The Burden of Alcohol in New Mexico and Next Steps to Reduce It

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Presentation Overview

- Introduction: Looking beyond DWI…

- The burden of alcohol in New Mexico

- Next steps to reduce it
Introduction:
Looking Beyond DWI...
Alcohol-Related Motor Vehicle Crash Fatality Rates
New Mexico and United States, 1982-2006

Source: NHTSA FARS
Rates are annual per 100 million vehicle miles traveled
Alcohol-Related Motor Vehicle Crash Fatality Rates
New Mexico and United States, 1982-2006

Source: NHTSA FARS

Rates are annual per 100 million vehicle miles traveled

“New Mexico...moved from sixth in the nation in 2002 to 14th in the nation in 2006 in alcohol related fatalities per 100 million vehicle miles traveled.”
- NMDOT, 03/10/2008
Alcohol-Related Death Rates
By Cause Category, United States and New Mexico, 1981-2004

New Mexico’s total alcohol-related death rate has ranked 1st, 2nd, or 3rd in the U.S. for each of the past 24 years (1st since 1997).

Source: NCHS death files; CDC ARDI; NMDOH SAEU

Rates are 3-year rolling averages, per 100,000 population, age-adjusted to the US 2000 population
Alcohol-related prevention in NM

• Has been successful in reducing alcohol-related motor vehicle crash deaths…

• …but other types of alcohol-related death have remained stable or increased over time

• Are we focusing enough attention on preventing excessive drinking -- the root cause of DWI and other alcohol-related problems?
The Burden of Alcohol in New Mexico
Alcohol-related death rates by cause category, New Mexico, 1990-2005.

Source: NMDOH BVRHS death files; CDC ARDI; OMI (NM-specific injury AAFs); NMDOH SAEU

**Alcohol-related chronic disease** is largely caused by chronic heavy drinking*

* Chronic heavy drinking is, for men, more than two drinks per day; for women, more than one drink per day (NIAAA)

**Alcohol-related injury** is largely caused by binge drinking**

** Binge drinking is, for men, five or more drinks on a single occasion; for women, four or more drinks on a single occasion (NIAAA)

Rates are 3-year rolling averages, per 100,000 population, age-adjusted to the US 2000 population.
Over the past fifteen years…

New Mexico’s death rate from alcohol-related chronic disease has consistently been 1st or 2nd in the nation, 1.5 to 2 times the national rate.

New Mexico’s death rate from alcohol-related injury has consistently been 1st, 2nd, or 3rd in the nation, 1.4 to 1.8 times the national rate.

Alcohol-related chronic disease is largely caused by chronic heavy drinking*

* Chronic heavy drinking is, for men, more than two drinks per day; for women, more than one drink per day (NIAAA)

Source: NMDOH BVRHS death files; CDC ARDI; OMI (NM-specific injury AAFs); NMDOH SAEU

Rates are 3-year rolling averages, per 100,000 population, age-adjusted to the US 2000 population
Prevalence of Excessive Drinking by Category
Adults 18 and older, New Mexico, 2002

“[These results suggest] that most alcohol problems in New Mexico are likely due to excessive drinking among persons who are not alcohol dependent. The adverse health and social consequences associated with excessive drinking are not limited to those who are alcohol dependent, but extend to a broader range of problem drinkers across the population.”

Source:
Alcohol-related deaths comprise 54 different causes of death… here are the ten leading causes:

- Alcohol-related liver disease: 12.4
- Motor-vehicle traffic crashes*: 7.2
- Alcohol dependence: 6.6
- Suicide: 4.2
- Fall injuries: 4.1
- Poisoning (not alcohol): 4.0
- Homicide: 3.6
- Alcohol abuse: 0.8
- Drowning injuries: 0.4
- Acute pancreatitis: 0.3

Source: NMDOH BVRHS death file; CDC ARDI; NMDOH SAEU
The "alcohol attributable fraction" is the proportion of deaths from a given cause that can be attributed to alcohol use.
There is a large burden of premature mortality associated with excessive alcohol use.

Source: NMDOH BVRHS death files; CDC ARDI; NMDOH SAEU
Years of potential life lost are a measure of premature mortality. They represent the average life expectancy at time of death (e.g., 58 years for 15-19 year-old males).

About 10% of YPPLs are the result of deaths to underage drinkers… about 90% result from premature death among adults.

Source: CDC ARDI
Alcohol-Related Death Rates
By Age, Sex, and Race/Ethnicity, New Mexico, 2004-2006

Male alcohol-related death rates are about twice female rates.
American Indian alcohol-related death rates are 2-4 times White rates, for both males and females.
Hispanic male rates are 1.5-2 times White male rates.

Source: NMDOH BVRHS death files; CDC ARDI; NMDOH SAEU
Alcohol-Related Death Rates by Race/Ethnicity
New Mexico, 1989-1991 and 2002-2004

Race/ethnic disparities persist, although some progress has been made toward reducing them.

RR$_{AI/Wh}$ = 4.0

RR$_{AI/Wh}$ = 2.6

All rates are per 100,000, age-adjusted to the US 2000 standard population

RR = rate ratio
Source: NCHS; CDC ARDI v. 2
Alcohol-Related Death Rates
By County, New Mexico

2004-2006

Alcohol-related death rates

- < 30
- 30-49
- 50-74
- > 75

Source: NMDOH BVRHS death files; CDC ARDI; NMDOH SAEU
In 2004, the United States alcohol-related injury death rate was 15.2 per 100,000.

In 2004-2006 all but one New Mexico county had a higher rate than the U.S.

15 New Mexico counties had rates more than twice the U.S. rate.
In 2004, the United States alcohol-related chronic disease death rate was 12.1 per 100,000.

In 2004-2006 all but four New Mexico counties had a higher rate than the U.S.

One-third of New Mexico counties had rates more than twice the U.S. rate.

McKinley and Rio Arriba Counties had rates more than four times the U.S. rate.
Past Year Alcohol Dependence
Persons Aged 12 or Older, United States, 2004-2006

Source: NSDUH, SAMHSA
Past Year Alcohol Dependence or Abuse
United States, 2004-2006

Source: NSDUH, SAMHSA
Past Year Needing but not Receiving Treatment for Alcohol Use
Persons Aged 12 or Older, United States, 2004-2006

Source: NSDUH, SAMHSA
Prevalence of Past Year Alcohol Dependence or Abuse and Needing but not Receiving Treatment for Alcohol Use Persons Aged 12 or Older, New Mexico, 2006-2007

NOTE: Any person who reported past-year alcohol dependence or abuse but no past-year treatment was classified as “needing but not receiving treatment” (regardless of self-reported perceived need for treatment or effort made to receive treatment.)

Source: NSDUH, SAMHSA
Number of Persons Reporting Past Year Alcohol Dependence or Abuse and Needing but not Receiving Treatment for Alcohol Use Persons Aged 12 or Older, New Mexico, 2006-2007

In 2006-07, only 3.1% of persons in New Mexico who needed treatment for alcohol use received it.

In 2007, in the United States, 8.1% of persons who needed treatment for alcohol use received it.

Source: NSDUH, SAMHSA
Past Year Perceived Need for Treatment and Effort Made to Receive Treatment among Persons Needing But Not Receiving Treatment for Illicit Drug or Alcohol Use Persons Aged 12 or Older, United States, 2007

The vast majority of persons who need treatment for illicit drug or alcohol use do not perceive their need for treatment; and do not seek it. This suggests the importance of primary and secondary prevention strategies for reducing the burden of excessive alcohol use in New Mexico.
The Burden of Alcohol in New Mexico…
And Next Steps to Reduce It
### Some evidence-based strategies for reducing the burden of excessive alcohol use in New Mexico

<table>
<thead>
<tr>
<th>Category</th>
<th>Interventions</th>
<th>Expert Reviews That Recommend Intervention*</th>
<th>Effectiveness of Intervention (Babor et al, 2003)**</th>
<th>Origin of Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulating Physical Availability</td>
<td>Enhance minimum legal drinking age (MLDA) enforcement</td>
<td>WHO, IOM, CG, NIAAA</td>
<td>+++</td>
<td>Local/State</td>
</tr>
<tr>
<td></td>
<td>Restrict alcohol outlet density</td>
<td>WHO, CG, NIAAA</td>
<td>++</td>
<td>Local/State</td>
</tr>
<tr>
<td></td>
<td>Implement and enforce server liability (per IOM)</td>
<td>WHO, IOM</td>
<td>+++</td>
<td>State</td>
</tr>
<tr>
<td></td>
<td>Further publicize and enforce &quot;4th Degree&quot; felony law</td>
<td>IOM</td>
<td>not rated</td>
<td>Local/State</td>
</tr>
<tr>
<td></td>
<td>Implement and enforce social host liability laws</td>
<td>JTO</td>
<td>not rated</td>
<td>Local/State</td>
</tr>
<tr>
<td></td>
<td>Regulate and enforce keg registration</td>
<td>IOM, JTO</td>
<td>not rated</td>
<td>Local</td>
</tr>
<tr>
<td>Taxation and Pricing</td>
<td>Increase alcohol tax</td>
<td>WHO, IOM, JTO, CG, NIAAA</td>
<td>+++</td>
<td>State</td>
</tr>
<tr>
<td></td>
<td>Index alcohol tax to consumer price index</td>
<td>IOM</td>
<td>not rated</td>
<td>State</td>
</tr>
<tr>
<td></td>
<td>Regulate and enforce restrictions on happy hour drink discounts</td>
<td>JTO, NIAAA</td>
<td>not rated</td>
<td>Local/State</td>
</tr>
<tr>
<td>Altering the Drinking Context</td>
<td>Increase retail compliance operations and related media</td>
<td>WHO, IOM, JTO, NIAAA</td>
<td>++</td>
<td>State</td>
</tr>
<tr>
<td></td>
<td>Community mobilization</td>
<td>WHO, IOM, CG, NIAAA</td>
<td>++</td>
<td>Local</td>
</tr>
<tr>
<td></td>
<td>Party patrols</td>
<td>IOM</td>
<td>not rated</td>
<td>Local</td>
</tr>
<tr>
<td></td>
<td>School policy on using zero tolerance</td>
<td>NIAAA</td>
<td>not rated</td>
<td>Local</td>
</tr>
<tr>
<td>Education</td>
<td>School-based instructional programs to reduce riding with drinking driver</td>
<td>CG</td>
<td>not rated</td>
<td>Local</td>
</tr>
<tr>
<td>Regulating Alcohol Promotion</td>
<td>Restrictions on alcohol advertising</td>
<td>IOM, JTO</td>
<td>?</td>
<td>Local/State</td>
</tr>
<tr>
<td>Drinking-Driving Counter-Measures</td>
<td>Increase the number of sobriety check points</td>
<td>WHO, IOM, CG, NIAAA</td>
<td>++</td>
<td>Local</td>
</tr>
<tr>
<td></td>
<td>Media campaigns about enforcement efforts</td>
<td>IOM, CG, NIAAA</td>
<td>not rated</td>
<td>Local/State</td>
</tr>
<tr>
<td></td>
<td>Lowered BAC limits</td>
<td>WHO, CG</td>
<td>+++</td>
<td>Local/State</td>
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<tr>
<td></td>
<td>Administrative license suspension</td>
<td>WHO, NIAAA</td>
<td>++</td>
<td>State</td>
</tr>
<tr>
<td></td>
<td>Graduated licensing including &quot;zero tolerance&quot; for infractions</td>
<td>WHO, IOM, JTO</td>
<td>++</td>
<td>State</td>
</tr>
<tr>
<td></td>
<td>Enforce mandatory interlock on all first-time DWI offenders</td>
<td>CG</td>
<td>not rated</td>
<td>Local/State</td>
</tr>
<tr>
<td>Treatment &amp; Early Intervention</td>
<td>Screening and brief intervention with at-risk drinkers</td>
<td>WHO, IOM, NIAAA</td>
<td>++</td>
<td>Local</td>
</tr>
</tbody>
</table>


** Babor et al effectiveness ranking: +++ = Evidence of a high degree of effectiveness; ++ = Evidence for moderate effectiveness

These are evidence-based prevention strategies that are well-recommended by experts; and could be more widely or completely implemented in New Mexico.
Next steps for alcohol-related prevention in NM

- Focus our alcohol-related prevention efforts more broadly
  - Not just on reducing DWI, but on reducing all alcohol-related injuries and alcohol-related chronic disease
  - Not just on underage drinking, but across the age range

- Focus more attention on reducing excessive drinking, the root cause of alcohol-related problems in New Mexico (e.g., focus more on reducing binge drinking)

- Focus on using the most effective possible prevention strategies (and managing them as effectively as possible)
  - Develop and implement a strategic plan for alcohol-related prevention
  - Implement strong science-based criteria for selecting strategies
    - e.g., Implement all the best-supported environmental strategies
  - Evaluate chosen strategies against performance goals and targets
  - Implement clear criteria for retaining or eliminating strategies
  - Enhance training for prevention managers and preventionists
Alcohol-Related Death Rates
By Cause Category, United States and New Mexico, 1981-2004

Source: NCHS death files; CDC ARDI; NMDOH SAEU

Rates are 3-year rolling averages, per 100,000 population, age-adjusted to the US 2000 population.
Adult Per Capita Cigarette Consumption, 1900-2006

Major Prevention Events

- 1st Surgeon General's Report
- Broadcast ad ban
- Master Settlement Agreement
- Federal cigarette tax doubles
- Great Depression
- End of WW II
- 1st Smoking-Cancer Concern
- Fairness Doctrine Messages on TV and Radio
- Nonsmokers' Rights Movement Begins

Thank You!

Any Questions?

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