New Mexico Epidemiology

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Alcohol-Related Deaths in New Mexico, 2013-2017

New Mexico has for many years had a high burden due to alcohol-related harms. New Mexico's alcoholrelated death rate has been the highest in the United States. Many causes of death are at least partially alcohol-related. Excess alcohol consumption has both a human and economic effect on New Mexico. In 2010 excessive alcohol use cost more than 2 billion dollars, which equates to over \$1,000 per resident per year.¹

Methods

Alcohol-related deaths are estimated based on the Centers for Disease Control and Prevention (CDC) Alcohol Related Disease Impact (ARDI) Alcohol Attributed Fractions (AAFs).² AAFs include both causes of death that are 100% alcohol-involved (e.g. alcoholic liver disease), and the fraction of deaths due to alcohol for conditions that are less than 100% alcohol-involved (e.g. liver cirrhosis – unspecified).

AAFs for deaths were identified using International Classification of Diseases 10 (ICD-10) codes and ARDI definitions. All alcohol-related deaths among New Mexico residents and in the US were used in this analysis. United States and New Mexico single year alcohol-related death data for 2013 through 2017 were used for comparison of national and state rates. U.S. data were from the National Center for Health Statistics (NCHS). U.S. death rates were per 100,000 population.

New Mexico deaths were identified using data from the Bureau of Vital Records and Health Statistics in the Epidemiology and Response Division, New Mexico Department of Health. Alcohol-related mortality rates were calculated by decedent demographics and by county for the five-year period, 2013 through 2017. NM state and county-level death rates were ageadjusted to the 2000 U.S. standard population and expressed per 100,000 population.

Results

The NM alcohol-related death rate per 100,000 population averaged almost twice (1.9 times) the US rate from 2013 through 2017. Between 2013 and 2017 NM Annaliese Mayette, Ph.D. Epidemiology and Response Division New Mexico Department of Health

rates increased from 53.0 to 66.8, and U.S. rates increased from 29.4 to 35.0 (Figure 1). For comparison, NM all cause death rates increased from 729.1 in 2013 to 749.4 in 2017 (an increase of 2.8%).

The category of alcohol-related death is made up of several specific causes of death. Chronic liver disease (CLD), alcohol abuse/dependence, drug overdose, motor vehicle crashes, and fall injuries were the top five causes of alcohol-related death in New Mexico in 2013 through 2017 (accounting for 34%, 15%, 9%, 9%, and 8% respectively) (Figure 2).

Causes of alcohol-related death can be grouped by chronic or acute conditions. In New Mexico in 2013 through 2017, 53% of all alcohol-related deaths were due to chronic conditions. Male rates were higher than female rates (87.8 compared to 37.6), and alcohol-related death among both females and males were more likely to be due to chronic conditions (Table).

Differences by race/ethnicity also exist. American Indians bore a greater burden of alcohol-related death than other racial/ethnic groups. Alcohol-related deaths among American Indians were most likely due to chronic conditions, and alcohol-related deaths among Asian/Pacific Islanders, Whites, and Blacks were most likely due to acute conditions (Table). By age group, overall rates were highest for people age 65 years or older. This age group has a higher overall death rate, with or without alcohol-involvement. Alcohol-related deaths among people under 25 years of age were most likely to be due to acute causes (Table).

Variations in overall rates, and rates by chronic or acute causes also exist by geography. McKinley, Rio Arriba, and Cibola counties had the highest overall rates (148.5, 139.4, and 93.3 respectively) and chronic rates (90.9, 85.0, and 60.3 respectively). In six counties (Catron, De Baca, Lea, Los Alamos, Mora, and Torrance) fewer than 40% of alcohol-related deaths were due to chronic causes (Figure 3).

Discussion

New Mexico has an alcohol-related death rate nearly twice the US rate, and has the highest rate of alcoholrelated death in the U.S. Males, American Indians, and people age 65 years and over had the highest rates of alcohol-related death in NM. Chronic liver disease accounts for 1 in 3 alcohol-related deaths in NM. Although alcohol-related deaths due to chronic conditions are more common in NM, there are exceptions to this. People under 25 years of age, some racial groups (Asian/Pacific Islanders and Blacks), and several counties have more alcohol-related deaths due to acute conditions.

While NM has implemented all of the six key National Safety Council policies central to opioid overdose prevention,³ it has not implemented most of the Community Preventive Services Task Force (CPSTF) recommended prevention strategies for excessive alcohol use (e.g., increasing alcohol taxes and regulating alcohol outlet density).⁴ While drug overdose death rates have recently been relatively stable, NM alcohol-related death rates continue to climb with 2017 having the highest alcohol-related death rate since 1990.

Recommendations

- 1. Continue to conduct systematic surveillance on excessive alcohol use.
- 2. Support excessive alcohol use prevention strategies across all demographics.
- 3. Partner with interested stakeholders to implement effective prevention strategies such as those outlined in The Community Guide of the CPSTF⁴ such as:
- Increasing alcohol taxes
- Dram shop liability
- Regulation of alcohol outlet density
- Screening, brief intervention and referral to Treatment (SBIRT)
- Maintaining limits on days of sale
- Maintaining limits on hours of sale

References

1. Sacks, J.J., Gonzales, K.R., Bouchery, E.E., Tomedi, L.E., & Brewer, R.D. (2015). 2010 National and state costs of excessive alcohol consumption. American Journal of Preventative Medicine 49(5):e73-e79.

2. CDC. Alcohol and Public Health: Alcohol-Related Disease Impact (ARDI). Available at: https://nccd.cdc.gov/DPH_ARDI/default/Default.aspx. Accessed April 15, 2019.

3. NSC. Prescription Nation 2018: Facing America's Opioid Epidemic. Available at: https:// www.nsc.org/ home-safety/safety-topics/opioids/prescription-nation . Accessed April 15, 2019.

4. CPSTF. The Community Guide. Preventing Excessive Alcohol Consumption. Available at: http:// www.thecommunityguide.org/alcohol/index.html. Accessed April 15, 2019.

Figure 1. Alcohol-related Death Rates, NM and US, 2013-2017



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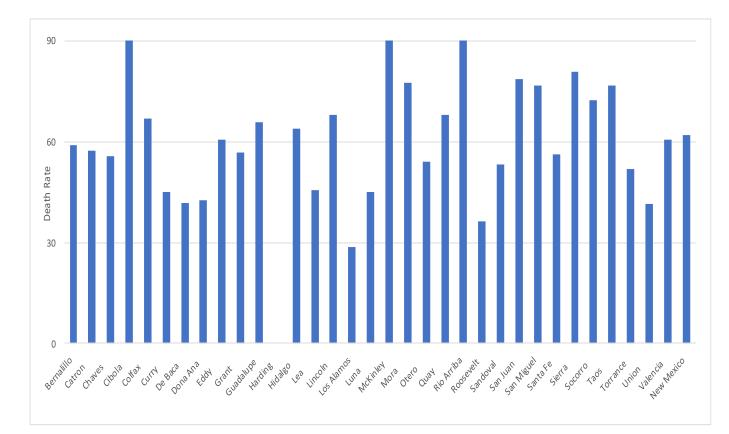


Figure 3. Alcohol-related Death Rates by County, New Mexico, 2013-2017

Table. Alcohol-related Death Rates per 100,000, by Cause and Demographics, New Mexico2013-2017

	Total Rate	Chronic Rate	Acute Rate
Female	37.6	20.9	16.7
Male	87.8	45.6	42.2
Total	62.2	32.8	29.3
American Indian	156.9	102.4	54.5
Asian/Pacific Islander	15.7	7.1	8.7
Black	50.9	24.9	25.9
Hispanic	59.7	32.9	26.9
White	46.8	20.9	25.9
Total	62.2	32.8	29.3
0-24	11.2	0.5	10.7
25-64	89.1	52.0	37.0
65+	100.4	56.5	43.9
Total	62.2	32.8	29.3

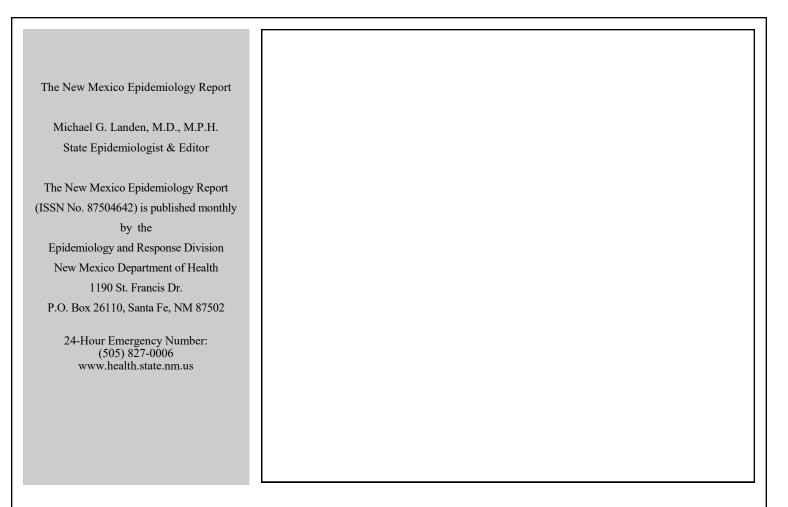


Figure 2. Alcohol-related Deaths by Cause of Death, New Mexico, 2013-2017

