

The Truth about Vaping

What is a Vape/E-cigarette?

- E-cigarettes are exploding in popularity, and are being used by both adolescents and adults. These devices—also called electronic nicotine delivery systems (ENDS)—are not a safe alternative to cigarette smoking.
- ENDS, e-cigarettes, personal vaporizers, vape pens, e-cigars, e-hookah, or vaping devices, are products that produce an aerosolized mixture containing flavored liquids and nicotine that is inhaled by the user. ENDS can resemble traditional tobacco products like cigarettes, cigars, pipes, or common gadgets like flashlights, flash drives, or pens.

What do vaping devices look like?

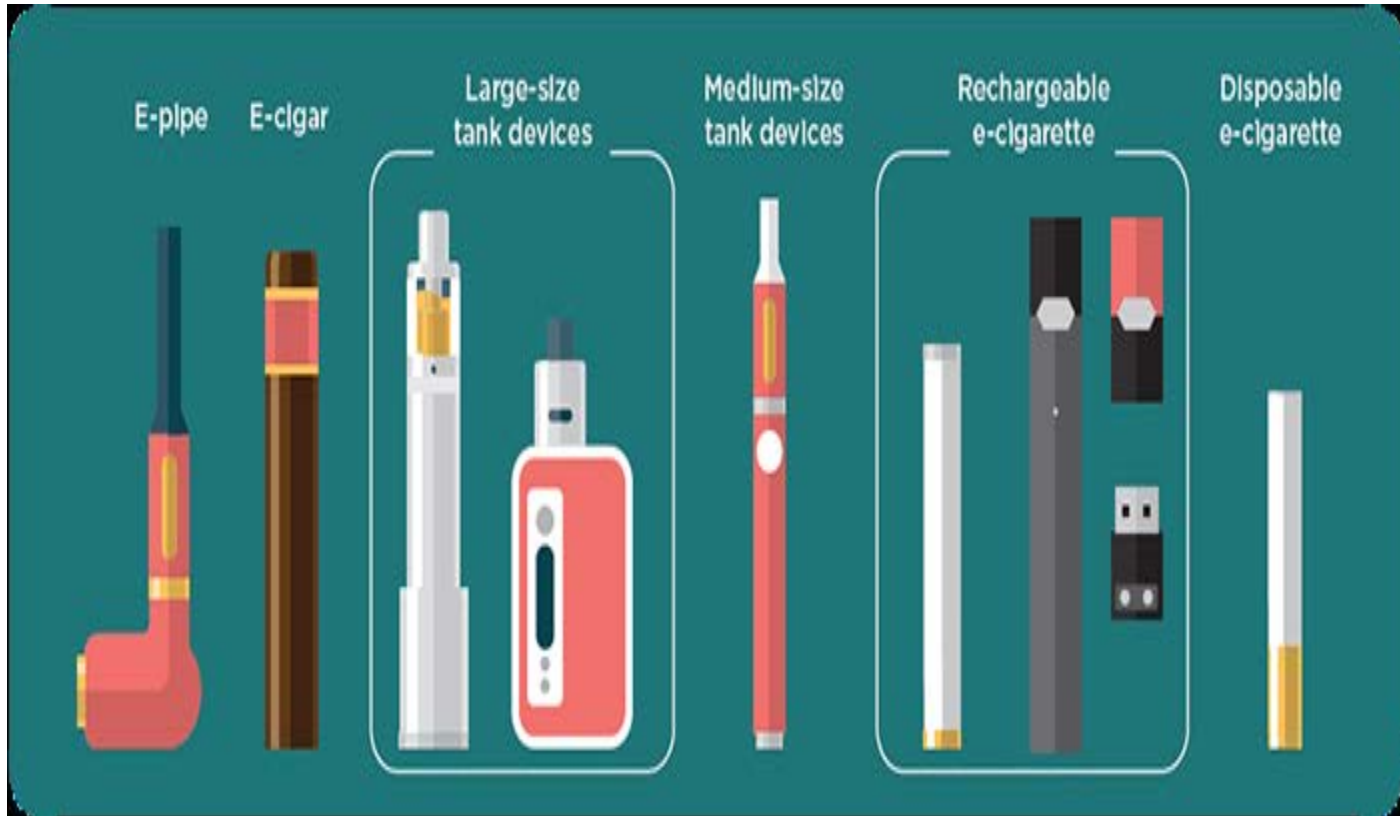
- Vape devices come in a wide variety of shapes and sizes that can often be difficult to identify. JUULS look like USB flash drives while other brands can look like anything from a regular cigarette/cigar to a smoking pipe, an everyday pen, or a battery charger for your smart phone.

What do Vapes look like?





Types of Vapes



What is Vaping?

- Vaping is using any form of electronic smoking device to deliver nicotine through the lungs.
- Vaping does not produce smoke like its combustible counterpart. Electronic smoking devices produce an aerosol that contains nicotine, flavoring, and other chemicals.
- Also known as e-cigs, mods, e-hookahs, JUULS (pronounced as “jewels”), or simply “vapes”, electronic smoking devices are all used to orally inhale liquid (often flavored) nicotine.

Youth and E-cigarettes

**E-cigarettes:
A Threat to Health**

The American Academy of Pediatrics believes e-cigarettes and other electronic nicotine delivery systems are a significant danger to the health of children and nonsmokers. For more information, visit bitly.com/AAPpolicy.

More than 7,700 flavors of e-cigarettes exist, including fruit and sweet flavors that appeal to children and youth.

It is not safe to use e-cigarettes near children: There are cancer-causing chemicals in the exhaled e-cigarette vapor.

Minors can easily purchase e-cigarettes online, or - in some states - at convenience stores.

Less than half a teaspoon of a nicotine-containing e-cigarette solution can be fatal to the average toddler.

Ads for e-cigarettes are targeting adolescents and appear on TV, radio, and online.

Most e-cigarettes contain nicotine. Nicotine is a highly addictive, harmful drug.

AMERICAN ACADEMY OF PEDIATRICS
Julius B. Richmond
Center of Excellence
www.richmondcenter.org

Is Vaping Bad For You?

- Vaping delivers nicotine to your lungs just like traditional cigarettes without the use of combustion so it carries similar health risks.
- Nicotine (in any form or delivery method) is toxic and highly addictive.
- Almost all e-cigarettes contain nicotine – including many that claim they are nicotine free.
- Second hand smoke from e-cigarettes is harmful to anyone nearby.
- Although less, vape aerosol still contains toxic and other cancer-causing chemicals. Many popular brands of vapes have been linked to heavy metal poisoning which is especially dangerous for fetuses and developing brains of young children.

ARE ELECTRONIC
CIGARETTES SAFE?



Health Concerns

Adverse effects of vaping

Mouth and airways

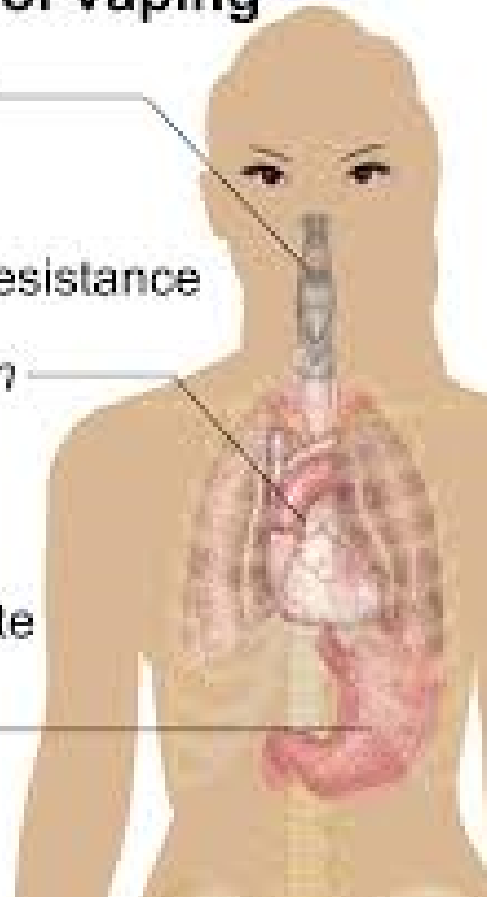
- Irritation
- Cough
- Increased airway resistance

Heart and circulation

- Chest pain
- Increased blood pressure
- Increased heart rate

Stomach

- Vomiting
- Nausea



Comparison

Chemical Composition



There are **599** additives put into analog cigarettes. Once you start burning a cigarette, those additives create **4,000** chemical compounds.

SMOKING

E-cigarettes have approximately **4** chemical ingredients: propylene glycol (polyethylene glycol, or vegetable glycerin), nicotine, flavoring, and water.



VAPING

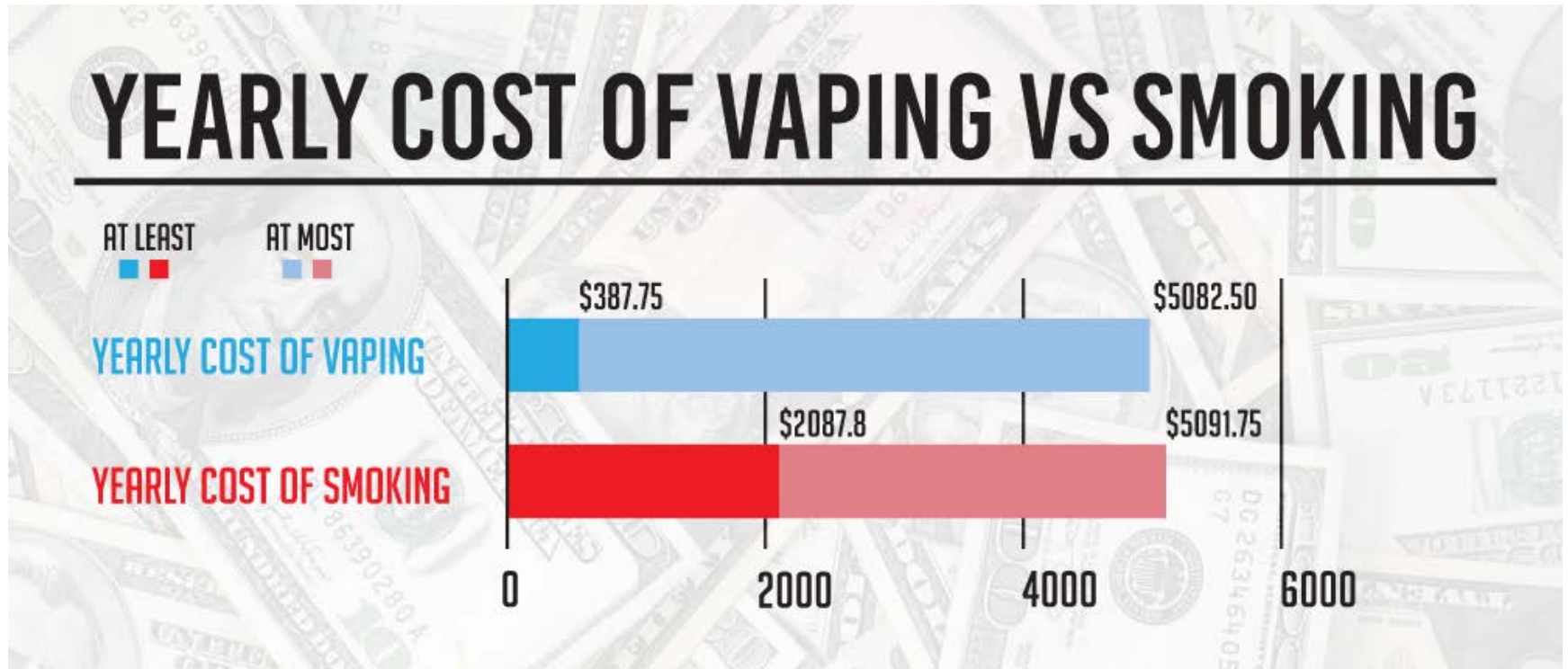
The Cost of Cigarettes vs. E Cigarettes

- In 2017, the average price of a pack of cigarettes in America was \$7.26
- A single disposable e-cig ranges in price from \$6.00 to \$12.00 a piece, and will last generally the equivalent of 2 to 3 packs of cigarettes.
- Cartridge models or Cig-a-Likes are rechargeable and contain pre-filled cartridges that are easy to exchange, with Starter kits usually range around \$40 to \$60

E-liquids

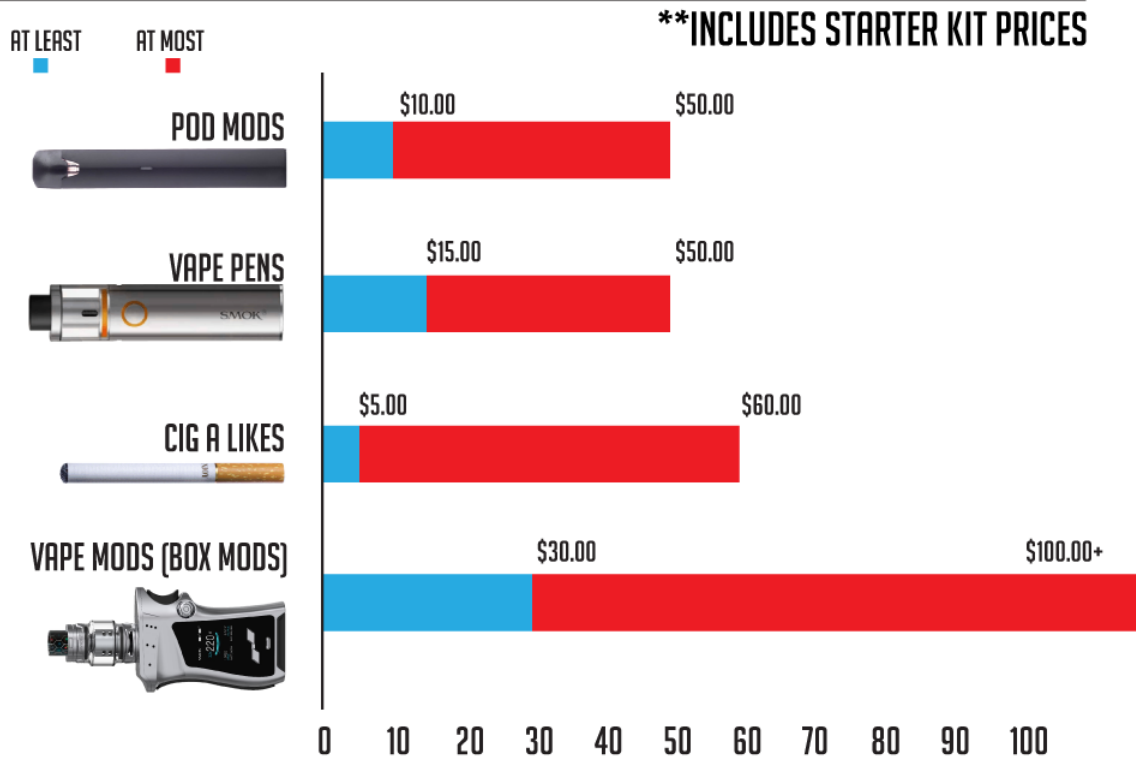
- basic e-liquids will vary in price, but mainly that is as a result of buying in bulk. A 10 ml contains the equivalents of about 5 packs of smokes and costs around \$7.00.

Comparing Costs



How much is a vape?

THE AVERAGE COST OF VAPES



How much are we spending?

- Vaping can cost anywhere from \$ 387 to \$5,082.50 per year. When compared to smoking, if you smoke a pack a day, it can cost you \$2,087.8 to \$5,091.75 dollar per year.
- Vaping is cheaper than smoking, but in some cases, vaping can be more expensive than smoking.
- This is because the cost of vaping depends on three main factors:
 - The type of vape you buy
 - The price of your e-juice
 - Vape juice consumption

Can you become addicted?

- The nicotine in e-liquids is highly addictive. Like other drugs, nicotine releases dopamine in the brain. In fact, research suggests that nicotine may be as addictive as heroin and cocaine. Hence, vaping carries a high risk of addiction
- Nicotine is the primary substance in both traditional and electronic cigarettes. And it is harmful to human health. Nicotine raises blood pressure and spikes adrenaline levels. As a result, it increases the user's heart rate and their likelihood of having a heart attack.
- Along with nicotine, vaping liquids contain toxic chemicals that have been linked to cancer, respiratory disease, and heart disease. Chemicals used to flavor some vape juice, may cause a condition called "popcorn lung," the scarring and obstruction of the lungs' smallest airways.

More Risk Factors

- Scientists are still learning about the long-term health effects of e-cigarettes.
- Some of the ingredients in e-cigarette aerosol could also be harmful to the lungs in the long-term. For example, some e-cigarette flavorings may be safe to eat but not to inhale because the gut can process more substances than the lungs.
- Defective e-cigarette batteries have caused some fires and explosions, a few of which have resulted in serious injuries.
- Children and adults have been poisoned by swallowing, breathing, or absorbing e-cigarette liquid through their skin or eyes.

