

The Great American Smokeout: Understanding the Effects of Vaping

By: Lynn Reinert, BS, RRT-RCP, Respiratory Care Manager, Kona Community Hospital

November 15th is the Great American Smokeout, a day set aside by the American Cancer Society to help people give up smoking for 24 hours with the hope that it will continue long past the first 24 hours.

We all know smoking is bad for you. People can develop lung cancer, chronic obstructive pulmonary disease, (COPD), and other illnesses related to smoking. It has taken many years to understand the long term effects of smoking.



In the news, we are now learning about the effects of vaping and e-cigarettes. The truly frightening issue with vaping is the uncertainty about the long-term effects. Many smokers have switched to vaping thinking it was better than smoking traditional cigarettes. However, now many people are suffering from serious lung damage linked to vaping. Still others have died from the damage done to their lungs.

As of November 5th, the Centers for Disease Control, (CDC), has confirmed 2051 cases of lung injury occurring in 49 states and one U.S. Territory, as well as 40 deaths in 24 different states. This is a frightening trend. All patients in these groups have a history of e-cigarette use.

The CDC reports the data they have collected shows that nearly 2/3 (62%) of these patients are 18 to 34 years old; with 22% of the patients falling between 18 and 21 years of age. Males make up the majority of patients at 69%.

CDC investigators found that 77% of patients reported using solutions containing THC. THC, tetrahydrocannabinol, is the active ingredient in marijuana that gives the smoker the "high".

It is believed that the e-cigarettes in question are being used with bootleg cartridges made with products containing pesticides and solvents. A quick on line search shows multiple websites with instructions on how to make vape juice. There are many black market cartridges available. Overall, the e-cigarette business is a billion dollar enterprise.

Health care providers must alter their thinking when caring for a patient presenting with the sometimes unusual symptoms. Patients have arrived with complaints of shortness of breath, fatigue, cough, nausea, vomiting, diarrhea and chest pain. In some cases weight loss has been a problem. Initially physicians may feel there is an infectious process at work. Now they must consider the patient's vaping history.

Thousands of people use e-cigarettes and not everyone is experiencing the serious effects that some have seen. Still we need to ask ourselves if the risk is really worth it. We just don't know what the long term effects of vaping will be. Studies are underway to help predict the effects, but scientists know this will take years of research to accurately determine the damage that will be done by vaping.