EMERGING TEEN DRUG TRENDS AND TREATMENT OPTIONS
What You Will Learn

• Why teens engage in substance abuse
• Teen substance abuse warning signs
• New and popular drugs among teens and why they’re dangerous
• Impact of drug use on teenager’s brains, health, learning abilities and emotional maturity
• How to talk to kids about substance abuse
Why Do Teens Turn To Substances?

- Social Pressures
- Genetics
- Exposure through family/media
- Boredom? Rebellion? Experimentation?
- To Escape
Teen Drug Use Trends

Last two decades of alcohol, cigarette, and illicit drug use.*

Past 30 day use.

2013:
- 39.2% of 12th graders
- 25.7% of 10th graders
- 10.2% of 8th graders

1993:
- 16.3% of 12th graders
- 9.1% of 10th graders
- 4.5% of 8th graders

Illicit drugs:
- 25.5% of 12th graders
- 19.4% of 10th graders
- 8.5% of 8th graders

RecoverGateway.org | 877-505-HOPE (4673)
## Top Drugs among 8th and 12th Graders, Past Year Use

### 8th Graders

<table>
<thead>
<tr>
<th>Drug</th>
<th>Illicit drugs</th>
<th>Pharmaceutical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marijuana/Hashish</td>
<td>11.7%</td>
<td></td>
</tr>
<tr>
<td>Inhalants</td>
<td>5.3%</td>
<td></td>
</tr>
<tr>
<td>Synthetic Marijuana</td>
<td>3.3%</td>
<td></td>
</tr>
<tr>
<td>Cough Medicine</td>
<td>2.0%</td>
<td></td>
</tr>
<tr>
<td>Tranquilizers</td>
<td>1.7%</td>
<td></td>
</tr>
<tr>
<td>Adderall</td>
<td>1.3%</td>
<td></td>
</tr>
<tr>
<td>Hallucinogens</td>
<td>1.3%</td>
<td></td>
</tr>
<tr>
<td>OxyContin</td>
<td>1.0%</td>
<td></td>
</tr>
<tr>
<td>Vicodin</td>
<td>1.0%</td>
<td></td>
</tr>
<tr>
<td>Cocaine (any form)</td>
<td>1.0%</td>
<td></td>
</tr>
<tr>
<td>MDMA (Ecstasy)</td>
<td>0.9%</td>
<td></td>
</tr>
<tr>
<td>Ritalin</td>
<td>0.9%</td>
<td></td>
</tr>
</tbody>
</table>

### 12th Graders

<table>
<thead>
<tr>
<th>Drug</th>
<th>Illicit drugs</th>
<th>Pharmaceutical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marijuana/Hashish</td>
<td>35.1%</td>
<td></td>
</tr>
<tr>
<td>Adderall</td>
<td>6.8%</td>
<td></td>
</tr>
<tr>
<td>Synthetic Marijuana</td>
<td>5.8%</td>
<td></td>
</tr>
<tr>
<td>Vicodin</td>
<td>4.8%</td>
<td></td>
</tr>
<tr>
<td>Tranquilizers</td>
<td>4.7%</td>
<td></td>
</tr>
<tr>
<td>Cough Medicine</td>
<td>4.1%</td>
<td></td>
</tr>
<tr>
<td>Sedatives</td>
<td>4.3%</td>
<td></td>
</tr>
<tr>
<td>Hallucinogens</td>
<td>4.0%</td>
<td></td>
</tr>
<tr>
<td>MDMA (Ecstasy)</td>
<td>3.6%</td>
<td></td>
</tr>
<tr>
<td>OxyContin</td>
<td>3.3%</td>
<td></td>
</tr>
<tr>
<td>Cocaine (any form)</td>
<td>2.6%</td>
<td></td>
</tr>
<tr>
<td>Inhalants</td>
<td>1.9%</td>
<td></td>
</tr>
<tr>
<td>Salvia</td>
<td>1.8%</td>
<td></td>
</tr>
<tr>
<td>Ritalin</td>
<td>1.8%</td>
<td></td>
</tr>
</tbody>
</table>

*Only 12th graders surveyed about sedatives use*

Source: University of Michigan, 2014 Monitoring the Future Study
Alcohol

• In the past 30 days:
  37.4% of 12th Graders have used Alcohol

• In 2014:
  19.4% of 12th Graders reported binge drinking
Underage Drinking

Many, many young people drink alcohol

<table>
<thead>
<tr>
<th>Teens Who Have Had at Least One Alcoholic Drink</th>
</tr>
</thead>
<tbody>
<tr>
<td>80%</td>
</tr>
<tr>
<td>60%</td>
</tr>
<tr>
<td>40%</td>
</tr>
<tr>
<td>20%</td>
</tr>
<tr>
<td>0%</td>
</tr>
</tbody>
</table>

Age 15: 35%
Age 18: 65%

In 2013, **8.7 million** young people ages 12–20 reported that they drank alcohol beyond “just a few sips” in the past month.²
How much is a drink?

• A standard drink is roughly 14 grams of pure alcohol, which is found in:
  - 12 ounces of beer
  - 5 ounces of wine
  - 1.5 ounces of distilled spirits
What is “binge drinking?”

Consuming an amount of alcohol within about 2 hours, that blood alcohol concentration (BAC) levels reach 0.08g/dL, the legal limit of intoxication.

How many drinks does it take to reach this level of intoxication?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Men</strong></td>
<td>5</td>
</tr>
<tr>
<td><strong>Women</strong></td>
<td>4</td>
</tr>
<tr>
<td><strong>Boys: Ages 9-13</strong></td>
<td>3</td>
</tr>
<tr>
<td><strong>Boys: Ages 14-15</strong></td>
<td>4</td>
</tr>
<tr>
<td><strong>Boys: Ages 16-17</strong></td>
<td>5</td>
</tr>
<tr>
<td><strong>Girls: Ages 9-17</strong></td>
<td>3</td>
</tr>
</tbody>
</table>
Youth Ages 12 to 20 Often Binge Drink

People ages 12 through 20 drink 11% of all alcohol consumed in the United States.³

- 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.
- 5.4 million young people had 5 or more drinks on the same occasion, within a few hours, at least once in the past month.⁴
- 1.4 million young people had 5 or more drinks on the same occasion on 5 or more days over the past month.⁴
Prescription Drug Abuse

Monitoring the Future Study:

% of Teens Who Have Misused Prescription Drugs
Prescription Drug Abuse

Opioids

• Opioids attach to opioid receptors in the brain, spinal cord, gut, and other organs blocking pain messages
• Relaxation & euphoria
• Other effects include:
  – Sleepiness
  – Confusion
  – Nausea
  – Constipation
  – Breathing problems
Prescription Drug Abuse
Opioids

4.8% of 12th Graders used Vicodin for non-medical reasons in 2014

ARE PRESCRIPTION OPIOIDS THE ROAD TO HEROIN?

Nearly half of young people surveyed in 3 recent studies who inject heroin reported abusing prescription opioids before starting heroin.
Prescription Drug Abuse

Stimulants

Classified as a central nervous system stimulant

Symptoms of Stimulant abuse:

- Nervousness and restlessness
- Pounding or fast heartbeat
- Shortness of breath
- Headache
- Difficulty falling and staying asleep
- Changes in sex drive
- Nausea, stomach pain, diarrhea or constipation
- Loss of appetite and resulting weight loss
- Hoarseness, dry mouth
- Excessive fatigue

Drugabuse.com
Prescription Drug Abuse
Stimulants

- 7.5% 12\textsuperscript{th} graders abused Adderall in the past year according to the “2015 Monitoring the Future Study”

- Adderall = combination of amphetamine and dextroamphetamine that is used to treat the symptoms of attention-deficit hyperactivity disorder (ADHD)
Newer Popular Drugs Used by Teens

- Dabs
- Cough Syrup
  - “Syrup,” “Purple Drank,” “Sizzurp,” “Lean”
- Synthetic Marijuana
- Bath salts
What is Dabs?

- THC wax extracted using a solvent like butane or carbon dioxide
- Slang terms: “Wax”, “Amber”, “Hash”
- Extraction method can be dangerous
- Fast high, can lead to “overdose” (uncomfortable high, passing out, vomiting)
Cough Syrup

• Ingredients in cough syrup that lead to abuse:
  – Codeine or hydrocodone
  – Dextromethorphan, often called DXM
  – Diphenhydramine

• Effects
  – Drowsy and relaxed high
  – Sense of mellowness
  – Fatigue
  – Loss of coordination
  – Constipation and urinary retention

Texas Commission on Alcohol and Drug Abuse
Synthetic Marijuana
*K2, Spice, Red Dawn X, Wicked X, etc.*

- A combination of dried herbs, flowers, and tobacco and chemical additives.
- Limitless high
- Effects can be 10x more intense than marijuana.
- **Signs and symptoms of use include:**
  - Hallucinations, Paranoia, Anxiety, and Over-activation of the Central nervous system (elevated temperature and rapid heart rate). However, initial experience is relaxing.
  - When coming down, users report significant agitation and sometimes aggression as well as intense cravings for more.
  - Some report suicidal ideation.
  - In 2012 this was the 2nd most abused substance among high school students at 11% of seniors. In 2014 it had dropped to 6% having used in their Senior year.
Synthetic Marijuana

• Cannabinoid compounds found in K2 products act on the same receptors in the brain as THC, however bind more strongly to those receptors which could lead to a **more powerful and unpredictable effect.**

• Regular users experience withdrawal. During the early phases of treatment, one may experience irregular heart rate, insomnia, agitation, paranoia, and intense cravings.

**EMERGENCY ROOM VISITS DUE TO SYNTHETIC MARIJUANA USE**

• According to an NIH report 11,406 ER visits in 2010 were associated with synthetic marijuana.
  • 75% were among adolescents and young adults ages 12-29
  • 3/4th of them males.

• Symptoms that bring individuals to the ER include rapid heart rate, vomiting, agitation, confusion, and hallucinations.
Bath Salts

A powder–like substance that can be snorted, injected, or smoked. It is described as “fake cocaine” and is a stimulant. Marketed as “plant food”, or “jewelry cleaner”.

Effects

- Last 6-8 hours
- Often people continue to use and can make the effects last for several days.

Symptoms

- Rapid heart rate
- Extreme energy
- Sweating
- Lack of appetite
- Insomnia
- Erratic behavior
- Hallucinations
- Violence
- Suicidal thoughts.
Bath Salts

• Highly addictive

• ER admissions often are a result of:
  – Erratic behavior
  – Paranoia
  – Psychosis
  – Increased heart rate
  – Anxiety

• Sometimes symptoms of paranoia, anxiety, and psychosis do not diminish with time and individuals are admitted to psychiatric facilities and/or often started on anti-psychotic medications.
Marijuana Use

CHANGING ATTITUDES ON MARIJUANA USE

64%
of high school seniors do not view regular marijuana use as harmful.

Compared to just 35% 20 years ago.

*Monitoring the Future 2014

MOST MARIJUANA USE BEGINS IN ADOLESCENCE

Of the 2.4 million people who began using in the last year, were aged 12-20
Teen Marijuana Use

Research shows:

• Marijuana interferes with attention, motivation, memory, and learning.

• Students who use marijuana regularly tend to get lower grades and are more likely to drop out of high school than those who don’t use.

• Those who use it regularly may be functioning at a reduced intellectual level most or all of the time.

• There is a possibility that street marijuana is laced with other dangerous substances, such as: cocaine, crack, PCP or even embalming fluid.
Teen Marijuana Use

HEAVY MARIJUANA USE BY TEENS IS LINKED TO:

**Educational Outcomes**
- lower grades and exam scores
- less likely to enroll in college

**Life Outcomes**
- lower satisfaction with life
- more likely to earn a lower income
- more likely to be unemployed

[Diagram showing icons for each outcome]
Teen Marijuana Use

![Graph showing teen marijuana use from 1993 to 2013. The percentage of past-year use in 12th graders increased from 26.0% in 1993 to 36.4% in 2013. The perceived harm drops as use goes up.]

Marijuana Effects on the Brain

• Marijuana is particularly harmful to the still developing brains of young people.
• It is connected to changes in adolescent brain development resulting in learning issues, memory problems and IQ loss.
Social Effects of Teen Marijuana Use

- Effects on learning and development
- Emotional immaturity
- “Failure to Launch”
Signs and Symptoms

• What parents and healthcare professionals should look for?
  – Physical
  – Emotional
Signs & Symptoms of Drinking or Drug Use in Teens

BEHAVIOR
- Change in overall personality
- Hidden stashes of alcohol
- Moodiness, irritability or nervousness
- Sudden oversensitivity or resentful behavior
- Secretive phone calls, texting or instant messages
- Extreme hyperactivity; excessive talking

SCHOOL
- Drop in grades
- Defiant of authority or complaints from teachers
- Truancy or loss of interest in schoolwork
- Loss of interest in school activities, hobbies or sports

PERSONAL APPEARANCE/HABITS
- Poor hygiene
- Messy, careless appearance
- Unexplained weight loss or gain
- Concealed marks or lines on arms or legs
- Chewing gum or mints to cover up breath
- Smell of smoke on breath or clothes
Signs & Symptoms of Drinking or Drug Use in Teens

FAMILY/FRIENDS
• Withdrawal from family members
• Disengage in family activities
• Change in friends; secretive about new friends

HEALTH
• Sweatiness
• Depression
• Sores, spots around mouth
• Dilated pupils or bloodshot eyes
• Inability to sleep or unusual sleep patterns
• Runny nose, not caused by allergies or a cold
• Unexplained nosebleeds, nausea or vomiting

HOME
• Locked bedroom doors
• Frequently breaks rules and curfews
• Missing household funds or valuables
• Excessive need for privacy; unreachable
• Increased use of air fresheners, scented candles, or incense

MONEY ISSUES
• Unexplained need for money
• Not able to account for spending
• Found cheating or stealing
Preventing Teen Drinking & Drug Use

Preventing teen drinking and drug use is a complex challenge. Any successful approach must consider many factors, including:

• Genetics
• Personality
• Rate of maturation and development
• Level of risk
• Social factors
• Environmental factors
Prevention and Treatment Options

• Talking to Teens about Substance Abuse

_Teens who consistently learn about the risks of drugs from their parents are up to 50% less likely to use drugs than those who don't._

Parents can help their children avoid alcohol problems by:

- Talking about the dangers of drinking
- Drinking responsibly
- Serving as positive role models
- Not making alcohol available
- Getting to know their children’s friends
- Having regular conversations about life in general
- Supervising all parties to make sure there is no alcohol
- Connecting with other parents about sending clear messages about the importance of not drinking alcohol
- Encouraging kids to participate in healthy and fun activities that do not involve alcohol
- Research shows that children whose parents are actively involved in their lives are less likely to drink alcohol.
Prevention and Treatment Options

• Treatment Programs for Teens
  – Outpatient
  – Residential
• Co-occurring/Dual-Diagnosis Treatment
• Medication Assisted Treatment
Gateway Alcohol & Drug Treatment

24-Hour Helpline
877-505-HOPE (4673)
RecoverGateway.org