

How Do We Know What to Do? Prioritizing Prevention Topics and Selecting Effective Strategies



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Overview of this presentation

- **Special thank you to Eric Davidson and Annabelle Escamilla**
- **Thank you to all of you for doing what you do to support your community**

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What I said I would cover...

We will discuss approaches to prevention efforts around alcohol and other drug use, including considering what to address and consider when there's pressure to do a particular program or focus on a particular topic. We will review ways in which NIAAA's CollegeAIM can be used to facilitate building a campus's strategic plan for prevention, intervention, and policy. Finally, we will talk about prioritizing prevention topics and considering ways to maximize resources, particularly when there are emerging or "hot topics" that seem to get attention.

- (1) Understand how NIAAA's College Alcohol Intervention Matrix (CollegeAIM) can be used to guide conversations about prevention priorities on campus.
- (2) Identify approaches with higher effectiveness in reducing alcohol use and related consequences.
- (3) Consider prevention strategies for behaviors with lower frequency but high impact to students (and those around them)

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Fry (1945)

- "Wine is often served at fraternity dinners in the hope that members will learn to appreciate proper wines with food." (p. 244)
- "Although milk and soft drinks are extremely popular in American colleges – the consumption of them being greater than other beverages – a special snobbism is sometimes to be associated with the appreciation and knowledge of fine wines." (p. 244)



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Fry (1945)

- Warns that a "state of intoxication" could be the primary purpose of some events.
- Discusses the opportunity for returning veterans to attend college, and speculates on the role alcohol might play related to coping when under pressure in the college setting.

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Larger, even national studies,
investigate the issue

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Strauss & Bacon (1953)

- First widespread study of drinking at 27 colleges



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Calls for effective prevention options are made, particularly as laws change

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Just Say No

- "Just Say No..."
- In 1982, while speaking with schoolchildren in Oakland, California, First Lady Nancy Reagan was asked what to do if someone were to be offered drugs.
- She answered, "Well, you just say no."
- By the end of President Reagan's term, over 12,000 "Just Say No" clubs had started



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Just Say No

- However, research at the time on prevention strategies acknowledged that while knowledge might increase following involvement in a program, attitudes were more difficult to change, and most studies showed no change in actual patterns of use (Hanson, 1982).

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College Alcohol Study: Differences from 1979 to 1985

- Task force or committee focusing on alcohol education and prevention
 - 1979: 37%
 - 1985: 64%
- Dedicated alcohol education coordinator or specialist
 - 1979: 14%
 - 1985: 48%

Gadaleta & Anderson (1986)

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College Alcohol Study: Differences from 1979 to 1985

- Top 3 most frequently endorsed activities:
 - Articles in campus publications (76%)
 - Films shown on campus (63%)
 - Speakers (63%)
- *There was recognition of the need to address college student drinking, yet no clear guidelines on how to best do this.*

Gadaleta & Anderson (1986)

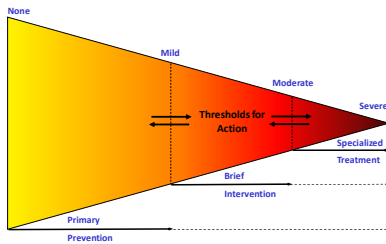
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www.collegedrinkingprevention.gov

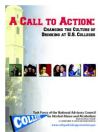
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Spectrum of Intervention Response



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NIAAA College Drinking Task Force Tier System Emphasized Need to Use Evidence-Based Strategies, Measure Outcomes



- Tier 1:** Evidence of effectiveness among college students (≥2 studies supporting efficacy)
- Tier 2:** Evidence of success with general adult population that could be applied to college environments
- Tier 3:** Evidence of logical and theoretical promise, but require more comprehensive evaluation
- Tier 4:** Evidence of ineffectiveness

www.CollegeDrinkingPrevention.gov

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G. Alan Marlatt, Ph.D.
November 26, 1941-March 14, 2011



"In a world so often focused on "treating" addiction with tough love, Marlatt showed through his work and his life that kindness simply works better."

Time Magazine, March 15, 2011

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"What Colleges Need to Know Now: An Update on College Drinking Research" (2007)



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COLLEGEAIM



www.collegedrinkingprevention.gov/CollegeAIM

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COLLEGEAIM



www.collegedrinkingprevention.gov/CollegeAIM

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Horizontal lines for notes on page 28.

COLLEGEAIM

Overarching Goal of College AIM

Increase the likelihood that research will inform interventions to address drinking on campuses by providing a framework for schools to compare and select evidence-based intervention strategies.

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NIAAA's CollegeAIM

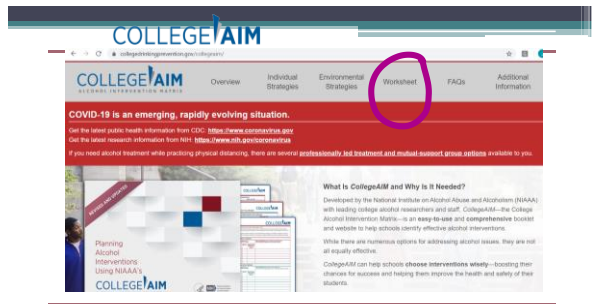
- How can schools and/or coalitions use CollegeAIM?
 - Review individual and environmental strategies to compare approaches
 - Find new evidence-based options to replace less effective strategies or address gaps
 - Anyone reviewing CollegeAIM can use the interactive strategy planning worksheet to select a combination of approaches based on needs and budget

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Horizontal lines for notes on page 30.

Start with a compilation of what is already offered

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www.collegedrinkingprevention.gov/CollegeAIM

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STRATEGY PLANNING WORKSHEET

Use this worksheet as a download or copy to capture your thoughts about your current strategies and how new ones you'd like to explore. Keep it handy. **Directions:** Which alcohol-related issues are of most concern to your campus? Make sure your school's needs and goals are well defined and keep them front and center as you fill in the worksheet. **Effectiveness:** Does research show that your current strategies are effective in addressing your priority issues? What others be more effective? **Resources:** How do you estimate the resources you can use for your available resources. When a balance is possible, between individual and environmental-level strategies, and between strategies that will face the barriers and can be put in place quickly and others that may take longer to implement. Consider the financial cost relative to the program's expected effectiveness and the approximate percentage of the student body that the strategy will reach.

CURRENT STRATEGIES						
Strategy Name (and the role of the sponsor from CollegeAIM if applicable)	Individual or Environmental?	CollegeAIM Rating	Effectiveness	Cost	Barriers	Notes and Next Steps (How is it being used? How is it most effective? Are resources enough? Can it be more effective?)
	-50	-100				
POSSIBLE NEW STRATEGIES						
Strategy Name (and the role of the sponsor from CollegeAIM)	Individual or Environmental?	CollegeAIM Rating	Effectiveness	Cost	Barriers	Notes and Next Steps (How is it being used? How is it most effective? Are resources enough? Can it be more effective?)
	-50	-100				

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Then, consult College AIM!

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

COLLEGE AIM

COVID-19: Combined program and staff costs for adoption/implementation and maintenance

Effectiveness	Costs	Savings	Public Health Reach	Research Amount	Primary Modality
High	Low	High	High	High	High
Medium	Medium	Medium	Medium	Medium	Medium
Low	Low	Low	Low	Low	Low

Legend

Effectiveness rating: High, Medium, Low

Costs: High, Medium, Low

Savings: High, Medium, Low

Public Health Reach: High, Medium, Low

Research Amount: High, Medium, Low

Primary Modality: High, Medium, Low

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ENVIRONMENTAL-LEVEL STRATEGIES: Revised and Updated*
 Estimated Relative Effectiveness, Costs, and Savings, Public Health Reach, and Research Amount/Quality

COLLEGE AIM

COVID-19: Combined program and staff costs for adoption/implementation and maintenance

Effectiveness	Costs	Savings	Public Health Reach	Research Amount/Quality
High	Low	High	High	High
Medium	Medium	Medium	Medium	Medium
Low	Low	Low	Low	Low

Legend

Effectiveness rating: High, Medium, Low

Costs: High, Medium, Low

Savings: High, Medium, Low

Public Health Reach: High, Medium, Low

Research Amount/Quality: High, Medium, Low

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COLLEGEAIM STRATEGY PLANNING WORKSHEET

Use this worksheet or download it to explore your thoughts about your current strategies and new ones you'd like to explore. Keep or modify.

Purpose: Which alcohol-related values are of most concern to your campus? Make sure your school's needs and goals are well defined, and keep them front and center as you fill in the worksheet.

Effectiveness: Does research show that your current strategies are effective in reducing your priority hazard? What affects its effectiveness?

Balance: Realistically assess what you can do with your available resources. Strike a balance, if possible, between individual and environmental-level strategies, and between strategies that will have low barriers and can be put in place quickly and others that may take longer to implement. Consider the financial cost relative to the program's reported effectiveness and the approximate percentage of the student body that the strategy will reach.

Strategy Name (Use the AIM or CIP number for CollegeAIM strategies)	Individual or Environmental?	CollegeAIM Ratings				Notes and Next Steps: Keep in mind "Ready to Lead Effectiveness" and "Complementary strategies?" (Are there other options?)
		Effectiveness	Cost	Barriers	Reach: Broad or Targeted % of students	

Strategy Name (Use the AIM or CIP number for CollegeAIM strategies)	Individual or Environmental?	CollegeAIM Ratings				Notes and Next Steps: (What strategy is being needed? Other research? Can the strategy be put in place for continuing or enhanced?)
		Effectiveness	Cost	Barriers	Reach: Broad or Targeted % of students	

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COLLEGEAIM

Select a strategy to see ratings, references, and potential resources

The image shows the CollegeAIM website interface. The top navigation bar includes 'Home', 'About', 'Environment', 'History', and 'Help'. The main content area is titled 'Environmental-Level Strategies' and lists several strategies. A red arrow points from the text 'Select a strategy...' to a strategy card. The card details the '2015 Environmental-Level Strategy: High-Intensity Campaign' and includes a 'Strategy Details' section with a list of references and resources.

www.collegedrinkingprevention.gov/CollegeAIM

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COLLEGEAIM

Click on strategies to print for reference or discussion

This image is identical to the one above, showing the CollegeAIM website with a red arrow pointing to a strategy card. It displays the 'Environmental-Level Strategies' section and the 'Strategy Details' for the '2015 Environmental-Level Strategy: High-Intensity Campaign', including a list of references and resources.

www.collegedrinkingprevention.gov/CollegeAIM

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COLLEGEAIM

See detailed answers to frequently asked questions



www.collegedrinkingprevention.gov/CollegeAIM

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

COLLEGEAIM

	Lower costs \$	Higher costs \$\$\$
High	<p>ES0-04 Restrict liquor licenses/retailers (2013, 4, 4*)</p> <p>ES0-05 Restrict liquor age (2013, 4, 4, 4*)</p>	<p>ES0-01 Increase age of drinking age (2013, 4, 4*)</p> <p>ES0-02 Increase age of drinking age (2013, 4, 4*)</p>
Medium	<p>ES0-07 Increase alcohol taxes on basis of alcohol sales (2013, 4, 4*)</p> <p>ES0-08 Increase alcohol taxes on basis of alcohol sales (2013, 4, 4*)</p> <p>ES0-09 Increase alcohol taxes on basis of alcohol sales (2013, 4, 4*)</p>	<p>ES0-03 Increase alcohol taxes on basis of alcohol sales (2013, 4, 4*)</p> <p>ES0-06 Increase alcohol taxes on basis of alcohol sales (2013, 4, 4*)</p> <p>ES0-10 Increase alcohol taxes on basis of alcohol sales (2013, 4, 4*)</p>
Low	<p>ES0-11 Increase alcohol taxes on basis of alcohol sales (2013, 4, 4*)</p> <p>ES0-12 Increase alcohol taxes on basis of alcohol sales (2013, 4, 4*)</p>	<p>ES0-08 Increase alcohol taxes on basis of alcohol sales (2013, 4, 4*)</p> <p>ES0-13 Increase alcohol taxes on basis of alcohol sales (2013, 4, 4*)</p>

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Some of the most effective strategies are carried out in the communities and states surrounding the campuses, such as enforcing the minimum legal drinking age. Campus leaders can be influential in bringing about off-campus environmental changes that protect students.

To achieve success off campus, partner with leaders and coalitions in your community and state. Building these partnerships takes time, so you may want to make it part of a long-term plan. For models of campus-community collaboration, see the Frequently Asked Questions section of the *CollegeAIM* website (see URL below).

CollegeAIM, page 6

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Environmental strategies/factors

- Increased enforcement of minimum drinking age laws.
 - Studies show that increased enforcement, particularly with compliance checks on retail outlets, cuts rates of sales to minors by at least 50 percent.

NIAAA (2002); NIAAA (2015); NIAAA (2020)

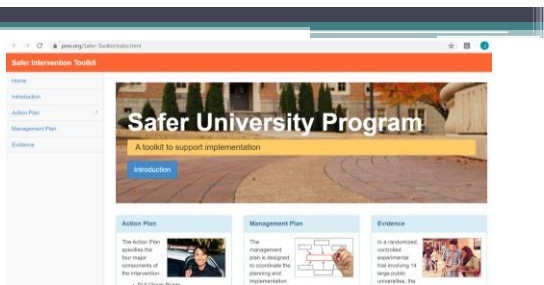
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Environmental strategies/factors

- Restrictions on alcohol retail outlet density.
 - Higher density of alcohol outlets is associated with higher rates of consumption, violence, other crime, and health problems.
 - Higher level of drinking rates associated with larger number of businesses selling alcohol within one mile of campus

NIAAA (2002); NIAAA (2015); NIAAA (2020)

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<https://prev.org/Safer-Toolkit/index.html>

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	Lower costs \$	Mid-range costs \$\$	Higher costs \$\$\$	
Higher effectiveness •••	ND-3 Normative re-education: Electronic/mailed personalized normative feedback (PNF) —Generic/other* [A, B, ****, online/offline]	ND-9 Skills training, alcohol focus: Goal/intention setting alone* [A, I, **, P1]	ND-19 Multi-component education-focused program (MCEFP): AlcoholEdu® for College [A, B, **, online]	
	ND-10 Skills training, alcohol focus: Self-monitoring/self-assessment alone* [A, I, ****, online/offline]	ND-14 Skills training, alcohol plus general life skills: Alcohol Skills Training Program (ASTP) [A, I, ****, P1]	Interventions Delivered by Health Care Professionals Strategies in which health care professionals identify and help students whose drinking patterns put them at risk for harm, or who are already experiencing alcohol-related problems.	
	ND-18 Personalized feedback intervention (PFI): eCHECKUP TO GO (formerly, e-CHUG) [A, B, ****, online]	ND-18 Brief motivational intervention (BMI): In-person—Individual (e.g., BASICS) [A, I, ****, P1]		ND-27 Screening and behavioral treatments
		ND-26 Personalized feedback intervention (PFI): Generic/other* [A, B, ****, online]		

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Prevention strategies:

Personalized Normative Feedback (PNF) and Personalized Feedback Intervention (PFI)

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Norms Clarification

- Examines people’s perceptions about:
 - Injunctive Norms:
 - Attitudes
 - Acceptability of behaviors
 - Descriptive norms
 - Perceptions about the prevalence of substance use among peers
 - Perception about the rate of substance use by peers



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The Alcohol Skills Training Program (ASTP)

- A skills-training approach using motivational interviewing techniques in its delivery with a focus on drinking in less dangerous and less risky ways for those who make the choice to drink.

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What is Harm Reduction?

- The most harm-free or risk-free outcome following a harm reduction intervention *is* abstinence
- *Any steps toward reduced risk are steps in the right direction*

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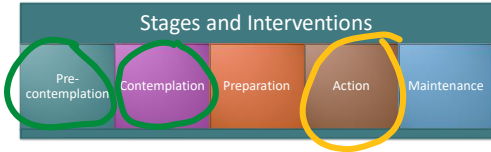
How are these principles implemented in an intervention with college students?

- Legal issues are acknowledged.
- Skills and strategies for abstinence are offered.
- However, if one makes the choice to drink, skills are described on ways to do so in a less dangerous and less risky way.
- A clinician, facilitator, student affairs professional, or program provider must elicit personally relevant reasons for changing.
 - This is done using the Stages of Change model and Motivational Interviewing.

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The Stages of Change Model

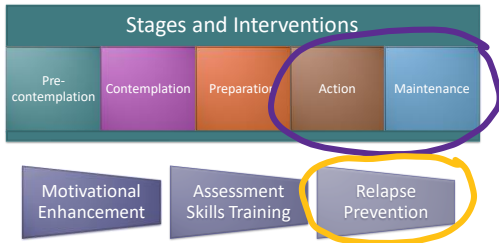
(Prochaska & DiClemente, 1982, 1984, 1985, 1986)



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The Stages of Change Model

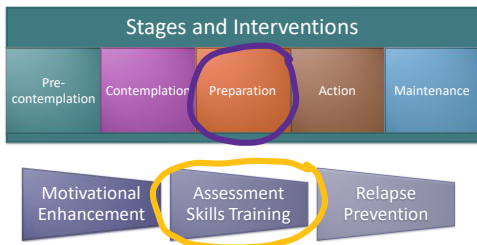
(Prochaska & DiClemente, 1982, 1984, 1985, 1986)



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The Stages of Change Model

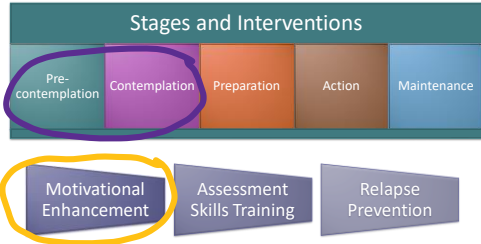
(Prochaska & DiClemente, 1982, 1984, 1985, 1986)



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The Stages of Change Model

(Prochaska & DiClemente, 1982, 1984, 1985, 1986)



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Motivational Interviewing

Basic Principles

(Miller and Rollnick, 1991, 2002)

1. Express Empathy
2. Develop Discrepancy
3. Roll with Resistance
4. Support Self-Efficacy



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Blood Alcohol Level

- .02% Relaxed
- .04% Relaxation continues, Buzz develops
- .06% Cognitive judgment is impaired

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Specific Tips for Reducing the Risk of Alcohol Use

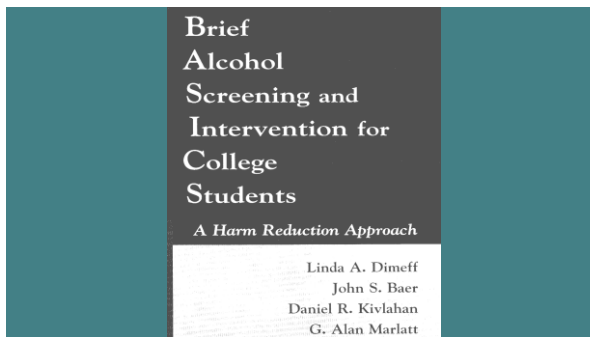
- Set limits
- Eat prior to or while drinking
- Keep track of how much you drink
- Space your drinks
 - Alternate alcoholic drinks w/non-alcoholic drinks
- Avoid trying to “out drink” or keep up with others
- Avoid or alter approach to drinking games
- If you choose to drink, drink slowly
- Use a designated driver
- Don't accept a drink when you don't know what's in it
- Have a friend let you know when you've had enough
- Avoid combining alcohol with cannabis (or other substances)

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	Lower costs \$	Mid-range costs \$\$	Higher costs \$\$\$
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What do we do with cannabis use?

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

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

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(1) Consider screening in Health & Counseling Centers

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(2) Go a step further with SBIRT, especially since motivational enhancement-based brief interventions show promise

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Screening: Universal screening for quickly assessing use/severity/risks

Brief **I**ntervention: Motivational/awareness-raising intervention to prompt contemplation of or commitment to change

Referral to **T**reatment: Referral to specialty care or follow-ups

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In-person, personalized feedback interventions have shown reductions in use, time spent high, and consequences (e.g., Lee, et al., 2013)

Lee, C.M., Kilmer, J.R., Neighbors, C., Atkins, D.C., Zheng, C., Walker, D.D., & Larimer, M.E. (2013). Indicated prevention for college student marijuana use: A randomized controlled trial. *Journal of Consulting and Clinical Psychology, 81*, 702-709.

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(3) Correct misperceived norms

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• **Correct Normative Misperceptions**

- Most people are not using
- Most people are not driving under the influence
- The more people use, the more they think others are using
 - Personalized normative feedback
 - Personalized feedback interventions
 - Social norms campaigns

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Mike Graham-Squire & Neighborhood House: MostSteerClear

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Mike Graham-Squire & Neighborhood House: MostSteerClear

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(4) If considering harm reduction approaches, be aware of recommendations for “lower risk” rather than “low risk” use

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journal homepage: www.elsevier.com/locate/drugpo

Review

Lower-Risk Cannabis Use Guidelines (LRCUG) for reducing health harms from non-medical cannabis use: A comprehensive evidence and recommendations update

Benedikt Fischer^{a,b,c,d}, Tessa Robinson^{e,f}, Chris Bullen^g, Valerie Curran^h, Didier Jutra-Awadⁱ, Maria Elena Medina-Mora^j, Rosalie Liccardo Pacula^k, Jürgen Rehm^{l,m}, Robin Room^{n,o}, Wim van den Brink^o, Wayne Hall^o

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ⁱResearch Centre of the Centre for Applied Research in Mental Health and Addiction, Vancouver, Canada
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General Precaution A:

“There is no universally safe level of cannabis use; thus, the only reliable way to avoid any risk for harm from using cannabis is to abstain from its use.”

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Among other recommendations:

- People who use cannabis should use low potency cannabis products
- “Overall, there is no categorically ‘safe’ route of use for cannabis and each route option brings some level of distinct risks that needs to be taken into account for use. “ That said, smoking is particularly risky.
- Keep use occasional (no more than 1 or 2 days a week, weekend only)
- If a person notices impacts to attention, concentration, or memory, “consider temporarily suspending or substantially reducing the intensity (e.g., frequency/potency) of their cannabis use.”
- Avoid driving while under the influence (waiting at least 6-8 hours after inhaling, 8-12 hours after use of edibles)

94

Recommendation #11: Some specific groups of people are at elevated risk for cannabis use-related health problems because of biological pre-dispositions or co-morbidities. They should accordingly (and possibly on medical advice as required) avoid or adjust their cannabis use. Higher risks for harm extend to individuals with a genetic predisposition (e.g., a first-degree family or personal history) for, or an active psychosis, mood (e.g., depressive) disorder, or substance use disorder.

95

(5) Consider what you are offering to those 21 and older

96

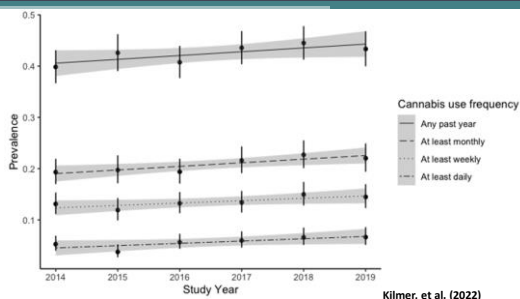
Kilmer, J.R., Rhew, I.C., Guttmanova, K., Fleming, C.B., Hultgren, B., Gilson, M.S., Cooper, R.L., Dilley, J., & Larimer, M.E. (2022). Cannabis use among young adults in Washington State after legalization of nonmedical cannabis. *American Journal of Public Health*, 112, 638-645.

- n=12,963 young adults in Washington over 6 time points
- Included covariates for:
 - Sex assigned at birth
 - Race
 - Ethnicity
 - Geographic region of the state
 - Age
 - Attending 4 year college
 - Full time employment status
- Computed post-stratification weights to further control for distribution across the samples

Cannabis Use Among Young Adults in Washington State After Legalization of Nonmedical Cannabis

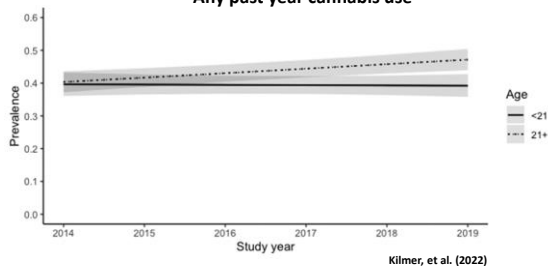
Abstract
 Objectives: Cannabis legalization in Washington State has led to increased use among young adults. This study examines trends in cannabis use among young adults in Washington State from 2014 to 2019, focusing on nonmedical use. Methods: Data from the Washington State Longitudinal Study (WSLS) were analyzed using generalized estimating equations (GEE) to estimate the prevalence of cannabis use among young adults (ages 18-29) from 2014 to 2019. Results: The prevalence of any past year cannabis use increased from 40% in 2014 to 44% in 2019. The prevalence of at least monthly use increased from 20% to 23%, at least weekly use from 13% to 15%, and at least daily use from 6% to 8%. Conclusions: Cannabis use among young adults in Washington State has increased since legalization. The increase in use is most pronounced for at least monthly use. The increase in use is also most pronounced for those aged 18-21.

97



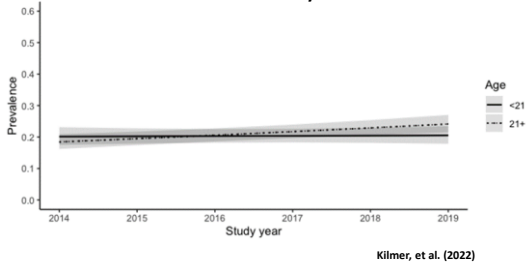
98

Any past year cannabis use



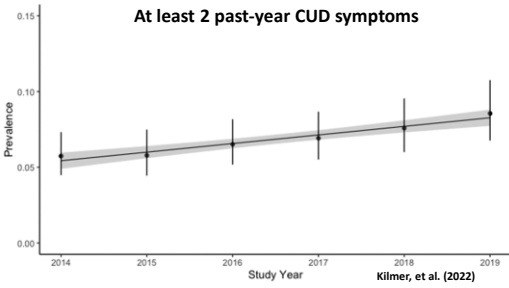
99

At least monthly cannabis use



100

At least 2 past-year CUD symptoms



101

(6) Realize the amazing influence parents, caregivers, and guardians can have

102

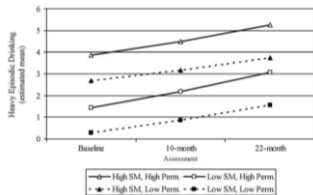
Examining role of parents and peers

- Fairlie, Wood, & Laird (2012) collected data during summer before starting college, 10 month follow-up (spring semester of first year), and 22 month follow-up (spring semester of second year)
- Looked at social modeling (e.g., # of close friends who drink heavily, perceived friend approval of drinking and getting drunk) and parental permissiveness

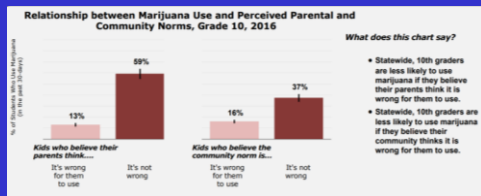


103

Heavy episodic drinking as a function of high or low social modeling + high or low parental permissiveness



104



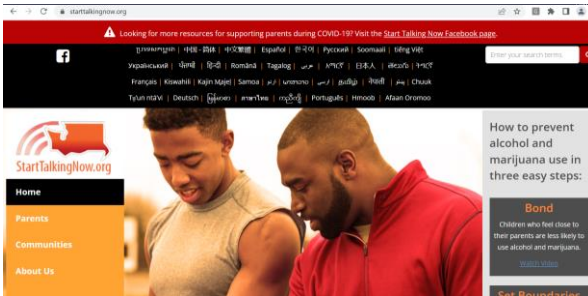
105

Decreasing trend significant
Increasing trend significant

WHERE DO PEOPLE GET CANNABIS, 18-20 year olds

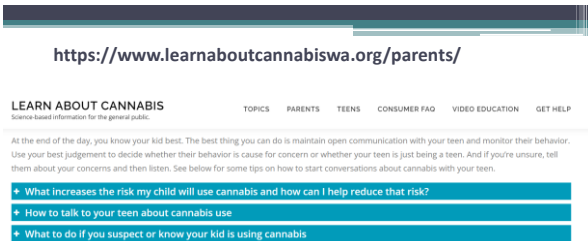
	Cohort 1	Cohort 2	Cohort 3	Cohort 4	Cohort 5	Cohort 6	Cohort 7	Cohort 8	Cohort 9	Cohort 10
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
From friends	72.86%	76.24%	69.68%	77.40%	63.75%	60.74%	66.87%	65.62%	59.68%	58.06%
Gave money to someone	23.29%	26.47%	34.72%	41.45%	39.29%	43.17%	40.55%	39.80%	37.62%	33.36%
Got it from someone w/ medical card	17.60%	14.12%	4.30%	5.24%	2.79%	2.82%	4.27%	4.58%	4.10%	1.62%
Got it from a medical dispensary	13.65%	18.99%	5.58%	4.72%	6.50%	8.28%	8.41%	12.03%	3.40%	7.53%
Got it at a party	22.99%	22.14%	23.08%	24.92%	20.12%	22.91%	8.82%	24.67%	16.43%	10.98%
Got it from family	5.65%	5.18%	11.75%	9.75%	11.24%	10.92%	13.49%	7.09%	11.36%	9.67%
Got it some other way	11.64%	4.12%	6.12%	9.02%	7.30%	6.21%	5.04%	6.24%	3.62%	4.28%
Bought from retail store	0.99%	4.58%	1.73%	1.92%	2.03%	3.55%	1.58%	1.03%	3.08%	1.53%
Got it from parents w/ permission	5.75%	6.02%	12.33%	10.44%	11.69%	12.91%	13.08%	13.91%	12.38%	15.77%
Grew it themselves	1.91%	1.15%	1.65%	0.23%	1.47%	2.78%	1.64%	0.42%	0.59%	0.56%
Stole it from store/dispensary	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	4.16%	2.40%	0.00%	0.57%

106



Available in 37 languages at StartTalkingNow.org

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108

http://www.collegeparentsmatter.org



109

route | collegeparentsmatter.org/cannabis.html

As a parent, what should I do?

The guidance that might be most useful for you differs by the level of involvement with cannabis.
How would you describe your grown child's cannabis use?
Click on one of the buttons below for discussion points and examples of what to say.

I'm not sure if my child is using cannabis

Click for suggestions ▼

My child uses cannabis, but I'm not sure how much or how often

Click for suggestions ▼

My child uses cannabis regularly

Click for suggestions ▼

110

http://www.collegeparentsmatter.org

- 1) Don't be afraid to start the conversation
- 2) As a family member, you are allowed to disapprove of substance use. Give yourself permission to disapprove.
- 3) Banish any fear that your disapproval is naïve.
- 4) Focus on one message during the conversation.
- 5) Reject the myth that discouraging substance use is useless because everyone is doing it.
- 6) Make communication a regular activity.
- 7) Recognize the power of your influence.

111

With other substances, go where your data lead you

112

Rates of substance use by college students are very well understood and established

113

Monitoring the Future Study
(2022 survey data for full-time college students)

- **Alcohol**
 - Past 12 months: 80.5%
 - Past 30 days: 62.5%
 - 5+ drinks/past 2 weeks: 27.7%
- **Cannabis**
 - Past 12 months: 40.9%
 - Past 30 days: 22.1%
 - 20+ days/month: 4.7%

Patrick, M. E., Miech, R. A., Johnston, L. D., & O'Malley, P. M. (2023). *Monitoring the Future Panel Study annual report: National data on substance use among adults ages 19 to 60, 1976-2022*. Monitoring the Future Monograph Series. Ann Arbor, MI: Institute for Social Research, University of Michigan.
<https://doi.org/10.7825/rnr-vm.06.585140.002.07.0002.2023>

114

Monitoring the Future Study
(2022 survey data for full-time college students)

- Past year substance use endorsed by at least 5.0% of students:
 - Vaping nicotine: 26.4%
 - Cigarettes: 15.6%
 - Tobacco using a hookah: 5.6%
 - Any prescription drug: 5.6%
 - Hallucinogens: 5.0%

Patrick, M. E., Miech, R. A., Johnston, L. D., & O'Malley, P. M. (2023). *Monitoring the Future Panel Study annual report: National data on substance use among adults ages 19 to 60, 1976-2022*. Monitoring the Future Monograph Series. Ann Arbor, MI: Institute for Social Research, University of Michigan.
<https://doi.org/10.7826/ISR-UM.06.585140.002.07.0002.2023>

115

Monitoring the Future Study
(2022 survey data for full-time college students)

- Past year substance use...other substances of note:
 - Amphetamines: 4.8%
 - Adderall: 3.7%
 - Narcotics other than Heroin: 0.8%
 - Ritalin: 0.2%
 - OxyContin: 0.1%
 - Vicodin: 0.1%
 - Heroin: **

Patrick, M. E., Miech, R. A., Johnston, L. D., & O'Malley, P. M. (2023). *Monitoring the Future Panel Study annual report: National data on substance use among adults ages 19 to 60, 1976-2022*. Monitoring the Future Monograph Series. Ann Arbor, MI: Institute for Social Research, University of Michigan.
<https://doi.org/10.7826/ISR-UM.06.585140.002.07.0002.2023>

116

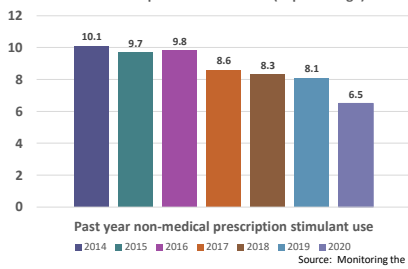
Certainly, non-medical use of prescription medication gets a lot of attention on college campuses

117

Rates of non-medical use of prescription stimulants (NMPS) by college students decreasing over time

118

College Students: Past Year Prevalence of Non-Medical Prescription Stimulant Use (in percentage)



119

Prescription stimulants are largely used with academic motives in mind, but use does not translate to improved GPA

120

Motives for use over past six months (among those with use over the past six months)

- Percentage endorsing "sometimes/half the time," "often/most of the time," or "always/almost always"
- 54.0% To concentrate better while studying
- 52.8% To be able to study longer
- 35.0% To feel less restless while studying
- 28.9% Because it helps increase my alertness
- 18.7% To concentrate better in class
- 13.9% To keep better track of assignments
- 11.2% To feel less restless in class
- 10.7% To feel better
- 9.4% To prevent others from having an academic edge
- 9.1% To get high
- 8.6% To prolong the intoxicating effects of alcohol/substances
- 8.6% Curiosity and experimentation
- 6.4% Because it is safer than street drugs
- 5.9% To lose weight
- 5.1% Other
- 4.3% To counteract the effects of other drugs
- 2.1% Because I'm addicted



Kilmer, et al., (2021)

121

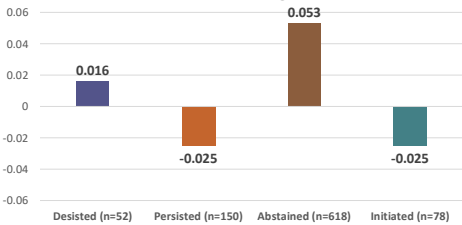
Non-Medical Use of Prescription Stimulants

- Desisted – used in year 2 but didn't in year 3
- Persisted – used in year 2 AND in year 3
- Abstained – didn't use in year 2 nor in year 3
- Initiated – didn't use in year 2 but did in year 3

Arria, A.M., Caldeira, K.M., Vincent, K.B., O'Grady, K.E., Cimini, M.D., Geisner, I.M., Fossos-Wong, N., Kilmer, J.R., Larimer, M.E. (2017). Do college students improve their grades by using prescription stimulants nonmedically? *Addictive Behaviors, 65*, 245-249.

122

Changes in Grade Point Average (GPA) across years 2 and 3 in college

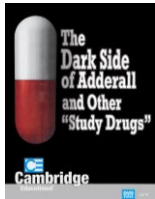


Arria, A.M., Caldeira, K.M., Vincent, K.B., O'Grady, K.E., Cimini, M.D., Geisner, I.M., Fossos-Wong, N., Kilmer, J.R., Larimer, M.E. (2017). Do college students improve their grades by using prescription stimulants nonmedically? *Addictive Behaviors, 65*, 245-249.

123

Media reports or even prevention efforts calling them "study drugs" or "smart pills" feed into the misperception

124



125

So what do we do when we're asked to address non-medical use of prescriptions?

Particularly if the main reason we're asked to address their use is that could be laced with fentanyl?

126

This talk could be 3 minutes long

- **“If we want health, we must promote health.”**
- Jeff Linkenbach

127

This talk could be 3 minutes long


- **If “THE” answer on how to address the opiate epidemic and the immediate threat of fentanyl existed, I’m sure we’d be running to implement it. Certainly, for bystanders, Narcan is a valuable and important piece of the puzzle, and test strips can be a component, too.**

128

This talk could be 3 minutes long


- **Fear based appeals DO NOT work**

129




But what do we do when the data
are scary?

130



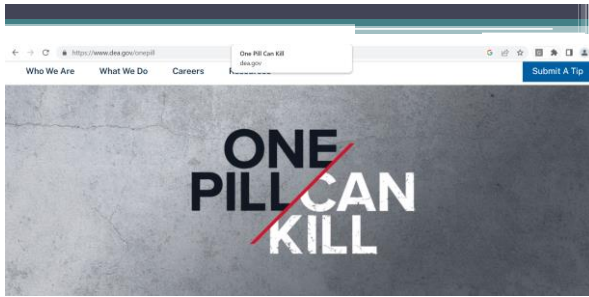
This is a scary substance.
But we can't be "scare tactic-y"

131



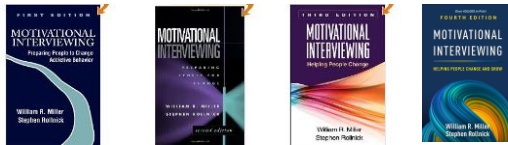
*We are increasingly see warnings that
vary in how blunt they are (and what it
means if we don't follow the warning)*

132



133

Motivational Interviewing



Miller & Rollnick, 1992, 2002, 2012, 2023

134

Allow the data to be confrontational – not us.

The data are what the data are.

135

Defining the issue and opportunities within prevention:

One possible group of people: Those who make intentional choices to use fentanyl

Another possible group of people: Those who ingest something else that, unbeknownst to them, contains fentanyl

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Substance Use & Misuse
Taylor & Francis

ORIGINAL ARTICLE

Nonmedical Use of Prescription Stimulants as a "Red Flag" for Other Substance Use

Jason R. Kilmer^a, Nicole Fossos-Wong^a, Irene M. Geisner^a, Jih-Chang Yeh^a, Mary E. Larimer^a, M. Dolores Cimini^a, Kathryn B. Vincent^a, Hannah A. Allen^a, Angelica L. Barral^a, and Arria A.M. Arria^a

^aCenter for the Study of Health and Risk Behaviors, Department of Psychiatry and Behavioral Sciences, University of Washington, Seattle, Washington, USA; ^bCenter for Behavioral Health Promotion and Applied Research, University at Albany, Albany, New York, USA; ^cCenter on Young Adult Health and Development, Department of Behavioral and Community Health, University of Maryland School of Public Health, College Park, Maryland, USA

ABSTRACT
Background: Nonmedical use of prescription stimulants (NMPS) has increased on college campuses during the past few decades. NMPS is primarily driven by academic achievement motives and normative perceptions exist as well. However, large nationwide studies have not yet been conducted to provide insight into how and why a deeper understanding of the relationship between NMPS and other substance use (e.g. alcohol use, marijuana, etc.). The present study was conducted to lay the foundation for prevention efforts related to NMPS by establishing NMPS prevalence, practices surrounding NMPS, and other substance use. Methods: 11,289 students from seven universities across the U.S. completed a web-based survey assessing NMPS practices and related behaviors. Prevalence and factors associated with NMPS were explored. Results: Analyses revealed a 17% past-year prevalence of NMPS with associated behavioral consequences of past-year NMPS use significantly related to alcohol use, binge drinking and marijuana use, as well as changed classes and affiliation with Greek life. Conclusions: Although most college students do

KEYWORDS
 binge drinking; college students; marijuana use; prescription stimulants; social norms

Kilmer, J.R., Fossos-Wong, N., Geisner, I.M., Yeh, J.-C., Larimer, M.E., Cimini, M.D., Vincent, K.B., Allen, H.A., Barral, A.L., & Arria, A.M. (2021). Non-medical use of prescription stimulants as a "red flag" for other substance use. *Substance Use and Misuse*, 56 (7), 941-949. doi: 10.1080/10826084.2021.1901926

137

Project PHARM: Collecting the data

- **Study of non-medical use of ADHD prescription stimulant medication at 7 schools across the United States**
 - 2,989 undergraduates between 18-25 years of age
 - "In the past 12 months, on how many days have you used an ADHD prescription stimulant non-medically?"
 - 17.2% reported past year use of a prescription ADHD stimulant medication not prescribed to them

Kilmer, J.R., Fossos-Wong, N., Geisner, I.M., Yeh, J.-C., Larimer, M.E., Cimini, M.D., Vincent, K.B., Allen, H.A., Barral, A.L., & Arria, A.M. (2021). Non-medical use of prescription stimulants as a "red flag" for other substance use. *Substance Use and Misuse*, 56 (7), 941-949. doi: 10.1080/10826084.2021.1901926

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Skipping class

- Among those with **no** past year non-medical use of prescription stimulants
 - % skipping at least one class: 34.9% ←
 - Of those with at least 1 skipped class, % who said they skipped due to use of alcohol/other substances: 8.9% ←
- Among those with past year non-medical use of prescription stimulants
 - % skipping at least one class: 54.1% ←
 - Of those with at least 1 skipped class, % who said they skipped due to use of alcohol/other substances: 39.6% ←

Kilmer, J.R., Fossos-Wong, N., Geisner, I.M., Yeh, J.-C., Larimer, M.E., Cimini, M.D., Vincent, K.B., Allen, H.K., Barrall, A.L., & Arria, A.M. (2021). Non-medical use of prescription stimulants as a "red flag" for other substance use. *Substance Use and Misuse*, 56 (7), 941-949. doi: 10.1080/10826084.2021.1901926

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Cannabis use

- Among those with **no** past year non-medical use of prescription stimulants
 - Past year cannabis use: 38.8% ←
 - Past 30-day cannabis use: 23.0% ←
- Among those with past year non-medical use of prescription stimulants
 - Past year cannabis use: 86.0% ←
 - Past 30-day cannabis use: 66.2% ←

Kilmer, J.R., Fossos-Wong, N., Geisner, I.M., Yeh, J.-C., Larimer, M.E., Cimini, M.D., Vincent, K.B., Allen, H.K., Barrall, A.L., & Arria, A.M. (2021). Non-medical use of prescription stimulants as a "red flag" for other substance use. *Substance Use and Misuse*, 56 (7), 941-949. doi: 10.1080/10826084.2021.1901926

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Heavy episodic alcohol use

(4+ drinks last 30 days for women, 5+ drinks last 30 days for men)

- Among those with **no** past year non-medical use of prescription stimulants
 - Women (4+ at least once past 30): 47.1% ←
 - Men (5+ at least once past 30): 47.0% ←
- Among those with past year non-medical use of prescription stimulants
 - Women (4+ at least once past 30): 88.4% ←
 - Men (5+ at least once in past 30): 85.6% ←

Kilmer, J.R., Fossos-Wong, N., Geisner, I.M., Yeh, J.-C., Larimer, M.E., Cimini, M.D., Vincent, K.B., Allen, H.K., Barrall, A.L., & Arria, A.M. (2021). Non-medical use of prescription stimulants as a "red flag" for other substance use. *Substance Use and Misuse*, 56 (7), 941-949. doi: 10.1080/10826084.2021.1901926

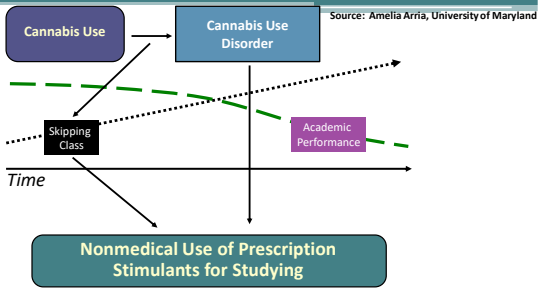
141

Cannabis and cognitive abilities



- **Effects on the brain**
 - **Hippocampus**
 - Attention, concentration, and memory
 - **Research with college students** shows impact on these even 24 hours after last use (Pope & Yurgelun-Todd, 1996)
 - **After daily use**, takes 28 days for impact on attention, concentration, and memory to go away (Pope, et al., 2001)
 - **Hanson et al. (2010):**
 - Deficits in verbal learning (takes 2 weeks before no differences with comparison group)
 - Deficits in verbal working memory (takes 3 weeks before no difference with comparison group)
 - Deficits in attention (still present at 3 weeks)

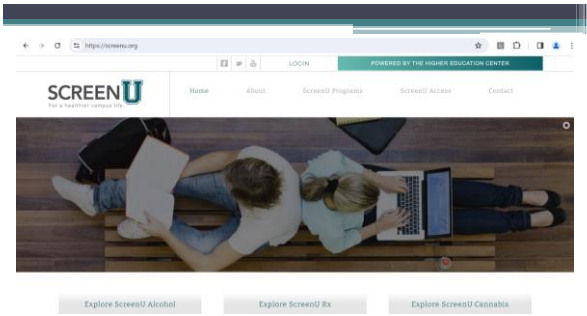
142



143

Idea #1:
There is a value in screening for non-medical use of prescription stimulants: This will likely identify those who also use cannabis and consume alcohol in a high-risk way

144



145



Idea #2:
There is a value in attempting to reduce cannabis use: Per Dr. Arria's theory, with a reduction in cannabis use, it appears non-medical use of stimulants would decline

146



Idea #3:
There is a value in getting people connected to providers who can assess for, diagnose, and treat ADHD and related conditions so that anyone seeking medications is obtaining it legally and with input from a provider.

This would reduce the likelihood of people using "fake" pills

147

— Many fake pills are made to look like prescription opioids such as oxycodone (Oxycontin®, Percocet®), hydrocodone (Vicodin®), and alprazolam (Xanax®); or stimulants like amphetamines (Adderall®).

https://www.dea.gov/sites/default/files/2022-12/DEA-OPCK_FactSheet_December_2022.pdf

148

Idea #4:
There is a value in doing what we can to reduce non-medical use of stimulants, particularly given concerns about fentanyl

149

Rates on campus

We asked you what percentage of students at █████ used a stimulant non-medically in the last year. Your estimate was:

40% ESTIMATION

Actual percentage of █████ students using a stimulant non-medically in the last year was...

22%

How did this match with your prediction?

This research was supported by a grant from the National Institute on Drug Abuse (U01DA040219) (PIs: Irene Geisner, Jason Kilmer, Amelia Arria, & Dolores Cimini)

150

How you see your academic-related skills

You told us the following about these different academic areas.



Time Management

Your current time management skills are something you would like to improve a bit

ACCEPTABLE

- It's nothing you would like to improve a bit
- It's something you would like to improve a bit
- It's something you would like to improve a great deal



Study Skills

Your current study skills are something you would like to improve a bit

ACCEPTABLE



Avoiding Procrastination

Your abilities to avoid procrastination are something you would like to improve a bit

ACCEPTABLE

This research was supported by a grant from the National Institute on Drug Abuse (U01DA040219) (PIs: Irene Geisner, Jason Kilmer, Amelia Arria, & Dolores Cimini)

151

Even in a sample with past year non-medical use of prescription stimulants, past 6-month prevalence rates declined over time across the whole sample:

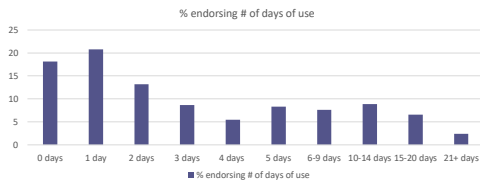
- Percentage of participants reporting non-medical use of prescription stimulants on at least one day in the past 6 months
 - Baseline: 81.9%
 - 6-month follow-up: 51.6%
 - 12-month follow-up: 52.2%

This research was supported by a grant from the National Institute on Drug Abuse (U01DA040219) (PIs: Irene Geisner, Jason Kilmer, Amelia Arria, & Dolores Cimini)

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On average, frequency of past 6-month non-medical use was less than once per month

- At baseline, in past 6 months, a total of 74.6% of participants reported either no use at all or use no more than 5 days (i.e., less than a once per month average).

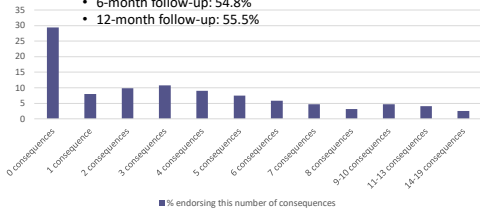


This research was supported by a grant from the National Institute on Drug Abuse (U01DA040219) (PIs: Irene Geisner, Jason Kilmer, Amelia Arria, & Dolores Cimini)

153

Consequence endorsement was very low

- Participants with no consequences/harms in past six months:
 - Baseline: 29.5%
 - 6-month follow-up: 54.8%
 - 12-month follow-up: 55.5%

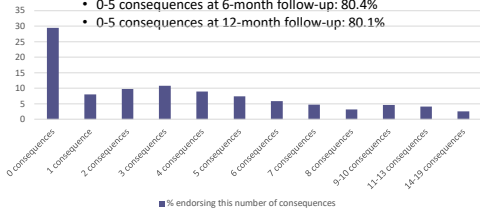


This research was supported by a grant from the National Institute on Drug Abuse (U01DA040219) (PIs: Irene Geisner, Jason Kilmer, Amelia Arria, & Dolores Cimini)

154

Consequence endorsement was very low

- Although up to 19 consequences could be endorsed...
 - 0-5 consequences at baseline: 74.5%
 - 0-5 consequences at 6-month follow-up: 80.4%
 - 0-5 consequences at 12-month follow-up: 80.1%



This research was supported by a grant from the National Institute on Drug Abuse (U01DA040219) (PIs: Irene Geisner, Jason Kilmer, Amelia Arria, & Dolores Cimini)

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Norms were changed for those who received feedback compared to those who did not

- **Negative binomial GLM**
 - **Past year non-medical use of prescription stimulants**
 - Significant at 6 months (p<.001)
 - Significant at 12 months (p<.01)
 - Significant linear trend (p<.001)
 - **Past month cannabis use**
 - Significant at 6 months (p<.001)
 - Significant at 12 months (p<.001)
 - Significant linear trend (p<.001)
 - **No treatment effect was observed for normative perceptions of alcohol use**

This research was supported by a grant from the National Institute on Drug Abuse (U01DA040219) (PIs: Irene Geisner, Jason Kilmer, Amelia Arria, & Dolores Cimini)

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Intervention effects at 6 month for non-medical use of prescription stimulants

- Negative binomial GLM models showed significant effect at 6-month follow-up
 - PFI participants reduced non-medical use of prescription stimulants at a greater rate than control group (p<.05%)
 - No significant findings at 12 months or in linear trend
- No effect on consequences
- No effect on cannabis use or alcohol use

This research was supported by a grant from the National Institute on Drug Abuse (U01DA040219) (PIs: Irene Geisner, Jason Kilmer, Amelia Arria, & Dolores Cimini)

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• What do we make of our results?

- **Everyone decreased over time – holds with trends in the US**
 - Good thing from a public health standpoint!
- **Already a relatively low baseline behavior**
 - When only using 1-5 times in past 6 months, not a lot of room to change
- **Relatively few harms experienced**
 - Challenging in a harm reduction focused intervention

This research was supported by a grant from the National Institute on Drug Abuse (U01DA040219) (PIs: Irene Geisner, Jason Kilmer, Amelia Arria, & Dolores Cimini)

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• What do we make of our results?

- **What we primarily addressed and focused on did change**
 - Perceived norms
 - Non-medical use of prescription stimulants, though changes did not persist beyond the 6 month follow-up
- **These are students reporting poly-substance use**
 - May need something more intensive than a web-based intervention (and never got the chance to test that)

This research was supported by a grant from the National Institute on Drug Abuse (U01DA040219) (PIs: Irene Geisner, Jason Kilmer, Amelia Arria, & Dolores Cimini)

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Idea #5:

There is a similar value in doing what we can to reduce non-medical use of opiates in general, given these same concerns about "fake pills" being laced with fentanyl.

And, if cannabis is a "companion drug," then reducing cannabis use can be part of this big plan.

Horizontal lines for notes.

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PERSPECTIVE

Why Marijuana Will Not Fix the Opioid Epidemic

by Kenneth Fava, MD

Currently, there is no widely available or accepted medical literature showing any benefit for pain with dispensary cannabis in common pain conditions.

Marijuana has been used for reported medical purposes for thousands of years when the plant... Currently, the most common reported medical use for pain... As of this writing there are 30 states and the District of Columbia that have legalized for recreational use... The United States is currently in the grip of an opioid epidemic which has been growing over the last 20 years and began with "pain" being termed the "5th vital sign." At the time, it was reported that people in pain did not become addicted to opiates, and the number of opioid prescriptions started to increase over time, followed by an increase in opioid overdose deaths.



prescriptions to using a number of marijuana products? It is difficult to translate population level statistics on individual treatments—such as individual treatments—opioid substitution, and the patient population is a rather small percentage of people who may be using opioids and/or medical marijuana. In 2017 Colorado had a record number of opioid overdose deaths from any opioid, including heroin, and Colorado has had a medical marijuana program since 2001.

There has been a lot of discussion about how the use of cannabis will help with the opioid epidemic. It has been reported that medical cannabis laws are associated with smaller increases in opioid overdose deaths.

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6140166/pdf/ms115_p0191.pdf

Finn K. (2018). Why marijuana will not fix the opioid epidemic. Missouri Medicine, 115, 191-193. PMID: 30228716; PMCID: PMC6140166.

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PERSPECTIVE

Why Marijuana Will Not Fix the Opioid Epidemic

by Kenneth Fava, MD

Finn K. (2018)

"In 2017 Colorado had a record number of opioid overdose deaths from any opioid, including heroin and Colorado has had a medical marijuana program since 2001." (p. 191)

of cannabis will help curb the opioid epidemic? It has been reported that medical cannabis laws are associated with smaller increases in opioid overdose deaths.

temperature, chiropractic, massage, and cognitive-behavioral therapies are some of the standard treatments for the management of acute back pain. Other

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6140166/pdf/ms115_p0191.pdf

Horizontal lines for notes.

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PERSPECTIVE

Why Marijuana Will Not Fix the Opioid Epidemic

Finn K. (2018)

by Kenneth Finn, MD

“There is currently a large and growing body of evidence showing that cannabis use increases, rather than decreases non-medical prescription opioid use and opioid use disorder, based on follow up of more than 33,000 people.” (p. 192)

Author cites: Olsson, M. (2018). Cannabis use and risk of prescription opioid use disorder in the United States. *American Journal of Psychiatry*, 175 (1): 47-53

...to increase over time, followed by an increase in opioid use disorder.
There has been a lot of discussion about how the use of cannabis will help with the opioid epidemic. It has been reported that medical cannabis laws are associated with...

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6140166/pdf/ms115_p0191.pdf

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PERSPECTIVE

Why Marijuana Will Not Fix the Opioid Epidemic

Finn K. (2018)

by Kenneth Finn, MD

“There is sufficient and expanding evidence demonstrating that medical marijuana use will not curb the opioid epidemic. There is further evidence that marijuana is a companion drug rather than substitution drug and that marijuana use may be contributing to the opioid epidemic rather than improving it. Although there are patients who have successfully weaned off of their opioids and use marijuana instead, the evidence that marijuana will replace opioids is simply not there.” (p. 192)

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6140166/pdf/ms115_p0191.pdf

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Opioid Mortality Following Implementation of Medical Cannabis Programs in the United States

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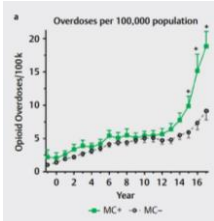
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ABSTRACT
Introduction: The United States is in the midst of an opioid overdose epidemic. Emerging evidence suggests that medical cannabis (MC) may reduce use of opioids for pain in some individuals, with potential impact on opioid-related overdose. However, there may be other important differences between states that did, and did not, adopt MC.
Methods: This study evaluated differences between legal MC states and US opioid-related overdose deaths, corrected for population, from 1999 to 2017 using an interrupted time series. Comparisons by MC states were also made for Medicaid expansion and the Centers for Disease Control and Prevention (CDC) reporting quality (R² = 0.99, F = 10.0, p < 0.0001).
Results: Opioid deaths were significantly higher in MC states from 2012-2017. Opioid death rates were also increased in states with (p < 1.4E-05, p < 0.001) or without (p < 0.001) Medicaid expansion (p < 0.001, F = 14.1, p < 0.001).
Conclusion: Non-legalization states were significantly high...

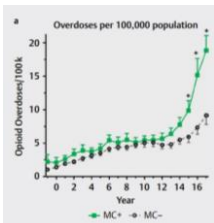
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“Significant differences in overdoses per 100,000 population were identified in '02, '06, and '13 to '17 between MC+ and MC- states.” (p. 93)

Kaufman DE, Nihal AM, Leppo JD, Staples KM, McCall KL, Piper BJ. (2021). Opioid mortality following implementation of medical cannabis programs in the United States. *Pharmacopsychiatry*, 54, 91-95. doi: 10.1055/a-1353-6509. Epub 2021 Feb 23. PMID: 33621991.

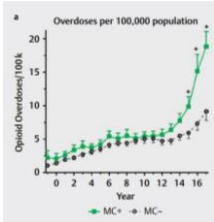
166



“...opioid overdoses did not decrease in the years subsequent to states adopting MC as compared to states that did not. In fact, states that adopted MC had significantly greater overdose slopes than those that did not.” (p. 93)

Kaufman DE, Nihal AM, Leppo JD, Staples KM, McCall KL, Piper BJ. (2021). Opioid mortality following implementation of medical cannabis programs in the United States. *Pharmacopsychiatry*, 54, 91-95. doi: 10.1055/a-1353-6509. Epub 2021 Feb 23. PMID: 33621991.

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“In conclusion, new empirically grounded solutions to reverse the pronounced levels of opioid overdoses in the US are urgently needed. This study tested whether the protective effects previously found in some studies of MC against opioid overdoses could be repeated with the addition of more data. States with MC had increased, not decreased as would be predicted, overdose slopes (p. 94).

Kaufman DE, Nihal AM, Leppo JD, Staples KM, McCall KL, Piper BJ. (2021). Opioid mortality following implementation of medical cannabis programs in the United States. *Pharmacopsychiatry*, 54, 91-95. doi: 10.1055/a-1353-6509. Epub 2021 Feb 23. PMID: 33621991.

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Idea #6:

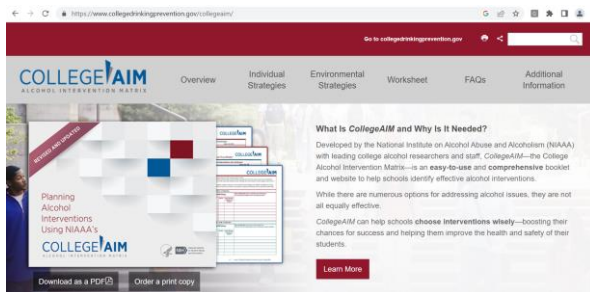
Some students report that the reason they take something without completely knowing what is in it is that they've been drinking alcohol and their judgment is impaired.

As with idea 5, reducing alcohol use can be part of this big plan.

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So what's the good news?

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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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Norms-based messages can be used to address non-medical use of prescription stimulants

Horizontal lines for writing notes.

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Sticking with naps and coffee?

So are your classmates – 83% of _____ students have not taken prescription stimulants that were not prescribed to them.



Data are based on past 12-month non-medical use of prescription stimulants and come from a 2016 study of 2,989 college students

Horizontal lines for writing notes.

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83% of _____ students have not taken prescription stimulants that were not prescribed to them.

Here's what other college undergrads suggested as tips to boost your focus:

- Talk to people
Exercise
Study in a group
Take a power nap
Break up your studying in pieces
Treat yourself after each piece
Take a 15 minute break



Data are based on past 12-month non-medical use of prescription stimulants and come from a 2016 study of 2,989 college students

Horizontal lines for writing notes.

180

Norms based messages can be used to support seeking help (and not seeking pills from others)

181

You wouldn't go to a friend for an antibiotic...

74% of ___ students with an ADHD prescription said they'd want friends who are asking for their medication to get help if they need it by seeing a doctor.

Consider the following on-campus resources:

**** CAMPUS SPECIFIC RESOURCES HERE ****



Project PHARM

Data are based on past 12-month non-medical use of prescription stimulants and come from a 2016 study of 2,989 college students

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Your friend's not a doctor.

74% of ___ students with an ADHD prescription said they'd want friends who are asking for their medication to get help if they need it by seeing a doctor.

Consider the following on-campus resources:

**** CAMPUS SPECIFIC RESOURCES HERE ****



Project PHARM

Data are based on past 12-month non-medical use of prescription stimulants and come from a 2016 study of 2,989 college students

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Wrapping up

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Wrapping up/Future directions

- We have effective strategies out there!
- Consider the audience for prevention/intervention efforts
 - Those who do not drink or use substances
 - Study abroad programs
 - Students in recovery
 - Fraternity and sorority members
 - Student athletes
 - High-risk events
- Consider ways to reach young adults who aren't in a college setting
- Add to the science on "what works" for impacting alcohol use, other drug use, interpersonal violence, and the overlap of these issues



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As you considered messaging, some great resources on the words we use

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Great resource from CDC:

https://www.cdc.gov/healthcommunication/Health_Equity.html



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Avoid saying target, tackle, combat, or other terms with violent connotation when referring to people, groups, or communities.

These terms should also be avoided, in general, when communicating about public health activities.

Instead of this...

- Target communities for interventions
- Target population
- Tackle issues within the community
- Aimed at communities
- Combat or fight against [disease]
- War against [disease]

Try this...

- Engage/prioritize/collaborate with/serve [population of focus]
- Population of focus
- Consider the needs of/Tailor to the needs of [population of focus]
- Communities/populations of focus
- Intended audience
- Eliminate/eradicate [issue/disease]
- Prevent/control spread of [disease]

https://www.cdc.gov/healthcommunication/Key_Principles.html

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Great resource from APA

<https://www.apa.org/about/apa/equity-diversity-inclusion/language-guidelines.pdf>



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Thank you!

- **Jason Kilmer**
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