



VAEP Vaping versus Smoking Chart

Ingredients

Vaping	Smoking
<ul style="list-style-type: none"> ➤ Propylene glycol is an organic non-toxic product used as a base for eliquid. It's used in food, toiletries, hospital air sanitizers, air fresheners and fog machines. ➤ Vegetable glycerin is another non-toxic organic product used as a base for eliquid. It is the base used in the non-nicotine ecigs we see in the pharmacies. ➤ Controlled dose of pharmaceutical grade nicotine expressed in mg/ml. ➤ Natural and artificial flavour. ➤ Occasionally distilled water or alcohol is used as a thinner. 	<ul style="list-style-type: none"> ➤ There are over 600 ingredients that can be added to cigarette tobacco such as smoke flavour, eucalyptus oil, furfuryl mercaptan, snakeroot oil and 6-Acetoxydihydrotheaspirane. ➤ 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. ➤ Lactones reduce the body's ability to get rid of nicotine. ➤ Acetaldehyde acts as an antidepressant in the brain.

What's inhaled

Vaping	Smoking
<ul style="list-style-type: none"> ➤ 70-90% pure water. We always breathe in water, it's called humidity. ➤ Propylene glycol is extensively tested and safe for inhalation. ➤ No significant hazard has been identified from inhaling vegetable glycerin. ➤ Traces of nicotine. ➤ Traces of flavour. ➤ All heavy metals, cancer causing chemicals and toxins found in vapor are at trace levels. Levels in far too low amounts to cause harm or disease. ➤ Over 9000 observations on the constituents of vapor were compared to workplace exposure standards and all were less than 1% of safety levels (except 2 were less than <5%). 	<ul style="list-style-type: none"> ➤ Over 6000 chemicals are produced when tobacco is burned: 1500 cause disease and 69 definitely cause cancer. ➤ Tar: A sticky, dark brown mixture of a whole bunch of chemicals that clog your lungs. ➤ Carbon monoxide takes the place of oxygen in your blood, making it harder to get oxygen to your cells. ➤ Hydrogen cyanide stops the lungs from cleaning themselves by preventing the tiny hairs (cilia) from moving bad stuff out. ➤ Hydrocarbons, organic acids, phenols, nitrous oxide and oxidizing agents harm your lungs. ➤ Free radicals make cholesterol stick to your blood vessels. This makes it hard for the blood to go where it needs to go which can cause heart attacks and strokes. ➤ Arsenic, cadmium, lead cause all sorts of diseases including cancer. ➤ Radioactive compounds cause cancer.



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Bystanders

Vaping

- Vapor has **light** fragrance.
- Vapor **does not** make you or anything else **stink** like smoke.
- Vapor has **no risk** to bystanders.
- It's highly unlikely that vapor would irritate respiratory conditions considering that smokers with lung diseases that switched to vaping reported decreases in symptoms. Please note, those highly sensitive to otherwise non-irritating substances may find vapour to be the same. In the case that vaping bothers others, vapers should act considerately.

Smoking

- About **600,000 people die** every year from second hand smoke.
- Second hand smoke **offends others** from the distinctive stench.
- Second hand smoke **causes irritation** to other people's eyes, nose, sinuses and taste.
- Second hand smoke can **trigger asthma** and sudden **infant death syndrome**.
- Second hand smoke makes vehicles, homes and the smoker **smell bad**.

Addiction

Vaping

- **Millions smokers** all over the world have **quit smoking** by switching to vaping because vaporizers effectively **deliver nicotine**; uniquely satisfy the ritualistic physical habit of smoking; and mimic the sensations of smoking *within* the smoker.
- In controlled clinical trials with smokers **not** intending to quit smoking: after six months **21% had quit smoking** using a vaporizer. These clinical trial groups had a total **reduction of 60-80%**; from **25 cigarettes** a day to just **5!** Compare this to trials with nicotine patches where only **6% quit smoking**.
- Over 25,000 vapers have been surveyed: typically they are **long term smokers**, 35-45 in age; they had **tried to quit an average of nine times** and 2 out of 3 had tried nicotine patches and/or gum to quit.
- Over ¾ of these vapers had **not had a smoke** in the last month. **93%** felt vaping was **less addictive** than smoking. 19% were dual users (smoke and vape) and had **reduced** the number of smokes a day by **40%**.
- Pharmaceutical grade nicotine found in gum (and vaporizers) is shown to be **3X easier** to quit than smoking.

Smoking

- **52%** of smokers **try to quit** every year.
- **70%** of smokers **want to quit** but believe they can't.
- They have a **4%** success rate **cold turkey**; **8%** success with nicotine **patches/gum**; if intense counselling is added, success can reach 16%.
- Smoking cessation methods currently approved by Health Canada have an **84% failure rate at best!**
- Of those successful 'quitters', **80% relapse in the first month** and only **5%** achieve **long term** cessation.
- **Chemicals** are **added** to tobacco cigarettes to make them **more addictive** than just nicotine on its own.
- The **physical ritual** of smoking is a big part of the addiction: 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 exhale** are repeated 240 times a day for a pack-a-day smoker; **87,600 times a year!** This physical habit is coupled with a hard hit of nicotine to the brain, making smoking one of the **hardest things to quit**.



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Health effects

Vaping	Smoking
<ul style="list-style-type: none"> ➤ 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. ➤ 18% of those with lung disease lowered their medication and 18% stopped taking medication after switching to vaping. ➤ Asthmatic smokers showed an actual reversal of lung damage when they stopped or reduced smoking by vaping. ➤ 90% of vapers surveyed stated that their health improved with vaping and 65% said they continue to have a smoking experience but with reduced health risks. ➤ No serious adverse effects have been caused by vaping. 	<ul style="list-style-type: none"> ➤ Tobacco cigarettes have been approved by Health Canada. When used correctly, this product kills 2 out of 3 users. ➤ Tobacco smoking is the biggest avoidable cause of disease and premature death in Canada and the world. ➤ Every year 37,000 Canadians die from smoking; one death every 11 minutes! ➤ About 1.1 million Canadians suffer from smoking related illnesses. ➤ Smoking is responsible for 36% of respiratory diseases, 29% of cancers, 14% of cardiovascular diseases, 85% of lung cancer and 87% of COPD.

The Costs

Vaping	Smoking
<p>Financial Vaping can be much cheaper (50%+) than smoking when using a pen style vape. Sub-ohm vaping, which produces thick clouds of vapor, uses a lot more eliquid and the hardware can be pricy.</p> <p>Social Vaping is not hazardous to the user or bystander; there is no need to be cast outside. Vapor does not stink like cigarettes and does not irritate others. Smokers can be free of the embarrassment and self-consciousness of smelling like smoke.</p> <p>Business Without risk to others, vaping can be done within the workplace. Eliminating the need for smoke breaks increases productivity. Eliminating the toxins and the illnesses resulting from smoking; vapers would take less likely to use as much sick time.</p> <p>Environment Vaping produces no polluting butts and most parts of vaporizers are recyclable.</p>	<p>Financial Smoking a pack a day costs about \$4500 per year. Smokers have more sick time and loss of earnings. Smokers are at higher risk for chronic disease which costs money for daily medications and treatments.</p> <p>Social Smokers are forced to leave social situations to smoke outside. They carry the embarrassing odour of smoke. Society has developed a judgmental attitude towards smokers. Loved ones worry about smokers' health and can cause conflict because of costs and other concerns.</p> <p>Business Smokers cost their employers US\$5,700 a year in lost productivity, sick time and benefits. Groups of people smoking outside a business make the establishments less inviting.</p> <p>Environment Most cigarette butts aren't biodegradable and pollute the environment. Ashes are messy and cigarettes are a significant cause of fires.</p>