



# Smoking, Vaping and COVID-19: About the Connection and How to Quit

**Smoking and vaping have harmful effects on the body, including making it harder for the body to fight infections. This includes serious infections like COVID-19 (also called coronavirus). Learn how smoking and vaping can put your body at a higher risk of catching COVID-19 and how to quit smoking and vaping to protect yourself and others.**

## DO SMOKING AND VAPING MAKE COVID-19 INFECTIONS WORSE?

**Yes. If a person who smokes catches COVID-19, they are more than twice as likely to develop a severe case of COVID-19 than those with no smoking history.** This means if a person smokes and catches COVID-19, they are more likely to be admitted to the **Intensive Care Unit (ICU)**, placed on a **ventilator** (breathing machine) or die from the illness. Menthol and other flavorings in tobacco products (including e-cigarettes) can also make lung infections, such as COVID-19, worse.

People who smoke or vape also have a higher risk of developing **chronic obstructive pulmonary disease (COPD)**, a long-term lung disease that affects how well air flows through the lungs). COPD could make COVID-19 infections worse.

## HOW DO SMOKING AND VAPING WEAKEN THE BODY'S DEFENSES AGAINST DISEASE?

Smoking and vaping weaken the body's natural defenses against disease in a few ways:

- **Tobacco use increases levels of angiotensin-converting enzyme 2 (ACE2).** ACE2 is an enzyme that helps the COVID-19 virus attach to cells in the lung once it enters the body.
- **Smoking and vaping damage the cilia** (hair-like structures that line the lungs to help move air throughout the lungs). This makes it easier for the COVID-19 virus to enter the lungs.

- **Smoking and vaping damage neutrophils and macrophages** (certain types of white blood cell that help fight infections). This makes it harder for the body to fight infections, including COVID-19.
- **Many tobacco flavorings, including menthol, affect how well lung and airway cells can fight infections, including COVID-19.**

## DO SMOKING AND VAPING INCREASE THE SPREAD OF COVID-19?

Yes, smoking and vaping can increase the spread of COVID-19 in two ways:

- If a person who smokes or vapes has COVID-19, but does not show symptoms, they are more likely to spread the COVID-19 virus through coughing. People who smoke might also confuse a "smoker's cough" with a cough caused by COVID-19.
- Smoking and vaping involve hand-to-mouth contact. This makes it easier for the COVID-19 virus to spread from their mouth to their hands and onto other surfaces.

***Learn how to quit smoking on the back! >>>***

## HOW CAN I QUIT SMOKING/VAPING AND PROTECT MYSELF FROM COVID-19?

It is very important for people who smoke and vape to make every effort to quit. There is support to help you, including:

- **Use a nicotine patch and gum.** By using a patch and gum together, you are 4 times more likely to quit successfully.
- **Pair quit smoking medications with expert coaching and support.** Common quit smoking medications are bupropion and varenicline. Ask your doctor which quit smoking medications are right for you. Two common quit lines for coaching and support are **1-800-784-8669** and SmokefreeTXT. **Text the word "QUIT" (7848) to IQUIT (47848) for free help.**

With these steps, you will have the best chance of quitting smoking and vaping. Quitting smoking and vaping can help protect you and your family from COVID-19. Please share this information with family or friends who may still be smoking or vaping.

*Rev. 3/26/2020. MassGeneral Hospital for Children and Massachusetts General Hospital do not endorse any of the brands listed on this handout. This handout is intended to provide health information so that you can be better informed. It is not a substitute for medical advice and should not be used to treatment of any medical conditions.*

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