

# Smoke Management and Public Health

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What is the goal of Smoke Management?

The goal of smoke management is to protect public health by reducing smoke impacts in populated areas while protecting the vitality of California's forests, other wildlands, and farmland. California's Smoke Management Program is designed to coordinate agricultural and prescribed burning among air districts, federal, state and local agencies, and private parties.

Smoke Management Guidelines

The California Air Resources Board has adopted guidelines that provide for enhanced smoke management planning and improved communication in conducting agricultural and prescribed burning. The guidelines continue to allow burning as a resource management tool, while minimizing smoke impacts on the public.

## Smoke Impacts

Is smoke bad for my health?

Yes. Avoid it if possible. Healthy adults are not usually at a major risk, but people with heart or lung diseases, such as congestive heart disease, chronic obstructive pulmonary disease, emphysema or asthma, can be at risk. Children and the elderly also are more susceptible to the harmful effects of smoke.

One of the biggest dangers of smoke comes from inhalable particulate matter found in the air-liquid droplets and small solid particles of minerals and soot-which can penetrate deep into the lungs. In smoke, 80% of this particulate matter is smaller than 2.5 micrometers in diameter. The diameter of the average human hair is about 30 times bigger!

How can smoke affect me?

You may have symptoms similar to a cold or allergies, including a scratchy throat, cough, irritated sinuses, headaches, runny nose, and stinging eyes. People with lung diseases, such as asthma or bronchitis, may find it difficult to breathe, may cough, or feel short of breath. People with pre-existing heart disease may also be at risk.

***Please contact your doctor if you have any medical concerns.***

Are the effects of smoke permanent?

Healthy adults generally find that their symptoms (runny noses, coughing, etc.) subside after the smoke is gone. If your symptoms persist, contact your doctor.

Do air filters, dust masks, or scarves help?

No. Most indoor air filtration devices may not effectively reduce the levels of indoor particles in the short-term. **Do not** use an air cleaner that works by generating ozone; it will increase the air pollution in your home. Paper "comfort" or "nuisance" masks are designed to trap large dust particles, not the tiny particles found in smoke. Scarves, even wetted, are equally ineffective.

How can I protect myself?

The air district, working with the news media (radio, TV, internet) will report the U.S. Environmental Protection Agency's Air Quality Index (AQI) for particulate matter and other pollutants. This may assist you in determining your days' activities. As smoke gets worse, the AQI changes -- and so do guidelines for protecting yourself. If you are told to stay indoors, keep windows and doors closed. If possible, you may want to leave the area until the smoke clears.

What is in smoke?

Smoke is made up mostly of water vapor, gases such as carbon monoxide, carbon dioxide, and nitrogen oxides, volatile organic compounds (VOCs), air toxics, and small particles of minerals and soot.

How long will the smoke last?

Depending on the circumstances in your area, smoke may linger from a few minutes, days, weeks, or longer. This can be due to a variety of factors, including the number of fires in the area, fire behavior and size, the material being burned, local weather and terrain. Smoke can travel long distances; therefore, fires in other areas may affect smoke levels in your area.

Can I find out in advance if a burn is being planned?

Most prescribed burns must have an approved smoke management plan on file with the local air district. Many must also have an air district and/or fire agency permit. A permit does not mean a burn will be conducted; this depends on many factors, but is one step in getting permission. Contact the Yolo-Solano AQMD for more information at 530-757-3650 or 800-287-3650.

**Need More Information?**

**Air Resources Board (800) 952-5588**

**Smoke Management Program Website: [www.arb.ca.gov/smp/smp.htm](http://www.arb.ca.gov/smp/smp.htm)**