



At-Risk Groups of People

Wildfire smoke is a mixture of many different air pollutants. Of these, fine particulate matter, also called particle pollution or PM_{2.5}, is the biggest threat to your health, especially if you are in an at-risk group. This fact sheet tells you **when to be concerned about wildfire smoke, who is at risk and why, and how to protect your health from smoke.**

When should I be concerned? Even if you only breathe smoky air for one day, it can affect your health. Breathing smoky air for several days can further increase the risk to your health. That is why it is important to reduce your exposure to wildfire smoke.

Who is at risk? Most healthy adults and children recover quickly from smoke exposure and will not suffer long-lasting health effects. However, if you are in any of the groups below, your risk of both immediate and long-lasting health effects is higher.

People With Chronic Diseases

Asthma and Other Lung Diseases

Why: Smoke exposure can trigger severe breathing responses in people with lung diseases.

Effects: Trouble breathing (e.g., coughing, wheezing, chest tightness) and worsening of chronic lung diseases, such as asthma and chronic obstructive pulmonary disease (COPD), that require a trip to the emergency department or a hospital stay and can be fatal.

Cardiovascular Disease

Why: Smoke exposure can trigger severe cardiovascular events in people with underlying cardiovascular diseases and related conditions (e.g., diabetes, obesity).

Effects: May include heart attacks and strokes that require a trip to the emergency department or a hospital stay and can be fatal.

Lifestages and Populations

Children

Why: Children up to 18 years of age are at greater risk of smoke-related health effects because their lungs are still growing. They are more likely to be exposed to smoke because they spend more time outdoors, engage in more vigorous activity, and inhale more air per pound of body weight compared to adults.

Effects: May include trouble breathing (e.g., coughing, wheezing, chest tightness) and reduced lung function. Children with asthma may have worsened asthma symptoms or asthma attacks that can require a trip to the emergency department or a hospital stay.

Older Adults

Why: Adults ages 65 and older are at greater risk because they are more likely to have chronic lung and heart disease. In addition, the body's ability to respond to health challenges generally declines with age.

Effects: May include cardiovascular (e.g., heart attacks, stroke) and respiratory events (e.g., asthma attacks, COPD events) that require a trip to the emergency department or a hospital stay and can be fatal.

Pregnant Women

Why: Changes in the body that occur during pregnancy (such as increased breathing rates) may increase sensitivity to smoke exposure. During pregnancy, the fetus may be more sensitive to smoke exposure.

Effects: Some evidence suggests that smoke exposure can lead to gestational diabetes and high blood pressure during pregnancy, as well as low birth weight and preterm birth.

People With Higher Exposure

People with higher exposure may experience worsening of underlying health conditions. This could lead to increased risk of respiratory- or cardiovascular-related emergency department visits, hospital stays, and death. These groups include the following:

People From Some Ethnic and Racial Minority Groups

Why: Ethnic and racial minority groups can be exposed to wildfire smoke due to economic, social, environmental, and other factors that may limit their ability to reduce their exposure to wildfire smoke.

People With Lower Incomes

Why: People with fewer financial resources often have less access to health care, which can lead to untreated or inadequately treated underlying health conditions (e.g., asthma, diabetes). They may also have higher smoke exposure due to less access to measures to reduce wildfire smoke exposure (e.g., ability to work from home, use air cleaners), living in poor quality housing that can lead to higher indoor smoke concentrations (or being unhoused), or spending more time outside traveling to work.

Outdoor Workers

Why: Outdoor workers can be exposed to high concentrations of smoke for extended periods.

What Actions Can You Take to Protect Yourself?

- Make a plan with your health care provider to protect your health during a wildfire smoke event, including keeping a supply of food and medicine on hand so you can stay inside in cleaner and cooler air if smoke levels are high for several days.
- Stay informed about air quality conditions. Check your local Air Quality Index (AQI) on the [Fire and Smoke Map](#) and check updates from local air quality or fire officials.
- [Reduce your smoke exposure](#):
 - Stay indoors or limit your time outdoors if smoke is present. If you cannot stay cool indoors, spend time in a place with cleaner and cooler air.
 - Keep activity levels low when you go outdoors. Try to avoid vigorous activities, such as doing yard work or going for a run.
- Wear a NIOSH Approved® respirator, such as an N95®, to [protect your lungs from smoke](#) if you need to go outside when smoke levels are high.
- Keep indoor air as clean as possible through [indoor air filtration](#).
- Check with a heating, ventilation, and air conditioning (HVAC) technician to learn the most efficient filters that can be used in your HVAC system. Use a high-efficiency filter (rated MERV 13 or higher) if your system can safely use one. You can also buy a portable air cleaner or make a do-it-yourself (DIY) air cleaner.
- [Create a cleaner air room at home](#) for a cleaner indoor air environment.

Resources

Scan the QR code to the right to access an online version of this fact sheet and the additional resources below.

Information on Air Quality

Check out the AirNow Fire and Smoke Map, your state air quality website, or your local news for air quality information. Access these resources using the links below!

- [AirNow Fire and Smoke Map](#)
- [IOS App](#)
- [Android App](#)
- [Wildfire Guide Fact Sheets](#)
- [Resources and Information on Wildland Fires and Smoke](#)
- [Infographics on Staying Safe Before, During and After Fires](#)



Additional Guidance to Reduce Exposure

For more information on how to reduce exposures to wildfire smoke view the following Wildfire Guide fact sheets:

- [Indoor Air Filtration](#)
- [How to Create a Cleaner Air Room at Home](#)
- [Protect Your Lungs from Wildfire Smoke or Ash](#)

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