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Health Risks of Smokeless Tobacco

Smokeless tobacco includes products such as chewing (spit) tobacco, moist snuff, snus (a “spitless,” moist powder tobacco, often in a pouch), and other tobacco-containing products that are not smoked.

Some smokeless tobacco products might expose people to lower levels of [harmful chemicals](#)¹ than tobacco smoke, but that doesn’t mean these products are a safe alternative to smoking.

Types of smokeless tobacco

There are many different types of smokeless tobacco products.

Chewing, oral, or spit tobacco

These products come as loose leaves, plugs, or twists of dried tobacco that may be flavored. They are chewed or placed between the cheek and gum or teeth. The nicotine in the tobacco is absorbed through the mouth tissues. The user then spits out (or swallows) the tobacco 'juices.'

Snuff or dipping tobacco

Snuff is finely ground tobacco packaged in cans or pouches. It’s sold as dry or moist and may have flavorings added.

Moist snuff is used by putting it between the lower lip or cheek and gum. The nicotine in the snuff is absorbed through the tissues of the mouth. Moist snuff also comes in small, teabag-like pouches that can be placed between the cheek and gum. These are designed to be both “smoke-free” and “spit-free” and are marketed as a discreet way to

use tobacco.

Dry snuff is sold in a powdered form and is used by sniffing or inhaling the powder up the nose.

Snus

Snus (sounds like “snouse”) is a type of moist snuff. It was first used in Sweden and Norway, but it's now available in the United States as well. It's packaged in small pouches, which are held between the gum and mouth tissues. Like spit-free snuff, the juices are swallowed.

Dissolvable tobacco

Dissolvable forms of smokeless tobacco come in different shapes and sizes, such as tobacco lozenges, orbs, pellets, thin strips (like melt-away breath strips), and toothpick-sized sticks. Some of these also contain sweeteners or flavoring and look a lot like candy. All have tobacco and nicotine. Depending on the type, they are held in the mouth, chewed, or sucked until they dissolve. The juices are swallowed.

Heated tobacco products

Heated tobacco products (sometimes called “heat-not-burn” products) typically use an electronic heating element, which heats specially-designed sticks, plugs, or capsules containing tobacco. The heat releases nicotine (and other chemicals) that can then be inhaled into the lungs, but the tobacco doesn't get hot enough to burn. These devices are not the same as [e-cigarettes](#)².

What are the health risks of smokeless tobacco?

Using any kind of smokeless tobacco can expose you to health risks. These products contain cancer-causing chemicals, as well as addictive nicotine.

Some smokeless tobacco products may expose users to lower levels of harmful chemicals than cigarette smoke, but this doesn't mean they are safe.

No form of smokeless tobacco is a safe substitute for cigarettes. Still, tobacco companies often market these products as alternatives to smoking in places where smoking isn't allowed.

Smokeless tobacco causes cancer

Overall, people who dip or chew get about the same amount of nicotine as people who smoke regularly. They are also exposed to more than 25 chemicals that are known to cause cancer. The most harmful cancer-causing substances in smokeless tobacco are *tobacco-specific nitrosamines* (TSNAs). TSNA levels vary by product, but the higher the level the greater the cancer risk.

Cancers linked to the use of smokeless tobacco include:

- [Mouth, tongue, cheek, and gum cancer](#)³
- [Cancer of the esophagus](#)⁴ (the tube that connects the throat to the stomach)
- [Pancreatic cancer](#)⁵

The risk of cancer with newer types of smokeless tobacco products isn't quite as clear, mainly because they haven't been studied as well as chewing tobacco and snuff. They still contain potentially harmful chemicals that might increase a person's risk of cancer, although the amounts can vary by product.

Smokeless tobacco causes other health problems

Mouth and tooth problems

Many studies have shown high rates of **leukoplakia** in the mouth where users place their chew or dip. Leukoplakia is a gray-white patch in the mouth that can become cancer. These patches can't be scraped off. They're sometimes called sores but are usually painless. The longer a person uses oral tobacco, the more likely they are to have leukoplakia. Stopping tobacco might help clear up the spot, but treatment may be needed if there are signs of early cancer.

Tobacco stains teeth and causes bad breath. It can also irritate or destroy gum tissue. Many regular smokeless tobacco users have receding or swollen gums, tooth decay and cavities (from the high sugar content in the tobacco), scratching and wearing down (abrasion) of teeth, and bone loss around the teeth. The surface of the tooth root may be exposed where gums have shrunk. All of these can cause teeth to loosen and fall out.

Other health problems

Other harmful health effects of smokeless tobacco include:

- Increased risk of dying from heart disease and stroke
- Increased risk of early delivery and stillbirth when used during pregnancy

Smokeless tobacco can lead to nicotine poisoning and even death in children who mistake it for candy.

All smokeless tobacco contains nicotine, which can lead to addiction. In teens, using nicotine can also harm the parts of the brain that control attention, learning, mood, and impulse control. It may also increase the risk for future addiction to other drugs.

Dissolvable tobacco is of special concern because at this time little is known about the health effects of these products. Still, it's clear that they are another way for people, especially youth, to experiment with tobacco products and become addicted to nicotine. Because they are so tempting, they can easily poison children and pets.

Can smokeless tobacco be used to help quit smoking?

Manufacturers often imply or even claim that spit or smokeless tobacco can help people quit smoking. A lot of people believe and try this. **But no smokeless tobacco product has been proven to help people quit smoking.**

Unlike US Food and Drug Administration (FDA)-approved standard treatments that have been proven to work (such as [nicotine replacement therapy \(NRT\)](#)⁶ and [certain drugs](#)⁷), oral tobacco products have not been tested thoroughly to see if they can help a person stop smoking. And research to date has not shown that they really help a person quit.

Even if using smokeless tobacco helps some people give up smoking, it still can cause cancer and other health problems, so it's not a safe alternative. And because it still contains nicotine, it's also addictive and hard to quit.

For more, see [How to Quit Using Tobacco](#)⁸.

Hyperlinks

1. www.cancer.org/cancer/cancer-causes/tobacco-and-cancer/carcinogens-found-in-tobacco-products.html
2. www.cancer.org/healthy/stay-away-from-tobacco/e-cigarettes-vaping/what-do-we-know-about-e-cigarettes.html
3. www.cancer.org/cancer/oral-cavity-and-oropharyngeal-cancer.html

4. www.cancer.org/cancer/esophagus-cancer.html
5. www.cancer.org/cancer/pancreatic-cancer.html
6. www.cancer.org/healthy/stay-away-from-tobacco/guide-quitting-smoking/nicotine-replacement-therapy.html
7. www.cancer.org/healthy/stay-away-from-tobacco/guide-quitting-smoking/prescription-drugs-to-help-you-quit-smoking.html
8. www.cancer.org/healthy/stay-away-from-tobacco/guide-quitting-smoking.html

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