Adolescent Drinking and Drug Use Developing Trends

Presented by:
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Understanding the Progression

Intensive Treatment

Brief intervention:
- Schools
- Courts
- Pediatric clinics
- Emergency rooms
- Mental health clinics

Adapted from Broadening the Base of Alcohol Treatment (IOM)
Rx New Step in Drug Ladder

- Cocaine
- Shrooms, Ecstasy
- Prescription/over-the-counter drugs (Rx/OTC)
- Liquor, marijuana
- Cigarettes, beer/wine
- Heroin, meth, crack

Average age of first use is 11-13 years old
Young people who begin drinking before age 15 are 8 times more likely to develop alcohol dependence than those who abstain until age 21.
The parts of the brain that control physical coordination, emotion and motivation develop first.

The part responsible for reasoning and impulse control develops LAST.
What is Binge Drinking?

**Men:** 5 or more drinks in one sitting

**Women:** 4 or more drinks in one sitting

- More common among young people
- Increased risk for high risk behaviors
- Stops emotional and intellectual development
- Decreased academic performance
- Decreased memory
- Increased risk for alcohol dependence
- Increased risk of injury

Drinking games involve binge drinking!

* Often leads to **BLACKING OUT OR PASSING OUT**
In September 2011, the 911 Good Samaritan Law went into effect to address fears about a police response to an overdose.

This law provides significant legal protection against criminal charge and prosecution for possession of controlled substances, as well as possession of marijuana and drug paraphernalia.

This protection applies to both the person seeking assistance in good faith as well as to the person who has overdosed.

Class A-1 drug felonies as well as sale or intent to sell controlled substances are not covered by the law.

http://www.health.ny.gov/
Marijuana is addictive.

- Research suggests 30 percent of users may develop some form of problem use, which can lead to dependence and addiction.4
- People who begin using marijuana before age 18 are 4 to 7 times more likely than adults to develop problem use.4

Marijuana has short- and long-term effects on the brain.

- When marijuana is smoked, the mind-altering chemical tetrahydrocannabinol (THC) passes from the lungs to the bloodstream.4
- Blood then carries the chemical to the brain and other organs throughout the body.4
- User generally feels the effects after 30 to 60 minutes, including changes in mood, impaired body movement, difficulty with thinking and problem solving, and impaired memory.4
- When marijuana users begin using as teenagers, long-term effects can include reductions in thinking, memory, and learning functions.4

What is THC?

- The primary mind-altering chemical in marijuana, responsible for most of the intoxicating effect people seek, is delta-9-tetrahydrocannabinol (THC).1
- The chemical is found in resin produced by the leaves and buds primarily of the female cannabis plant. The plant also contains over 500 other chemicals, including more than 100 compounds that are chemically related to THC, called cannabinoids.7
- Organs in the body have fatty tissues that quickly absorb the THC in marijuana. Standard urine tests can detect traces of THC several days after use. In heavy marijuana users, urine tests can sometimes detect THC traces for weeks after use stops.7

*More sensitivity to heroin or opiates after chronic use
• A highly concentrated version of THC known as Butane Hash Oil, Dabs, or Wax is made using highly explosive butane.

• Extremely potent; 1-2 drops of oil can equal the amount of 1 joint.

• Oil is then put into a Vaporizer, E-cigarette/g-pen, or food.
Surgeon general warns youth vaping is a public health threat

Ryan W. Miller, USA TODAY Published 5:06 p.m. ET Feb. 6, 2017

"Dripping," which differs from normal e-cigarette use that slowly releases the liquid from a wick onto a hot atomizer, may expose users to higher levels of nicotine and to harmful non-nicotine toxins, such as formaldehyde and acetaldehyde — known carcinogens.

Sixty-four percent of the surveyed teens said they dripped for the thicker smoke, 39% for the better flavor and 28% for the stronger throat hit or sensation, according to the study published Monday in the journal Pediatrics.

ON AUGUST 8TH, 2016, LEGISLATION PASSED 90 DAYS PRIOR WENT INTO EFFECT WHICH CLASSIFIED ELECTRONIC CIGARETTES AND E LIQUIDS AS TOBACCO PRODUCTS.

HOW OLD DO I HAVE TO BE TO VAPE?

In most local municipalities, the age to vape is the same as purchasing cigarettes, which is 18. There are exceptions out there however, such as 19 in Nassau County, NY and 21 in New York City. Online sales in the US now require all customers to be 21 or older, including age verification with state ID, drivers license, or passport.

CAN I USE THE DEVICE INDOORS?

In the United States, there are currently only two jurisdictions where electronic cigarette use is prohibited in places that normally prohibit real cigarettes: Suffolk County, New York and the State of New Jersey.
<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
<th>Some Brands</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disposable e-cigarette</td>
<td>Cigarette-shaped device consisting of a battery and a cartridge containing an atomizer to heat a solution (with or without nicotine). Not rechargeable or refillable and is intended to be discarded after product stops producing aerosol. Sometimes called an e-hookah.</td>
<td>NJOY, OneJoy, Aero Disposable, Flavorvapes</td>
</tr>
<tr>
<td>Rechargeable e-cigarette</td>
<td>Cigarette-shaped device consisting of a battery that connects to an atomizer used to heat a solution typically containing nicotine. Often contains an element that regulates puff duration and/or how many puffs may be taken consecutively.</td>
<td>Blu, GreenSmoke, EonSmoke</td>
</tr>
<tr>
<td>Pen-style, medium-sized rechargeable e-cigarette</td>
<td>Larger than a cigarette, often with a higher capacity battery, may contain a prefilled cartridge or a refillable cartridge (often called a clearomizer). These devices often come with a manual switch allowing to regulate length and frequency of puffs.</td>
<td>Vapor King Storm, Totally Wicked, Tornado</td>
</tr>
<tr>
<td>Tank-style, large-sized rechargeable e-cigarette</td>
<td>Much larger than a cigarette with a higher capacity battery and typically contains a large, refillable cartridge. Often contains manual switches and a battery casing for customizing battery capacity. Can be easily modified.</td>
<td>Volcano, Lavatube</td>
</tr>
</tbody>
</table>
NICOTINE & THE TEENAGE BRAIN

The teenage brain is still developing. Decision-making, impulse control and planning ahead are among the last features of the brain to mature. This makes teenagers more susceptible to the effects of nicotine and other addictive substances.

**Limbic System aka Reward System** – part of the brain affected by nicotine

*Regulates stimuli and emotional responses,* including attention span

*Stimulates dopamine production,* producing a feeling of pleasure. The brain remembers these pleasurable feelings and seeks them out, producing an addiction.
DECODING WHAT’S BEHIND THE VAPOR

WHAT IS AN E-CIGARETTE?
A battery-powered device that heats cartridges of flavored, liquid nicotine and other additives, which is delivered as an aerosol or “vapor.” They are not lit, but many produce a lit effect when the vapor is inhaled. These devices are often made to look like tobacco products, especially cigarettes and cigars.

WHAT IS VAPING?
The vaporized nicotine is combined with propylene glycol, which the user then inhales in a manner similar to smoking a cigarette. When the user exhales (vaping), the vapor contains mainly the propylene glycol, which looks like smoke from a cigarette.

Different Names for the Same Product

NICOTINE & THE TEENAGE BRAIN

Cartridge | Atomizer | Battery | LED light
---|---|---|---

H₂C

hookah pen

vape pen

e-cigarette
e-hookah

vape pipe

OH

HO
**JUUL flavor pods**
The juice-flavored pods contain 50 milligrams of nicotine, roughly equivalent to a pack of cigarettes.

**Design**
The design of the e-cigarette is about the same size as a cigarette and weighs a couple of grams.

**USB charging dock**
The battery is charged by dropping the body on a magnetic USB adapter. It takes an hour to fully charge and will last up to 200 puffs, a full day of regular use.

**Body**
Most of the e-cigarette’s body is designed to contain a built-in battery.

**Charging dock**
It looks like a USB thumb drive.
How does it work?

Milliamp Hours

- ~400 Puffs
- ~800 Puffs
- ~1000 Puffs

Regular Cigarette | e-Liquid Nicotine
---|---
Unfiltered (Very Strong) | Super Strong - 36mg
Full Flavored (Strong) | Very Strong - 24mg
Regular (Average) | Strong - 18mg
Light | Medium - 12mg
Ultra Light | Light - 6mg
No Nicotine | No Nicotine - 0mg
VAPE PEN PARTS

DRIP TIP
PREVENTS DRIPPING FROM THE TOP OF THE TANK

TANK
RETAINS YOUR E-JUICE

FIRE BUTTON
ACTIVATES THE DEVICE

COIL
VAPORIZES YOUR E-JUICE

THREADING
提供安全连接，使电池与储液器相连

THE BATTERY
SUPPLIES DEVICE WITH POWER

USB CHARGE
MICRO USB HOLE TO RECHARGE THE BATTERY

LCD DISPLAY SCREEN
ALLOWS FOR VISUAL DISPLAY OF SETTINGS

WWW.VAPEFS.COM
How to Determine What Type of Vape Pen is Being Used

- Open the Vape Pen
- Inside the pen, you might see a raised wick surrounded by coil, a flat coil, or just a cylinder.
  - The packed or used residue of the product will be inside these areas
  - If the pen had been smoked recently, the odor of the product will sometimes remain inside the pen
  - Please note with a closed pen (wax or oil on inside) there is very little to no smell

DIRECTIONS:
1. PRESS BUTTON 5 TIMES TO LOCK / UNLOCK.
2. UNSCREW MOUTHPIECE.
3. LOAD DESIRED ESSENTIAL OILS INTO HEATING CHAMBER.
4. SCREW MOUTHPIECE BACK ON.
5. PRESS AND HOLD BUTTON.
6. INHALE.
Of the students in 8th, 10th and 12th grade who said they had ever used a vaporizer device:

- About 20 percent said they are vaping nicotine
- About 6 percent said they are vaping marijuana
- About 6 percent do not know what substance they last vaped
- FDA Regulated as of May 2016 – can no longer be sold to youth < 18 years

(NIH, 2016)
What did 12th graders think was in the mist they inhaled from an e-cigarette? Despite the belief that the liquid used in e-cigs contains only flavoring, it also might contain nicotine.
• Nicotine stimulates the adrenal glands to release the hormone epinephrine (adrenaline) and increases the levels dopamine.
• The activity of dopamine in the brain’s reward system motivates some people to use nicotine again and again, despite possible risks to their health and well-being.
• E-cigarette use also exposes the lungs to a variety of chemicals, including those added to e-liquids, and other chemicals produced during the heating/vaporizing process.

Youth are exposed to e-cigarette advertisements from multiple sources.

Sources of e-cigarette advertisement exposure

- **14.4 MILLION** youth are exposed at retail stores
- **10.5 MILLION** youth are exposed through the internet
- **9.6 MILLION** youth are exposed through TV/movies
- **8 MILLION** youth are exposed through magazines/newspapers

US students exposed to e-cigarette advertisements, by school type and number of sources of exposure

*Percentages may not add up exactly to any source due to rounding.

Teenagers Embrace JUUL, Saying It's Discreet Enough To Vape In Class

December 4, 2017 11:58 AM ET
Perception of Risk
Why might people use drugs?
Curiosity

Peer pressure

Relaxation

Anxiety

Social acceptance

Depression

Escape

Energy

Lose inhibitions
Risk Factors for Drug Use and Abuse

- Family history
  - predisposition to drug or alcohol problems
- Close friends who use drugs or alcohol
- Early first use
- Diagnosed or undiagnosed depression/other mental health disorders
- Problems in school/learning disabilities
Tips for Parents

Get Rid of Old-School Beliefs

- This is what kids do.
- It’s just a phase.
- I turned out ok.
- What about my kids’ right to privacy?
- I’d rather they do it in my house than in the street.
“I think my child might be using”

“I think my friend is on drugs”

How will I know…
## How do I know if someone is having a problem with drugs or alcohol?

It is important to identify how a person's substance use has led to changes or dysfunctions in 6 specific life areas:

<table>
<thead>
<tr>
<th>Area</th>
</tr>
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<tbody>
<tr>
<td>1. Physical/Health</td>
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<tr>
<td>2. Emotional/Psychological</td>
</tr>
<tr>
<td>3. Interpersonal Relationships (Family/Friends)</td>
</tr>
<tr>
<td>4. Education/Vocation</td>
</tr>
<tr>
<td>5. Financial</td>
</tr>
<tr>
<td>6. Craving</td>
</tr>
</tbody>
</table>
Coping Skills

Unhealthy Coping Skills

• Substance Use / Self-Medication
• Emotional Eating
• Gambling
• Over spending
• Sexual Obsessions
• Feelings of Inadequacies / Low Self-Worth
• Anger Management Issues / Rage

Healthy Coping Skills

• Exercise
• Communication
  • (peers, professionals, family, supports)
• Relaxation techniques
  • (meditation, quiet time, spiritual practice, activities of enjoyment)
• Acceptance
  • (does not mean likability)
• Mindfulness
• Self-expression/Creative expression
LICADD SERVICES

• Individual and family counseling
• Family support and education
• Anger Management/Emotional Regulation Counseling
• Relapse Prevention Counseling
• Harm Reduction
• School-Based Prevention Education
• Staff Training
• Naloxone Training
• Continuing Education for Social Workers and Mental Health Professionals
• Community outreach
• Advocacy and community partnerships
• 24-hotline availability

You can reach a LICADD clinician 24/7!
516-747-2606
Westbury
631-979-1700
Holbrook
www.licadd.org
Where to Get Help

Long Island Council on Alcoholism and Drug Dependence, Inc. (LICADD):

www.licadd.org

516-747-2606

1025 Old Country Road,

Westbury, NY 11590