

Do e-cigarettes cause cancer?



Your Health and Wellness Awareness Program

Tobacco use remains the leading cause of preventable disease and death in the United States. Not only can smoking damage a cell's DNA, leading to the creation of a cancerous tumor, the poisons in cigarette smoke weaken the immune system and make it more difficult to kill cancer cells.



The use of smokeless tobacco increases the risk for cancer as well, as it can cause cancer of the mouth and esophagus.

While the relationship between tobacco and cancer has been proven, the danger level of electronic cigarettes (or e-cigarettes) is not yet clear. E-cigarettes contain nicotine and may resemble conventional cigarettes, but their health effects are still being studied.

Rather than burning tobacco, e-cigarettes are battery-operated and use a heating element to warm a reservoir filled with liquid. The heated liquid, which contains nicotine and other chemicals, turns into a vapor that's inhaled and exhaled by the user.

Still under review

E-cigarettes may be promoted as being safer than traditional cigarettes, or as an alternative for those who want to quit smoking. Little, however, is known about their health risks.

E-cigarette vapor may contain harmful substances, including carcinogens and toxic chemicals such as formaldehyde. In addition, the aerosol emitted by the e-cigarettes contains small particles that can penetrate into the lungs.

Most e-cigarettes contain nicotine, which is highly addictive. It may impact brain development, which makes it especially harmful for children and teens.

The various flavors of e-liquids may also make e-cigarettes attractive to young people. More than 7,000 flavors have been documented, including mint, candy, fruit flavors, and chocolate.

There are signs that young people who smoke e-cigarettes may eventually turn to other tobacco products. A study found that youth who use e-cigarettes are more likely than others to start smoking traditional cigarettes.

-  Smoking can cause cancer almost anywhere in your body.
-  Smoking causes about 90 percent of all lung cancer deaths.
-  Smoking increases the risk of men developing lung cancer by 25 times.
-  Smoking increases the risk of women developing lung cancer by 25.7 times.
-  Within 5 years of quitting, the risk for mouth, throat, esophagus, and bladder cancer drops by half.
-  Within 10 years of quitting, the risk for lung cancer drops by half.

Source: Centers for Disease Control and Prevention

New regulations

Few regulations covered e-cigarettes when they were first introduced. In some states, however, vaping (the act of smoking e-cigarettes) is now prohibited in areas where smoking is not allowed.

E-cigarettes are receiving additional federal oversight as well. This summer, the Food and Drug Administration (FDA) finalized a rule prohibiting the sale of e-cigarettes to minors.

The rule also extended the FDA's authority to all tobacco products, including e-cigarettes. The FDA will now be able to evaluate the ingredients of new tobacco products and communicate potential risks.

In addition, the product packages and advertisements of newly regulated tobacco products with nicotine will contain the following warning statement: "This product contains nicotine. Nicotine is an addictive chemical."

The health risks and benefits of e-cigarettes are still unclear. However, the new FDA rule is expected to make more information available to consumers, to help them make educated decisions about the products.



Online Resources

Smokefree.gov

This federal government site provides information on quitting smoking and support to help a person quit.

<https://smokefree.gov/>

Guide to Quitting Smoking

This site from the American Cancer Society provides information about overcoming tobacco addiction, as well as cancer research.

<http://www.cancer.org/healthy/stayawayfromtobacco/guidetoquittingsmoking/index?sitearea>

Vaporizers, e-Cigarettes, and other Electronic Delivery Systems

This site from the Food and Drug Administration provides information on regulation of electronic nicotine delivery systems and statistics on their use.

<http://www.fda.gov/TobaccoProducts/Labeling/ProductsIngredientsComponents/ucm456610.htm>