

Wildfire Smoke Protection

Poor air quality caused from wildfire smoke can have an impact on your health. It is important to know what the symptoms of wildfire smoke are and how to reduce exposure to wildfire smoke. Review this fact sheet for ways to keep yourself and others safe from wildfire smoke.

Check the Air Quality Index (AQI)

The air quality index (AQI) shows how polluted the air is. While there are many chemical compounds present in wildfire smoke, the principal harmful pollutant of concern for people not in close proximity to the wildfire is fine particulate matter with a diameter of 2.5 micrometers or smaller, known as “PM2.5”. These particles are smaller than a grain of sand and can enter the bloodstream through the lungs when they are breathed in. You can check the current AQI in your area at www.AirNow.gov. If you do not have access to the internet, ask your supervisor for the current AQI in your area.

AIR QUALITY INDEX - PARTICULATE MATTER	
301+	HAZARDOUS
201-300	VERY UNHEALTHY
151-200	UNHEALTHY
101-150	UNHEALTHY FOR SENSITIVE GROUPS
51-100	MODERATE
0-50	GOOD

Communication

During a wild fire smoke event, EH&S will make a campus wide announcement to communicate any impacts to campus operations. EH&S will be actively monitoring the air quality to track changing conditions and will provide updates accordingly.



Recognize Health Effects

It is important to recognize symptoms for wildfire smoke exposure. The short-term symptoms of wildfire smoke are fatigue, coughing, difficulty breathing, rapid heartbeat, burning eyes, runny nose, and chest pain. The long-term symptoms of wildfire smoke exposure are reduced lung function, chronic bronchitis, worsening of asthma, and heart failure. The people who are at the highest risk for the wildfire smoke symptoms previously mentioned are adults over 65, children, pregnant women, people with existing heart and lung conditions, and people with weakened immune systems.



Monitor Your Health

If you are feeling any ill effects from wildfire smoke contact your supervisor immediately.



Requirements

If you may be exposed to wildfire smoke and the AQI is 151 or higher, supervisors must provide AQI updates before and periodically during each shift; provide training on awareness of AQI and appropriate actions for employees to take during poor air quality incidents; and provide clean, NIOSH-approved respirators (such as N95s) for voluntary use. Contact your supervisor for questions about additional protections that may be available to you.



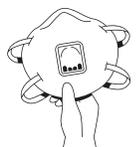
Protections

To reduce exposure to wildfire smoke, the following preventive controls may be implemented: relocating the work, changing the work schedule, lessening the work intensity, or providing additional rest breaks. During prolonged events, EH&S will work with FD&O to reduce outside air intake into buildings to reduce indoor air quality impacts.



Properly Select and Use Respiratory Protection

When the AQI level for PM2.5 is 151 or higher, FD&O will provide employees with respirators for voluntary use. If the AQI level exceeds 500, use of a properly fitting respirator is required for any critical outdoor work. Review the next page of this fact sheet for more information on how to wear an N95 respirator.



Wildfire Smoke Protection cont.

How to Use an N95 Respirator Properly

N95 masks are special face coverings with respirators that are designed to filter out particles before the air is breathed. The N95 means that it is certified to filter out 95% of particles 0.3 microns or larger when worn properly.



1. Wash your hands or use hand sanitizer.
2. Check the N95 for damage.
3. Put on the N95:
 - a. Hold the N95 in your hand with the nose piece bar (or foam) at your fingertips. If yours does not have a nose piece, use the text written on it to be sure the top end is at your fingertips.
 - b. Place the N95 under your chin with the nose piece bar at the top.
 - c. Pull the top strap over your head, placing it near the crown. Then, pull the bottom strap over and place it at the back of your neck, below your ears. Do not crisscross the straps. Make sure the straps lay flat and are not twisted.
 - d. Place your fingertips from both hands at the top of the nose piece. Press down on both sides of the nose piece to mold it to the shape of your nose.
4. Keep the N95 snug.
5. Remove the N95.
 - a. Remember to hold the straps, not the mask itself.
 - b. Don't forget to wash your hands or use hand sanitizer.

NOTE: Replace the N95 when the straps are stretched out and it no longer fits snugly against your face or when it becomes wet, dirty, or damaged. Throw it in the trash.

References

- California Air Resources Board: [Smoke Ready California](#)
- California Department of Industrial Relations: [Worker Protection from Wildfire Smoke](#)
- SJSU [Wildfire Smoke Event & Response Program](#)
- UC [Wildfire Smoke Protection Training Fact Sheet](#)
- CDC: [How to Use Your N95 Respirator Properly](#)