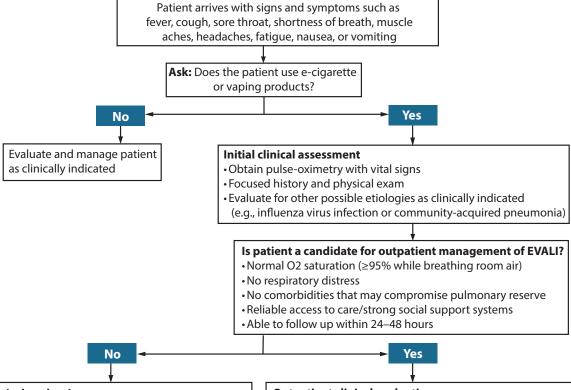
ALGORITHM FOR MANAGEMENT OF PATIENTS WITH RESPIRATORY, GASTROINTESTINAL, OR CONSTITUTIONAL SYMPTOMS AND E-CIGARETTE, OR VAPING, PRODUCT USE





Inpatient clinical evaluation

- Conduct urine toxicology, influenza testing, plus other laboratory and infectious disease testing guided by clinical findings
- Obtain a chest x-ray and consider CT if chest x-ray is normal
- Consider consultation with pulmonary, critical care, medical toxicology, infectious disease, and others
- Additional testing with bronchoalveolar lavage or lung biopsy as clinically indicated, in consultation with pulmonary specialists

Inpatient clinical management

- Discontinue use of e-cigarette, or vaping, products
- Consider empiric use of antibiotics, antivirals, or both, in accordance with established guidelines
- Consider corticosteroids, with timing depending on severity
- Offer or connect patients to services to stop using e-cigarette, or vaping, products
- Ensure follow-up no later than 1–2 weeks after discharge from hospital
- Emphasize importance of routine influenza vaccination

Outpatient clinical evaluation

- Consider obtaining chest x-ray particularly if indicated by complaints of chest pain, dyspnea, or clinical exam findings
- Consider influenza testing, in accordance with established guidance

Outpatient clinical management

- Manage for possible EVALI
- Advise patient to discontinue use of e-cigarette, or vaping, products
- Use of corticosteroids might worsen respiratory infections and should be considered with caution in the outpatient setting
- Manage other possible infections, if present, in accordance with established guidelines
- o Consider early initiation of antivirals for possible influenza
- Consider appropriate antibiotics for community acquired pneumonia
- Offer or connect all patients to services to stop using e-cigarette, or vaping, products
- Ensure follow-up within 24–48 hours; additional follow-up might be indicated, based on clinical findings
- Emphasize importance of routine influenza vaccination

 $\textbf{Abbreviations:} \ \mathsf{CT} = \mathsf{computed} \ \mathsf{tomography}; \ \mathsf{EVALI} = \mathsf{e-cigarette}, \ \mathsf{or} \ \mathsf{vaping}, \ \mathsf{product} \ \mathsf{use-associated} \ \mathsf{lung} \ \mathsf{injury}.$

continued >>



Reporting cases with suspected EVALI to state, local, territorial, or tribal health departments is critical for accurate surveillance of EVALI.

Determine whether any remaining product, including devices and liquids, is available for testing. Consider submission of any collected specimens, including bronchoalveolar lavage, blood, urine, biopsy, or autopsy specimens, to CDC for evaluation. Testing can be coordinated with <u>health departments</u>.

CDC recently developed <u>International Classification of Diseases</u>, <u>Tenth Edition</u>, <u>Clinical Modification coding guidance</u> for health care encounters related to EVALI.

Recommendations for clinicians regarding the Outbreak of EVALI will be updated at www.cdc.gov/lunginjury.