

21 Minimum Drinking Age – The Science

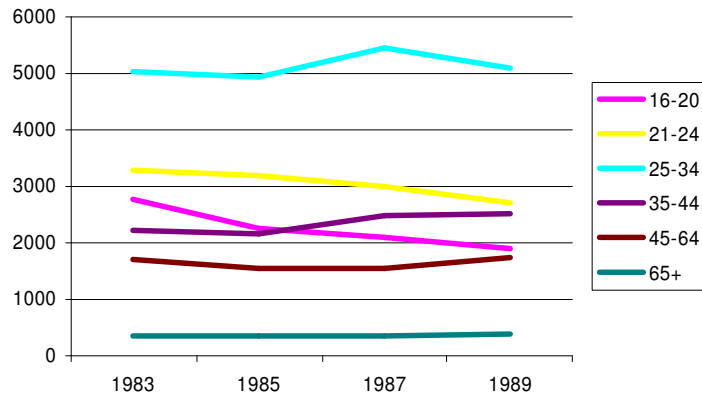
Setting the drinking age at 21 has saved lives.

Some facts are so strong, they demand an explanation. This is true for the 21 minimum drinking age – between 1983 and 1989, the number of drivers at a .10 BAC (the

old illegal limit for adults) involved in fatal crashes increased, except for two age groups – 16-20 year olds, which decreased 32 percent, and 21-24 year olds, which decreased 18 percent.¹

Obviously, something happened during that time that impacted the drinking and driving rates among 16-24 year olds, because this holds up even when you control for the number of 16-24 year old drivers.²

Drivers at a .10+ BAC involved in fatal crashes



That something is the 21 minimum drinking age. The Centers for Disease Control looked at 49 high-quality, peer-reviewed studies of places that changed their drinking age and found conclusively that a 21 minimum drinking age decreases fatalities by 16 percent.³ It also helps those slightly above the drinking age.⁴ Similarly, over 40 high-quality studies reviewed separately came to the same conclusion.⁵

The CDC isn't the only one who says this, either. A host of experts, including the National Highway Traffic Safety Administration⁶, the General Accounting Office⁷, the Institute of Medicine⁸, the Surgeon General⁹, the National Institute of Health¹⁰, and so on. And why wouldn't they? The 21 minimum drinking age is the most studied public health law ever.

As you might guess, then, **lowering the drinking age costs lives.** Some have suggested that we should experiment by lowering the drinking age and see what happens. Unfortunately, we've done that, with disastrous results back in the late 60s and early 70s. These "experiments" were found by that same CDC study found that decreasing the drinking age to 18 or 19 increases fatalities by ten percent among just those under 21.¹¹ Considering that the younger people start drinking, the more likely they are to drive drunk¹²¹³¹⁴¹⁵, this is just the tip of the iceberg.

A more recent experiment is also instructive. In 1999, New Zealand lowered its drinking age from 20 to 18. Not only did the alcohol-involved crash rate increase among 18 and 19 year olds (12% increase for males; 51% for females), but also among 15-17 year olds (14% increase for males; 24% for females).¹⁶ It is ludicrous to believe that lowering the drinking age in the US would not have similarly fatal results. And there are impacts beyond drinking and driving.

A lower drinking age promotes unsafe binge drinking. Other countries provide a strong example here. Most European countries with lower drinking ages have not only higher drinking rates, but higher binge drinking/intoxication rates.¹⁷¹⁸¹⁹²⁰ As a result, several of these countries (UK, Australia, New Zealand, Canada) are considering increasing their drinking ages because the 21 minimum drinking age is so effective. In this country, from 1983 (the year before the national 21 law) to 1988 (the year when all states had adopted it), binge drinking among 12th graders dropped 15 percent²¹ during the same time binge drinking rates were increasing among the same age groups in Canada.²²

In fact, **all underage drinking is unsafe drinking.** Research has shown that the brain continues to develop into the early twenties.²³²⁴²⁵²⁶ The part that controls reasoning and cognitive ability takes the longest to mature; thus, underage drinking, especially heavy drinking, affects memory and reasoning.²⁷²⁸²⁹ The part of the brain responsible for forming new memories, is noticeably smaller in youth who abuse alcohol³⁰ Alcohol use in adolescence also decreases executive functioning, memory, spatial operations, and attention among adolescents.³¹³²³³³⁴ And these changes may be permanent.³⁵

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- ¹ NHTSA FARS data as displayed in Alcohol Safety Facts guides at <http://www-nrd.nhtsa.dot.gov/departments/nrd-30/ncsa/AvailInf.html#>
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- ³ Shults, Ruth, et al. "Reviews of Evidence Regarding Interventions to Reduce Alcohol-Impaired Driving." American Journal of Preventive Medicine 21(4S) (2001): 66-88.
- ⁴ Hedlund, JH, R.G. Ulmer and D.F. Preusser. "Determine Why There are Fewer Young Alcohol-Impaired Drivers." National Highway Traffic Safety Administration, 2001.
- ⁵ Wagenaar, A.C., Toomey, T.L. Effects of minimum drinking age laws: Review and analyses of the literature from 1960-2000. *Journal of Studies on Alcohol*, Suppl(14):206-225, 2002.
- ⁶ NHTSA estimates the minimum drinking age law saves about 900 people per year. National Highway Traffic Safety Administration. "Traffic Safety Facts 2005: Young Drivers". DOT 810 630. Washington DC: National Highway Traffic Safety Administration, 2006.
- ⁷ "raising the drinking age has a direct effect on reducing alcohol-related traffic accidents among youths affected by the laws, on average, across the states" and that "raising the drinking age also results in a decline in alcohol consumption and in driving after drinking for the age group affected by the law." -- United States General Accounting Office (1987). *Drinking-Age Laws: An Evaluation Synthesis of Their Impact on Highway Safety*. GAO/PEMD-87-10. Washington, DC: USGAO.
- ⁸ National Research Council of the National Academies. Bonnie, Richard J. and Mary Ellen O'Connell, eds. Reducing Underage Drinking: A Collective Responsibility. Washington, DC: The National Academies Press, 2003.
- ⁹ Office of the Surgeon General. "Call to Action to Prevent and Reduce Underage Drinking". March 2007.
- ¹⁰ National Institute of Health. "Alcohol-Related Traffic Deaths – Research Results for the Public." 2007
<http://www.nih.gov/about/researchresultsforthepublic/AlcoholRelatedTrafficDeaths.pdf>
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