



Underage Drinking in New Mexico

Overview and Highlights

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- This presentation provides a brief overview of underage drinking in New Mexico.
- It describes:
 - (1) The immediate and long-term risks to underage drinkers posed by alcohol consumption
 - (2) The prevalence of underage drinking in New Mexico
 - (3) The associations between underage drinking (especially binge drinking) and other risk behaviors among New Mexico high school students

Why is Underage Drinking a Public Health Issue?

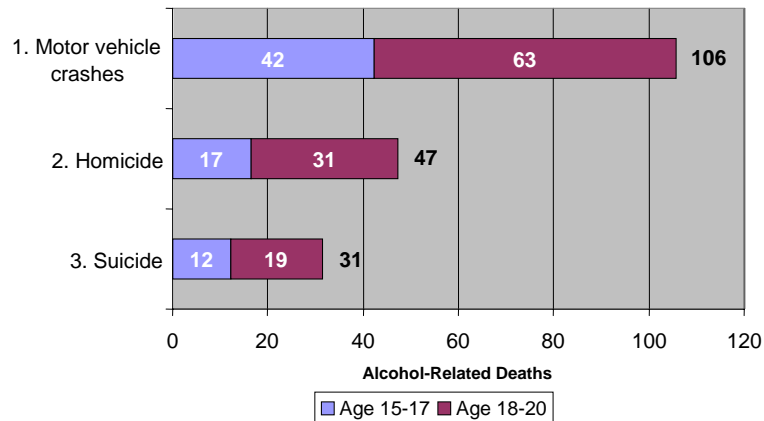
Underage drinking increases the...

- Immediate risk of injury and death from the three leading causes of death for youth aged 15-20. Alcohol is involved in:
 - 42% of Motor Vehicle Crashes
 - 46% of Homicides
 - 28% of Suicides
- Long-term risk of adult alcohol dependence, alcohol-related chronic disease, and alcohol-related chronic disease death

- Why is underage drinking a public health issue?
- There are two major reasons:
 - First, underage drinking increases the immediate risk of alcohol-related injury and death.
 - Alcohol is a key causal factor in the 3 leading causes of death for youth aged 15-20.
 - Second, underage drinking increases the long-term risk of adult alcohol-related health problems.

Immediate Risk Alcohol-Related Death

Here are the leading causes of Underage Alcohol-Related Death in New Mexico in 2000-2003...



SOURCE: Substance Abuse Epidemiology Unit, New Mexico Department of Health

- Looking first at the immediate risk of alcohol-related injury and death...
- In 2000-2003, among New Mexico youth aged 15-20, there were:
 - 106 alcohol-related motor vehicle crash deaths
 - 47 alcohol-related homicides
 - 31 alcohol-related suicides
- A substantial proportion of these underage alcohol-related deaths (35-40%) were to high-school age youth (age 15-17).

Immediate Risk
Years of Potential Life Lost

Here are the average Years of Potential Life Lost due to Underage Alcohol-Related Death in New Mexico in 2001...

	<u>Age < 21</u>
A-R Motor Vehicle Crash	60
Homicide	55
Suicide	53

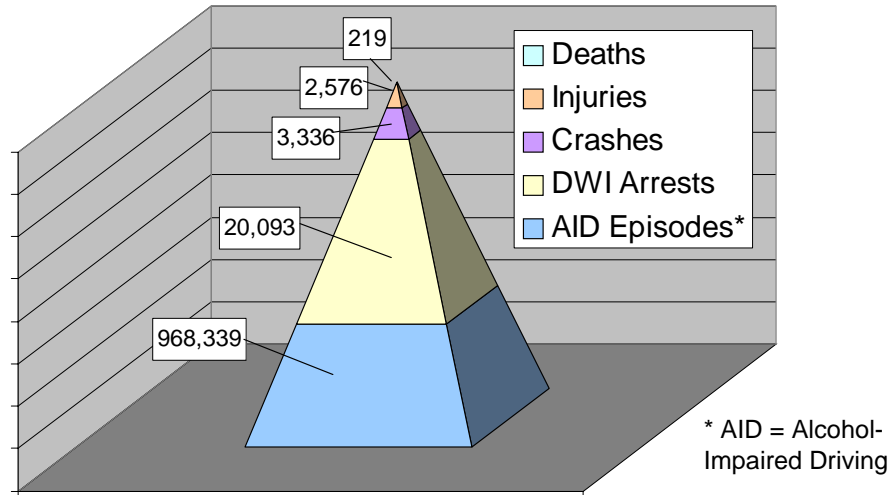
SOURCE: Centers for Disease Control (CDC-ARDI)

- “Years of Potential Life Lost” provide another way of looking at the impact of death.
- “Years of Potential Life Lost” are the total years of life expectancy remaining at the time of death.
- By definition, underage deaths are associated with large numbers of years of potential life lost.
 - For example, a youth dying at age 15 has more than 55 years of remaining life expectancy.
- On average, each underage alcohol-related death represents more than 55 years of potential life lost to the individual, their family, their community, and society overall.

Immediate Risk

Death is only the “Tip of the Iceberg”

Here are the number of Alcohol-Related Motor Vehicle Events in New Mexico in 2004...



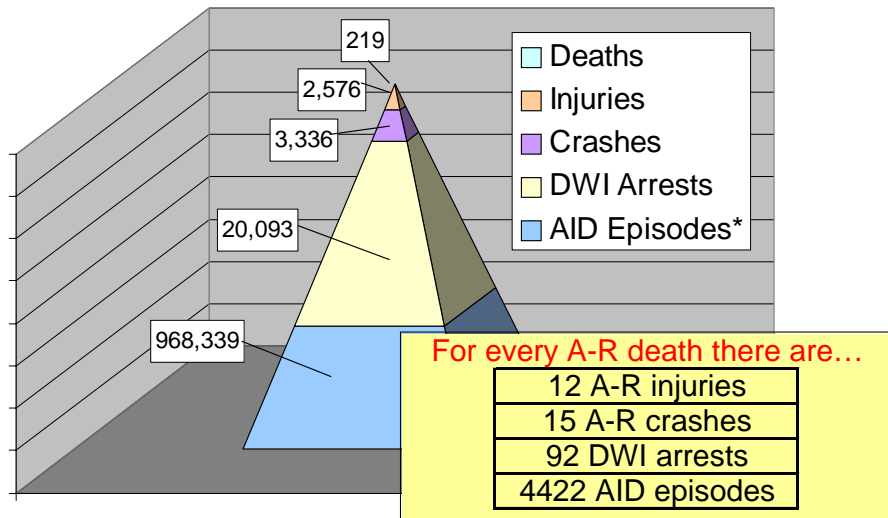
SOURCE: 2004 New Mexico Traffic Safety Bureau, * 2004 BRFSS and 2003 YRRS

- Of course, death is only the “tip of the iceberg” when it comes to alcohol-related health problems...
- For example, looking at alcohol-related motor vehicle events in New Mexico in 2004, there were:
 - 219 alcohol-related motor vehicle crash deaths
 - 2,576 alcohol-related motor vehicle crash injuries
 - 3,336 alcohol-related motor vehicle crashes
 - 20,093 DWI arrests
 - 968,339 alcohol-impaired driving episodes

Immediate Risk

Death is only the “Tip of the Iceberg”

Here are the number of Alcohol-Related Motor Vehicle Events in New Mexico in 2004...



SOURCE: 2004 New Mexico Traffic Safety Bureau, * 2004 BRFSS and 2003 YRRS

- Another way of saying this is that for every alcohol-related motor vehicle crash death there were:
 - 12 alcohol-related motor vehicle crash injuries
 - 15 alcohol-related motor vehicle crashes
 - 92 DWI arrests
 - 4,422 alcohol-impaired driving episodes
- The same kind of “pyramid” exists for homicide and suicide:
 - For every homicide or suicide there are many intentional injuries
 - For every intentional injury there are many more precursor events – alcohol-related fights, assaults, suicide attempts, etc
- Again, the point is that death is only the most serious of a much larger set of negative health and social consequences associated with underage drinking.

Long-Term Risk
Adult Alcohol Dependence or Abuse

National Survey on Drug Use and Health

The NSDUH Report

October 22, 2004

“Persons reporting first use of alcohol before age 15 were more than 5 times as likely to report past-year alcohol dependence or abuse than persons who first used alcohol at age 21 or older.”

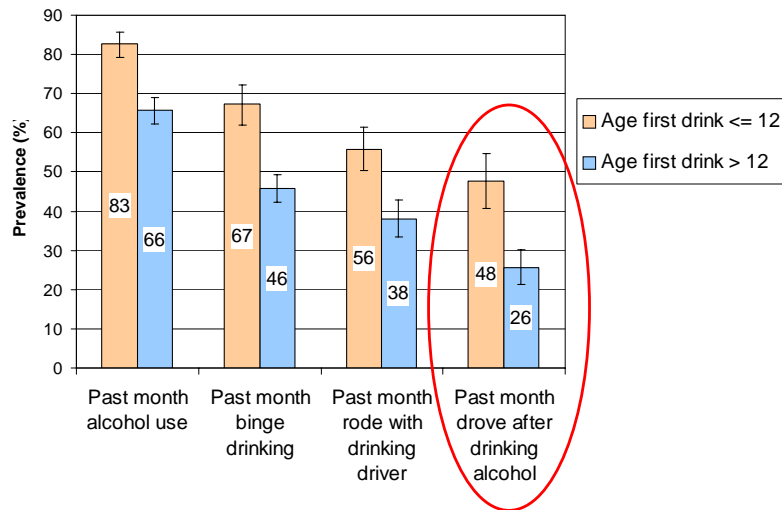
SOURCE: Substance Abuse and Mental Health Administration (SAMHSA)

- The impact of underage drinking isn't limited to the immediate risk of alcohol-related injury and death...
- Underage drinking also poses a long-term risk, by predisposing young drinkers to a greater risk of alcohol-related problems as an adult.
- The Substance Abuse and Mental Health Administration (SAMHSA) recently publishing findings indicating that...[read slide]
- Publicizing this connection between underage drinking and adult alcohol problems is a key goal of SAMHSA's current efforts to address underage drinking. This linkage between early drinking and adult alcohol problems is the focus of the Public Service Announcements SAMHSA has produced to support its current underage drinking prevention effort.

Long-Term Risk

Impact of early drinking is seen among HS Seniors

New Mexico high school seniors who drank before age 13 are more likely to report alcohol-related risk behaviors at age 17...



SOURCE: 2003 NM Youth Risk and Resiliency Survey (YRRS)

- Do we see an association between early drinking and later alcohol-related problems here in New Mexico?
- Looking at New Mexico high-school seniors, we see that seniors **who drank before age 13 are significantly more likely than seniors who began drinking later to report alcohol-related risk behaviors at age 17...**
- **These early drinkers are significantly more likely than later drinkers to report:**
 - Past month alcohol use
 - Past month binge drinking
 - Past month riding with a drinking driver
 - Past month alcohol-impaired driving
- For example, almost half of the early drinkers report past-month alcohol-impaired driving, compared to a quarter of the later drinkers.
- This suggests that, even as early as senior year in high school, many early drinkers are on a behavioral path leading to adult alcohol problems.

Long-Term Risk
Adult Alcohol-Related Health Problems

New Mexico has among the highest rates of...

– Alcohol-related psychiatric disorders:

- Ranked 6th for Alcohol dependence or abuse (DSM-IV), 2002-03
- Ranked 4th for Alcohol dependence (DSM-IV), 2002-03 (1st in 2002)

– Death from diseases associated with chronic drinking:

- Ranked 1st for Alcohol-Related Chronic Liver Disease, 2000-2002
- Ranked 1st for Alcohol Dependence Syndrome, 2000-2002

SOURCE: National Survey of Drug Use and Health (NSDUH); CDC Wonder

- Why is the strong association between underage drinking and adult alcohol problems so important in New Mexico?
- Because New Mexico has among the highest rates of adult alcohol-related problems in the nation. New Mexico has among the highest rates in the nation for:
 - Alcohol-related psychiatric disorders (“alcohol dependence” is a psychiatric diagnosis of alcoholism)
 - Alcohol-related death from diseases associated with chronic heavy drinking
- Efforts to prevent adult alcohol problems can begin by reducing early underage drinking, which is often a precursor and predictor of adult alcohol problems.

Economic Costs* of Underage Drinking

Source of Costs	New Mexico	
	Cost	Percent
Alcohol-Attributable Traffic Crashes Involving Youth	\$204.2	45%
Alcohol-Attributable Violence Involving Youth	\$219.9	49%
Other Causes	\$25.7	6%
Total	\$449.8	100%

* Costs expressed in millions of 1998 dollars, based on 1996 data

SOURCE: Cost of Underage Drinking, prepared by PIRE for OJJDP

- One more way to think about the cost of underage drinking is in economic terms.
- This slide shows the latest available estimates of the cost of underage drinking in New Mexico:
 - Underage drinking causes at least \$450 million in costs per year.
 - About 45% of these costs are due to alcohol-attributable traffic crashes...
 - ...and about 50% are due to alcohol-attributable violence.
- Unfortunately, this estimate is 10 years old, based on 1996 data and reported in 1998 dollars...
- ...for this reason, it can be regarded as a conservative estimate of the current costs of underage drinking in New Mexico.

Economic Costs* of Underage Drinking

Source of Costs	New Mexico	
	Cost	Percent
Alcohol-Attributable Traffic Crashes Involving Youth	\$204.2	45%
Medical Care	\$11.9	6%
Work Loss and Other Costs	\$57.7	28%
Pain and Quality of Life Lost	\$134.6	66%
Alcohol-Attributable Violence Involving Youth	\$219.9	49%
Medical Care	\$11.2	5%
Work Loss and Other Costs	\$31.3	14%
Pain and Quality of Life Lost	\$177.4	81%
Other Causes	\$25.7	6%
Medical Care	\$1.0	4%
Work Loss and Other Costs	\$6.9	27%
Pain and Quality of Life Lost	\$17.8	69%
Total	\$449.8	100%
Medical Care	\$24.0	5%
Work Loss and Other Costs	\$95.9	21%
Pain and Quality of Life Lost	\$329.8	73%

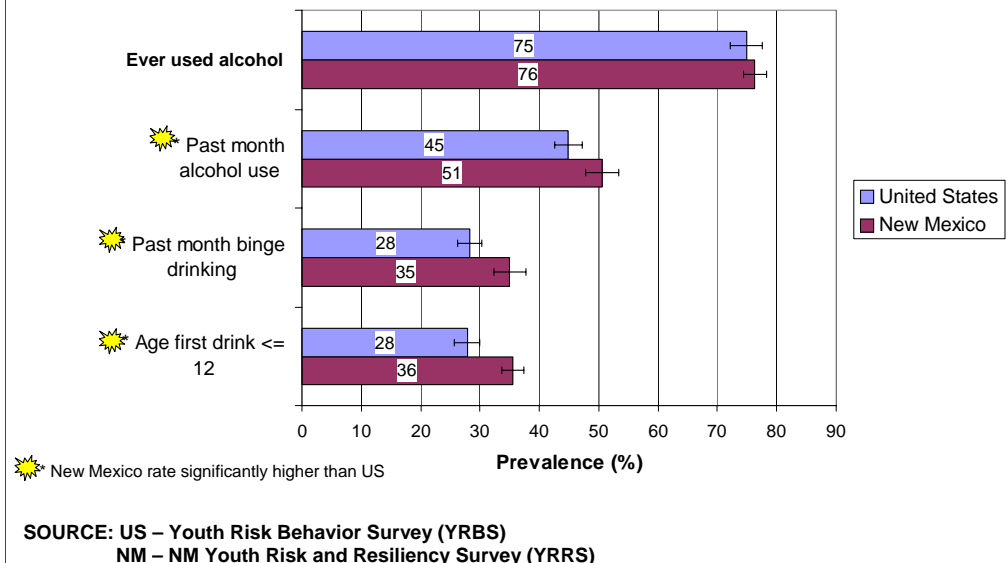
* Costs expressed in millions of 1998 dollars, based on 1996 data

SOURCE: Cost of Underage Drinking, prepared by PIRE for OJJDP

- This slide breaks out these costs into important components:
 - About 5% of total costs are associated with Medical Care...
 - ...about 21% of total costs are due to alcohol-related Work Losses (lost productivity)...
 - ...and almost 75% of the total costs are due to Lost Quality of Life associated with alcohol-related injuries.

Underage Drinking Behavior New Mexico compared to United States

In 2003, U.S. and N.M. high school students reported...



- Hopefully, the previous slides have made it clear that underage drinking is a serious public health problem in New Mexico, associated with both immediate and long-term negative consequences.

- Just how prevalent is underage drinking in New Mexico?

- Based on the 2003 Youth Risk and Resiliency Survey, a biannual survey of New Mexico high school students:

- 51% of New Mexico high school students report any drinking in the past month

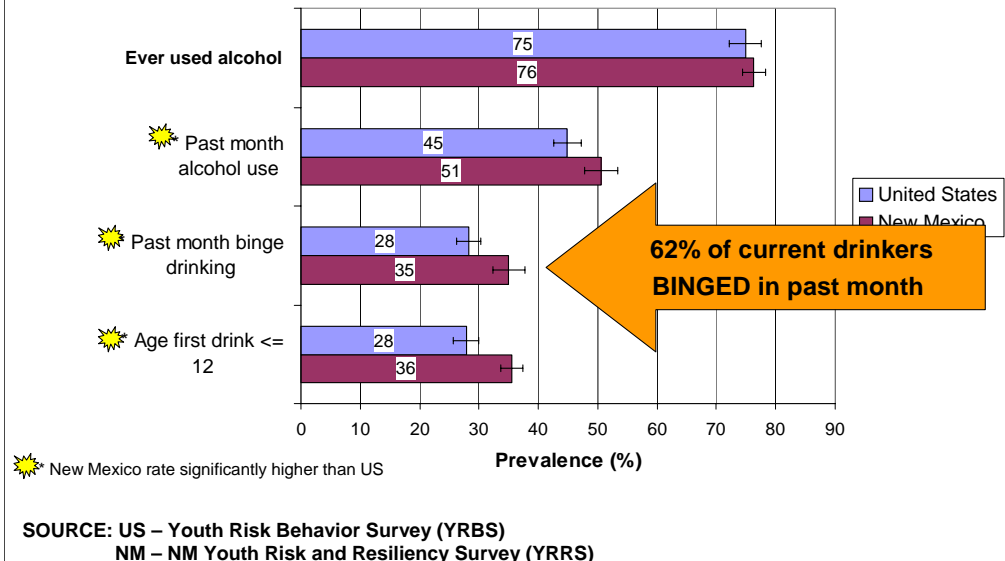
- 35% of New Mexico high school students report binge drinking (defined as 5 or more drinks on a single occasion) in the past month

- 36% of New Mexico high school students report early drinking (drinking before age 13)

- The prevalence of each of these three behaviors is significantly higher in New Mexico than in the US overall.

Underage Drinking Behavior New Mexico compared to United States






In 2003, U.S. and N.M. high school students reported...



- Furthermore, more than 60% of currently-drinking high school students report past-month binge drinking.
- In other words, the majority of currently-drinking high school students report binge drinking...
- ...Binge drinking is NORMATIVE behavior among underage drinkers in New Mexico.
- The next several slides present data on New Mexico high school students, to show why we care so much about binge drinking as a risk behavior.

Associated Risk Behaviors

Underage Drinking is associated with many risks






<u>Risk Category</u>		
Other Substance Use		 Overdose Death
Violence & Victimization		 Homicide
Depression & Self-Harm		 Suicide
Sexual Activity		 STD/HIV
Motor Vehicle Related		 MV Crash Death

SOURCE: NM Youth Risk and Resiliency Survey (YRRS)

- As already described, underage drinking is associated with a large burden of alcohol-related injury and death in New Mexico.
- However, underage drinking is also associated with many sub-lethal risk behaviors that expose youth to great potential harm...and ultimately, to injury and death.
- This slide lists risk behavior categories that we survey biannually in New Mexico high school students, using the Youth Risk and Resiliency Survey (YRRS).
- These risk categories include:
 - Other substance use
 - Violence and victimization
 - Depression and self-harm
 - Sexual activity
 - Unsafe motor vehicle practices

Associated Risk Behaviors

Underage Drinking is associated with many risks

<u>Risk Category</u>	<u>Risk Behavior</u>	
Other Substance Use	<ul style="list-style-type: none"> • Early age of first alcohol use • Current smoking • Current marijuana use • Current cocaine use 	 Overdose Death
Violence & Victimization	<ul style="list-style-type: none"> • Weapon carrying • Fighting • Being hurt by boyfriend/girlfriend • Being forced to have sex 	 Homicide
Depression & Self-Harm	<ul style="list-style-type: none"> • Being “sad or hopeless” • Making suicide plan • Seriously considering suicide • Attempting suicide 	 Suicide
Sexual Activity	<ul style="list-style-type: none"> • Being sexually active • Using alcohol/drugs before sex 	 STD/HIV
Motor Vehicle Related	<ul style="list-style-type: none"> • Low seatbelt use • Riding with drinking driver • Driving after drinking 	 MV Crash Death























SOURCE: NM Youth Risk and Resiliency Survey (YRRS)

- This slide shows the specific risk behaviors that YRRS asks about, within these risk categories.

Associated Risk Behaviors


















Underage Drinking is associated with many risks

 **Drinkers have significantly higher rates than non-drinkers for ALL of these risk behaviors**

Other Substance Use	<ul style="list-style-type: none">  Early age of first alcohol use  Current smoking  Current marijuana use  Current cocaine use 	 Overdose Death
Violence & Victimization	<ul style="list-style-type: none">  Weapon carrying  Fighting  Being hurt by boyfriend/girlfriend  Being forced to have sex 	 Homicide
Depression & Self-Harm	<ul style="list-style-type: none">  Being "sad or hopeless"  Making suicide plan  Seriously considering suicide  Attempting suicide 	 Suicide
Sexual Activity	<ul style="list-style-type: none">  Being sexually active  Using alcohol/drugs before sex 	 STD/HIV
Motor Vehicle Related	<ul style="list-style-type: none">  Low seatbelt use  Riding with drinking driver  Driving after drinking 	 MV Crash Death

SOURCE: NM Youth Risk and Resiliency Survey (YRRS)





- When we look at the prevalence of these risk behaviors by drinking status, we see that high school students who drink are significantly more likely to report having engaged in each of these risk behaviors than high school students who do not drink.

Associated Risk Behaviors		
Binge Drinking is especially risky		
 Binge drinkers have signif. higher rates than non-binge drinkers for <u>MANY</u> risk behaviors		
Other Substance Use	<ul style="list-style-type: none"> • Early age of first alcohol use  Current smoking  Current marijuana use  Current cocaine use 	 Overdose Death
Violence & Victimization	<ul style="list-style-type: none">  Weapon carrying  Fighting • Being hurt by boyfriend/girlfriend • Being forced to have sex 	 Homicide
Depression & Self-Harm	<ul style="list-style-type: none"> • Being “sad or hopeless” • Making suicide plan  Seriously considering suicide • Attempting suicide 	 Suicide
Sexual Activity	<ul style="list-style-type: none">  Being sexually active  Using alcohol/drugs before sex 	 STD/HIV
Motor Vehicle Related	<ul style="list-style-type: none">  Low seatbelt use  Riding with drinking driver  Driving after drinking 	 MV Crash Death
SOURCE: NM Youth Risk and Resiliency Survey (YRRS)		

- Furthermore, we see that binge drinkers are significantly more likely to report having engaged in most of these risk behaviors than non-binge drinkers.

- Specifically, high school student binge drinkers are more likely than non-binge drinkers to report:

- Smoking
- Using marijuana or cocaine
- Fighting or carrying a weapon
- Having considered suicide
- Being sexually active, or having used alcohol or drugs before sex
- Unsafe motor vehicle-related behaviors

Associated Risk Behaviors		
Binge Drinking is especially risky		
Binge drinkers have signif. higher rates than non-binge drinkers for <u>MANY</u> risk behaviors		
Other Substance Use	<ul style="list-style-type: none"> • Early age of first alcohol use ☀ Current smoking ☀ Current marijuana use ☀ Current cocaine use 	 Overdose Death
Violence & Victimization	<ul style="list-style-type: none"> ☀ Weapon carrying ☀ Fighting • Being hurt by boyfriend/girlfriend • Being forced to have sex 	 Homicide
Depression & Self-Harm	<ul style="list-style-type: none"> • Being "sad or hopeless" • Making suicide plan ☀ Seriously considering suicide • Attempting suicide 	 Suicide
Sexual Activity	<ul style="list-style-type: none"> ☀ Being sexually active ☀ Using alcohol/drugs before sex 	 STD/HIV
Motor Vehicle Related	<ul style="list-style-type: none"> ☀ Low seatbelt use ☀ Riding with drinking driver ☀ Driving after drinking 	<div style="border: 1px solid black; padding: 5px; display: inline-block;"> Binge drinkers are 6x more likely to drink and drive than non-binge drinkers </div>

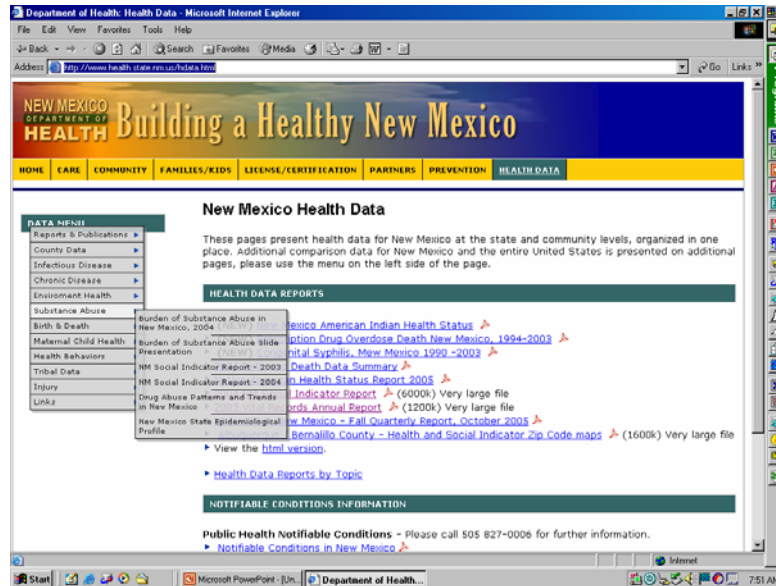
SOURCE: NM Youth Risk and Resiliency Survey (YRRS)

- For most of these behaviors, binge drinkers are 2-3 times more likely to report the risky behavior than non-binge drinkers.
- When it comes to alcohol-impaired driving, binge drinkers are six times more likely than non-binge drinkers to report past month drinking and driving.
- It's because of binge drinking's strong association with a wide range of other risk behaviors...
- ...and the possibility that binge drinking plays a contributing role in some of these behaviors...
- ...that the Centers for Disease Control suggests that underage drinking prevention should focus on reducing binge drinking.
- Reductions in binge drinking can be expected to contribute to reductions in a wide range of associated risk behaviors.

Resources

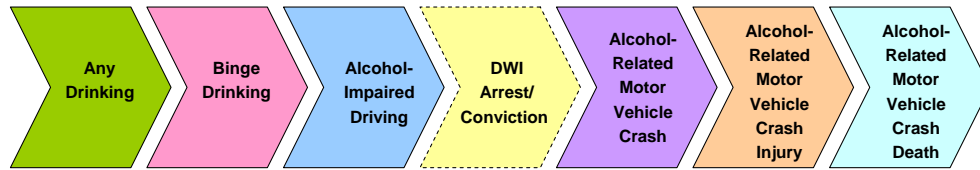
Other Reports (State and County-Level)

- <http://www.health.state.nm.us/hdata.html>

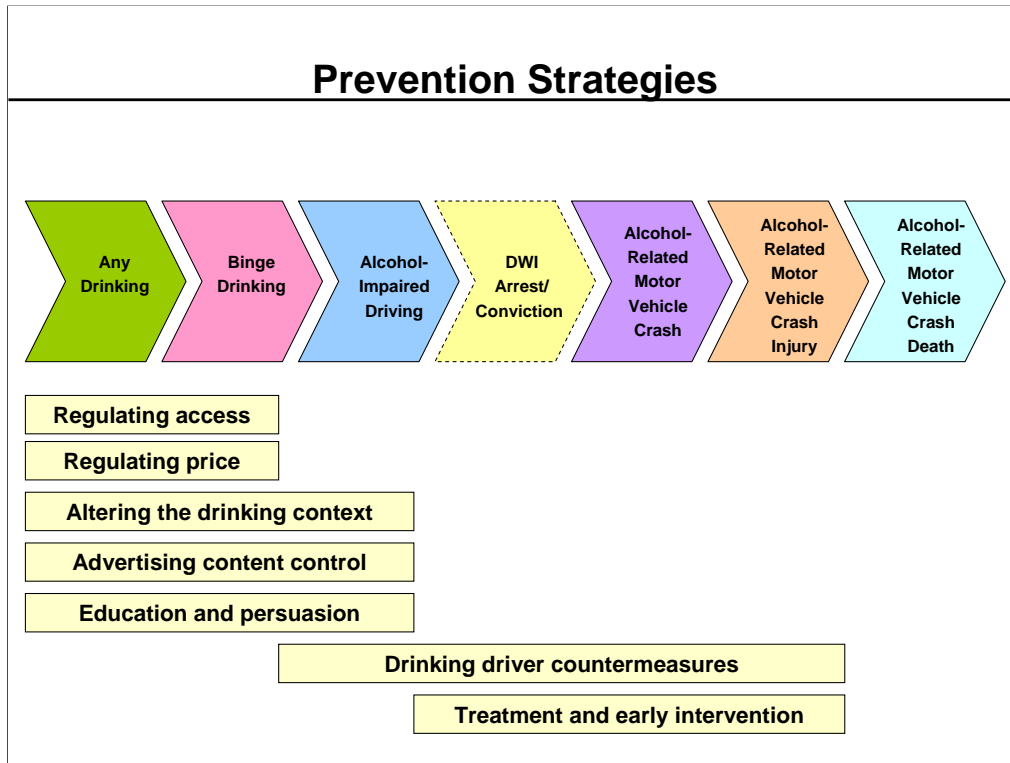


- This concludes this brief presentation of epidemiological data related to underage drinking here in New Mexico.
- This presentation has focused mostly on comparisons of New Mexico to the United States overall...
- If you're interested in county-level data regarding underage drinking, the New Mexico Department of Health produces several reports that present county-level rates and measures.
- These reports are available at <http://www.health.state.nm.us/hdata.html>, and include:
 - New Mexico State Epidemiological Profile
 - New Mexico Social Indicator Report

Stages at which to apply Prevention Strategies



- Of course, describing a problem is only the first step towards preventing it.
- Efforts to prevent the negative consequences of underage drinking can be targeted to various stages along the path to negative outcomes.
- This slide shows steps along the path to alcohol-related motor vehicle crash death.
- Binge drinking is an especially important precursor to subsequent negative outcomes.
- Prevention efforts targeting underage drinking, especially binge drinking, can be expected to impact a wide variety of negative outcomes, in addition to motor vehicle crash deaths.



- This slide shows various types of prevention strategies (yellow bars), and the behavioral stages they are likely to impact.
- For more information on prevention strategies, see the book Alcohol: No Ordinary Commodity, Babor et al, Oxford University Press, 2003.

If you have any questions, comments, or suggestions regarding this presentation, please contact:

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