

Tobacco

A dark blue diagonal gradient bar that starts at the bottom left and extends towards the top right, covering the lower half of the page.

Nicotine

- 1 in 5 deaths in the US is caused by a smoking related illness

Nicotine

- 22% of the population smoke
 - 18-25 Years old accounts for 39.5%

Nicotine

- An addictive drug found in tobacco leaves

Nicotine

- Stimulant: drug that increases the action of the CNS, heart, and lungs
 - What diseases can this cause?
- Raises blood pressure, increases heart rate, contributes to disease and stroke
- YOU KEEP NEEDING MORE

Why do people smoke?

- Genetics
- Family and peer pressure
- 90% of regular smokers started age 19 or younger
- Psychosocial factors: Stress
- Desire to lose weight
- Media and Advertisements

Cigarettes

- Tobacco products
- 600 additives
 - Ammonia
- When lit, the cigarette releases 4,000 chemicals
 - More than 60 are carcinogenic
 - Arsenic
 - Formaldehyde
 - Tar

Why else is smoking bad?

- Smokers have 10 years shorter life expectancy
- It is a carcinogen
 - Cancer causing substance
- Tar: destroys cilia, damages alveoli (structures that absorb the o₂ and discard c₀2)
- Increases risk of
 - Bronchitis
 - Pneumonia
 - Emphysema
 - Cancer
- Carbon Monoxide
 - Colorless, odorless, and poisonous gas
 - Replaces O₂ in blood
 - Increases blood pressure, heart disease, and hardens the arteries

Effect of smoking on nonsmokers

- 250 chemicals that cause cancer
- Non Smokers get more of the harmful chemicals than the smokers
- 3400/year diagnosed with lung cancer because of second hand smoke
- 22K-70K Die from heart disease due to secondhand smoke
- Can cause eye irritation, headaches, coughing, and ear infections
- Growth problems in baby and children
- Babies of smokers are 2.5x more likely to suffer from SIDS sudden infant death syndrome

Tobacco effects on the body

- Short term
 - Withdrawal as soon as 30 minutes
 - Increased respiration and heart rate
 - Dulled taste buds and reduced appetite
 - Bad Breath, smelly hair, clothes, and skin
- Long Term
 - Chronic Bronchitis
 - Emphysema
 - Lung Cancer
 - Coronary heart disease and stroke
 - 3x more likely to have sudden death from heart disease
- Other consequences
 - Legal
 - Social
 - Financial

Pipes and Cigars

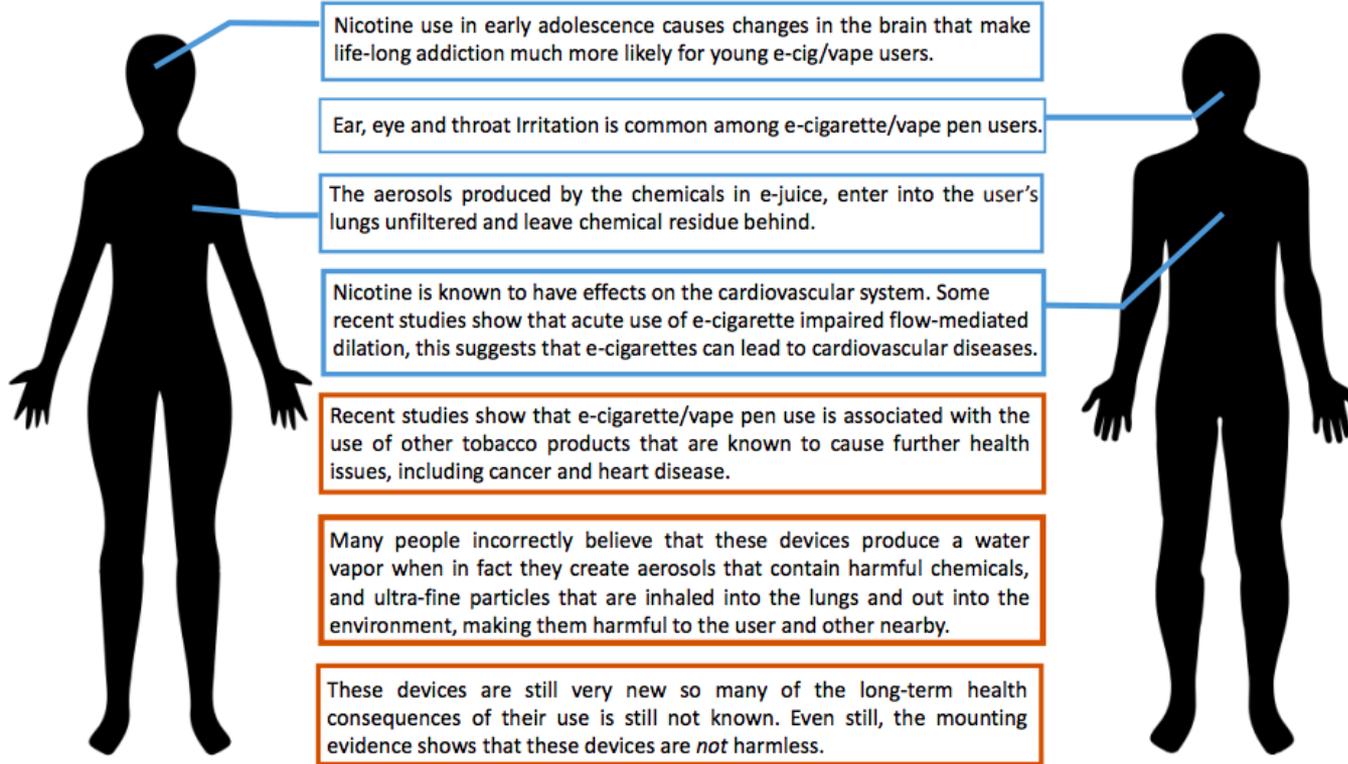
- Cigars have more nicotine
 - Increases tar and carbon monoxide
 - 1 cigar=1 pack of cigarettes
 - Increased risk of lip, mouth, and throat disease, lung cancer, and COPD

Smokeless Tobacco

- Sniffed, chewed, held in mouth
- Additional 28 carcinogens compared to cigarettes absorbed directly into the blood
- One can = 4 packs
- Increases of cancers in lip, tongue, cheek, gums, and mouth
- Can cause Leukoplakia which leads to cancer

Risks of E-Cigarette and Vape Pen Use

Although the overwhelming majority of young people do not use e-cigarettes, the recent increase in use among adolescent is concerning to health professionals.



E-Cig Aerosol Composition

<ul style="list-style-type: none"> • Propylene glycol • Glycerin • Flavorings (many) • Nicotine • NNN • NNK • NAB • NAT • Ethylbenzene • Benzene • Xylene • Toluene • Acetaldehyde • Formaldehyde • Naphthalene • Styrene • Benzo(b)fluoranthene 	<ul style="list-style-type: none"> • Chlorobenzene • Crotonaldehyde • Propionaldehyde • Benzaldehyde • Valeric acid • Hexanal • Fluorine • Anthracene • Pyrene • Acenaphthylene • Acenaphthene • Fluoranthene • Benz(a)anthracene • Chrysene • Retene • Benzo(a)pyrene • Indeno(1,2,3-cd)pyrene 	<ul style="list-style-type: none"> • Benzo(ghi)perylene • Acetone • Acrolein • Silver • Nickel • Tin • Sodium • Strontium • Barium • Aluminum • Chromium • Boron • Copper • Selenium • Arsenic • Nitrosamines, • Polycyclic aromatic hydrocarbons 	<ul style="list-style-type: none"> • Cadmium • Silicon • Lithium • Lead • Magnesium • Manganese • Potassium • Titanium • Zinc • Zirconium • Calcium • Iron • Sulfur • Vanadium • Cobalt • Rubidium
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Compounds in yellow are from FDA 2012, Harmful and Potentially Harmful Substances – Established List

Where Else Can You Find These Chemicals?

Propylene glycol → Antifreeze



Acetone → Nail Polish Remover



Ethylbenzene → Paints, Pesticides



Formaldehyde → Embalming



Nicotine → Cigarettes



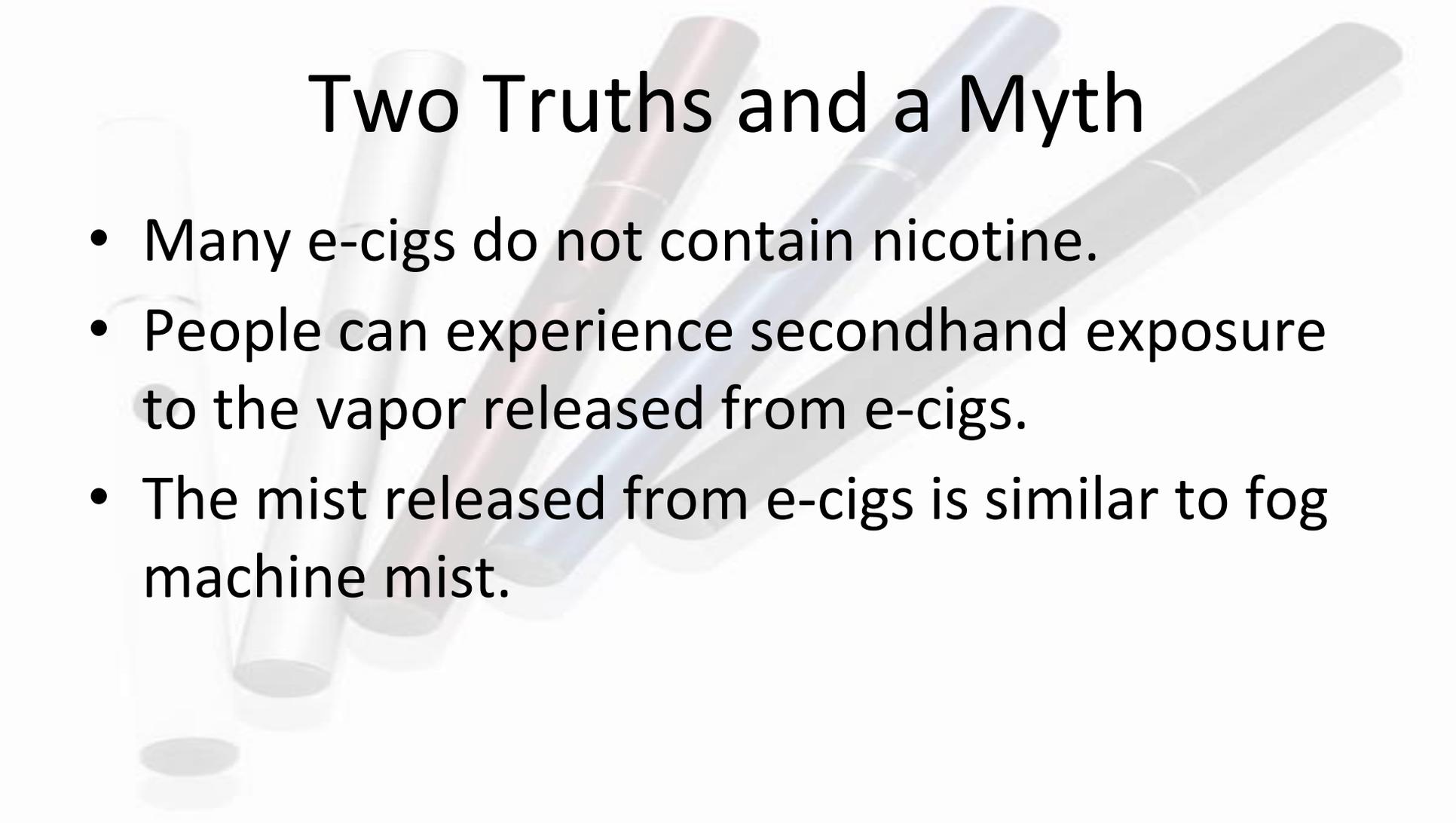
Rubidium → Fireworks



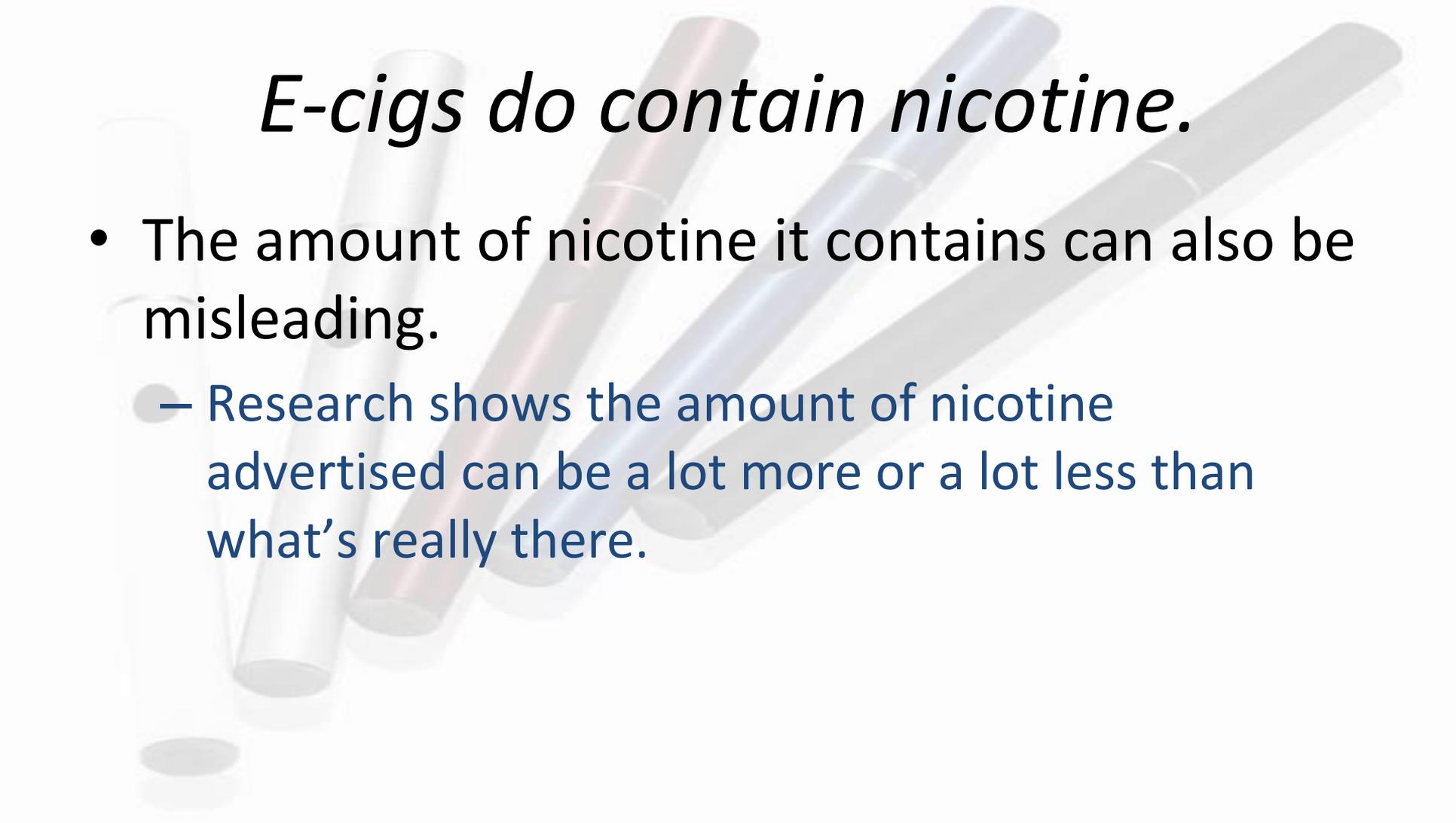
Two Truths and a Myth



Two Truths and a Myth



- Many e-cigs do not contain nicotine.
- People can experience secondhand exposure to the vapor released from e-cigs.
- The mist released from e-cigs is similar to fog machine mist.

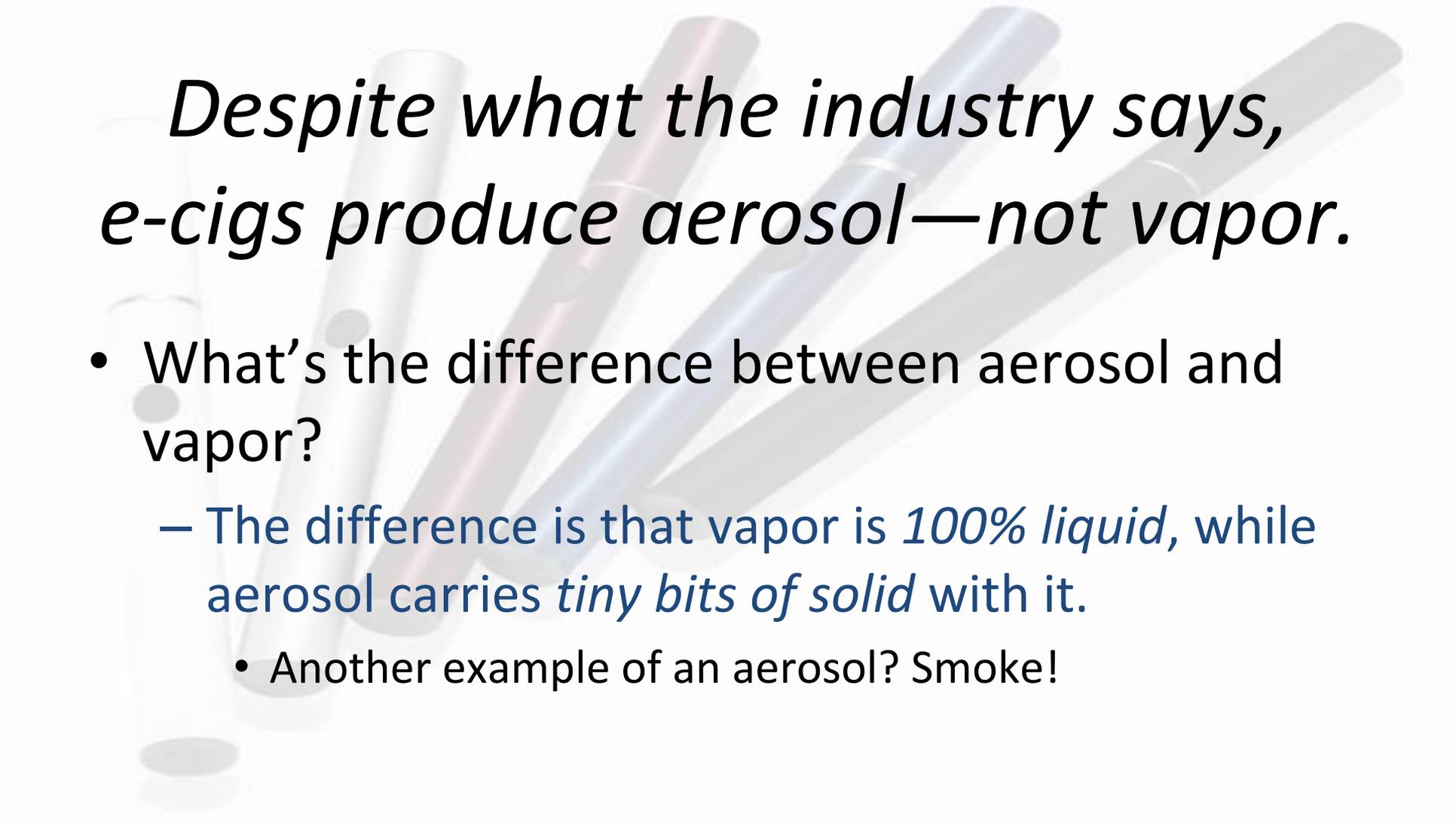


E-cigs do contain nicotine.

- The amount of nicotine it contains can also be misleading.
 - Research shows the amount of nicotine advertised can be a lot more or a lot less than what's really there.

Two Truths and a Myth

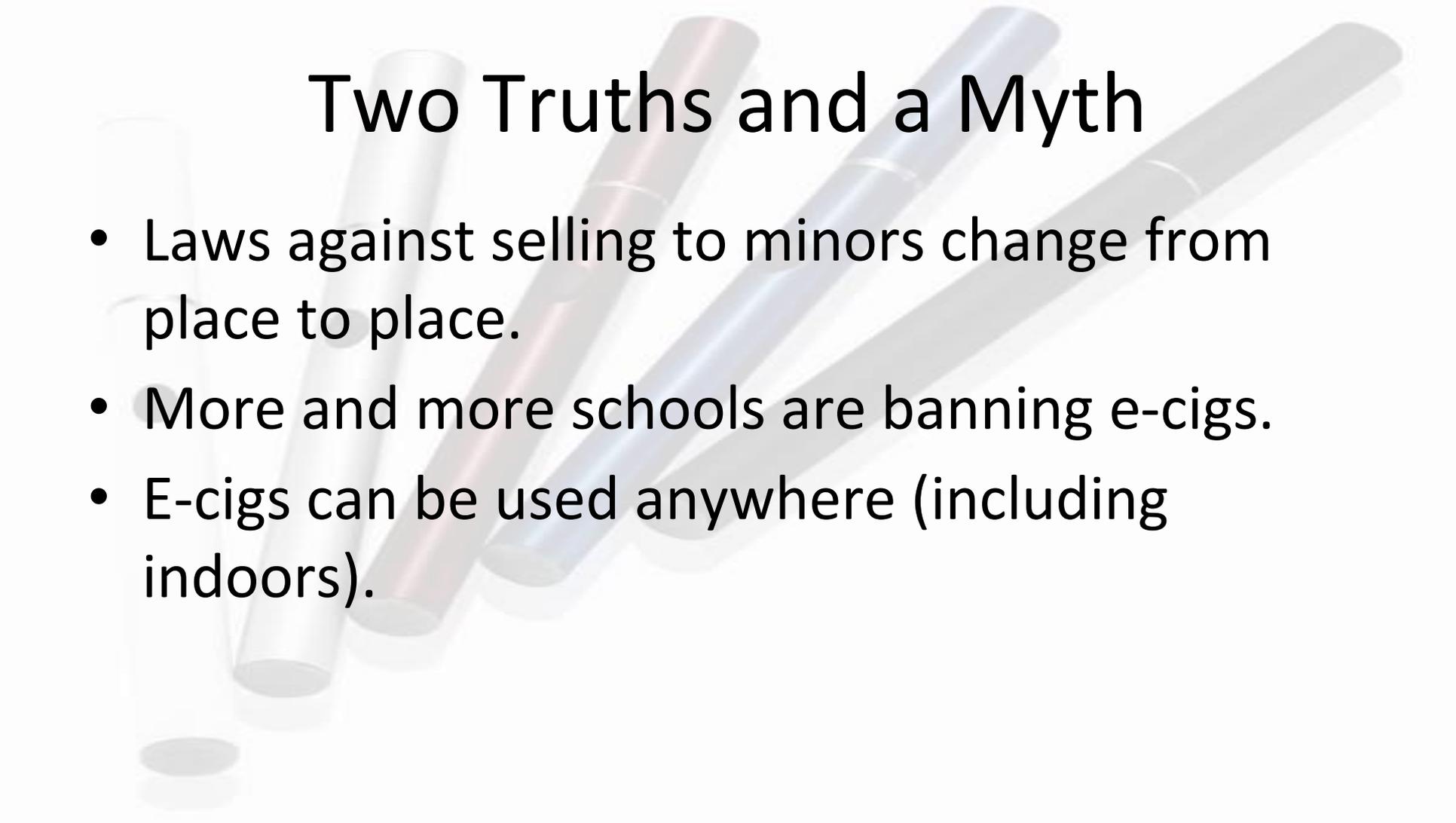
- E-cigs only produce vapor.
- The vapor from e-cigs contains the nicotine, the flavor-containing chemicals, and a chemical that creates the mist you exhale.
- Some flavor chemicals, when inhaled, have been known to cause scarring in the lungs, a condition known as “popcorn lungs”.



Despite what the industry says, e-cigs produce aerosol—not vapor.

- What's the difference between aerosol and vapor?
 - The difference is that vapor is *100% liquid*, while aerosol carries *tiny bits of solid* with it.
 - Another example of an aerosol? Smoke!

Two Truths and a Myth

Four e-cigarettes are arranged diagonally across the background. From left to right, they are white, red, blue, and grey. They are slightly out of focus, serving as a decorative backdrop for the text.

- Laws against selling to minors change from place to place.
- More and more schools are banning e-cigs.
- E-cigs can be used anywhere (including indoors).

E-cigs cannot be used anywhere.

- In fact, many regulations ask e-cig users to respect the *same* laws cigarette users follow.



Two Truths and a Myth

- In hookah, the charcoal is burned, not the tobacco.
- The smoke from charcoal has a lot of the same poisonous chemicals in it as tobacco.
- Hookah is less dangerous because the water helps filter the chemicals in the smoke.

The water does not clean the smoke or remove any toxic chemicals.

- In fact, the water cools down the smoke, allowing it to go deep into the lungs—causing more damage.
- The charcoal also contains toxins not found in tobacco alone, such as benzene, which can cause leukemia.

Two Truths and a Myth

- When using e-cigs, there is a risk of explosions of electronics and batteries.
- The FDA currently regulates the chemical ingredients in e-cigs and what is listed on the labels.
- The heat generated in an e-cig can create formaldehyde from the liquid, and rip metals from the side of the device. This is delivered to the lungs.

The FDA does not currently regulate the chemical ingredients and labels.

- In fact, the FDA also does not regulate:
 - The amount of different chemicals that can be used to make e-juice
 - The cleanliness of facilities that produce e-juice



Choosing to not use tobacco

- Choose friends who don't use tobacco
- Avoid situations with tobacco
- Practice and use refusal skills

Tips for quitting

- Set a date to quit
- Get support and encouragement
- Identify health services
- Replace tobacco with healthier alternatives
- Change daily behavior
- Engage in healthful behaviors