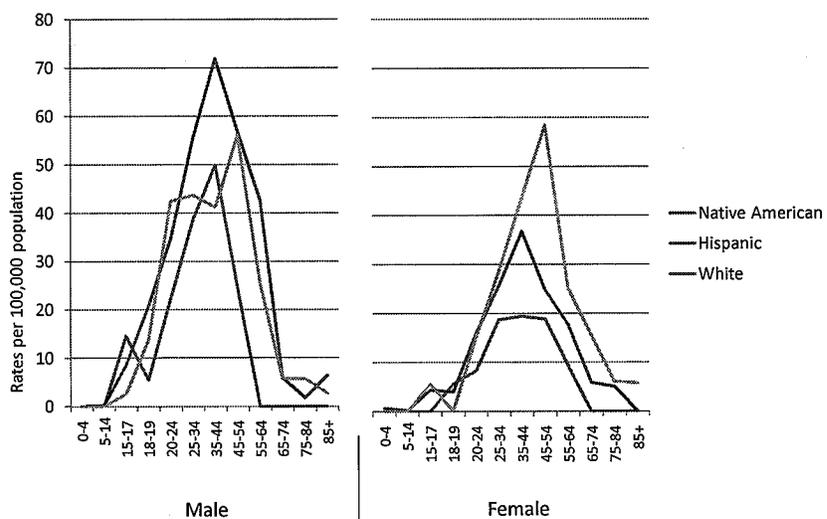
Source: NMDOH BVRHS

ALCOHOL

Excessive alcohol use is a public health issue

- ➢ 3rd leading cause of preventable death
  - Nationally, approximately 88,000 deaths per year
  - In New Mexico, nearly 1,200 deaths in 2012
- ➢ Substantial contribution to premature death
  - 1 in 10 deaths among working age adults is attributable to alcohol in the U.S.
  - 1 in 6 deaths among working age adults is attributable to alcohol in New Mexico
- ➢ Mortality has increased approximately 17% in New Mexico in the past two decades
  - From 46.6 deaths/100,000 in 1990 to 54.3 deaths/100,000 in 2012
  - Decreased approximately 10% in the U.S. (1990-2009)

Mokdad AH, JAMA, 2004; NMDOH BVRHS & UNM/GPS 1990-2012; Stahre M, Prev Chronic Dis, 2014

Definitions of excessive drinking

1 in 7 — New Mexican adults who binge drink

- ➢ Binge drinking
  - 4+ drinks at one time for women, 5+ for men
  - Associated with car crashes, falls, homicide, suicide, domestic violence, sexual assault, and alcohol poisoning
  - Most common pattern of excessive drinking
  - Most binge drinkers are not alcohol dependent
- ➢ Heavy drinking
  - 2+ drinks per day for women or 3+ drinks per day for men
  - Associated with alcohol dependence, chronic liver disease, several types of cancer, and domestic violence

5% — New Mexican adults who drink heavily

CDC www.cdc.gov/alcohol/index.htm; 2012 NMBRFSS

Definitions of excessive drinking continued

- ➢ Any alcohol consumption during pregnancy
  - In 2010, 6.4% of women reported drinking alcohol in the last trimester of pregnancy
  - Associated with miscarriage, stillbirth, and fetal alcohol spectrum disorders
- ➢ Any alcohol consumption under the age of 21
  - Binge drinking in youth: 1 in 5 New Mexico youth binge drink (5+ at one time)
  - About 90% of the alcohol consumed by youth under the age of 21 in the is in the form of binge drinks
 - Underage drinking is decreasing in New Mexico

CDC www.cdc.gov/alcohol, www.cdc.gov/ncbddd/fasd/alcohol-use.html;
2011 YRRS; The State of Health in New Mexico 2013

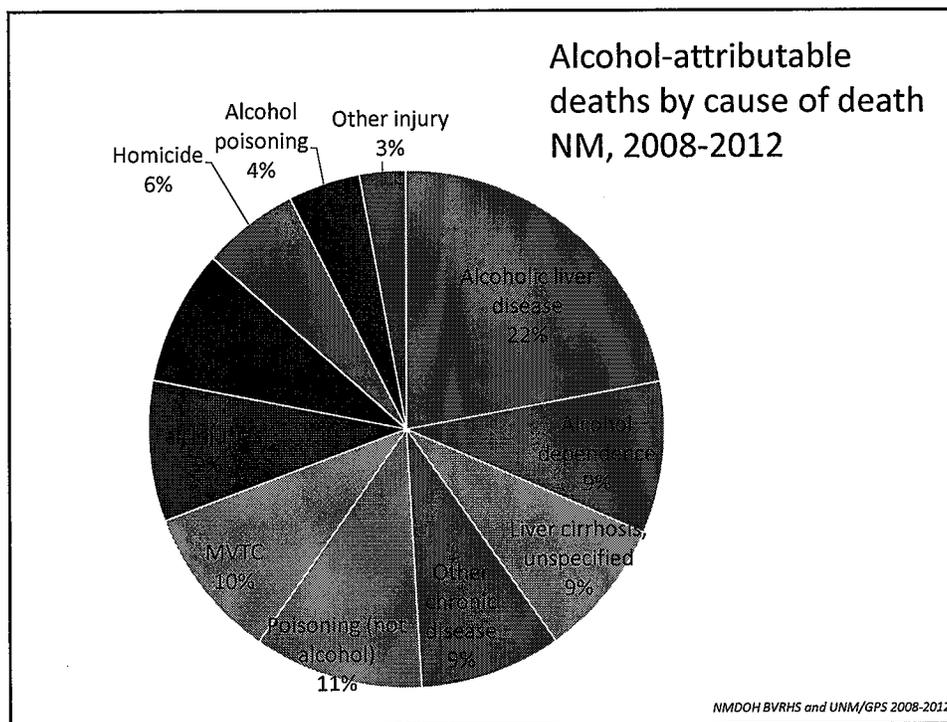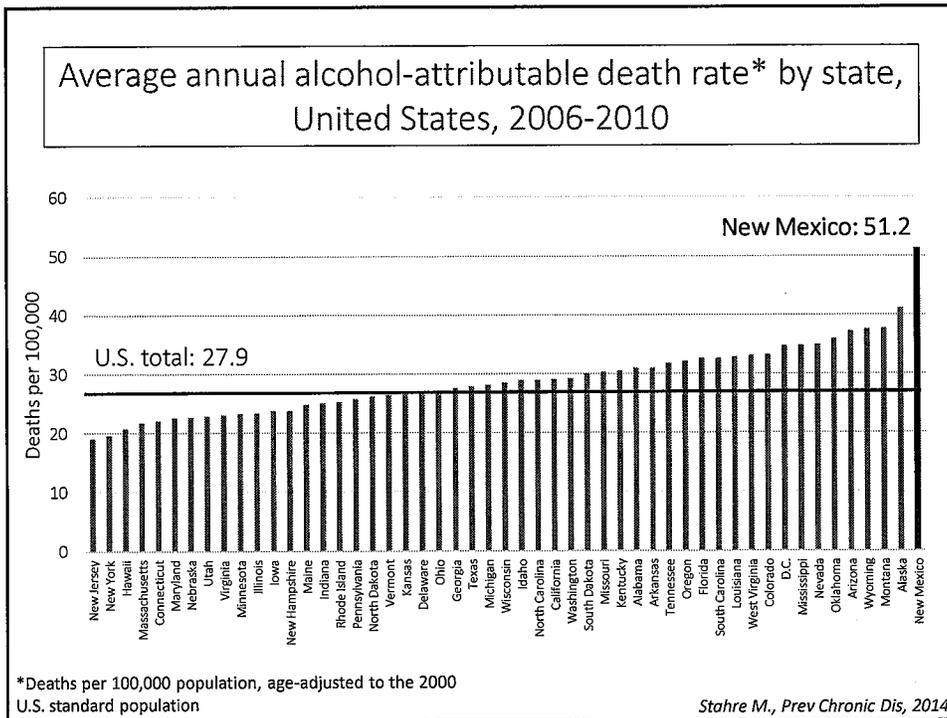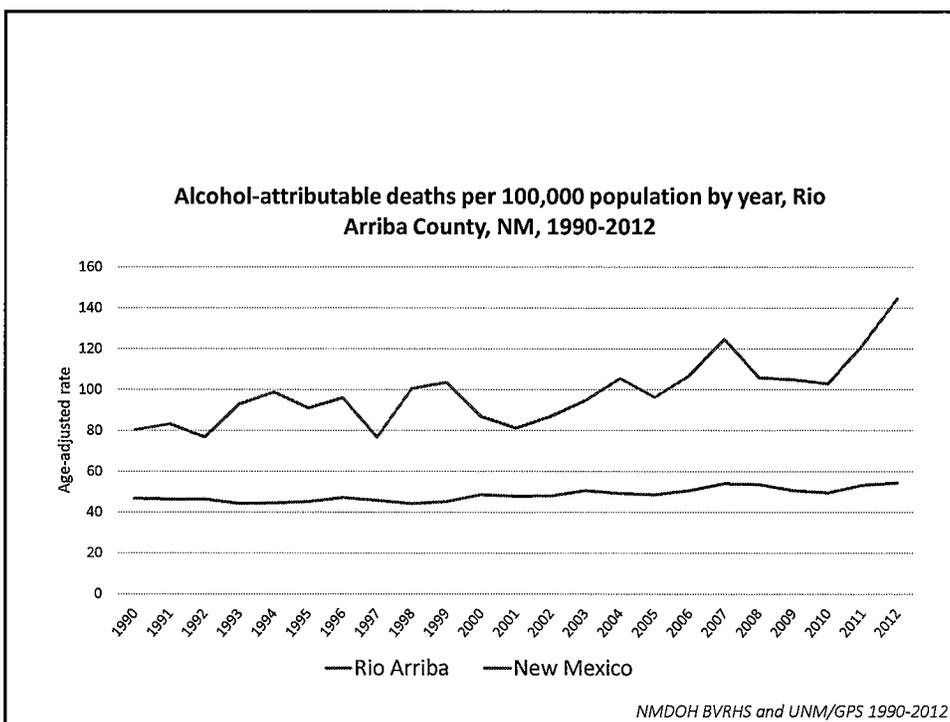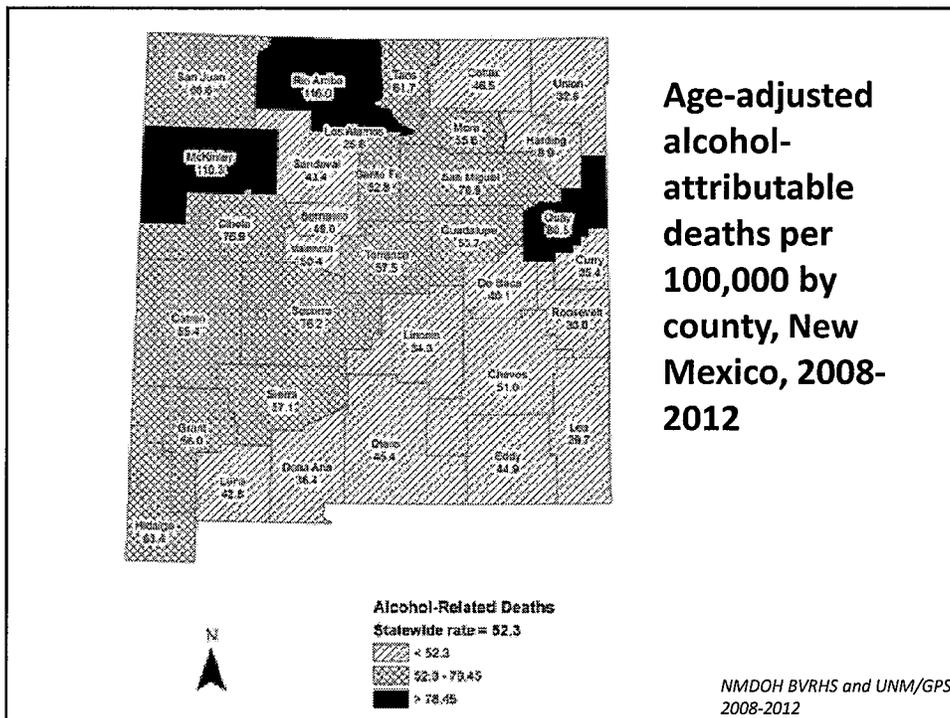## Binge drinking grades 9-12, NM, 2001-2013
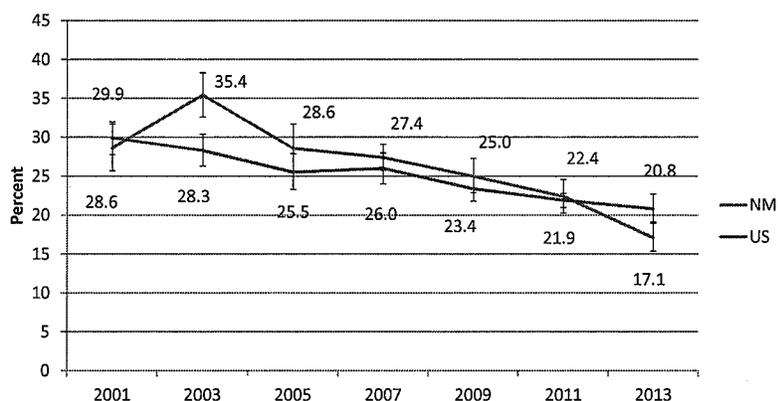
Binge drinking = had 5 or more drinks of alcohol in a row, or within a couple of hours, in the past 30 days
Source: YRRS (NM); CDC YRBS (US); NMDOH Survey Section (NOTE: Brackets around reported rates are 95% confidence intervals)
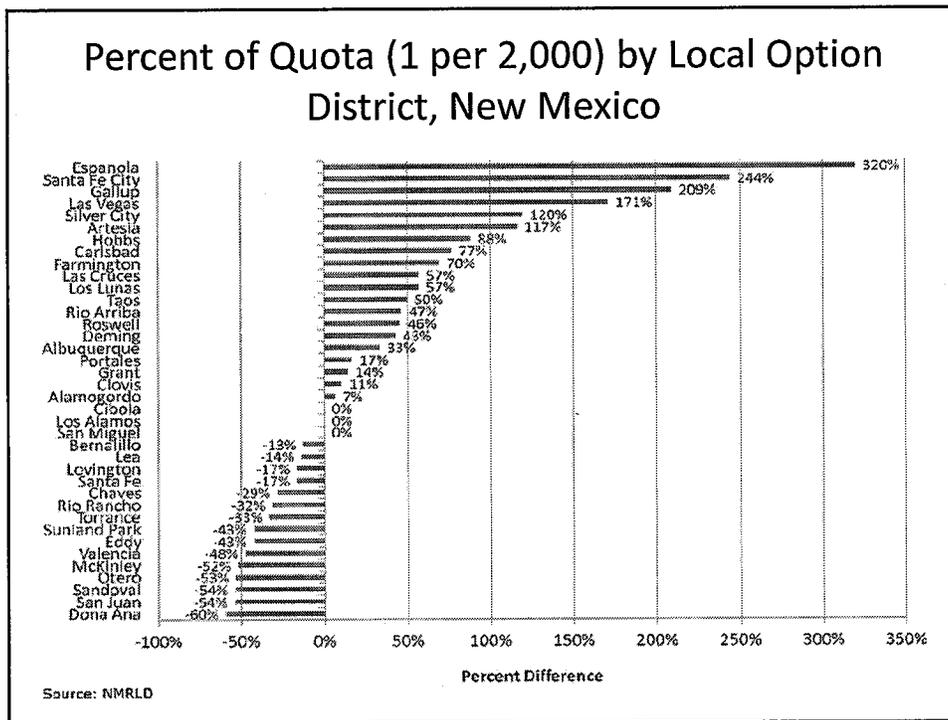
Adult binge drinking by year and age, NM, 1998-2012
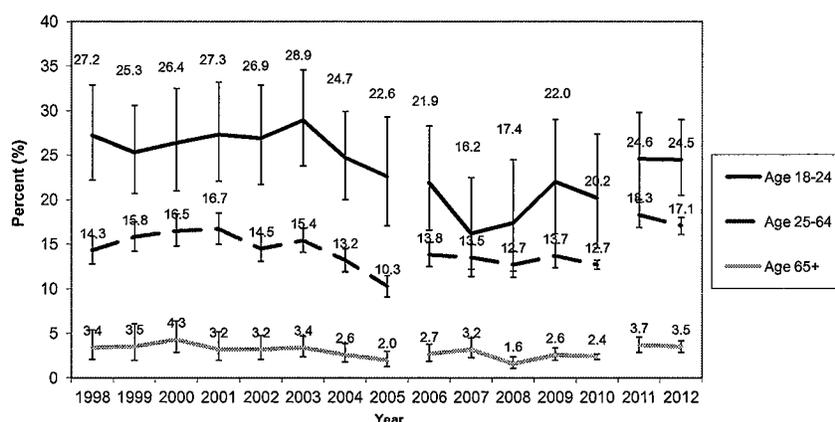
Binge drinking definition: 1998-2005, drinking five or more drinks on an occasion at least once in past 30 days; 2006-present, drinking five or more drinks (for men) or four or more drinks (for women) on an occasion at least once in past 30 days
BRFSS sampling and weighting methodology changed in 2011
Source: BRFSS; SAES (NOTE: Brackets around reported rates are 95% confidence intervals)

Average annual alcohol-attributable death rate* by state, United States, 2006-2010

*Deaths per 100,000 population, age-adjusted to the 2000 U.S. standard population

Stahre M., Prev Chronic Dis, 2014

Alcohol-attributable deaths by cause of death NM, 2008-2012

NMDOH BVRHS and UNM/GPS 2008-2012

20

Age-adjusted alcohol-attributable deaths per 100,000 by county, New Mexico, 2008-2012

Alcohol-Related Deaths
Statewide rate = 52.3

NMDOH BVRHS and UNM/GPS 2008-2012

Alcohol-attributable deaths per 100,000 population by year, Rio Arriba County, NM, 1990-2012

NMDOH BVRHS and UNM/GPS 1990-2012

Percent of Quota (1 per 2,000) by Local Option District, New Mexico

Source: NMRLD

Conclusions

- Today and historically, New Mexico has had the greatest burden of substance abuse of any state in the U.S.
- The death rate from alcohol is over twice as great at that for drug overdose and is rising
  - NM's rate is now 25% higher than the next state (AK)
- New Mexico has reduced the drug overdose death rate by 17% over the last 2 years largely due to reductions in opioid prescribing – lowest rate since 2006
- Controlled substance and alcohol use can be regulated more effectively in New Mexico

RECOMMENDATIONS

Recommendations: Drug Overdose

- Upgrade mandatory PMP use by health care providers through licensing boards
- Enhance feedback on dangerous prescribing to practitioners and their licensing boards
- Assure that naloxone is available to all at high risk of drug overdose
- Assess and address treatment infrastructure gaps in New Mexico

Recommendations: Alcohol

- Reduce consumption of alcohol in NM and particularly in high risk areas
  - Make use of data on deaths and alcohol sales to target high risk areas
- Promote evidence-based prevention strategies
  - Screening and brief intervention
  - Increase local control over alcohol outlet density
- Assess and address treatment infrastructure gaps in New Mexico