

THE SCHOOL NURSE BULLETIN

Stephanie Knutson, Ed.D, RN School Health Administration Education Consultant School Nursing and Health

Severe Pulmonary Disease Associated with Using E-Cigarette Products

The following official Health Advisory is from the Centers for Disease Control and Prevention Website located at <u>https://emergency.cdc.gov/han/han00421.asp</u>

Summary: The Centers for Disease Control and Prevention (CDC) provided: 1) background information on the forms of e-cigarette products, 2) information on the multistate outbreak of severe pulmonary disease associated with using e-cigarette products (devices, liquids, refill pods, and cartridges), and 3) clinical features of patients with severe pulmonary disease. This health advisory located at https://emergency.cdc.gov/han/han00421.asp also provides recommendations for clinicians, public health officials, and the public based on currently available information.

General Background: E-cigarettes typically contain nicotine, most also contain flavorings and other chemicals, and some may contain marijuana or other substances. They are known by many different names and come in many shapes, sizes and device types. Devices may be referred to as "e-cigs," "vapes," "e-hookahs," "vape pens," "mods," tanks, or electronic nicotine delivery systems (ENDS). Some e-cigarette devices resemble other tobacco products such as cigarettes; some resemble ordinary household items such as USB flash drives, pens, and flashlights; and others have unique shapes. Use of e-cigarettes is sometimes referred to as "vaping" or "juuling." E-cigarettes used for dabbing are sometimes called "dab" pens.

E-cigarettes can contain harmful or potentially harmful substances, including nicotine, heavy metals (e.g., lead), volatile organic compounds, and cancer-causing chemicals. Additionally, some e-cigarette products are used to deliver illicit substances; may be acquired from unknown or unauthorized (i.e., "street") sources; and may be modified for uses that could increase their potential for harm to the user. For example, some e-cigarette products are used for "dripping" or "dabbing." Dripping involves dropping e-cigarette liquid directly onto the hot coils of an e-cigarette which can result in high concentrations of compounds (e.g., tetrahydrocannabinol [THC] and cannabinoid compounds). Dabbing involves superheating substances such as "budder", butane hash oil (BHO), and "710" that contain high concentrations of THC and other plant compounds (e.g., cannabidiol [CBD]).

Youth, young adults, pregnant women, as well as adults who do not currently use tobacco products should not use e-cigarettes. E-cigarettes containing nicotine have the potential to help some individual adult smokers reduce their use of and transition away from cigarettes. However, e-cigarettes are not currently approved by the Food and Drug Administration (FDA) as a quit smoking aid, and the available science is inconclusive on whether e-cigarettes are effective for quitting smoking.

Outbreak Background: As of August 27, 2019, 215 possible cases have been reported from 25 states and additional reports of pulmonary illness are under investigation. One patient (in Illinois) with a history of recent e-cigarette use was hospitalized with severe pulmonary disease and subsequently died. Although the etiology of e-cigarette-associated pulmonary disease is undetermined, epidemiologic investigations in affected states are ongoing to better characterize the exposures, demographic, clinical, and laboratory features and behaviors of patients. All patients have reported using e-cigarette products. The exact number is currently unknown, but many patients have reported using e-cigarettes containing cannabinoid products such as THC or CBD.

All of the above information is taken from and located on the CDC Web site at https://emergency.cdc.gov/han/han00421.asp



The following information provided by CDC Healthy Schools

The Centers for Disease Control and Prevention (CDC) is working with the Food and Drug Administration, state health departments, and public health and clinical partners to investigate the multistate outbreak of lung injury associated with e-cigarette product use, or vaping. The most up-to-date, publicly available information on this investigation, including CDC recommendations, can be found on the CDC's website at: www.cdc.gov/lunginjury. CDC Newsroom also provides the latest news and is located at https://www.cdc.gov/lunginjury.

What You Need to Know

- Though the investigation is ongoing, and the specific chemical exposure causing the outbreak remains unknown at this time, today's report provides the first national comprehensive data on the characteristics of cases reported to CDC, including sex, age, and select substances used in e-cigarette, or vaping products.
- The latest findings from the investigation into lung injuries associated with e-cigarette use, or vaping, suggest products containing THC play a role in the outbreak.
- Most of the patients (77%) in this outbreak reported using THC-containing products, or both THC-containing products and nicotine-containing products.
- A second report published today in MMWR from Wisconsin and Illinois had similar findings regarding the use of products containing THC. The report contains more details on the characteristics of cases in those states, including demographics, as well as substances and product types used.
- While this investigation is ongoing, CDC recommends people consider refraining from using e-cigarette, or vaping, products, particularly those containing THC.
- If you are an adult who used e-cigarettes containing nicotine to quit cigarette smoking, do not return to smoking cigarettes.
- If you have recently used an e-cigarette or vaping product and you have symptoms like those reported in this outbreak, see a healthcare provider.
- Regardless of the ongoing investigation, e-cigarette or vaping products should not be used by youth, young adults, women who are pregnant, as well as adults who do not currently use tobacco products.

Latest Outbreak Information on Lung Injury Associated with Electronic Cigarettes, or Vaping https://www.cdc.gov/tobacco/basic_information/e-cigarettes/severe-lung-disease.html

- As of September 24, 2019 at 5pm, 805* lung injury cases associated with the use of e-cigarette or vaping products have
- been reported to CDC from the following states and I U.S. territory: AR, AZ, CA, CO, CT, DE, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MA, ME, MD, MI, MN, MO, MT, MS, NC, ND, NE, NJ, NM, NV, NY, OH, OK, OR, PA, SC, SD, TN, TX, UT, VA, VT, WA, WI, WV, WY, and USVI. These numbers may change frequently.
- Twelve deaths have been confirmed in California (2), Florida, Georgia, Illinois, Indiana, Kansas (2), Minnesota, Mississippi, Missouri, and Oregon.
- The latest findings from the investigation into lung injuries associated with e-cigarette use, or vaping, suggest products containing THC play a role in the outbreak.
 - O Most of the patients reported using THC-containing products or both THC-containing products and nicotine-containing products. Some of the patients reported using only nicotine-containing products.
 - O All patients have a reported history of e-cigarette product use, or vaping, and no consistent evidence of an infectious cause has been discovered. Therefore, the suspected cause is a chemical exposure.
 - O All reported patients have a history of e-cigarette product use or vaping.
 - O CDC continues to work closely with FDA, states, public health partners, and clinicians on this outbreak.

*The increase in lung injury cases from last week represents both new patients and recent reporting of previously-identified patients to CDC.

Key Facts for School Nurses about E-Cigarette Use, or Vaping

https://www.cdc.gov/tobacco/basic information/e-cigarettes/severe-lung-disease.html

- Electronic cigarettes or e-cigarettes are also called vapes, e-hookahs, vape pens, tank systems, mods, and electronic nicotine delivery systems (ENDS).
- Using an e-cigarette product is commonly called vaping.
- E-cigarettes work by heating a liquid to produce an aerosol that users inhale into their lungs.
- The liquid can contain: nicotine, tetrahydrocannabinol (THC) and cannabinoid (CBD) oils, and other substances and additives. THC is the psychoactive mind-altering compound of marijuana that produces the "high".

What CDC knows:

- There are 805* lung injury cases reported from 46 states and 1 U.S. territory. Twelve deaths have been confirmed in 10 states.
- CDC has received sex and age data on 771 patients.
 - O About 69% of patients are male.
 - O Nearly two thirds (62%) of patients are 18 to 34 years old; with 22% of patients between 18-21.
 - O 16% of patients are under 18 years.
- All reported patients have a history of e-cigarette product use or vaping.
- The latest findings from the investigation into lung injuries associated with e-cigarette use, or vaping, suggest products containing THC play a role in the outbreak.
 - O CDC has received data on substances used in e-cigarettes or vaping products in the 30 days prior to symptom onset among 514 patients.
 - About 77% reported using THC-containing products; 36% reported exclusive use of THC-containing products.
 - About 57% reported using nicotine-containing products; 16% reported exclusive use of nicotinecontaining products.

What is not yet known:

- The specific chemical exposure(s) causing lung injuries associated with e-cigarette product use, or vaping, remains unknown at this time.
- No single product or substance has been linked to all lung injury cases.
- More information is needed to know whether one or more e-cigarette or vaping products, substances, or brand is responsible for the outbreak.

What CDC recommends:

- While this investigation is ongoing, CDC recommends that you consider refraining from using e-cigarette, or vaping, products, particularly those containing THC.
- If you are an adult who used e-cigarettes containing nicotine to quit cigarette smoking, do not return to smoking cigarettes.
- If you have recently used an e-cigarette or vaping product and you have symptoms like those reported in this outbreak, see a healthcare provider.
- Regardless of the ongoing investigation:
 - O Anyone who uses an e-cigarette or vaping product should not buy these products (e.g., e-cigarette or vaping products with THC or CBD oils) off the street, and should not modify or add any substances to these products that are not intended by the manufacturer.
 - O Youth and young adults should not use e-cigarette, or vaping, prod-ucts.
 - Women who are pregnant should not use e-cigarette, or vaping, products.
 Adults who do not currently use tobacco products should not start using e-cigarette, or vaping, products.

** Above information taken from the CDC Website located at <u>https://www.cdc.gov/tobacco/</u> <u>basic_information/e-cigarettes/severe-lung-disease.html</u>

	nnecticut State Department of Education (CSDE) presents New School Nurse Workshop Tuesday, December 3, 2019 & Wednesday, December 4, 2019 8:30 a.m. – 2:30 p.m. Red Lion Hotel, Cromwell 100 Berlin Road, Cromwell, CT 06416 hanie Knutson, Education Consultant, CSDE & Other CT School Nurse	25
an overview of legal nurses, supervisory education, and acad Participants will lead for immunizations, l services; special edu school health. Audience: School nurse	rn state laws and regulations regarding school health; state mandat health assessments, and screenings; documentation in school health ucation and Section 504; and academic achievement issues related t es, school nurse supervisors, directors of special education/pupil	es h
Cost: \$250.00 per perso h Questions: Please call 2 connecticut N Connecticut N	II advisors, and other school staff on (Includes light breakfast and lunch) <u>II Register Here II</u> https://ctnurses.org/event-3561298 203-238-1207 x 1 or email Virginia@ctnurses.org 203-238-1207 x 1 or email Virginia@ctnurses.org https://ctnurses.org/event-3561298 203-238-1207 x 1 or email Virginia@ctnurses.org https://ctnurses.org/event-3561298 203-238-1207 x 1 or email Virginia@ctnurses.org https://ctnurses.org/event-3561298 https://ctnurses.org https://ctnurses.org	has not

Bureau of Health/Nutrition, Family Services and Adult Education, 450 Columbus Boulevard, Suite 504, Hartford CT 06103 Phone: 860-807-2108 <u>stephanie.knutson@ct.gov</u>

Nondiscrimination Statement

The Connecticut State Department of Education is committed to a policy of equal opportunity/affirmative action for all qualified persons. The Connecticut State Department of Education does not discriminate in any employment practice, education program, or educational activity on the basis of race, color, religious creed, sex, age, national origin, ancestry, marital status, sexual orientation, gender identity or expression, disability (including, but not limited to, intellectual disability, past or present history of mental disorder, physical disability or learning disability), genetic information, or any other basis prohibited by Connecticut state and/or federal nondiscrimination laws. The Connecticut State Department of Education does not unlawfully discriminate in employment and licensing against qualified persons with a prior criminal conviction. Inquiries regarding the Connecticut State Department of Education policies should be directed to: Levy Gillespie, Equal Employment Opportunity Director/Americans with Disability tes Act Coordinator, Connecticut State Department of Education, 450 Columbus Boulevard, Suite 607, Hartford, CT 06103, 860-807-2071, Levy Gillespie@ct.gov.