### 2019 ICCPUD STOP Act Stakeholders Meeting



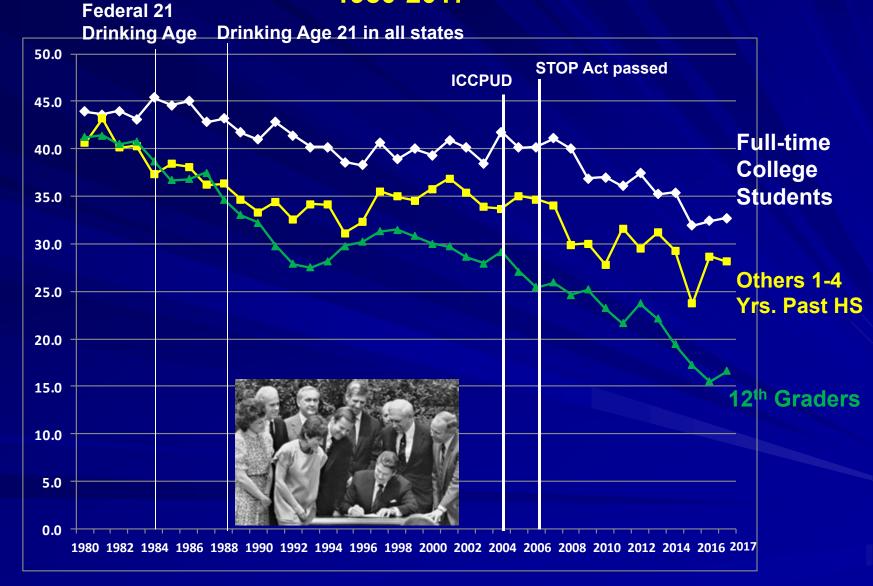
Ralph Hingson, Sc.D, M.P.H Director, Division of Epidemiology and Prevention Research, National Institute on Alcohol Abuse and Alcoholism





Alcohol: Trends in 2-Week Prevalence of 5 or More Drinks in a Row among College Students vs. Others 1-4 Years Beyond HS, 1980-2017

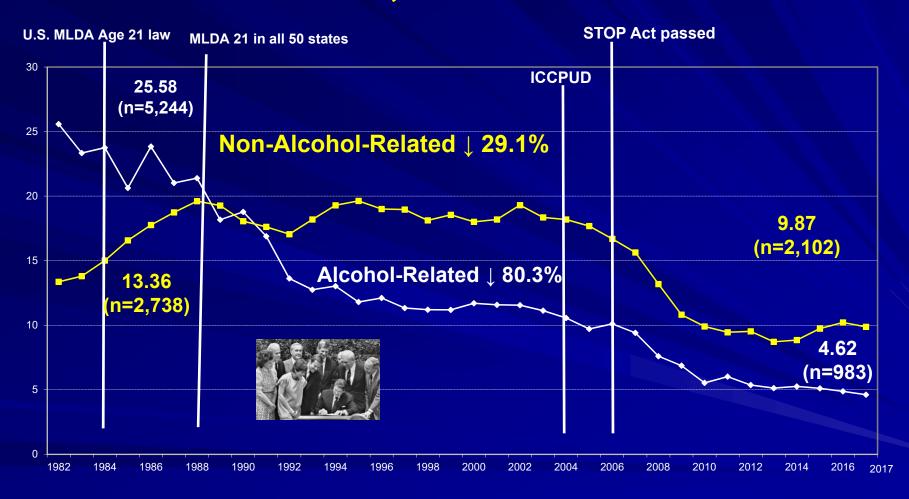




**Source: Monitoring the Future, 2018** 



# Alcohol- vs. Non-Alcohol-Related Traffic Fatalities, Rate Per 100,000, Ages 16-20, United States, 1982-2017



Sources: U.S. Fatality Analysis Reporting System, 2018; U.S. Census Bureau, 2018



### Key Underage Drinking Facts

- Alcohol is the leading contributor to injury deaths under age 21
  - 4,300 alcohol injury and overdose deaths
  - Far exceeding opioid deaths (1,034)
- 58% of opioid overdose deaths involve other drugs or alcohol

Sources: Centers for Disease Control and Prevention, 2018; Kandel et al., Drug and Alcohol Dep, 2017





- Nearly 1 million high school students and nearly 2 million 12-20 year olds consume 5 or more drinks 6 or more times per month. They are much more likely to
  - Ride with a drinking driver
  - Drive after drinking
  - Never wear safety belts
  - Carry weapons/guns
  - Be bullied
  - Be injured in a fight
  - Be injured in a suicide attempt

- Be forced to have sex
- Have had sex with 6 or more partners
- Have unprotected sex
- Use marijuana/cocaine
- Have ever injected drugs



# Youth Risk Behavior Survey 2009

Frequent binge drinkers compared to abstainers in high school were much more likely in the past month to:

**Drink at school** 

32% vs. 0%

Use marijuana at school

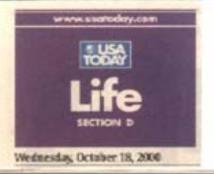
24% vs. 1%

Earned mostly D's and F's in school within the past year

14% vs. 4%

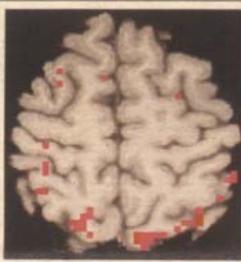






Two 20-year-old winners take a memory test. One of them abused alcohol. The MFE scan on the left is her brain, the lack of color indicating a sleggish mixed, in contrast, the scan on the right is of the woman who doesn't have

a drinking problem. The colors show lets of brain activity. Not surposingly, she does better on the test.





#### Teen drinking, thinking don't mix

Alcohol appears to damage young brains, early research finds

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Changing youth? drinking babits, 82

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Sources: Zeigler et al, Prev Med, 2005; Squeglia et al, Clin EEG Neurosci, 2009; Squeglia et al, J Stud Alcohol Drugs, 2012; Norman, *Drug & Alcohol Depend*, 2011





### Prevalence of Lifetime Alcohol Dependence According to Age of Drinking Onset

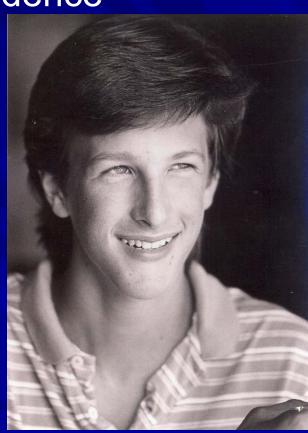


Source: Grant and Dawson (1997) J. Substance Abuse z



# Earlier Age Drinking Onset Also Related to:

- More rapid development of dependence
- Dependence by age 25
  Of ever dependent
  47% before age 21
  2/3 before age 25
- Chronic Relapsing Dependence
  - Longer episodes
  - Multiple episodes
  - Past year dependence
  - More symptoms
  - Early dependents less likely to seek help



Brian Paul McKelvey

Hingson, Heeren and Winter 2006 *Archives Pediatric and Adol Med* Hingson, Heeren and Winter 2006 *Pediatrics* 



### **State Underage Implementation Effort**



Number of States	Implementation Effort
39	Interagency coordinating committee
25	Strategic plan to prevent underage drinking
37	Conduct compliance checks
16	Cops in shops
10	Shoulder taps
23	Party patrols

Source: SAMHSA, 2018 State Performance & Best Practices Report



## State Laws to Prevent Underage Drinking and Related Problems

/EATY	Alcohol Illegal for Persons <21 to:	No.	Exceptions
ISM	Possess	51	32
ouc	Furnish alcohol to minors	51	31 (family)
ا کا	Use fake ID	51	41 (suspend driver's license)
and Alcoholism	Zero Tolerance		
	Graduated driver's license	51	Full license (17/20 states, 18/15 states)
Abuse	Prohibit sales or service to minors	51	28 defined penalty guidelines
Alcohol	Alcohol tax constant over time	51	Beer: \$0.02-1.29/gallon Wine: \$0.20-2.50 Liquor: \$1.50-14.25
on /	Attempt purchase	47	
ute	Dram shop liability	45	
Institute	Responsible Beverage Service Training	39	13 mandatory
ationa	Consumption illegal	37	22
Nati	Prohibited retail interstate alcohol shipping	33	

Source: SAMHSA, 2018 State Performance & Best Practices Report





### State Laws to Prevent Underage Drinking and Related Problems (cont.)

Alcohol Illegal for Persons <21 to:	No.	Exceptions	
Compliance checks	36	15 no formal written protocol	
Social host liability	34		
Distance limits for alcohol outlets Schools Colleges	31 12		
Keg registration	30		
Minimum legal drinking age Off-premise sellers On-premise bartenders	10 20		
Home delivery	8		
Internal possession	9		
Direct sales from producers	7		
Use/lose	39	10 age 18; 1 age 19	

Source: SAMHSA, 2018 State Performance & Best Practices Report



### Is Passing Laws Enough?

STATUS REPORT

Underage Youths Easily Buy Beer and Their Traffic Deaths Go Up

Clerks in liquor stores and other harkets in Washington, D.C., rurely seek identification from 19- and 26-year-old youths who try to purchase beer, a new study by the Insurance Institute for Highway Salety reveals.

In 57 cust of 180 attempts to bur a stirrback, record men IS and 26 years of age were successful, sithough the legal alcohol purchase age is Zi Throughout the nation.

"This is not at isolated oxidetem," says Brian O'Neill, Instibute president. "It's time to crack down and enloyee the 21. drinking age laws." Alcoholiesi lated fatalities among under age drivers are now on the tiec. following years of decime: - :

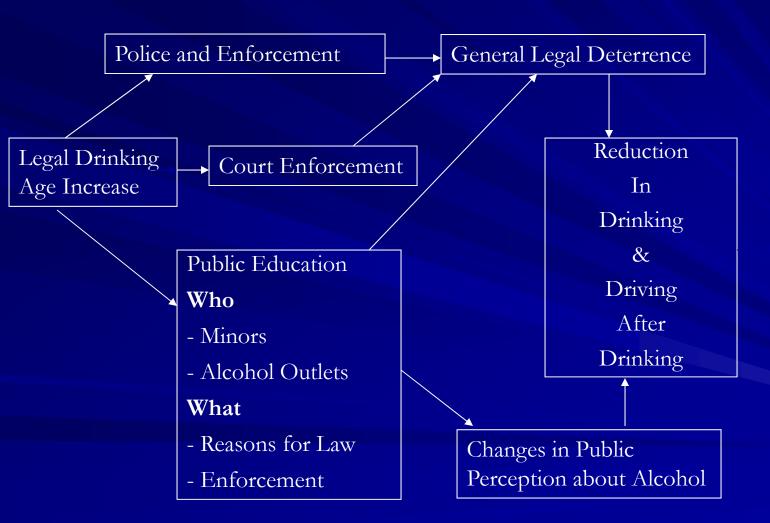


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### Potential Process of Change After a Drinking Age Increase



Alcohol-Related

Fatal

Crash

Reductions





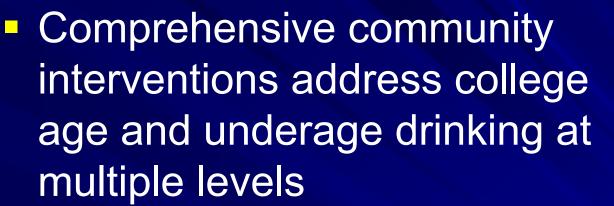
#### **Successful Comprehensive Community Interventions**



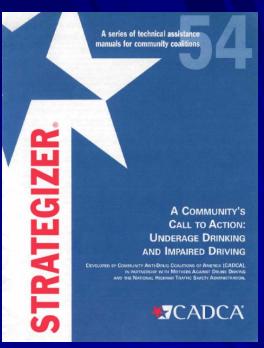
Saving Lives Program, Hingson (1996)

- Project Northland, Perry (1996)
- Communities Mobilizing for Change, Wagenaar (2002)
- 5 Community Trials, Holder (2000)
  - A Matter of Degree, Weitzman (2004)
  - Fighting Back, Hingson (2005)
    - Sacramento Neighborhood Prevention, Treno, (2007)
    - State Coalitions to Reduce Underage Drinking, Wagenaar (2007)
    - Neighborhoods Engaging with Students (NEST), Saltz (2009)
    - College community program, McCartt et al. (2009)
    - Communities That Care, Hawkins et al. (2009)
    - Safer California Universities, Saltz et al. (2010)
    - Study to Prevent Alcohol Related Consequences (SPARC), Wolfson et al. (2011)
    - Cherokee Nation, Komro et al. (2017, 2018)
    - California Native American, 2019 (Moore)





- Coordinate multiple city departments
- Clear measurable Objectives and Strategic Plans
- Combine Education and Law Enforcement
- Include screening and early interventions
- Use Data to Plan and Evaluate
- Involve Private Citizens Be Inclusive
- Involve Youth



Tanner-Smith & Lipsey, Brief alcohol interventions for adolescents and young adults: A systematic review and meta-analysis, J Subst Abuse Treat, 2014

#### Methods:

 A comprehensive literature search yielded 185 experimental studies of brief alcohol interventions (universal, selective, or indicated) aimed at reducing alcohol use or alcohol-related problems among adolescents ages 11-18 and young adults ages 19-30

#### Results:

- Overall, brief alcohol interventions significant reduced:
  - Alcohol consumption
  - Alcohol-Related problems
- Effects persist up to one year
- Effects:
  - Did not differ by:
    - Intervention length
    - Intervention format
- Benefits greater with risky adolescent drinkers

#### Scott-Sheldon et al. Efficacy of Alcohol Interventions for First-Year College Students, *J Clin Consult Psych*, 2014



#### Methods

- Reviewed 41 studies with 62 individual or group interventions
   Results: Compared to control subjects
  - Recipients of interventions reduced alcohol consumption and related problems up to 4 years past intervention
  - Individual and group interventions yielded comparable results on most outcomes
  - Individual reduced heavy drinking more than group interventions
  - Computer and face-to-face were equally effective
  - Effective interventions components:
    - Personalized feedback
    - Protective strategies to moderate drinking
    - Setting alcohol related goals
    - Challenging alcohol expectancies
  - Interventions with 4 or more components were most effective
  - Recommend routine screening all incoming college students



#### DiClemente et al., Motivational Interviewing, Enhancement, and Brief Interventions Over the Last Decade, Psychol Addict Behav, 2017

- Twenty literature reviews covering thousands of individuals: "provide significant and strong support for the effectiveness of both clinical and brief motivational interventions in reducing drinking with alcohol misusing:
  - Adults
  - College Students
  - Adolescent students
- Brief motivational interventions for marijuana seems to have substantial support for effectiveness in reducing use (7 reviews and 2 of brief interventions)
- The evidence is insufficient to make solid conclusions about efficacy of motivational interventions with opiate and methamphetamine use

## Young Adults at Risk for Excess Alcohol Consumption are Often Not Asked or Counseled About Drinking

- 2/3 of 18-39 year olds nationwide saw a physician in the past year
- Only 14% of them (12% 18-20 year olds):
  - Were asked about their alcohol consumption and
  - Given advice about what drinking patterns pose risk to health
- Persons 18-25:
  - Were most likely to exceed low-risk drinking guidelines (68% vs. 56%)
  - Were least likely to have been asked about their drinking (34% vs. 54%), especially those under age 21 (26%)



**Helen Marie Witty** 

Source: Hingson et al., J Gen Intern Med, 2012



# Next Generation Health Study, Wave 1, National Survey (N=2,519 10<sup>th</sup> graders average age 16)

- 82% saw a doctor in the past year
- At their last MD visit:

All Respondents	Drinking alcohol	Smoking	Other Drug use
Doctor asked about	54%	57%	55%
Advised about related health risks	40	42	40
Advised to reduce or stop	17	17	17
Frequent Substance Users	Drunk	Smoking	Other Drug use
Doctor asked about	60%	58%	56%
Advised about related health risks	52	46	54
Advised to reduce or stop	24	36	42

- Drunk, smoking 6+ times past month: 7%, 9%
- Drugs 6+ times past year: 5%

21

## Interagency Coordinating Committee on the Prevention of Underage Drinking

#### #SoberTruth4Youth







www.samhsa.gov gov/underage-drinking