



## Protecting Yourself from Wildfire Smoke During the COVID-19 Pandemic Frequently Asked Questions

**August 27, 2020**

The following FAQ was developed by the San Francisco Department of Public Health and will be posted at [www.sfgdcp.org/covid19](http://www.sfgdcp.org/covid19).

**AUDIENCE:** The general public in San Francisco.

**BACKGROUND:** The San Francisco Bay Area has been impacted by a number of wildfires in recent years. Smoke and ash from wildfires can irritate your eyes, nose, throat, and lungs, and increase your chances of developing a respiratory infection such as pneumonia. Wildfire smoke may also worsen illness from COVID-19. This FAQ provides guidelines on how to protect yourself from wildfire smoke during the COVID-19 pandemic.

### Frequently Asked Questions

#### **What are the best ways to protect myself from wildfire smoke during the COVID-19 pandemic?**

The most effective way to protect yourself from wildfire smoke is to stay indoors or limit your time outdoors when there is smoke in the air. This is especially important if you have heart or lung disease or are at higher risk for adverse health effects. Staying at home also reduces your exposure to COVID-19. You can [create a cleaner air space](#) at home by closing all windows and doors, and running fans or air conditioning with a new filter on recirculate to prevent outside air from coming inside. If you have one, use a portable air cleaner to filter the air in the rooms you occupy most. Reducing physical activity is another way to reduce your exposure to smoke, as is avoiding activities that increase indoor pollution, such as burning candles, using gas stoves, and vacuuming.

#### **How can I protect myself if I need to go outside?**

Try to limit the time you spend outside when it is smoky. You can monitor the air quality at [www.airnow.gov](http://www.airnow.gov) and follow the guidelines in the table below from the [California Air Resources Board](#). Try to go outside when the air quality is better (air quality index 0-50, in the green zone).

If you have an N95 or P100 respirator (mask) available, consider wearing it when you go outside. Respirators can filter out small airborne particles produced from fires. Respirators can be found online, or in hardware, home repair, or drugstores. People with heart or lung problems should check with their healthcare provider before using a respirator because the respirator can make it more difficult to breathe. Respirators are not designed to fit children.



**Air Quality Index and Actions You Can Take to Protect Yourself**

Air Quality Index (AQI)		Who Needs to be Concerned?	What Should I do?
0-50	Good	It's a great day to be active outside	
51-100	Moderate	Some people who may be unusually sensitive to particulate pollution.	<p><b>Unusually sensitive people:</b> <i>Consider reducing prolonged or heavy exertion. Watch for symptoms such as coughing or shortness of breath. These are signs to take it easier.</i></p> <p><b>Everyone else:</b> It's a good day to be active outside.</p>
101-150	Unhealthy for Sensitive Groups	Sensitive groups include people with heart or lung disease, older adults, children and teenagers.	<p><b>Sensitive groups:</b> <i>Reduce</i> prolonged or heavy exertion. It's OK to be active outside, but take more breaks and do less intense activities. Watch for symptoms such as coughing or shortness of breath.</p> <p><b>People with asthma</b> should follow their asthma action plans and keep quick relief medicine handy.</p> <p><b>If you have heart disease:</b> Symptoms such as palpitations, shortness of breath, or unusual fatigue may indicate a serious problem. If you have any of these, contact your health care provider.</p>
151-200	Unhealthy	Everyone	<p><b>Sensitive groups:</b> <i>Avoid</i> prolonged or heavy exertion. Consider moving activities indoors or rescheduling.</p> <p><b>Everyone else:</b> <i>Reduce</i> prolonged or heavy exertion. Take more breaks during outdoor activities.</p>
201-300	Very Unhealthy	Everyone	<p><b>Sensitive groups:</b> <i>Avoid all</i> physical activity outdoors. Move activities indoors or reschedule to a time when air quality is better.</p> <p><b>Everyone else:</b> <i>Avoid</i> prolonged or heavy exertion. Consider moving activities indoors or rescheduling to a time when air quality is better.</p>
301-500	Hazardous	Everyone	<p><b>Everyone:</b> <i>Avoid all</i> physical activity outdoors.</p> <p><b>Sensitive groups:</b> Remain indoors and keep activity levels low. Follow tips for keeping particle levels low indoors.</p> <p><b>Workplaces:</b> May consider closing if not essential to public health.</p>



### **How do I use a respirator if I have one?**

Some tips for wearing an N95/P100 respirator can be found [here](#). Follow the mask manufacturer's instructions. Try to seal the mask closely to your face. As a good seal is not possible with facial hair, make sure the skin is clean shaven where the respirator touches the face. Throw away your respirator when it gets harder to breathe through or if it gets dirty.

If you have difficulty breathing, get dizzy, or have other symptoms while wearing a respirator, go to a place with cleaner air and remove it. Wearing a respirator, especially if it's hot or you are physically active, can increase the risk of heat-related illness. Take breaks often and drink water.

### **Can I wear an N95 respirator with a one-way valve?**

Masks with one-way valves (often a raised plastic disk about the size of a quarter, on the front or side of the mask) are not allowed under the [Face Covering Health Order](#) when you are around other people, as they can expose other people nearby to air you exhale and do not protect others from COVID-19. You can wear an N95 with a valve when you are alone at home or in your car, or if you are outside and nobody else is nearby. Wearing a cloth face covering or simple face mask over a respirator with a valve is acceptable.

### **What if I don't have access to a respirator?**

Stay indoors as much as possible, and follow the recommendations in the table above based on the [air quality index](#). If you need to go outside, wear an isolation or surgical mask if you have one, or a cloth face covering made up of multiple layers of fabric (you should not be able to see light shining through when the mask is held up to light).

### **Do KN95 masks protect against wildfire smoke?**

The effectiveness of different KN95 masks on the market has been variable when tested by the National Institute for Occupational Safety and Health. KN95s should provide at least the same level of protection as regular surgical masks. If used for wildfire smoke protection, KN95 respirators which have [FDA Emergency Use Authorization](#) are preferable.

### **What if I have a medical condition?**

Monitor [air quality](#) and follow the recommendations in the table above for sensitive groups. Consult your health care provider before wearing a respirator.

### **What can employers to do protect outdoor workers?**

Employers of outdoor workers should monitor the [air quality index](#) and make sure they are taking the required steps to comply with Cal/OSHA's [Protection from Wildfire Smoke standard](#).



## Resources

- San Francisco Department of Public Health (SFPDH)
  - [www.sfgdcp.org/covid19](http://www.sfgdcp.org/covid19)
- San Francisco Department of Emergency Management
  - [www.sf72.org/hazard/air-quality-covid-19](http://www.sf72.org/hazard/air-quality-covid-19)
- AirNow
  - [www.airnow.gov](http://www.airnow.gov)
- Bay Area Air Quality Management District
  - [www.baqmd.gov/about-air-quality/current-air-quality/air-monitoring-data/#/aqi?id=316&date=2020-08-25&view=hourly](http://www.baqmd.gov/about-air-quality/current-air-quality/air-monitoring-data/#/aqi?id=316&date=2020-08-25&view=hourly)
- California Air Resources Board
  - [ww2.arb.ca.gov/news/multimedia-release-carb-offers-guidance-protecting-yourself-exposure-smoke-wildfires](http://ww2.arb.ca.gov/news/multimedia-release-carb-offers-guidance-protecting-yourself-exposure-smoke-wildfires)
- California OSHA
  - [www.dir.ca.gov/title8/5141\\_1.html](http://www.dir.ca.gov/title8/5141_1.html)
- Centers for Disease Control and Prevention (CDC)
  - <https://blogs.cdc.gov/niosh-science-blog/2018/01/04/respirators-public-use/>