

E-cigarette and Vaping Product Use-Associated Lung Injury Outbreak (EVALI)

Key Facts & Messages

This information is current as of October 28, 2019

Since June 2019, the Centers for Disease Control & Prevention (CDC), the U.S. Food & Drug Administration (FDA) and state and local health departments, including the Vermont Department of Health, have been investigating a multi-state outbreak of a severe lung injury associated with e-cigarette product use, or vaping (now being referred to as EVALI, which stands for E-cigarette, or Vaping, product use-Associated Lung Injury).

Vermont Department of Health EVALI (Lung Injury Investigation): healthvermont.gov/vapinginjury

WHAT WE KNOW

As of October 23, there have been 1,604 cases reported from 49 states, the District of Columbia and the U.S. Virgin Islands. 34 deaths in people have been confirmed in 24 states.

- All cases have a history of vaping.
- Most patients report a history of using products containing THC (tetrahydrocannabinol), particularly those obtained from informal sources.
- Nicotine products have **not** been excluded as a potential factor.
- No single cause has been linked to all lung injury cases, and there may be more than one cause.

The latest findings suggest products containing THC, particularly those obtained from informal sources, play a major role in this outbreak, but specific substances, chemical exposure(s) or routes of exposure, products, methods of use or combinations involved are still unknown.

WHAT WE DON'T KNOW

- We don't yet know what specific chemical exposure(s) are causing these lung injuries.
- No single product or substance has been linked to all lung injury cases.
- While most people who have gotten sick reported using products containing THC, we cannot exclude the possibility that products containing nicotine may play a role.

IN VERMONT

- As of October 23, there are 3 confirmed cases in Vermont with no deaths.
- The Health Department confirmed its first case in a Vermont resident on September 16, 2019.

For current information and resources, visit: healthvermont.gov/vapinginjury (update weekly)

KEY MESSAGES FOR VERMONTERS

- **This is a serious health emergency for people who use e-cigarettes or other vaping products.**
- **DO NOT use e-cigarette or vaping products that contain THC.**
- **Do not buy vaping products from informal sources**, especially anything containing THC.
- **Do not modify or add substances** to e-cigarettes or vapes that are not intended by the manufacturer, even if you bought it through a retail establishment.
- **Refrain from using vaping products that contain nicotine.** Since we don't know the cause(s) of lung injury, the only way to make sure you are not at risk is to not vape.
- **Get medical attention immediately** if you recently used an e-cigarette or vaping product and develop symptoms associated with this outbreak:
 - Cough, shortness of breath or chest pain
 - Nausea, vomiting or diarrhea
 - Fatigue, fever or abdominal pain
- **Symptoms of the flu are similar to symptoms of EVALI.** If you used an e-cigarette or vaping product and think you may have the flu, see your health care provider immediately. Providers should also consider flu in all patients with suspected EVALI. Get vaccinated against the flu.
- **Do not return to smoking cigarettes.**

Get Help Quitting Tobacco or Vaping Products

- Young adults and teens can text “VtVapeFree” to 88709 to get help and support for quitting e-cigarettes and vaping.
- For help quitting nicotine – including e-cigarettes: Go to 802quits.org or dial 1-800-QUIT-NOW.
- For help to stop using cannabis – including vaping products: Dial 2-1-1 (weekdays 8 am-8pm) or go to healthvermont.gov/find-treatment to find treatment options near you.

Find updated information at healthvermont.gov/vapinginjury

FOR HEALTH CARE PROVIDERS

- Vermont Department of Health Update: [E-cigarette or Vaping-associated Lung Injury \(EVALI\)](#) (October 18, 2019)
- CDC: [Fact Sheet for Evaluating and Caring for Patients with Suspected EVALI](#) (October 25, 2019)
- CDC: Clinician Outreach and Communication Activity Webinar Slides – [Update: Interim Guidance for Health Care Providers Evaluating and Caring for Patients with suspected EVALI](#) (October 17, 2019)
- CDC: Coding guidance for healthcare encounters related to e-cigarette, or vaping, product use associated lung injury: [International Classification of Diseases, Tenth Edition, Clinical Modification \(ICD-10-CM\) – Supplement](#)

QUESTIONS AND ANSWERS ABOUT THIS OUTBREAK

1. What is causing this outbreak of lung injury?

- At this time, CDC and FDA have not identified the cause or causes of the lung injuries. The only commonality among all cases is that patients report the use of e-cigarette, or vaping, products.
- No single compound of ingredient has emerged as the cause of these injuries to date, and there may be more than one cause. Available data suggest THC-containing products play a role in this outbreak, but the specific chemical or chemicals responsible for lung injury have not yet been identified, and nicotine-containing products have not been excluded as a possible cause.
- The outbreak is occurring in the context of widespread availability for e-cigarette or vaping products, which may have a mix of ingredients, complex packaging and supply chains, and include potentially illicit substances. Users may not know what is in their e-cigarette or e-liquid solutions. Many of the products and substances can be modified by suppliers or users. They can be obtained from stores, online retailers, from informal sources (e.g. friends, family members).
- More information is needed to know whether one or more e-cigarette or vaping products, substances, brands, or methods of use is responsible for the outbreak.

2. What are the symptoms of lung injury reported by some patients in this outbreak?

- Patients in the national outbreak have reported symptoms such as:
 - cough, shortness of breath or chest pain
 - nausea, vomiting, abdominal pain or diarrhea
 - fatigue, fever or weight loss
- Some patients have reported that their symptoms developed over a few days, while others have reported their symptoms developed over several weeks. A chemical exposure, not a lung infection, appears to be causing the injury.

3. What should I do if I have used e-cigarettes and have symptoms?

- Get medical attention right away if you have symptoms like those reported in this outbreak.
- You can also call the New England Poison Control Center at 1-800-222-1222 or text "POISON" to 85511.
- You can also submit a detailed report of any unexpected health or product issues related to tobacco or e-cigarette products to the FDA via the online [Safety Reporting Portal](#).

4. What if I quit smoking cigarettes and am now using e-cigarettes?

- Until more is known about the exact cause of vaping-associated lung injuries, it's recommended you consider refraining from using e-cigarette products. Do not return to smoking cigarettes.

- If you continue to use e-cigarettes, carefully watch for symptoms and get medical attention right away if you have symptoms like those reported in this outbreak.
- For help quitting nicotine – including e-cigarettes – go to 802quits.org – or dial 1-800-QUIT-NOW.

5. Should I get vaccinated for the flu if I am using e-cigarettes or vaping products?

- Yes. Everyone 6 months and older should get a flu vaccine every year, including people who use e-cigarettes, or vaping products.
- Flu vaccination can reduce flu illnesses, doctor's visits, and missed work and school due to flu, as well as prevent flu-related hospitalizations and deaths.
- Because the symptoms of flu and lung injury are similar, if you use e-cigarettes or vape and experience symptoms get medical attention right away.
- CDC recommends that health care providers strongly consider respiratory infections as well as lung injury associated with the use of e-cigarette or vaping products in all patients who have respiratory symptoms AND a history of using these products.

6. What is an e-cigarette?

- Electronic cigarettes – or e-cigarettes – work by heating a liquid to produce an aerosol that is inhaled into the lungs.
- The liquid can contain nicotine, tetrahydrocannabinol (THC) and cannabinoid (CBD) oils, and other substances, flavorings, and additives.
- E-cigarettes are also called vapes, e-hookahs, vape pens, tank systems, mods, and electronic nicotine delivery systems (ENDS).

7. What is vaping?

- Using an e-cigarette is commonly called vaping. It has also been referred to as JUULing, named after the popular e-cigarette brand, JUUL.
- Vaping can refer to using e-cigarette products to inhale many substances, including nicotine and THC or CBD oils.

8. What is marijuana/cannabis? What is THC?

- Marijuana or cannabis, also called weed, pot, dope and other names, is the dried flowers and leaves of the cannabis plant.
- Cannabis contains mind-altering (i.e. psychoactive) compounds.
- THC (tetrahydrocannabinol) is a psychoactive compound found in cannabis.
- Cannabis also contains other active compounds like cannabidiol (CBD), which are not psychoactive.
- For more information about marijuana use, prevention and treatment in Vermont: healthvermont.gov/marijuana

Primary Resources

Vermont Department of Health

- EVALI (Lung Injury Investigation): healthvermont.gov/vapinginjury
- E-cigarettes and Vaping: healthvermont.gov/wellness/tobacco/resources
- Flu: healthvermont.gov/flu

Centers for Disease Control and Prevention

- For the Public: cdc.gov/lunginjury
- For Providers: cdc.gov/tobacco/basic_information/e-cigarettes/severe-lung-disease/healthcare-providers/index.html#flu

Food and Drug Administration

- For the Public: fda.gov/news-events/public-health-focus/lung-illnesses-associated-use-vaping-products

**E-Cigarettes and Youth:
Resources for Educators and Others Working with Youth**

Updated: October 24, 2019

CDC Office on Smoking and Health (CDC/OSH) E-Cigarettes Resources. The [CDC e-cigarettes landing page](#) has a variety of materials and resources, and is a one-stop shop for evidence-based messages about e-cigarettes:

- A webpage with [general information about e-cigarettes](#).
- A webpage with information specific to [e-cigarettes and young people](#), with links to infographics, fact sheets, an [e-cigarettes and youth toolkit for partners](#), and a new [OSH presentation to educate youth on e-cigarettes](#). (Please note: these materials don't include information on the e-cigarettes lung-injury outbreak.)
- CDC/OSH and the Tobacco Control Network (TCN) collaborated to produce a pair of youth e-cigarette use microlearning videos. The videos, a [long form](#) and a [short form](#), feature introductory remarks from TCN Chair Luci Longoria before a comprehensive overview on the prevalence and risks of youth e-cigarette use from Dr. Brian King, Deputy Director for Research Translation with OSH. Both videos present the same content in different levels of detail, and are appropriate to share with school administrators, nurses, teachers, and other school-based stakeholders to ensure that all young people can learn in an environment free from e-cigarette use.

CDC Outbreak of Lung Injury Associated with E-Cigarette Use, or Vaping Information and Resources. See this webpage for information specific to the [outbreak of lung-injury associated with e-cigarette use, or vaping](#), including information for the [general public](#), and a [healthcare provider](#) webpage with information relevant to school health staff, including a poster, available in [English](#) and [Spanish](#), suitable for placement in school health clinics and school nurse offices.

School-Based E-Cigarettes Prevention Curriculum. While CDC/OSH doesn't endorse programs or curricula, in addition to the OSH presentation mentioned above, there are several noteworthy evidence-based youth e-cigarette prevention curricula and materials:

- FDA Center for Tobacco Products lesson plan and activity [The Real Cost of Vaping: Understanding the Dangers of Teen E-Cigarette Use](#), developed in collaboration with Scholastic.
- The Stanford Medical School [Tobacco Prevention Toolkit](#) module on E-Cigs/Vapes and Pods
- The University of Texas Health Science Center at Houston [Catch My Breath Youth E-Cigarette and JUUL Prevention Program](#)
- The American Lung Association [INDEPTH™: Intervention for Nicotine Dependence: Education, Prevention, Tobacco and Health](#) offers an alternative to suspension or citation for infractions of school tobacco-free policies.

E-Cigarettes Cessation Resources for Youth

- The Truth Initiative launched a youth/young-adult focused [E-cigarette Quit Program](#). Youth and young adults can access the e-cigarette quit program by texting "DITCHJUUL" to 88709. Parents and other adults looking to help young people quit should text "QUIT" to (202) 899-7550.
- The National Cancer Institute's [SmokefreeTeen](#) website includes information on [How To Quit Vaping](#).

Youth-Facing E-Cigarette Prevention Ads

The FDA Center for Tobacco Products is running a national e-cigarettes prevention campaign to reach youth. The press release, [FDA launches its first youth e-cigarette prevention TV ads, plans new educational resources as agency approaches one-year anniversary of public education campaign](#), describes the campaign as well as resources (e.g., posters, lessons plans) that FDA has distributed or plans to distribute to public and private middle and high schools nationwide. A variety of the FDA's youth e-cigarette prevention materials, including

print materials and social media content, are available for download on the [Center for Tobacco Products Exchange Lab](#), including:

- “Chemicals in Vaping” posters. These five posters – focused on [chromium](#), [lead](#), [nickel](#), and [nicotine](#) – help educate youth about the potential dangers of e-cigarette use.
- [11 short vaping videos](#), designed to educate youth that vapes can contain chemicals that could be harmful to the body, are available for download to share on Instagram and Facebook.

The Truth Initiative is offering **truth**®-branded video content focused on flavored e-cigarettes. The content has been created specifically for youth-serving partners and stakeholders. The video “[Sweet Clouds](#)” highlights the fact that 81% of youth who have ever used e-cigarettes started with flavors.

Truth Initiative is also offering **truth** content that spreads awareness of the facts and dangers associated with flavored and menthol tobacco products. “[Burn Through](#)” focuses on how Big Tobacco uses fruit flavors to disguise the 3,000 other dangerous chemicals in their products. Also available are “[Making Menthol Black](#)”, a hard-hitting expose of the tactics Big Tobacco used to target African Americans for decades, and “[Power In Numbers](#)”, an exploration of the disturbing trends and numbers behind menthol use in America.

The videos are available in :30, :15 and :10 length versions plus scripted social media posts, gifs and still images. They are available free of charge (any/all media fees to be covered by partners) and can be run online (and some on TV) as well as on closed circuit tv systems on college campuses. *All assets are available without any tagging/co-branding or any modifications.* The use of the **truth** content will be vetted by and at the discretion of Truth Initiative. For further information, contact ad.inquiries@truthinitiative.org.

CDC/Surgeon General Public Service Announcements for Adult Influencers. Adult-facing public service announcements (PSAs) from CDC/OSH and the U.S. Surgeon General are available for free through the CDC Media Campaign Resource Center. These PSAs are not designed for youth; they are appropriate for use with adult audiences, to raise their awareness about the health risks associated with e-cigarettes and youth:

- [One Brain](#) Radio PSA
- [It's Not Like You Can Buy A New Brain](#) (Vending Machine) Print ad
- [It's a Fact](#) Radio PSA
- [Any Volunteers?](#) Video PSA
- *E-Cigarettes Risky for Youth* [digital](#) and [social](#) media images
- [E-Cigarettes, Nicotine, and Brain Development](#) social media image

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Educational Links on Marijuana Community & Health Concerns

ARTICLES and REPORTS

VT Physicians vtdigger.org/2018/11/01/vermont-physicians-group-comes-legal-marijuana-market/

VT State Police www.hinesburg.org/police/cclee-opposition-letter-to-marijuana-legalization.pdf

Smart Approaches to Marijuana- SAM

<http://sam-vt.org/> VT professional groups opposed to Pot; impact studies from CO & VT, taxpayer costs

<https://learnaboutsam.org/toolkit-2/> a wealth of information, graphs, demographics, reports

VT State House report - www.orcamedia.net/show/s54-regulation-cannabis-h444-ranked-choice-voting-h508-charter-town-bennington-41119 US Attorney to Colorado from 2010-18, Bob Troyer, addresses VT legislators April 2019 – Reports increases in teen depression, dropouts, suicide, schizophrenia, traffic fatalities and ER overdose increases. Hard to find clean employees. Additional health and law enforcement costs. Public land grows are problematic and effects of it are showing up in the food chain. There are other environmental issues. Black market and cartels were strengthened. Also includes testimony from Vermonters - Dr. Blake, whose son died after several rehab treatments, and R. Coppolla, whose son became schizophrenic and destroyed their life savings from a one superhigh.

Parents Opposed to Pot - poppot.org/ Medical Marijuana, MJ vs Pain pills, Mental Health, Drug Labs, Child Endangerment, medical documentation, addiction resources, dabbing, driving, CBD, violence and Crime, Vaping

Mom Strong momsstrong.org – Sharing stories of child's struggles with pot, MJ following the tobacco company tactics to mislead public on health concerns

A Night in Jail – new release - anightinjail.com/ - a novella about addiction and mental illness, marijuana psychosis sobered her, but her bother got lost in the drug maze until she stepped in to help. This is his story.

Marijuana Report themarijuanareport.org/ updated news posts from all over the country, some expert testimony clips

Center for Disease Control - www.cdc.gov/tobacco/basic_information/e-cigarettes/severe-lung-disease.html THC involved in most of the recent wave of vaping deaths

HHS.gov, Cadca, Vermont Department of Health, NAMI, MAPA Statement of Concern

VIDEOS - documentaries

Other Side of Cannabis – NAMI, Harvard, Mass General – request it through VT interlibrary loan (60min)

Documentary reports from 10+ teens and some adult who found MJ to be addictive, medical experts, and a torn family

Weed Documentary – OR <https://www.youtube.com/watch?v=BApEKGUpXs> (15min.) Youth produced documentary about changes in the high school environment, shows mooking and seizing (making sport of having seizures)

Marijuana X- CO - <https://www.youtube.com/watch?v=5mFgll7KEpl> (55 min.) Documentary reports from community leaders – doctors, psychiatrists, attorney general, educators, shelter homes, MJ industry leaders – shows making dabs, butters, and shatter...

Aubree Adams – CO (various) <https://www.youtube.com/channel/UCUOYsc4bZkdgOSUvp9unYPg> Mother reporting on changes in her community and family when the cartels came to town

Judge Ben interviews Dr. Catherine Antley - www.cctv.org/watch-tv/programs/consequences-commercialization-marijuana VT physician and judge exploring discussing changes commercialization ushers in.

