

E-cigarettes

Health researchers have been interested in the latest phenomenon of electronic cigarettes (e-cigarettes) where users inhale aerosol instead of smoking. An e-cigarette is a battery-operated device that heats a liquid into an aerosol the user inhales. The liquid usually contains flavourings in it, along with other additives.

The act of using an e-cigarette is often referred to as 'vaping' and mimics the use and sometimes appearance and taste of a conventional cigarette but does not contain tobacco. The use and availability of e-cigarettes has increased across the world, and a number of traditional cigarette manufacturers now sell e-cigarettes.

The Ontario Dental Hygienists' Association does not condone or recommend the use of e-cigarettes.

DEMOGRAPHICS

E-cigarettes are very popular with young people and have grown dramatically in the last five years. Today, more high school students use e-cigarettes than regular cigarettes.

Many people try e-cigarettes to assist in smoking cessation or reduce cigarette consumption, although effectiveness as a cessation aid has not been proven.

DANGERS OF E-CIGARETTES

E-cigarettes can also be used to deliver cannabis and other drugs. Some e-cigarettes contain nicotine and usage could result in nicotine addiction. Illicit e-cigarettes with nicotine can be easily obtained in Canada, whether through certain retailers or online.

Besides nicotine, e-cigarettes contain harmful and potentially harmful ingredients, including:

- ultrafine particles that can be inhaled deep into the lungs
- flavourants such as diacetyl, a chemical linked to lung disease
- volatile organic compounds such as benzene, which is found in car exhaust
- heavy metals such as nickel, tin and lead



EFFECTS ON ORAL HEALTH

E-cigarettes containing nicotine can have a negative effect on oral health. Nicotine acts as a vasoconstrictor and without sufficient blood flow, gums are not receiving the amount of oxygen and nutrients needed to remain healthy. Nicotine inhibits the body's ability to produce saliva which leads to increase bacteria build up, dry mouth and tooth decay. Saliva also becomes thick and ropy overtime. Nicotine stimulates jaw muscles and increases bruxism.

NEGATIVE HEALTH EFFECTS

Short-term studies have identified several negative health outcomes associated with the active inhalation of e-cigarette aerosol. These include:

- airway, mouth and throat irritation
- decreased lung function
- allergic reactions
- potential respiratory inflammation

BEHAVIOUR RISKS

E-cigarettes are proving to be a gateway to other products. Use among youth and young adults is strongly linked to the use of other tobacco products, such as regular cigarettes, cigars, hookah, and smokeless tobacco. Some evidence suggests e-cigarette use is linked to alcohol and other substance use, such as cannabis. Studies show that non-smoking youth who use e-cigarettes are more likely to try conventional cigarettes in the future.

As professional health-care providers, dental hygienists are primarily concerned with promoting good oral health. Dental hygiene is among the largest of the regulated healthcare professions in the province. In Ontario all dental hygienists are registered with the College of Dental Hygienists of Ontario, which regulates the profession to ensure the public receives safe and ongoing comprehensive oral care.

VFS19.1
© The Ontario Dental Hygienists' Association