### Learn the Facts About Vaping

#### What is vaping?

Vaping is the use of a portable battery powered device to heat cartridges of liquid solutions (or “e-liquids”) containing nicotine, flavorings, and other chemical additives into an aerosol cloud that can be inhaled into the lungs.

Aerosol from e-cigarettes can contain chemical particles from both the liquid solution and the device itself (such as particles from heated device components).

These devices go by a variety of names and are commonly known as electronic cigarettes or e-cigarettes, hookah pens, e-pipes, JUUL’s, or vape pens.

#### What do these devices look like?

They come in a variety of forms and can range from looking like cigarettes, pens to USB’s.

### What is in vaping e-liquids then?

The most common ingredients are nicotine, propylene glycol, and vegetable glycerin. Solutions also include many additives and flavorings with unknown health effects.

One known product of vaping is formaldehyde gas, which can increase the risk of certain cancers or worsen asthma and other respiratory illnesses.

### What does nicotine do?

Nicotine is an addictive substance derived from tobacco plants and is used as a stimulant, activating reward pathways in the brain.

Effects of nicotine include increased heart rate, blood pressure, changes in memory, concentration, and appetite suppression.

Mild overdosing can lead to headache, nausea, vomiting, tremors, and stomach upset.

Severe nicotine poisoning can cause irregular heartbeat, chest pain, seizures, ultimately leading to paralysis, difficulty breathing, loss of consciousness and death.

### What is the harm that vaping can do?

Brains continue developing until the early 20’s. Early exposure to nicotine and other compounds found in vaping devices can change the chemistry of the brain with potential long-term consequences.

E-liquids can include cancer-causing toxins and combustible products that release ultrafine particles that lodge deep in the lungs.

In addition, some recent studies have found associations with e-cigarette use and future heart and lung disease.

### What are some other potential harms?

Defective, improperly manufactured or modified electronic vapor devices have been known to explode causing burns, injury, or death.

E-liquids contain high concentrations of nicotine and can be absorbed directly through the skin making them particularly dangerous.

Improper handling, labeling, and storage of nicotine containing e-liquids can lead to toxic levels of nicotine poisoning. Small children and animals are especially vulnerable.

Even 1 mg nicotine can cause mild toxicity in young children.

### Who is this available to?

Currently Vermont prohibits the sale of tobacco substitutes, including e-cigarettes, to persons under 18 years of age. This will increase to 21 years of age on September 1, 2019.

A retail license or permit is required to sell e-cigarettes in Vermont.

E-cigarettes are banned from sale online in Vermont.

There is a 92% excise tax on e-cigarettes in Vermont.
One cigarette contains up to **30 mg Nicotine**.

One e-cigarette or refill cartridge contains up to **24 mg Nicotine**.

E-cigarette refill bottles can contain up to **240 mg Nicotine**.

According to the National Institute of Health 2018 *Monitoring the Future Survey* nicotine vaping in 2018 increased by **3.4%** in 8th graders, **8.9%** in 10th graders, and **10.9%** in 12th graders.

The 10th and 12th grade increases are the **largest ever recorded** for any substance in the 44 years that the *Monitoring the Future Survey* has tracked youth drug use.

E-cigarette companies increased advertisement spending from **$6.4 million** in 2011, to **$115 million** in 2014.

Learn more at:

https://e-cigarettes.surgeongeneral.gov/

https://www.nnepc.org/poisons/n/nicotine

https://www.cdc.gov/vitalsigns/ecigarette-ads/index