TN Department of Health

October 29, 2019

Updated Guidance for Evaluating and Caring for Patients with Suspected E-cigarette, or Vaping, Product Use Associated Lung Injury

Summary and Action Items

- CDC has released "Update: Interim Guidance for Health Care Providers Evaluating and Caring for Patients with Suspected E-cigarette, or Vaping, Product Use Associated Lung Injury – United States, October 2019"
- The Tennessee Department of Health (TDH) is requesting that health care providers treating patients with suspected serious respiratory illness, and who vape, continue to report potential cases to public health as soon as possible.
- TDH will continue to coordinate testing of vaping devices and products with FDA.
- TDH can now also coordinate clinical specimen testing with CDC.

Background

There have been 57 cases of vaping associated pulmonary illness in Tennessee, ranging in age from 16 to 56 years. There have been two deaths confirmed. Additional cases are under investigation.

Potential Exposures

Patients have reported vaping in the weeks to months prior to illness. An investigation is ongoing to determine if there is a specific component or brand of vaping liquid that may be causing this problem, or if there are any other common exposures. Products used by cases may contain THC, CBD, nicotine, flavors and other chemicals.

Clinical Guidance

- CDC has released "Update: Interim Guidance for Health Care Providers Evaluating and Caring for Patients with Suspected E-cigarette, or Vaping, Product Use Associated Lung Injury – United States, October 2019"
- PowerPoint slides available here: https://emergency.cdc.gov/coca/calls/2019/callinfo_101719.asp

Public Health Response

- TDH will continue to conduct investigations among cases to look for any common exposures and to collect information on products potentially linked to the illnesses.
- With consent of patients, TDH is coordinating testing of vaping devices and e-liquid products with FDA.
- TDH will also coordinate testing of clinical samples with CDC.
    - Complete Laboratory Clinical Sample Collection, Storage, and Submission Guidance is available here: https://www.cdc.gov/tobacco/basic_information/e-cigarettes/pdfs/Lab-Clinical-Specimen-Collection-Storage-Guidance-Lung-Injury-508.pdf
    - Testing is available for Bronchoalveolar lavage fluid (BAL) (2 mL – 7mL), with or without accompanying blood and urine samples.
    - When reporting a suspect case to TDH, note whether or not a BAL specimen is available for testing and additional collection and shipping guidance will be provided.

Reporting a Suspect Case

- There are multiple ways to report a suspect case to TDH for further investigation:
    - Fill out the "Vaping Reporting Form for Providers v2.0" (also attached to this TNHAN) and either email to vaping.illness@tn.gov or fax to 615.741.3857 ATTN: Vaping.
    - Email Tennessee Department of Health at vaping.illness@tn.gov to report a suspect case. In your email, please include 1) patient's home county, 2) brief clinical description 3) reporting provider's name, email address, telephone number and 4) whether or not a BAL specimen is available for additional laboratory testing. A TDH staff member will follow-up by phone to complete the investigation with the provider.
    - Contact your regional or metropolitan health department.

IS THIS A CASE I NEED TO REPORT TO PUBLIC HEALTH?

Please confirm answers to these three questions before proceeding.

1. Does the patient have a history of vaping in the 90 days before onset of illness? ☐ Yes (If "no", not a case)
2. Is there evidence of pulmonary infiltrates (opacities or ground-glass opacities) on any imaging? ☐ Yes (If "no", not a case)
3. Is there any evidence that the disease is due to an alternative plausible diagnosis (e.g., cardiac, rheumatologic or neoplastic processes?) ☐ No (If "yes", not a case)

DEMOGRAPHICS

- Patient Last Name _____ Patient First Name _____
- Patient Sex _____ Patient DOB _____
- Patient Address _____
- Patient City _____ Patient ZIP _____
- Patient County_____ Patient Phone _____
- Is patient deceased? ☐ Yes (Date: _____/_____/_____) ☐ No

REPORTING

- Provider Name _____
- Provider Email _____ Provider Phone Number _____

Please provide a specific phone number for public health staff to conduct follow-up with reporting provider

INITIAL CLINICAL INFORMATION

- When did respiratory symptoms begin? (If before July 1, 2019, **not** part of this investigation) _____/_____/_____
- **Imaging**:
  - Chest Radiograph performed? ☐ Yes ☐ No
  - Chest CT performed? ☐ Yes ☐ No
  - Location of abnormal findings? ☐ Bilateral ☐ Right ☐ Left ☐ Normal (no findings)
  - Sub-pleural sparing on CT? ☐ Yes ☐ No ☐ Unknown
  - Comments about imaging or other abnormal findings:

- **Ruling out infectious causes:**
  - Respiratory viral panel: ☐ Any Positive ☐ All Negative ☐ Not Done ☐ Pending
    - Please describe any positive results:_____
  - Influenza:
    - PCR test: ☐ Positive ☐ Negative ☐ Not Done ☐ Pending
    - Rapid flu test: ☐ Positive ☐ Negative ☐ Not Done ☐ Pending
  - Blood cultures: ☐ Positive ☐ Negative ☐ Not Done ☐ Pending
    - If positive, specify organisms: _____
  - *Legionella* urinary antigen: ☐ Positive ☐ Negative ☐ Not Done ☐ Pending
  - *Strep pneumoniae* urinary antigen: ☐ Positive ☐ Negative ☐ Not Done ☐ Pending
  - *Mycoplasma pneumoniae*: ☐ Positive ☐ Negative ☐ Not Done ☐ Pending
  - Please describe any other infectious disease tests performed and their results:

    _____
  - **If positive for *any* infectious agents**, does the provider believe the infectious agent is the sole cause of the respiratory disease process? ☐ Yes ☐ No ☐ Not applicable (no positive infectious agents)
    Comments:

CLINICAL LABORATORY FINDINGS

- Bronchoalveolar lavage performed? ☐ Yes, date of sample_____ ☐ No
  - If yes, lipid staining? ☐ Yes ☐ No
  - If yes, lipid-laden macrophages seen? ☐ Yes ☐ No

- Lung biopsy performed? ☐ Yes, date of sample _____ ☐ No
  - If yes, lipid staining? ☐ Yes ☐ No
  - If yes, lipid-laden macrophages seen? ☐ Yes ☐ No
  - If yes, findings consistent with acute lung injury? ☐ Yes ☐ No If no, specify findings
  - If yes, other significant findings: _____

TDH can coordinate additional testing of BAL (paired with or without blood and/or urine) specimens at CDC if desired. If a BAL has already been performed and at least 2 mL (7 mL preferred) of fluid is remaining for additional testing, please provide contact information to coordinate specimen collection and shipping.

☐ Use contact information provided above for reporting provider to coordinate specimen collection and shipping
☐ Use contact information for person below to coordinate specimen collection and shipping

Name _____

Phone Number _____

Email Address _____

☐ Non-applicable (BAL not performed/not enough fluid remaining/not interested in additional testing)