Vaping
(Electronic Cigarette Use)
The Truth

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m.o.v.e.

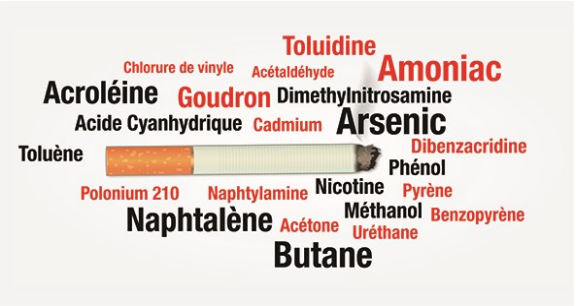
Medical Organizations supporting Vaping and Electronic cigarettes

The Tobacco Epidemic

"It's estimated that smoking is responsible for **30% of all cancer deaths** in Canada and is related to more than **85% of lung cancer cases."**

(Canadian Cancer Society)

Tobacco smoking is the biggest avoidable cause of disease and premature death in Canada[36]. Just over 5.7 million Canadians smoke[52]. Every year 37,000 Canadians die from smoking; that's 101 people dead from smoking *every day*[32]! The Centers for Disease Control and Prevention states, "For every person who dies from a smoking related disease, about 30 more people suffer with at least one serious illness from smoking"[35]. That's about 1.1 million Canadians or every person in the city of Edmonton[33] suffering with heart disease, stroke, COPD or cancer! The social cost to the taxpayer was $17 billion in 2002[18] and yet governments collect only $7.3 billion (2013) in tobacco taxes[34]. But no one can put the price on the health destroying effects of smoking-related illnesses: years of decline and suffering, for the smoker and their loved ones. We have long known that smokers smoke for the nicotine but die from inhaling the thousands of chemicals within the smoke from burning tobacco[23]. We also know that once hooked, smokers have a less than 10% success at quitting[13] . Canadians deserve access to accurate information on *every* method to quit or reduce tobacco smoking.



"Smoking contributes to the buildup of **plaque** in your **arteries**, reduces the **oxygen** in your **blood pressure** and makes your **heart work harder."**

(Heart and Stroke Foundation of Canada)

Why is tobacco smoking so addictive?

The two aspects to tobacco addiction: nicotine and behaviour

"The most **common addiction** in Canada is **smoking."**

(Public Health Agency of Canada)

600 ingredients are added to tobacco cigarettes to enhance nicotine delivery and effects[37]. Ammonium salts increase the amount of nicotine absorbed into the bloodstream; menthol numbs the lungs as well as eucalyptol and theobromine chemically stretch the passageway to the lungs to get more smoke into the lungs[38]. Then, lactones reduce the body's ability to get rid of nicotine; and acetaldehyde acts as an antidepressant in the brain[38]. Tobacco is *more addictive* than just nicotine on its own[1].

This chart shows the success rates of people trying to quit various sources of nicotine[1]. The source of pure, pharmaceutical grade nicotine found in nicotine gum is the least addictive because it is the easiest to quit.

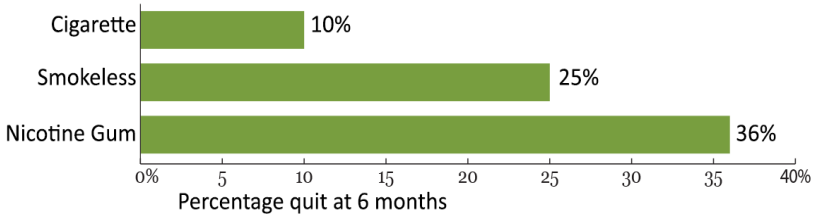
The other addictive aspect of smoking is the repeated physical habit[12]. The ritual of bringing a smoke to the mouth; tasting the smoke with a drag; feeling sensations in the throat and lungs on a big inhale; and seeing the visible large exhale are repeated 240 times a day for a pack-a-day smoker[12]. That's 87,600 times a year! This physical habit is coupled with a hard hit of nicotine to the brain. Together, the nicotine addiction and physical habit make smoking one of the hardest things to quit[1].

All people who **smoke** are at increased risk for:

- Problems with their **heart** and blood vessels
- Certain types of **cancers**
- **Lung** and respiratory prob-lems
- Other **health** issues
- Premature **death**

(Government of Canada)

Ref. 1. The addiction continuum of tobacco and nicotine products. The Success of volunteers taking placebo medications at 6 months, in quitting cigarettes, smokeless tobacco and nicotine gum.



The Vaporizer or 'Vape' (Electronic Cigarette)

What is it and what is the liquid inside?

"More subjects would use the **e-cigarette** to make a quit attempt (**76%**) than the **inhaler (24%)**"

(E-cigarette versus nicotine inhaler: Comparing the perceptions and experiences of inhaled nicotine devices. (2014) Steinberg, Zimmermann, Delnevo, Lewis, Shukla, Coups, & Foulds)

"People **smoke** for **nicotine** but they **die** from the **tar.**"

(Professor Michael Russell, 1976)

"The **burden of proof** is on the regulatory agency to **demonstrate** that the **product is unreasonably dangerous** for its intended use...**electronic cigarette prohibition will do harm** to hundreds of thousands of vapers already using electronic cigarettes in place of tobacco ones - **a clear violation of no maleficence.**"

(Electronic cigarettes as a harm reduction strategy for tobacco control: A step forward or past mistakes? (2010) Cahn, & Seigel)

Electronic cigarettes or 'vaporizers' are very simple electronic devices that use a rechargeable battery to power a heating element (coil) that heats the 'eliquid' into a non-toxic vapor to be inhaled. An 'atomizer' holds the eliquid in a 'tank' and wicks sit in the eliquid to draw the right amount into the coil, to produce vapor. The vapor travels through the inner tube and is drawn through the mouthpiece. There is a computer chip in the battery to ensure power to the coil will not exceed 5-10 seconds.

The evolving vaporizer technology has been completely driven by consumer demand[21]. In the photo below: on the upper right is a 1st generation disposable cig-a-like and in the middle is a cartridge style. On the left is the 2nd generation style: The vaporizer or 'vape pen' or just 'vape'.

Eliquid has 4 just ingredients that have been approved for inhalation by Health Canada (HC): propylene glycol (PG), glycerin, nicotine and flavours[5]. The same ingredients are found in nicotine sprays:

Nicorette Quickmist vs. Electronic Cigarette E-Liquid

Nicorette Quickmist	Electronic Cigarette
Propylene glycol	Propylene glycol
Anhydrous ethanol	
Trometamol	
Poloxamer 407	
Glycerol	Vegetable Glycerin
Sodium hydrogen carbonate	
Levomenthol	
Mint flavour	Flavoring
Cooling flavour	
Sucralose	
Acesulfame potassium	
Hydrochloric acid	
Purified water	
Micotine	Nicotine

Only 3.7% of vapers use the cig-a-likes[6]. Vape pens produce more vapor; deliver nicotine more effectively; have longer lasting batteries; hold more eliquid; and come in many styles that allow the smoker to find the right one for them[13]. Eliquid comes in hundreds of flavours for taste preferences and in various strengths of nicotine allowing the 'vaper' to wean off[6].

PG is used in medical inhalers, nebulizers, hospital air sanitizers and injectable medicines[4]. It has been extensively tested and is safe for inhalation[41]. Glycerin and flavours are in the cig-a-likes without nicotine approved for sale in Canadian pharmacies.

Nicotine

Nicotine is an addictive mild stimulant[1]. It elevates mood, stimulates cognitive function and increases energy[1]. Nicotine is one of the safest medicines and is used to treat neurological disorders[1]. Most people have it in their bodies because it is in foods such as tomatoes, potatoes and peppers[20]. The amounts in foods are too low to cause any effect[20]. As with caffeine, water and Tylenol, massive doses of anything including nicotine can be toxic (1mg of nicotine per kilogram of body weight). The amount of nicotine found in vapor is 1/10 of what is found in tobacco smoke[24].

Vaping: What the Science Tells Us

Are there risks to the vaper?

"Current state of **knowledge about chemistry** of liquids and aerosols associated with electronic cigarettes indicates that there is **no evidence that vaping produces inhalable exposures to contaminants** of the aerosol that would warrant health concerns by the **standards** that are used to **ensure safety of workplaces**."

(Peering through the mist: Systematic review of what the chemistry of contaminants in electronic cigarettes tells us about health risks. (2014) Burstyn)

"The **amount** or dose of a **chemical** entering the body is probably the **single most important factor** which determines whether a chemical will **cause poisoning.**"

(Canadian Centre for Occupational Health and Safety)

"Risk reduction of ecigs is at least 95%, and probably **99%"**

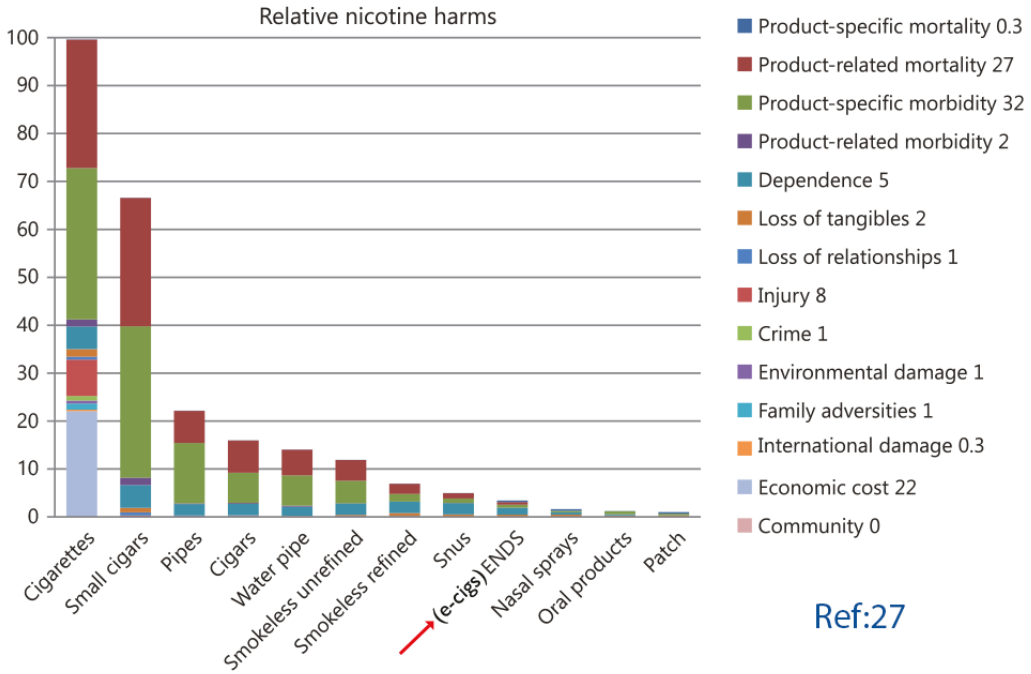
(Professor Hajek)

There have been over 600 published papers on electronic cigarettes[9]. No serious adverse effects have been caused by vaping[9]. Dozens of samples of eliquid and vapor have been studied and analyzed[24]. The amount of cancer causing chemicals found in *just 2* out of *dozens* of samples of eliquid tested is the same amount found in a nicotine patch[8]. These levels are 500-1400 fold lower than tobacco smoke[24].

Ref:8 Maximum tobacco-specific nitrosamine levels[a] in various cigarettes and nicotine-delivery products (ng/g, except for nicotine gum and patch that are ng/patch or ng/gum piece)[6]

Product	*NNN*	*NNK*	*NAT*	*NAB*	*Total*
Nicorette gum (4 mg)[18]	2.00	ND	ND	ND	2.00
NicoDerm CQ patch (4 mg)[18]	ND	8.00	ND	ND	8.00
Electronic cigarettes [6]	3.87	1.46	2.16	0.69	8.18
Swedish snus[18]	980	180	790	60	2010
Winston (full)[18]	2200	580	560	25	3365
Newport (full)[18]	1100	830	1900	55	3885
Marlboro (ultra-light)[18]	2900	750	1100	58	4808
Camel (full)[18]	2500	900	1700	91	5191
Marlboro (full)[18]	2900	960	2300	100	6260
Skoal (long cut straight)[18]	4500	470	4100	220	9290

Fourteen types of harm resulting from nicotine products are all factored into this comparison of different sources of nicotine. 'E-cigs' are shown to be 96% less harmful than tobacco smokes[27].



Ref:27

"Even if there are long-term vapers, this is not a problem, as long as they quit smoking. **The problem is combusted tobacco, not nicotine.** At the dosage used by vapers or users of nicotine gums or patches, nicotine is not toxic. **Long term vaping is not a public health problem; not any more than** long term use of **nicotine gums**."

(*Dr Jean-François Etter*)

"The most important **toxins in cigarette** smoke are missing – those that remain are orders of magnitude lower."

(Dr Konstantinos Farsalinos)

"**Vapers should be more concerned of the air** they breathe **in polluted cities** rather than their vaping!"

(*Dr Riccardo Polosa*)

Vaping: What the Science Tells Us

Are there risks to the vaper?

Heavy metals have been found in some eliquid and in nicotine inhalers but at far lower levels that could cause harm[17]. A typical vaper has about 200 daily puffs on a vaporizer[1]. For worst case scenario, this chart shows 880 puffs a day; the levels are still low:

HEAVY METALS IN SMOKE AND NICOTINE VAPORS, MEAN CONCENTRATIONS, AND ESTIMATED DAILY EXPOSURE.

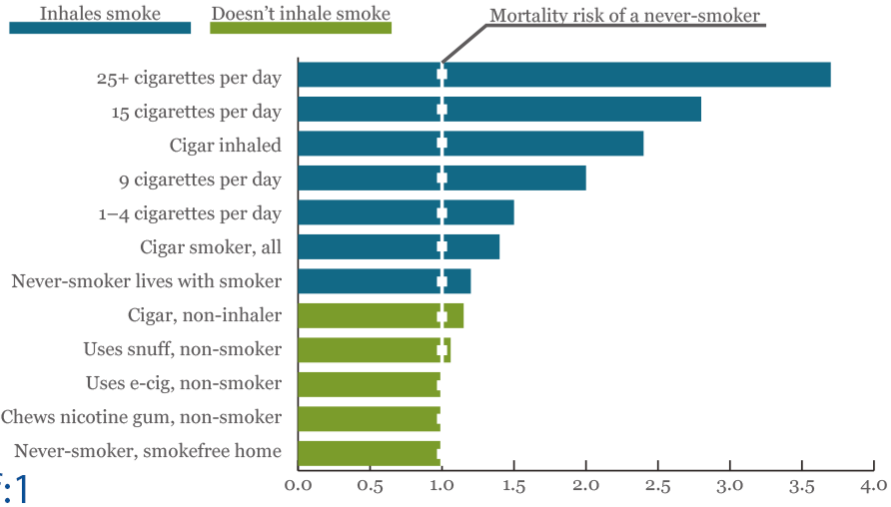
	Cigarette [27, 30, 31]	Nicorette nicotine medicinal Inhalator[24]	European (12 e-cigarette brands) [24]	Unnamed US electron-ic cigarette brand[28]	Daily dose estimate At 880 e-puffs/ day	Permitted Daily Exposure[30]
	Ng / litre	Ng/litre	Ng/litre	Ng/litre	Ng/day	Ng/day
Cd	160	3	8	NR	400	1500
Chr	0.2-500	NR	NR	14	620	25000
Ni	0, 136, 151	18	18	10	440	1500
Pb	105	4	9	34	1500	5000
Sn	NR	NR	NR	39	1720	NR

NR = not reported. E-cigarette puffs calculated at 50 ml / puff. Sn = tin. Nanogram (ng) =one billionth of a gram.

Ref:1

This chart shows vaping is at the same level of risk of premature death as a non-smoker[1]:

CHART 4. THE CONTINUUM OF MORTALITY RISK. RELATIVE RISK OF MORTALITY FROM LIFETIME USE OF VARIOUS TOBACCO AND NICOTINE PRODUCTS, COMPARED TO THE RISK FOR A NEVER SMOKER.



Ref:1

It's not just about what chemicals but how much

The amount of a substance matters when we apply it to health

For decades, scientists have been testing thousands of known substances and have established safe, therapeutic, toxic and lethal doses. Those standards have been applied to analysing vapor and tobacco smoke. We know that the types and amounts of chemicals in tobacco smoke cause disease and death[8]. This is not the case with electronic cigarette vapor[45].

The Science on Vaping

Is there risk to bystanders?

A considerable advantage to vaping is that there is no risk to bystanders[17]. Over 9000 observations on the constituents of vapor were compared to workplace exposure standards; and all (except 2 were less than <5%) were *less than 1%* of safety levels[45]. Vapor is 70–90% water (we breathe in water all the time; it's called humidity); some PG and glycerin; and traces of nicotine and flavour[25]. The toxic chemicals in tobacco smoke either don't exist or are significantly reduced in vapor[1]. Considering the lack of risk to the person inhaling directly off the vaporizer, what is exhaled and diluted by room air is negligible[1]. Remember, risk to health is not only what the substance is but how much of it. This is why we are comfortable having lunch on a pa o even though vehicle exhaust contains lots of toxic chemicals, heavy metals and compounds that cause cancer[42]. The amount we get in our lungs is diluted by the surrounding air and the amount of toxins is too small to cause harm.[42]

"Saying e-cigs are 95% **safer** is not a medical claim, it's a **truth.**"

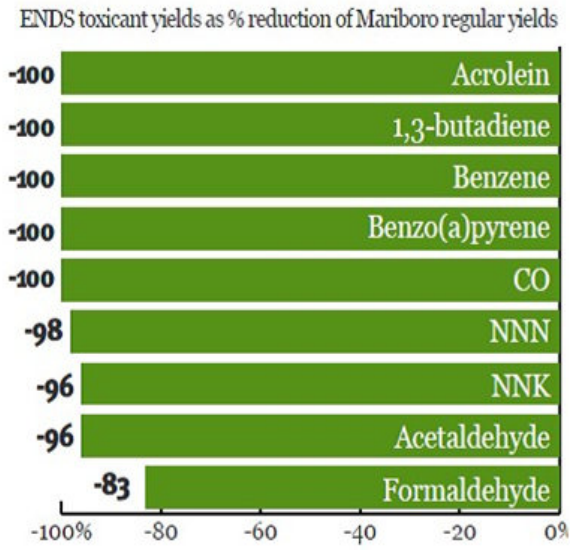
(Professor Hajek)

"None of the toxicological testing conducted in E-cigs has **shown** that **users** or **bystanders are exposed to harmful levels of** toxins or carcinogens. **E-cigs eliminate exposure to the smoke toxicants responsible for nearly all smoking-related diseases."**

(A fresh look at tobacco harm reduction: The case for the electronic cigarette. (2013) Polosa, Rodu, Caponnetto, Maglia, & Raciti)

CHART 8. EXPECTED REDUCTION IN LEADING TOXICANTS INHALED IF THE SMOKER SWITCHED FROM SMOKING TO VAPING Ref: 1

(for nine toxicants prioritised by World Health Organization's TobReg Committee for reduction;[32] nicotine adjusted, comparing the Ruyan Classic e-cigarette with Marlboro king size regular[23, 27])



The Problem with Public Bans on Vaping

Vaping is not smoking and should not be treated as such

Public bans of *tobacco smoke* are justified to protect bystanders from the toxins from burning tobacco[1]. Vaping is *not hazardous* to bystanders and it helps smokers reduce or eliminate their tobacco smoking[1]. Banning vaping would *wrongly* make vaping look like it is dangerous and this would make smokers less likely to try vaping and the public less supportive. Forcing those trying to quit smoking to stand outside *amongst people smoking* encourages smoking *relapse*. Vaping regularly, maintains nicotine levels in the blood thereby effectively reduces the craving to smoke[26]. Of 1615 vapers surveyed, 61% said they would go back to tobacco if there was a vaping ban[43]. Spain's vaping ban decreased the number of vape sales by 70% and 60% of the vape shops closed[48].

Canada is a free country. In public, we allow perfume although it can affect asthma; shellfish, strawberries and peanuts can cause death to those with allergies. Vaping in public is a small social shift like wearing seatbelts, to reduce harm without endangering others. Agencies give out condoms to reduce the risk of contracting disease even though it was met with fear-based resistance in the 80's. Canadians supporting the use of less harmful sources of nicotine can reduce smoking related diseases and the associated public costs[27].

"Bans of e-cigarettes based on harms that are minor compared to smoking are likely to **perversely protect tobacco sales from competition."**

(Nicotine and Health. (2013) Laugese)

"Surveys document that **most smokers would like to quit,** and many have **made repeated efforts** to do so. However, conventional smoking cessa-tion approaches require nico-tine addicted smokers to **abstain from** tobacco and **nicotine** entirely. Many **smokers are unable** - or at least unwilling - to achieve this goal, and so they **continue smoking** in the face of impending adverse health consequences. In effect, the status quo in smoking cessation presents smokers with just two unpleasant alternatives**: quit or suffer the harmful effects** of continuing smoking. But there is a **third choice** for smokers**: tobacco harm reduction**. It involves the use **of alternative sources of nicotine,** including modern smokeless replacement for smoking. **E-cigs might be the most promising product for tobacco harm reduction** to date because delivering nico-tine vapour **without** the com-bustion products that are re-sponsible for nearly all of **smoking's damaging effect**, they also **replace** some of the **rituals** associated with **smoking behaviour."**

(A fresh look at tobacco harm reduction: The case for the electronic ciga-rette. (2013) Polosa, Rodu, Caponnetto,

Smoking Reduction and Cessation

Does vaping help to reduce smoking?

52% of smokers try to quit every year[22]. They have a 4% success rate cold turkey; 8% success with nicotine replacement therapy (NRT) such as patches or gum[22]; if you add intense counselling, success can reach 16%[23]. Smoking cessation methods currently approved by HC have an *84% failure rate* at best! Of those successful 'quitters' 80% relapse in the first month and only 5% achieve long term cessation[24].

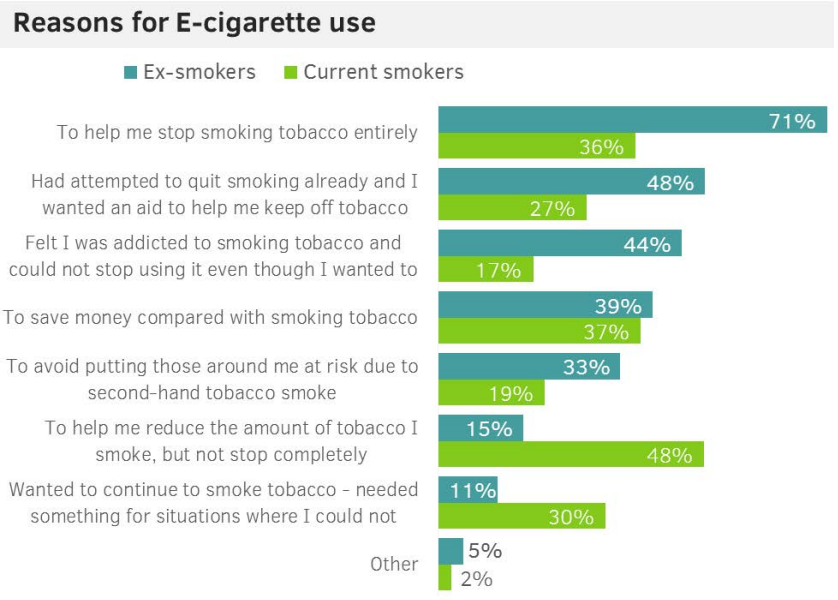
Hundreds of thousands of smokers all over the world have quit smoking by switching to vaping[6]. In controlled clinical trials smokers **not** intending on quitting were given vape pens and eliquid. *Six months later 21% had quit smoking* compared to 7% "success" swith cig-a-likes and 6% "success" with nicotine patches[13]. Some became 'dual users' (smoke and vape) which reduced the number of cigarettes smoked. These clinical trial groups had a total reduction of **60–80%** (from an average of 25 tobacco smokes a day to just 5 smokes a day[16]). The lower the number of cigarettes smoked in a day, the lower the chances of getting lung cancer[2].

27% of attempts to quit smoking in the UK utilize vapes[29]. This method of smoking reduction has been completely consumer driven[21]. In 2012, the UK had 700,000 vapers; this has tripled to 2.1 million in 2014[17]. Vaping appeals to the smoker because it offers the smoker very similar physical sensa ons to get nicotine but without the health compromising chemicals found in tobacco smoke[6]. Socially, they no longer are embarrassed by smelling of smoke[15] and they no longer feel guilty about harming bystanders with second-hand smoke[2]. Financially, vaping is about 80% cheaper. The hundreds of styles of 'hardware' and accessories offer a hobby interest.

Who are using vaporizers/ecigarettes?

And why?

Less than 1% of never smokers try vaping and virtually none continue[28]. Over 25,000 vapers have been surveyed: typically, they are long term smokers, 35-45 in age; had tried to quit an average of *9 times* and 2 out of 3 had tried NRTs to quit[24]. Over 3/4 of them had not had a tobacco smoke in the last month; 19% were dual users and had reduced their daily smokes by 40%[24]. 9 out of 10 stated that their health improved with vaping and 65% said they continue to have a smoking experience but with reduced health risks[24.] 93% felt vaping was less addictive than smoking[3].



"Harm reduction" aims to keep people **safe** and **minimize** death, **disease**, and injury from **high risk behaviour**.

(BC Center for Disease Control)

"Once these products are more common and the purpose of them is known, **seeing people** use them should normalize quitting behaviour, something **the children were very supportive** of."

(Looks like smoking, is it smoking?: Children's perceptions of cigarette-like nicotine delivery systems, smoking and cessation.(2013) Glover, Nosa, & Pienaar)

"Harm reduction is one of the four pillars **of Canada's Drug Strategy**. This health-centred **approach**, with the goal of **reducing the health** and social harms related to **substance use** and abuse."

(Substance Abuse Issues and Public Policy in Canada)

"Now that **research shows** that **e-cigarettes increase smoking cessation**, it proves also **that e-cigarettes denormalize being a smoker."**

(Nicotine and Health. (2013) American Council on Science and Health)

Tobacco Harm Reduction

It just makes sense in a country with universal healthcare

'Harm reduction' is intended to lessen the negative health, social and financial consequences caused from high risk behaviours[31]. Examples of harm reduction are impaired driving check-stops[40], condom use[19], and needle exchanges. Giving an IV drug user 5 clean needles a day would cost 50¢ each day or $186 a year. If that person uses a dirty needle just once and contracts HIV, the cost to healthcare to treat that person starts at $14,453 a year and increases to $22,000 as the disease progresses[19]. Our taxes ensure every citizen has access to healthcare. Reducing harmful outcomes means lesser costs to the taxpayer. Smokers are hooked on nicotine[17]. Nicotine is just one of 4000 chemicals[47] formed when burning today's tobacco cigarette. In fact, 69 of those chemicals definitely cause cancer[37]. Smoking is responsible for 36% of respiratory diseases, 29% of cancers, 14% of cardiovascular diseases and 87% of COPD[12]. These are chronic diseases requiring drugs, doctor's visits and hospital stays over many years. Eventually the long term smoker can become so sick that they are unable to work and our taxes will provide disability benefits. The cost of smokingnicotine addiction and physical habit without the toxic chemicals. Smokers with chronic diseases that switched to vaping showed improvements: 40% with diabetes; 50% with high blood pressure; 42% with high cholesterol; 65% with asthma; 54% with heart disease; and 76% with COPD[6]. 18% of those with lung disease lowered their medication and 18% stopped taking medication[6]. Asthmatic smokers showed an actual reversal of lung damage when they stopped or reduced smoking by vaping[11] .

"Refusing to provide truthful information about and access to safer alternative sources of nicotine dissuades smokers from quitting the most harmful method of obtaining nicotine - inhaling smoke[24]." Vaping is a tobacco harm reduction approach for those addicted to tobacco smoking. It satisfies the

'Normalizing ' Smoking

Will vaping undo all the progress we have made?

Vaping doesn't make the distinctive stench and toxins of smoke that is so annoying to others[1]. No more smelling like smoke, yellowed teeth and dulled sense of taste. There are no ashes, no side-stream, and no butts. Vaporizers look nothing like a smoke. The only similarity is a visible exhale like when you breathe outside on a cold day. But for the smoker, the sensations within the body feel much like smoking, making it an appealing alternative[3]. How can something that doesn't smell, look, operate, pollute nor harm like smoking, normalize smoking? If anything, it normalizes quitting smoking[1].

Youth and Vaping

Is banning flavours the solution to reducing future tobacco smokers?

Eliquid flavour variety was rated 4 out of 5 (*very important*) to vapers[7]. If flavours were restricted, 49% said they would have an increased smoking craving and 40% said they would have been less likely to quit or reduce smoking[7]. Two thirds, switched flavours daily (average of 3 flavours) because a flavour will get 'blunt'[7]. Tobacco flavours are more common when starting vaping and in dual users[7] . Most vapers used fruit (70%) and sweet (61%) flavours if they stopped smoking (91% had quit smoking of the 4,618 surveyed[7]). Its evident that flavours of eLiquid are a very important aspect of attracting smokers to vaping.

An online survey of 11-19 year olds found that there was no difference in the desire to try an electronic cigarette with flavour than without flavour[46] . However, 74% of those youth that smoked were willing to try vaping compared those that were nonsmokers (18%)[46]. Keep in mind that 43% of Canadian grade 12 students have tried smoking[49]. Interest in vaping is higher in adult smokers than non-smokers as well[1] .

"Nonsmoking teens' interest in e-cigarettes was very low (mean 0.41 on a 0-10 scale)…Past 30- day adult e-cigarette users had the greatest interest in e-cigarettes, and their interest was most affect-ed by flavor…**flavors tested appealed more to adult smokers than to nonsmoking teen**, but **interest** in flavours **was low** for both groups."

(The impact of flavor descriptors on nonsmoking teens' and adult smokers' interest in electronic cigarettes. (2015) Shiffman, Sembower, Pillitteri, Gerlach, & Gitchell)

"…only one student who initi-ated with an [ecig] (1.7%) was a daily user of any tobacco product, compared to the **10% to 21% of current daily tobacco users who first tried conventional cigarettes**…"

(Which nicotine products are gateways to regular use? (2015) Meier, Tackett, Miller, Grant, & Wagener)

"Nearly 1 in 5 (18%) participants [teens] were willing to try either a plain or flavored ecigarette, but **willingness to try plain versus flavored varieties did not differ**. Smokers were more willing to try any ecigarette than nonsmokers (74% vs 13%)."

(Which nicotine products are gateways to regular use? (2015) Meier, Tackett, Miller, Grant, & Wagener, 2015)

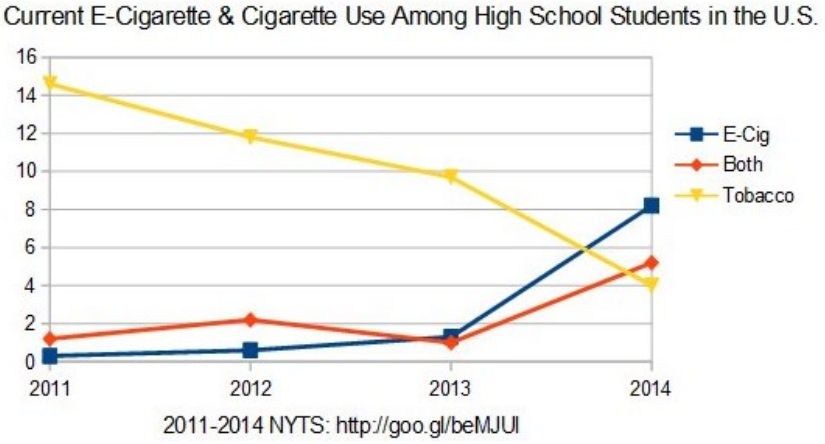
The Gateway Theory

Is vaping leading to smoking?

Where vaping is increasing, smoking rates of adults and youth are decreasing at higher rates than ever seen before. In England, the national smoking survey recorded decreasing rates in quitting smoking from 2007-2011 (6.7% down to 4.6%). But in 2012, 700,000 smokers started vaping and the quit rate jumped to 6.2%. In 2014 (2.1 million vapers) the quit rate rose to 7.5%[50].

99% of youth who first exposure to nicotine was vaping, did not become tobacco smokers[30] . Of those that tried tobacco smoking first, *10% to 21% became daily smokers*[30].

A child's strongest influences for future behaviours are parents[10]. Children have a twice the chance of becoming a smoker if just one person smokes in the home[44]. Therefore, if the parents quit smoking it reduces the chances of their ch ildren becoming smokers. Gateway from vaping to smoking would mean switching from wonderful flavours to revolting toxic smoke; to something that makes you stink and is more addictive. Smoking is 100- fold worse for your health[14], costs 10 times as much and casts you out in the cold. How likely is that switch? The gateway theory is simply nonsense!



Summing it up

Did you learn anything new?

"Beliefs don't change facts. **Facts**, if you are reasonable **should change** your **beliefs**"

(Ricky Gervais)

"What do you think science is?There's nothing magical about science. It is simply a **systematic way for carefully and thoroughly observing nature and using consistent logic to evaluate results.** Which part of that exactly do you disagree with? Do you disagree with being thorough? Using careful observation? Being systematic? Or using consistent logic?"

(Dr. Steven Novella)

"**Nurses** to the extent possible, **provide** persons in their care with the **information** they need to make **informed decisions related** to their **health** and well-being. They also work to make sure that health **information** is **given** to individuals, families, groups, **populations and communities** in their care in an open, **accurate and transparent manner.**"

(Code of Ethics for Registered Nurses. (2008) Canadian Nurses Association)

Tobacco smoking is killing people, destroying lives and costing Canadians *a lot of money*. Chemicals are added to tobacco cigarettes to make them more addictive. Not only are smokers addicted to nicotine, but the physical habit of smoking is a *huge* part of the reason smokers can't quit or stay quit. Vaporizers are simple electronic devices that heat 4 ingredients into a *non-toxic* water-based vapor to be inhaled. They don't smell, look, operate, addict, pollute, nor harm like smoking but it feels like smoking to a smoker; and this is what makes them appealing to a smoker. Vaping is growing in popularity and technology because of smokers' demand for it. Vaping *substantially exceeds* the quit rates of patches and gums or it helps smokers cut way back on their smoking. The *amount* of a chemical entering the body is as important as *what* that chemical is to determine if it will be harmful. Harm reduction has been successful at keeping Canadians healthier which in turn, has lowered human suffering and tax expense. Vapor is not hazardous to the user or bystanders. Banning vaping in public is *unjustified* and will give a *false impression* that vaping is harmful; it would also inhibit thevaper from maintaining nicotine levels in their bodies to effectively reduce their cravings to smoke.

Banning flavours will make vaping less appealing and therefore less effective for smokers trying to quit. Evidence shows that youth and adults that are smokers are almost *four times* more interested in vaping than non-smokers and flavours are *not* a reason to try vaping. The gateway theory is simply non-sense!

We have an ethical obligation to support the freedom and right of all Canadians, including smokers, to have access to accurate informa on and resources to have control over their health! Evidence shows that quitting or reducing smoking by vaping *improves chronic diseases*.

This paper is just scratching the surface on the variety and depth of information available from the on-going investigations into vaping as a tobacco harm reduction strategy. If you have any questions or would like more information, please visit VAEPworld.com.

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Vision, Mission and Objectives

Vision

Make the truth about vaping common knowledge throughout the general population.

Mission

Through advocacy and education, disseminate to the general population accurate and comprehensive information about vaping. Ensure smokers can make an informed decision about vaping as a smoking alternative.

Objectives

Unify the growing numbers of knowledgeable vapers and their passion for vaping by engaging them in the development and implementation of a population education campaign.

Create support for the effective utilization of vaping within non-vaping populations such as government, non-profit organizations and healthcare agencies by providing access to vaping information and facilitating informed decision making within those groups.