

Drug and Alcohol Abuse

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Percentage of high school seniors reporting they could
obtain drugs fairly easily or very easily:
Source DEA 2017 Drug Threat Assessment

Marijuana	80.3%
Amphetamines	47.9%
Cocaine	22.5%
Alcohol	89.4 %
Controlled Prescription Drugs	63.2%
Heroin	48.8%
Crystal methamphetamine	45.3%
Fentanyl	14.6%

The Effects of Using:

Source : Samhasa

- 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 5x 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 or use them early are much more likely to engage in violent behavior than others.
- Signs school personnel 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. Call 911 from a landline if overdose is suspected.

Heroin

Heroin is a highly addictive drug and the most rapidly acting of the opiates. 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. The most significant effect of heroin use is addiction. Because users cannot know the actual strength of the drug and because of the traffickers’ very common practice of mixing fentanyl with the heroin to produce a more powerful and less expensive “high”, overdose is common.

Heroin use increased rapidly across all demographic groups until the end of 2015. The DEA 2017 Threat Assessment reports heroin use among 10th and 12th grade students has continued to decrease from 0.7% in 2015 to 0.3% in 2017.

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 and methcathinone.

Common street names include bennies, black beauties, coke, crank, ice, r-ball, snow, speed and uppers.

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

Over 300,000 Americans die each year as a direct result of tobacco use. Nicotine, also found in cigarettes, is a highly addictive substance. Smoking is the nation's most prevalent addiction. About one sixth of Americans are dependent on Nicotine. Cigarette use is generally the first substance that adolescents experiment with.

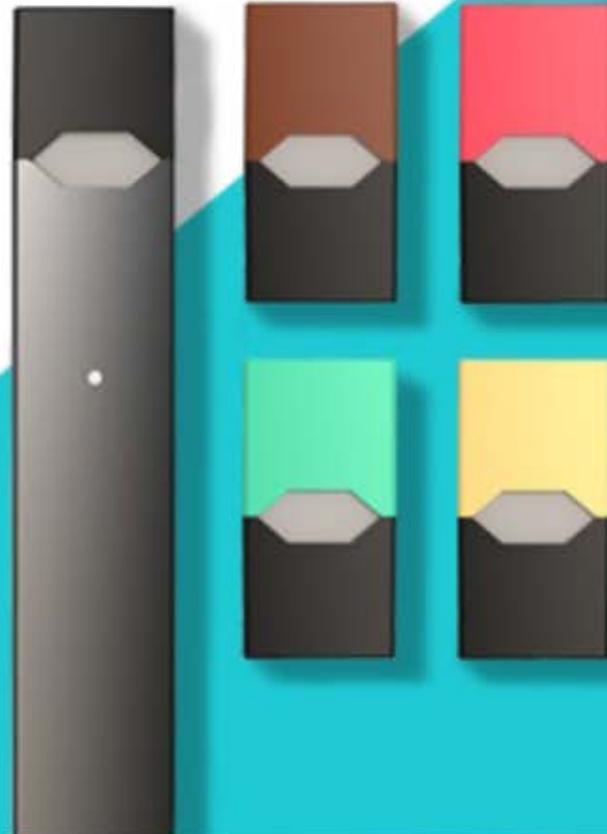
According to the US Centers For Disease Control and Prevention 2018 report on teen smoking over 1.6 million high school students are current smokers. The report also states that 1.9% of 8th graders and 5.0% of 10th graders in the US are current smokers

Vaporizers

Electronic cigarettes, vaporizers, vape pens, hookah pens, electronic cigarettes 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 and 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 are ODORLESS.

In May 2018, the FDA described vaping as the next epidemic among US high schoolers. There was a 900% increase in vape use in this age group from 2011 to 2016. Today, approximately 8.4% of 8th graders and 15% of 9th through 12th graders use some sort of vape at least once a month.

JUUL
SMOKING EVOLVED







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 E-cigarettes.

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.

As per the EPA/2017 Drug Threat Assessment Survey data, availability of the drug is at it's highest in eleven years and the cocaine reaching the US is very high in purity, most likely due to traffickers competing against the heroin market. The increased purity of the drug has resulted in a 4.9% increase in cocaine use only overdoses. After a significant overall decrease in reported lifetime and annual cocaine use among 10th and 12th graders since 2004 there has recently been an increase in cocaine use among these groups.

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, rooffies, tranks and yellows. 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 or 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. It contains over 480 constituents. THC (tetrahydrocannabinol) 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 and enhanced sensory perception. Side effects at higher doses include time distortion, an increase in risk taking behavior, agitation, paranoia, anxiety 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. Studies have shown that school age marijuana use was significantly predictive of marijuana use fourteen years later when study participants were in young adulthood.

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 9.4% of students in 10th and 12th grade reported use of synthetic marijuana in the past month making it the second most widely used class of illicit drug after marijuana.

Alcohol

Alcohol is a depressant derived from the natural fermentation of fruits, vegetables and/or grains. Physical responses include altered perception, loss of coordination, impaired judgement, dizziness, nausea and vomiting. An overdose can cause 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 and the rate is higher for adolescents. It is estimated that by 8th grade 28% of adolescents have tried alcohol.

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, blotter, cubes, fry, mind candy, 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.

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 air conditioning refrigerant, spray paint, aerosol cleaning supplies and air fresheners.

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

- ❑ Studies by the American Lung Association have shown that adolescent use of inhalants has been decreasing yearly since 2007.

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 2016 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.

Aka: Arnolds, gym candy, roids, stackers, juice

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 Heroin related overdoses in New Jersey. This has been attributed to the increased purity of the Heroin as well as traffickers' continued practice of mixing Fentanyl with the Heroin to produce a less expensive, more powerful "high".

Ketamine- Since the 1970's Ketamine has been used medically as an anesthetic for use in humans and animals. It has been used under medical supervision to treat acute depression. Recently Ketamine has been identified as a "club drug". It comes in powdered form which can be sprinkled into a marijuana joint or cigarette and a liquid which can be mixed into drinks. It induces a state of sedation and is abused for its ability to produce dissociative sensations. A "special K trip" or an experience known as slipping into a "K hole" indicates intentional use of a much higher dose which can cause unconsciousness and dangerously slowed breathing.

References

2017 DEA Threat Assessment

-American Lung Association, E-Cigarette and Lung Health Study, 2017

Hazeldon Betty Ford Foundation

The National Institute on Drug Abuse “Monitoring the Future” National Survey Results on Drug Use 1975-2017

Campaign for Tobacco Free Kids
www.tobaccofreekids.org