

Smoking and Respiratory Infections, including COVID-19



Tobacco Prevention and Cessation

November 2024

Cigarette smoking can harm and weaken the immune system and compromise lung function. There is evidence to suggest that e-cigarette use (vaping) may also weaken lung function and increase susceptibility to respiratory viruses. Respiratory viruses are conditions which affect the airways and other parts of the lungs. They include Influenza (flu), bronchitis, pneumonia, and coronavirus infections such as COVID-19.

In 2023, about 1 in 7 or 14.5% of Hoosier adults reported smoking, slightly higher than the US median (12.1%). Additionally, about 8.5% of Hoosier adults reported use of e-cigarettes. People who smoke have a higher risk of severe symptoms and dying from respiratory infections such as influenza, COVID-19, and pneumonia. Additionally, smoking can impact chronic conditions such as chronic obstructive pulmonary disease (COPD), type 2 diabetes, and heart disease and can lead to worsening symptoms or an increased risk of complications that may result in hospitalization or death.

Coronavirus Disease (COVID-19)

Coronavirus disease (COVID-19) is an infectious disease caused by the SARS-CoV-2 virus. The virus can cause respiratory illness with symptoms such as cough, fever/chills, fatigue, headache, new loss of sense of smell/taste, and in more severe cases, chest pain/pressure and difficulty breathing.

Influenza (Flu)

The flu is a contagious respiratory disease caused by the influenza virus. Symptoms of the flu often include fever, cough, sore throat, muscle aches, headaches, and fatigue. Occasionally, the flu may cause diarrhea or vomiting, although this is more common among children than adults.

Bronchitis

Acute bronchitis is when bronchial tubes that carry air to lungs get inflamed and swollen. It is often caused by the same viruses that cause a cold or influenza. Sometimes, bacteria bring it on. Symptoms of acute bronchitis include congestion, sore throat, cough that may bring up mucus, wheezing, shortness of breath, body aches, low fever, and fatigue.

Pneumonia

Pneumonia is an infection that causes the air sacks in lungs (alveoli) to become inflamed and fill with fluid. This can make it hard to breathe in enough oxygen to reach the bloodstream. Pneumonia is caused by bacteria and some viruses. Symptoms of pneumonia include cough with phlegm, fever, chills, and difficulty breathing.

Quick Facts

- About 1 in 7 Hoosier adults (14.5%) reported smoking cigarettes in 2023.
- Smoking weakens the immune system and decreases lung function.
- Evidence suggests that vaping may also weaken lung function and increase susceptibility to infections.
- Quitting tobacco use reduces the risk of smoking-related health problems.
- Quit Now Indiana (1-800-QUIT NOW; [QuitNowIndiana.com](https://www.QuitNowIndiana.com)) provides free support and resources to those that use tobacco.
- Coronavirus disease (COVID-19) is an infectious disease that causes respiratory illness with symptoms such as cough, fever, and in severe cases, difficulty breathing.

Secondhand Smoke Exposure and Respiratory Diseases

Exposure to secondhand smoke increases the risk of a number of respiratory health problems among adults and children. Exposure to secondhand smoke can worsen the frequency and severity of asthma attacks among children with asthma. Children with chronic health problems such as asthma, chronic lung disease, blood disorders, heart disease, and weakened immune systems are at greater risk of complications from respiratory viruses. Both children and adults with chronic health problems such as moderate to severe asthma are at greater risk of severe illness from COVID-19.

Steps to Protect Yourself and Your Family

- Getting a COVID-19 vaccine is an effective way to protect you from getting seriously ill.
- Getting a flu vaccine each year is the best way to prevent the flu.
- Good hygiene practices, including covering coughs and sneezes and frequent handwashing (for at least 20 seconds), can help reduce the spread of viruses such as the flu, acute bronchitis, and COVID-19.
- If you are symptomatic including a fever, a cough or difficulty breathing call your healthcare provider for medical advice. Most people with COVID-19 develop mild symptoms and can recover at home. Additionally staying home and away from others is the best way to reduce the spread of respiratory viruses.
- For those who smoke or vape, quitting reduces the risk of smoking-related health problems.
- For Hoosiers interested in treating their tobacco dependence, Quit Now Indiana (1-800-QUIT-NOW; QuitNowIndiana.com) provides free evidence-based support, advice and resources.
- To prevent health complications from secondhand smoke, do not allow smoking in your home or vehicle and eliminate you and your family's exposure to secondhand smoke.

For additional information on Indiana tobacco prevention and cessation:

in.gov/health/tpc



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