

Allergies, COVID-19, Wildfire Smoke



Fall allergies, COVID-19, and irritation from wildfire smoke can cause similar symptoms. Primorac91 / Getty Images

- **Overlap of symptoms from allergies, COVID-19, and wildfire smoke can make it difficult to know which you're experiencing.**
- **Treatment for each is different.**
- **Exposure to wildfire smoke can increase susceptibility to respiratory infections like COVID-19.**

All data and statistics are based on publicly available data at the time of publication. Some information may be out of date. Visit our [coronavirus hub](#) and follow our [live updates page](#) for the most recent information on the COVID-19 outbreak.

With more than allergens circulating around this fall, it can be difficult to tell what's causing the symptoms you may experience, like sore throat, runny nose, and headache.

Could these symptoms be signs of COVID-19, irritation from wildfire smoke, or simply fall allergies?

"If you take a step back and put the whole picture into perspective, it can be easier to tell the difference. For instance, smoke exposure can be more temporary and include more burning than

itching, which typically comes with allergies,” [Dr. Tina Sindher](#), allergist at Stanford Health Care, told Healthline.

However, Sindher adds that some people with severe seasonal allergies can present symptoms similar to those of a viral infection like COVID-19.

“They may have a mild fever, and that’s when it gets confusing,” she said.

To make sense of it all, here’s a breakdown of the differences between each and what you can do about it.

Spring vs. fall allergies

While the symptoms of spring and fall allergies can be similar, such as persistent runny nose, sneezing, and itchy or watery eyes, the triggers vary.

During spring months (February through August), tree and grass pollination are main triggers. During the fall months (August through November), triggers include weeds and outdoor molds, with ragweed being the most common.

[Dr. Kasey Strothman](#), pediatric allergist and immunologist at Nationwide Children’s Hospital, says during the fall months, other environmental factors can worsen symptoms.

“For example, while warmer temperatures are often welcomed, the lingering humidity, windy conditions, and dry air can all increase the release of mold spores. Outdoor activities such as raking leaves can also be problematic for those with pollen and mold allergy, as raking can stir up spores and cause their release into the air,” Strothman told Healthline.

However, treatment for spring and fall allergies are similar, and include avoiding triggers as much as possible.

“Avoidance measures are multiple and include monitoring pollen or mold counts, avoiding the outdoors during peak times of day, keeping windows and doors shut at home, and showering or changing clothes after being outdoors,” Strothman said.

Medications are similar, too, and consist of over-the-counter nasal steroids like Flonase and Nasacort, and eye drops like ketotifen, says [Dr. Ronald Saff](#), clinical assistant professor of medicine at Florida State University College of Medicine.

“The combination of a prescription nasal antihistamine coupled with an [over-the-counter] nasal steroid is very effective. Standard allergy shots, which can be obtained under the care of an allergist, are very effective for both fall and spring seasons, as well as [for] patients who experience perennial symptoms,” Saff told Healthline.

One treatment, RAGWITEK, is specific to ragweed allergies, he adds.

“It is a form of oral immunotherapy. It is like an allergy shot in the sense that it boosts the body’s

i

Allergies vs. COVID-19

fever and chills

muscle and body aches

new loss of taste or smell

nausea or vomiting

diarrhea

However, the following can be symptoms of both COVID-19 and allergies:

- cough
- fatigue
- headache
- sore throat
- congestion or runny nose
- shortness of breath or difficulty breathing (for those with asthma)

Sindher says the biggest difference between the two is that people with viral infections tend to get run down regardless of whether they have a fever or not.

"You rely on Motrin or Tylenol to feel better. You don't see that in allergies," she said.

When it's hard to tell the difference from a viral infection and seasonal allergies, Sindher looks at a person's history with allergies to help determine the cause of their symptoms.

"There should be a historical pattern of how and when they present with allergy symptoms. If it's a kid in the springtime, and they were at the park all day and have some sneezing but no other symptoms like fatigue or fever, I chalk it up to their seasonal allergies. With a viral infection you may not feel well, may have a fever or vomiting or diarrhea, and we don't see those with seasonal allergies," she said.

One way she suggests determining whether you're experiencing more than allergies is to take an antihistamine.

"If they're allergic, there will be some benefit, but if it's a viral infection, you won't see any," Sindher said.

When it comes to potential exposure to COVID-19, Saff says getting tested is the only way to really know.

"Since allergies tend to be chronic, most of my patients who experience classic hay fever symptoms attribute their symptoms to a recurrence of their symptoms and become suspicious of COVID-19 only if they experience other symptoms, like fatigue or fever, or if they feel really

sick. Generally speaking, hay fever symptoms can make one feel miserable, but not sick. Again, however, there is some overlap," he said.

Allergies and COVID-19 vs. wildfire smoke irritation

Wildfire smoke consists of gases and particles from burning vegetation, building materials, and more.

The [CDC](#) warns that exposure to air pollutants in wildfire smoke can cause inflammation, alter immune function, and increase susceptibility to respiratory infections, likely including COVID-19.

Recent [research](#) also indicates that air pollutant exposure worsens COVID-19 symptoms and [outcomes](#).

Some symptoms of wildfire smoke exposure and COVID-19 can be the same, including dry cough, sore throat, and difficulty breathing.

For those with asthma, being exposed to wildfire smoke can cause an asthma attack.

"If you have an underlying lung condition such as asthma, follow the plan laid out by your doctor. Stay indoors and keep windows and doors shut," Strothman said.

Symptoms of smoke irritation [include](#):

- coughing
- trouble breathing normally
- stinging eyes

- a scratchy throat
- runny nose
- irritated sinuses
- wheezing and shortness of breath
- chest pain
- headaches
- tiredness
- fast heartbeat
- asthma attack

"We will get reports from people, including myself, who might not be outside for very long and just walking from the car to the building, and notice a headache," Sindher said.

The best way to treat smoke irritation is to avoid exposure as much as possible by staying inside. The [CDC](#) recommends finding cleaner-air shelters and cleaner-air spaces.

"The number we look at is the [AQI index](#). [Air pollutants] can go inside your lungs, and with the passage of air exchange, get inside your bloodstream and can induce an immune response to your body. Then it's too late," Sindher said.

While paper "comfort" or "dust" masks trap large particles, such as sawdust, the CDC states they won't protect your lungs from smoke.

Same for cloth masks being used to slow the spread of COVID-19. These won't capture most small particles in smoke.

An N95 mask, properly worn, may offer some protection, but they're in short supply due to the pandemic. The CDC's [Respirator Fact Sheet](#) provides more detail about respirator masks.

If you're exposed to wildfire smoke, drinking water and running a humidifier [may help](#) relieve symptoms. Strothman says over-the-counter eye drops can help with burning or irritation.

"Eliminate all other sources of smoke exposure, including candles, fireplaces, or wood-burning stoves," she said.



Cathy Cassata is a freelance writer who specializes in stories around health, mental health, and human behavior. She has a knack for writing with emotion and connecting with readers in an insightful and engaging way. Read more of her work [here](#).