The Good, The Bad and The Ugly About Vaping

Back in the old days, "smoking in the boy's room" was dangerous, rebellious and cause for a school suspension! Times have changed and electronic cigarettes now seem to be the temptation for today's youth. Regardless of our choices and habits, most of us can agree that smoking is bad for our health. But what about e-cigarettes? What is Northern Gateway Public School's position on using them in school or on school property?

WHAT ARE E-CIGARETTES?

There are many different types of electronic smoking devices: Vapes, e-cigarettes, e-hookahs, vape pens, JUUL, etc. For the purpose of this article, I will simply use the generic term "VAPES". The devices are battery-operated, with cartridges filled with liquid chemicals. Heat from the atomizer turns the chemicals into a vapor that is inhaled by the user.

ARE THEY SAFE?

Although Vapes are advertised as being safe, Health Canada advises not to use electronic smoking devices because they **have not been tested and may be harmful**. Most vaping liquids have nicotine in them, even those that are sold as "nicotine-free". In fact, *a single JUUL pod contains as much nicotine as a package of 20 cigarettes!*

Promotional material for Vapes describe the vapor as simply "water vapor". In reality, there are no standards or labelling requirements, making it hard to know exactly what is in the liquid. The U.S. Food and Drug Administration found **cancer-causing chemicals** in many of the cartridges.

A study from the University of North Carolina discovered the two primary ingredients found in Vapes are **propylene glycol** (a man-made product used in antifreeze and theatre fog) and **vegetable glycerin**. Vapes also contain **acrolein** (an **herbicide** primarily used to kill weeds). Other chemicals are added for flavor. All these substances are toxic to human cells and the more ingredients in an e-liquid, the greater the toxicity.

Vaping can cause a type of lung disease called "*popcorn lung*". This condition is when the airways of the lungs are damaged, making the user cough and feel short of breath. There is no cure for this disease other than a lung transplant. In addition to popcorn lung, vaping can cause **acute lung injury**, **COPD**, and may also cause **asthma** and **lung cancer**.

Researchers found signs of the airways becoming narrow and inflamed after using the vape for only 5 minutes.

Defective batteries have caused fires and explosions, some of which resulted in serious injuries.

WHAT ARE THE EFFECTS ON YOUTH?

Data from a 2017 survey by Health Canada revealed that the rates of vaping among Alberta youth almost *tripled* between 2015 and 2017 (8% to 22%) among those in grades 10 to 12. In 2017, there were over 35,000 Alberta youth using vaping devices and risking nicotine addiction.

A study of more than 44,000 grade 9 to 12 students from Ontario and Alberta teenagers, published in the Canadian Medical Association Journal, reports a "strong and robust" linkage between so-called vaping and subsequent tobacco use.

"We found that youth that had used e-cigarettes and vapes were significantly more likely to start smoking a year later. They're more likely to try smoking and **they're more likely to become daily smokers**." ~ lead researcher David Hammond, a professor in the school of public health at the University of Waterloo.

IS VAPING ALLOWED IN SCHOOL OR ON SCHOOL PROPERTY?

DEFINITELY NOT. Not by students, staff, or visitors. NGPS Administration Procedure #163.1 states:

Students may not use, or be in the possession of tobacco products, including electronic cigarette products, while in school, on school premises or on the school property or during school related functions.

Section 163.2 states the same rules for staff and visitors.

This is the bad and the ugly about vaping, and I have yet to find the good. As time goes on, and more medical research is completed, I suspect that we will be seeing the same health warnings on electronic smoking devices as we see on cigarette packaging.

My familiar piece of advice is this: **START THE CONVERSATION EARLY** about the dangers of vaping. Talk about general health, safety and good decisions for the mind and body. Get the "Talk with Your Teen about Vaping" tip sheet for parents from the link below. If your teen is vaping, remind them that, like smoking, it is illegal for youth under the age 18 to buy, sell and use these products. Set strong boundaries and expectations for your home. Be sure you are setting a healthy example. Keep in mind that quitting vaping is like quitting smoking cigarettes. Talk to your local Mental Health and Addictions worker about strategies and products to help.

This article was submitted by Tammy Charko BA, BSW, RSW. Tammy is Northern Gateway Public School's Student Support Facilitator. Tammy advocates for students and parents, providing a link to other supports within the community. Tammy has been a social worker for over 20 years and is a mother to 4 children, 3 of which are teenagers.

Sources: https://www.canada.ca/content/dam/themes/health/publications/healthy-living/vaping-mechanicsinfographic/FINAL_English%20-%20Talking%20with%20Your%20Teen%20About%20Vaping%20-%20December%2018.pdf; Protectalbertakids.ca January 23, 2019; Tobacco Reduction Program, Alberta Health Services July 20, 2017; Sheryl Ubelacker of The Canadian Press October 30, 2017; American Lung Association February 2019; https://www.cdc.gov/tobacco/basic_information/e-cigarettes; https://www.nap.edu/resource/24952/012318ecigaretteConclusionsbyEvidence.pdf; ;https://doi.org/10.1371/journal.pbio.2003904;