



Edibles, Vapes & Spiked Seltzers and More:

Tips for Talking to Your Teens about Drugs & Alcohol in Today's World

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Why?

Substance Use Disorders are Preventable

We can improve the quality of life our teens

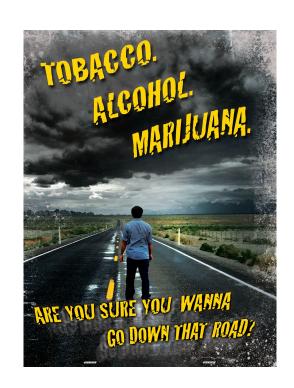
We can prevent emotional and physical challenges that

can carry into adulthood



Nicotine, Alcohol and Marijuana are Gateway Drugs

- Early use can lead to increased vulnerability to addiction
- Most users will not go on to develop an addiction to other drugs
- My patients with Opioid Use Disorder all started with alcohol or marijuana



Risks

Alcohol use prior to age 15:

- 4x more likely to meet criteria for alcohol dependence
- 2x more likely to meet criteria for alcohol abuse

Marijuana:

 1 in every 6 adolescents who uses marijuana will develop dependence

Nicotine

Highly addictive: can occur after two weeks of casual use

Teens want parents to talk to them

It's **never too early** to begin the conversation; honest, open discussions

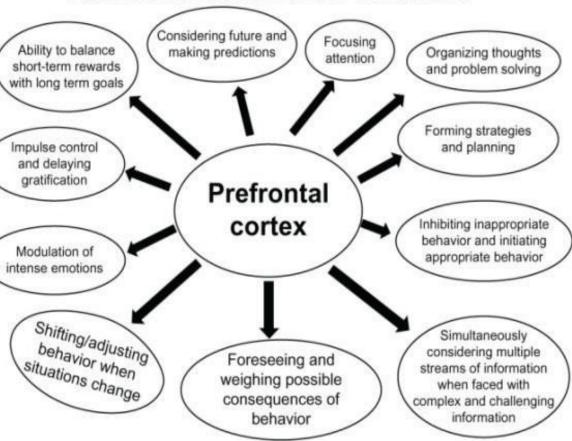






It's a teenage brain

Executive human brain functions



Prefrontal cortex—not fully mature until **age 25!**

- Impulsive
- Instant Gratification
- Think They Are Invincible

Start The Conversation

- Discuss Positive Norms: Most kids their age are not using nicotine, alcohol, and marijauna on regular basis.
- Congratulate them on making a positive decision for their health.
- Praise them for not using.
- Allow them the space to ask you questions.
- Assure them you will support them and not punish them if they use a substance.

Younger Teens

- Ask them what they know about specific substances.
- Have they seen anyone using?
- Ask them if they have been offered any of these substances and discuss strategies they can use.
- Find out what will motivate them to continue avoiding substances.

Older Teens

- Ask them how they feel about not using and review strategies they use to avoid substances.
- Are they feeling left out? Are any of their friends using substances?
- Ask them what motivates them.
- Help them set short term goals.
- Set a plan for them to be able to reach out to you in case they need you. Set expectations about driving.
- Discuss **family history** (risk factor for dependence).

Is my teen using substances?

- Changes in behavior (depression, anger, anxiety, irritability)
- Erratic sleep
- Lack of interest in school, activities, friends
- Declining grades
- Spending more time alone
- You know your child the best



How to approach your teen if there are concerns

- Talk to them
- Tell them you are worried about them, based on what you observe
- Don't confront about using drugs
- Reach out for help (even if they don't disclose to you)
- If you mention drug use, make sure they know you won't punish them, but help them
- Don't drug test

VAPING-Social Media Targeting of Teens





NICOTINE VAPING

- Tell me what you know about nicotine vaping?
- Do you know about what it can do your brain and lungs?
- Have you been around second hand vape?
- Review something they like participating in and how vaping can effect them (they live in the moment)
- Talk about a relative who smoked cigarettes and had a poor health outcome
- The companies deliberately target teens for profit, and don't' care about your health (Big Tobacco)
- Vaping is not a "healthier alternative to cigarette smoking". (They all think cigarette smoking is gross")

JUUL PODS

0.7 mL of liquid

5% nicotine

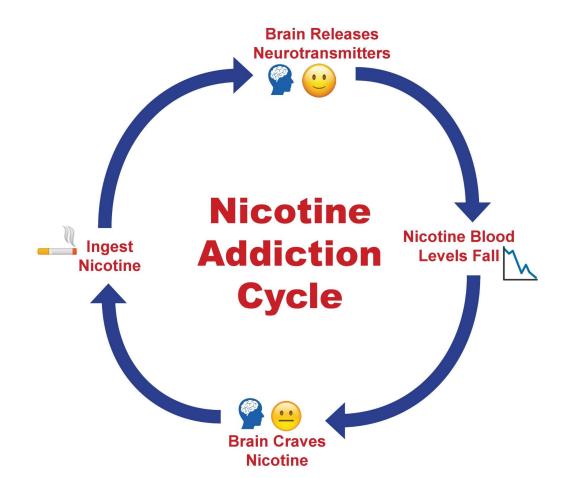
1 JUUL POD = 20 CIGARETTES

WHAT'S REALLY GOING INTO YOUR BODY?









Case-Nicotine

- 16 year old
- JUUL pod was confiscated from him at school.
- No matter how hard he has tried on his own, he cannot stop.
- Takes a "hit" from a pod multiple times during the school day.
- Goes through a pod every 2 days and the money he earns working on weekends is spent on JUUL pods.
- He is a track athlete and has noticed his endurance and speed declining.
- He has had a cough for over a month.
- He knows that nicotine is unhealthy for him.

Develop A Plan

- Removal of Nicotine Products
- Discussion of Withdrawal Symptoms and Offering Treatment and Support
- Quit Apps
- Nicotine 'Replacement Therapy

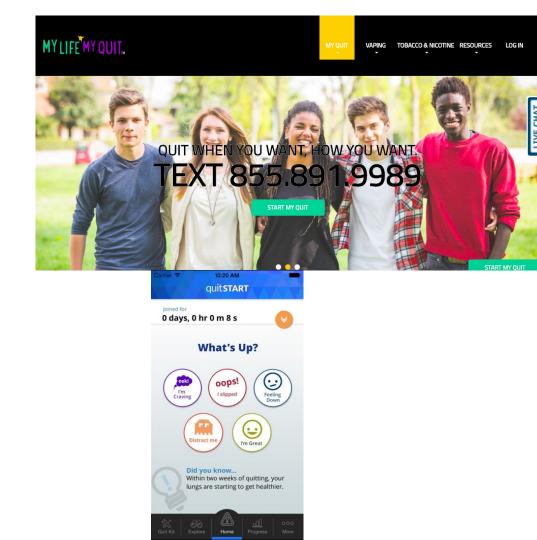
Motivational Interviewing

- Health Concerns–75% of teens are worried (current and future)
- Cost–Reviewing how much money can be saved
- Physical Fitness (Is it better with or without?)
- Peer Group (find non smokers—having a best friend as a smoker greatly reduces odds of quitting)



Apps

- MyLifeMyQuit
- SmokeFreeTeen
- QuitStart



Nicotine Replacement Therapy

Prescription Needed for Patients under the age of 18

- Patch
- Lozenge
- Gum



Case-Nicotine

- Very motivated but quitting was very challenging
- Became irritable and angry at times
- Started Nicorette Gum and was eventually weaned off
- Set goals for running
- No punishment for relapse
- Was able to stop after 4 months

ALCOHOL: Why do teens drink?

Social Media

Peer Pressure





Observing Adults Drinking

Hearing "I just need a drink to relax."

Advertising



Self-medication

Alcohol in the Media

Our kids continue to be exposed to tv shows and movies that normalize and glamorize use of alcohol by teens.

Access is much easier via streaming platforms



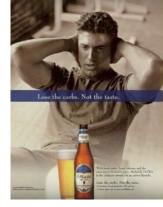


Alcohol Advertising-Social Media

Deliberate targeting on Instagram/TikTok/Snap









Parents Play a Vital Role

- Remember, they listen to you and watch you: "I'm going out drinking tonight with my friends" or "I need a drink to relax after my tough day".
- Talk about the difference between the teen and adult brain
- Waiting to have that first drink until you are older protects your overall health
- 80% of teens say their parents are the leading influence on whether to drink even while they are in high school and college.

Parents Play a Vital Role

If your teen asks you: "You probably drank when you were my age and you are okay"

- Be honest if you used
- Discuss adverse effects you may have experienced
- Discuss regrets
- Say "I was one of the lucky ones who didn't have any long term effects"

Case-Alcohol

- 17 year old high school senior
- Recently taken to the ER for acute alcohol intoxication after passing out at a party
- Remembers doing shots of hard liquor and consuming Monster Drinks
- Screening at physical 6 months ago: no substance use.
- Started drinking at parties: initially a few drinks only to relax and fit in
- Led to Binge Drinking
 –Hard Time Saying "No"
- Has been in a cars with a friend(s) who had been drinking.
- Had a sexual encounter without a condom last month while drunk (with someone he had just met)
- Does not report withdrawal symptoms or cravings for alcohol
- He has found alcohol at home and drank alone at times when stressed

Case-Alcohol

- Hockey Player–motivating factor to stay healthy, but his team does drink when they get together
- Discussed strategies to say "no"; find an "out" with friends
- Agreed not to drink and drive; text parents with "no questions asked" if he needed to be picked up or need an out
- Admitted that he had significant Social Anxiety
- Therapy for Anxiety and Coping with Stress (mindfulness)

Teens more likely to use alcohol (and marijuana)if they see their friends post about it on social media

 Strong correlation between social media alcohol exposure and alcohol consumption (9,000 teens interviewed—self-reported use of alcohol after viewing or interacting with alcohol related social media posts)
 Alcoholism: Clinical and Experimental Research, 2018

Seeing social media posts-wanting to "fit in", not wanting to be left out

of "the fun"



Binge Drinking



- Although youth drink less often than adults do, when they do drink, they drink more.
- Young people consume more than **90%** of their alcohol by binge drinking. (National Institute on Alcohol Abuse and Alcoholism, 2019)

Alcohol and Energy Drinks

- Energy Drinks are stimulants and mask the fatigue that occurs while consuming alcohol
- Caffeine content is high; half life of caffeine is 5 hours
- Alcohol and caffeine are both dehydrating, increasing the risk for heat-related illness
- Body's ability to metabolize alcohol is hindered



How easy is it for teens to get alcohol?

- Almost 72% of teens who drink get alcohol without having to pay for it.
- Teens can access alcohol from friends, family members, or at parties.
- Underage drinkers who pay for alcohol usually give money to someone else to buy it.

Alcohol and High Risk Sexual Behavior

22% of high school youth reported using alcohol or drugs prior to their last sexual encounter.

(MetroWest Adolescent Health Survey, 2018)

Annual Deaths Due to Alcohol (under 21)

- 1,580 deaths from motor vehicle crashes
- 245 from alcohol poisoning, falls, burns, drowning
- 492 from suicides

(NIDA, 2019)

Parents Play a Vital Role

- Make sure teens can't access alcohol without your knowledge.
 Unmonitored alcohol, including alcohol stored in a cabinet, basement or garage, can be a temptation. When in doubt, lock it up.
- Get to know their friends
- Make sure their friends' parents are on the same page



What about other countries?

Percentage of Youth Reporting Binge Drinking in the past 30 days, 2015. (WHO) and age of legal use/purchase

United States	19.8%	21
Canada	33.2%	18 or 19
Germany	50.6%	16
France	48.5%	18
United Kingdom	40.5%	16 under supervision, 18 to buy
Denmark	40.5%	No age, 18 to purchase

Case-Alcohol

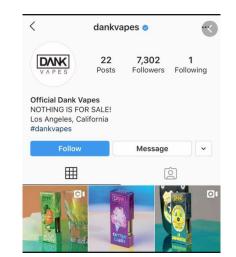
- Avoided alcohol during last few months of high school; did have a beer if he got together with friends
- Stopped energy drink consumption
- Noticed himself playing hockey better

In College:

- Started to drink more at college parties
- Ended up binge drinking and realized that his health and his grades were at risk
- Worried about "doing something I might regret"
- Worried about alcohol dependence
- Continued therapy in college
- Participated in dry January and committed to not drinking while in college; likes life better without alcohol

Big Cannabis: The New Big Tobacco

- Social media messages decrease teens' perception of harm of marijuana.
- Teens who see marijuana ads (including medical marijuana) are more likely to use the drug.
- The number of teens who had seen a marijuana ad increased from 25% to 70% from 2010-2017. Rates of use increased. (California, 5000 middle school students, Drug and Alcohol Dependence, 2018).





Medical Marijuana

works on pain even when opiates don't

americansforsafeaccess.org/football





pain on a daily basis

Effect of Legalization

Survey of 3 million 7th, 9th and 11th graders in California

Between 2017-2018 and 2018-2019

- 23% increase in past 30 day marijuana use
- 18% increase lifetime use

Journal of Studies on Alcohol and Drugs, 2021

MetroWest Data, 2021

Perceived risk of marijuana use **declined from 58% in 2018 to 51% in 2021** (use once or twice a week)

48% say it would be "fairly easy" or "very easy" to obtain marijuana if they wanted to down from **64%** in 2018

Case-Cannabis

- 15 year old high school freshman; always a "quiet kid".
- Parents and teachers notice a decline in grades.
- Over the past two months, starts coming to school late, reporting that he vomits every morning.
- Comes in for his phsycial: anxiety, depression, daily cannabis use (smoking, vaping and edibles), cutting (thighs) and passive suicidal ideation
- Has been feeling this way for a number of months but never disclosed to anyone. It all started after a break up and a social media incident.
- Had a debilitating anxiety attack after ingesting an edible.

Cannabis Use-Patterns and Perceptions

- Cannabis Use by Teens is more likely to be self-medicating when compared to alcohol (alcohol is usually social)
- Teens use marijuana to try to improve mood, anxiety, sleep
- While they agree that tobacco smoking or vaping is harmful to the lungs, they don't share the same concern for cannabis
- Harmful effects of tobacco and alcohol are well known, but not of marijuana

Edibles





- Products marketed to teens
- Cookies, Brownies, Candy
- Delayed onset of action--Because the "high" is not immediate, teens will consume larger amounts
- Very Potent: Ingestion can cause acute psychosis
- Emergency Department Visits Increasing due to Ingestion by teens and young children

Marijuana Vaping

Vaping THC does not produce the telltale smell that emerges when smoking marijuana through a joint, blunt or pipe. **Teens can use marijuana without being detected**

When people vape rather smoke marijuana, they tend to consume even **higher concentrations of THC**, which means greater exposure to the drug's mind altering and addictive ingredient; **95% THC** in some extracts





Talking to a Teen who is Using Marijuana

Open and Honest Discussion With Factual Information

No Judgement or Punitive action

Meet them where they are

Empathy

Harm Reduction

Avoid home drug tests





"Not As Bad"

But it is bad for you.

What's better: smoking weed or not smoking weed?

Would you rather jump off of a 4 story building or a 8 story building?



Natural Does Not Mean Safe

Some examples of other natural dangerous plants:

Cocaine, Heroin, Tobacco,

Poison Ivy, Poisonous Berries

Remember: The marijuana of the 60s was 1-3% THC; marijuana of today: 12%; The plant did not do this itself--genetically modified



It is Addictive!

Quote from a Recovery Coach: "Out of all the substances I have used, the hardest addiction to overcome was my addiction to marijuana"

1 in every 6 adolescents who use marijuana will develop an addiction

National Institute of Drug Abuse, 2021

Marijuana Withdrawal Timeline





While you can't overdose...

Psychosis can be caused by heavy marijuana ingestion (vaping, edibles)

Psychotic Events can lead to adverse outcomes

Marijuana can be laced with Fentanyl



TY SELLS | CLEARING THE AIR

THC is not a medicine

Only FDA approved uses for CBD for under 18: Lennox Gastaut Syndrome and Dravet Syndrome (two types of seizure disorders)

For medications, you need a dosing regimen and protocols for managing side effects

No evidence for treatment of anxiety, depression or chronic pain

Nicotine was promoted as healthy by Big Tobacco

In fact, marijuana...

The Brain is Hijacked

Use at a young age/long term use leads to:

- Increased incidence of anxiety, depression, and suicidal ideation
- Increased incidence of psychosis (41%)



It is legal...

Legal does not mean safe.

There are plenty of legal products that are not safe:

- Tobacco
- Alcohol
- Energy Drinks

For your health, I advise against using them as well

Respiratory Effects

You are inhaling a substance into your lungs

Many of the same harmful carcinogens as cigarette smoke

Carcinogenic effect is unclear

Weakens respiratory immune defenses

Regular users are more likely to experience cough, wheezing, exercise intolerance

Cannabinoid Hyperemesis Syndrome

- Symptoms include: nausea, vomiting, abdominal pain, diarrhea.
- Shower helps symptoms
- Missed School
- Weight Loss
- ER Visits, Hospitalizations

Endocrine Side Effects in Males

Dose related decrease in testosterone levels

Erectile Dysfunction

Low Sperm Count

Gynecomastia (Development of Breast Tissue)

Casual Use and Effect on Academics

- The marijuana of today is very potent; may take up to days to be excreted.
- Readily crosses the blood-brain barrier and binds to receptors in the brain for long periods of time.
- A study of high school students showed that those who used marijuana casually (even only on weekends) had lower test scores. (Journal of School Health, 2017)
- Long Term: Irreversible decrease in IQ of 8 points

Impaired Driving

Impairs:

- Judgement
- Motor Coordination
- Reaction Time

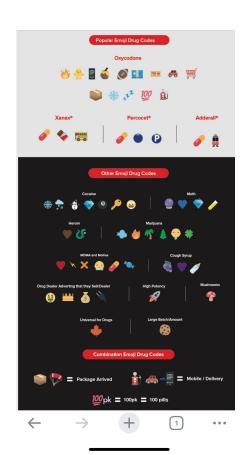
Several meta-analyses of multiple studies found that the risk of being involved in a crash significantly increased after marijuana use. (National Institute on Drug Abuse)

Case-Cannabis

- Reluctant to start any kind of therapy (he had seen someone when he was younger).
- Felt that marijuana was the only thing helping anxiety and depression
- He felt he could not reduce marijuana intake after the first visit, but was willing to an antidepressant:(Lexapro)
- Started checking in with his guidance counselor
- After a few visits, he was ready to start reducing cannabis intake (we started with avoiding edibles first, then vaping, and slowly decreasing the amount he smoked); it was very difficult—he had cravings
- GI symptoms started to resolve
- Agreed to meet with a mentor/coach—gym regularly
- Improving his grades was his motivating factor
- Driving –stopped completely once he was ready to drive
- 6 months later: "My life is better without pot"

Obtaining Illicit Drugs...The New World





Marijuana

Opioids (pain killers)

Benzos (Xanax)

Simulants (Adderall)

Mushrooms

Cocaine, Meth

Opioids and Fentanyl

- A very small fraction of teen drug use
- Usually OxyContin or other pills
- Many drugs (illicit pills, marijuana) can be laced with fentanyl
- Fentanyl Test Strips
- Narcan can reverse an overdose

Dental procedures do not require opioids for pain.



Opioid Treatment in Primary Care

Opioid Use Disorder can be treated with Buprenorphine; it is a life saving medication: eliminates withdrawal and cravings

https://www.npr.org/sections/health-shots/2024/02/16/1231128088/more-kids-are-dying-of-drug-overdoses-could-pediatricians-do-more-to-help



Opioid Use Disorder Can Be Treated Medically

From a 24 year old who struggled with opioid use disorder in adolescence and early adulthood (started with alcohol, then oxycontin—tried many other drugs— he was treated with Buprenorphine):

"I am about six months from graduating from _____, with a full ride scholarship. Still have the same sober date of October 31,2020" (all substances)

The Road to Treatment

- Primary Care Provider
- Mental Health Clinician–Experience in Adolescent Substance Use
- Treating underlying Depression and Anxiety



In Conclusion

- Substance Use Disorders are Preventable Illnesses
- Connections with Trusted Adults
- Connections with Community



