Wildfire smoke can create dangerous community air pollution that poses an immediate risk to health and life. Smoke is a dangerous mixture of pollutants—ozone, carbon monoxide, polycyclic aromatic compounds, and high concentrations of fine particles or particulate matter (PM2.5) that can be inhaled deep into the lungs.

Reducing your exposure and that of vulnerable community members—especially children, older adults and people with heart disease, asthma and immunocompromised conditions—is critical.

**Health effects of smoke**

Even healthy adults and children exposed to smoke may experience irritation and other hazardous symptoms; these individuals may recover quickly once the exposure subsides. Less fortunate are those at higher risk of severe complications, including:

- **Individuals with asthma, COPD and other respiratory diseases** who may have difficulty managing their conditions and have more frequent and at times life-threatening attacks;
- **Individuals with heart disease** who may experience shortness of breath, chest tightness, chest pain, palpitations and unusual fatigue;
• The elderly who may be especially sensitive to particulate pollution because their respiratory defense mechanisms decline with age;

• Pregnant women who may be at risk of giving birth to infants with low birth weight if their exposure to smoke is prolonged; and

• Children may be at higher risk. A California study of children exposed to wildfire smoke found that rates of significant respiratory symptoms increased as much as 300 percent after five days of continuous exposure to smoke. Even children with no history of asthma reported a high rate of symptoms.

Tips for protecting health and reducing smoke exposure at home

When wildfires create smoky conditions, there are things you can do—indoors and out—to reduce your exposure to smoke. Make a plan for your household to protect your health and reduce your exposure.

• Consider downloading the AirNow app, which provides up-to-date air quality measurements. Use that information to make decisions about when it’s safe to go outdoors or move around the community.

• Follow your healthcare provider’s advice about what to do if you have heart or lung disease.

• If you or household members have asthma, follow your asthma management plan.

• If anyone feels sick, call your health provider immediately.

• Stay inside with the doors and windows closed. Seal doors and windows as much as possible to keep smoke out.

• If you have air conditioning, use it with as little outside air as possible. Use high-efficiency filters in window or central AC units; these filters capture fine smoke particles. Ask an air-conditioning professional what type of high-efficiency filter your air conditioner can accept.

• Seek shelter elsewhere if you do not have an air conditioner and it is too warm to stay inside with the windows closed.

• Do not add to indoor air pollution. Avoid burning candles or using gas, propane, wood- burning stoves, fireplaces or aerosol sprays. Do not fry or broil meat, smoke tobacco products or vacuum. All of these can build up air pollution indoors and make conditions much worse.

• Use a portable air cleaner with an efficient filter (high-efficiency particulate air, or HEPA for short) to reduce indoor air pollution. Make sure it is sized for the room and that it does not make ozone, which is a harmful air pollutant. Portable air cleaners can maximize reduction of indoor particles when used alongside central air systems with efficient filters.

• When you can’t reduce smoke infiltration in the whole house, create a “clean room.” Choose a room that has no fireplace and as few windows and doors as possible, such as a bedroom. Install a HEPA air cleaner in the room.

• Have a supply of N95 respirators, and learn how to use them. Do not rely on dust masks or bandanas for protection from smoke. If you must be out in smoky conditions, an N95 respirator can protect you if it fits snugly to your face and is worn properly.

• Have enough food and medication on hand to last several days so you don’t have to go out for supplies. If you must go out, avoid the smokiest times of day.

• When air quality improves, even temporarily, air out your home to reduce indoor air pollution.

• If you can’t manage symptoms associated with smoke and have difficulty reducing outside air infiltration into your home, seek out a clean shelter in your area. Most counties have established these shelters and you should consider spending as many hours there as you can until symptoms subside.

Reduce smoke exposure outdoors

Know your air quality. Smoke levels can change a lot during the day, so wait until air quality is better before you are active outdoors. Check your state or local air quality agency’s website or airnow.gov for air quality forecasts and current air quality conditions. On AirNow, you can also sign up to get email notifications, download an air quality app, or check current fire conditions. In addition, some communities have visual range programs where you can assess smoke conditions by how far you can see.

Other strategies to keep you safe

When air quality is “unhealthy” or “very unhealthy,” avoid strenuous activities such as mowing the lawn or going for a run.

Reduce smoke in your vehicle by closing the windows and vents and running the air conditioner in recirculate mode. Slow down when you drive in smoky conditions.

And finally, have a plan to evacuate. Know how you will get alerts and health warnings, including air quality reports and public service announcements. Public advisories can provide important information such as changing smoke conditions and evacuation notices. Know your evacuation routes, organize your important items ahead of time, and know where to go in case you have to evacuate.

For more information contact the health and safety team at 4healthandsafety@aft.org