



“Tell me about your history with tobacco.” You ask, waiting for the reply.
“Oh, I don’t smoke. I vape.”

You feel a tickle of confusion in your brain, wondering if your client suddenly slipped into a different language. Seeing the misunderstanding on your face, she pulls out a pen-shaped object from her purse and holds it up for you to see. It has a sleek black look, a few small buttons, and a small transparent plastic section in which a clear liquid sloshes around.



“Nothing wrong with this...right?”

It’s important to be aware that many users of these devices don’t consider themselves to be “smoking” or using “tobacco.” The most common term for them is an electronic cigarette, but they go by dozens of different names: personal vaporizer, E-cig, E-Hookah, Hookah-pen, vape-pipe, and shisa, to name a few.

One of the main reasons why electronic cigarettes are so difficult to discuss with participants is the sheer amount of misinformation that exists about them. This misinformation can be attributed to lack of safety data/research, unsubstantiated vendor claims, and lack of manufacturing and advertising oversight.

Lack of Safety Data/Research

One of the biggest concerns with electronic cigarettes is that there is very little research on the long-term risks of use. This is a frustrating fact for healthcare providers to deal with, but it’s important to keep this in perspective. Commercial cigarettes have been around for nearly 130 years, and only popular in this country for around 100 years. Healthcare experts were not voicing concerns about the risks of cigarettes until the early 1940’s (30 years after they became popular), and the Surgeon General’s report causally linking lung cancer and smoking didn’t come out until 1964 (nearly 50 years after they became popular). Electronic cigarettes have been around since 2003, and only gaining popularity in the last few years. It’s impossible to know long term risks of something so new.

Unsubstantiated Vendor Claims

There is a large amount of information (none of which has any research behind it) being put out by the vendors of these products. A [recent study](#) examining 59 different electronic cigarette websites found that 95% of them made health claims on the website (most often stating that they are a “safer alternative to cigarettes”). In addition, 66% of these websites either made claims directly or indirectly (by publishing user reviews) about the devices being able to help a person quit smoking. Lastly, 22% of the websites have either pictures or videos of “doctors” (people in white lab coats) talking about the products, in an attempt to add some form of credibility. Because there has been no official body

regulating these marketing claims, nor any long term research into the potential health risks, the claims stand. However, under the Food & Drug Administration's recently proposed rules, manufacturers will no longer be able to make health claims without first doing research.

Current Lack of Advertising Oversight

One other concern that will hopefully be resolved by the FDA's ruling is the lack of manufacturing or advertising oversight. With the FDA's recently proposed ruling, manufacturers will need to list all ingredients with the FDA, and would not be able to market new products without FDA approval. This is important, because even within the 10 years these products have been in existence, they have gone through significant design changes. These changes make them more effective at delivering nicotine or [other chemicals](#).

Frequently Asked Questions from Providers

Q: Could the e-cigarette actually help my patients/clients quit?

Based on what we know right now, electronic cigarettes are not an effective method for quitting for most people. There have only been two large scale studies that have tested this, and they both came back negative. People were not significantly more likely to quit with the electronic cigarette than with a Nicotine Replacement Therapy or placebo.

Q: Well, it HAS to be better than smoking, right? I mean, what are the risks?

It is true that there are significantly lower amounts of carcinogens when compared to the average cigarette; however there are still serious risks that we should be concerned about if patients continue to use these products. In pregnant women, the electronic cigarette still exposes a baby to nicotine, which has been shown to alter the brain structure in developing infants. While there are lower amounts of carcinogens, a number of studies have found that these chemicals are often still present in the electronic cigarette fluid and vapor.

While the chances are small, there is also the risk of malfunction. In order to vaporize the mixtures of chemicals, the heating element of an electronic cigarette must heat up to an incredible temperature (for example, vegetable glycerin has a boiling point of 554 degrees Fahrenheit). While reports of it are rare, there is always the risk of fire, particularly when using a refillable model, because of how much hotter the heating element becomes when it runs out of fluid.

What about my patients who are exposed to the vapor of electronic cigarettes?

First off, it's important to clarify that the "vapor" is not water vapor. Depending on the brand, it is mostly (60-90%) propylene glycol and vegetable glycerin. While these substances are generally recognized as safe by the FDA, we don't actually have any studies evaluating the health effects of inhaling these chemicals after they have been vaporized with extreme heat. Some experts are concerned that the extreme heat may be causing these chemicals to undergo a reaction, making them

carcinogenic. This has yet to be confirmed through research, but it is a concern. We also know that the chemicals used to flavor many electronic cigarettes are toxic on their own.

Studies have shown that a number of chemicals in the electronic cigarette liquid are still [present in the vapor](#), as well as surfaces exposed to the vapor. You can be exposed to these chemicals the same way as if you were exposed to second or [third hand smoke from a tobacco cigarette](#). There have also been isolated reports of the vapor acting as an airway irritant for asthmatics.

As with any new product on the market, there is going to be a period of time before we really know any of the long term risks with these products. While there are many promising trends with electronic cigarettes (fewer carcinogens and other toxic chemicals), we simply don't know enough about these devices to recommend their use with pregnant women.

Key Messages for Participants about E-Cigarettes:

"There is just not enough information available for me to say that it is definitely safer than cigarettes for pregnant women."

"At this point, it doesn't look like e-cigarettes actually help people quit."

"There are a lot of chemicals used to make e-cigarettes; we don't know enough about their safety or health impacts"

Counseling Recommendations for Participants Using or Interested in E-Cigarettes:

- Stay neutral. Your patient has come up with what she believes to be a good solution to quitting smoking.
- Build rapport and elicit her opinion about electronic cigarettes: "I think it's great that you're looking at all of your options. What kinds of things have you heard about them?"
- How much was she smoking before? Some electronic cigarette users end up MORE addicted to nicotine because they don't pay attention to concentrations in their cartridges, or they are simply using the electronic cigarette more frequently than they smoked, because they are using the device in situations that they didn't smoke in the past (watching TV, at work, etc.).
- What are her reasons for quitting smoking in the first place? If she didn't want to be addicted to nicotine, didn't want to be tied down to the habit, didn't want to deal w cravings, wanted to save \$, wanted to be a good role model, wanted to deal with stress in a productive manner... are electronic cigarettes the best option? Or is she just transferring her addiction?