

Greeting, introduction, background

Let me start with a little background. How many of you have heard of MATFORCE before? Did you know that we partner with various organizations to implement projects that help educate and raise awareness concerning substance abuse trends? For more information visit our website at <http://matforce.org/>.

Youth Drug Use Trends

Today I'm going to be making the case for why you should be talking to your kids about the risks of substance use in their youth. I like to start by asking a few questions. First, how many parents out there have talked to their children about drugs and alcohol in the last year? That's a good start. Now, can you tell me what the top 5 drugs of choice for Yavapai County youth are?

1) alcohol; 2) e-cigarettes; 3) marijuana; 4) cigarettes; 5) prescription drugs - specifically opioids (pain relievers).

According to the most recent Arizona Youth Survey of 8th, 10th and 12th graders, 22% of our youth are regular alcohol drinkers; 25% are regular e-cigarette users; 18% are regular marijuana users (9% tobacco; 3% Rx painkillers).

What does this mean for our youth?

First and foremost, there is the danger of addiction. Studies repeatedly show that the younger youth start using a substance the greater the chance of them becoming addicted. 9 out of 10 people addicted to drugs or alcohol started in their teens.

Second, because of the advancements in medical technology, we've come a long way with brain research in the past 20 years. Most importantly we know that the brain doesn't stop developing until 25 years of age. We've also learned that the brain develops from the back to the front. With the pre-frontal cortex being the last area to develop. The pre-frontal cortex controls Executive Functioning, reasoning, decision making, and judgement.

We also know that anything we put into our body affects our brain. Therefore, if we are putting mind-altering substances into our body at a young age, we are affecting brain development. Some of these changes are temporary and can be reversed by stopping substance use. However, as we are sadly learning through many studies, some of the changes to the brain are permanent.

Effects of Each Drug on Brain

We know that alcohol affects executive functioning and coordination. But, studies have also shown that heavy alcohol use in the teen years significantly decreases the brain's functional activity levels. (Show pic on UAD rack card.)

Studies continue to find that 1) heavy marijuana use as a youth changes the structure of the brain; 2) impairs reaction time and coordination, affects the hippocampus (helps regulate emotions), long & short term memory, and executive functioning; 3) increases risk of mental health issues including depression and anxiety; 4) latest study found that it is more dangerous to the developing brain than alcohol

Researchers from the Center for Brain Health at the University of Texas in Dallas recently imaged the brains of heavy users who started before the age of 16. They found arrested brain development, particularly in the prefrontal cortex, the part of the brain responsible for judgment, reasoning and complex thinking.

In typical adolescent brain development, the brain prunes neurons over time, resulting in reduced cortical thickness and a greater contrast between gray and white matter. And the more pruning, the more the brain adds wrinkles and folds to its surface. MRIs found those who started smoking marijuana early had greater cortical thickness, less gray and white matter contrast and fewer folds.

The extent of brain alteration, the researchers found, was directly related to the amount of marijuana smoked.

E-cigarette use is so new to our society that there are not a lot of studies out on the harms. But, with decades of studies about cigarettes we know definitively that nicotine is highly addictive and can harm adolescent brain development. Use has been associated with lasting cognitive and behavioral impairments, including effects on working memory and attention. Youth also use THC concentrates in e-cigarettes. (THC is the chemical in marijuana that produces the high feeling or altered state.) New studies have shown that aerosolized (vaped) marijuana is far more potent than combustible (smoked) marijuana bringing higher levels of cognitive and coordination (psychomotor - relating to the origination of movement in conscious mental activity) impairment as well as anxiety, hallucinations, and feelings of paranoia (psychosis).

Why do youth use?

The age old question of why do youth use drugs and alcohol is never far from a parent's or caregiver's thoughts. Most people understand that youth, and adults for that matter, that use substances use them because it's fun. This is consistently the #1 answer in our youth surveys. (#2 is to get high) What most parents and caregivers don't realize is that the third reason why youth use drugs and alcohol is to deal with stress. And number four is because they are sad. What does that mean? They are using to cope with emotions they don't know how to deal with. They simply don't have or know how to use positive coping skills to stay healthy. One of the things we cover when we go into schools is alternatives to using drugs and alcohol. Our health educators ask students ways they can stay healthy and not use drugs or alcohol. More often than not, students across all grade levels are at a loss for healthy alternatives.

Talk Early, Talk Often

So, what can we as parents do about these issues? Talk to your kids about drugs and alcohol. If they aren't getting information from their parents where are they getting it? Music, TV, videos, movies, social media, and friends. Most of these sources are pro-drug influences. Talk to your kids about your expectations with drugs and alcohol. Set clear boundaries and consequences for crossing those boundaries. Practice scenarios with them. Give them several ways they can say no when offered drugs. Lock up the prescription and over-the-counter medications in your home and properly dispose of any expired or unwanted medications you

might have. All police departments in Yavapai County have prescription drug drop boxes to dispose of medication and there are prescription take back days twice a year at various locations throughout Yavapai County. Model healthy ways to deal with stress, depression, and or anxiety. Sit down with your child and go through this information together. The best way to discuss drugs and alcohol is not to use scare tactics. Studies show that children are more inclined to listen when you present the facts and allow them to make an informed decision.

With all that we now know about how drugs and alcohol damage the still-developing brains of teens, one of our most important goals as parents should be delaying the age of first-time use as long as possible. Discussing the harms of alcohol, marijuana, and other drugs with your child is an important step in moving toward that goal. We encourage you to talk early, talk often. This should not be a one-time conversation.