Smoke Management and Public Health

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 (see listing on next page), 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, please 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. Don’t 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 news media (radio, TV, internet) or the local air district in your area may 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. Your local air district can give you more information.

Need More Information?
Air Resources Board (800) 952-5588
Smoke Management Program Website:  www.arb.ca.gov/smp/smp.htm

Local Air Districts
If you are unsure which local air district you are in, you can either contact the Air Resources Board at the number above, or use the ARB Air District Look Up database at:
http://www.arb.ca.gov/app/dislookup/dislookup.htm

Amador County (209) 257-0112  Monterey Bay Unified (831) 647-9411
Antelope Valley (661) 723-8070  North Coast Unified (707) 443-3093
Bay Area (415) 771-6000  Northern Sierra (530) 274-9360
Butte County (530) 891-2882  Northern Sonoma County (707) 433-5911
Calaveras County (209) 754-6504  Placer County (530) 889-7130
Colusa County (530) 458-0590  Sacramento Metro (916) 874-4800
El Dorado County (530) 621-6662  San Diego County (858) 650-4700
Feather River (530) 634-7659  San Joaquin Valley (559) 230-6000
Glenn County (530) 934-6500  San Luis Obispo County (805) 781-4247
Great Basin Unified (760) 872-8211  Santa Barbara County (805) 961-8800
Imperial County (760) 482-4606  Shasta County (530) 225-5674
Kern County (661) 862-5250  Siskiyou County (530) 841-4029
Lake County (707) 263-7000  South Coast (909) 396-2000
Lassen County (530) 251-8110  Tehama County (530) 527-3717
Mariposa County (209) 966-2220  Tuolumne County (209) 533-5693
Mendocino County (707) 463-4354  Ventura County (805) 645-1400
Modoc County (530) 233-6419  Yolo-Solano (530) 757-3650
Mojave Desert (760) 245-1661