VAPING

The New York Experience



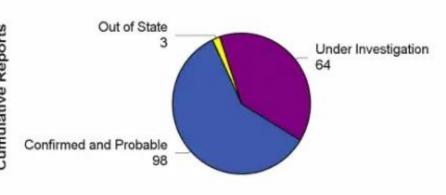
New York State Vaping-Related Illness Investigation

Summary of case data reported to NYS Department Health through November 4, 2019

Reports of Vaping-Related Illness

Investigation Status

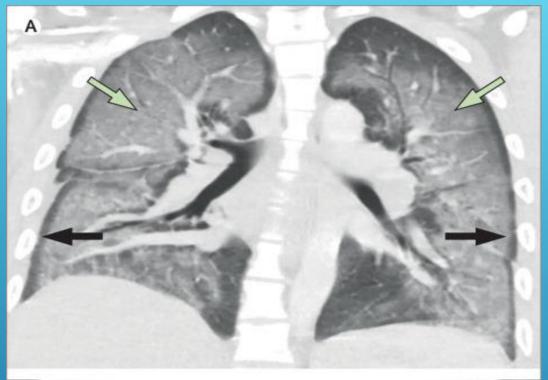


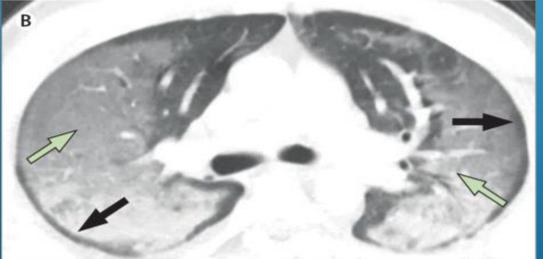


Total reported cases=165

Confirmed and Probable Cases are classified based upon the Centers for Disease Control and Prevention case definition. The definitions are meant for surveillance and not clinical diagnosis. Due to the ongoing and evolving nature of the outbreak, an individual case's classification status may change.









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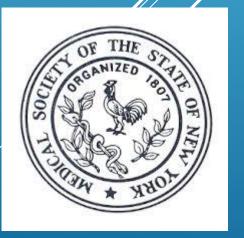
PlumX Metrics

ARTICLES | ONLINE FIRST

E-cigarette, or vaping, product use associated lung injury (EVALI): case series and diagnostic approach

Aleksandr Kalininskiy, MD $\stackrel{\wedge}{\sim}$ Christina T Bach, MD † Nicholas E Nacca, MD $^{\bullet}$ Gary Ginsberg, PhD $^{\bullet}$ Jeanna Marraffa, PharmD $^{\bullet}$ Kristen A Navarette, MD $^{\bullet}$ et al. Show all authors $^{\bullet}$ Show footnotes





E-Cigarette, or Vaping, Product Use Associated Lung Injury (EVALI)

Interim Diagnostic and Therapeutic Guidance

History and Physical

Symptoms:

- · Cough, dyspnea, pleuritic chest pain
- · Nausea, vomiting, diarrhea
- · Headache, fatigue, weight loss

Physical Exam Findings:

· Hypoxemia, fever, tachypnea

Positive Screen for Vaping-specific History:

- · E-cigarette ("vaping") or "dabbing" (inhaling concentrated liquid) within 30 days
- · Most cases involve use in days to weeks preceding presentation. CDC case definition includes vaping use in prior 90 days



Obtain Chest **Imaging**

Chest X-ray:

Diffuse bilateral infiltrates/disease

Chest CT:

- Nonspecific bilateral ground glass opacities +/- sub-pleural sparing
- Acute eosinophilic pneumonia, diffuse alveolar damage, organizing pneumonia, or lipoid pneumonia
- Diffuse lung nodules

If history, physical, and/or chest imaging not suggestive consider alternative diagnoses

If atypical presentation:

Consider alternative

diagnoses

- · Repeat imaging
- · Close follow-up (within 48 hours)



Obtain Lab Data to Screen for **Alternate** Diagnoses

Cardiac, Rheumatologic, **Neoplastic Testing (at clinical** discretion):

- · CBC with differential · ESR, CRP, LDH
- · CMP (i.e., BMP + LFTs)
- Urinalysis
- ECG

Infectious Testing:

- · Blood cultures
- · Extended viral panel including influenza testing
- Mycoplasma NAAT
- · Strep. Pneumo urinary Ag
- · Legionella Ag
- HIV testing

Or Consider an

EVALI Clinical Management:

If EVALI is suspected, clinical management should proceed immediately and be further guided by individual laboratory results:

- · Early pulmonology and toxicology consultation, including screening for urine THC
- · Oxygen and respiratory/ventilatory support as required
- Empiric antibiotic coverage for at least 48 hours if history is unclear, if patient is intubated, or patient has severe hypoxemia despite supplemental oxygen
- · During influenza season, antivirals should be considered until influenza is excluded
- Systemic steroids if no improvement with antibiotics and/or respiratory support
- · Corticosteroid dosing and duration should be considered on a case by case basis
- · Length of steroid taper should be made based on patient's clinical course of recovery and close follow up
- · Arrange for outpatient follow up with primary care team and/or pulmonary team
- · Report to local Poison Control Center for case surveillance
- · Collect vaping cartridges for state public health lab testing

If bronchoscopy performed:

(consider in intubated patients or at the

EVALI– concomitant

respiratory infection

- discretion of treatment team)
- Lipid staining of samples · Oil-red O stain
- · Total cell count with differential
- · Bacterial and fungal cultures
- · Gram stains and smears
- · Medical cytology
- · Fungal stains
- · Additional testing as clinically indicated









THE LANCET **Respiratory Medicine**

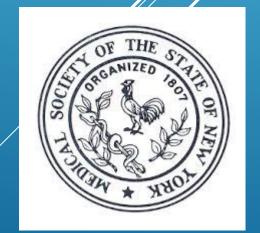
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E-cigarette, or vaping, product use associated lung injury (EVALI): case series and diagnostic approach

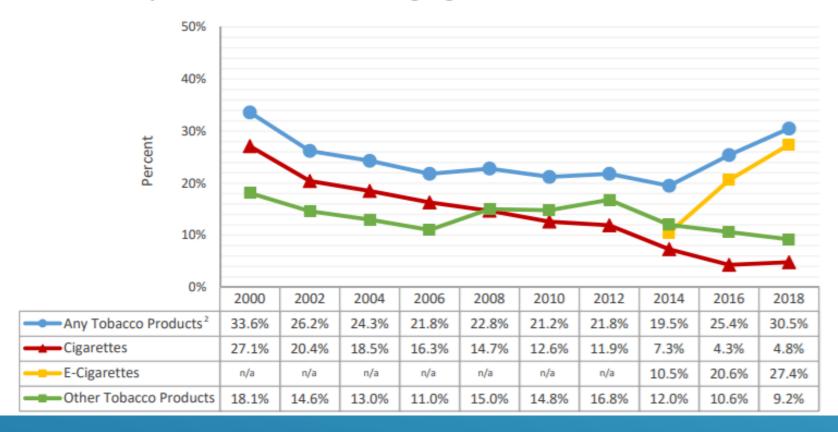
Aleksandr Kalininskiy, MD 2 1 2 - Christina T Bach, MD 1 - Nicholas E Nacca, MD - Gary Ginsberg, PhD -Jeanna Marraffa, PharmD . Kristen A Navarette, MD . et al. Show all authors . Show footnotes

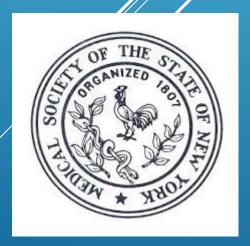
Published: November 08, 2019 • DOI: https://doi.org/10.1016/S2213-2600(19)30415-1 •





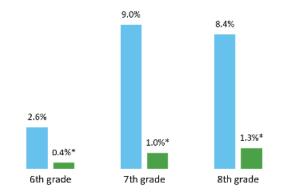
Trends in Any Tobacco Product Use among High School Students³ in NYS, 2000-2018





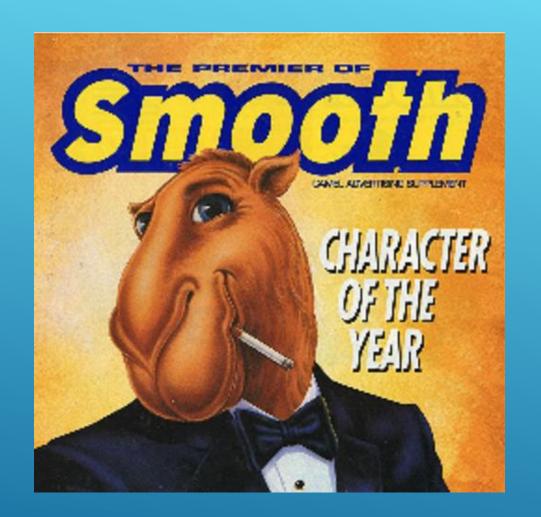
Health Department Sounds the Alarm on E-cigarette Use Among NYC Middle School Students

Percentage of public middle school students who currently use e-cigarettes and cigarettes, New York City, 2018



^{*}I stimate should be interpreted with caution due to large relative standard error.









YR MEDIA

Candy Flavors Put E-Cigarettes On Kids' Menu

February 17, 2014 · 3:37 AM ET Heard on Morning Edition

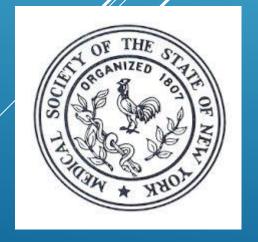
JENNY LEI BOLARIO













Court Blocks Cuomo's Flavored Vaping Ban, For Now

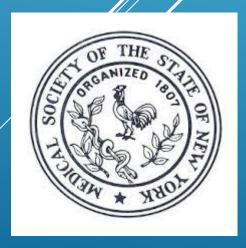
BY <u>FMILY SUZANNE LEVER</u>
DCI. 4, 2019 4, 40 P.M. + 41 COMMENTS













Original Investigation | Substance Use and Addiction



February 1, 2019

Association of Electronic Cigarette Use With Subsequent Initiation of Tobacco Cigarettes in US Youths

Kaitlyn M. Berry, MPH¹; Jessica L. Fetterman, PhD²; Emelia J. Benjamin, MD, ScM^{2,3}; et al.

J/M/A Netw Open. 2019;2(2):e187794. doi:10.1001/jamanetworkopen.2018.7794





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Article

Electronic Cigarettes and Future Marijuana Use: A Longitudinal Study

Hongying Dai, Delwyn Catley, Kimber P. Richter, Kathy Goggin and Edward F. Ellerbeck Pediatrics May 2018, 141 (5) e20173787; DOI: https://doi.org/10.1542/peds.2017-3787

