WELCOME to the

Supporting Our Students
ECHO

Session will start in less than 15 minutes
VAPING in SCHOOLS
Project ECHO

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Conflict of Interest Disclosure Statement

No Conflicts of Interest
Cigarette use: NH & VT

- In 2017, 15.7% & 13.7% of adults smoked. Nationally the rate was 17.1%
- In 2017, 7.8% - 8.8% of high school students in NH & VT smoked cigarettes on at least one day in the past 30 days. Nationally the rate was 8.8%
Other tobacco product use: NH

• In 2017, **5.6% & 3%** of adults in NH and VT used e-cigarettes and about **2% & 2.6%** used smokeless tobacco.

• In 2017, **23.8% & 12%** of high school students in NH & VT used e-cigs on at least one day in the past 30. Nationally the rate was **13.2%**.

• In 2017, about **9.5%** of high school students in NH & VT smoked cigars, cigarillos or little cigars on at least one day in the past 30. Nationally, the rate was **8.0%**.
State funding for tobacco control
Anatomy of an E-Cigarette

**THE E-CIGARETTE**

**THE CARTRIDGE**
This holds the e-liquid (substance). It comes prefilled or refillable. It is usually combined with an atomizer as one unit.

**THE ATOMIZER**
It is a coil that is a heating element which helps convert e-liquid to tiny airborne droplets (aerosol).

**THE SENSORS**
E-cigarettes without a power button will turn on when the user inhales through it. E-cigarettes with or without a power button require sensors to turn on.

**THE BATTERY**
It is a rechargeable lithium ion battery, which provides enough current to heat the atomizer to 400 degrees Fahrenheit in seconds.

**Mod Box**
It is a 3rd generation device that is modifiable ("Mod") allowing users to change the voltage, coils and wicks.

**Sub-Ohm Tank**
It is made of plastic or metal with transparent casing so liquid levels can be seen. It contains a lower resistance coil that allows the liquid to heat up faster.

**Cartridge**
It is made of plastic or metal with transparent casing so liquid levels can be seen. It contains an atomizer that heats up the e-liquid.

**E-Liquid**
E-liquid is contained in a pod, cartridge or tank. It is made up of a mixture of substances that includes nicotine, cannabis, and/or flavoring.
4\textsuperscript{th} generation electronic cigarettes

Pod Mods

- Pod Mod is an e-cigarette, or vaping, product with a prefilled or refillable “pod” or pod cartridge with a modifiable (mod) system (“Pod-Mods”).
- These are other examples of fourth generation devices. Pod Mods come in many shapes, sizes, and colors.
- Common Pod Mod brands include JUUL\textsuperscript{*} and Suorin \textsuperscript{*}
- There are compatible prefilled pod cartridges that contain nicotine, THC, or CBD with or without flavoring.
4th generation e-cigarettes allow nicotine to be inhaled easily
Challenges

• ¾ of teachers stated that vaping has become a bigger problem at their school over time

• Many kinds of students are vaping
  - Disrupting classes by leaving to vape or vaping in class
  - Nicotine addiction, craving & mood changes when students can’t vape
  - Peer pressure disturbs non-vaping students
  - Performance impaired among vapers; disturbing to nonvapers
Harms?

**Nicotine addiction**
- Use despite impairment
  - Continuing to vape even though your grades are going down, your parents are yelling at you or your sports performance is lower
- Signs of tolerance
  - Use more to get same effect over time
- Signs of withdrawal
  - When person does not use, has symptoms — craving, irritability, frustration, anger, anxiety, difficulty concentrating, restlessness, depressed mood, insomnia
  - Flavors may increase addiction potential

**Brain development**
- Nicotine can harm the developing adolescent brain.\(^1\) The brain keeps developing until about age 25.
- Using nicotine in adolescence can harm the parts of the brain that control attention, learning, mood, and impulse control.\(^1\)
- Each time a new memory is created or a new skill is learned, stronger connections — or synapses — are built between brain cells. Young people’s brains build synapses faster than adult brains. Nicotine changes the way these synapses are formed.
- Using nicotine in adolescence may also increase risk for future addiction to other drugs.

**Impact of vaping on the lung**
- Some of the flavorings in ecigs are toxic
- Rare cases of popcorn lung
- Outbreak of e-cig and vaping associated lung injury in fall of 2019 — thought to be associated with vitamin E additives to THC vaping products
- Unknown long term effects of unflavored aerosol with nicotine
- In contrast, toxins in smoke have been proven to cause lung disease, cancers, diabetes, heart disease and more
What to do?

- Educate yourself – you are here!

- Use classroom management skills to address disruptive behaviors

- Talk to kids - inquire, discuss, give information - don’t punish

- For kids who are having nicotine withdrawal, refer to primary care provider and give them information
  - [https://truthinitiative.org/thisisquitting](https://truthinitiative.org/thisisquitting)
  - This is Quitting, teens and young adults text DITCHJUUL to 88709
Resources


- https://truthinitiative.org/thisisquitting