California Department of Public Health
Health Advisory – September 24, 2019

Vaping Related Lung Illness: A Summary of the Public Health Risks and Recommendations for the Public

This health advisory seeks to inform the public about the imminent public health risks posed by vaping any product, including the use of electronic cigarettes (e-cigarettes), as vaping has recently been linked to severe breathing problems, lung damage, and even death.

Vaping is inhaling aerosol from an e-cigarette or other vaping device that heats a liquid that can contain nicotine, marijuana (THC), cannabidiol (CBD) or other substances. The shapes and sizes of these devices vary and include colorful vape pens, modified tank systems, and new pod-based devices that can look like USB flash drives, cell phones, credit card holders, and highlighters. These devices are frequently referred to as e-cigarettes, e-cigs, vapes, vape pens, electronic vaporizers, pod mods, or pod systems.

The California Department of Public Health (CDPH) urges everyone to refrain from vaping, no matter the substance or source, until current investigations are complete. Since June 2019, CDPH has received reports that 90 people in California who have a history of vaping were hospitalized for severe breathing problems and lung damage, and two people have died. Across the U.S., there are over 500 reports of lung damage associated with vaping across 38 states and 1 U.S. territory, and more reports are coming in nearly every day.

CDPH, along with other states, the Centers for Disease Control and Prevention (CDC), the U.S. Food and Drug Administration (FDA), local health departments, and healthcare providers are working hard to investigate what is in the vape materials that is making people sick.

Although CDPH regulates manufacturers of cannabis vaping products to ensure they are as safe as possible for those who choose to vape, CDPH warns that individuals put themselves at risk any time they inhale a foreign substance into their lungs. The risk of vaping now includes death. CDC continues to warn that any tobacco product use, including e-cigarettes, is unsafe, especially for youth,
pregnant, and breastfeeding women.

**Sudden lung damage from vaping is a new health problem.**

We are learning from this investigation that lung damage can happen very suddenly to people who vape, including people who have not been vaping for a long time, and young, healthy people who do not have lung disease or other health problems. This is different from most other health issues caused by vaping and smoking, which happen over a long time and can be worse in people who have other medical conditions. Additionally, most patients do not have a recent history of smoking regular cigarettes, suggesting these lung issues are exclusively related to vaping. Many types of vape products may be causing the lung damage from vaping.

Almost all people with lung damage from vaping say that they vaped or “dabbed” the cannabis products THC and CBD in cartridges, waxes, oils, and other forms. Some people report vaping only nicotine. Many people report vaping a combination of both nicotine and cannabis products. The investigation is still in process, but the one thing that people with the lung illness have in common is a history of vaping.

County health departments are contacting the people who had lung damage from vaping to find out which products they used, where they purchased the products, and to collect their vape products to test for harmful ingredients.

The government does not ensure the safety of vaping devices through regulation. In California, **licensed cannabis retailers** are required to sell products obtained from a licensed cannabis manufacturer that have been **tested** by a licensed laboratory. Cannabis products sold by licensed sources are tested for a variety of chemicals, pesticides, microbial impurities, and heavy metals. Illegal cannabis dispensaries sell unregulated and unstested cannabis products and absolutely should not be used.

**People are hospitalized with breathing problems and other symptoms.**

People with lung damage from vaping typically have symptoms that start a few days to a few weeks before they go see a doctor. All people hospitalized developed some type of breathing problems, but many people also have other symptoms. The symptoms reported by those who have gotten sick are:

- Breathing symptoms: trouble catching their breath, coughing, chest pain
- Gastrointestinal symptoms: nausea, vomiting, diarrhea, abdominal pain
- Non-specific symptoms: feeling tired, fever, weight loss
These symptoms are very similar to having a lung infection like pneumonia or bronchitis, so it can be hard to tell if the symptoms are from an infection or vaping the first time someone sees the doctor. There is no test that a doctor can do to know that breathing problems are from vaping right away. Laboratory blood tests and an x-ray or CT scan of the lungs may be necessary.

People with vaping-related lung disease are usually admitted to the hospital because of their breathing problems.

- Teenagers and young adults make up almost half of the people hospitalized with breathing problems from vaping in California.
- 30% of people hospitalized in California had to be treated with a mechanical ventilator, or “life support,” in the intensive care unit (ICU).

**Be Aware That Your Child’s Respiratory Issues Could be Related to Vaping**

Parents should be aware that numerous cases involve children under age 18. Parents in particular should be aware that e-cigarettes and vaping devices are available in more than 15,000 flavors that may be attractive to children, such as mango, bubble gum, unicorn poop, mint. The secondhand aerosol typically smells sweet so it can be hard to detect. Be aware of the symptoms in case your middle or high school child develops symptoms, and seek medical attention.

**No one knows yet why this lung damage is happening from vaping.**

There are many different possible ingredients added to cannabis and nicotine to make the cartridges, waxes, and oils used for vaping. Multiple people who were diagnosed with lung damage from vaping say that they received the cannabis products from unlicensed smoke shops or individuals. Vape products sold by unlicensed retailers are not tested and can contain harmful ingredients. We do not know yet if all of the people in the country with this illness use the same vape products, or if the products were contaminated with the same substance.

The long-term effects of vaping are still unknown, but these short-term effects are alarming.
Recommendations for the Public

1. CDPH urges everyone to quit vaping altogether, no matter the substance or source. For those who continue, you are urged to avoid buying any vaping products on the street and never modify a store-bought vape product.

2. If you, or your child, have vaped at all in the past few months and are having new problems with breathing or other symptoms, you should seek medical care immediately and tell your healthcare provider about your history of vaping.

3. If you decide to stop vaping, do not replace vaping with smoking combustible cigarettes. Ask your doctor for FDA-approved quitting treatments.

Resources

CDPH Tobacco Free California Website  https://tobaccofreeca.com/

The California Smokers’ Helpline offers vaping cessation services including telephone counseling, text messaging, web chat, and an online app to help all tobacco users quit. For more information and resources for youth, young adults and parents, call 1-800-NO BUTTS or visit http://www.nobutts.org/vaping.

If you suspect your child is vaping, visit flavorshookkids.org for more information on the health effects and actions you can take. You can download the parent’s guide for information on how to talk to your child about vaping.

For help on how to quit vaping marijuana, consult a doctor or contact the Substance Abuse and Mental Health Services Administration helpline at 1-800-662-4357.

For additional information, please review the CDC’s recommendations about the vaping-related lung injuries.