An Examination of the Criticisms of the Minimum Legal Drinking Age 21 Laws in the United States from a Traffic-Safety Perspective

National Highway Traffic Safety Administration

October 2008

Perhaps no alcohol safety measure has attracted more research and public attention or shown more consistent evidence of effectiveness than the minimum legal drinking age (MLDA) 21 law in the United States. MLDA laws were established in the States after the repeal of Prohibition in 1933 (21st Amendment to the U.S. Constitution). Many States set the MLDA at 21 during that time. When the voting age was lowered from 21 to 18 in 1971 (26th Amendment to the U.S. Constitution), many States lowered their drinking age to 18 or 19. Studies in the 1970s and 1980s showed significant increases in alcohol-related crashes involving youth aged 18-20 in States that lowered their drinking age. Consequently, the U.S. Congress passed the National Minimum Drinking Age Act and President Reagan signed the bill into law in 1984. Since 1988, the MLDA has been 21 in all 50 States and the District of Columbia (DC). Between 1982 and 1998, the population-adjusted involvement rate of drinking drivers aged 20 and younger in fatal crashes decreased 59 percent. MLDA-21 laws have been shown to be associated with this decline. The National Highway Traffic Safety Administration (NHTSA) has estimated that MLDA laws save approximately 900 lives a year in traffic fatalities alone.

Section I of this report presents cases that have been made for lowering the drinking age and examines these arguments. Much of the information contained in this section was adapted from two prior publications with similar arguments and augmented with new and updated information.

Section II provides detailed information and supporting data on the benefits of MLDA 21 and the extent of teen motor vehicle risks.
Introduction

The passage of Minimum Legal Drinking Age 21 (MLDA 21) laws has been one of the most successful traffic safety countermeasures implemented over the past 30 years. The National Highway Traffic Safety Administration (NHTSA) estimates that 900 lives are saved every year due to these laws, with a total of more than 25,000 lives since 1975.

MLDA laws were first established in the States after the repeal of Prohibition in 1933 (21st Amendment to the U.S. Constitution). Many States set the MLDA at 21 during that time. When the voting age was lowered from 21 to 18 in 1971 (26th Amendment to the U.S. Constitution), a number of States lowered their drinking age to 18 or 19 to mirror the drop in voting age.

The resultant differences in minimum drinking ages across the States allowed the agency and other organizations to study the effect of MLDA laws set at different ages. Perhaps no alcohol-related traffic safety measure has attracted more research and public attention. The evidence generated as a result has demonstrated clearly the effectiveness of minimum drinking age laws set at age 21.

Studies in the 1970s and 1980s showed significant increases in alcohol-related crashes involving youth aged 18-20 in States that lowered their drinking age to 18. Consequently, the U.S. Congress passed the National Minimum Drinking Age Act (Title 23 U.S.C. §158). President Reagan signed the bill into law in 1984. Since 1988, the MLDA has been 21 in all 50 States and the District of Columbia.

Between 1982 and 1998, the involvement rate of drinking drivers aged 20 and younger in fatal crashes decreased 59 percent. Research has shown that MLDA 21 laws were associated with this decline. However, despite the compelling evidence of effectiveness of MLDA 21 laws, there is a movement again in some States to lower it. This report examines some of those claims.

Section I of this report presents cases that have been made for lowering the drinking age and discusses these arguments. Much of the information contained in this section was adapted from two prior publications supplemented here with new and updated information.

Section II of this report provides detailed information and supporting data on the benefits of MLDA 21 and the status of underage drinking and driving in the United States.
SECTION I: Arguments and Responses

Argument 1: “Nineteen- and twenty-year-olds are drinking anyway. If we legalize it, at least they’ll be drinking in a controlled setting.”

Response: A bar is not necessarily a “safe” or “controlled” environment to drink. A recent study showed that 76 percent of bars sold alcohol to obviously intoxicated patrons.\(^2\) **Research shows that about half of drivers arrested for driving while intoxicated (DWI) or killed as drinking drivers in traffic crashes did their drinking at licensed establishments.**\(^3,4,5\) This is not a controlled setting for youth to drink.

Argument 2: “Making it illegal to drink until 21 just increases the desire for the ‘forbidden fruit’. When teens turn 21, they’ll drink even more.”

Response: Research shows that when the drinking age is 21, those younger than 21 drink less and continue to drink less through their early twenties. The lower rates of drinking before 21 are not compensated for by a higher rate of drinking after reaching 21.\(^6\) In fact, research shows that the opposite is true.\(^7\)

In 2004, a joint report by the National Research Council and Institute of Medicine (IOM) reviewed studies that controlled for history of alcohol dependency, frequency of heavy drinking, years of drinking, age, gender, race or ethnicity, history of cigarette smoking, and illicit drug use.\(^8\) These studies reveal that those who start drinking at age 18 are at least twice as likely to be unintentionally injured, be in motor vehicle crashes, and be in physical fights while under the influence of alcohol than those who start drinking at age 21.\(^9,10,11,12,13\)

Argument 3: “The Federal Government is exerting too much authority over the States. The Federal law encouraging States to set the legal drinking age at 21, by withholding highway funds from States that do not do so, is just one example of this.”

Response: Providing for the public safety is the primary responsibility of government at all levels. Based on accumulating data that young people were being disproportionately lost to crashes involving alcohol, the United States Congress acted to promote safety and the public welfare. Past and current surveys have shown that the U.S. public supports the drinking age of 21.\(^14,15,16\)
Argument 4: “Lower rates of drinking and driving crashes among 18- to 20-year-olds are not related to the MLDA 21 laws, they are related to increased anti-drinking and driving education efforts, tougher drunken-driving penalties, and tougher enforcement. Additionally, the decrease in drunken driving fatalities could be attributed to other factors, such as increased seat belt use.”

Response: It’s true that highly visible enforcement and stricter laws have had an impact on reducing traffic fatalities across the board among all age groups. But if this argument were correct, one would expect that alcohol-involved crash rates would have fallen uniformly among different age groups when MLDA 21 laws were enacted. However, when the MLDA 21 age restriction was initiated, driver alcohol involvement in fatal crashes declined significantly more among the 18- to 20-year-old population, compared to drivers aged 21 and older.

A National Highway Traffic Safety Administration report on the decline of young alcohol-impaired drivers in fatal traffic crashes between 1982 and 1998 found that MLDA laws were a key factor in a 59 percent reduction in the rate of young alcohol-impaired drivers involved in fatal crashes, along with demographic shifts, .02 or less blood alcohol concentration laws for drivers under 21, and general anti drunk driving efforts. The report noted:

“MLDA 21 laws clearly reduced youth drinking and driving. They appear to have done so both by reducing youth drinking directly and by encouraging youth to separate their drinking from their driving.”

Argument 5: “Government should consider issuing special licenses to 18-20 year olds to allow them to drink alcohol if they complete an alcohol education course. The idea is that the course will teach them to ‘choose responsibility’ when drinking.”

Response: There is no evidence to suggest that lowering the drinking age to 18 for those who complete an education program will reduce the likelihood of their drinking and driving, let alone make them a more responsible drinker. Studies have shown that traffic safety education efforts alone are very good at raising awareness, but that in many cases they do not lead to behavior change.

Argument 6: “Don’t experiences in other countries show that there are fewer alcohol and drunk driving problems when the drinking age is lower?”

Response: International evidence shows that lowering the drinking age results in increased traffic crashes. For example, in New Zealand, the drinking age was lowered from 20 to 18 in 1999. A study found that after the drinking age was lowered to 18, there was a significant increase in traffic crashes among youth affected by the law change. The study found that the rate of traffic crashes and injuries to 18- to 19-year-old males increased 12 percent and increased 14 percent for males aged 15 to 17 comparing 4 years before and after New Zealand lowered the MLDA to 18. For females, the effect was even greater—rates increased 51 percent for 18- to 19-year-olds and 24 percent for 15- to 17-year-olds. The study estimated that 400
serious injuries and 12 deaths could be prevented each year among 15- to 19-year-olds if the nation raises the MLDA back to 21.

Several States have considered legislation that would lower the drinking age. The outcomes in New Zealand are similar to the evidence in the United States after the drinking ages were lowered in the 1970s. A GAO Report, *Drinking Age Laws, An Evaluation of the Synthesis of their Impact on Highway Safety*, looked at research on the effects of lowering the drinking age to 18, and found evidence that traffic crashes increased as a result of changes in the law. Lowering the drinking age to 18 also increases alcohol-related crashes for 15- to 17-year-olds.

**Conclusions**

The following facts support State laws that establish a minimum legal drinking age of 21:

- A NHTSA study found that MLDA 21 laws were a key factor in a 59 percent reduction in the rate of young alcohol-impaired drivers involved in fatal crashes between 1982 and 1998.

- NHTSA estimates that MLDA 21 laws save approximately 900 lives each year in reductions in traffic fatalities involving young drivers.

- Providing science-based responses is important to ensure that those considering any change to the law are informed of the facts.
SECTION II: Supporting Data for the Effectiveness of MLDA 21 Laws

Statistics show a decrease in fatal injuries related to car crashes for 15- to 24-year-olds following the implementation of the MDLA 21 laws. NHTSA credits the passage of MLDA 21 laws with saving approximately 900 traffic lives of people of all ages each year.

When the drinking age was different from State to State, one of the concerns that led to a uniform MLDA 21 was the fact that some young people drove across State lines to get alcohol, which created “blood borders” when they were involved in crashes. Having a uniform drinking age eliminates unsafe driving behavior related to a patchwork quilt of State drinking age laws.

Lives Saved by MLDA 21

NHTSA estimates that minimum drinking age laws have saved 26,333 lives since 1975. This estimate represents people of all ages who otherwise would have been involved in a fatal crash involving 18-20 year old alcohol-impaired drivers. Every State and the District of Columbia have the 21-year-old minimum drinking age law and a zero tolerance law.


Figure 1. Cumulative Estimated Number of Young Lives Saved by Minimum Drinking Age Laws, 1975–2007
Zero Tolerance Laws for Youth Under Age 21

As of June 1998, every State and the District of Columbia have set a BAC limit of .02 percent or lower for drivers younger than age 21 (zero tolerance law). This law has been associated with significant reductions in underage 21 drinking driver involvement in fatal traffic crashes. Studies also have shown that education alone is not effective at reducing consumption. In order to achieve long-term results, we have to change the environment as well. That is why policy coupled with education is vital.

![Map of States with Zero Tolerance Laws for Drivers Younger Than Age 21]


Figure 2. States with Zero Tolerance Laws for Drivers Younger Than Age 21

Drinking and Driving by Youth

Two of five deaths among U.S. teens are the result of a motor vehicle crash. In fact, motor vehicle crashes are the leading cause of death among teens, and alcohol is involved in close to one-third of these fatalities.

At all BAC levels, the risk of involvement in a motor vehicle crash is greater for teens than for adult drivers. In 2006, 25 percent of drivers aged 15 to 20 who died in motor vehicle crashes had a BAC of 0.08 g/dl or higher.

Tragic as these numbers are, they could have been much worse. In a national survey conducted in 2003, 30 percent of teens reported that within the previous month, they had ridden with a driver who had been drinking alcohol. One in eight reported having driven after drinking alcohol within the same one-month period.
Drinking and driving is correlated with other high-risk behavior. In 2006, among teen drivers who were killed in motor vehicle crashes after drinking and driving, 77 percent were unrestrained.

Table 1. Leading Causes of Death for Youth Aged 16-20: 2002

<table>
<thead>
<tr>
<th>Rank</th>
<th>Cause</th>
<th>Percent of Deaths</th>
<th>Number of Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Motor Vehicle Crashes</td>
<td>39%</td>
<td>6,327</td>
</tr>
<tr>
<td>2</td>
<td>Homicide</td>
<td>15%</td>
<td>2,422</td>
</tr>
<tr>
<td>3</td>
<td>Suicide</td>
<td>11%</td>
<td>1,810</td>
</tr>
<tr>
<td>4</td>
<td>Other Injury (falls, drowning, etc.)</td>
<td>8%</td>
<td>1,258</td>
</tr>
<tr>
<td>5</td>
<td>Cancer</td>
<td>5%</td>
<td>805</td>
</tr>
<tr>
<td>6</td>
<td>Heart Disease</td>
<td>3%</td>
<td>449</td>
</tr>
<tr>
<td></td>
<td>All Other Causes Combined</td>
<td>19%</td>
<td>3,168</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>100%</td>
<td>16,239</td>
</tr>
</tbody>
</table>

Source: National Center for Health Statistics (NCHS), Vital Statistics Mortality Data - 2002, Multiple Cause of Death

In 2006, 12.9 percent (7,463) of all the drivers involved in fatal crashes (57,695) were young drivers aged 15 to 20 years old, and 16 percent (1,621,000) of all drivers involved in police-reported crashes (10,558,000) were young drivers.

Table 2. Alcohol Involvement among Drivers 15 to 20 Years Old Involved in Fatal Crashes, 2006

<table>
<thead>
<tr>
<th>Driver Status</th>
<th>Number of Drivers</th>
<th>0.00 g/dl</th>
<th>0.01 to 0.07 g/dl</th>
<th>0.08 g/dl or Higher</th>
</tr>
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<tbody>
<tr>
<td>Surviving</td>
<td>4,685</td>
<td>83</td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>Fatally Injured</td>
<td>3,389</td>
<td>70</td>
<td>6</td>
<td>25</td>
</tr>
<tr>
<td>Total</td>
<td>8,074</td>
<td>78</td>
<td>5</td>
<td>17</td>
</tr>
</tbody>
</table>

Source: National Center for Statistics and Analysis, Traffic Safety Facts – Young Drivers 2006 Data

Table 3. Intoxication Rates among Young Drivers Fatally Injured in Traffic Crashes by Age, 2006

<table>
<thead>
<tr>
<th>Age (Years)</th>
<th>Number of Drivers</th>
<th>Percentage with BAC 0.08 g/dl or Higher</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>84</td>
<td>17</td>
</tr>
<tr>
<td>16</td>
<td>341</td>
<td>16</td>
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<td>17</td>
<td>567</td>
<td>19</td>
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<td>18</td>
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<td>19</td>
<td>837</td>
<td>28</td>
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<tr>
<td>20</td>
<td>834</td>
<td>33</td>
</tr>
</tbody>
</table>

Source: National Center for Statistics and Analysis, Traffic Safety Facts – Young Drivers 2006 Data
Youth Traffic Fatalities

The higher drinking age reduces death and injury from traffic crashes for youth. However, in 2006, about 6 percent of licensed drivers were aged 15 through 20, but this age group accounted for approximately 13 percent of drivers involved in fatal crashes, and 11 percent of all alcohol-involved drivers in fatal crashes.19 (See Figure 3)


Figure 3. Young Driver Over-involvement in Fatal Crashes in 2006, Ages 15–20

The severity of the crash increases with alcohol involvement. In 2006, 5 percent of the 15- to 20-year-old drivers involved in property-damage-only crashes had been drinking, 6 percent of those involved in crashes resulting in injury had been drinking, and 23 percent of those involved in fatal crashes had been drinking.19
Endnotes


17 Hedlund, JH, Ulmer RG, Preusser DF. *Determine Why There are Fewer Young Alcohol-Impaired Drivers.* Washington, DC: U.S. Department of Transportation; 2001. DOT HS 809 348.


