



Outlawing Vaping in Public: A Nursing Perspective

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Smoking is the number one preventable cause of disease and death in first world countries; and the most common addiction in Canada. Quitting smoking is more achievable with vaping than any other NRT (nicotine replacement therapy). In controlled clinical trials, 21% quit smoking with vaping vs 6% with nicotine patches. Replacing smoking with vaping can reduce the occurrence of smoking-related diseases; the resulting human suffering; and associated tax costs. Vaping must be allowed in public places to maximize its potential to improve smokers' health.

Nurses assist people in achieving better health by helping them adopt

less harmful behaviours; this is called 'harm reduction'. Vaping is rapidly becoming recognized as the most effective harm reduction strategy for smokers. Public Health England and the Royal College of Physicians have reviewed the vaping science and recommends vaping for smokers.

Outlawing vaping in public places is contrary to harm reduction. Governments making laws to outlaw vaping in public (vaping bans), significantly reduce the chances of a smoker successfully switching to vaping. Vaping in public places should be left to the discretion of the establishment for the following reasons:

- 1. Exhaled vapor doesn't compromise indoor air quality and vaping bans deceptively imply that vaping is dangerous.**
- 2. Vaping bans prevent the smoker from keeping the amount of nicotine in their blood high enough to reduce the craving to smoke.**
- 3. Vaping bans prevent the smoker from learning how to use their vaporizer.**
- 4. Vaping bans greatly increase the chances of restarting smoking.**
- 5. Vaping in public doesn't 'renormalize' smoking.**

Exhaled vapor doesn't compromise indoor air quality

Every year, smoking kills 37,000 Canadians and afflicts over 1 million Canadians with chronic disease at a cost to the taxpayer of at least \$20 billion. That is \$55 million every day! We are so compelled to help people stop smoking that Champix continues to be prescribed as a smoking cessation treatment even though it has been linked to several deaths. Side effects include aggression, violence and suicide.

It took decades to understand the harm potential of tobacco smoke because it took decades to develop the technology to analyze the smoke. Since then, science has analyzed thousands of known substances and catalogued the levels of each substance in relation to how it affects human health. An example of this knowledge is feeling safe breathing city air because we have determined that the levels of carcinogens, heavy metals and toxins from vehicle exhaust are too low in the air to cause us harm. There is nothing new in 'e-liquid', the fluid used in a vaporizer.

Unlike a burning cigarette, there is no side-stream when vaping: the exhaled vapor is the only vapor entering environmental air. In short, there is no second hand smoke. Over 9000 observations of vapor constituents have been analyzed using the latest technologies and found them to be less than 1% of Workplace Exposure Standards (WES) levels. With the exception of 2, which were less than 5% WES.

There are many public risks that needlessly exist, particularly regarding allergies. One out of a hundred people has a peanut allergy. Consider this situation: person "A" holds a Snickers bar and opens a door with that hand and then person "B" touches the same door handle. If person "B" has a peanut allergy they can have an anaphylactic reaction and die unless they receive immediate medical attention.

Now, we have discussed the lack of public risk posed by vaping. Vaping

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is also an effective alternative for smoking. In one European survey, 41% of those that bought a vaporizer quit smoking. The vaping industry has been completely driven by smokers seeking an alternative that is less harmful but similar to smoking. No Canadian tax money has been

used to support or promote this harm reduction alternative.

To address the 'nuisance' reason Edmonton City Council used to outlaw vaping: it is important to distinguish between normal vaping and 'cloud-blowing'. Normal vaping produces small amounts of thin vapor while cloud-blowing produces large volumes of dense vapor. To support harm reduction and to ensure the comfort of patrons, establishments can simply enact policy to restrict cloud-blowing and/or having vaping friendly areas.

Vaping bans deceptively imply that vaping is dangerous

We only ban very dangerous things in public, such as loaded firearms, to ensure public safety. Outlawing vaping in public gives people the false impression that there is something dangerous about it. This deceiving message would likely make the public

afraid of the vapor and discourage them from being comfortable with vaping around them. This false belief would likely make smokers afraid of trying vaping and reduce social support from their loved ones, coworkers, friends and community.

Vaping bans prevent the smoker from keeping the amount of nicotine in their blood high enough to reduce the craving to smoke

To effectively reduce the craving to smoke, the amount of nicotine in the blood (serum levels) must be within a concentration that is high enough to satisfy the nicotine addiction (therapeutic range). A good example would be a smoker that is attempting

to quit smoking by using an NRT such as a nicotine inhaler, gum or patch. A nurse would teach the smoker to use the NRT regularly, including when in public, to maintain their nicotine serum levels within a therapeutic range. This is called 'medication compliance'.

Vaping bans prevent the smoker from learning how to use their vaporizer

Achieving and maintaining therapeutic serum levels is a challenge for new vapers because vaping has a different delivery of nicotine than smoking. Vaping has 10% of the nicotine content that is found in tobacco smoke and does not have the multitude of chemicals added to cigarettes that boost the effects and the delivery of nicotine. This means it takes longer via a higher number of puffs for the person to reach and maintain therapeutic levels. This challenge is compounded with new

vapers. Vaping effectively, requires a longer, slower draw than smoking; and does not have the added 'kick' of the 6000 chemicals in tobacco smoke. Vapor is 70-90% water, some propylene glycol, vegetable glycerin, and traces of nicotine and flavour.

There is a learning curve for new vapers to get their nicotine levels into a therapeutic range as quickly as experienced vapers. Smokers switching to vaping need to keep practicing to get good at it.

Vaping bans greatly increase the chances of restarting smoking

In the case of vaping bans, when a smoker is switching to vaping and is in a public place, their serum levels will drop too low and they experience a "nic-fit" (withdrawal symptoms). Then, they are forced to repeat the ritualistic behaviours of their smoking addiction by standing outside in the smoking pit. They are then cued by the smell of smoke and observing smoking which increases their craving to smoke. The vaporizer will not raise their serum levels as fast as the rate

they're used to from smoking. Their typical behaviour in the smoking pit when experiencing a nic-fit is to 'bum a smoke,' meaning they would ask another smoker for a cigarette. Once they have had a cigarette, they're more likely to continue smoking because they have internally experienced the more satisfying effects of tobacco smoke and they may conclude that vaping did not work for them.

Vaping in public doesn't renormalize smoking

In one study, children aged 6-11 were shown videos of adults either smoking, vaping or eating a lollipop. The children were able to note the differences between vaping and smoking, such as no flame was used to light the vaporizer and that a burning cigarette could not be put into a pocket as the vaporizer had been. They talked about how bad smoking is and the worry they felt for relatives who smoked. When it was explained that vaping helps people quit smoking, the children became supportive of vaping. They easily understood the concept of harm reduction

About 90% of smokers start as teenagers. The more cigarettes smoked, the higher the chance of becoming addicted. After 100 cigarettes (4 to 5 packs), 93% of teens cannot or have difficulty saying, "No" to a cigarette; they're on their way to becoming smokers. Just 5% of quitting smoking attempts are long term.

Nicotine doesn't cause disease and is only 1 of over 6000 chemicals inhaled in tobacco smoke. Cigarettes have been shown to be greatly more addictive than just nicotine on its own. Many studies using nicotine to treat neurological disorders have not

produced any nicotine addicts.

In the last few years, an increasing number of teens are experimenting with vaping. During that same period, a significant decline of teens are experimenting with smoking. If vaping was a gateway to smoking, we would see an increase in smoking.

It is normal teenage behaviour to experiment with adult taboos; the question is: what are the lasting consequences? If teens are trying vaporizers instead of cigarettes, one must look at the reduction in harm to health; and the decrease in the long term addiction potential of this new behaviour, particularly when only 26% of teens reported vaping with nicotine. An online survey of 11-19 year olds found that there was no difference in the desire to vape with flavour such as chocolate, than without flavour. However, 74% those youth that smoked were willing to try vaping compared those that were non-smokers (18%).

Vaping may not only be harm reduction for current smokers, it may be reducing the number of new smokers. The facts suggest that vaping normalizes quitting smoking and prevents smoking.

Conclusion

Outlawing vaping in public jeopardizes its potential to reduce in the number of Canadian smokers. Vaping isn't dangerous to the public yet bans deceive people into believing it is dangerous. Those switching to vaping can't maintain the nicotine in their blood and are forced into smoking pits where

they are more likely to be tempted to smoke. As teens are increasingly experimenting with vaping, they are decreasing smoking. Smoking is the most harmful source of nicotine; vaping is at least 95% safer. Vaping regulation should be based on the facts to maximize its potential to reduce smoking.

Vaping Advocacy and Education Project Inc. (VAEP)

VAEP is a not-for-profit corporation that was conceived by a Canadian registered nurse. Our goal is to assist the public and healthcare professionals in learning the truth about vaping to help them make informed decisions. VAEP aims to empower vapers to advocate effectively by providing them with the tools, resources, guidance and support they need to educate others.