HEATED TOBACCO PRODUCTS

WHAT'S THE BOTTOM LINE?

Heated tobacco products heat processed tobacco leaf, allowing users to inhale nicotine 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, and 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 electronically heated tobacco product authorized for sale in the United States works.
  - Some work by heating liquids that create an emission 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. This type of product is allowed to be sold in the United States.
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 short- and long-term health effects. The use of any tobacco product—including heated tobacco products—is harmful, especially for youth, young adults, and 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 emissions created from heated tobacco products generally contain 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 July 7, 2020, the FDA has authorized only one heated tobacco product system (IQOS and three of its tobacco-containing Heatstick products) to be marketed as modified risk tobacco products. These are the first tobacco products to receive “exposure modification” orders. These specific products may be marketed with claims that fully switching from regular cigarettes to IQOS can reduce a person’s exposure to harmful chemicals.

Similar claims may not be made about other heated tobacco products. In addition, the manufacturer of IQOS may not claim that using IQOS reduces the risk of disease, that the products are endorsed or approved by the FDA, or that the FDA deems the products to be safe for use by consumers.3,4

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.

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.5

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.6

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

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.

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 who sell tobacco products 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.

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

HEALTH PROFESSIONALS CAN:

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- 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.
- **World Health Organization’s Heated Tobacco Products (HTPs) Information Sheet:** Describes what heated tobacco products are and summarizes the evidence concerning these products.
- **World Health Organization’s Heated Tobacco Products Brief:** Provides diagrams of heated tobacco products and provides a more in-depth summary of 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


