

Severe Pulmonary Disease Associated with E-Cigarette Use

Date: Thursday, September 05, 2019

To: Family Physicians; Emergency Room Physicians and Staff; Nurse Practitioners; CZMA; Communications; EPH; EMS; Labs; ED/M; Chief Zone Officer; Zone Medical Director; U of A Rural Family Medicine Program; Tobacco Reduction Specialist(s)

From: Dr. Digby Horne, on behalf of Medical Officer of Health – Central Zone

Subject: Severe Pulmonary Disease Associated with E-Cigarette Use; Surveillance and Notification

You may have heard of reports of cases of severe lung disease in the United States that appear to be associated with a history of vaping. While there have not been any similar cases reported in Canada to date, effective September 4, 2019, the Chief Medical Officer of Health of Alberta has made severe pulmonary disease associated with e-cigarette use notifiable under the Public Health Act. As a result, any cases meeting the following definitions are required to be reported the Central Zone Medical Officer of Health (CZMOH) on-call, phone 403-356-6430.

Confirmed Case:

- A. Using an e-cigarette ("vaping") or dabbing* in 90 days prior to symptom onset; **AND**
- B. Pulmonary infiltrate, such as opacities on plain film chest radiograph or ground-glass opacities on chest CT; **AND**
- C. Absence of pulmonary infection on initial work-up: Minimum criteria include negative respiratory pathogen panel, influenza PCR or rapid test if local epidemiology supports testing. All other clinically indicated respiratory ID testing (e.g., urine Antigen for *Streptococcus pneumoniae* and *Legionella*, sputum culture if productive cough, Bronchoalveolar lavage (BAL) culture if done, blood culture, HIV-related opportunistic respiratory infections if appropriate) must be negative; **AND**
- D. No evidence in medical record of alternative plausible diagnoses (e.g., cardiac, rheumatologic or neoplastic process).

Probable Case:

A, B, and D above; **AND**

Infection identified via culture or PCR, but clinical team** believes this is not the sole cause of the underlying respiratory disease process OR Minimum criteria to rule out pulmonary infection not met (testing not performed) and clinical team** believes this is not the sole cause of the underlying respiratory disease process

* Using an electronic device (e.g., electronic nicotine delivery system (ENDS), I Quit Ordinary Smoking (IQOS), electronic cigarette, e-cigarette, vaporizer, vape(s), vape pen, dab pen, or other device) or dabbing to inhale substances (e.g., nicotine, marijuana, THC, THC concentrates, CBD, synthetic cannabinoids, flavorings, or other substances).

** Clinical team caring for the patient.

(over)

Your role as a clinician: It is important to consider all possible causes of illness in patients presenting with these symptoms, even if they report a history of e-cigarette product use. Clinicians should evaluate and treat for other likely causes of illness (e.g., infectious or other) as clinically indicated. If you identify a confirmed or probable case, please report to the Central Zone Medical Officer of Health (CZMOH) on-call, phone 403-356-6430.

To prevent any harms that could come from vaping, please reinforce with your patients that non-smokers and young people should not vape. In addition, the use of vaping by smokers as a Harm Reduction measure is not yet supported by evidence. In the interim, it is not recommended for smokers to vape as a cessation support.

We will continue to provide updates regarding this emerging public health issue. In the meantime, we thank you for your important role in protecting the health of Albertans.