Drug and Alcohol Abuse

Donna Lenox, MSW, LSW
Mental Health/Substance
Abuse Counselor- Linkages
Program ext 7278
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The National Institute on Drug Abuse's (NIDA) Monitoring the Future (MTF) longitudinal survey has become the nation's most relied upon scientific source on substance use and trends following 8th, 10th and 12th graders in the United States since 1975. The most recent 2022 report indicates substance use (except for alcohol use)in the past year has decreased in all age groups. Alcohol use among 12th graders across the U.S. increased by 5%. Results indicate 52% of 12th graders report using alcohol in the past six months. This is a significant increase from the 2021 level of 47%.

The Effects of Using:

Source: Samhsa

- The more a student uses alcohol, marijuana, or other illicit drugs, the lower his /her grade point average is likely to be.
- **■** Frequent users are 3x more likely to drop out of school altogether than other students.
- Alcohol abusers are 4x more likely to cut classes or skip school, marijuana abusers 6x more likely.
- Alcohol abuse over time can reduce brain size the hippocampus (responsible for learning and memory) can shrink up to roughly 10%, severely jeopardizing school performance, and damage to the prefrontal cortex can hinder an individual's decision-making ability.
- Adolescents with substance use disorders are at 6X higher risk for developing co-occurring psychiatric disorders.
- Students who sell drugs and/or use them early are more likely to engage in violent behavior than others.
- Signs school personnel and parents can look out for include multiple absences/tardiness, giving up activities/sports, drastic change in social group and/or isolation, a drop in grades, excessive sleepiness, red/glassy eyes

The Controlled Substances Act (CSA) Regulates Five Classes of Drugs:

- Narcotics
- Depressants
- Stimulants
- Hallucinogens
- Steroids

Source: U.S. Department of Justice Drug Enforcement Administration

Narcotics

Class includes opium, opium derivatives, heroin, oxycodone, vicodin, codeine, hydromorphone, morphine, methadone and fentanyl.

Common street names include; smack, horse, junk, paregoric, MPTP, hillbilly heroin, oxies, juice.

Withdrawal symptoms include watery eyes, runny nose, yawning, irritability, loss of appetite, nausea, intense craving for the drug, severe depression, vomiting, increased heart rate and blood pressure, alternating chills and sweating.

Overdoses are not uncommon and can be fatal. Signs include constricted pupils, cold clammy skin, confusion, convulsions, extreme drowsiness, slowed breathing and unconsciousness.

Heroin

Heroin is a highly addictive opiate. It is processed from Morphine, a naturally occurring substance extracted from the seed pod of certain varieties of poppies grown in Southeast and Southwest Asia, Mexico and Columbia. It is typically sold as a powder and can be snorted, smoked or injected after being "cooked".

Effects are immediate and include a "rush" followed by euphoria, impaired mental functioning, constricted pupils, slowed respiration and a twilight state of sleep and wakefulness.

IMPORTANT to note. In New Jersey and most of the Eastern part of the Country heroin availability and use has dropped dramatically as heroin has all but been replaced by Fentanyl a powerful synthetic opiate analgesic. Fentanyl is now preferred over heroin as it is cheaper and produces a similar effect. Also IMPORTANT to know, the threat of fatal overdose has skyrocketed and fentanyl is now considered by the DEA as the number ONE cause of death for all US citizens under the age of 45.

Stimulants

Class includes amphetamines (Adderall and Dexedrine), methylphenidate (Concerta and Ritalin), diet aids (such as Didrex, Bontril, Preludin, and Meridia) and illicitly manufactured drugs such as methamphetamine, cocaine, crack cocaine.

NOTE: Methamphetamine use in N.J. has begun to increase sharply in the past two years.

Taken in the form of pills, powder, rocks and injectable liquids and can be swallowed, smoked, snorted or injected which produces a sudden sensation known as a "rush".

Side effects include dizziness, tremors, headache, sweating, vomiting, chest pain with palpitation and abdominal cramps. In overdose, unless there is medical intervention, high fever, convulsions and cardiovascular collapse may precede death.

Tobacco/Nicotine

Over 300,000 Americans die each year as a direct result of tobacco use. Nicotine, also found in cigarettes and most vaporizers not containing marijuana, is a highly addictive substance. Smoking is the nation's most prevalent addiction. About one in ten Americans are dependent on nicotine. Cigarette/vaporized nicotine use is generally the first substance that adolescents experiment with. Adolescent use of nicotine can result in addiction, lowered impulse control and brain synapse formation delays. Nicotine can also prime young brains to become more susceptible to addiction to other substances.

According to the NIDA 12% of eighth graders, 20.5% of tenth graders and 27.3% of 12th graders reported vaping nicotine in the past year.

Vaporizers

Electronic cigarettes, vaporizers, vape pens, hookah pens or electronic nicotine delivery systems (ENDS) are battery operated devices used to inhale an aerosol, which typically contains nicotine. Vaporizers or "vapes" can be used to smoke marijuana concentrates and even alcohol. Most vapes contain a cartridge or reservoir which holds the liquid or concentrate solution (e-liquid or e-juice), a heating element (atomizer), a power source (typically a battery) and a mouth piece that the user uses to inhale. Vapes are very popular among teens. Their easy availability, alluring advertisements, various e-liquid flavors and the belief that they're safer than cigarettes (as they do not contain tobacco) have helped make them appealing to this age group. It is very important to note that vapors from all forms of vaporizers do NOT smell of marijuana or cigarette smoke.

The FDA has described vaping as an epidemic among US high school students with nearly 28% of 12th graders reporting vaporizer/nicotine use.









Side Effects of Vaporizer Use

The most prevalent side effect of vaporizer use of nicotine is addiction. But there is another very serious physical side effect caused by diacetyl found in the majority of Ecigarettes.

Diacetyl, the buttery flavored chemical that, prior to 2006, was found in foods like microwave popcorn, causes bronchiolitis obliterans, or "popcorn lung", a scarring of the tiniest air sacs in the lungs resulting in the thickening and narrowing of the airways. It is a serious lung disease that causes coughing, wheezing and shortness of breath similar to the symptoms of COPD.

Cocaine

Cocaine is an intense, euphoria-producing stimulant drug with strong addictive potential. It is derived from the leaves of the coca plant grown in Bolivia, Peru and Columbia where about 92% of the cocaine powder reaching the U.S. is produced. It can be snorted as powder or injected once dissolved in water. Base "crack" cocaine is smoked.

The effects of cocaine include euphoria, excitation and alertness. The crash that follows is characterized by mental and physical exhaustion, depression and an intense craving for the drug.

According to the NIDA cocaine use among adolescents ages 12-18 decreased from 2.1% in 2018 to 0.4% in 2022.

ADD & ADHD Medication Abuse

Common medications: Ritalin, Adderal, Concerta, Stratera

These medications are stimulants and are most commonly abused by individuals who do NOT have ADD or ADHD. They increase alertness, attention and weight loss.

Depressants

Class includes alcohol, barbiturates (butalbital, phenobarbital, seconal, nembutal), benzodiazepines (valium, xanax, rohypnal, halcion, restoril, librium and ativan) as well as GHB (sodium oxybate).

Common street names include barbs, benzos, downers, liquid x, R2, reds or roofies. Come in the form of pills, syrups and injectable liquids. Individuals abuse depressants to experience euphoria or to counteract a stimulants' side effects.

Side effects include slurred speech, loss of motor coordination, weakness, headache, dizziness, nausea, vomiting, low blood pressure and slowed breathing. Overdose effects occur with high doses of barbiturates and/or benzodiazepines and use of them with alcohol or other drugs and can slow heart rate and breathing enough to cause death. Withdrawal from depressants can be life threatening.

Marijuana

Marijuana is a mind altering, psychoactive drug produced by the Cannabis Sativa plant. THC (tetrahydrocannabinal) is the main ingredient that produces the psychoactive effect and is what most labs test for. Side effects include euphoria, disinhibition, relaxation, increased sociability, impaired judgement, reduced coordination, enhanced sensory perception and short term memory impairment.

Marijuana is the most commonly abused drug in the U.S. More people use marijuana than all other illicit drugs combined and availability levels are extremely high. Abuse of marijuana concentrates ("wax", "honey oil" etc.) is rapidly increasing. These concentrates have a THC content of 52-80% while the THC content of leaf marijuana is 12-17%. Highly flammable butane gas is used to extract THC from the marijuana leaf. They can be abused using e-cigarettes or consumed in edibles. The NIH reports 30.7% of 12th graders in the United States used marijuana in the past year.

Synthetic Marijuana

Synthetic marijuana, sometimes referred to as K2 or Spice, remained unscheduled by the DEA until 2011 due to the practice of traffickers who would frequently change the ingredients/chemicals of the psychoactive end product to avoid criminal prosecution.

Synthetics can contain cannabinoids or cathinones which are responsible for the vast majority of SM overdoses. Users rarely know what is in the synthetics they are using. According to the National Institute on Drug Abuse, use of synthetic marijuana by 12 to 23 year olds in the U.S. has drastically declined from an average of 2.6% in 2018 to 0.2% in 2022.

Alcohol

Alcohol is a depressant derived from the natural fermentation of fruits, vegetables and/or grains. Physical responses include relaxation, altered perception, loss of coordination and sleepiness.

An overdose can cause dizziness, nausea, vomiting, impaired judgement unconsciousness and respiratory failure leading to death. Currently it is estimated that 10-14% of Americans are alcohol dependent. 40-50% of all fatal car accidents involve alcohol.

According to the NIDA, 52% of 12th graders in the U.S. used alcohol in the past year.

Hallucinogens

Are found in plants and fungi (LSD) or are synthetically produced. Used for their ability to alter human perception and mood this class of drugs includes PCP, ecstasy/MDMA, K2/spice (synthetic marijuana), ketamine (a synthetic dissociative anesthetic), LSD, peyote/mescaline (derived from the peyote cactus), and psilocybin (a chemical obtained from certain types of mushrooms).

Common street names are mollies, molly, acid, mushrooms, shrooms, special K, X and XTC. Hallucinogens come in a variety of forms; MDMA or ecstasy tablets are sold in many colors with a variety of logos to attract young users. LSD is sold in the form of impregnated paper squares (blotter acid) typically imprinted with colorful graphic designs. Deaths from overdose of LSD, mushroom and mescaline are rare. An overdose of PCP or Ketamine can result in coma, seizures and death due to respiratory arrest. NOTE: The NIDA reports Ketamine use continues to rise in the 12th grade-college age group.

Inhalants

- Common household products that produce chemical vapors that are inhaled to induce psychoactive or mind altering effects.
- There are more than 1,000 products that are very dangerous when inhaled. Examples of commonly abused products include, spray paint, aerosol cleaning supplies and air fresheners.

<u>Symptoms</u>: Slurred speech, lack of coordination, dizziness, lightheadedness, hallucinations, delusions, loss of control. lingering headache, confusion, nausea and burns around the mouth.

Ecstasy

Ecstasy or MDMA is a synthetic substance that acts as a stimulant and a hallucinogen producing an energizing effect, distortions in time and perception and greatly enhanced enjoyment of tactile experiences.

Aka: MDMA, Mollie, Ecstasy, XTC, E, X

Side Effects:

Euphoria, feelings of closeness, empathy and sexuality. Some unwanted side effects include confusion, depression, anxiety, paranoia, sleep problems and drug craving all of which usually occur 30 to 45 minutes after ingestion and usually last 4 to 6 hours. A sore jaw due to involuntary jaw clenching is often a side effect of Ecstasy use.

Someone who is using Ecstasy may have items which appear quite innocent, but may be linked to the drug's use. Pacifiers and lollipops are often used to help users control teeth grinding that comes from involuntary jaw clenching. Candy necklaces and bags of small candy may be used to disguise tablets.

Over-The-Counter and Controlled Prescription Drugs

There are over 120 OTC drugs that can be abused. These include caffeine stimulants (No-Doz), antihistamines (Benadryl), decongestants (Sudafed), weight loss medications (laxatives), sleep aids, motion sickness medications (Dramamine) and cough medicines (Dextromethorphan). Taken in excess these medications produce a high that was never intended by manufacturers. At levels above the recommended dosage Dextromethorphan or DXM, the active ingredient in many cough syrups, can produce a dangerous dissociative high.

According to the Substance Abuse Services Administration, National Survey on Drug Use and Health, prescription opioid analgesics, specifically those containing oxycodone and hydrocodone are the most common types of CPDs abused. 53.7% of adolescents who misused CPDs in 2022 reported they got the drug from a friend or relative.

Steroids

Anabolic steroids are synthetically produced variants of the naturally occurring male hormone testosterone that are abused in an attempt to promote muscle growth, enhance athletic or other physical performance and improve physical appearance. The doses abused are often 10 to 100 times higher than the approved medical treatment doses.

Side effects include severe acne, male-pattern baldness, oily skin and hair, stunted growth when abused in early adolescence, extreme irritability, facial hair growth and deepened voice in females and breast development in males.

EMERGING DRUGS OF CONCERN

Fentanyl - A powerful synthetic opiate analgesic similar to but more potent than Morphine. Medicinally it is used to treat patients with severe pain. It works by binding to the brain's opiate receptors. Recently there has been a dramatic increase in fentanyl related deaths with the DEA listing fentanyl overdose deaths the NUMBER ONE cause of death for U.S. citizens under the age of 45.

Xylazine- A powerful tranquilizer that is quickly taking over the fentanyl market in N.J. and the Eastern seaboard of the U.S. Many fentanyl users prefer the fentanyl/xylazine combination known as "tranq" as their "high" lasts longer and users do not wake up as "dope sick" (craving more fentanyl) as they would using fentanyl alone.

WHAT ARE EDIBLES?

For cannabis/marijuana users they're an alternative to traditional combustion methods. Edibles can be any cookie, brownie, chocolate bar, gummy bear or other treat laced with cannabis chemicals like THC and CBD. And because these confections are digested rather than inhaled, they can affect the body in <u>far more potent</u> ways.

In recent years, this <u>stronger</u>, <u>longer-lasting effect</u> has led to several non-fatal overdoses. Most concerning, these overdoses often happen to small children who essentially become poisoned by the high amount of THC. For most adults, the outcome of over-consumption is likely nausea and paranoia.

WHAT ARE EDIBLES?

The edible high can peak 2-3 hours after consumption and the effects can last 7-12 hours in total.

According to the existing research the effects of marijuana edibles can start anywhere from 30 minutes to an hour following ingestion. The peak high can then occur two-three hours after consumption, while muted effects can often persist for five hours or more after that.

If only small amounts are taken, this 'come down' could be relatively quick and normality may resume as soon as six hours after the edibles are eaten. But if a dose is particularly high (20 milligrams and above), the effects can last much longer.

Timeline of an edible high:

Average onset time:	30 mins – 1 hour
Recommended waiting time:	2 hours
Peak high:	2 – 5 hours
Come down:	7 – 12 hours

DRUG TREND IMAGES









DRUG TREND IMAGES



















References

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SAMHSA

Truth Initiative