Public Health Implications of Alcohol Use in New Mexico

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Objectives

- Describe the burden of alcohol use in NM

- Provide reasons for why NM's burden remains #1 in the U.S.

- Describe key public health interventions

- Provide recommendations for reducing the burden of alcohol use in NM
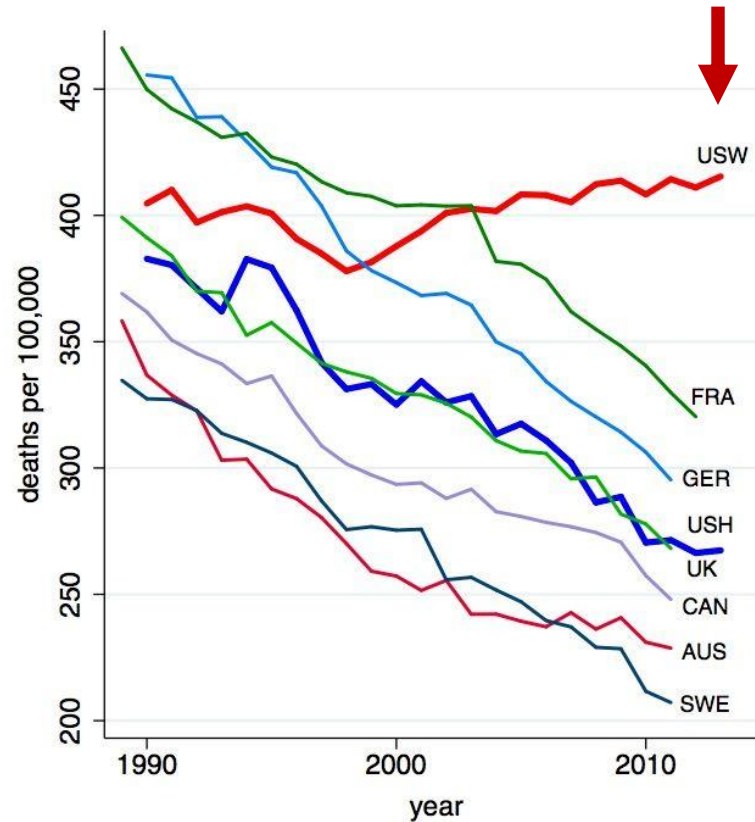
Impact on Health Status of NM

# Mortality is rising among Middle-Aged White Americans

Rx Drugs & Heroin
Suicide
Alcohol Poisoning
Driving Increase

USW – US Whites   UK – United Kingdom
FRA – France   CAN – Canada
GER – Germany   AUS – Australia
USH – US Hispanics   SWE - Sweden

Case & Deaton. Rising morbidity and mortality in midlife among white non-Hispanic Americans in the 21st century, 2015.

DALYs: NM vs. US Age-Standardized
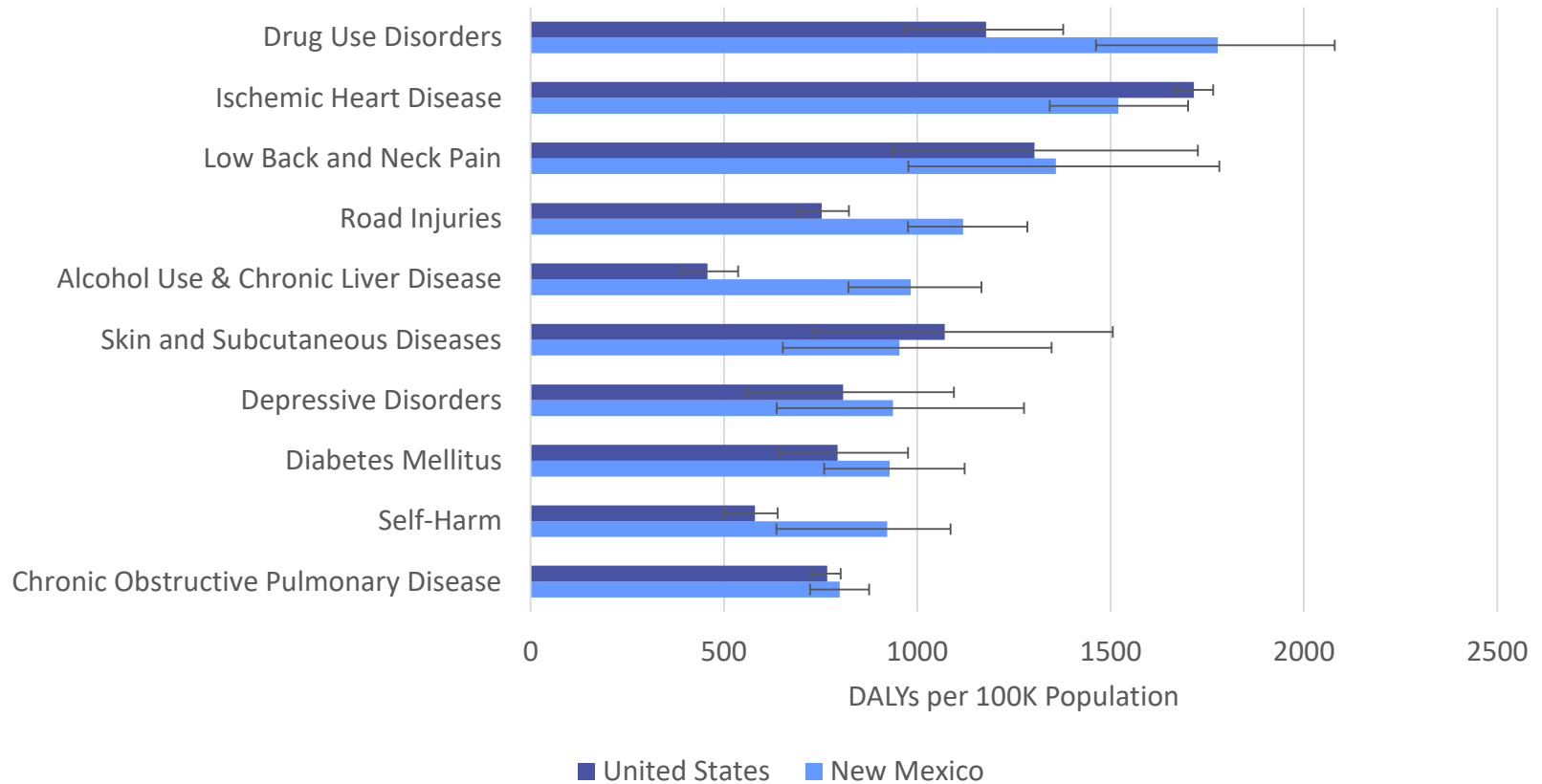## Total DALYs 1990-2016
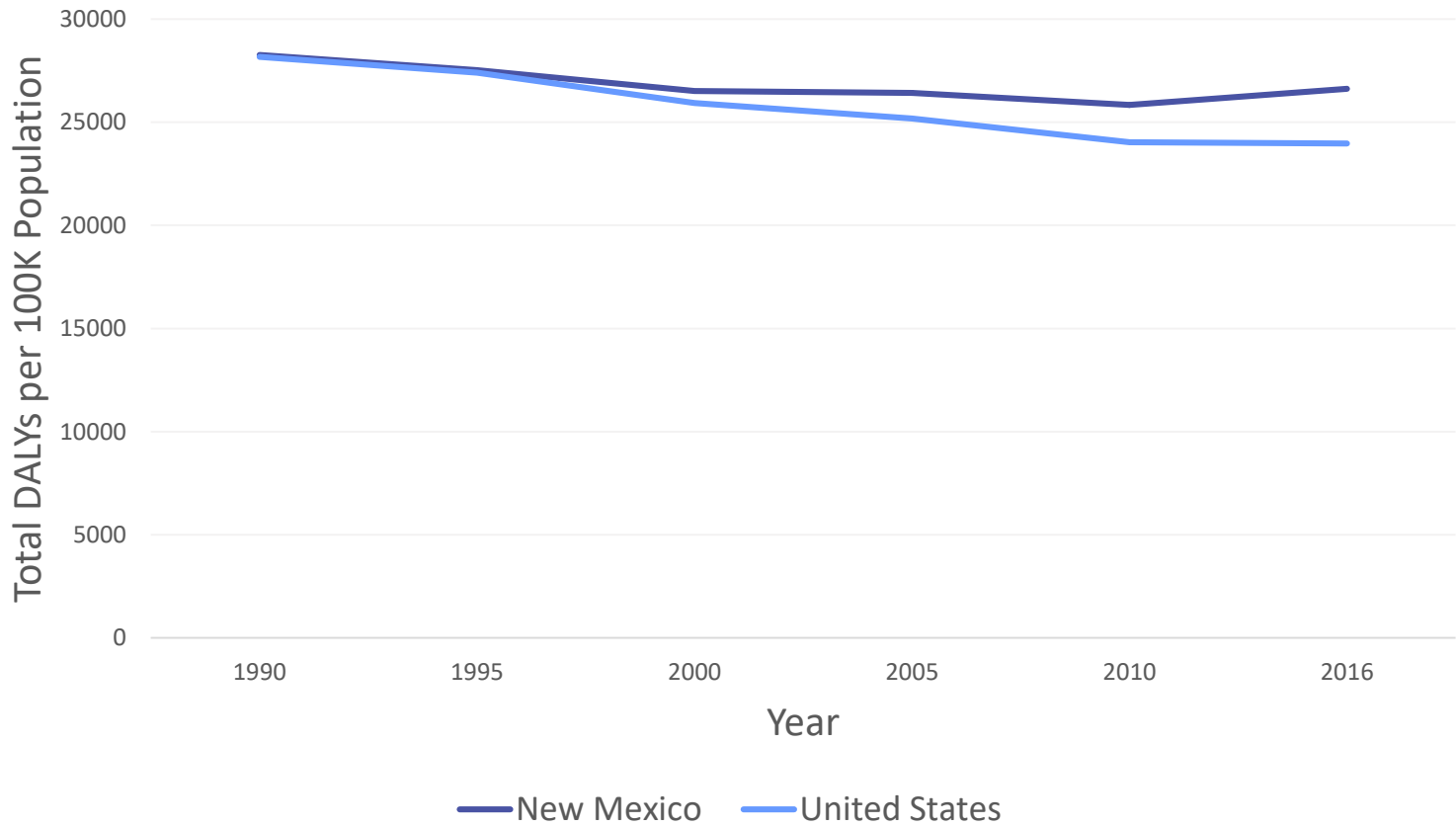
Source: University of Washington, Institute for Health Metrics and Evaluation, GBD Compare

DALYs: Top 10 Conditions
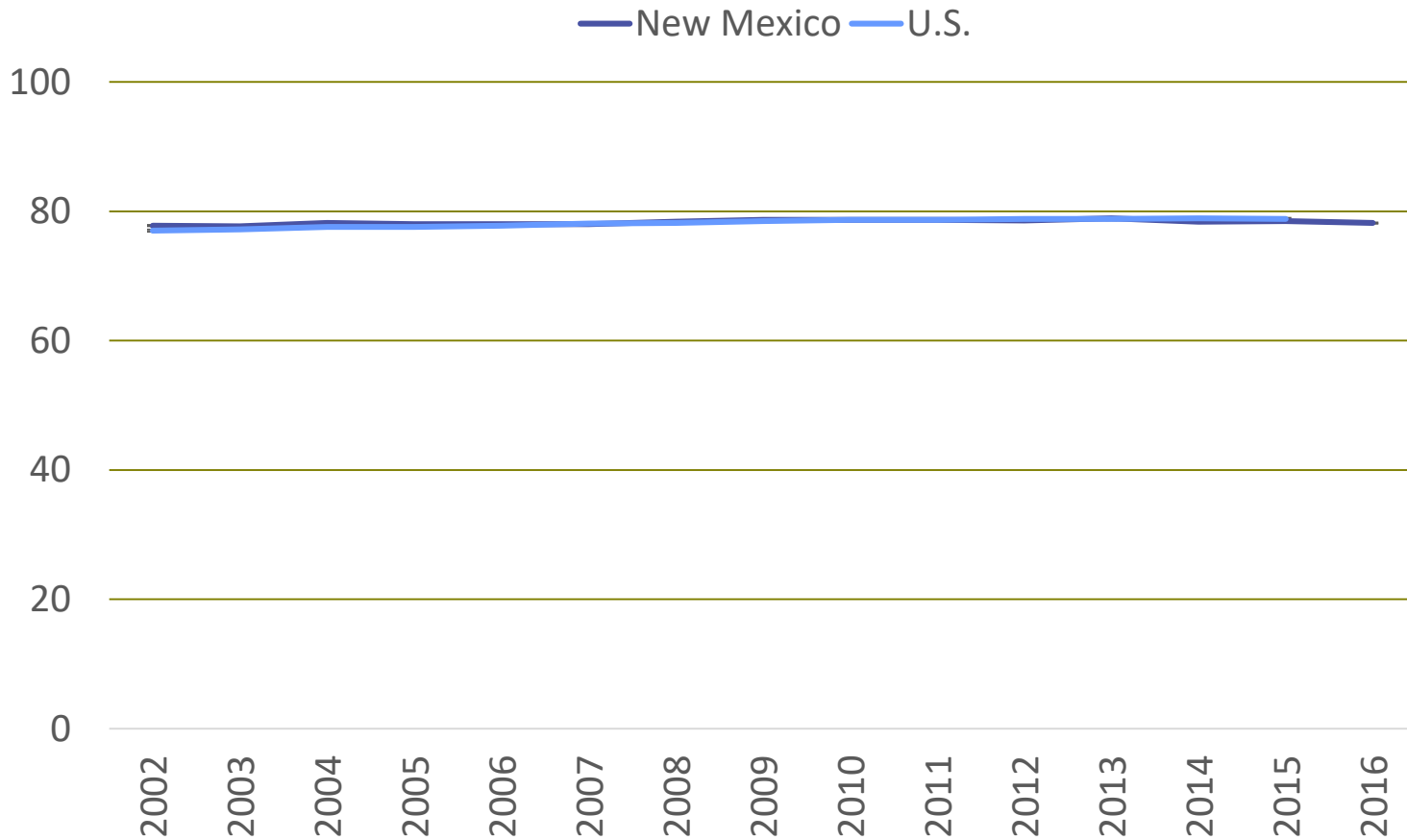New Mexico vs. US, 2016 Age-Standardized

Source: University of Washington, Institute for Health Metrics and Evaluation, GBD Compare

Life Expectancy at Birth
New Mexico, 2005-2016 and U.S., 2005-2015

— New Mexico — U.S.

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016

(Y-axis labeled 0, 20, 40, 60, 80, 100)

Source: New Mexico Indicator-Based Information system (NM IBIS); and ; CDC

1190 S. St. Francis Drive • Santa Fe, NM 87505 • Phone: 505-827-2613 • Fax: 505-827-2530 • nmhealth.org

Life Expectancy at Birth by Race/Ethnicity
New Mexico, 2016

Bar chart showing Expected Number of Years of Life by race/ethnicity:

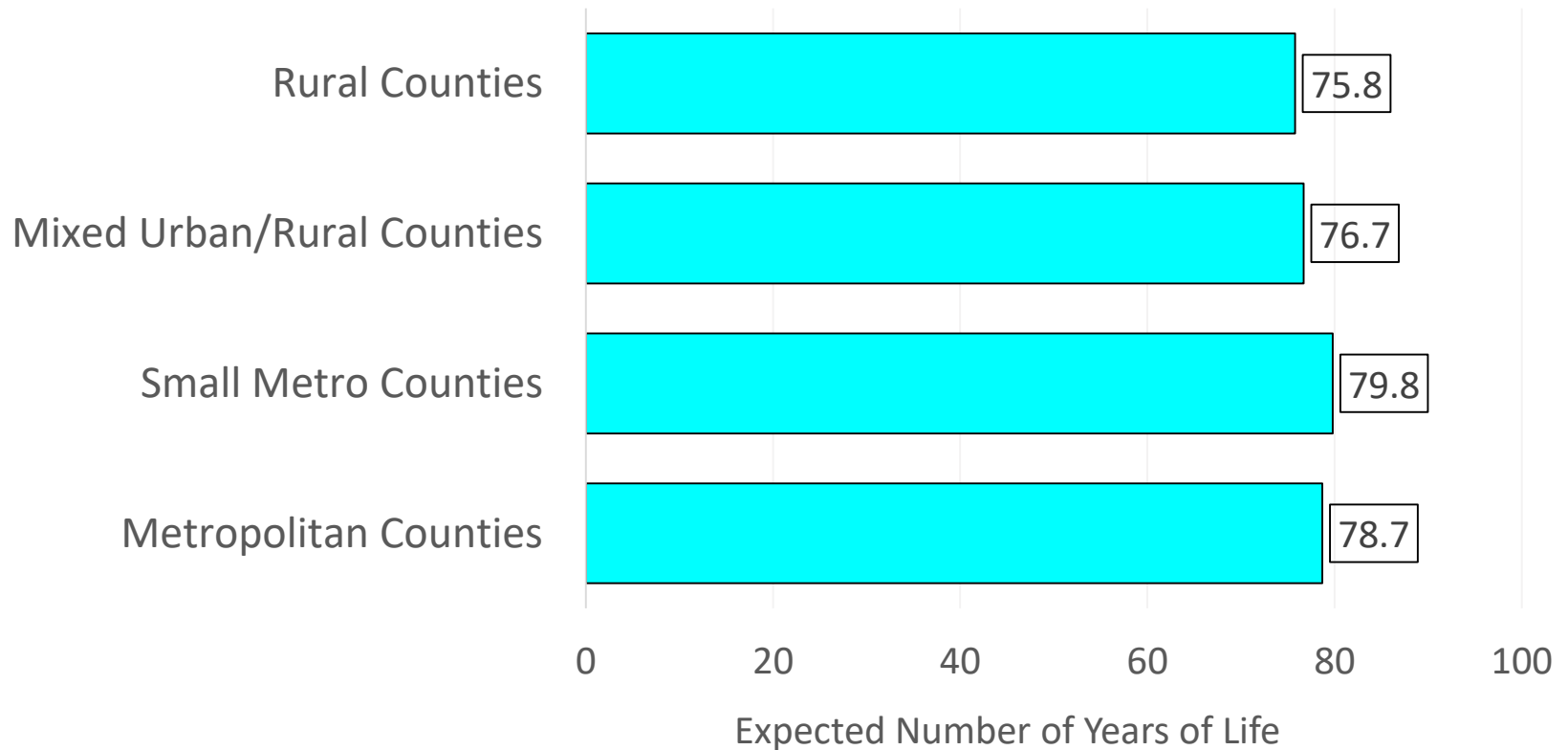| Race/Ethnicity	Expected Number of Years of Life
American Indian, Alaska Native	71.8
Asian, Pacific Islander	84.2
Black, African American	77.9
Hispanic	78.8
White	79.3
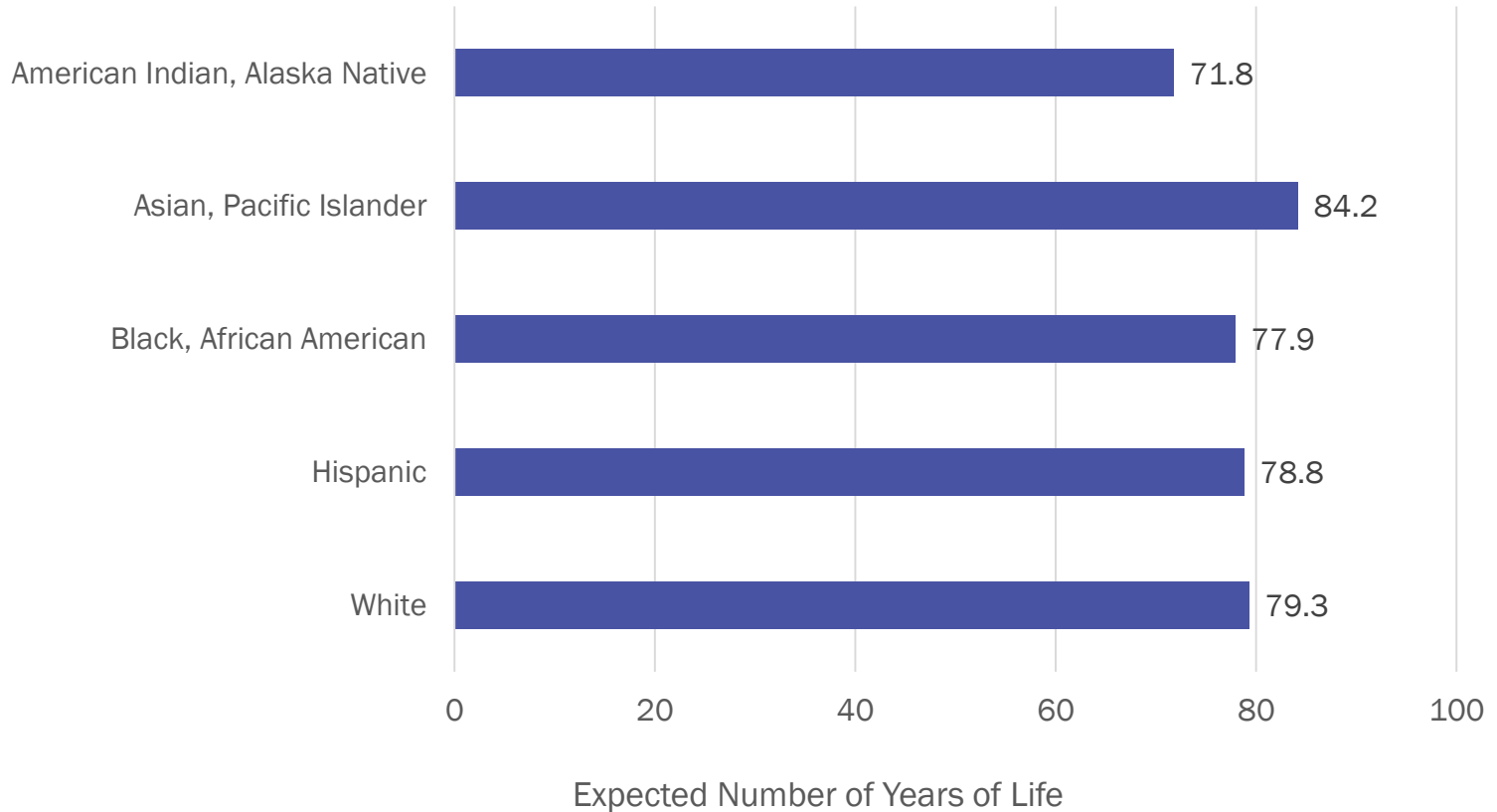
Source: New Mexico Indicator-Based Information System (NM IBIS)

Life Expectancy at Birth
by Urban and Rural Counties
New Mexico, 2016

Rural Counties — 75.8

Mixed Urban/Rural Counties — 76.7

Small Metro Counties — 79.8

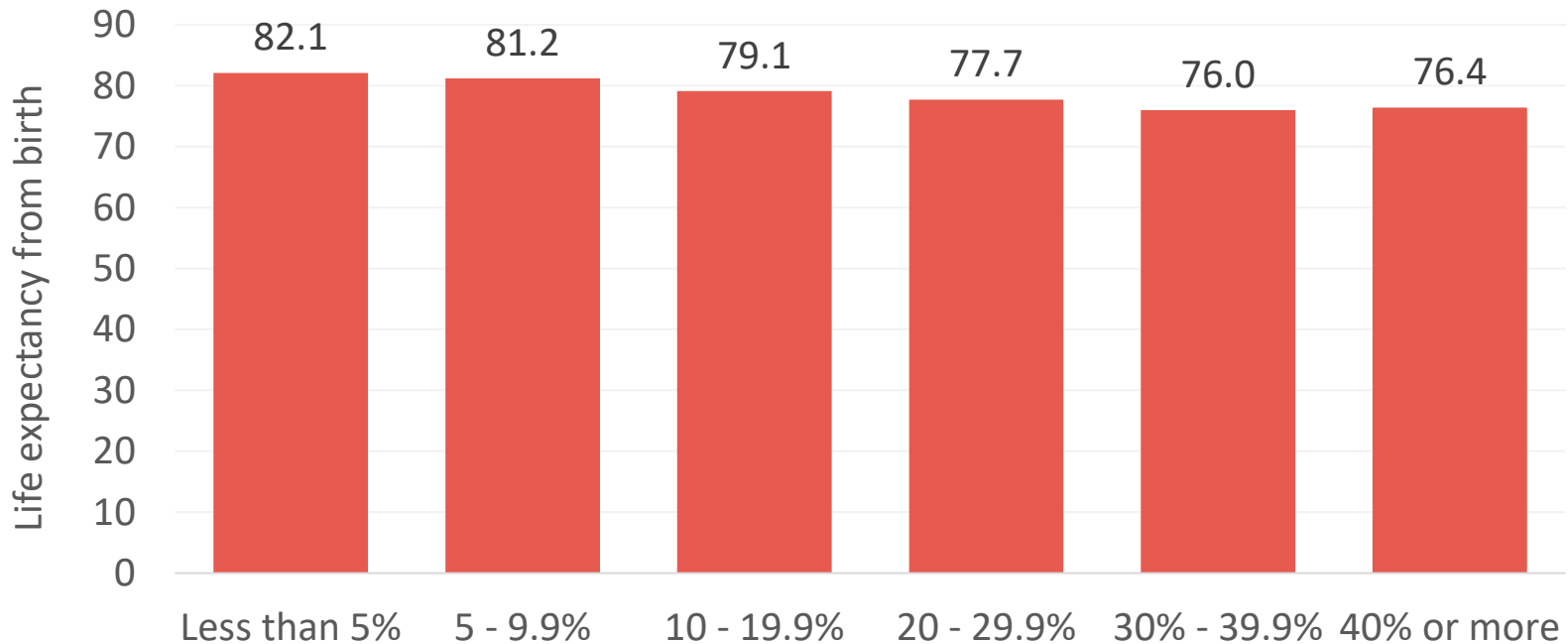Metropolitan Counties — 78.7

Expected Number of Years of Life

Source: New Mexico Indicator-Based Information System (NM IBIS)

Life Expectancy from Birth by Census Tract Poverty Level*

New Mexico, 2012-2016

*Poverty level is the percentage of persons of all ages in the decedent's census tract living at or below 100% of Poverty.
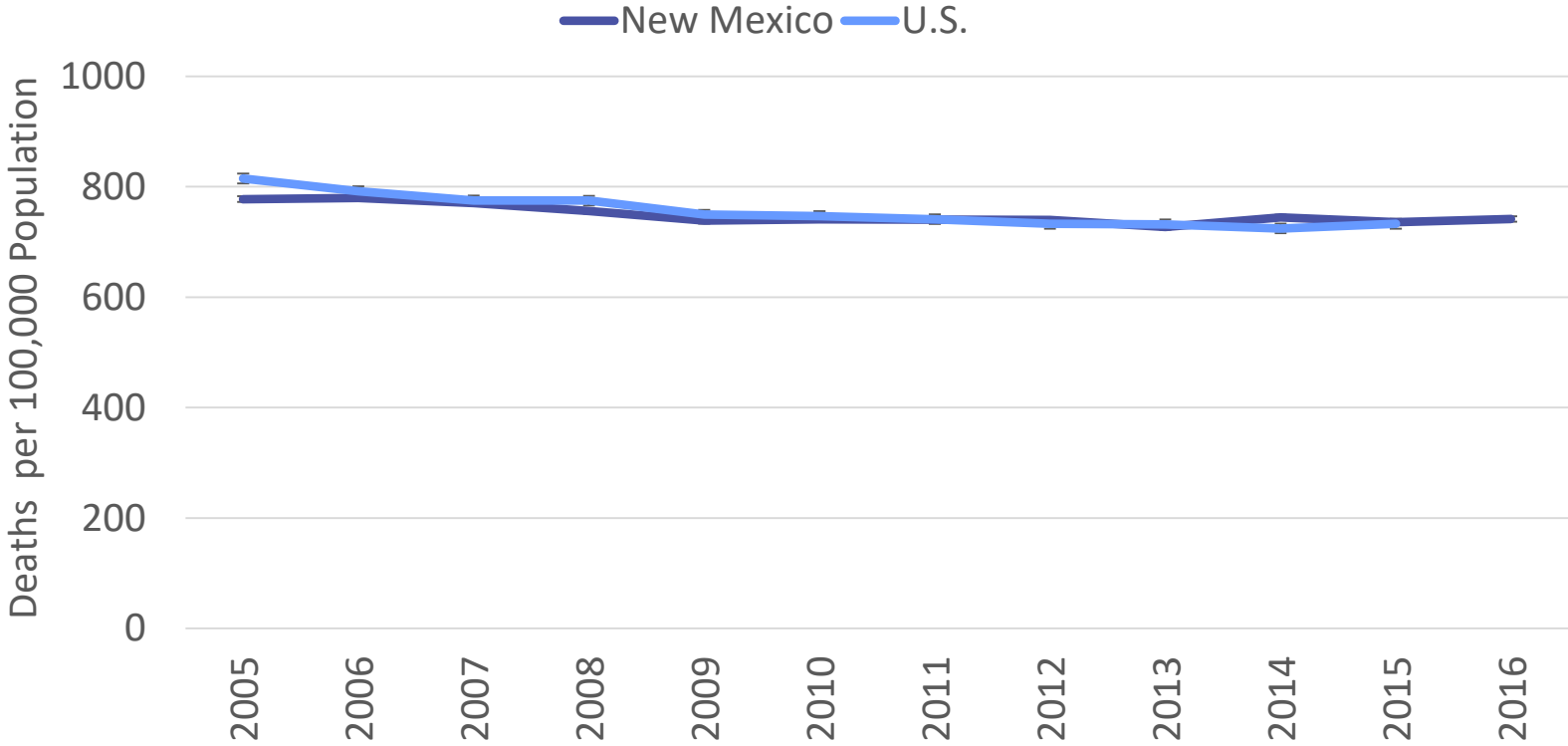Rates have been age-adjusted to the standard U.S. 2000 population.
Life expectancy calculated by methods retrieved from: http://ibis.health.state.nm.us/resources/LifeExp.html.
Source: NM Vital Records and Health Statistics, U.S. Bureau of the Census, American Community Survey

Total Deaths Rates
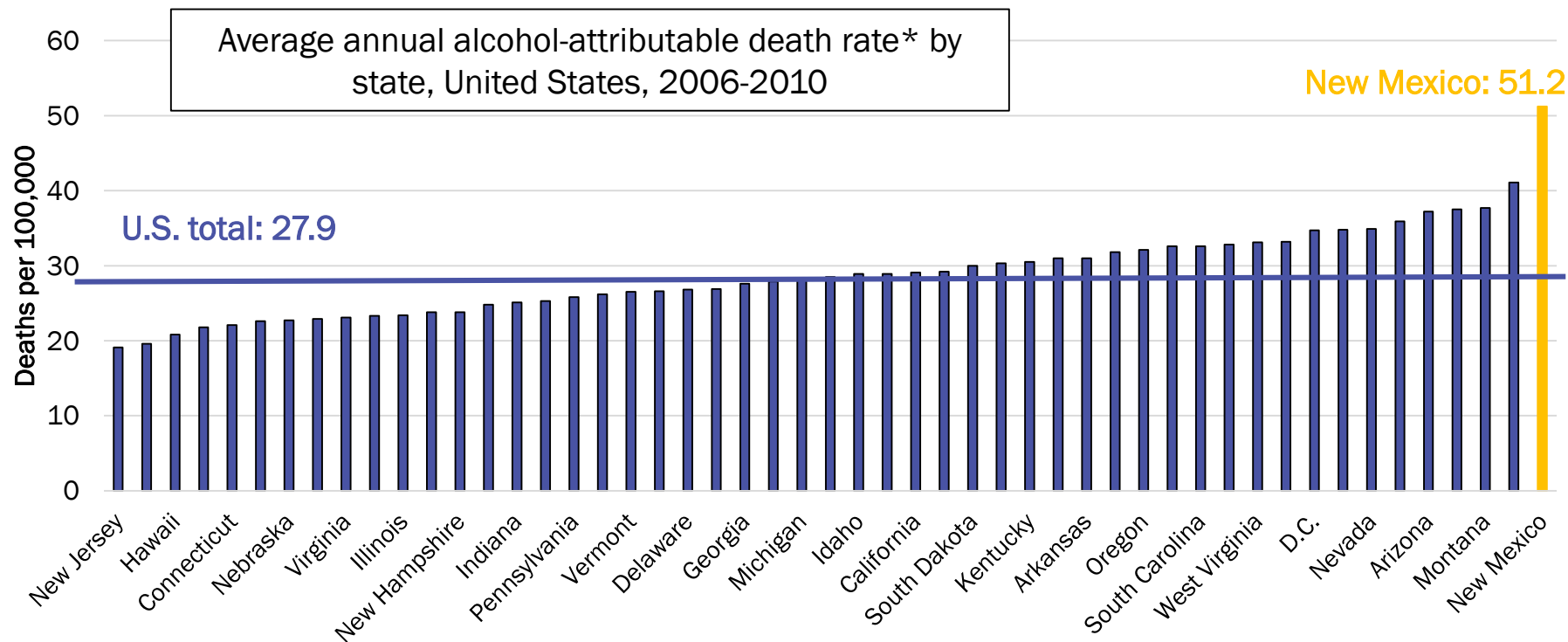## New Mexico, 2005-2016 and U.S., 2005-2015

Rates have been age-adjusted to the standard U.S. 2000 population
Source: NM Vital Records and Health Statistics; CDC WONDER

New Mexico Leads the Nation in Alcohol-Attributable Death

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

New Mexico: 51.2

U.S. total: 27.9

Deaths per 100,000

New Jersey, Hawaii, Connecticut, Nebraska, Virginia, Illinois, New Hampshire, Indiana, Pennsylvania, Vermont, Delaware, Georgia, Michigan, Idaho, California, South Dakota, Kentucky, Arkansas, Oregon, South Carolina, West Virginia, D.C., Nevada, Arizona, Montana, New Mexico
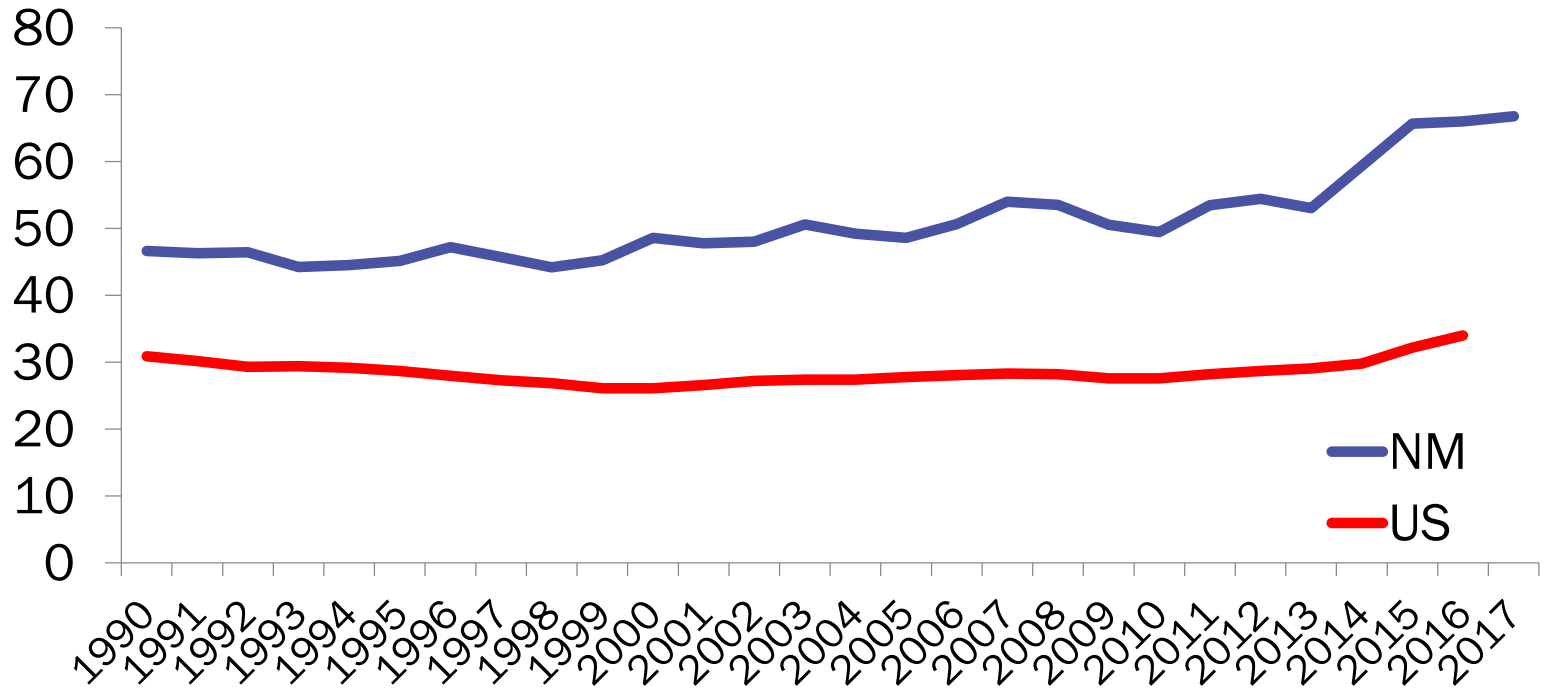
*Deaths per 100,000 population, age-adjusted to the 2000 U.S. standard population

Stahre M., Prev Chronic Dis, 2014

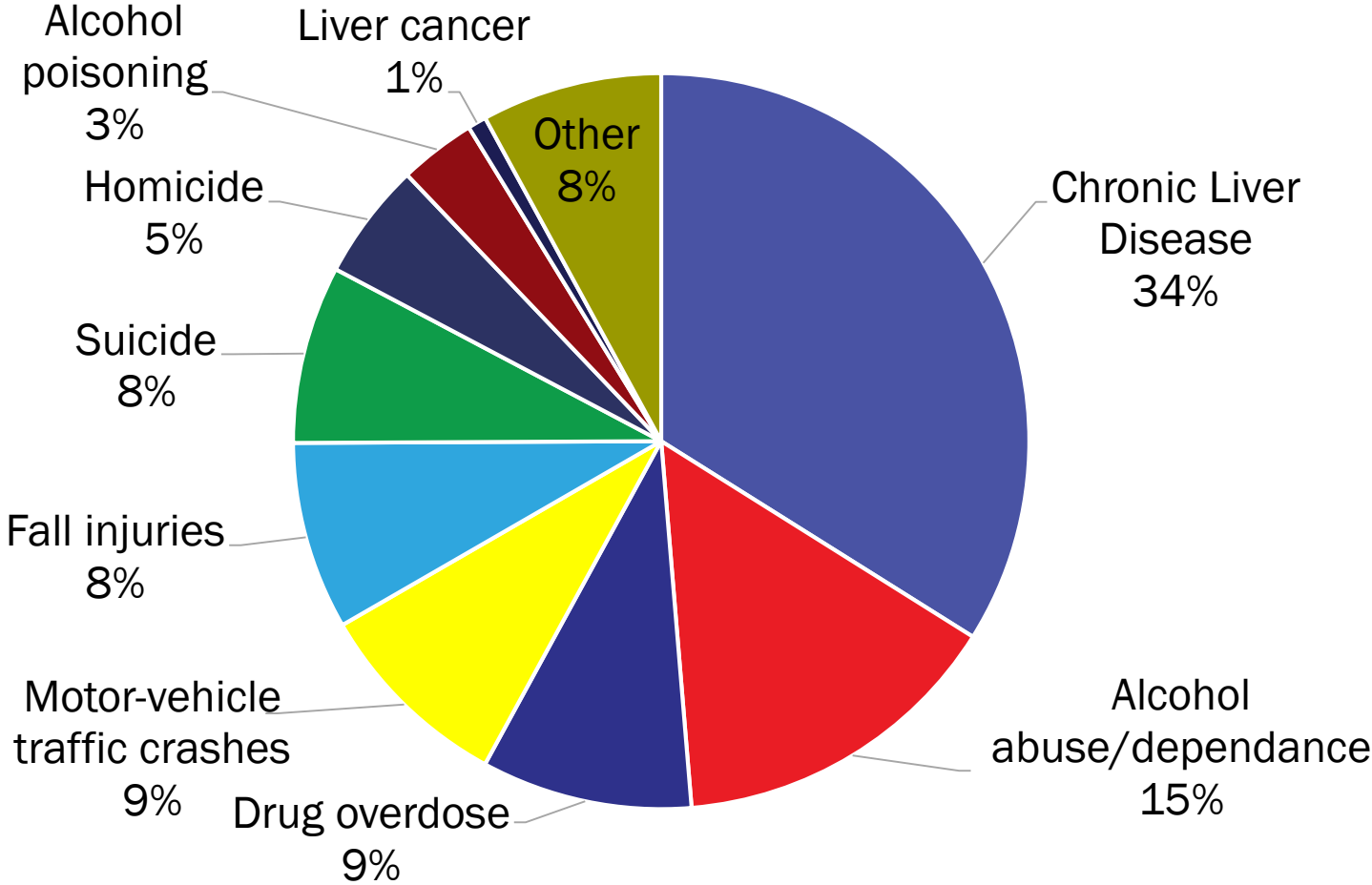# Alcohol-Attributable Death Rates
New Mexico, 1990-2017, and U.S., 1990-2016

Data Sources: NCHS (US); NMDOH BVRHS; UNM-GPS; IBEB SAES; CDC ARDI v. 2
Rates are age-adjusted to the 2000 U.S. standard population
2016 for the US, and 2017 for NM

Alcohol-Attributable Death by Cause of Death, New Mexico, 2013-2017

Alcohol poisoning 3%

Liver cancer 1%

Homicide 5%

Other 8%

Suicide 8%

Chronic Liver Disease 34%

Fall injuries 8%

Motor-vehicle traffic crashes 9%

Drug overdose 9%

Alcohol abuse/dependance 15%

NMDOH BVRHS 2013-2017; CDC ARDI

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Alcohol-Attributable Death by Demographics, New Mexico, 2013-2017

Bar chart showing Deaths per 100,000:
- Men: 87.8
- Women: 37.6
- American Indian: 156.9
- Asian/PI: 15.7
- Black: 50.9
- Hispanic: 59.7
- White: 46.8
- 0-14 years: 2.6
- 15-24 years: 25.6
- 25-34 years: 57.9
- 35-44 years: 79.3
- 45-54 years: 114.3
- 55-64 years: 106.0
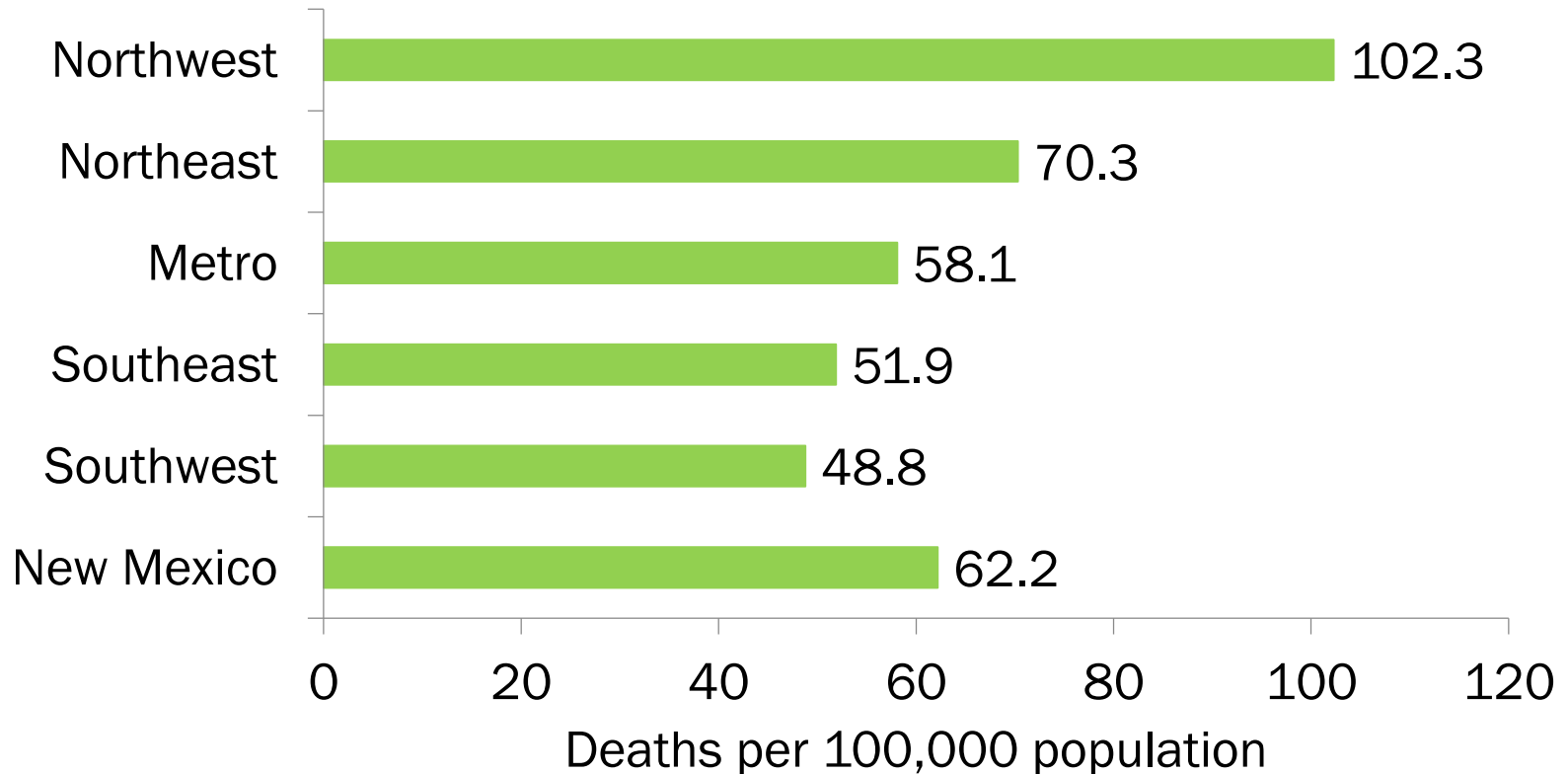- 65-74 years: 78.8
- 75-84 years: 95...
- 85+ years: 225.2
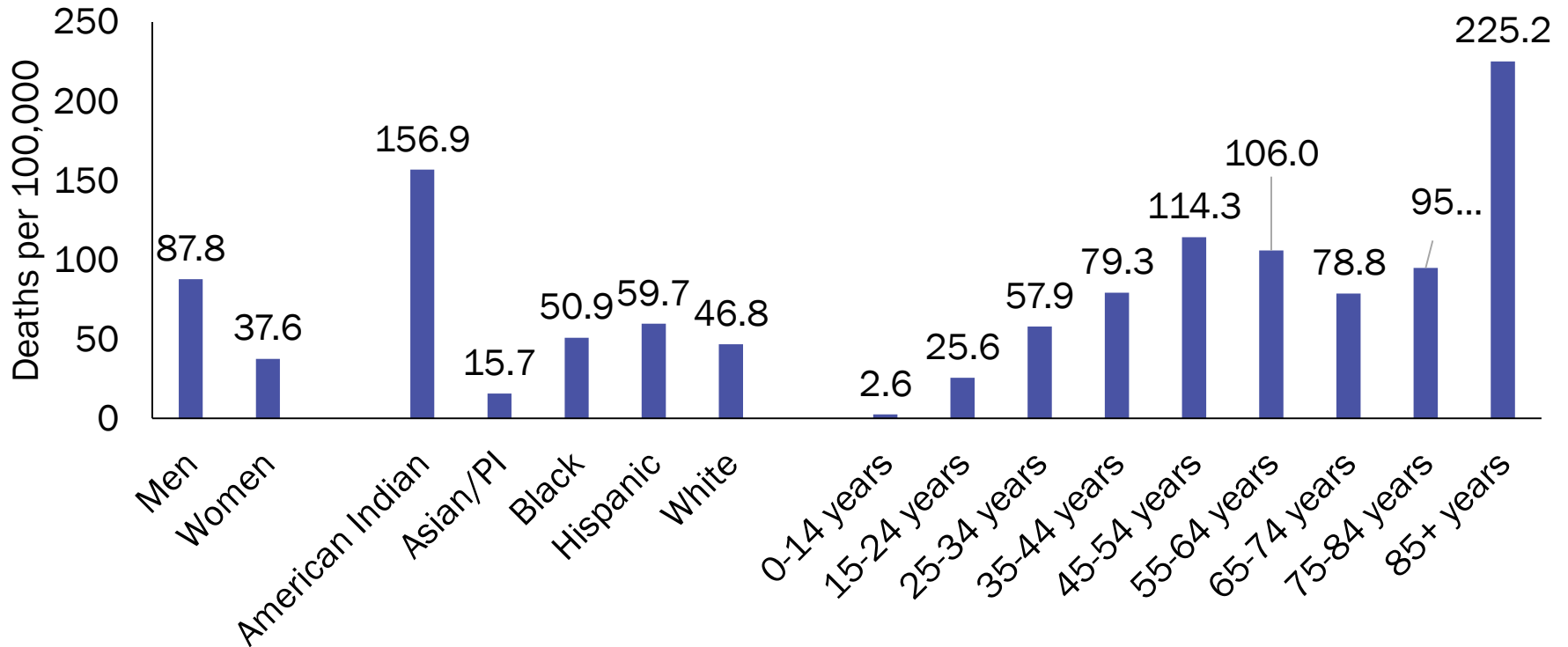
NMDOH BVRHS 2013-2017; CDC ARDI; Rates by gender and race/ethnicity were age-adjusted using 2000 US Standard Population

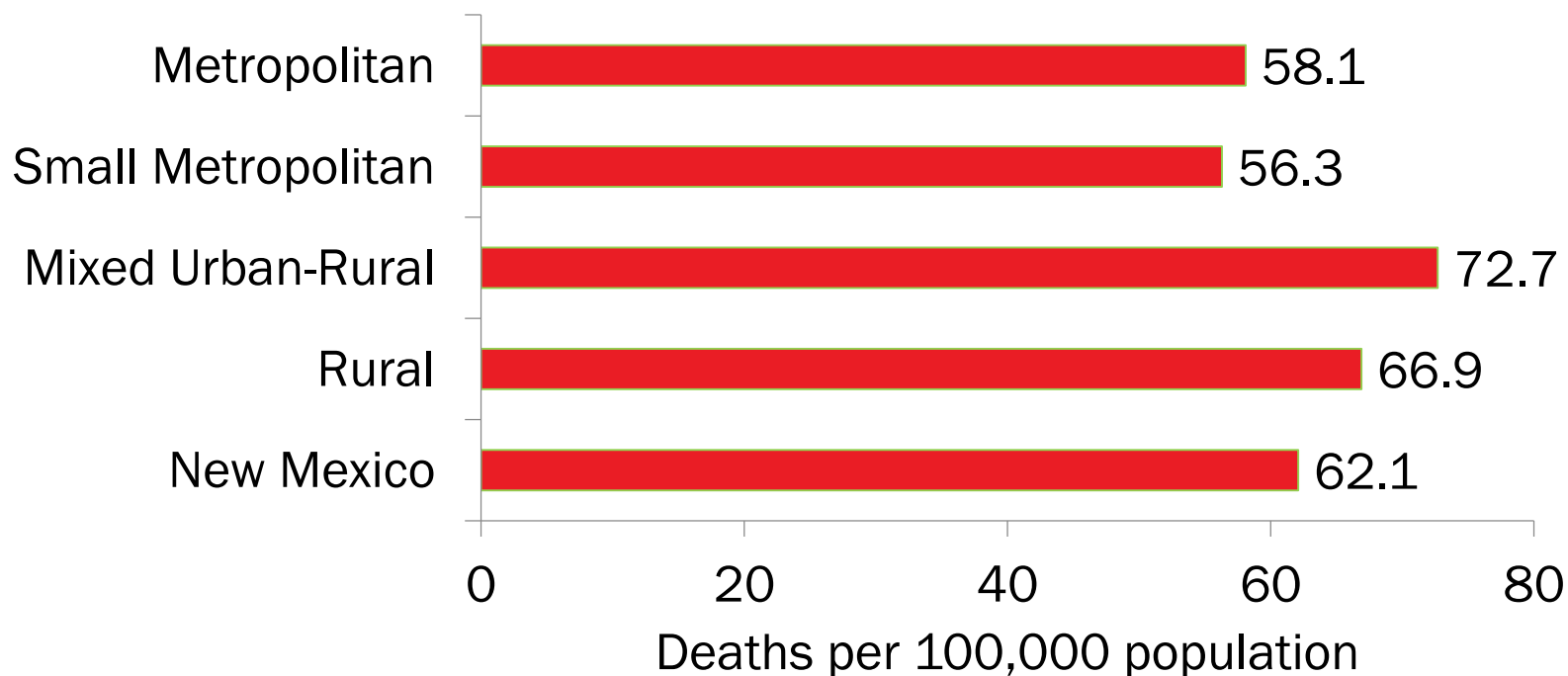# Alcohol-Attributable Death Rates by Region

New Mexico, 2013-2017

Region	Deaths per 100,000 population
Northwest	102.3
Northeast	70.3
Metro	58.1
Southeast	51.9
Southwest	48.8
New Mexico	62.2

Deaths per 100,000 population

Alcohol-Attributable Death Rates
by Rural/Urban
New Mexico, 2013-2017

Category	Deaths per 100,000 population
Metropolitan	58.1
Small Metropolitan	56.3
Mixed Urban-Rural	72.7
Rural	66.9
New Mexico	62.1

Deaths per 100,000 population

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Alcohol Related Death Rates by Census Tract Poverty Level*
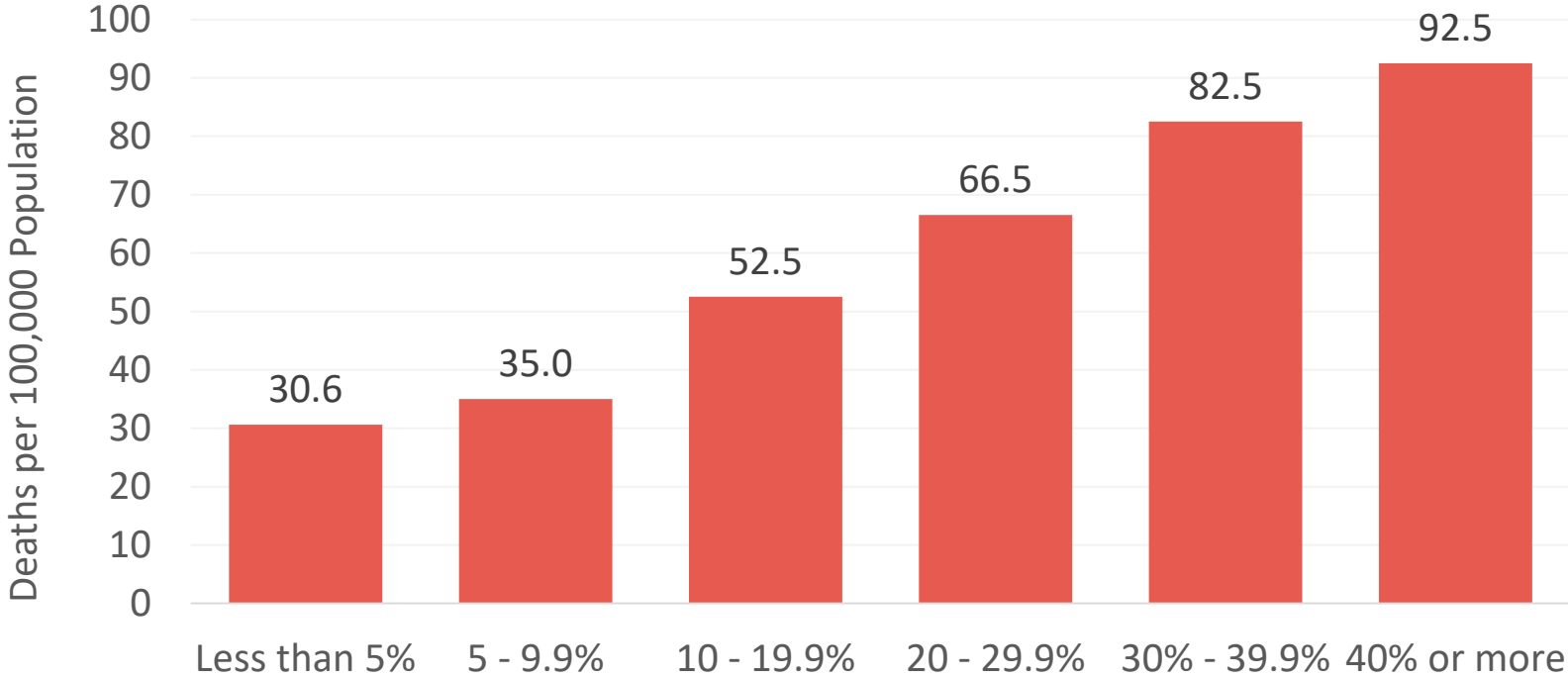
New Mexico, 2012-2016

Chart: Deaths per 100,000 Population by census tract poverty level

Poverty Level	Deaths per 100,000 Population
Less than 5%	30.6
5 - 9.9%	35.0
10 - 19.9%	52.5
20 - 29.9%	66.5
30% - 39.9%	82.5
40% or more	92.5

*Poverty level is the percentage of persons of all ages in the decedent's census tract living at or below 100% of Poverty. Alcohol related deaths are defined by ICD10: Alcohol-related deaths include deaths that are partially attributable to alcohol as well as 100% attributable alcohol-induced deaths. For more information, visit the CDC Alcohol-related Disease Impact (ARDI) software page: http://www.cdc.gov/alcohol/ardi.htm
Rates have been age-adjusted to the standard U.S. 2000 population.
Source: NM Vital Records and Health Statistics, U.S. Bureau of the Census, American Community Survey

Ambivalence or Aggressive Action

Alcohol or Opioids

Smoking-attributable, Alcohol-attributable, and Drug Overdose Death Rates[1]

New Mexico (2013-2017) and US (2016)

	New Mexico	U.S.	Rate Ratio
Smoking-attributable death rate[2]	96.2	104.9	0.9
Alcohol-attributable death rate[3]	62.2	34.0	1.8
Drug overdose death rate[4]	24.6	19.8	1.2

[1]Rates are deaths per 100,000 population, age-adjusted to the 2000 U.S. standard population
[2] Smoking-Attributable Mortality, Morbidity, and Economic Costs (SAMMEC), apps.nccd.cdc.gov/sammec/index.asp, 2016 for US and 2013-2017 for NM
[3] Alcohol-Related Disease Impact (ARDI), nccd.cdc.gov/DPH_ARDI/default/default.aspx, 2013-2017 for NM and 2016 for US
[4] Defined as International Classification of Diseases, tenth revision (ICD-10) codes X40-X44, X60-X64, X85, and Y10-Y14, 2013-2017 for NM and 2016 for US

Total Alcohol Related & Drug Overdose Death Rates, New Mexico, 1998-2017
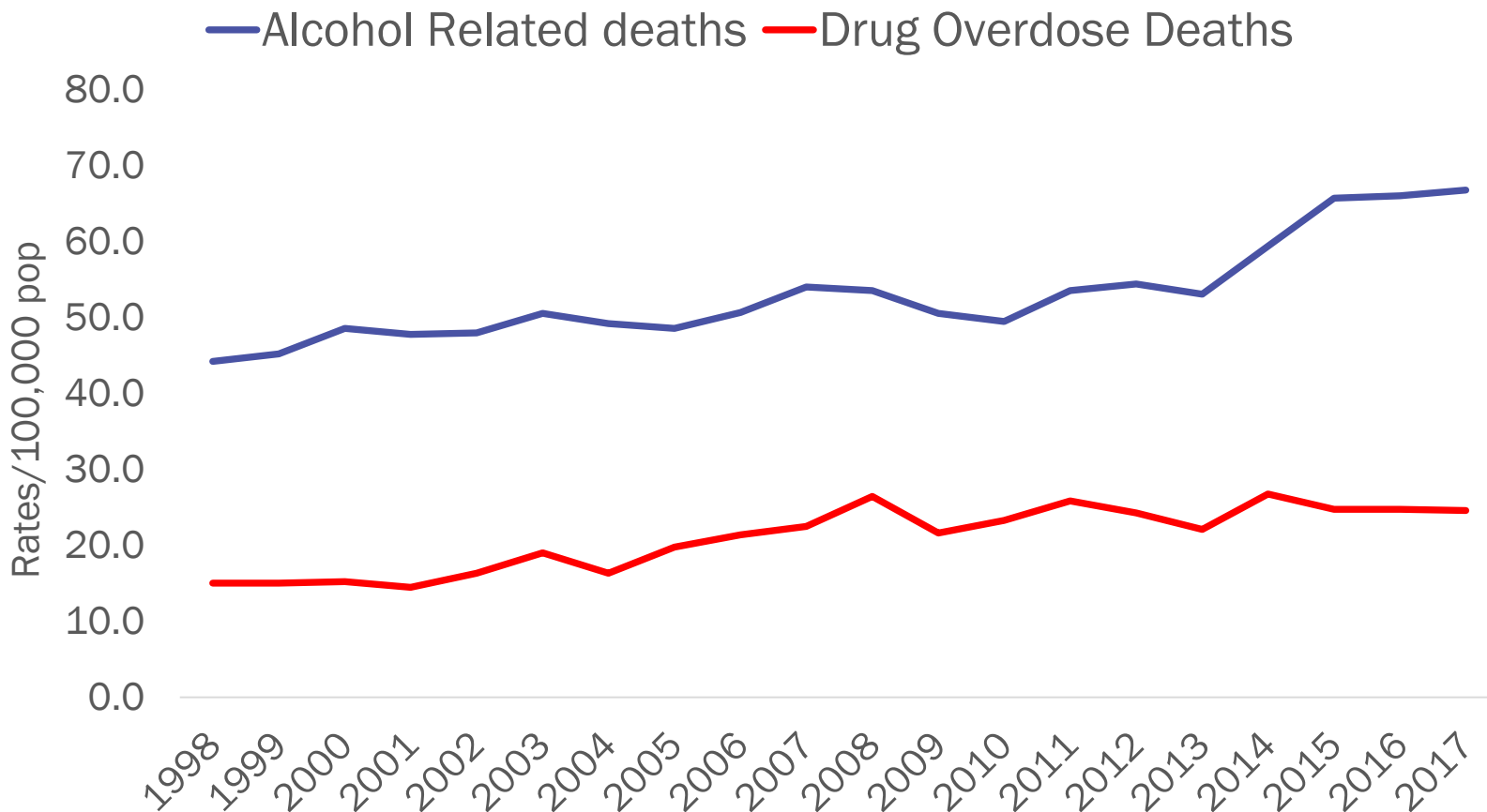
Data Sources: NMDOH BVRHS
Rates are age-adjusted to the 2000 U.S. standard population

Excessive Alcohol Consumption as a Public Health Concern

- New Mexico has one of the highest per capita costs of excessive alcohol use

- $2.2 billion ($2.77 per drink or an average of $1,084 per person) in 2010
    - 41% of these costs were paid by government
    - 75% of these costs are from binge drinking

Sacks JJ, Am J Prev Med, 2015

Excessive Alcohol Consumption Definitions

- Binge drinking
    - ≥ 4 drinks per occasion for women or ≥ 5 drinks per occasion for men

- Heavy drinking
    - Defined as consuming ≥ 8 drinks per week for women or ≥ 15 drinks per week for men

- Any consumption by pregnant women or people younger than age 21
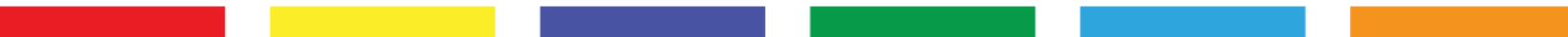
Binge Drinking is the Most Deadly, Costly, & Common Pattern of Excessive Drinking in the U.S.

≥4 drinks per occasion for women and ≥5 for men

54% of the deaths due to excessive drinking
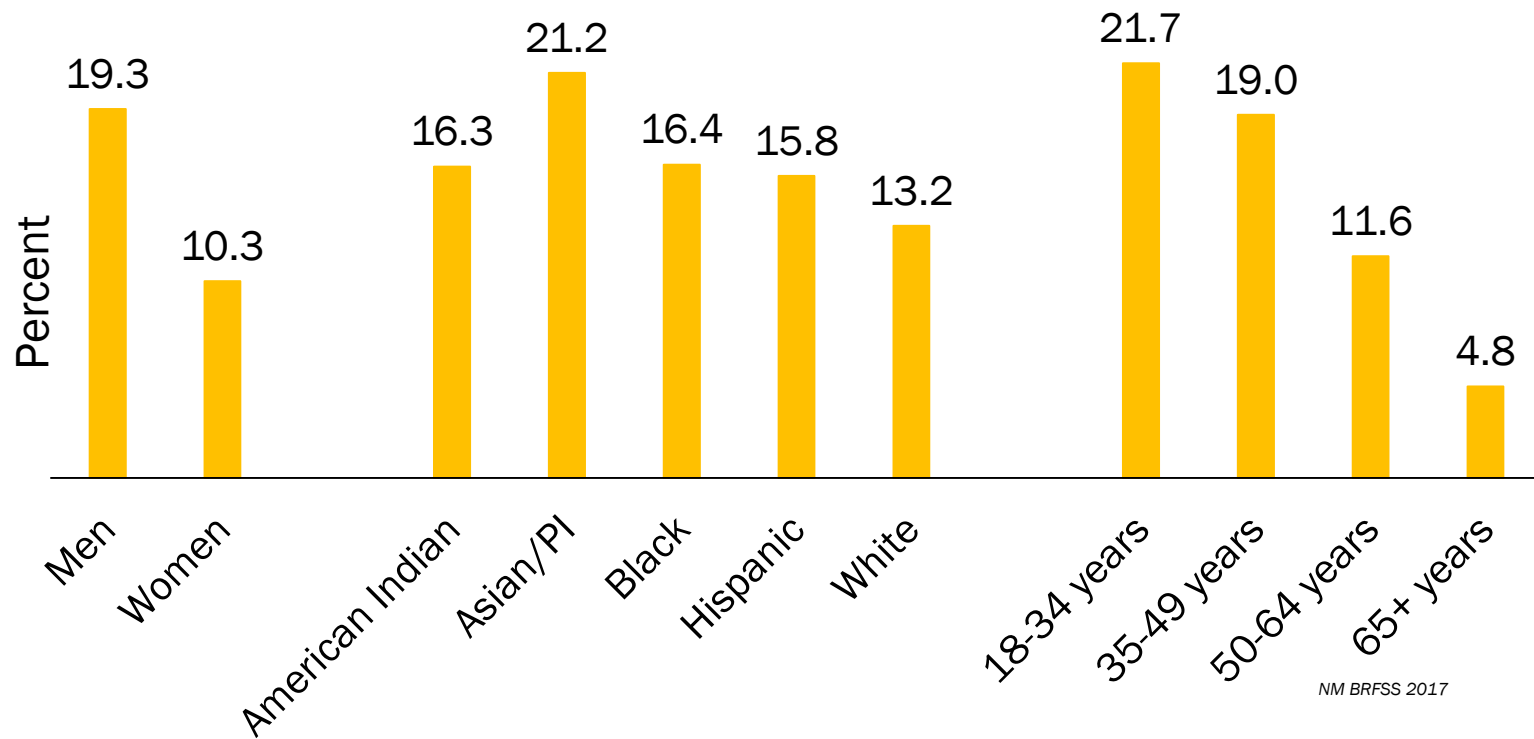
Binge Drinking

66% of the Years of Potential Life Lost (YPLL)

77% of the economic costs

CDC. Vital Signs: Binge Drinking Prevalence, Frequency and Intensity Among Adults−United States, 2010
NIAAA.   NIAAA Scientific Advisory Council Approves Binge Drinking Definition Newsletter. 2004;3(3)

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Binge Drinking by Demographics Among Adults, New Mexico, 2017

NM BRFSS 2017

Percent

Category	Value
Men	19.3
Women	10.3
American Indian	16.3
Asian/PI	21.2
Black	16.4
Hispanic	15.8
White	13.2
18-34 years	21.7
35-49 years	19.0
50-64 years	11.6
65+ years	4.8

Decrease Availability

↓

Decrease Consumption/Use

↓

Decrease Morbidity and Mortality

Community Guide Recommendations for Preventing Excessive Drinking

➢Regulate alcohol outlet density

➢Dram shop (commercial host) liability

➢Avoid further privatization of alcohol sales

➢Increase alcohol taxes

➢Maintain limits on days of sale

➢Maintain limits on hours of sale

➢Enhance enforcement of laws prohibiting alcohol sales to minors
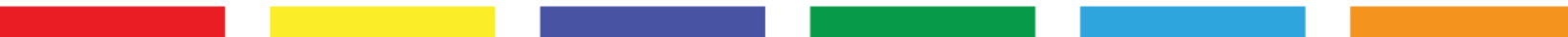
➢Electronic screening and brief intervention (e-SBI)

www.thecommunityguide.org/alcohol
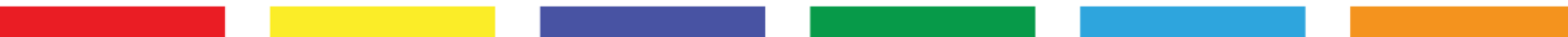
Community Guide Findings on Alcohol Excise Taxes

❑ **Increasing price by 10% would reduce overall alcohol consumption by about 7%.**

❑ **Tax increases are efficiently reflected in the retail price.**

❑ **Impact is proportional to the size of the tax increase.**

Elder RW, et al. *Am J Prev Med* 2010 38(2) 217-229

# Alcohol Screening and Brief Intervention (A-SBI)

- A-SBI can reduce the amount consumed on an occasion by 25% in those who drink too much

- United States Preventive Service Task Force recommendation

- Recommendation: Screen all adult patients

- 29% of adults in New Mexico reported that they had not been asked about the amount of alcohol they drink in the previous 12 months
    - 20% of binge drinkers had not been asked

NMBRFSS 2015; CDC Vital Signs, January 2014

DOH Activities

- One of 5 states with alcohol epidemiologist funding from CDC

- Working with health councils to include community guide alcohol prevention strategies

- Working with TRD to collect county level alcohol consumption data
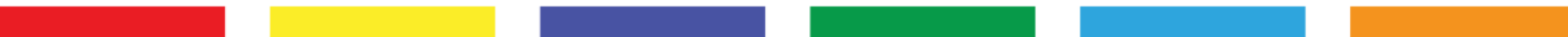
Conclusions

- NM's health status is worsening with respect to that of the U.S.
  - For this to change alcohol-related death must decrease in NM
- There is ambivalence regarding addressing alcohol as a public health problem compared to opioids
- NM requires an aggressive policy agenda to address problem drinking

Recommendations

- Address alcohol like opioids
    - Utilize a public health approach
- Track and reduce alcohol consumption
- Create an alcohol and public health council
- Evaluate a change of the legal BAC
- Resources