

# Quality Report Card

Licking Memorial Health Systems

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RESPIRATORY CARE

## EVALI – E-cigarette or Vaping Product Use Associated Lung Injury

Vaping devices – also known as e-cigarettes, e-hookahs, vape pens and mods – are battery-operated devices used to inhale an aerosol, which typically contains nicotine, flavorings and other chemicals. In recent months, there has been an outbreak of a severe lung illness called E-cigarette or Vaping product use Associated Lung Injury (EVALI). The illness was first recognized by the Centers for Disease Control and Prevention (CDC) in August 2019 when the number of Emergency Department (ED) visits across the country rose sharply. Patients who experienced shortness of breath or fever were hospitalized, and experts and researchers soon discovered that all of these cases involved the patient using e-cigarettes.

E-cigarettes work by heating an e-liquid, or e-juice, to produce a vapor that users inhale into their lungs. Nicotine is quickly absorbed into the bloodstream when a person vapes. Many people have switched to using e-cigarettes because they believe vaping devices may help to lower nicotine cravings and be less harmful than regular cigarettes. However, nicotine is highly addictive in any form, and the use of e-cigarettes exposes the lungs to other harmful substances found in e-liquids, including additives and chemicals produced during the heating process.

According to the CDC, more than 80 percent of EVALI cases involved products containing Tetrahydrocannabinol (THC), which is the chemical found in marijuana. Vitamin E acetate, an additive typically

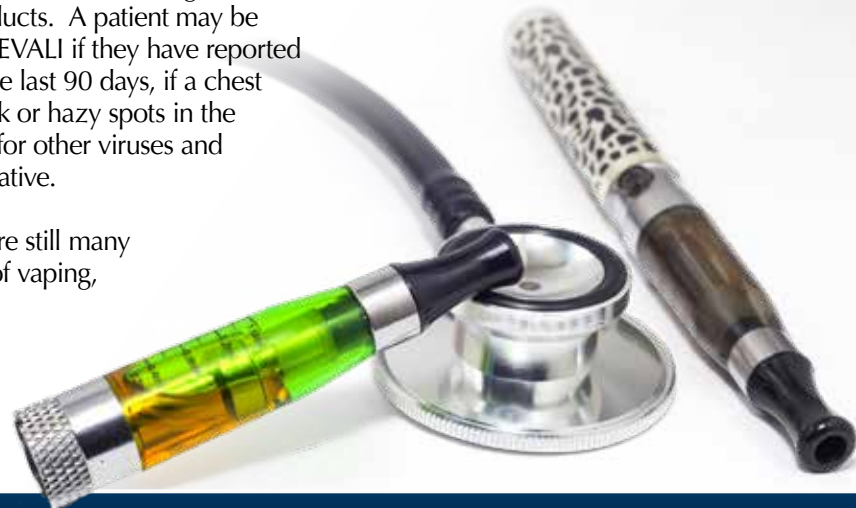
used in e-cigarettes containing THC, also has been linked to the EVALI outbreak. As of February, a total of 2,758 hospitalized EVALI cases or deaths have been reported to the CDC from all 50 states, the District of Columbia, Puerto Rico and U.S. Virgin Islands. The latest national and state findings suggest that products containing THC, specifically those acquired off the street, are linked to most EVALI cases that played a role in the outbreak last fall.

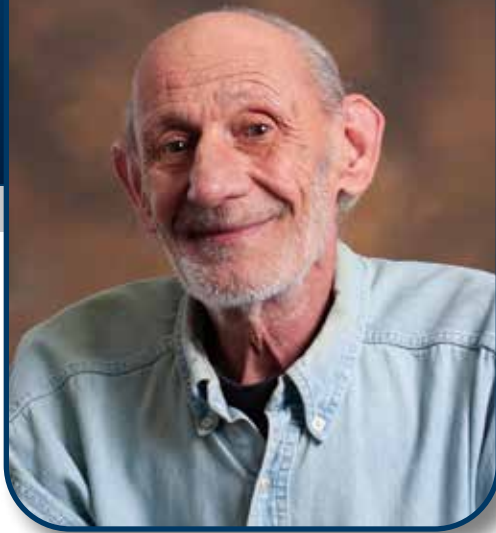
Diagnosing EVALI can be difficult because the condition can cause symptoms that resemble those of other respiratory illnesses such as pneumonia or the flu. Symptoms include cough, chest pain, shortness of breath, fever and chills. In some instances, abdominal pain, nausea, vomiting and diarrhea can occur. Severe cases may require intensive care and the use of a ventilator to assist the patient with breathing. There is no specific test for EVALI; therefore, physicians must take a detailed health history of the patient and also inquire about the use of e-cigarettes and vaping products. A patient may be diagnosed with EVALI if they have reported vaping within the last 90 days, if a chest X-ray shows dark or hazy spots in the lungs, and tests for other viruses and bacteria are negative.

Because there are still many unknown risks of vaping, the CDC recommends that children, young adults, and pregnant

women should not vape. Individuals should not use e-cigarettes or vaping products that contain THC, particularly those that are purchased from unauthorized sources such as friends, family, and in-person or online dealers.

E-cigarettes, or vaping products, are not an FDA-approved smoking cessation aid, and there is no conclusive scientific evidence to prove that vaping helps a person quit smoking long term. A healthcare provider can recommend quitting methods that are safe and effective to people who want to stop smoking. Licking Memorial Hospital (LMH) offers a Quit for Your Health Tobacco Cessation Program with Certified Tobacco Treatment Specialists for Licking County residents. The counselors utilize evidence-based techniques to help participants develop a plan that will offer an opportunity to become tobacco-free. Smokers who wish to quit can either ask their primary care physician for more information or simply call (220) 564-QUIT (7848).





## Patient Story – Michael DeLong

Michael DeLong moved to Newark about five years ago so his wife could be close to her family. He took an early retirement from his job at a medical warehouse in Columbus to care for her because of her failing health. Michael also was dealing with medical issues after being diagnosed with chronic obstructive pulmonary disease (COPD) – an inflammatory lung disease that causes obstructed airflow from the lungs. At the time, Michael did not establish a relationship with a primary care physician.

Michael began experiencing severe symptoms from his COPD. He had trouble breathing, and went to the Emergency Department (ED) at Licking Memorial Hospital (LMH) quite often. Typically, Michael would have to spend one to two days at LMH until his oxygen returned to an acceptable level. In March 2019, a Licking Memorial Community Case Manager began visiting Michael at his home weekly to assist in managing his symptoms. Community Case Management monitors and plans services which may be necessary for a patient's healthcare needs. The team, which includes registered nurses, licensed social workers, dietitians and respiratory therapists, help patients coordinate care and services, serve as information specialists, assist in independent healthy living and support patients to make responsible healthcare decisions. Michael was assigned a registered nurse (R.N.) case manager who checked his blood pressure and oxygen level, and also provided him with different types of tools to assist in improving his health.

There were many barriers to Michael receiving the care he needed, including transportation and financial issues,

but the case manager helped him find needed solutions and resources. Michael also was connected to a primary care physician, Donald J. Fairbanks, M.D., and a pulmonologist, Emilia N.U. Anigbo, M.D. Together, the physicians created a care plan and prescribed the medications he needed to manage his COPD. "Dr. Fairbanks and Dr. Anigbo are very knowledgeable and they have been helpful in getting me on the right track," Michael said.

Michael reported smoking a half pack of cigarettes a day, and the physicians also encouraged him to quit. Michael took the advice seriously and contacted a tobacco cessation counselor with LMH's Quit for Your Health program. The counselor visited Michael at his home as well because he had difficulty leaving his home due to weakness and shortness of breath. He received nicotine replacement therapy including patches and lozenges. Although he knew it would be difficult to break the nicotine addiction, Michael was willing to take the advice from the counselor and work toward cessation. He experienced one relapse, but after two visits from the counselor, Michael quit smoking entirely.

Michael's case manager also connected him to local palliative care. Palliative care is specialized medical care for people living with a serious illness and focuses on providing relief from the symptoms and stress of the disease to improve quality of life. A specially-trained team of doctors, nurses and other specialists worked together with Drs. Fairbanks and Anigbo to provide an extra layer of support. The case manager explained to Michael that he could call the palliative care team at the first sign of worsening symptoms. The palliative care practitioners are able to call in prescriptions and make sure Michael has his inhaler or other needed medications. With their assistance, he can get the care he needs without having to wait for an appointment with his primary physician or visiting the ED.

As Michael learned more about his disease and symptoms, he gained confidence in his own self-care and how to recognize the triggers that could cause him to become seriously ill. As suggested by his case manager, he learned to use a calendar to keep track of medical appointments and now is more consistent about visiting his physicians. "I have been able to stay out of the Emergency Department for over a year. I try very hard to follow the care plan," Michael said. "I have my good days and my bad days, but overall, I feel successful in managing my illness." His case manager and tobacco cessation counselor both were pleased with Michael's attitude towards making healthy lifestyle changes.

Michael is among the first patients to participate in the Health Coach program – a collaboration between Licking Memorial Health Systems (LMHS) and Denison University. The Denison students serve as Health Coaches under the supervision of healthcare professionals from LMH Community Case Management Department. A Health Coach student makes home visits to support Michael in continuing to make healthy lifestyle choices, and managing his medication and COPD symptoms. "Michael was the perfect candidate for this program. He is eager to improve his health, manage his chronic illness, and readily accepts advice and assistance from his Health Coach," said Debbie Young, Vice President Allied Health Services, and Community Health and Wellness.

As his health improved, Michael began leaving his home more often – even driving again. Dr. Anigbo referred Michael to the Pulmonary Rehabilitation Clinic to assist in gaining strength and stamina. His support staff marvels at his progress and is grateful to continue to witness his journey to better quality health.

# Respiratory Care – How do we compare?

At Licking Memorial Health Systems (LMHS), we take pride in the care we provide. To monitor the quality of that care, we track specific quality measures and compare to benchmark measures. Then, we publish the information so you can draw your own conclusions regarding your healthcare choices.

1. Tobacco use has been linked to many serious and life-threatening conditions, such as cancer, heart disease, cardiopulmonary disease and diabetes. An estimated 24 percent of Licking County adults smoke.<sup>(1)</sup> LMHS offers free Quit For Your Health tobacco cessation education, counseling, and nicotine-replacement products. A similar program, Quit for You, Quit for Your Baby, adds incentives to help pregnant women stop using tobacco products. Over 3,086 visits were made as part of the LMHS tobacco cessation programs in 2019.

	LMH 2017	LMH 2018	LMH 2019	LMH Goal
Six-month success rate for patients who completed Quit for Your Health <sup>(2)</sup>	N/A*	73%	68%	N/A*
*New collection methodology implemented in 2018.				

2. Chronic obstructive pulmonary disease (COPD) is a serious lung condition that includes two life-threatening diagnoses, chronic bronchitis and emphysema. According to the American Lung Association, COPD is the third leading cause of death in the U.S. There is no cure for COPD, but with careful management, patients can enjoy longer and healthier lives. To monitor the quality of COPD patients' care, the Centers for Medicare/Medicaid Services tracks the death rate nationally for patients who died (for any reason, including reasons not related to COPD) within 30 days of a hospital admission.

	LMH 2017	LMH 2018	LMH 2019	National <sup>(3)</sup>
Mortality rate of COPD patients within 30 days of hospital admission	8.2%	10%	8.5%	8.5%

3. Protecting patients from hospital-acquired infections is a primary patient safety goal. LMH has many ongoing programs and safety mechanisms in place to help prevent patient infections. In accordance with the Centers for Disease Control and Prevention (CDC) recommendations, LMH monitors patients who are at high risk for infections, including those using invasive devices, such as ventilators (breathing machines). The following data reflect the number of respiratory infections associated with ventilator use, per every 1,000 patient days.

	LMH 2017	LMH 2018	LMH 2019	LMH Goal
Pneumonia infection rate of Intensive Care Unit patients on ventilators per 1,000 patient days	0.0	0.0	0.0	0.0

4. Some pneumonia patients who are hospitalized require treatment with a ventilator to assist their breathing. Although the ventilator can be life-saving, it carries the risk of serious complications, such as infections, stomach ulcers, blood clots and extended dependency on the ventilator. To help prevent complications, LMH staff members follow a best-practices protocol for patients on ventilators. Known as the "ventilator bundle," these five steps are carefully documented to ensure each patient receives the best possible care.

	LMH 2017	LMH 2018	LMH 2019	LMH Goal
Head of bed elevated to 30 degrees	100%	100%	99.9%	greater than 90%
Oral care	99.9%	99.7%	98.6%	greater than 90%
Daily test to reduce sedation	99.6%	100%	99.6%	greater than 90%
Stomach ulcer prevention	99.1%	99.5%	99.9%	greater than 90%
Blood clot prevention	100%	99.9%	99.6%	greater than 90%

5. LMHS is committed to providing and encouraging free, easily accessible vaccines to all employees. In order to provide the safest care to our community, LMHS recognizes the importance of keeping the staff healthy.

	LMHS 2017	LMHS 2018	LMHS 2019	LMH Goal	National <sup>(3)</sup>
LMHS employees receiving the influenza vaccine	94%	95%	95%	greater than 90%	90%

Respiratory Care – How do we compare? (continued on back)



Check out our Quality Report Cards online at [www.LMHealth.org](http://www.LMHealth.org).

**6.** Licking Memorial Health Professionals (LMHP) office patients who are at high risk for these illnesses also are screened and vaccinated as appropriate. LMHP physicians strongly encourage patients over the age of 65 years to receive a one-time dose of pneumonia vaccine and an annual influenza vaccine during each “flu season,” which runs from October to March.

	LMHP 2017	LMHP 2018	LMHP 2019	National <sup>(1)</sup>
Physician office patients over 65 years receiving the pneumonia vaccine	80%	78%	78%	74%
	LMHP 2016-2017	LMHP 2017-2018	LMHP 2018-2019	National <sup>(1)</sup>
Physician office patients over 65 years receiving the influenza vaccine	80%	76%	78%	55%

**7.** Asthma is a condition in which swelling or inflammation can cause narrowing of the breathing tubes, making it difficult to breathe and sometimes resulting in a medical emergency. By using the correct medications, such as inhaled corticosteroids, asthma can be controlled. Use of these medications can reduce asthma-related emergency room visits, hospital admissions, and missed work/school days. Licking Memorial Pulmonology assesses all asthma patients during their office visits to ensure that they are being treated with the correct long-acting corticosteroid.

	LMHP Pulmonology 2017	LMHP Pulmonology 2018	LMHP Pulmonology 2019	LMHP Goal
Asthma patients assessed for appropriate inhaled corticosteroid	97%	95%	94%	90%

**Data Footnotes:**

- (1) Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, [2016].
- (2) Tobacco-free status is self-reported by patients in a six-month follow-up after completing the Quit for Your Health program.
- (3) HospitalCompare.hhs.gov national benchmarks

## Health Tips – Lung Cancer Screening

Lung cancer is the leading cause of cancer deaths in the United States, killing more people every year than breast, colorectal, prostate, and pancreatic cancers combined. Lung cancer is difficult to detect early because patients often have no symptoms. Individuals often are diagnosed with lung cancer in the advanced stages after the cancer has spread outside of the lungs. Studies show that low-dose computed tomography screening (LDCT) can save lives by detecting lung cancer in its early stages.

LDCT uses special X-ray equipment and a low dose of radiation to make detailed images inside the chest. This non-invasive exam reviews areas of abnormal tissue, or nodules, in the lungs. Lung cancer that is

detected through LDCT often is considered early stage and has a higher likelihood of treatment success.

Individuals who are eligible to receive an LDCT screening meet all of the following guidelines:

- Age 55 to 77
- Current smoker or have quit smoking within the last 15 years
- Have no symptoms of lung cancer
- Have a tobacco smoking history of at least 30 pack years, an average of 1 pack a day for 30 years

There are many risk factors for lung cancer. People who have smoked for many years have a higher risk of lung cancer than smokers who quit 10 years ago or people

who have never smoked. Other risk factors for lung cancer include contact with radon, asbestos or other cancer-causing agents, history of cancer, family history of lung cancer, and history of COPD or pulmonary fibrosis.

In addition to early detection of lung cancer, LDCT screenings also may discover other conditions not related to lung cancer such as heart disease or thickened tissue in the lungs from scarring. The decision to be screened for lung cancer is personal for each patient. Individuals should consult their physician to determine if lung cancer screening is an appropriate option.



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Visit us at [www.LMHealth.org](http://www.LMHealth.org).

Please take a few minutes to read this month’s report on **Respiratory Care**. You’ll soon discover why Licking Memorial Health Systems is measurably different ... for your health!

The Quality Report Card is a publication of the LMHS Public Relations Department. Please contact the Public Relations Department at (220) 564-1572 to receive future mailings.

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