Our Partners in Prevention: Top Ten Things Parents Need to Know about Alcohol, Marijuana and Other Drugs

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Importance of parents and prevention

Prevention has to be multi-faceted

It’s not just on us as prevention professionals – parents are really important partners!

What they say can....

- Support a prevention message
- Undermine a prevention message
- Be a prevention/intervention effort in and of itself
Top 10 Things Parents Need to Know
10) If your student abstains, he or she is not alone!
Past Month Use of Intoxicants

**ALCOHOL**

*16.6% of 12th graders report binge drinking within the past 2 weeks*

→ The rates of alcohol use and binge drinking have stayed relatively consistent.

**MARIJUANA**

*22.9% of 12th graders report using marijuana within the past 30 days.*

→ The perception of risk of marijuana has decreased over the past 5 years.

Substance Use Data from Monitoring the Future Study (College Students)

Alcohol
Past year
75.8% report any alcohol use
58.0% report having been drunk

Past month
62.0% report any alcohol use
34.8% report having been drunk

Substance Use Data (College Students)

- Any illicit drug
  - 42.4% report past year use

- Marijuana
  - 38.3% report past year use

- Any illicit drug other than marijuana
  - 18.1% report past year use
    - 9.4% Adderall
    - 8.6 Amphetamines

9) People tend to perceive that “everybody” drinks, uses marijuana, takes Adderall, etc.
Social norms: Perception versus reality

People are influenced by their subjective interpretation of a situation rather than by the actual situation (Lewin, 1943).

We are influenced by our perception of others’ attitudes, behaviors, and expectations rather than by their actual attitudes, behaviors, or expectations.

Our perceptions and interpretations are often inaccurate.

Source: Neighbors & Kilmer (2008)
Examines people’s perceptions about:

- Acceptability of excessive behavior
- Perceptions about the prevalence of drinking among peers
- Perception about the rates of drinking by peers
Norm Perception with Marijuana

- In survey of 5990 participants, 67.4% of students said they hadn’t used MJ in the past year. Thus, “most” students don’t use marijuana.

- Only 2% of students got this right! 98% of students perceived the typical student to use at least once per year.

- Misperceptions were related to use and consequences.

Kilmer, et al. (2006)
Past 12 month non-medical use

“In the past 12 months, on how many days have you used an ADHD prescription stimulant non-medically?”

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>82.8%</td>
<td>0 times</td>
</tr>
<tr>
<td>3.3%</td>
<td>1 time</td>
</tr>
<tr>
<td>3.1%</td>
<td>2 times</td>
</tr>
<tr>
<td>1.9%</td>
<td>3 times</td>
</tr>
<tr>
<td>1.3%</td>
<td>4 times</td>
</tr>
<tr>
<td>3.3%</td>
<td>5-10 times</td>
</tr>
<tr>
<td>2.1%</td>
<td>11-20 times</td>
</tr>
<tr>
<td>1.5%</td>
<td>21-40 times</td>
</tr>
<tr>
<td>0.8%</td>
<td>41-300 times</td>
</tr>
</tbody>
</table>

This is a low frequency behavior: 55.4% of the students with any non-medical use in the past 12 months did it 1 to 4 times.

Data Source: PHARM.NASPA/CPAMM Executive Summary, 2017 (Kilmer, PI)
8) Alcohol will not make the shy teen/person more social
What are some of the ways alcohol affects us?

What are some of the ways that alcohol affects you positively in social situations?

What are some of the ways that alcohol affects you in “not-so-good” ways in social situations?

Have you ever had alcohol do different things for you at different times?
DOS EQUIS

The uncommon imported beer
Placebo Effects of Edible Cannabis: Reported Intoxication Effects at a 30-Minute Delay

Mallory J. E. Loflin, Ph.D., a Mitch Earleywine, Ph.D., b Stacey Farmer, M.A., c Melissa Slavin, M.A., c Rachel Luba, B.S., c and Marcel Bonn-Miller, Ph.D. d

a Fellow, National Center for PTSD Training and Dissemination Division, VA Palo Alto Health Care System, Menlo Park, CA, USA; b Professor, Department of Psychology, University at Albany SUNY, Albany, NY, USA; c Graduate Student, Department of Psychology, University at Albany SUNY, Albany, NY, USA; d Adjunct Assistant Professor, Department of Psychiatry, Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA, USA

ABSTRACT
Previous research has demonstrated the ability of non-active smoked cannabis cigarettes to induce subjective effects of intoxication (i.e. placebo effect). No studies have been conducted to test whether edible forms of cannabis, which are associated with a significant delay in onset of effect, are able to induce a placebo effect. In the present study, 20 participants were told that they would receive an edible cannabis lollipop containing a high dose of tetrahydrocannabinol (THC), but were instead given a placebo lollipop. Measures of intoxication and mood were taken at baseline, 30 minutes, and 60 minutes post-ingestion of the placebo lollipop. Results of four repeated-measures ANOVAs found significant and quadratic changes across time in cannabis (ARC1 m-scale) intoxication (F(2,18) = 4.90, p = .01, η² = .22) and negative mood (F(2,18) = 3.99, p = .05, η² = .19). Changes in positive mood and the overall measure of general intoxication (ARC1) failed to reach significance. The present study provides preliminary evidence that a placebo effect can be induced with inert edible agents when participants are told that they are receiving active THC. This is the first known study to demonstrate an edible cannabis intoxication placebo effect.
Loflin, et al. (2017)

- Asked participants to refrain at least 8 hours before study
- Told to plan for a variable end (1.5-6 hours depending on dose they would receive)
- Told they would be in one of three rooms (no dose, low THC, high THC)
- Cubicles (no interaction), and had to rate music and comedy clips, color designs, and compute math problems
Loflin, et al. (2017)

**Hemp Pops**
Hemp seed oil (no active elements of THC or CBD), glucose syrup, citric acid, sugar, natural flavors, and colors #2 and #5
Placebo effects need to be explored

For example…
   Sativa – typically described as uplifting and energetic
   Indica – typically described as relaxing and calming

“We would all prefer simple nostrums to explain complex systems, but this is futile and even potentially dangerous in the context of a psychoactive drug such as cannabis” (Piomelli & Russo, 2016, *Cannabis and Cannabinoid Research*)

Differences in observed effects could be due to other content (which is rarely assayed) or what is reported to potential consumers
7) “One drink” could mean a lot of different things to someone not considering a “standard drink”
A Standard Drink is...

...a drink containing ½ ounce of ethyl alcohol
What Is A Standard Drink?

12 oz. beer
10 oz. microbrew
10 oz. wine cooler
8 oz. malt liquor
8 oz. Canadian beer
8 oz. ice beer
6 oz. ice malt liquor
4.5 oz. fruit-flavored, high-ethyl alcohol content malt beverages (formerly alcoholic energy drinks)*
4 oz. wine
2.5 oz. fortified wine
1.25 oz. 80 proof hard alcohol
1 oz. 100 proof hard alcohol
6) Regretted decisions from drinking can come with a range of drawbacks including unwanted affect
Among undergraduate students who drink, within the past 12 months as a consequence of drinking:

- 33.1% did something they later regretted
- 28.1% forgot where they were/what they did
- 20.3% had unprotected sex
- 12.5% physically injured themselves
- 3.1% seriously considered suicide
- 2.2% had sex with someone without giving your consent
- 1.9% got in trouble with the police
- 1.4% physically injured another person
- 0.3% had sex with someone without getting their consent

*n= 95,761 undergraduate students at 137 institutions in overall sample (National College Health Assessment, 2016)*
Alcohol Myopia

2 sets of cues:

impelling (sexual arousal, what person is feeling in moment)

inhibiting (appraise risk and consequences)
Impelling Cues > Inhibiting Cues
When intoxicated, impelling cues are most salient and focused on more than inhibiting cues
Bi-phasic Response

"Buzz" Stimulant Euphoria

.01 .03 .05 .06 .07 .08 .09 .10 .15 .20 .30 .40
Blood Alcohol Level (BAL)

"Drunk" Depressant Dysphoria

Lower Risk Drinking
5) The impact of substance use on academic success is well-established
Of all the problems that contribute to dropping out, substance use is one of the easiest to identify and one of the most easily stopped by interventions including treatment.

Research evidence shows that when adolescents stop substance abuse, academic performance improves.
America’s Dropout Crisis:

The Unrecognized Connection
To Adolescent Substance Use

“There is no problem so bad that alcohol and drugs will not make it worse.”

Robert L. DuPont, M.D.¹
Kimberly M. Caldeira, M.S.²
Helen S. DuPont, M.B.A.¹
Kathryn B. Vincent, M.A.²
Corinne L. Shea, M.A.¹
Amelia M. Arria, Ph.D.²³

March 2013

http://www.cls.umd.edu/docs/AmerDropoutCrisis.pdf

Substance using students are at increased risk for academic failure, including drop out

Marijuana has stronger negative relationship to GPA and other outcomes and risk for dropout than alcohol use

“The more severe the substance use, the more likely the impact on academic performance and risk for dropout.”

- Place more attention on at-risk students. Act early to identify and address variety of problem behaviors:
  - Truancy
  - Drug and alcohol use
  - Delinquency
  - Academic “disengagement”

- Focus resources on empowering parents

- Identify and study policies and programs that deliver on the goal of helping youth sustain long-term abstinence

- Develop and evaluate new personalized approaches to intervening with students at risk for dropout.

More frequent marijuana use is associated with more discontinuous enrollment, skipping more classes, and lower GPAs (Arria, et al., 2013, 2015).

Any marijuana use is associated with lower GPA, and decreasing and frequent marijuana use over time is associated with less current enrollment and being less likely to graduate on time (Sureken, et al., 2016).
Alcohol and marijuana are both associated with lower GPA; when entered in same regression, effects of alcohol became non-significant (Bolin, Pate, McClintock, 2017).

Students using both marijuana and alcohol at moderate to high levels have significantly lower GPAs over two years (Meda, et al., 2017).

Students who moderate or curtail substance use improved GPA (Meda, et al., 2017).
Marijuana impacts attention, concentration and memory
Effects on the brain

Hippocampus
  Attention, concentration and memory

Research with college students shows impact on these even 24 hours after last use

After daily use, takes 28 days for impact on attention, concentration, and memory to go away

Marijuana’s impact on performance

• Deficits in verbal learning (at day 3, not 2 weeks)

• Deficits in verbal working memory (at day 3, at 2 weeks, not at 3 weeks)

• Deficits in attention (still present at 3 weeks)

Hanson et al. (2010)
Substance Use, Academic Success and Retention

- Effects of excessive drinking/drug use can be understood as a “cascade” of interrelated problems

Diagram:

- Alcohol Use
- Drug Use
- Mental Health

**Intermediary Processes**
- Skipping Class
- Studying Less
- Decreased Motivation
- Poor Quality/Less Sleep
- Cognitive Problems

**Short-Term Manifestations**
- Declining GPA
- Dropping Classes
- Lost Opportunities (internships, work, special studies)

**Long-Term Outcomes**
- Delayed Graduation
- Failure to Graduate
- Attenuation of Goals
- Lack of Readiness for Employment
- Underemployment
4) Marijuana in 2018 is a very different substance than marijuana in 2008, 1998, 1988, or 1978
<table>
<thead>
<tr>
<th>When smoked...</th>
<th>When consumed in food or drink...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effects begin immediately</td>
<td>Effects begin 30-60 minutes</td>
</tr>
<tr>
<td>Last 1-3 hours</td>
<td>Lasts up to 4 hours</td>
</tr>
</tbody>
</table>
Effect after use

» Feel euphoric or “high” due to action in the reward system of the brain

» After euphoria passes, may feel sleepy or depressed

» Occasionally produces anxiety, fear, distrust, panic

Mahmoud A. ElSohly, Zlatko Mehmedic, Susan Foster, Chandrani Gon, Suman Chandra, and James C. Church

ABSTRACT

BACKGROUND: Marijuana is the most widely used illicit drug in the United States and all over the world. Reports indicate that the potency of cannabis preparation has been increasing. This report examines the concentration of cannabinoids in illicit cannabis products seized by the U.S. Drug Enforcement Administration over the last 2 decades, with particular emphasis on Δ⁹-tetrahydrocannabinol and cannabidiol.

METHODS: Samples in this report were received over time from materials confiscated by the Drug Enforcement Administration and processed for analysis using a validated gas chromatography with flame ionization detector method.

RESULTS: Between January 1, 1995, and December 31, 2014, 38,681 samples of cannabis preparations were received and analyzed. The data showed that although the number of marijuana samples seized over the last 4 years has declined, the number of sinsemilla samples has increased. Overall, the potency of illicit cannabis plant material has consistently increased over time since 1996 from ~4% in 1995 to ~12% in 2014. The cannabidiol content has decreased on average from ~.28% in 2001 to <.15% in 2014, resulting in a change in the ratio of Δ⁹-tetrahydro-
Average THC for Marijuana Flower by Strain

<table>
<thead>
<tr>
<th></th>
<th>SATIVA</th>
<th>HYBRID</th>
<th>INDICA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average THC:</td>
<td>22.11%</td>
<td>21.56%</td>
<td>21.19%</td>
</tr>
<tr>
<td>THC Range:</td>
<td>11% - 30%</td>
<td>14% - 29%</td>
<td>12% - 29%</td>
</tr>
</tbody>
</table>

Average potency (nation) = 13.18%
Average potency (Seattle) = 21.62%

Concentrates average potency (nation) = 55.85%
Concentrates average potency (Seattle) = 71.71%

SOURCE: Uncle Ike’s Pot Shop Capitol Hill Menu and NWHIDTA
3) We have to continue to emphasize the importance of not driving after substance use
<table>
<thead>
<tr>
<th>BAC = .08%?</th>
<th>BAC = .16%?</th>
<th>BAC = .24%?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>5 HOURS (5 AM)</strong></td>
<td><strong>10 HOURS (10 AM)</strong></td>
<td><strong>15 HOURS (3 PM)</strong></td>
</tr>
<tr>
<td>.080% ...</td>
<td>.160% ...</td>
<td>.240% ...</td>
</tr>
<tr>
<td>.064% ...</td>
<td>.144% ...</td>
<td>.224% ...</td>
</tr>
<tr>
<td>.048% ...</td>
<td>.128% ...</td>
<td>.208% ...</td>
</tr>
<tr>
<td>.032% ...</td>
<td>.112% ...</td>
<td>.192% ...</td>
</tr>
<tr>
<td>.016% ...</td>
<td>.096% ...</td>
<td>.176% ...</td>
</tr>
<tr>
<td>.000%</td>
<td>.080% ...</td>
<td>.160% ...</td>
</tr>
</tbody>
</table>
Impaired driving and duration of effects

- Marijuana DUI: 5 nanograms per milliliter of active THC in the blood
  Why 5 ng? Similarities in impairment to .08% for alcohol

  How long does it take to drop below 5 ng?

  Grotenhermen, et al., (2007) suggest it takes 3 hours for THC levels to drop to 4.9 ng THC/ml among 70 kg men

  From a public health standpoint, Hall (2013) recommends waiting up to 5 hours after use before driving

  New article encourages waiting at least 6 hours after use (Fischer, et al., 2017)
Driving within 3 hours of use

Driving after marijuana use
“During the past 30 days, how many times did you drive a car or other vehicle within three hours after using cannabis (e.g., marijuana, hashish, edibles)?”

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>50.59%</td>
<td>55.29%</td>
<td>58.19%</td>
<td>58.56%</td>
</tr>
<tr>
<td>1 time</td>
<td>14.13%</td>
<td>13.13%</td>
<td>12.50%</td>
<td>12.85%</td>
</tr>
<tr>
<td>2-3 times</td>
<td>13.28%</td>
<td>12.34%</td>
<td>11.97%</td>
<td>11.98%</td>
</tr>
<tr>
<td>4-5 times</td>
<td>6.43%</td>
<td>4.35%</td>
<td>3.48%</td>
<td>4.48%</td>
</tr>
<tr>
<td>6 or more times</td>
<td>15.57%</td>
<td>14.88%</td>
<td>13.85%</td>
<td>12.12%</td>
</tr>
</tbody>
</table>

**There are declines in driving after marijuana use between cohort 3 and cohort 1 (p<.05) and between cohort 4 and cohort 1 (p<.01), as well as a significant linear trend (p<.01).**

Source: Young Adult Health Survey, 2017 data report
More pot use found in fatal crashes, data says

Marijuana use appears to have increased as a factor in deadly crashes last year in Washington.

By Bob Young

Marijuana use appears to have increased as a factor in deadly crashes last year in Washington.

New data from the Washington Traffic Safety Commission shows the number of drivers involved in fatal crashes with THC in their body increased from 38 in 2013 to 75 this past year. About half those 75 drivers had active THC — the main psychoactive chemical in pot — above the level that legally determines intoxication.
Drugged driving eclipses drunken driving in tests of motorists killed in crashes

By Ashley Halsey III  April 26 at 12:01 AM

For the first time, statistics show that drivers killed in crashes are more likely to be on drugs than drunk.

Forty-three percent of drivers tested in fatal crashes in 2015 had used a legal or illegal drug, eclipsing the 37 percent who tested above the legal

43% of fatally-injured drivers with a known test result tested positively for drugs, more frequently than alcohol was present.

Source: 2017 Fatality Analysis Reporting System (FARS)
2) Especially for college bound students, changing environments if they’ve been drinking at home, can be life-threatening.
Tolerance

Applying Laboratory Research: Drug Anticipation and the Treatment of Drug Addiction

Shepard Siegel and Barbara M. C. Ramos
McGill University

Basic research concerning drug tolerance and withdrawal may inform clinical practice, and vice versa. These areas that integrate the work of the laboratory and the clinic are discussed: (1) drug overdose, (2) cue exposure treatment of addiction, and (3) pharmacological treatment of withdrawal symptoms. The areas are linked in that they illuminate the contribution of drug-paired cues to the effects of addictive drugs and the role of Pavlovian conditioning of drug effects in drug tolerance and withdrawal symptoms.

The concerns of the laboratory researcher often seem esoteric to the clinician. For example, the laboratory scientist might be enthusiastic about a finding that opiate tolerance is correlated with c-fos expression in the nucleus of the rat’s brain (Espinosa, Siegel, MacQueen, & Young, 1996), but the clinician likely would find little in these results relevant to the treatment of opiate addiction in people. Similarly, the clinician may be intrigued by the case report of a palliative-care patient, tolerant to the anesthetic effect of oral morphine, who suffered an overdose when switched to transdermal fentanyl (Johnson & Foulds, 1997). This tragic observation, however, probably would not appear immediately relevant to the research studying fundamental processes of opiate effects in rodent models. The purpose of this article is to illustrate the relationship of basic, and other, experimental and clinical observations—this is, to illustrate the symbiotic relationship between the researcher and the clinician.

Three Areas of Integrated Experimental and Clinical Research

In this article we summarize three areas of integrated research that integrate the work of the laboratory and the clinic: drug overdose, cue exposure treatment of addiction, and pharmacological treatment of withdrawal symptoms.

Drug Overdose

Many addicts die shortly after injecting heroin. Although it has been conventional to attribute such deaths to heroin overdose, it has been clear, since the pioneering work of Brecher (1972), that overdose is a misnomer in describing the cause of death in heroin addicts. Most of the deaths are not due to a pharmacological overdose, as the term usually is understood. Brecher summarized the extensive literature that existed 30 years ago: (1) The deaths cannot be due to overdose. (2) There never has been any evidence that they are due to overdose. (3) There has long been a plethora of evidence demonstrating they are not due to overdose (p. 102, italics in original). Results of subsequent research confirmed Brecher’s conclusions, and it has been suggested that “the term ‘overdose’ has served to obscure the lack of understanding of the true mechanism of death in families directly related to opiate use” (Greene, Luke, & DuPont, 1994, p. 175), and “concerned utilization of the term ‘overdose’ to cover all heroin-related fatalities may be counterproductive in developing strategies to reduce the morbidity and mortality associated with heroin” (Drake & Zador, 1994, p. 1775). Despite the likely misuse of the word, we continue to use the generally accepted term overdose when referring to these tragic fatalities, rather than more cumbersome alternatives such as “an idiosyncratic reaction to an intravenous injection of an unspecified material(s) and probably not a true pharmacologic overdose of an active.” (Chernick, McCrake, Badea, Kavalier, & Aasen, 1972, p. 11).

Despite the fact that pronounced tolerance develops to the respiratory depressive effects of opiates, the heroin overdose victim typically dies of respiratory depression. Instead of the victims of overdose typically are not heroin users (e.g., Drake & Zador, 1996), it would be expected that they would have been very tolerant to heroin and thus would have self-administered a very large dose when they overdosed. However, postmortem examinations of heroin over-
Classical Conditioning
Pavlov
CNS Stimulation (CNS speeds up)

Baseline (normal activity)

Desired feeling

CNS Depression (CNS slows down)
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.
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).”
Implications

Consider high-risk events that can be associated with changes in cues:

- Spring Break
- 21st birthdays
- Halloween
- Students studying abroad
- Start of the school year

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.
1) The influence of parents is extraordinary
Parents as Partners in Prevention

...Do they really listen to me?

...What if they blow me off?

...I am not sure what to say or do.
Parents as Partners in Prevention

Although peer behavior is found to be strongly correlated with alcohol consumption...

...Parents also have an impact on the behaviors of their children in college
Parental Monitoring
Extent to which parents actively try to know about their students' whereabouts and social connections

High parental monitoring has been linked to less alcohol use in adolescent and college student populations

SAMHSA Survey on Drug Use and Health (2010)
Wood & Laird (2012)
Parental drinking permissiveness = the degree to which parents are lenient regarding alcohol use

Low parental drinking permissiveness is associated with less risky drinking

Wood & Laird (2012)
Pre College Discussion About Drinking

Teens who talked with their parents about alcohol before they began their first year of college:

- more likely to fall into a non-drinking or light-drinking category
- or to transition out of a heavy-drinking group if they were already heavy drinkers

Turrisi et al (2013)
Parental Influence Extends into Early Adulthood

Pre College discussion + booster during first semester

“Parents who maintain effective communication with their teen, and through this communication, reinforce expectations regarding alcohol use can provide protection during this vulnerable transition, when most young people increase their drinking behaviors.”
a parent handbook for
Talking with College Students About Alcohol

Rob Turrisi, Ph.D.
Prevention Research Center
The Pennsylvania State University
Parent Handbook for Talking with Teens About Alcohol

Madd.org/powerofparents
Marijuana Resources for Parents

The 2016 national Monitoring the Future Study shows marijuana use among U.S. teens holding steady or even declining slightly for grades 8, 10, and 12.

In Washington State, according to the 2016 Healthy Youth Survey, marijuana use among youth has remained steady at levels similar to the national rates since 2010, despite the changing landscape of legalized marijuana in our state.

Although use of marijuana has not changed significantly in the last several years, youth attitudes towards marijuana moved toward greater acceptance, both nationally and in Washington State.

The good news is that parents are the primary influence on adolescent behavior -- even if it may not always seem that way. Here are some resources that can help parents discuss the use of marijuana with their children.

Get tips for talking with your kids about making healthy choices at StartTalkingNow.org

How to Talk to Your Kids About Marijuana
Launched February 2017

 WHETHER IT’S CLEANING THEIR ROOM OR USING MARIJUANA, TEENS NEED TO KNOW THEIR FAMILY’S RULES AND CONSEQUENCES.

TEENS ARE UNDER THE INFLUENCE...OF YOU.
LEARN MORE AT STARTTALKINGNOW.ORG
GOT IT FROM PARENTS WITH THEIR PERMISSION

Data Source: DBHR/UW Washington Young Adult Health Survey 2016 data report
Where 18-20 year olds get marijuana

Decreasing trend significant
Increasing trend significant

### WHERE DO PEOPLE GET MARIJUANA, 18-20 year olds

<table>
<thead>
<tr>
<th>Source of Marijuana</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>From friends</td>
<td>72.86%</td>
<td>76.24%</td>
<td>69.68%</td>
<td>77.40%</td>
</tr>
<tr>
<td>Gave money to someone</td>
<td>23.29%</td>
<td>26.47%</td>
<td>34.72%</td>
<td>41.45%</td>
</tr>
<tr>
<td>Got it from someone</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>w/ medical mj. card</td>
<td>17.60%</td>
<td>14.12%</td>
<td>4.30%</td>
<td>5.24%</td>
</tr>
<tr>
<td>Got it from a med. disp.</td>
<td>13.65%</td>
<td>18.99%</td>
<td>5.58%</td>
<td>4.72%</td>
</tr>
<tr>
<td>Got it at a party</td>
<td>22.99%</td>
<td>22.14%</td>
<td>23.08%</td>
<td>24.92%</td>
</tr>
<tr>
<td>Got it from family</td>
<td>5.65%</td>
<td>5.18%</td>
<td>11.75%</td>
<td>9.75%</td>
</tr>
<tr>
<td>Got it some other way</td>
<td>11.64%</td>
<td>4.12%</td>
<td>6.12%</td>
<td>9.02%</td>
</tr>
<tr>
<td>Bought from retail store</td>
<td>0.99%</td>
<td>4.58%</td>
<td>1.73%</td>
<td>1.92%</td>
</tr>
<tr>
<td>Got it from parents</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>with permission</td>
<td>5.75%</td>
<td>6.02%</td>
<td>12.33%</td>
<td>10.44%</td>
</tr>
<tr>
<td>Grew it themselves</td>
<td>1.91%</td>
<td>1.15%</td>
<td>1.65%</td>
<td>0.23%</td>
</tr>
<tr>
<td>Stole it from store/disp.</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

Data Source: DBHR/UW Washington Young Adult Health Survey 2017 data report
Northeastern University

**Relationship between Marijuana Use and Perceived Parental and Community Norms, Grade 10, 2016**

What does this chart say?

- Statewide, 10th graders are less likely to use marijuana if they believe their parents think it is wrong for them to use.
- Statewide, 10th graders are less likely to use marijuana if they believe their community thinks it is wrong for them to use.
Group Discussion

How can coalitions get these messages across to parents in their communities?

Where have people seen success in engaging parents as true partners?

What strategies are people in the room doing to share this information with parents in a way that they can understand it, believe it, and take action?
WRAPPING UP

Final thoughts:

• Offer parent presentations/programs/resources for information
  ➢ Consider options for skill building content that provides dialogue/talking points

• Make sure parents understand how influential they are

• Partner with local schools/coalitions

• Get people onboard at universities that parents have to be a part of the equation
Thank you for the work you do!

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https://studentlife.northeastern.edu/open/