WHAT ARE E-CIGARETTES?

E-cigarettes are sometimes called “e-cigs,” “vapes,” “e-hookahs,” “vape pens,” and “electronic nicotine delivery systems (ENDS).” Some e-cigarettes look like regular cigarettes, cigars, or pipes. Some look like USB flash drives, pens, and other everyday items.
E- Cigarettes are popular among youth

Very popular!

Teen vaping is surging

Trends in use of cigarettes and vape devices in the past 30 days among 12th-Graders

Source: "National Adolescent Drug Trends in 2018" NIDA

Vox
NATIONAL YOUTH TOBACCO SURVEY TRENDS

NATIONAL YOUTH TOBACCO SURVEY*: YOUTH USE OF E-CIGARETTES CONTINUES TO CLIMB

MARYLAND TRENDS

Tobacco Use Among Maryland High School Youth: 2016-2017 and 2018-2019
JAMA NOVEMBER 5, 2019
E-CIGARETTE USE AMONG YOUTH IN THE UNITED STATES, 2019

Karen A. Cullen, PhD1; Andrea S. Gentzke, PhD2; Michael D. Sawdey, PhD1; et al

- 27.5 % use among High School students
- 10.5 % use among middle school students

2019 Youth Tobacco Survey
- Over 5 million youth are currently using e-cigarettes
- Nearly 1 million used the product daily
- About 1.6 million use 20 or days per month
- Majority report using JUUL as their usual brand (60%)
- Flavorings are popular (mint, mango, fruit)

MENTHOL/MINT ARE MOST POPULAR FLAVOR

FLAVORS POPULAR AMONG HIGH SCHOOL USERS OF E-CIGARETTE

- Preliminary YNTS data
PEDIATRICS OCTOBER 28 2019: E- CIGARETTE FLAVORING AND TEEN USE

● A study by Leventhal published Oct. 28 in the journal Pediatrics found that teens who use flavored e-cigarettes are more likely to become regular users and vape more heavily.

● A study by Chen-Sankey published October 28 in the journal Pediatrics found teens exposure to e-cig marketing stimulates e-cigarette use.

E-CIGARETTES USE – WHAT ARE THE CONCERNS?

Risks

● Unsafe for kids, teens, and young adults
● Highly addictive
● Exposure user to harmful chemicals that cause cancer
● Contain addictive nicotine that harms brain development
● Lead to other nicotine/tobacco use
● Can contain ingredients that cause severe lung disease and death

Benefits

● The potential to benefit adult smokers who are not pregnant if used as a complete substitute for regular cigarettes and other smoked tobacco products

Source: CDC
MARYLAND YOUTH ASSOCIATED RISK

Maryland Data: Youth Use of ESDs

- Youth ESD Users Increased Likelihood of Engaging in Risk Behaviors
  - 34% of youth ESD users also use cigarettes, 25% use cigars, and 25% use smokeless tobacco.
  - Youth electronic cigarette use, like tobacco use, is highly correlated with other risk behaviors including drinking alcohol, marijuana use, and prescription drug abuse.

![Maryland Department of Health Monitoring, Change in Teen Behavior 2001 - 2019.]

E-CIGARETTE AND VAPING RELATED LUNG INJURY

CDC Update and Epidemiology

- 2,172* cases of e-cigarette, or vaping, product use associated lung injury (EVALI) have been reported to CDC.
- Cases have been reported from 49 states (all except Alaska), the District of Columbia, and 1 U.S. territory.
- 42 deaths have been confirmed in 24 states, and D.C.
- Median age of deceased patients was 53 years and ranged from 17 to 75 years.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Number of cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>58%</td>
</tr>
<tr>
<td>Female</td>
<td>42%</td>
</tr>
</tbody>
</table>

Approximately 70 percent of patients are under 35 years old.

The latest findings suggest products containing THC play a role in the outbreak.

FDA is conducting broad-spectrum testing for contaminants.

A note from the CDC:
- E-cigarette, or vaping, products should never be used by youth, young adults, or women who are pregnant.
- Adults who do not currently use tobacco products should not start using e-cigarette, or vaping, products. There is no safe tobacco product. All tobacco products, including e-cigarettes, carry a risk.

hcehealth.org
VAPING ILLNESSES
AS OF NOV. 20, THERE HAVE BEEN 2,290 VAPING ILLNESSES AND 47 DEATHS

51 confirmed or probable cases in Maryland

FINDING THE CAUSE

Investigators Find Clue to Mysterious Vaping Injuries

- Vitamin E oil (acetate) found in fluid in lungs of all 29 patients from ten states (including Maryland)
- "Potential toxin of concern", not enough to be labeled a "cause"
- Could still be more than one culprit.
- THC found in 23 samples (82%); nicotine in 16 (63%)

Distilling the Vaping Illness Mystery

THE WALL STREET JOURNAL
November 8, 2019
CM1  Maura -- 51 cases as of November 19, 2019 in Maryland
     Cliff Mitchell, 11/26/2019

CM2  Also, CDC uses the November 20, 2019 reporting date in its Vaping Page.
     Cliff Mitchell, 11/26/2019
RECOMMENDATIONS

RESTRICT ACCESS
✓ Increase legal age to purchase tobacco products including e-cigarettes. (New Maryland Tobacco 21 Law)
● Limit locations/distance where e-cigarettes may be sold. (Montgomery County)
● Ban the sale of flavored products. (Massachusetts, New York, Michigan)
● Require age verification for DtC sales and delivery.

RECOMMENDATIONS

ADDRESS MARKETING
● Restrict marketing of products to youth and public.
● Use tested public health counter marketing and educational campaigns.

DISCOURAGE USE
✓ Require childproof packaging (Federal Law)
● Require health warning messages on packaging.
● Tax E-cigarette products. (19 States and DC)