

What the Research Shows on the Minimum Legal Drinking Age 21 in the United States

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**Maryland House Special Committee on Drug and
Alcohol Abuse**

Minimum Legal Drinking Ages Around the World

- **Australia – 18**
- **France – 16**
- **Japan – 20**
- **Switzerland – 14**
- **USA – 21**
- **Canada – 18**
- **Italy – 16**
- **Sweden – 18**
- **Great Britain – 16**
- **Venezuela – 18**

Source: WHO

Minimum Legal Drinking Age 21 History in the United States

- **Minimum Legal Drinking Age (MLDA) Laws established in the States after the Repeal of Prohibition in 1933 (21st Amendment to the US Constitution):**
- **Most States set the MLDA at 21 (e.g., set and stayed at 21):**

**AR (1935); CA (1933); IN (1934); KY (1938);
NV (1935); NM (1934); ND (1936); OR (1933);
PA (1935); UT (1935); WV (1934)**

Minimum Legal Drinking Age 21 History in the United States

- Voting age lowered from 21 to 18 in 1971 (26th Amendment to the US Constitution)
- Many States began to lower the drinking age to 18 or 19 in the 1970s
- Studies in the 1970s and 1980s showed significant *increases* in alcohol-related fatal traffic crashes involving youth aged 16-20 in States that *lowered* their drinking age

Minimum Legal Drinking Age 21 History in the United States

- **Mothers Against Drunk Driving (MADD) founded in 1980**
- **President's Commission on Drunk Driving established in 1982**
- **MADD, President's Commission, Members of Congress recommended a National Uniform Drinking Age Law**

MLDA 21 Milestones

President Ronald Reagan signs federal 21 Minimum Drinking Age law in 1984



All 50 States plus DC adopt age 21 as minimum legal drinking age (illegal to *possess* alcohol and illegal to *purchase* alcohol) by 1988 or risk the withholding of a portion of Federal Highway Construction funds.

What Have Been the Effects of the Minimum Legal Drinking Age 21 in the United States?

- **Reduction in alcohol consumption by those <21**
- **Reduction in drinking driver fatal crashes by those <21**

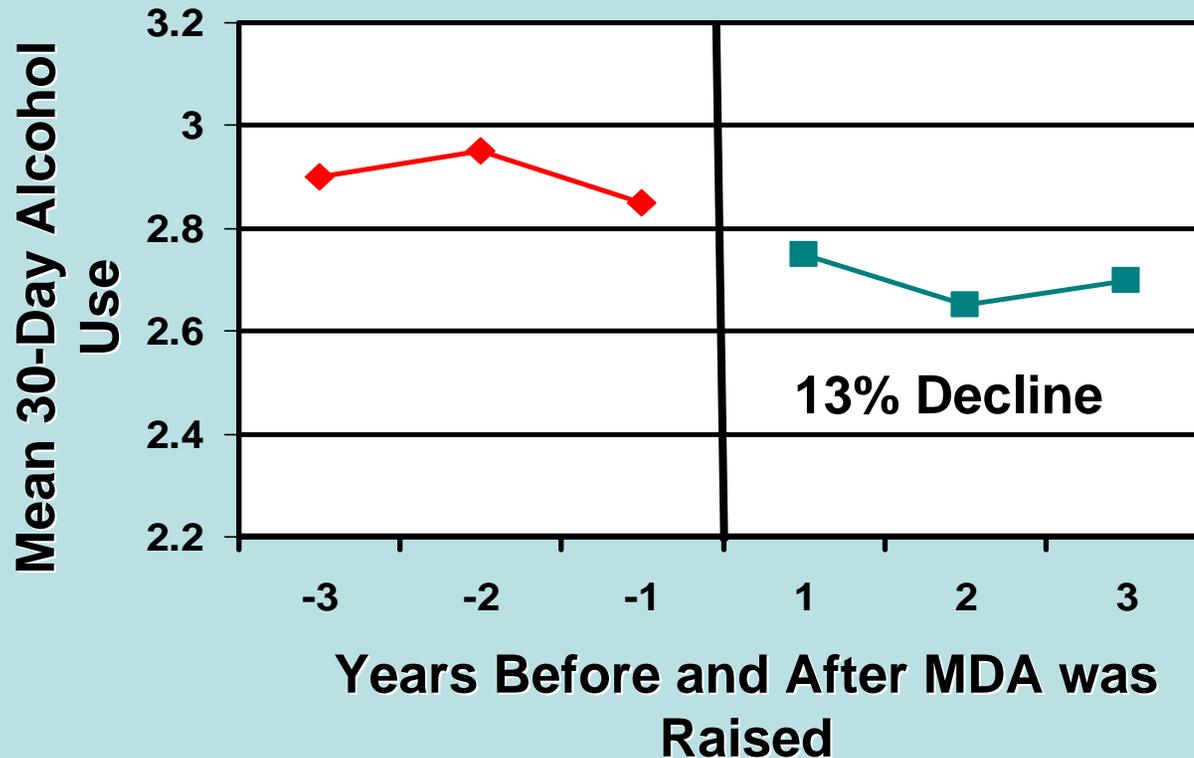
Minimum Legal Drinking Age 21 History in the United States

- **Studies in the 1980s and 1990s show that *raising the drinking age saves lives***
- **Studies from the National Highway Traffic Safety Administration (NHTSA) show that MLDA 21 laws reduce 18- to 20-year-old driver involvements in fatal crashes by 13% (Arnold, 1985; Womble, 1989; Kindelberger, 2005)**
- **MLDA laws estimated to save 900 lives each year in reductions in traffic fatalities**

Evidence of MLDA 21 Law Effectiveness

- **Williams, Zador, Harris, Karpf, 1983**
- **Arnold, 1985**
- **Decker, Graitcer, Schaffner, 1988**
- **Womble, 1989**
- **O'Malley & Wagenaar, 1991**
- **Toomey, Rosenfeld & Wagenaar, 1996**
- **Shults, et al., 2001**
- **Voas, Tippetts & Fell, 2003**
- **Ponicki, Gruenewald & LaScala, 2007**
- **Many Others**

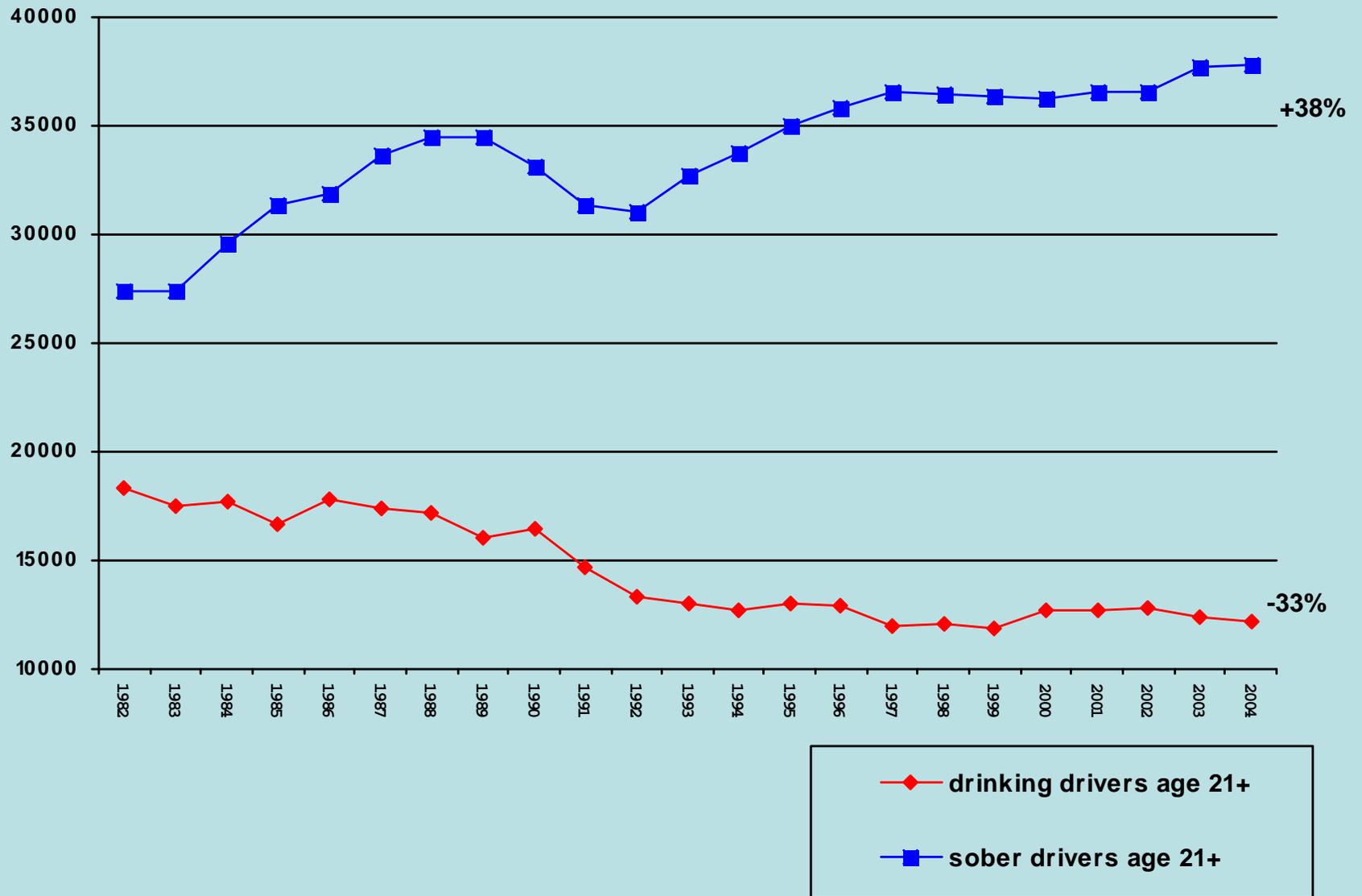
30-day Alcohol Use and Minimum Drinking Age



Source: O'Malley & Wagenaar (1991)

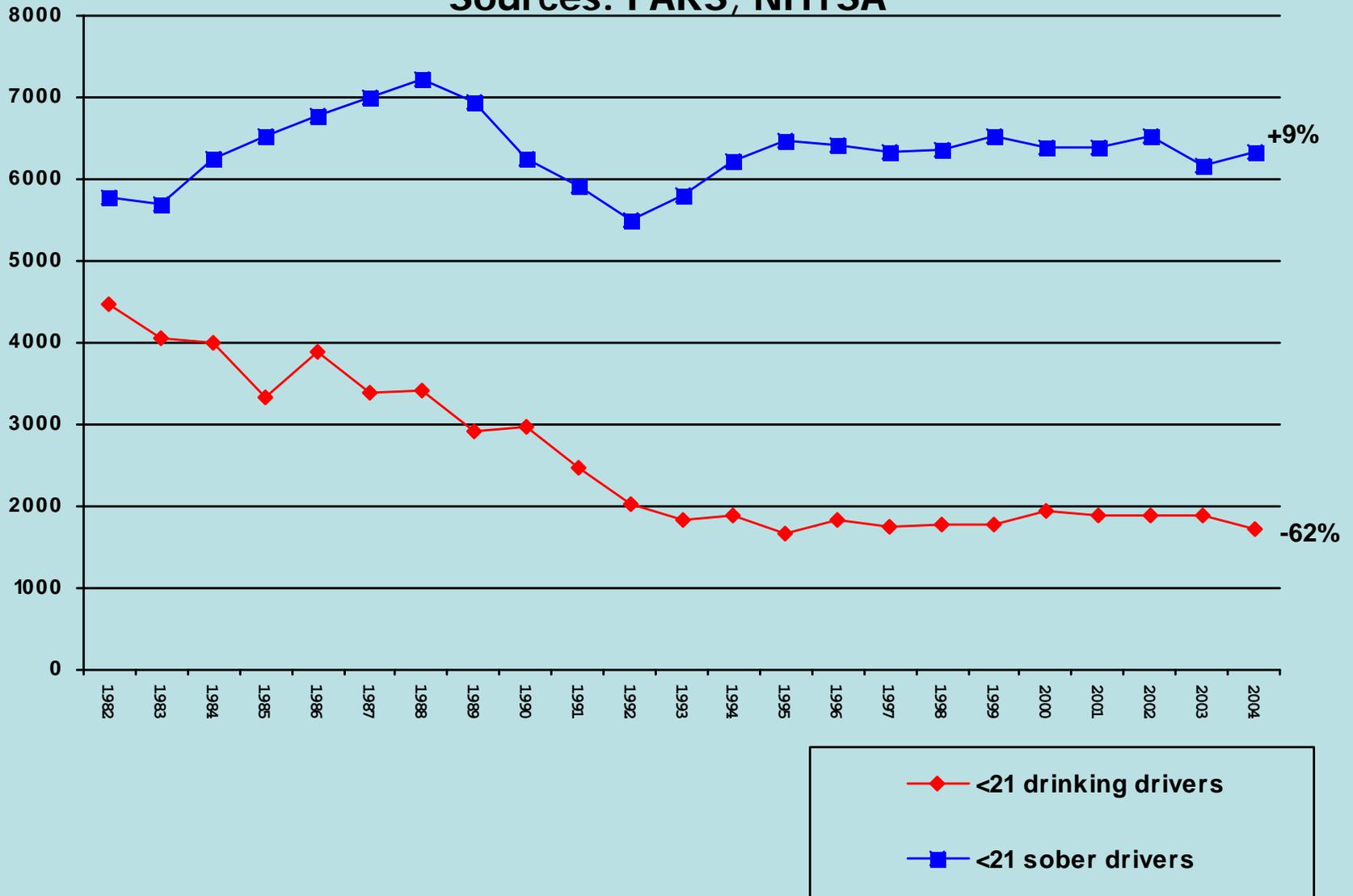
Drivers Over Age 21 Involved in Fatal Crashes 1982-2004

Sources: FARS; NHTSA

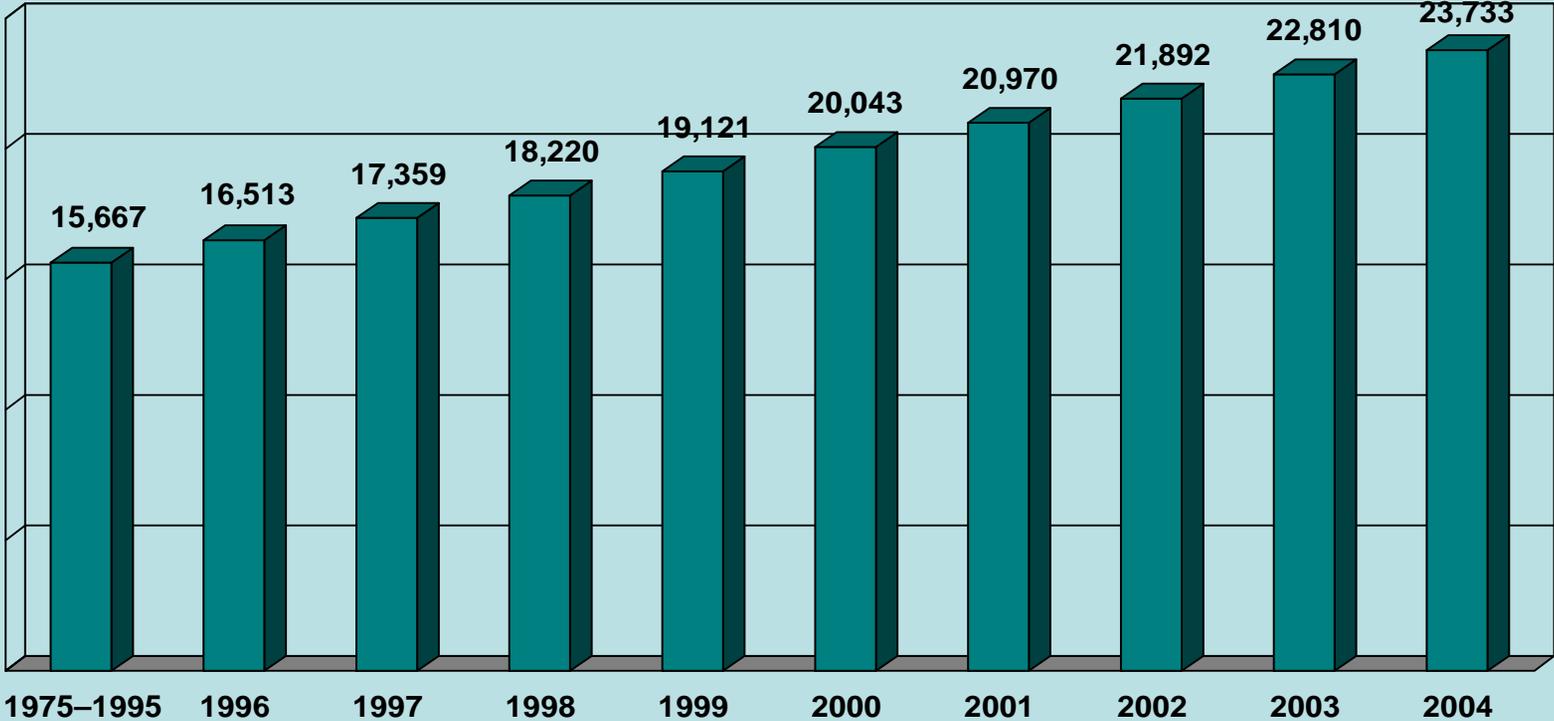


Drivers Under Age 21 Involved in Fatal Crashes 1982-2004

Sources: FARS; NHTSA



Cumulative Estimated Number of Lives Saved by Minimum Drinking Age Laws, 1975–2004



Source: Traffic Safety Facts 2004: Young Drivers, NHTSA

The European Drinking Age Myth

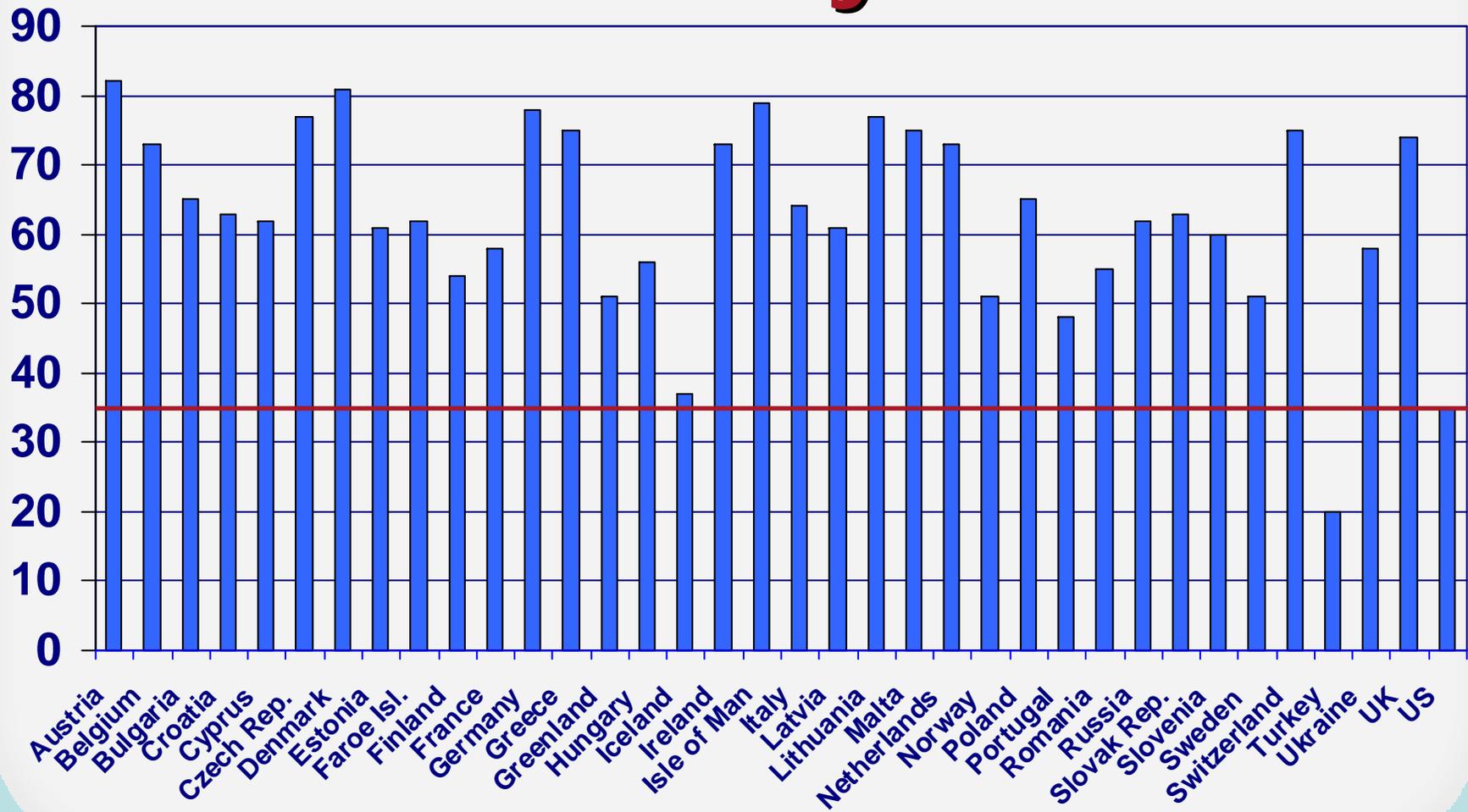
A higher percentage of young people from a majority of European countries report:

- Experimenting with alcohol
- Drinking in the past year
- Drinking in the past 30 days
- Heavy episodic drinking
- Intoxication



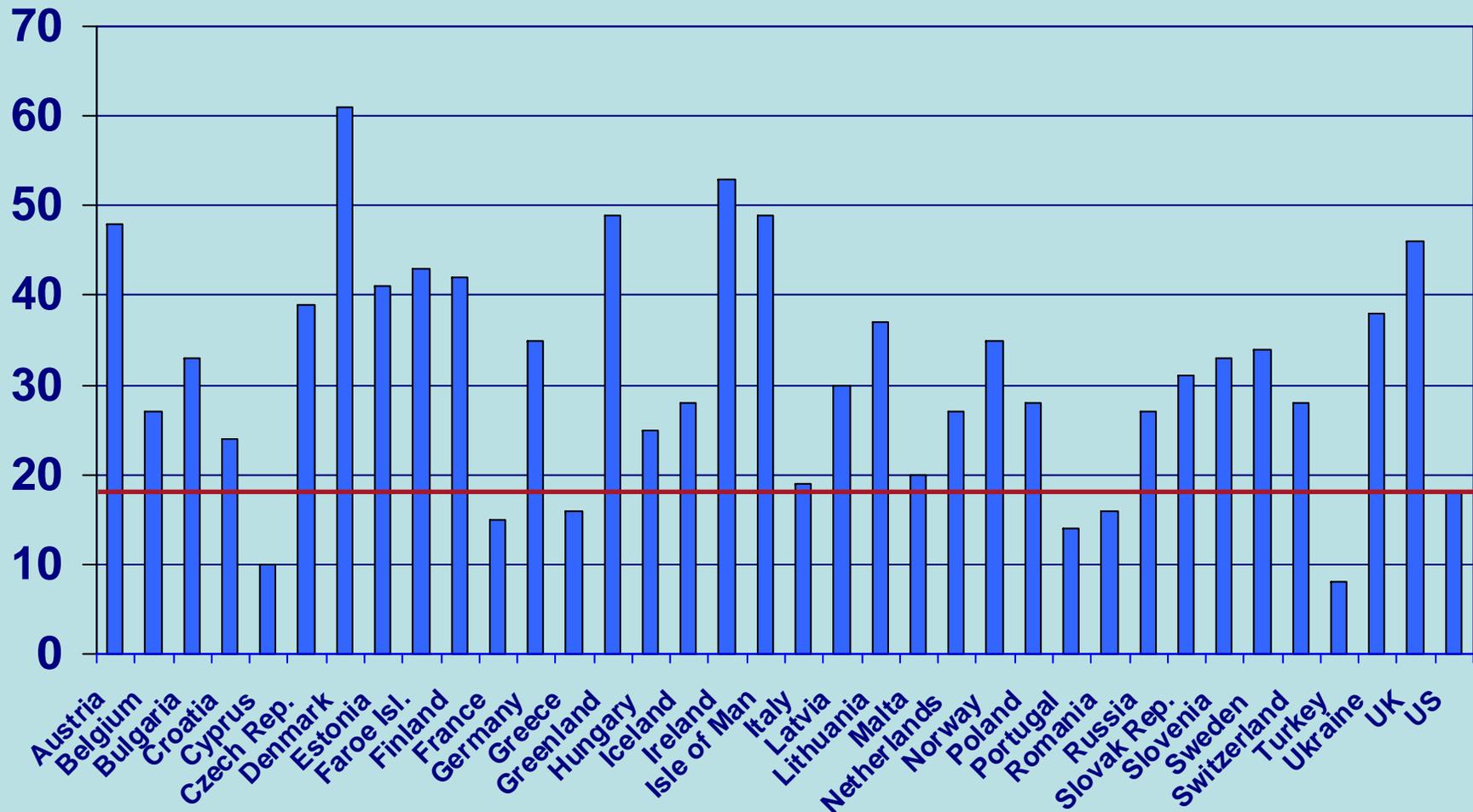
A recent study in New Zealand showed that when they lowered their drinking age from 20 to 18, significantly more alcohol-related crashes occurred among 15- to 19-year-old drivers.

Prevalence of Drinking Past 30 Days



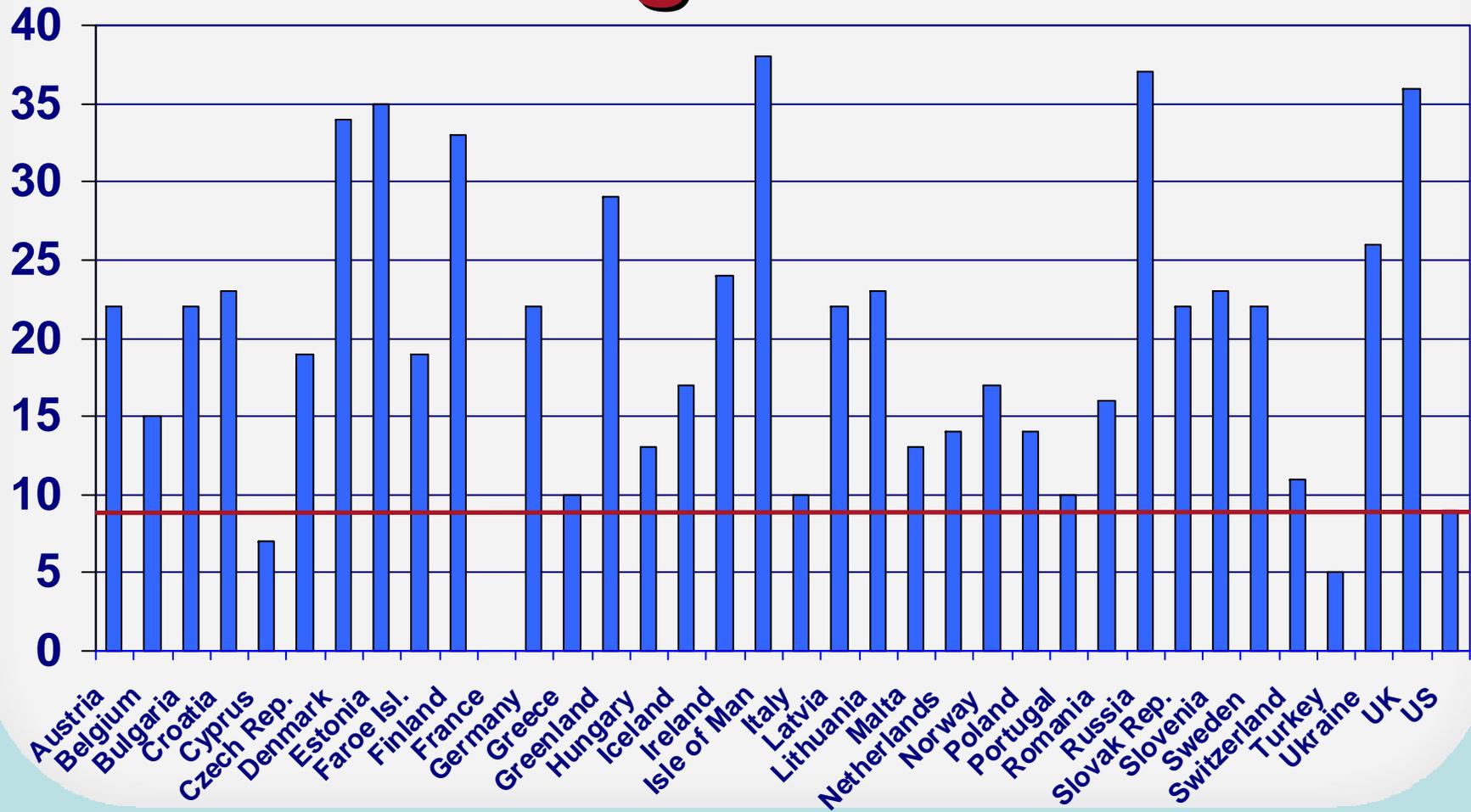
Sources: Hibell, et al., 2004;
Johnston, O'Malley, Bachman, & Schulenberg, 2004

Prevalence of Intoxication Past 30 Days



Sources: Hibell, et al., 2004;
Johnston, O'Malley, Bachman, & Schulenberg, 2004

First Intoxication Before Age 13



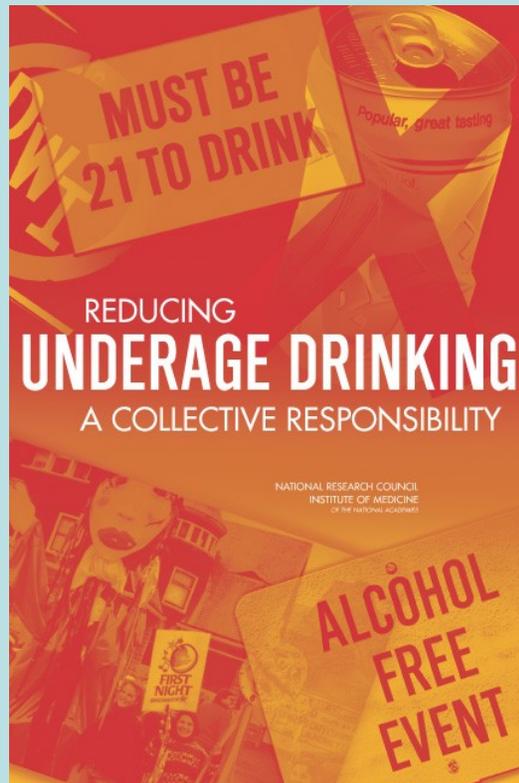
Sources: Hibell, et al., 2004;
Johnston, O'Malley, Bachman, & Schulenberg, 2004

Some critics of the 21 drinking age are advocating lowering it to 18 and issuing special alcohol drinking licenses to 18-20 year olds who complete an alcohol education course. The idea is to teach them to “choose responsibility” when drinking. Is this a good idea?

No Evidence that Lowering MLDA to 18 for those who Complete an Alcohol Education Course will Reduce the Problem

- Driver education courses did not reduce crashes for beginning drivers
- DARE education program did not reduce drug usage by youth
- How can we expect an 18 year old to “choose responsibility” when they are drinking alcohol? They actually lose their inhibitions when under the influence.

REDUCING UNDERAGE DRINKING: A COLLECTIVE RESPONSIBILITY



**National Research
Council
Institute of Medicine**

In Sum

(IOM, 2003)

- *Develop national adult-oriented media campaign*
- *Create national partnership, including industry*
- *Increase compliance, including enforcement*
- *Reduce youth exposure, both advertising and entertainment*
- *Develop community-specific responses, including campus collaborations*
- *Implement evidence-based education efforts*
- *Improve national and state coordination*
- *Increase excise taxes*
- *Conduct ongoing monitoring and R& E*

Argument: "If I'm old enough to vote and go to war, I should be old enough to drink."

Response:

- *Many rights have different ages of initiation:*

| | |
|-----------------|--------|
| Hunting License | Age 12 |
|-----------------|--------|

| | |
|------------------|--------|
| Driver's license | Age 16 |
|------------------|--------|

| | |
|------|--------|
| Vote | Age 18 |
|------|--------|

| | |
|-----------------------|--------|
| Serve in the Military | Age 18 |
|-----------------------|--------|

| | |
|--------------------|--------|
| Serve in the House | Age 25 |
|--------------------|--------|

| | |
|-------------------|--------|
| Elected President | Age 35 |
|-------------------|--------|

- **The brain is not fully developed until about age 25.**
- The risk of a fatal crash increases with the first drink, especially for drivers aged 16-20.

New Zealand Natural Experiment

- It has been 30 years since the last state lowered its drinking age.
- If a state were to lower its drinking age under the current conditions—would youthful crash injuries increase?
- *New Zealand lowered its drinking age from 20 to 18 in 1999, providing an opportunity to study such a reduction.*

All Crash Injuries Before and After Drinking Age Reduction

Rate per 10,000 person years

| | Age Group (years) | Incidence rate ratio | (95% CI) | <i>p</i> -value |
|---------|-------------------|----------------------|--------------|-----------------|
| Males | 20-24 | 1 | Reference | |
| | 18-19 | 1.12 | (1.00, 1.25) | 0.04 |
| | 15-17 | 1.14 | (1.01, 1.30) | 0.04 |
| Females | 20-24 | 1 | Reference | |
| | 18-19 | 1.51 | (1.17, 1.94) | 0.002 |
| | 15-17 | 1.24 | (0.96, 1.59) | 0.01 |

From Traffic Crash Reports

Conclusions

- The size of the effect for 18- to 19-year-olds (increases of 12% for males and 51% for females) was remarkable given the legal exceptions to the pre-1999 law and its poor enforcement.
- There were large “trickle-down” effects for 15- to 17-year-olds (increases of 14% for males and 24% for females).
- There were significantly more alcohol-involved crashes among 15- to 19-year-olds than would have occurred had the purchase age not been reduced to 18.

Have there been any recent studies that the MLDA 21 is effective in the U.S.? All the studies seem to be old.

Effectiveness of MLDA 21 Laws in 36 States

(Fell, et al, *Accident Analysis and Prevention*, July 2008)

- **11.2% reduction in underage drinking drivers involved in fatal crashes associated with passage of MLDA 21 in 36 States**

Controlled for as many factors as possible that could be accounting for the reduction including key drunk driving laws (.10 per se; .08 per se; ALR) and economic, demographic and environmental factors in each State examined.

16 KEY COMPONENTS OF UNDERAGE DRINKING LAWS IN THE UNITED STATES

| <u>MLDA 21 Law Components</u> | <u># States with Law</u> |
|--|--------------------------|
| • Possession | 51 |
| • Consumption | 30 |
| • Purchase/attempt to purchase | 47 |
| • Furnishing/selling | 51 |
| • Age 21 for on-premises Server/sellers (all 3 beverage types) | 24 |
| • Age 21 for off-premises Server/sellers (all 3 beverage types) | 24 |
| • Zero tolerance | 51 |

16 KEY COMPONENTS OF UNDERAGE DRINKING LAWS IN THE UNITED STATES

MLDA 21 Law Components

States with Law

- Use and lose 37
- Keg registration 26
- RBS training mandatory/voluntary 33
- Use of fake ID illegal 51
- Transfer/production of Fake ID illegal 25
- Retail Support Provisions for Fake ID 46
- Social host liability-underage parties 18
- GDL with night restrictions 44
- State control of alcohol (at least 1 beverage) 18

Key MLDA 21 Laws

There are only 4 laws out of the 16 key law components that all States have adopted:

- **Illegal for youth under age 21 to Possess**
- **Illegal to Furnish or Sell Alcohol to those under age 21**
- **Zero Tolerance (BAC \geq .02) for Drivers under age 21**
- **Use of a Fake ID to purchase alcohol is illegal**

Policies to Reduce Commercial Access to Alcohol by Youth

PUBLIC

- Minimum age of seller
- Ban home delivery
- Server training
- Manager training
- Compulsory compliance checks
- Administrative penalties
- Shoulder Tap programs

INSTITUTIONAL

- Check age identification
- Server training
- Incentives for checking I.D.
- Post warning signs

Policies to Reduce Social Access to Alcohol by Youth

PUBLIC

- Keg registration
- Restrictions at community events
- Restrictions in public places
- Parking lot lights at alcohol outlets
- Restrict billboards
- Restrict noisy assemblies
- Social host liability

INSTITUTIONAL

- School/college policies
- Cite/arrest adult providers
- Lock-up alcohol in the home
- Distribute warning fliers
- Counter-advertising
- Alcohol stories in mass media
- Restrict age of room renters
- Restrictions at stadiums/events

College Interventions (IOM, 2003)

- **Campuses should adopt comprehensive evidence-based approaches:**
 - **Screening and brief interventions**
 - **Limit alcohol availability and access for underage students**
 - **Consistent enforcement of laws and policies**
 - **Universal educational approaches as well as selective and indicated approaches**
- **NIAAA and SAMHSA should continue to fund evaluation of college-based programs and should maintain list of evidence-based programs.**

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