

# Preventing Overdose: Risks, Relevant Science, and Prevention Opportunities on College Campuses



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Associate Professor  
Psychiatry & Behavioral Sciences



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## Overview of this presentation

- Special thank you to Alex Sirotzki and the Washington Poison Center
- What I said I'd cover:
  - *In this presentation, we will look at the role of classical conditioning (and, therefore, the role of environment) in potential overdose situations, which highlights possible risks associated with spring break, 21st birthday celebrations, and even starting school. Opportunities for prevention and intervention will be discussed.*

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## Substance Use Data from Monitoring the Future Study



- Alcohol
  - Past year
    - 76.4% report any alcohol use
  - Past month
    - 59.6% report any alcohol use
  - 5+ drinks in a row in past 2 weeks
    - 30.4% at least once
  - 10+ drinks in a row in past 2 weeks
    - 10.5% at least once



Source: Patrick, et al. (2022)

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### Cannabis Use Data from Monitoring the Future Study

- College students
  - 40.3% report past year use
  - 24.2% report past month use
  - 5.6% report use 20+ days in past month



Source: Patrick, et al (2022)

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### Other Past Year Substance Use Data from Monitoring the Future Study for College Students

- 6.8% Hallucinogens
  - 4.6% Hallucinogens other than LSD
  - 4.3% LSD
- 5.2% Amphetamines
  - 4.3% Adderall
  - 1.7% Ritalin
- 3.9% Cocaine
- 1.7% Tranquilizers
- 1.6% MDMA/molly
- 1.4% Ketamine
- 0.9% Narcotics (other than heroin)
- 0.8% Vicodin
- 0.3% OxyContin
- 0.3% Methamphetamine
- 0.1% Heroin

Source: Patrick, et al (2022)

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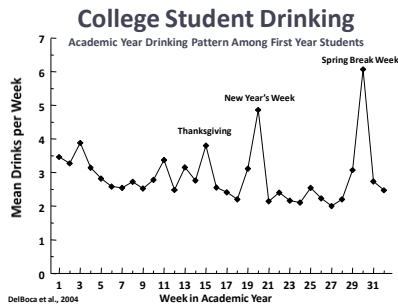
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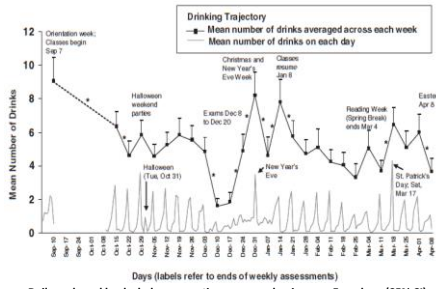
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Daily and weekly alcohol consumption over academic year. Error bars (95% CI) are shown above the mean only. Asterisks (\*) refer to significant adjacent week differences (Bonferroni adjusted level of p<.002) (Tremblay, et al., 2010)

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## Tolerance

**Applying Laboratory Research: Drug Anticipation and the Treatment of Drug Addiction**  
Shepard Siegel and Barbara M. C. Ramos  
Richard L. Isaacson

Drug anticipation refers to the process by which the drug user anticipates the effects of the drug before it is taken. This process is thought to be important in the development of addiction and in the relapse to drug use after treatment. The present review discusses the role of drug anticipation in the development of addiction and in the relapse to drug use after treatment.

**Siegel, S., & Ramos, B.M.C. (2002)**  
**Applying laboratory research: Drug anticipation and the treatment of drug addiction. *Experimental and Clinical Psychopharmacology*, 10, 162-183.**



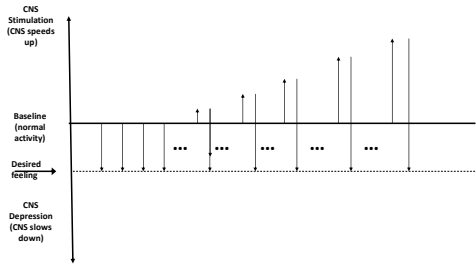
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## Types of learning

- **Classical Conditioning**
  - Pavlov
    - Association of two events such that one event acquires the ability to elicit responses formerly associated with the other event



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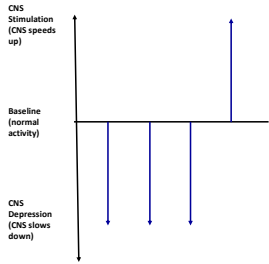
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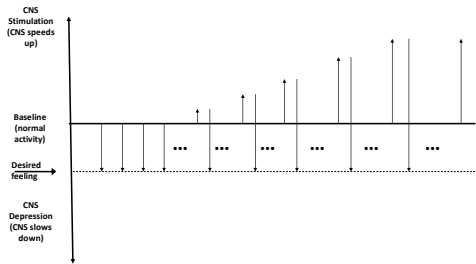
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Rethinking withdrawal or craving factors

- Cocteau (1958)
  - "The dead drug leaves a ghost behind. At certain hours it haunts the house..."

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Rethinking withdrawal or craving factors

- Siegel (2005)
  - "The 'ghost' is the conditioned compensatory response...it 'haunts the house'...when confronted with conditioned stimuli."
  - "Effective treatment requires an appreciation of how conditioning may be used to exorcise the ghost..."

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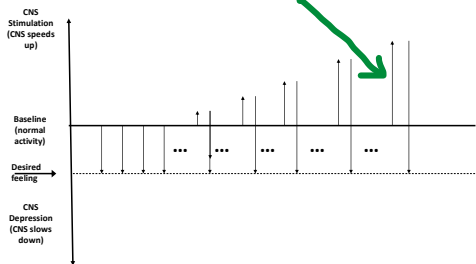
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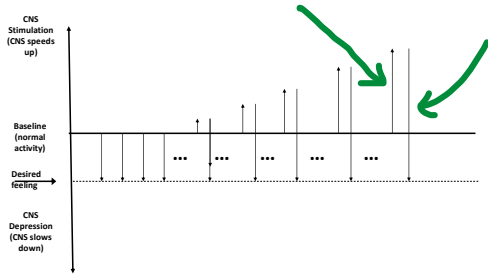
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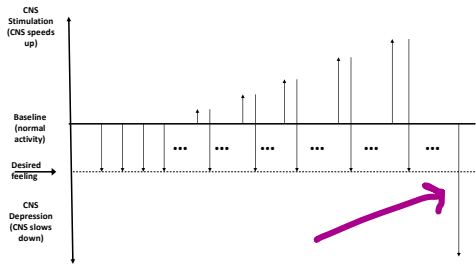
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### Considering cues

- **Even taste can be a cue**
  - Siegel (2011) noted that college students who consume alcohol in the presence of usual taste cues (e.g., a beer flavored beverage) display greater tolerance to intoxicating effects than when consumed in a novel blue, peppermint-flavored beverage of the same strength.

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**Conclusion**

- **“The situational specificity of tolerance”**
  - If alcohol is presented “in a manner divorced from the usual alcohol-associated stimuli, the effects of the alcohol are enhanced (Siegel, 2011, p. 358).”

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**Implications for the prevention**

- **Consider high-risk events that can be associated with changes in cues:**
  - Spring Break
  - 21<sup>st</sup> birthdays
  - Halloween
- **Students studying abroad**
- **Coming back to campus**
- **Going to restaurants/bars/new settings for first time in 26 months**
- **As a field, we still need to research ways to incorporate this information into prevention/intervention efforts, both for those who make the choice to drink and for those who may be bystanders intervening on someone’s behalf**

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***Other concerns for potentially lethal outcomes***

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Hufford, M.R. (2001). Alcohol and suicidal behavior. *Clinical Psychology Review*, 21 (5), 797-811.



Clinical Psychology Review, Vol. 21, No. 5, pp. 797-811, 2001  
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0272-7358/01/000797-5

### ALCOHOL AND SUICIDAL BEHAVIOR

Michael R. Hufford  
University of Montana

**ABSTRACT.** Alcohol dependence and alcohol intoxication are important risk factors for suicidal behavior. However, the mechanism for the relationship remains unclear. This review presents a conceptual framework relating alcohol to suicidal behavior. Distal risk factors create a statistical potential for suicide. Alcohol dependence, as well as associated comorbid psychopathology and negative life events, act as distal risk factors for suicidal behavior. Proximal risk factors determine the timing of suicidal behavior by translating the statistical potential of distal risk factors into action. The acute effects of alcohol intoxication act as important proximal risk factors for suicidal behavior among the alcoholic and nonalcoholic alike. Mechanisms responsible for alcohol's ability to increase the proximal risk for suicidal behavior include alcohol's ability to: (1) increase psychological distress, (2)

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### Alcohol-related risk factors for suicide (Hufford, 2001)

- **Distal risk factors**
  - Relatively stable characteristics/ events occurring in the weeks, months, or years preceding suicidal behavior.
- **Proximal risk factors**
  - Variables that increase suicide risk in moments immediately before suicidal behavior



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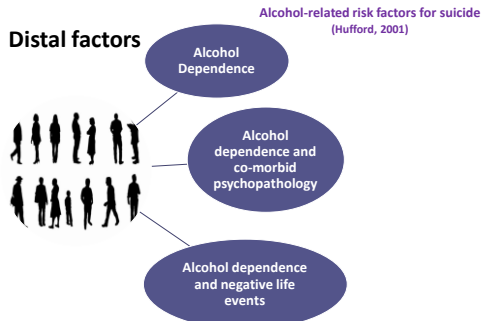
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### Alcohol-related risk factors for suicide (Hufford, 2001)

#### ▪ Distal risk factors

##### ▪ Alcohol dependence and negative life events

##### ▪ Interpersonal loss

▪ Over one-fourth of those with alcohol dependence who died by suicide experienced interpersonal loss within 6 weeks of their death (Murphy, et al., 1979)

##### ▪ Relapse

▪ Those with alcohol dependence are at greater risk for suicide during periods of active drinking



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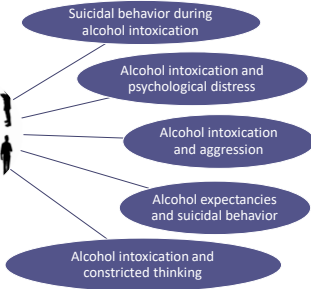
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#### Proximal factors



#### Alcohol-related risk factors for suicide (Hufford, 2001)



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### Alcohol-related risk factors for suicide (Hufford, 2001)

#### ▪ Proximal risk factors

##### ▪ Suicidal behavior during alcohol intoxication

▪ Looking at odds ratios, Borges & Rosovsky (1996) showed consumption of over 10 standard drinks increases risk for suicide attempts *90 times* in comparison to abstinence

▪ Acute intoxication greater risk than habitual



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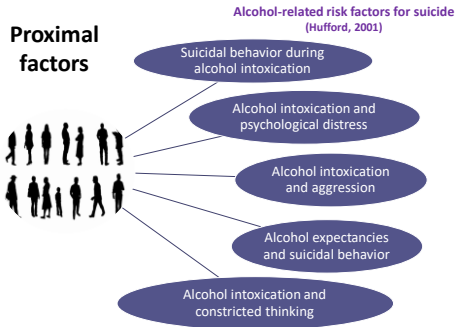
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**Alcohol-related risk factors for suicide**  
(Hufford, 2001)

- Proximal risk factors
  - Alcohol intoxication and constricted thinking
    - Alcohol myopia (Steele & Josephs, 1990)



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Steele, C.M., & Josephs, R.A. (1990). Alcohol myopia: Its prized and dangerous effects. *American Psychologist*, 45 (8), 921-933.

**Alcohol Myopia**  
*Its Prized and Dangerous Effects*

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Claude M. Steele and Robert A. Josephs *University of Michigan*

**ABSTRACT:** This article explains how alcohol makes social responses more extreme, enhances important self-evaluations, and relieves anxiety and depression, effects that underlie both the social desirability of alcohol and the reinforcing effects that make it an addictive substance. The theories are based on alcohol's impairment of perception and thought—the myopia it causes—rather than on the ability of alcohol's pharmacology to directly cause specific reactions or on expectations associated with alcohol's use. Three conclusions are offered: (a) Alcohol makes social behaviors more extreme by blocking a form of response conflict. (b) The same process can inflate self-evaluations. (c) Alcohol myopia, in combination with dis-

icant effects, a straightforward idea has dominated the thinking of laymen and scientists alike. Such effects stem directly from the pharmacological properties of alcohol, much the way relaxation stems from the pharmacological properties of valium. We know, for example, that people often drink alcohol to get the effects they assume it will directly cause: relaxation, a better mood, courage, social ease, and so on (e.g., Grönlund, Brown, & Christiansen, 1987; Leigh, 1989; Maisto, Connors, & Sachs, 1981). This idea explains both heads of the beast, some of these direct effects, such as aggression and hostility, can be socially destructive, and others, such as relaxation and tension reduction, are reinforcing enough to make alcohol a po-

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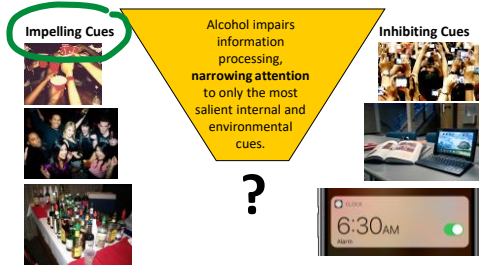
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### “Alcohol Myopia”



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### Alcohol-related risk factors for suicide (Hufford, 2001)

- Proximal risk factors
  - Alcohol intoxication and constricted thinking
    - Alcohol myopia (Steele & Josephs, 1990)
      - *“The immediate, and usually painful, aspects of experience take on disproportionate weight in the delicate balance between choosing life over death among those contemplating suicide (p. 804).”*
    - Can interfere with inhibition conflict
      - *“Alcohol intoxication acts to interrupt inhibition conflict through alcohol myopia, leading to more excessive responses than would have occurred while sober (p. 804).”*

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### “Alcohol prevention is suicide prevention...”

Laurie Davidson, Suicide Prevention Resource Center

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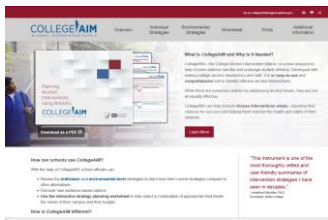
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Opportunities for prevention

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COLLEGEAIM



www.collegedrinkingprevention.gov/CollegeAIM

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**INDIVIDUAL-LEVEL STRATEGIES: Revised and Updated\***  
Estimated Relative Effectiveness, Costs, and Barriers, Public Health Reach, Research Amount, and Primary Modality

EFFECTIVENESS: Success in achieving targeted outcomes†	COE17s: Combined program and staff costs for adoption/implementation and maintenance		Public health reach Number of people reached Per 100,000 Per year	Research uncertainty +++ = Very High ++ = High + = Moderate - = Low - - = Very Low - - - = Not known	Primary modality PE = Peer education PI = In-person only PO = Online	
	Lower costs: \$	Mid-range costs: \$\$				Higher costs: \$\$\$
<b>Highly to very effective</b>	Highly effective	NO-3 Narrative on education (20-min) + student personal narrative feedback (10-min) (2021) (U.S. www.collegeaim.gov)	NO-12 Data training, alcohol topic (15-minute) setting event (2021) (U.S. www.collegeaim.gov)	NO-18 Multi-component education-based program (2021) (U.S. www.collegeaim.gov)	<b>Legend</b> PE = Peer education PI = In-person only PO = Online - = Low - - = Very Low - - - = Not known +++ = Very High ++ = High + = Moderate - = Low - - = Very Low - - - = Not known * = Not known † = Not known	
		NO-10 Data training, alcohol topic (15-minute) setting event (2021) (U.S. www.collegeaim.gov)	NO-13 Data training, alcohol topic (15-minute) setting event (2021) (U.S. www.collegeaim.gov)	NO-19 Multi-component education-based program (2021) (U.S. www.collegeaim.gov)		
		NO-11 Narrative on education (20-min) + student personal narrative feedback (10-min) (2021) (U.S. www.collegeaim.gov)	NO-14 Data training, alcohol topic (15-minute) setting event (2021) (U.S. www.collegeaim.gov)	NO-20 Multi-component education-based program (2021) (U.S. www.collegeaim.gov)		
	Moderately effective	NO-15 Data training, alcohol topic (15-minute) setting event (2021) (U.S. www.collegeaim.gov)	NO-16 Data training, alcohol topic (15-minute) setting event (2021) (U.S. www.collegeaim.gov)	NO-21 Multi-component education-based program (2021) (U.S. www.collegeaim.gov)		
		NO-17 Data training, alcohol topic (15-minute) setting event (2021) (U.S. www.collegeaim.gov)	NO-22 Multi-component education-based program (2021) (U.S. www.collegeaim.gov)	NO-23 Multi-component education-based program (2021) (U.S. www.collegeaim.gov)		
		NO-19 Multi-component education-based program (2021) (U.S. www.collegeaim.gov)	NO-24 Multi-component education-based program (2021) (U.S. www.collegeaim.gov)	NO-25 Multi-component education-based program (2021) (U.S. www.collegeaim.gov)		
	Little to no effectiveness	NO-26 Data training, alcohol topic (15-minute) setting event (2021) (U.S. www.collegeaim.gov)	NO-27 Data training, alcohol topic (15-minute) setting event (2021) (U.S. www.collegeaim.gov)	NO-28 Multi-component education-based program (2021) (U.S. www.collegeaim.gov)		
		NO-29 Data training, alcohol topic (15-minute) setting event (2021) (U.S. www.collegeaim.gov)	NO-30 Data training, alcohol topic (15-minute) setting event (2021) (U.S. www.collegeaim.gov)	NO-31 Multi-component education-based program (2021) (U.S. www.collegeaim.gov)		
		NO-32 Data training, alcohol topic (15-minute) setting event (2021) (U.S. www.collegeaim.gov)	NO-33 Data training, alcohol topic (15-minute) setting event (2021) (U.S. www.collegeaim.gov)	NO-34 Multi-component education-based program (2021) (U.S. www.collegeaim.gov)		
		NO-35 Data training, alcohol topic (15-minute) setting event (2021) (U.S. www.collegeaim.gov)	NO-36 Data training, alcohol topic (15-minute) setting event (2021) (U.S. www.collegeaim.gov)	NO-37 Multi-component education-based program (2021) (U.S. www.collegeaim.gov)		
		NO-38 Data training, alcohol topic (15-minute) setting event (2021) (U.S. www.collegeaim.gov)	NO-39 Data training, alcohol topic (15-minute) setting event (2021) (U.S. www.collegeaim.gov)	NO-40 Multi-component education-based program (2021) (U.S. www.collegeaim.gov)		
		NO-41 Data training, alcohol topic (15-minute) setting event (2021) (U.S. www.collegeaim.gov)	NO-42 Data training, alcohol topic (15-minute) setting event (2021) (U.S. www.collegeaim.gov)	NO-43 Multi-component education-based program (2021) (U.S. www.collegeaim.gov)		

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**ENVIRONMENTAL-LEVEL STRATEGIES: Revised and Updated\***  
Estimated Positive Effectiveness, Costs, and Barriers; Public Health Reach; and Research Amount/Quality

**COLLEGEAIM**

EFFECTIVENESS: Success in achieving targeted outcomes?	COSTS: Combined program and staff costs for adoption/implementation and maintenance		
	Lower costs: \$	Mid-range costs: \$	Higher costs: \$\$\$
<b>Original effectiveness</b> ***	ENR-18 Record-based interventions for smoking cessation (ENR, 3, ++)	ENR-19 Online chat for smoking cessation (ENR, 3, ++)	ENR-17 Record-based interventions for smoking cessation (ENR, 3, ++)
<b>Moderate effectiveness</b> **	ENR-24 Medication for smoking cessation (ENR, 3, ++)	ENR-22 Smoking cessation and physical activity (ENR, 3, ++)	ENR-25 In-person tobacco use (ENR, 3, ++)
	ENR-17 Record-based interventions for use of alcohol (ENR, 3, ++)	ENR-23 Multiple tobacco cessation of alcohol smoking needs (ENR, 3, ++)	ENR-26 Record-based interventions for use of alcohol (ENR, 3, ++)
<b>Lower effectiveness</b> *	ENR-27 Record-based interventions for tobacco cessation (ENR, 3, ++)	ENR-27 Online chat for "online & in-person" for tobacco cessation (ENR, 3, ++)	ENR-28 Record-based interventions for tobacco cessation (ENR, 3, ++)
	ENR-28 Record-based interventions for tobacco cessation (ENR, 3, ++)	ENR-29 Record-based interventions for tobacco cessation (ENR, 3, ++)	ENR-30 Record-based interventions for tobacco cessation (ENR, 3, ++)
<b>No clear impact</b>	ENR-6 Record-based interventions for tobacco cessation (ENR, 3, 0)	ENR-8 Evidence-based interventions for tobacco cessation (ENR, 3, 0)	ENR-14 Evidence-based interventions for tobacco cessation (ENR, 3, 0)
<b>No clear effectiveness</b> †	ENR-4 Record-based interventions for tobacco cessation (ENR, 3, 0)	ENR-5 Record-based interventions for tobacco cessation (ENR, 3, 0)	ENR-7 Evidence-based interventions for tobacco cessation (ENR, 3, 0)

**Legend**  
ENR-# Evidence-based interventions for tobacco cessation (ENR, 3, ++)

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**"Consider a mix of strategies.**  
*Your best chance for creating a safer campus could come from a combination of individual- and environmental-level interventions that work together to maximize positive effects (p. 5)."*

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**This "mix" includes (but is not limited to):**

- Policies
- Enforcement
- Education
- Prevention
- Intervention
- Treatment
- Recovery support

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### Implementation strategies are key

“...the use of effective interventions on a scale sufficient to benefit society requires careful attention to implementation strategies as well. One without the other is like serum without a syringe; the cure is available, but the delivery system is not.” (p. 448)

Fixsen, D. L., Blase, K. A., Duda, M. A., Naoom, S. F., & Van Dyke, M. (2010). Implementation of evidence-based treatments for children and adolescents: Research findings and their implications for the future. In J. R. Weisz & A. E. Kazdin (Eds.), *Evidence-based psychotherapies for children and adolescents* (p. 435–450). The Guilford Press

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### Bystander approaches

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### Sample of 306 college students (Lewis, 2008)

- **Helping Behaviors**
  - 0 (*never*) to 1 (*1 or more times*) scale
  - $\alpha = .77$
- **Sources of Help**
- **Reasons You have Never Helped**
  - 1 (*strongly disagree*) to 4 (*strongly agree*)

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**Source: Lewis (2008)**

### Results

Sources of Help

> 86% of students reported using a source of help.

Source	%
Another Student	44%
Parent	14%
Hospital/Clinic/ER	9%
Resident Advisor	3%
Off-Campus Police	2%
Campus Police	<1%

Note. n = 263.

"It has not been severe enough to need outside help, just watch them, help them and get some water or something like that."

"I once googled alcohol poisoning for the symptoms just to make sure my friend didn't have it."

"I may use the internet for signs or symptom help."

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**Source: Lewis (2008)**

### Results

Reasons Not to Seek Help

> 14% of students reported never having helped.

Reason	Mean	SD
No need to help, no risk	3.48	1.17

Note. n = 43.

"I have not witnessed any of these problems therefore I have not helped!"

"Never was in a situation where my friend was really bad where I had to contact a hospital!"

"My friends do not drink nor do I."

"I have never been in a situation where the people who I was with were drunk enough to need help. They had only had a couple drinks."

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**Source: Lewis (2008)**

### Results

Reasons Not to Seek Help

Reason	Mean	SD
Someone else was helping	2.84	1.19
Was not sure what to do	2.31	1.08
Others were not concerned	2.20	.85
Afraid friend would be in trouble	2.10	.99
Assumed someone else would help	2.00	.90
Others discouraged me from helping	1.93	.86
Afraid self would be in trouble	1.90	.83
Too busy, in a hurry	1.70	.71

Note. n = 43.

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**Bystander approaches**

- Signs of overdose
- What to do when in that situation
- Opportunities with RAs, Greek Leaders, Peer Health Educators
- Increased awareness of risk when person they're concerned about is in a new environment
- Things to keep in mind:
  - Needs the skills training component
  - Need to think critically about outcome data
  - Be careful not to feed into misperceived norms

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***Event-specific prevention***

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***What's the number one spring break destination?***

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Detailed study of 726 first year college students who were originally included in the study for high-risk drinking

- Of those that did go on a trip for spring break (n=332):
  - Had a hangover?
    - 32.8% (most, 67.2%, did not)
  - Felt sick to your stomach or threw up after drinking?
    - 23.2% (most, 76.8%, did not)
  - Passed out?
    - 9.3% (most, 90.7% did not)
  - Had a fight, argument, or bad feelings with a friend?
    - 8.4% (most, 91.6%, did not)

Lee, C.M., Lewis, M.A., & Neighbors, C. (2009). Preliminary examination of spring break alcohol use and related consequences. *Psychology of Addictive Behaviors, 23*, 689-694.

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***Norms  
definitely  
matter***

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Available online at [www.sciencedirect.com](http://www.sciencedirect.com)  
**ScienceDirect**  
*Addictive Behaviors* 32 (2007) 2671–2680

**ADDICTIVE  
BEHAVIORS**

Event-specific prevention: Addressing college student drinking during known windows of risk

Clayton Neighbors<sup>1,\*</sup>, Scott T. Walters<sup>2</sup>, Christina M. Lee<sup>3</sup>, Amanda M. Visher<sup>4</sup>,  
Taraana Velting<sup>1</sup>, Thomas Selinger<sup>1</sup>, William Daehong<sup>5</sup>

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“At the individual level, administrators could sponsor a social norms campaign to raise awareness of the norms around spring break (p. 2672)” (Neighbors, et al., 2007)

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Daily Variations in Spring Break Alcohol and Sexual Behaviors Based on Intentions, Perceived Norms, and Daily Trip Context

MELISSA E. PATRICK, M.A.,\* and CHRISTINE M. LEE, Ph.D.†

ABSTRACT: Objective: Given the known rates of alcohol use and sexual behaviors during spring break, the authors examined the extent to which these behaviors were related to intentions, perceived norms, and trip context.

Method: A national survey of 1,583 college students was conducted during the spring break period. The survey assessed intentions, perceived norms, and trip context.

Perceived alcohol use norms moderated the effect of being on a Spring Break trip

“Trip days” were especially likely to be “drunk days” the more students perceived heavy/high social norms

Patrick, M.E., & Lee, C.M. (2012). Daily variations in spring break alcohol and sexual behaviors based on intentions, perceived norms, and daily trip context. Journal of Studies on Alcohol and Drugs, 73, 591-596.

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Addiction Research & Theory

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Understanding college student spring break drinking: Demographic considerations, perceived norms and travel characteristics

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Abstract: Research has documented normative perceptions of others' alcohol use and how these related to increased rates of drinking and related problems among college students. Recently, research has expanded this concept to specific events (i.e., holiday drinking and caregiving). No studies to date explore the concept of normative perceptions of alcohol use for spring break. This is a known time of risk for excessive alcohol use, and understanding whether students' perceptions of drinking norms, variables that influence norms perceptions (gender, ethnicity, and travel and alcohol-related attitudes) are related to their own drinking and related consequences and intentions offers. We tested the literature by assessing 58 normative perceptions (10 alcohol or not) these perceptions are accurate and (2) the relationship to students' own drinking and related consequences. A random sample (N = 1,583) of students were asked about

Keywords: College students, drinking norms, event-specific drinking, spring break. Received 24 August 2012; Accepted 12 October 2014; Published online 18 November 2014

Geisner, I., Mittman, A., Sheng, E., Herring, T., Lewis, M., & Lee, C. (2015). Understanding college student spring break drinking: Demographic considerations, perceived norms and travel characteristics. Addiction Research & Theory, 23, 238-245.

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• Sample of 1,583 college students

- **Actual drinking**
- Males: 17.5 drinks per week
- Females: 9.0 drinks per week

- **Perceived norms**
- Males: 34.0 drinks per week
- Females: 29.4 drinks per week

• For those that went on a trip, perceived norms were related to their own actual alcohol consumption

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## Normative misperceptions can be corrected

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Journal of Consulting and Clinical Psychology

### Randomized Controlled Trial of a Spring Break Intervention to Reduce High-Risk Drinking

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Lisa A. Garberson, Jason R. Kilmer, and Mary E. Larimer

**Objective:** Although recent media have documented high-risk drinking occurring during Spring Break (SB), particularly on SB days with friends, potential intervention strategies are few. In the present study, we evaluated the efficacy of a team-specific preventive strategy for reducing SB drinking among college students. Participants were assigned to a normative-only control group, as well as enhanced feedback of peers to intervention and levels of intervention delivery (in-person or web). Methods: Participants included 750 undergraduate (50% women, average age = 20.5 years) attending to part of a SB trip with friends, as well as to drink heavily on a later day of SB. Participants completed pretests on SB and were randomized to 1 of 6 intervention conditions: SB in-person brief alcohol training and intervention (College Student BASICS, SB in-person), SB web BASICS, SB in-person BASICS, SB web BASICS with feedback, SB web BASICS with feedback, or an attention control condition. Follow-up assessment was completed 1 week after SB. Results: Although the SB web BASICS with feedback condition produced the largest decrease in normative beliefs, drinking SB drinking, results revealed significant intervention effects for SB in-person BASICS in reducing SB drinking, particularly on SB days. Follow-up analyses indicated that change in descriptive norms

Lee, C.M., Neighbors, C., Lewis, M.A., Kayser, D., Mittman, A., Geisner, I.M., Atkins, D.C., Zheng, C., Garberson, L.A., Kilmer, J.R., & Larimer, M.E. (2014). Randomized controlled trial of a spring break intervention to reduce high-risk drinking. *Journal of Consulting and Clinical Psychology, 82*, 189-201.

- 783 undergrads planning on a spring break trip with friends and intending to drink heavily
- Tested 6 conditions:
  - Control
  - BASICS
  - SB BASICS
  - SB BASICS + FI
  - SB web BASICS
  - SB web BASICS + FI

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- Only SB BASICS had significant effects – fewer drinks consumed, lower BAC over all days and peak day

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**Abstract:** Although recent studies have demonstrated high-risk drinking screening during Spring Break (SB), particularly on SB days with limited available interventions, studies are few to the general public. We evaluated the efficacy of a one specific prevention strategy for reducing SB drinking among college students, consistent to general prevention strategies and an intervention-only control group. We used an ecological behavior change approach to design and test an intervention during the period in which alcohol consumption is highest (SB). Participants included SB undergraduates (N = 1,000) who were screened for SB risk and randomized to either a SB day intervention or a control group. The SB day intervention was a 10-day intervention that included an SB day intervention (SB) and a 9-day intervention (SB) in person Brief Alcohol Screening and Intervention in College Student (BASICS) format. Data collection at baseline (SB) and SB (SB) was conducted with BASICS with SB and SB (SB) with SB and SB (SB) with SB. An attention control condition (SB) was included in the SB day intervention. Results indicated that the SB day intervention was significantly more effective than the SB day intervention in reducing SB drinking, especially among those who were not screened at baseline or were screened at baseline but not screened at SB. These results indicate that the SB day intervention is a promising strategy for reducing SB drinking.

Lee, C.M., Neighbors, C. Lewis, M.A., Kayson, D., Mittman, A., Gelsner, I.M., Atkins, D.C., Zheng, C., Garberson, L.A., Kilmer, J.R., & Larimer, M.E. (2014). Randomized controlled trial of a spring break intervention to reduce high-risk drinking. *Journal of Consulting and Clinical Psychology, 82*, 189-201.

- When looking at mediators, changes in Spring Break drinking norms led to reductions in drinking
- Not the case for changes in drinking intentions or changes in expectancies

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Screening

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- S**creening: Universal screening for quickly assessing use/severity/risks
- B**rief **I**ntervention: Motivational/awareness-raising intervention to prompt contemplation of or commitment to change
- R**eferral to **T**reatment: Referral to specialty care or follow-ups

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**Screening**

- Validated measures screening for substances with high overdose potential can help identify people who might otherwise slip through the cracks
- Can even assess for connection to those who pose an overdose risk

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***Role of environment***

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- Consider ways to get information about new environments in people's hands
- Can be distributed at (or around) high-risk times of year
- Gordie Center at University of Virginia:  
<https://www.youtube.com/watch?v=Jq4U4O8o4sg>

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*Any one thing  
we do is a piece  
of an overall  
puzzle*

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Margaret Mead



- “What is the first sign you look for to tell you of an ancient civilization? How do you know they were civilized? Was it some instrument, a tool, an article of clothing?”
- “A healed femur.”

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  - Washington Poison Center

Jason Kilmer – [jkilmer@uw.edu](mailto:jkilmer@uw.edu)

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