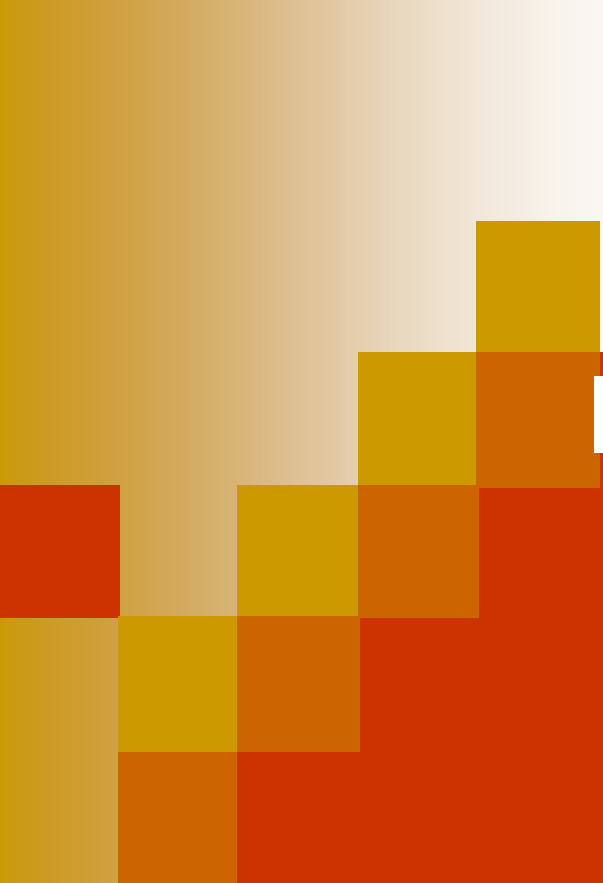




**MADD/NHTSA
Regional
Law Enforcement
Leadership Summit**

**Reno, Nevada
July 11-12, 2005**



Impaired Driving and Underage Drinking Enforcement: Effective Strategies

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Research and
Evaluation**



Impaired Driving

In the 1970s

- About 60% of traffic deaths in America were alcohol related – an estimated 28,000-30,000 people killed yearly.
- Drunk driving was socially accepted in American culture; tolerated as an “accident” — not a serious crime.
- Limited awareness, no victim rights or services and no citizen activist groups working to stop drunk driving.

Today

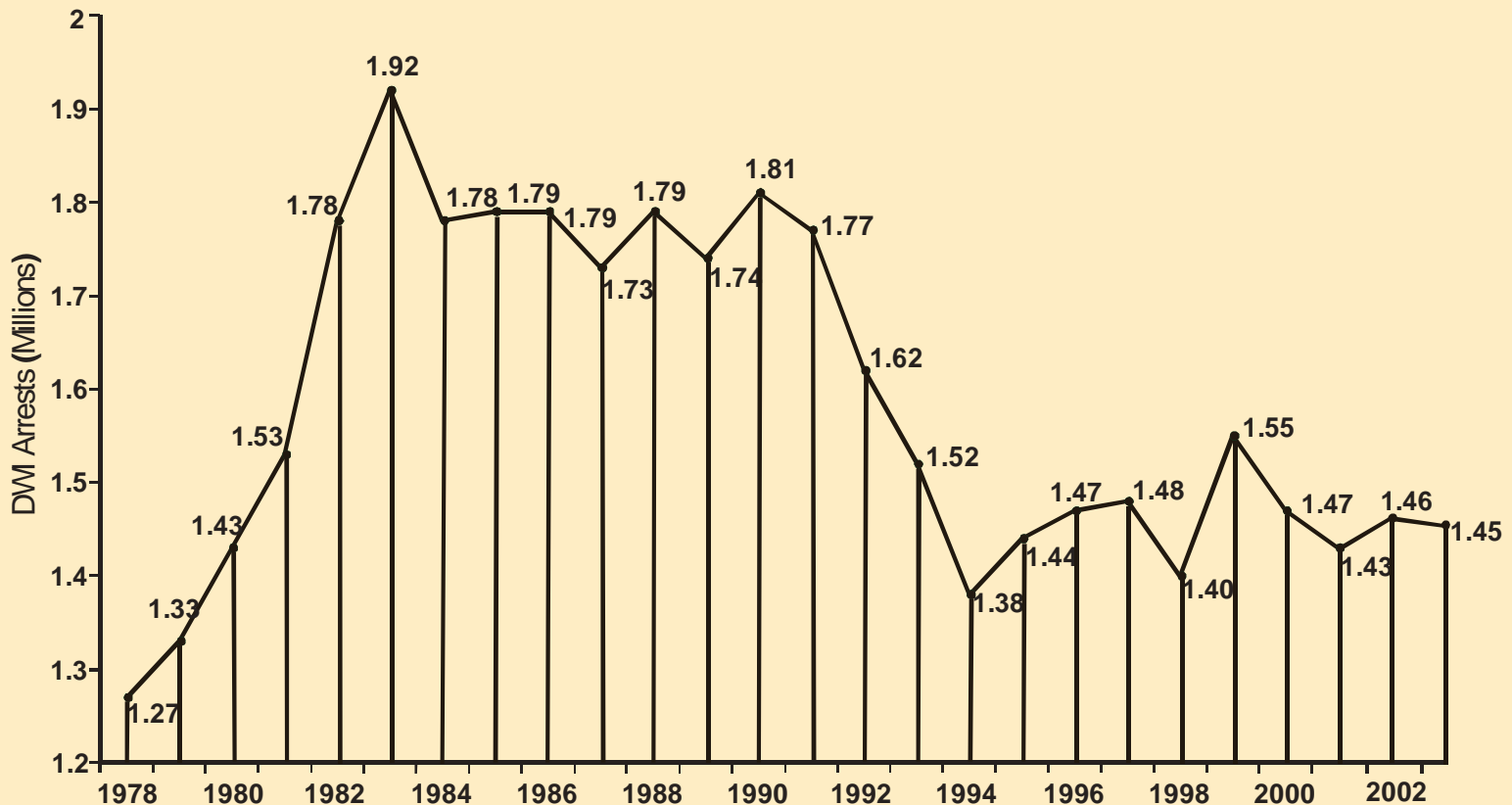
- 35% decline in alcohol-related traffic deaths (from 26,173 in 1982 to 17,013 in 2003).
- Efforts have saved more than 300,000 lives over the past 25 years.
- More than 2,300 alcohol-impaired driving laws have been adopted.
- One of Department of Transportation's top priorities
- MADD is the largest crime victim service organization in the world.
- Impaired driving enforcement plays a significant role in overall law enforcement in the United States.



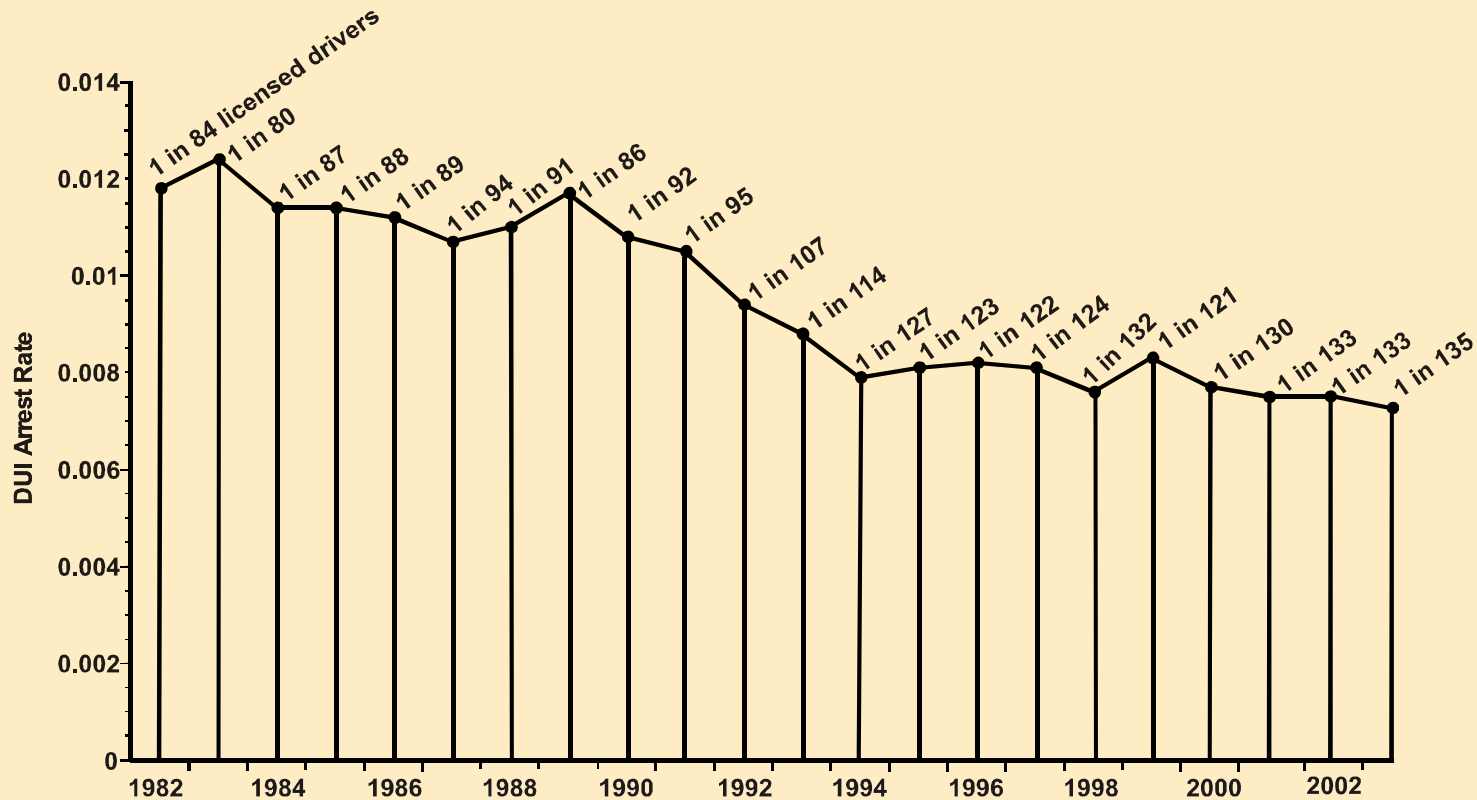
The Impaired Driving Problem: United States

- 17,013 alcohol-related traffic fatalities in 2003
- 16,654 preliminary estimate for 2004
- An estimated 500,000 people injured in alcohol-related traffic crashes each year
- \$51 billion in annual costs to society
- 1,400,000 drivers arrested for driving while intoxicated or driving under the influence

Estimated DWI Arrests in the United States (1978–2003)



Estimated DUI Arrests per Number of Licensed Drivers in the United States (1982–2003)

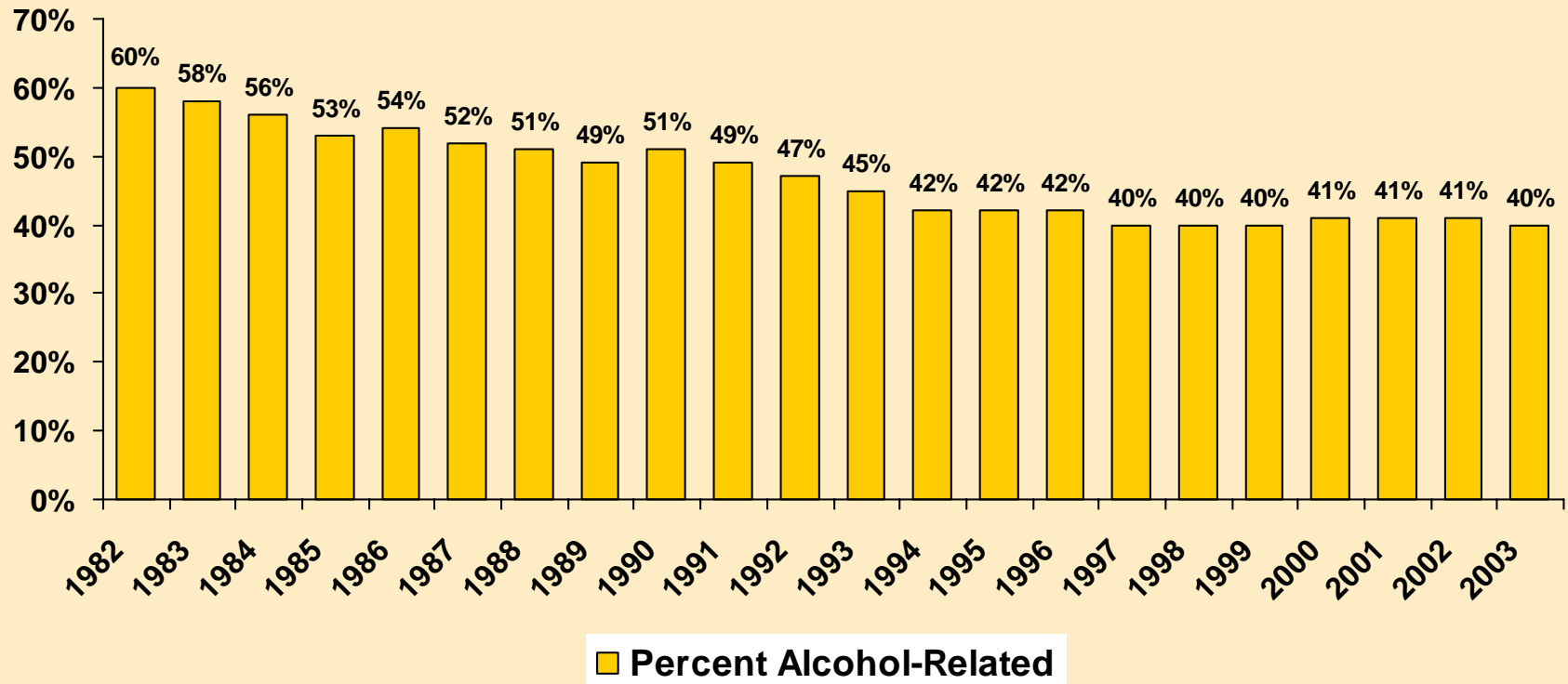


DWI Enforcement in the United States

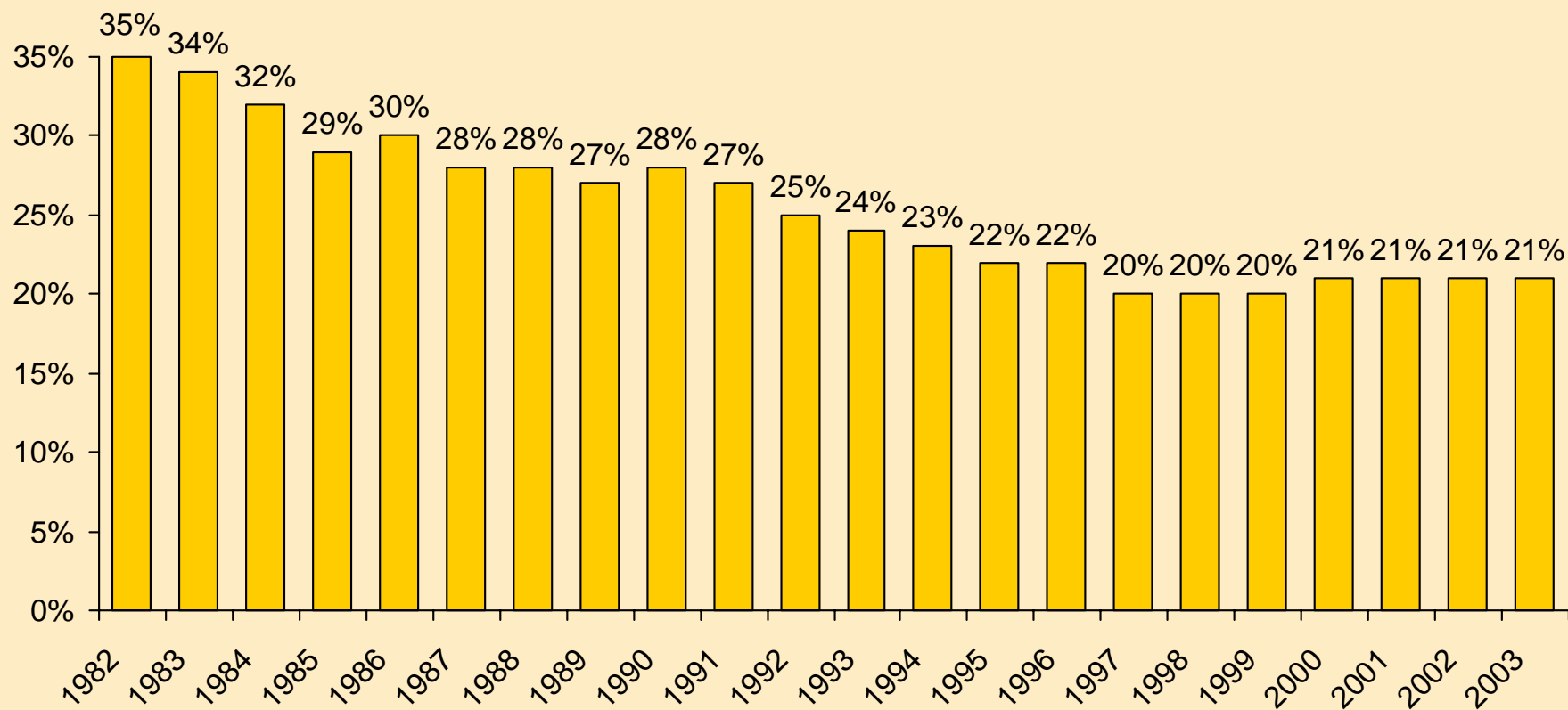
- 1,400,000 drivers arrested for DWI/DUI each year
- 1 DWI arrest for every 135 licensed drivers
- 1 DWI arrest for every 772 reported episodes of driving after drinking
- 1 DWI arrest for every 88 episodes of driving over the BAC limit
- 1 DWI arrest for every 6 stops by police for suspicion of DWI

Sources: FBI Uniform Crime Report; Zador, et al (2000)

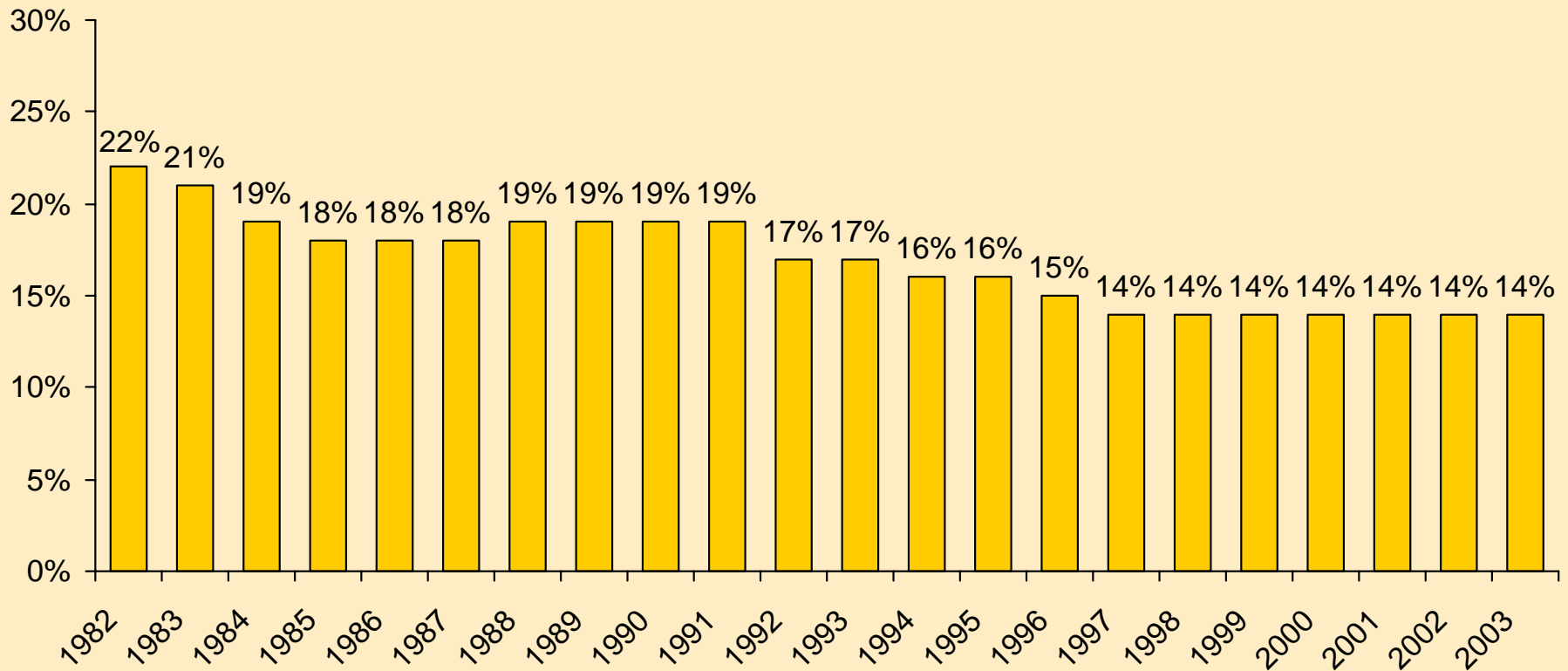
Alcohol-Related Traffic Fatalities



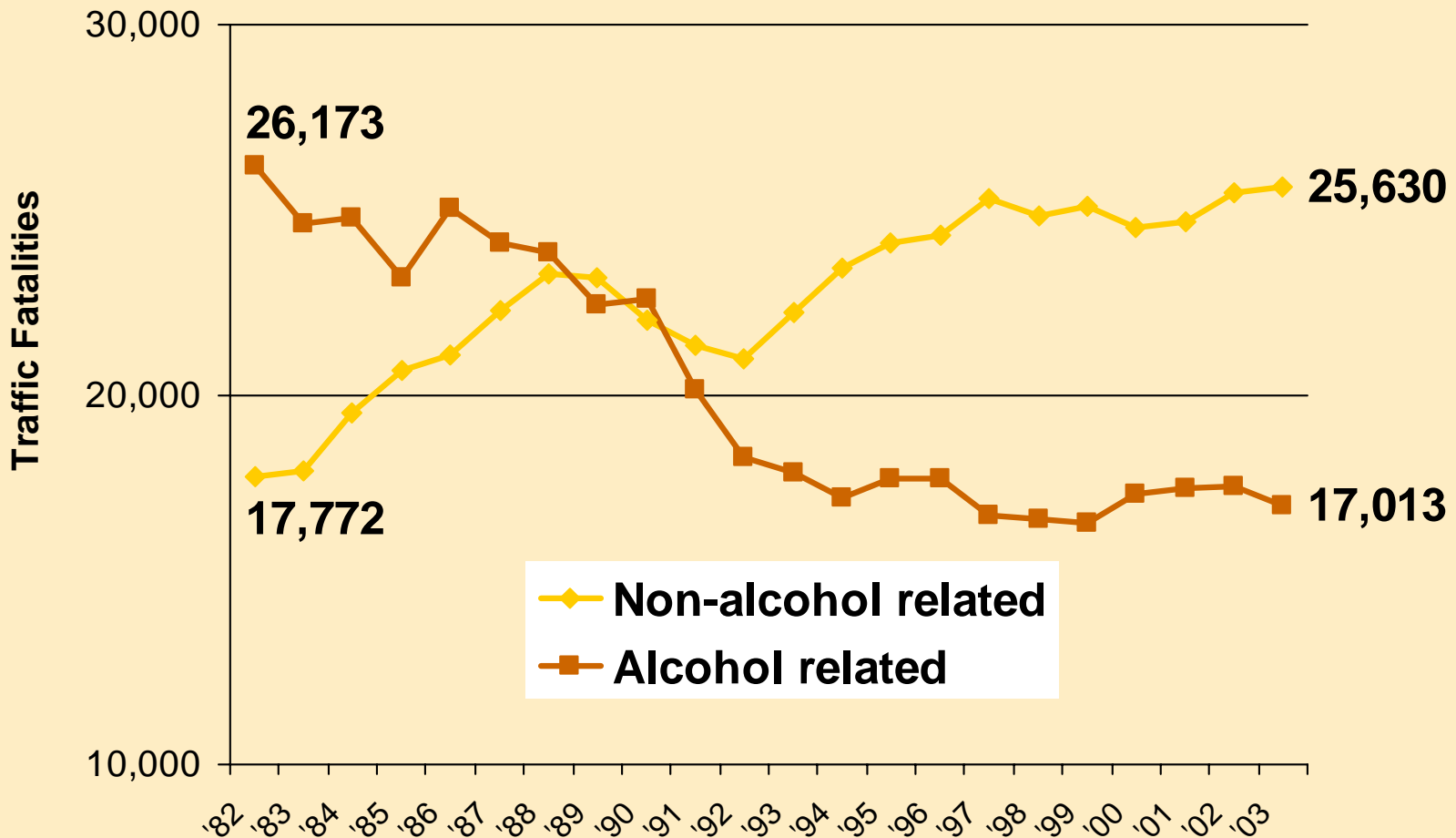
Proportion of all Drivers Involved in Fatal Crashes Estimated to Have Been Legally Intoxicated (BAC=>.08)



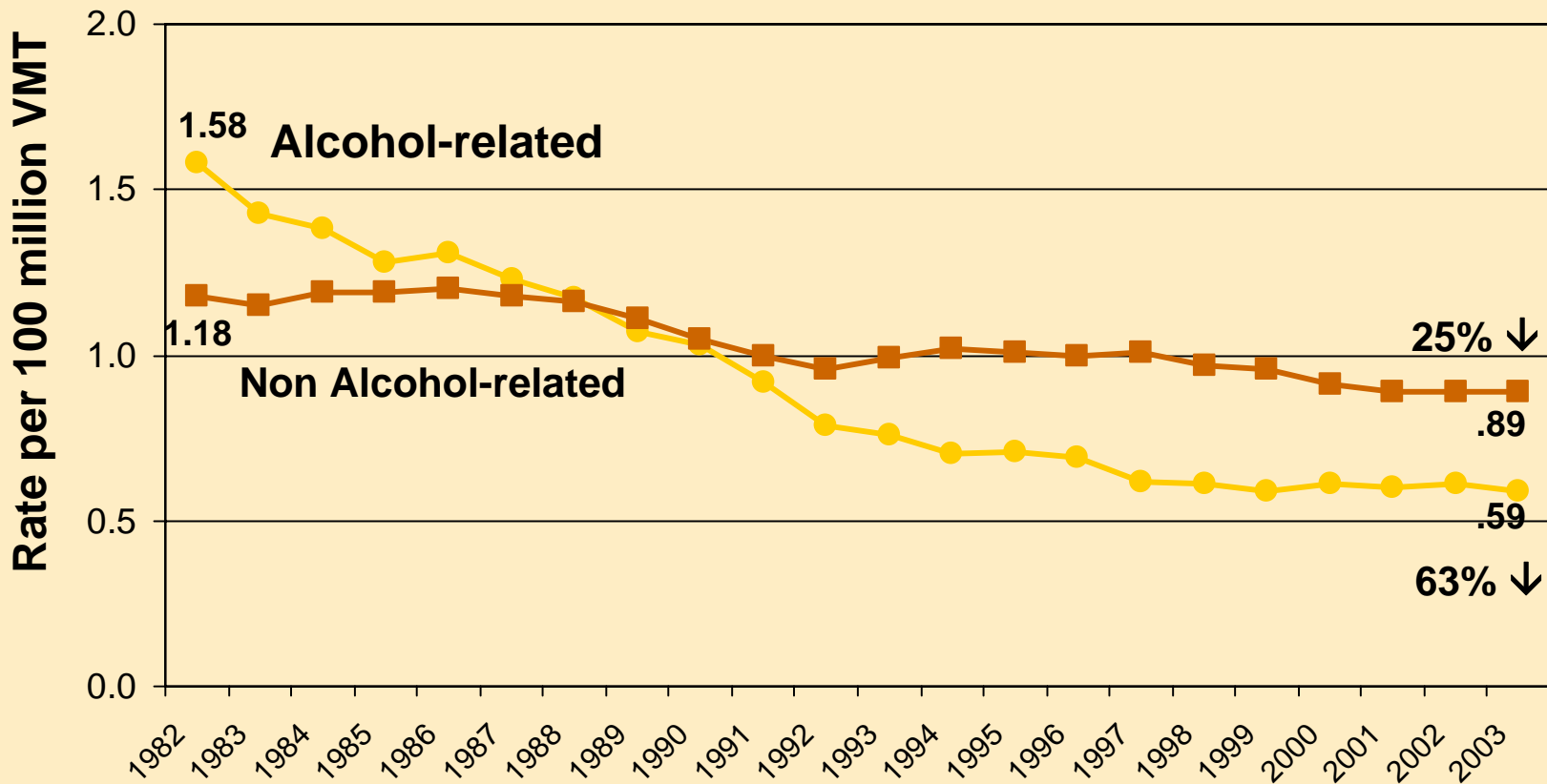
Proportion of Fatally Injured Drivers with Very High BAC =>.20



Traffic Fatalities 1982–2003



Alcohol and Non Alcohol-Related Traffic Deaths Per 100 Million Vehicle Miles Traveled (US) 1982–2003





The Problem

- Drunk driving is America's most frequently committed violent crime
- Alcohol-related traffic deaths account for 40% of all traffic fatalities
- Major cause: Public and political complacency



To Reduce Drunk Driving: We Need Increased Enforcement

- Establish an effective general deterrence approach
 - Routine, daily enforcement of impaired driving laws
 - Call on state leaders to change laws needed to permit sobriety checkpoints
 - Studies show that checkpoints reduce alcohol-related crashes by 18-24%



Sobriety
checkpoints work

Results of Sobriety Checkpoint “Blitzes”

- Charlottesville, VA (1985)
 - 13% reduction in proportion of alcohol-related crashes
- Clearwater/Largo, FL (1986)
 - 20% decrease in proportion of alcohol-related crashes compared to control sites
- Bergen County, NJ (1990)
 - 10-15% decline in single-vehicle nighttime crashes and other measures
- Binghamton, NY (1991)
 - 39% decline in drinking drivers based on roadside surveys
 - 23% reduction in late-night crashes

Checkpoint Tennessee

A Statewide Sobriety Checkpoint Program (Checkpoints 1994-1995)

■ Checkpoints conducted	882
■ Drivers checked	144,299
■ Drivers arrested for DUI	773
■ Seat belt violations	1,517
■ Drug violation arrests	201
■ Felony arrests, stolen vehicles, weapons	88
■ Youth offender violations	84
■ Other traffic citations	7,351

Results of “Checkpoint Tennessee”

- Significant effect associated with the checkpoint program
- 20% reduction over the projected number of drunk-driving fatal crashes that would have occurred with no intervention
- Reduction of 9 drunk-driving fatal crashes per month
- 5 comparison states showed nonsignificant *increase* in drunk-driving fatal crashes coincident with “Checkpoint Tennessee”
- Effect present 21 months after initial year

Georgia's Operation Zero Tolerance

A Statewide Highly Publicized Sobriety Checkpoint Program (Checkpoints 2000-2001)

■ Checkpoints conducted	2,837
■ Drivers checked	280,082
■ Drivers arrested for DUI	2,322
■ Seat belt violations	5,348
■ Drug violation arrests	1,001
■ Felony arrests	236
■ Stolen vehicles recovered	57
■ Suspended/Revoked Licenses	2,481
■ Other traffic citations	14,776

Results

Georgia


- Significant decrease in the ratio of drinking drivers to non-drinking drivers in fatal crashes (-14% ; $p < .005$).
- 5% decrease in number of alcohol-related fatalities per 100,000,000 vehicle miles driven (nonsignificant).
- 27% decrease in proportion of people who reported driving after drinking (from 26% to 19%).
- 50% decrease in proportion of people who reported driving after drinking too much (from 18% to 9%).
- Enforcement program saved an estimated 60 lives in the first year of operation.

Reviews of the Literature on Sobriety Checkpoints

Review	# Studies	Conclusion
Ross (1992)	9	Cumulation of evidence supports the hypothesis that checkpoints reduce impaired driving.
Peek-Asa (1999)	14	Decreases in alcohol-related fatalities associated with checkpoints: 17% to 75%.
Shults et al. (2001)	16	Median decrease of 20% in alcohol-related fatal and nonfatal injury causes associated with sobriety checkpoints.

NHTSA Guidelines

- Stuster & Blowers (1995)—checkpoints effective regardless of staffing levels (3-5 vs. 8-12) or location movement
- Compton (1983); NHTSA (1990)—guidelines for conducting sobriety checkpoints
- NHTSA (1999)—training video on how to conduct checkpoints
- NHTSA (2000)—How-to Guide for Planning and Publicizing Checkpoints
- Miller et al. (1998)—for every \$1.00 spent on checkpoint programs, \$6.00 is saved in reductions in crashes



Checkpoint Status in the United States

- 39 states plus DC conduct sobriety checkpoints
- 11 states—sobriety checkpoints are illegal (ID, IA, MI, MN, OR, RI, TX, WA, WY), prohibited (WI), or not conducted (AK)

Saturation Patrols

- In California, highly publicized saturation patrols reduced alcohol-related crashes by 17%.
- In comparison, four California communities that used highly publicized sobriety checkpoints reduced alcohol-related crashes by 28%.

(Stuster and Blowers, 1995)



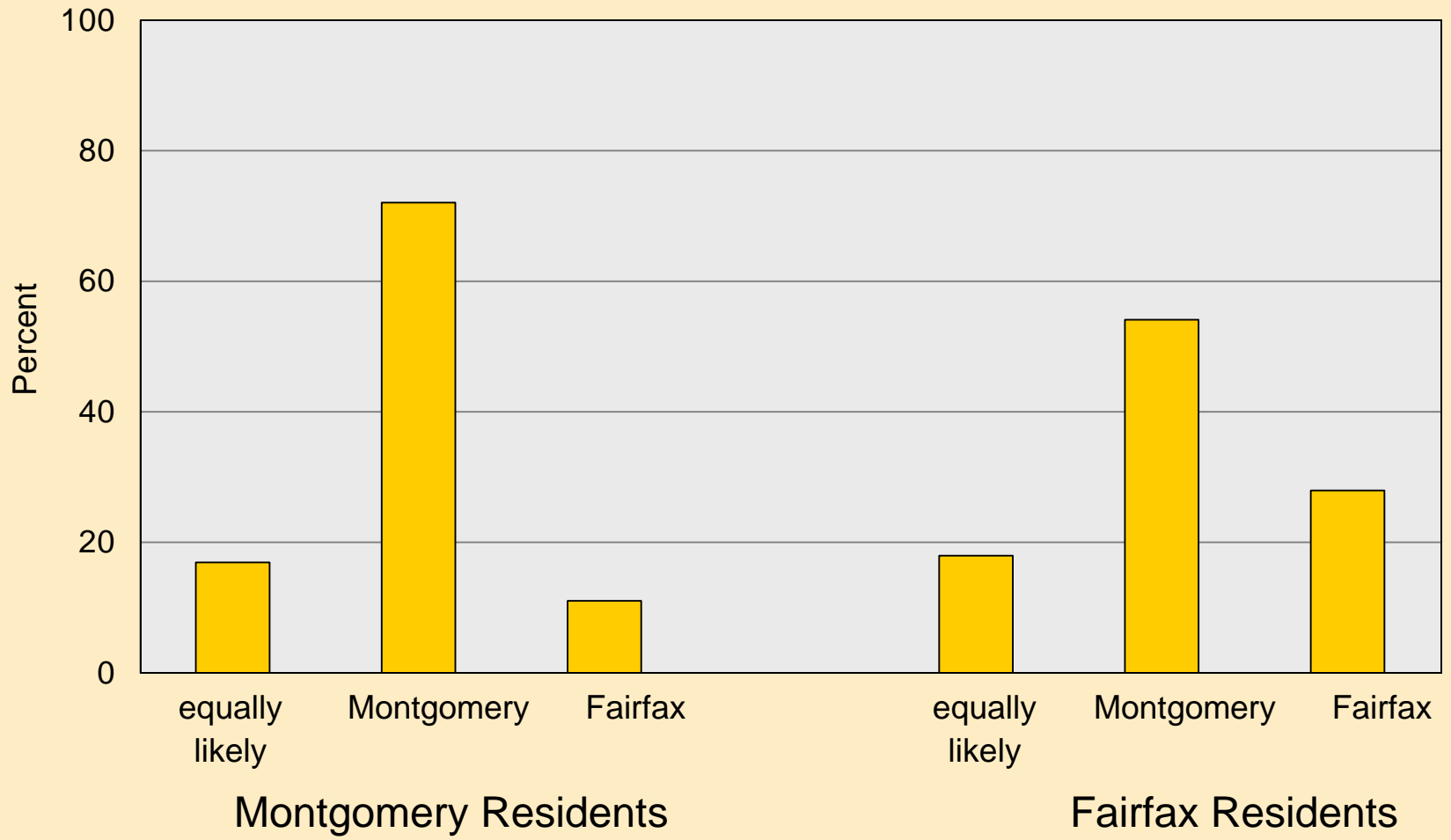
We Need Increased Enforcement

- Checkpoints not only detect impaired drivers, but also result in arrests for illegal weapons, drugs, stolen vehicles, and fugitives. They will help improve *Homeland Security*.
- Checkpoints may well be as “productive” as saturation patrols in terms of arrests per enforcement hour. We need to document and publicize this.

Enforcement Activity in Fairfax and Montgomery Counties: *Early 1980s*

	Fairfax	Montgomery
Number of sobriety checkpoints	0	30-50
DUI arrests per 10,000 drivers	96	31

County in Which Respondents Thought they Would be More Likely to be Arrested for Drunk Driving



What is Needed?

- A checkpoint system that uses few officers so that it can be mounted without outside funding.
- Use of passive alcohol sensors (PAS) so that all those stopped can be checked for drinking.
- An operational plan that allows checkpoints to be mounted as a regular feature of the DUI enforcement program.

What are Passive Alcohol Sensors?

- Tool to detect alcohol
- Extension of police officer's nose
- Quick, objective, passive
- Legal, constitutional
- Not PBT or evidential test
- Can detect low levels of alcohol



Police Detection of High BAC Drivers, with and without Passive Alcohol Sensors (PAS)

	Percent detected	
	W/O PAS	With PAS
<u>Sobriety checkpoints</u>		
Charlottesville, VA	45	68
Fairfax, VA	55	71
<u>Routine patrol</u>		
Columbus, OH	69	77
<u>Special DUI patrol</u>		
Chattanooga, TN	88	94

The “PAS-Point” Concept


- 4 to 5 officer checkpoints conducted several times a week.
- Checkpoints manned by regular traffic patrol officers who assemble at pre-established sites for 2-hour periods.
- Auxiliary officers set up and tear down sites.
- Officers are equipped with passive sensors and use them with every driver interviewed.



Passive sensor in use at Fairfax county sobriety checkpoint

PAS-Point Operations

- Low manpower checkpoints using Passive Alcohol Sensors being pilot tested in West Virginia.
- So far, operations are feasible and logistics are being worked out.
- Project is sponsored by IHS. Initial effectiveness in reducing impaired driving was evaluated.



Low Staff Checkpoints

- Study conducted in 4 rural counties in West Virginia.
- Low staff checkpoints used 3-5 officers.
- Weekly checkpoints conducted in 2 experimental counties for one year.

Low Staff Checkpoints Results

- Relative to drivers in the 2 comparison counties, the proportion of drivers on the roads in the experimental counties with BACs $\geq .05$ was 70% lower.
- The proportion of drivers on the roads in the checkpoint counties with BACs $\geq .08$ was 64% lower than the comparison counties.



Summary

- Checkpoints need not be big and expensive.
- Police officers need not be burdened with the requirement to make rapid judgments about drinking based on a very limited interview with a driver.

Other Promising Enforcement Strategies

- “Happy Hour” Checkpoints (4pm-7pm) – increase visibility
- “Mobile Awareness” Checkpoints – increase visibility
- “Enforcement Zones” – nighttime enforcement of safety belt usage: increases chances of detecting impaired drivers

Enforcement Zones

- High visibility safety belt enforcement at night
- Vehicles stopped only if an occupant is unbuckled (primary law state)
- Potential for detecting impaired drivers is increased
- Does not involve use of sobriety checkpoints

RATIONALE:

- Safety belt use lower at night
- Impaired driving higher at night
- Impaired drivers have low safety belt use rates
- Combined enforcement – efficient use of resources



Underage Drinking

Underage Drinking FACTS

- Half of 8th graders and $\frac{3}{4}$ of high school seniors report consuming alcohol within the past year.
- Half of high school seniors report being drunk in the past year.
- Half of all college students report high-risk drinking (five or more drinks per session) within the past year.



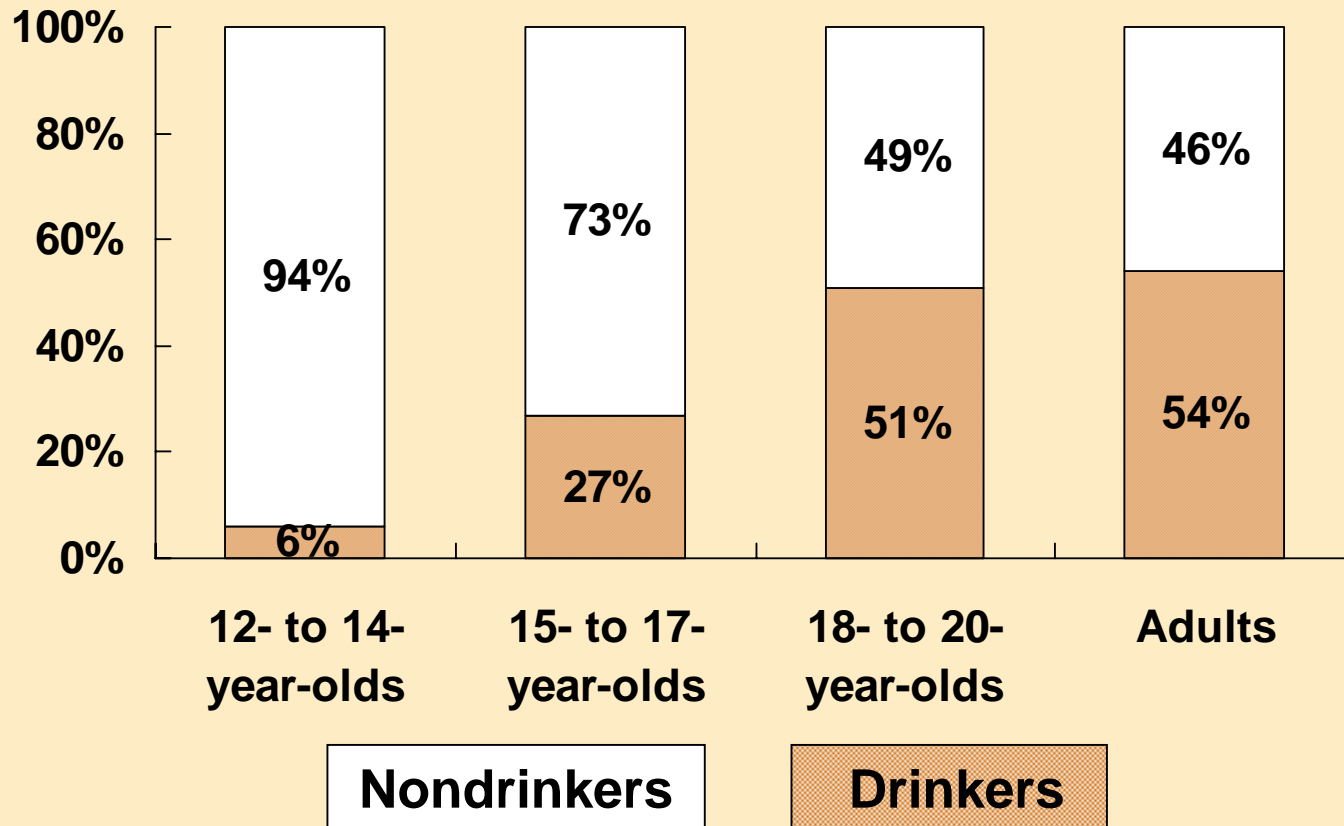
Underage Drinking FACTS

- More than 2,200 youths aged 15-20 are killed annually in alcohol-related traffic crashes.
- Underage drinking is related to youth crime, suicides, rapes, assaults, alcohol poisoning, and unintentional injuries. This costs society \$62 billion annually.



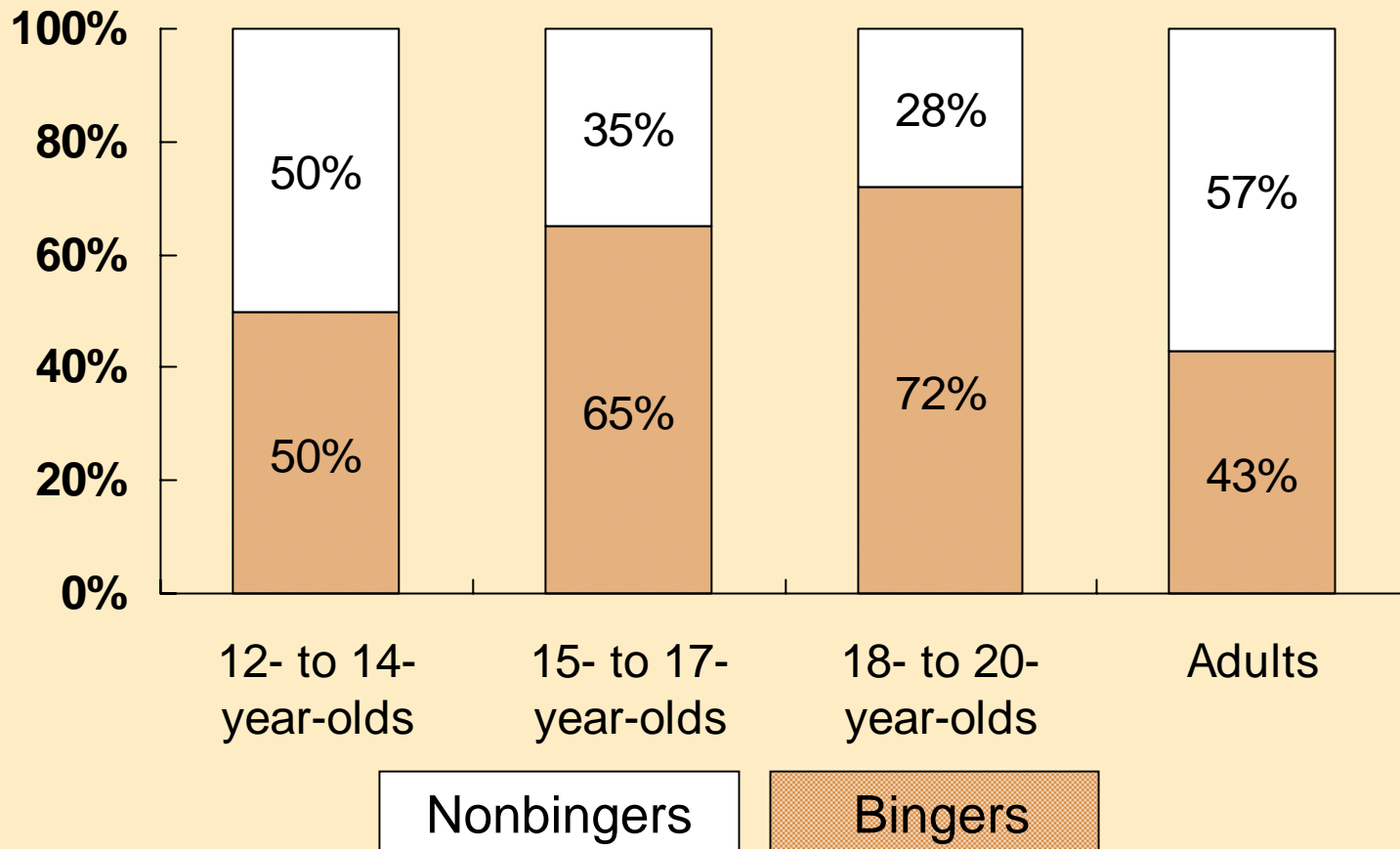
Fewer Youth Drink Compared to Adults

Comparison of drinking patterns for adult and underage drinkers (past 30 days)



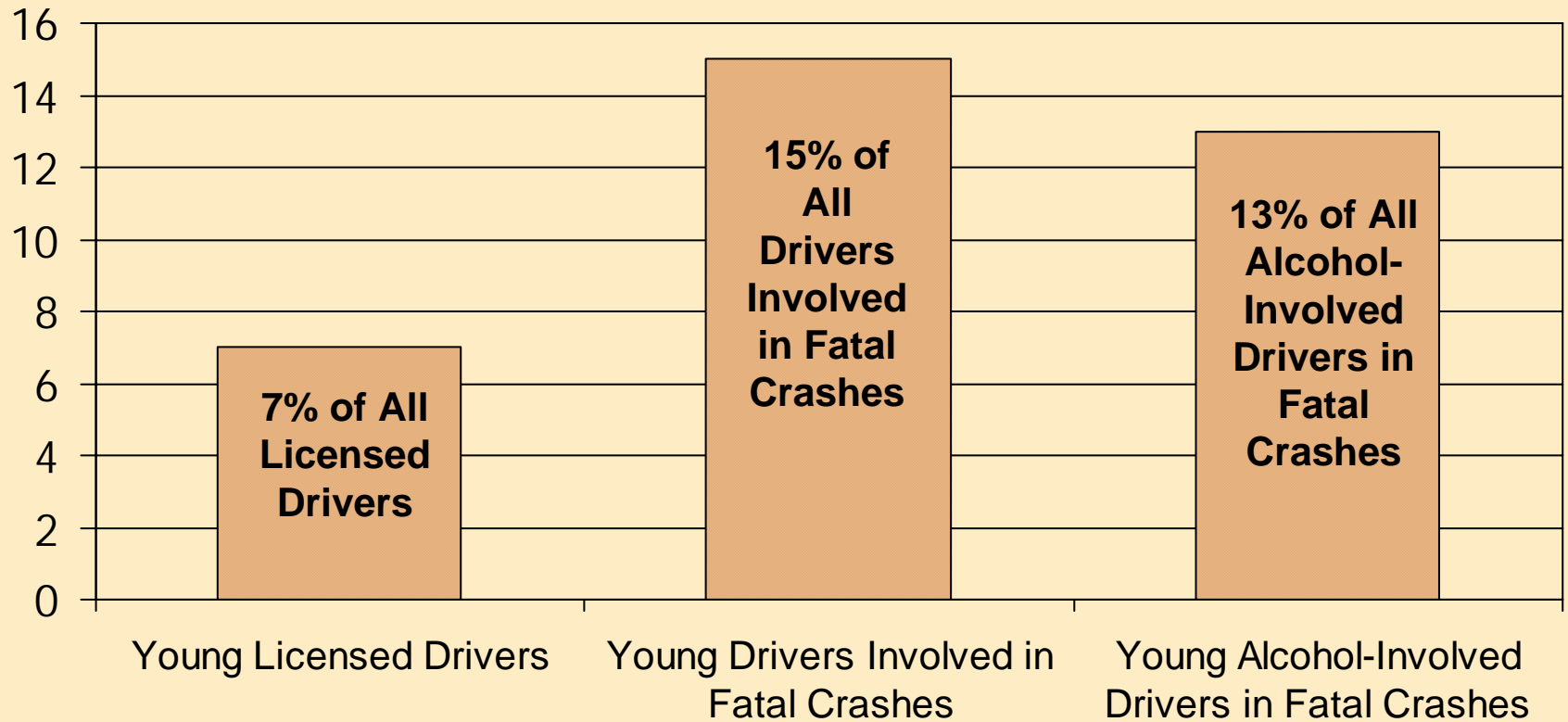
Young Drinkers Tend to Drink More Heavily than Adult Drinkers


Comparison of drinking patterns for adult and underage drinkers (past 30 days)



Young Drivers' Over-Involvement in Fatal Crashes in 2000

Ages 15-20





Why Should Underage Drinking Laws Be Enforced?

- Minimum drinking age 21 laws save 1000 lives per year in reductions in traffic fatalities involving young drivers.
- Medical research shows that excessive drinking by youth under age 21 can cause brain damage as well as reduce brain function.

Why Should Underage Drinking Laws be Enforced?

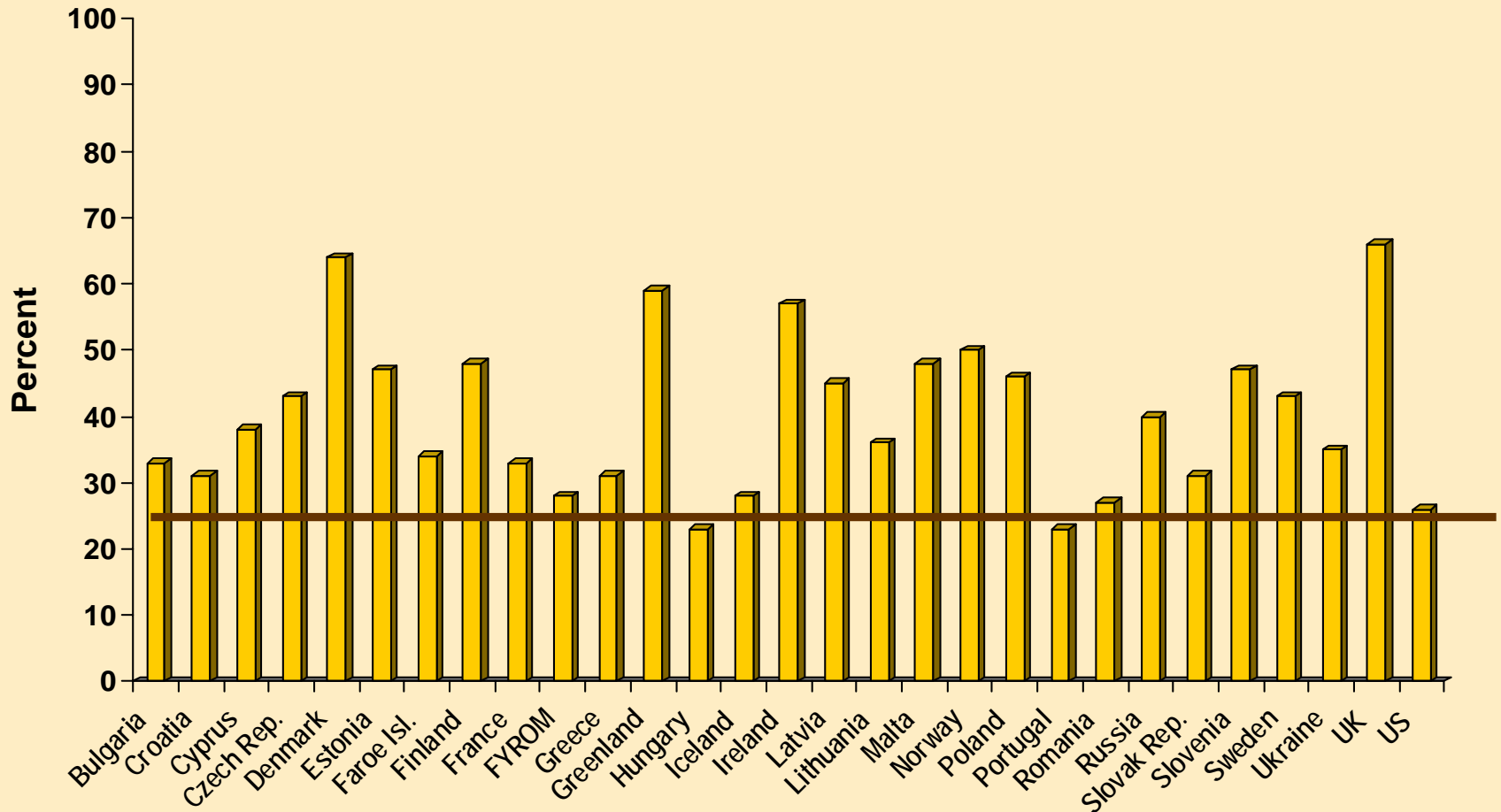
- Early onset of drinking increases the risk for future alcohol abuse problems, crashes, and assaults.



- European countries with lower drinking ages experience higher percentages of youth that report intoxication in the past month.



Prevalence of 5+ Drinks Among European and U.S. Adolescents





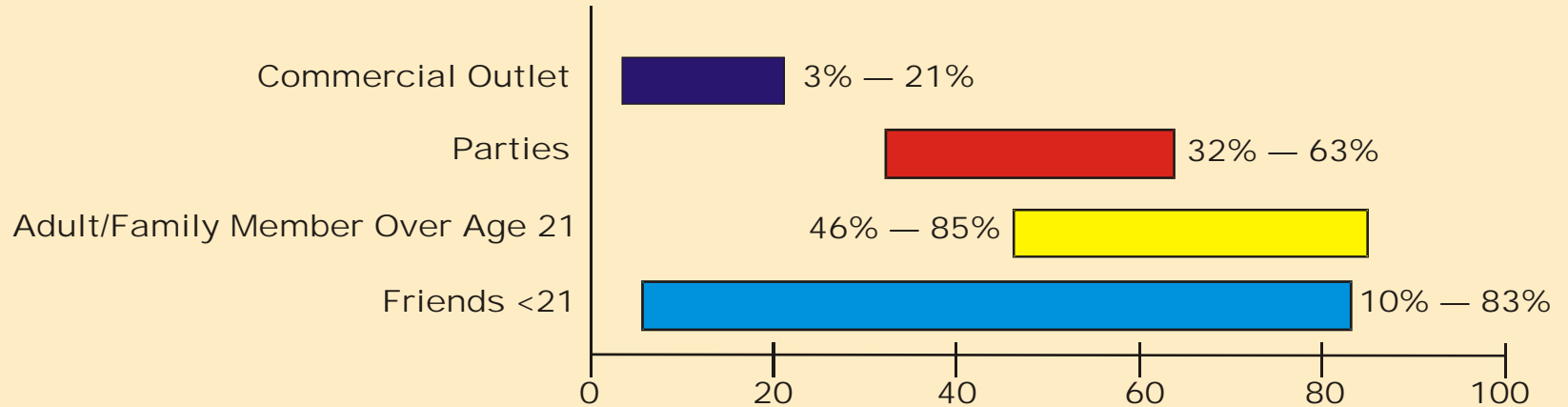
Summary

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

Summary of Underage Drinking Sources

Range of Underage Respondents from Surveys Who Report Alcohol Source



Enforcement of Underage Drinking

- Compliance Checks (“Stings”)
- Cops in Shops
- False ID Detection
- Shoulder Tap Programs
- Party Dispersal
- Keg Registration Tracking
- Sobriety Checkpoints
- Traffic Stops





National Academy of Sciences

Reducing Underage Drinking:
A Collective Responsibility
2003



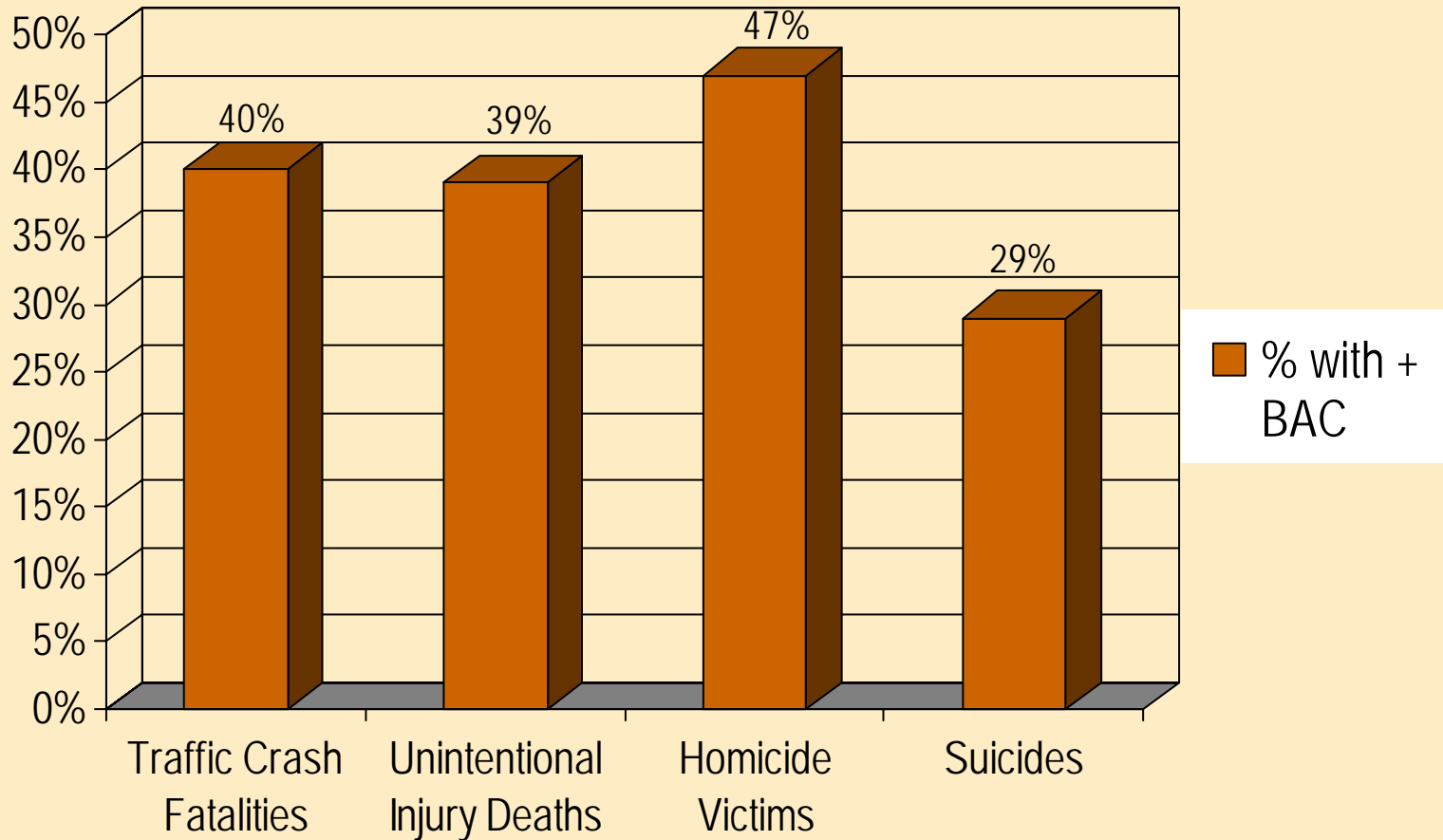
MADD's Impaired Driving Priorities:

- Highly visible, highly publicized and frequent enforcement
- Primary Seat Belt Usage Laws in every State
- Tougher Sanctions, better system for dealing with high risk drinking drivers

Why Primary Seat Belt Laws?

- There is evidence that when seat belt usage increases from 70-75% to 85-90%, more high risk (drinking) drivers will be buckled up.
- Preliminary studies are indicating that reductions in alcohol-related crash fatalities are greater than reductions in non-alcohol-related fatalities when States upgrade to Primary Seat Belt Laws.

Alcohol Involvement in Fatal Injuries



Recommendations for Increased Enforcement:

- Highly publicized and frequent sobriety checkpoints probably have the greatest potential for immediately reducing impaired driving crashes in this country.
- Minimum drinking age 21 and zero tolerance laws save more than 1,000 lives per year. Imagine how many lives would be saved if they were enforced to any great extent?



Enforcement Barriers

- **Resources (money, personnel, equipment)**
- **Complexity of the arrest process**
- **Knowledge about and buy-in to what works**
- **Motivations, attitudes, priorities**

Dealing with the Barriers

- Smaller (4-5 person) checkpoints
- Enhanced training in arrest procedures, in providing testimony
- Equipment that facilitates enforcement, e.g., in-car videos, PBTs, passive alcohol sensors
- Computerized forms, digital dictation systems that reduce paper work and recording errors



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