Yesterday

- In the mid 1970s, alcohol was a factor in over 60% of traffic fatalities. Traffic crashes were the leading cause of alcohol-related deaths and two-thirds of traffic deaths among persons aged 16 to 20 involved alcohol.
- At that time, preventive measures consisted primarily of efforts to reduce harm from alcohol by identifying and treating middle-aged individuals convicted of driving under the influence with established or advanced cases of alcoholism.

Today

- Since the early 1980s, alcohol-related traffic deaths per population have been cut in half with the greatest proportional declines among persons 16-20 years old.
- Reductions in driving after drinking saved more than 150,000 lives between 1982 and 2001 — more than the combined total saved by increases in seat belt use, airbags, and motorcycle and bicycle helmets.
- Today alcohol is involved in 37% of all traffic deaths among persons aged 16 to 20.
- Of particular importance for prevention efforts is the recent realization that alcohol abuse, dependence, and related problems such as alcohol-impaired driving must be addressed throughout the lifespan, not just at middle age.
- Indeed, the evidence now suggests a need to target prevention efforts to young people. Analyses by NIH scientists indicate that over 70% of people in crashes caused by alcohol met alcohol dependence criteria, but most have never been arrested or received treatment.
- NIH studies revealed that young people who began drinking before age 15 are four times more likely to develop alcohol dependence during their lifetime than those who began drinking at age 21 or later.
- Those that drank before age 15 are also seven times more likely to report having been in a traffic crash because of drinking both during adolescence and adulthood.
- NIH research identified several approaches to screening and early intervention that reduced drinking and alcohol related traffic crashes among college students and other underage populations.
- Numerous NIH-funded studies over the last three decades established the effectiveness of raising the minimum legal drinking age to 21 in reducing both drinking and alcohol-related crashes among persons under age 21. The U.S. Department of Transportation estimates that such laws, now in effect in all states, prevent 1,000 traffic deaths each year.
- In the 1980s, several states established laws for zero alcohol tolerance for drivers under the age of 21. Research funded by NIH established the effectiveness of this approach which led to the passage of Zero Tolerance Laws in all 50 States by the late 1990s.
- The number of alcohol-related traffic deaths among 16 to 20 year-olds in the U.S. decreased from 5,244 in 1982 to 1,987 in 2008 in large measure because of the legal drinking age of 21 and Zero Tolerance Laws.
- Several NIH-supported studies demonstrated that comprehensive, community-based intervention programs can further reduce traffic deaths and other alcohol-related harm beyond that achieved through age 21 drinking laws.

Tomorrow

- *Preventing alcohol problems at lifestages.* Research aimed at understanding the interactions of alcohol with stages of life will enable us to address the prevention of alcohol problems in a lifestage-appropriate manner. For example, identifying specific genetic, behavioral, biological, or environmental factors that contribute to drinking initiation and the development of alcohol dependence at various lifestages will foster the rational design of prevention strategies tailored to each individual. The potential risks associated with driving after drug use,
particularly in combination with alcohol, need to be examined so that effective prevention initiatives are identified.

- **Improving diagnosis.** Studies will reveal strategies for expanding screening and brief intervention opportunities in underage populations, among whom alcohol use disorders remain under-diagnosed; a major goal of such strategies will be to reduce alcohol-impaired driving.

- **Improving community-based prevention programs.** Research to expand and improve comprehensive community programs that strive to reduce alcohol-impaired driving, injuries, and fatalities will save lives and reduce morbidity in future generations.

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