

The NSDUH Report

April 30, 2004

Graduated Driver Licensing and Drinking among Young Drivers

In Brief

- During the combined years of 1999 to 2001, 21 percent of young drivers aged 15 to 17 were binge drinkers and 6 percent were heavy drinkers
- Young drivers aged 15 to 17 in States with the most restrictive driver-licensing laws had lower rates of heavy drinking than those in States with the least restrictive laws
- Young drivers aged 15 to 17 in States with more restrictive driver-licensing laws had lower rates of driving under the influence of alcohol than those in States with less restrictive laws

Motor vehicle crashes are the leading cause of death among persons aged 15 to 20¹ and occur at twice the rate among this age group compared with those over age 20.^{2,3} Two out of five deaths among teens in the United States result from motor vehicle crashes. In 2001, more than 4,700 teens ages 16 to 19 died of injuries caused by motor vehicle crashes in the United States.⁴ (CDC 2003). The crash risk for young drivers is greatest at night, and increases when teenage passengers are in the car. Graduated Driver Licensing (GDL) addresses the high risks faced by new drivers by allowing them to get their initial driving experience under low risk conditions.

Although programs vary considerably, all 50 States use some form of GDL to reduce the crash risk of underage youths by providing a transition into the complexities of driving. The National Survey on Drug Use and Health (NSDUH) asks respondents about the quantity and frequency of their alcohol use in the past month, as well as problems or behaviors associated with their alcohol use, including driving under the influence of alcohol (DUI).

This report examines the associations among binge drinking, heavy drinking, and DUI for

drivers aged 15 to 17 by the restrictiveness of State GDL laws. Binge alcohol use is defined as drinking five or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least 1 day in the past 30 days. Heavy alcohol use is defined as drinking five or more drinks on the same occasion for 5 or more days during the past 30 days; all heavy alcohol users are also binge alcohol users. All estimates of drinking and driving behavior presented in the report are averages based on combined data from the 1999, 2000, and 2001 NSDUHs.

Graduated Driver Licensing

States vary in the extent to which they restrict driving behavior among young drivers. More restrictive laws require new drivers be accompanied by an adult and place requirements on driving hours and/or the number of passengers allowed in a car while the young driver is behind the wheel.

The Insurance Institute for Highway Safety (IIHS) and the Traffic Injury Research Foundation developed a rating scheme⁵ for GDL legislation placing States in one of four categories. The rating system has been adapted for this report and is defined in Table 1.⁶ GDL ratings by state are displayed in Figure 1.

Binge and Heavy Drinking

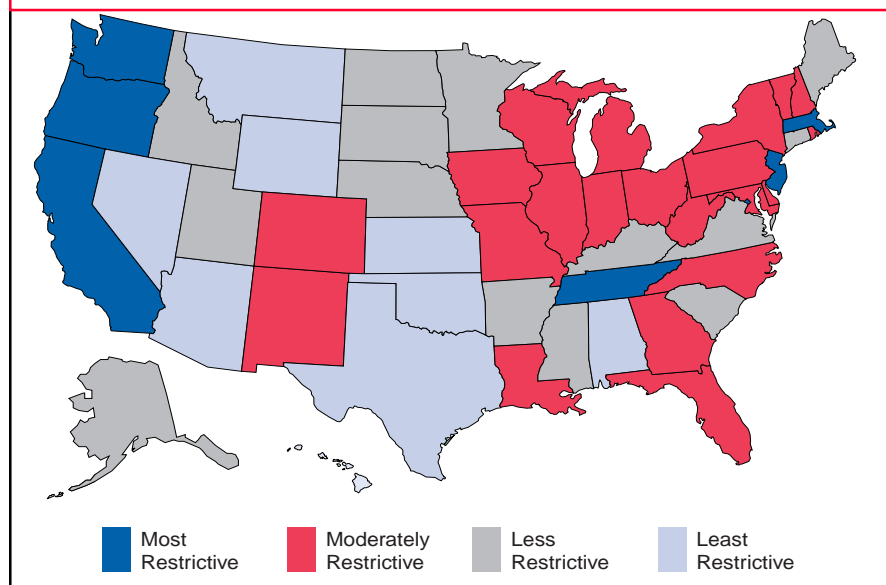
In the Nation as a whole, 66 percent of persons aged 15 to 17 were classified as drivers.⁷ Among drivers aged 15 to 17, one in five (21 percent) were binge drinkers and 6 percent were heavy drinkers. Binge drinking rates did not differ significantly among States with different GDL ratings. However, young drivers in States with “most restrictive” GDL ratings had lower rates of heavy drinking than did young drivers in States with “least restrictive” ratings ($p < 0.05$) (Figure 2).

Table 1. Graduated Driver Licensing Ratings: Fall 2000

Rating	Requirements
Most Restrictive	Minimum 6-month learner's phase for young beginners; once licensed, beginners are subject to nighttime restrictions beginning at 10 p.m. or earlier and extending to 5 a.m. and/or restricted to no more than one or more passengers when driving without an adult in the vehicle; and beginners must wait until age 17 for their unrestricted licenses.
Moderately Restrictive	Law includes the late evening/night driving or passenger restriction listed above, and beginners must wait until age 17 for their unrestricted licenses; or law includes a minimum learner's phase (any length) plus some restrictions on driving hours and/or passengers, and beginners must wait until age 16.5 years for their unrestricted licenses.
Less Restrictive	Law includes a minimum learner's phase (any length) plus some restrictions on driving hours and/or passengers when initially licensed, or law includes only a learner's phase lasting a minimum of 6 months; or law includes only restrictions on driving hours and/or passengers once a beginner is licensed.
Least Restrictive	No minimum learner's phase and no nighttime or passenger restrictions; or minimum learner's phase shorter than 6 months.

Rating scale adapted from the Insurance Institute for Highway Safety (IIHS), 2003.

Figure 1. Graduated Driver Licensing by State*: Fall 2000



Driving Under the Influence

One in ten drivers aged 15 to 17 reported driving under the influence of alcohol in the year prior to completing the survey. The percentage of drivers aged 15 to 17 who drove under the influence of alcohol increased as the restrictiveness of GDL laws decreased (Figure 3).

End Notes

1. National Highway Traffic Safety Administration. (2001). *Traffic safety facts 2000: Young drivers*. (DOT HS 809 336). Washington, DC: Author. Available as a PDF at <http://www-nrd.nhtsa.dot.gov/pdf/nrd-30/NCSA/TSF2000/2000ydrive.pdf>
2. Yi, H. Y., Williams, G. D., & Dufour, M. C. (2001). *Trends in alcohol-related fatal crashes, United States, 1979-99*. (Surveillance Report No. 56). Bethesda, MD: National Institute on Alcoholism and Alcohol Abuse.

Figure 2. Percentages of Drivers Aged 15 to 17 Reporting Past Month Binge and Heavy Alcohol Use, by GDL Rating*: Annual Averages Based on 1999-2001 NSDUHs

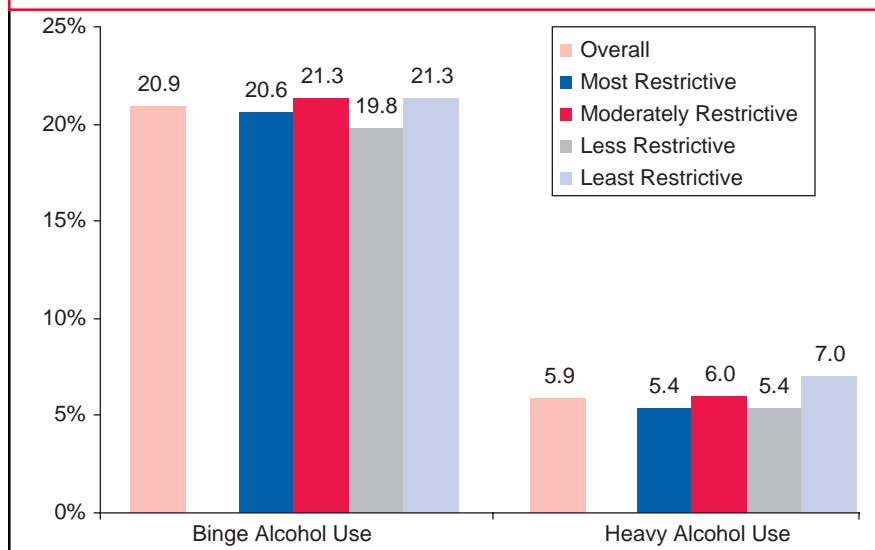
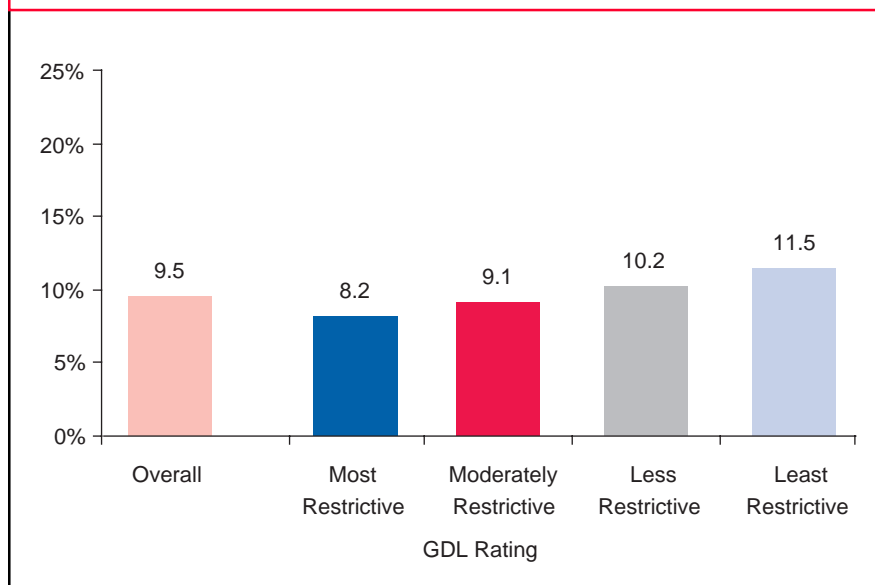


Figure 3. Percentages of Drivers Aged 15 to 17 Reporting Driving Under the Influence of Alcohol in the Past Year, by GDL Rating*: Annual Averages Based on 1999-2001 NSDUHs



The National Survey on Drug Use and Health (NSDUH) is an annual survey sponsored by the Substance Abuse and Mental Health Services Administration (SAMHSA). Prior to 2002, this survey was known as the National Household Survey on Drug Abuse (NHSDA). The 1999, 2000, and 2001 data are based on information obtained from more than 207,000 persons aged 12 or older (about 70,000 each year); 24,956 of whom were 15 to 17 year old drivers. The survey collects data by administering questionnaires to a representative sample of the population through face-to-face interviews at their place of residence.

The NSDUH Report is prepared by the Office of Applied Studies (OAS), SAMHSA, and by RTI International in Research Triangle Park, North Carolina (RTI International is a trade name of Research Triangle Institute).

Information and data for this issue are based on the following publication and statistics:

Office of Applied Studies. (2000). *Summary of findings from the 1999 National Household Survey on Drug Abuse* (DHHS Publication No. SMA 00-3466, NHSDA Series H-12). Rockville, MD: Substance Abuse and Mental Health Services Administration.

Office of Applied Studies. (2001). *Summary of findings from the 2000 National Household Survey on Drug Abuse* (DHHS Publication No. SMA 01-3549, NHSDA Series H-13). Rockville, MD: Substance Abuse and Mental Health Services Administration.

Office of Applied Studies. (2002). *Results from the 2001 National Household Survey on Drug Abuse: Volume I. Summary of national findings* (DHHS Publication No. SMA 02-3758, NHSDA Series H-17). Rockville, MD: Substance Abuse and Mental Health Services Administration.

Also available on-line:
<http://www.oas.samhsa.gov>

U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES
 Substance Abuse & Mental Health Services Administration
 Office of Applied Studies
www.samhsa.gov



3. Zador, P. L., Krawchuk, S. A., & Voas, R. B. Alcohol-related relative risk of driver fatalities and driver involvement in fatal crashes in relation to driver age and gender: An update using 1996 data. *Journal of Studies on Alcohol* 61: 387-395.

4. Centers for Disease Control and Prevention. Web-based Injury Statistics Query and Reporting System (WISQARS) [Online]. (2003). National Center for Injury Prevention and Control, Centers for Disease Control and Prevention (producer). Available from: URL: www.cdc.gov/ncipc/wisqars. [Cited 15 Nov 2003].

5. Williams, A. F. & Mayhew, D. R. (2003, December). *Graduated licensing: A blueprint for North America*. Retrieved February 9, 2004 from http://www.hwysafety.org/safety_facts/teens/blueprint.pdf

6. Revised graduated driver licensing State ratings for fall 2000 provided by Michele Fields, Insurance Institute for Highway Safety, in an e-mail dated October 6, 2003.

7. Respondents were identified as drivers if they indicated "yes" or "no" to the question about wearing a seatbelt when they drove. If a respondent indicated that he or she did not

drive when asked the question about wearing a seatbelt when driving and did not indicate a "yes" or "no" answer to driving under the influence of alcohol, driving under the influence of drugs, or being booked on a DWI/DUI charge, he or she was excluded from this analysis.

Figure and Table Notes

* Rating scale adapted from the Insurance Institute for Highway Safety (IIHS), 2003

Source: SAMHSA 1999-2001 NSDUH