

## E-Cigarette Lesson Plan

**On Board:** Are e-cigarettes safe?

**Pre-survey:** Hand out paper with the above question. Ask students to write yes or no as well as why. Encourage students to guess even if they are unsure.

**Review:** What is an e-cigarette? Show laminated pictures of various types. Explain how e-cigs work.

**Group debate:** Split students into 6 groups, with each taking one point in the debate. Distribute a key point and accompanying visuals to each group. Direct students to discuss their point and choose how they would like to present it. Make sure they understand argument as well as the visuals.

Once groups understand their point, have them present to the whole class, alternating between yes and no. Detailed info on following pages (there are page break between each point so you'll need to scroll to see all the materials). These are the key points:

- 1) YES – They do not contain tobacco
- 1) NO -- They still have nicotine, which is addictive and harmful to health
- 2) YES – They do not cause secondhand smoke
- 2) NO – They still contain lots of dangerous chemicals
- 3) YES – They help people quit
- 3) NO – Cessation is not the true purpose of e-cigarettes and they are not even highly effective

**Wrap-Up:** Distribute post-survey (time permitting)

## **YES, E-Cigarettes Are Safe**

**Point # 1: E-cigarettes do not contain tobacco, which is the most dangerous ingredient in traditional cigarettes.**

Supporting Facts:

- Tobacco is the main ingredient in traditional cigarettes but is not in e-cigarettes.
- 480,000 Americans die every year from using tobacco—100 million people died in the 20<sup>th</sup> century from tobacco
- Tobacco use leads to: cancers of the lung, mouth, esophagus, and pancreas, lung disease, emphysema, bad breath, stained teeth and fingernails, smelly hair

Evidence #1:

- Fake tobacco leaves because tobacco is what causes cancer in smokers.

## **NO, E-Cigarettes Are NOT Safe**

**Point # 1: E-cigarettes contain nicotine, which is a highly addictive drug that has harmful health effects on its own, even when it is extracted from tobacco.**

Supporting Facts:

- Nicotine is one of the most highly addictive substances for humans.
- Addiction to nicotine is an especially big problem for teenagers, because their brains are still development. A nicotine addiction during the teenage years can lead to problems in the development brain circuits that control attention, learning, and resistance to addiction later in life.
- Nicotine also affects blood pressure and causes heart disease.

Evidence # 1:

- Model Brain to emphasize effect of nicotine causes addiction.

Evidence # 2

- Occluded artery to demonstrate heart disease caused by nicotine addiction.

## **YES, E-Cigarettes Are Safe**

**Point # 2: E-cigarettes do not cause second hand smoke, so they are much safer for non-smokers.**

Supporting Facts:

- Secondhand smoke leads to more than 40,000 deaths in America every year.
- Secondhand smoke causes: cancer, heart disease, asthma, bronchitis, & premature babies
- Cigarette smoke contains more than 4,000 chemicals

Evidence # 1:

- Oversized cigarette model to show the thousands of chemicals in smoke (pull out fake smoke to show list of chemicals)

Evidence #2:

- Graphic “Are e-cigarettes safe?” shows that e-cigs contain only three ingredients.

## **NO, E-Cigarettes Are NOT Safe**

**Point # 2: Even though e-cigarettes do not emit smoke, their aerosol contains many harmful chemicals and they pose other dangers.**

Supporting Facts:

- Heating e-cigarette “juice” causes chemical reactions that lead to harmful chemicals being breathed in and exhaled. It’s not the same as cigarette smoke, but it’s still dangerous.
- Some known health effects of ingredients include, cancer, lung disease, asthma.
- Some substances are safe to eat but become dangerous when they are heated and inhaled.
- E-cigarette liquid is completely unregulated, so there is no way of knowing what chemicals people breathe in or exhale out when they use e-cigarettes.
- E-cigarette juice is poisonous if swallowed and has killed children who drank it.
- E-cigarette batteries can explode and cause severe burns.

Evidence # 1:

- Samples of chemicals found in e-cig aerosol, including toy rocket (lithium), battery (cadmium), nickel (nickel), soda can (aluminum), perfume bottle (benzaldehyde), microwave popcorn (diacetyl).

Evidence # 2:

- Two jars of blue liquid: would you drink one if you were thirsty? The point is that we do not usually consume things if we have no idea what they are, but that’s what people do with e-cigarette liquid.

Evidence # 3:

- Teaspoon measure to show how much e-cigarette juice a 5 year-old would need to consume to be killed.

Evidence # 4:

- Photos of fires and burns from e-cigarettes. This shows that there are still many dangers from e-cigarettes

## **YES, E-Cigarettes Are Safe**

### **Point # 3: E-cigarettes are a helpful tool for people who want to quit smoking.**

Supporting Facts:

- E-cigarettes are similar to nicotine patches and gum—they provide the body with “clean nicotine” that people can use to gradually reduce their smoking.

Evidence # 1:

- Box of nicotine replacement patches. These patches are used by smokers trying to quit to help maintain some nicotine in their system while they break the habit of smoking cigarettes. E-cigarettes are similar because the nicotine they deliver to people’s lungs is in a cleaner form than cigarette smoke.

## **NO, E-Cigarettes Are NOT Safe**

**Point # 3: E-cigarettes are not a proven way to help people quit smoking and they are being marketed to kids who may not even be smokers.**

Supporting Facts:

- No major evidence supports the claim that e-cigarettes help people quit.
- 89% of e-cigarette users are still using them a year after starting, a sign that they have not helped people quit.
- In 2013, 77% of e-cigarette users also smoked traditional cigarettes.
- There are more than 7,000 e-cigarette juice flavors, many of which are geared toward kids—those are not intended to help anyone quit!
- In 2014, \$88 million dollars was spent advertising e-cigarettes and they were not marketed as tools for quitting.

Evidence # 1:

- Photos of e-cigarette flavors.

Evidence # 2:

- Sample e-cigarette ads that look like regular cigarette ads from years ago.

Evidence # 3:

- Chart showing dollars spent on e-cigarette advertising.