

HEATED TOBACCO PRODUCTS

WHAT'S THE BOTTOM LINE?



[Heated tobacco products](#) heat processed tobacco leaf to create an aerosol, which users inhale into their lungs. Some brands of heated tobacco products permitted for sale in the United States include IQOS and Eclipse.



More research is needed to understand the [short and long-term health effects](#) of heated tobacco products.



The use of [any type of tobacco product—including heated tobacco products](#)—is harmful, especially for youth, young adults, or pregnant women, as well as adults who do not currently use tobacco products.



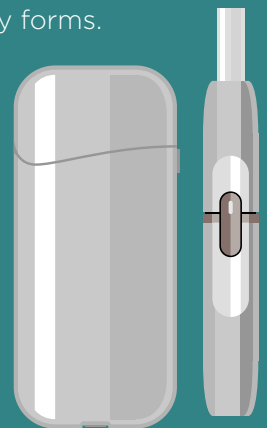
Heated tobacco products [have not been scientifically shown](#) to help smokers quit.



If you've never used tobacco products, including heated tobacco products, [don't start](#).

WHAT ARE HEATED TOBACCO PRODUCTS?

- Sometimes marketed as “heat-not-burn” products, heated tobacco products come in many forms.
- Some heated tobacco products use electronic heating elements.
 - » Some heat specially-designed sticks, plugs, or capsules containing tobacco. This is how the heated tobacco products authorized for sale in the United States work.
 - » Some work by heating liquids that create an aerosol that then passes through a tobacco plug to absorb flavor and nicotine from the tobacco.
 - » Some have a sealed part of the device that heats loose tobacco, either alone or together with flowers from the marijuana (cannabis) plant.
- Some heated tobacco products have a similar size and shape as regular cigarettes and have a carbon tip wrapped in glass fibers that the user heats with a lighter or match.



U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

ARE HEATED TOBACCO PRODUCTS THE SAME AS ELECTRONIC CIGARETTES?

- No. Heated tobacco products heat actual tobacco leaf. In contrast, e-cigarettes heat liquids that typically contain nicotine derived from tobacco, as well as flavorings and other ingredients. [Learn more about e-cigarettes.](#)

WHAT ARE THE HEALTH EFFECTS OF USING HEATED TOBACCO PRODUCTS?

- Heated tobacco products are still new in the United States, and scientists are still learning about their long-term health effects.
- The use of any tobacco product—including heated tobacco products—is harmful, especially for youth, young adults, or pregnant women, as well as adults who do not currently use tobacco products.
 - Regardless of whether they are heated by flame or electronically, heated tobacco products contain nicotine.



- » **Nicotine is highly addictive.¹**
- » **Nicotine exposure can also harm the developing adolescent brain. The brain keeps developing until about age 25.¹**
 - » Using nicotine in adolescence can harm the parts of the brain that control attention, learning, mood, and impulse control.
 - » Using nicotine in adolescence may also increase the risk for future addiction to other drugs.



- » **Nicotine is toxic to developing fetuses.¹**

IS IT HARMFUL TO BREATHE THE SECONDHAND EMISSIONS FROM HEATED TOBACCO PRODUCTS?

- Heated tobacco products produce emissions that are not as safe as clean air.
- Studies of secondhand emissions from heated tobacco products suggest that the products expose both users and bystanders to some of the same chemicals found in cigarette smoke, although at lower levels than cigarette smoke.²
- Additional research is needed to understand the health effects of heated tobacco products and their emissions.

ARE HEATED TOBACCO PRODUCTS LESS HARMFUL THAN REGULAR CIGARETTES?

- The **aerosol created from heated tobacco products** generally contains lower levels of harmful ingredients than the smoke from regular cigarettes. However, that does not mean heated tobacco products are safe.
- Research suggests that heated tobacco products **contain many of the same harmful ingredients as regular cigarettes**, as well as other harmful ingredients not present in regular cigarettes.
- **Additional research is needed** to determine whether adult cigarette smokers who completely switch to heated tobacco products might reduce their risks of tobacco-related disease.
- As of January 8, 2020, **no tobacco company has received permission from the FDA to market a heated tobacco product as a reduced-risk product.**

Heated tobacco products are **not an FDA-approved method** for quitting smoking.

WHO IS USING HEATED TOBACCO PRODUCTS?

These products are new in the United States. The U.S. Food and Drug Administration (FDA), as of January 8, 2020, has authorized IQOS and Eclipse heated tobacco products for sale in this country. Sales of other heated tobacco products are growing worldwide.



Reported use of heated tobacco products went up **in 2018**, when **2.4% of adults**, including **6.7% of people** who currently smoked regular cigarettes, reported they had ever used a heated tobacco product.⁴

An illustration of a man in a dark suit and white shirt, holding a white rectangular sign. He is standing on a large teal circular base. The background behind him is a light grey wall with rounded, cloud-like shapes.

CDC began tracking use of heated tobacco products among U.S. adults **in 2017**. At that time, **0.7% of adults**, including **2.7% of people** who currently smoked regular cigarettes, reported they had ever used a heated tobacco product.³

There are no studies yet looking at how many youth in the United States use heated tobacco products.

WHAT CAN PEOPLE DO TO ADDRESS USE OF HEATED TOBACCO PRODUCTS?



STATES, COMMUNITIES, TRIBES, AND TERRITORIES CAN implement evidence-based, population-level strategies that address use of all forms of tobacco products, including heated tobacco products, such as:

- » Incorporating all tobacco products, including heated tobacco products, into smoke-free and tobacco-free policies.
- » Licensing retailers and restricting young people's access to tobacco products in retail settings.
- » Implementing price policies.
- » Reducing access to flavored tobacco products.
- » Curbing advertising and marketing for tobacco products that is appealing to young people.
- » Developing educational initiatives that warn about the risks of tobacco product use, especially among young people.^{5,6}

PARENTS AND TEACHERS CAN:

- » Learn about the different types of tobacco products and the risks of using tobacco products, including heated tobacco products.
- » Set a good example by being tobacco-free.
- » Talk to children, teens, and young adults about why all forms of tobacco products are harmful for them.
- » Develop, implement, and enforce tobacco-free school policies and prevention programs that are free from tobacco industry influence, and that address all types of tobacco products, including heated tobacco products.⁶

HEALTH PROFESSIONALS CAN:

- » Learn about the different types of tobacco products and the risks of using tobacco products.
- » Ask about use of all forms of tobacco products, including heated tobacco products, when screening patients for the use of tobacco products.
- » Talk to children, teens, and young adults about why all forms of tobacco products are harmful for them.
- » Encourage patients to quit using tobacco products.

MORE INFORMATION

- [Guide for quitting smoking](#): Provides free resources, including a mobile app and quit guide.
- Heat-not-burn tobacco products: a systematic literature review (2018): Provides a summary of scientific studies on heated tobacco products.
- [World Health Organization's Heated Tobacco Products \(HTPs\) Information Sheet](#): Describes what heated tobacco products are and summarizes the evidence concerning these products.
- [U.S. Food and Drug Administration's website, "How are Non-Combusted Cigarettes, Sometimes Called Heat-Not-Burn Products, Different from E-Cigarettes and Cigarettes?"](#): Explains why the heated tobacco products authorized for sale in the United States are considered non-combusted cigarettes, and how they differ from e-cigarettes.

REFERENCES

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6. U.S. Department of Health and Human Services. [Surgeon General's Advisory on E-Cigarette Use Among Youth; 2018](#). [PDF-571 KB]