California Environmental Protection Agency
NEWS RELEASE
Air Resources Board

Release 08-58
FOR IMMEDIATE RELEASE
August 18, 2008

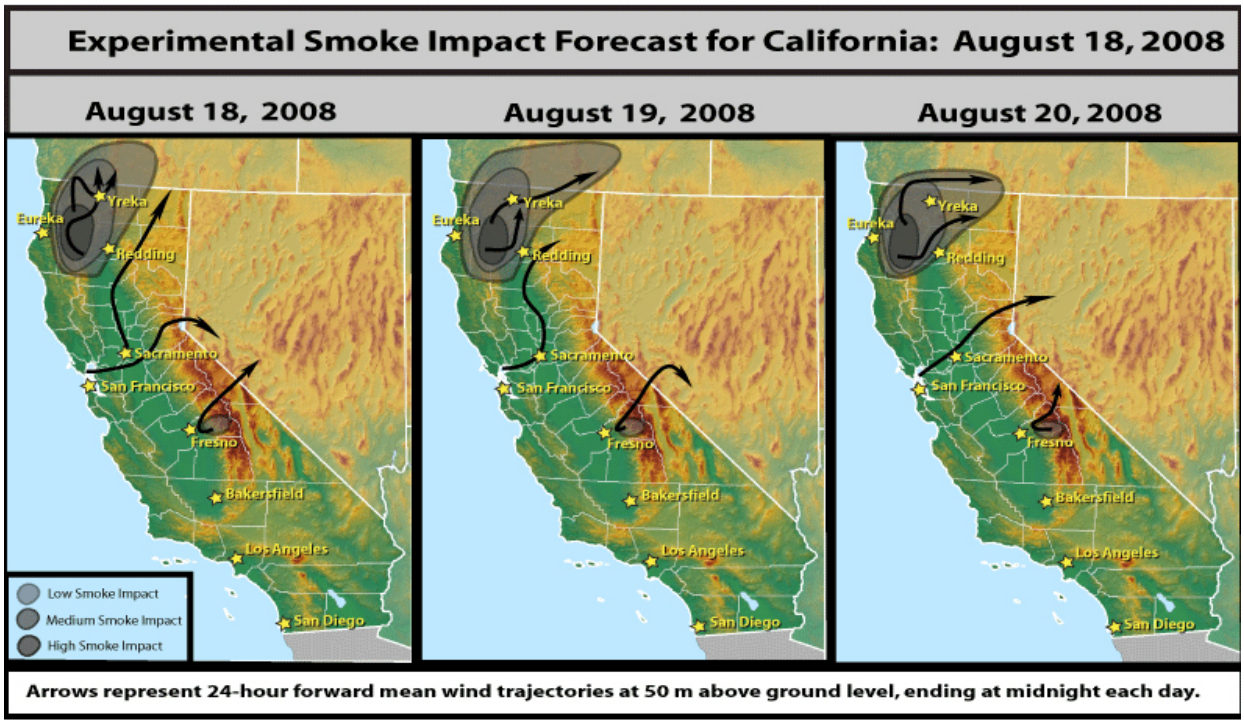
Dimitri Stanich
(916)322-2825
www.arb.ca.gov

Health advisory for Northern and Central California

Wildfires in Northwest California
Keep Air Quality Index in the Unhealthy to Very Unhealthy Range

SACRAMENTO -- Poor air quality continues to plague the northwestern counties of California as the wildfires create very unhealthy conditions. Parts of eastern Humboldt County and Trinity County have experienced unusually persistent smoky days this week. Governor Arnold Schwarzenegger declared a state of emergency (link) in Humboldt County on August 6, 2008, 'as a result of the numerous wildfires that have led to unprecedented smoke conditions and unhealthy air quality.' Residents are urged to take all necessary precautions to protect their health. The North Coast Unified Air Quality Management District has again issued health advisories for its local communities.

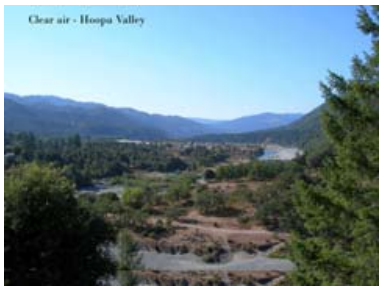
Particulate monitors are located in Orleans, Big Bar, Junction City, Ruth, Hayfork, Weaverville, Ft. Jones, Somes Bar, and Willow Creek. These serve as the basis for the health advisories.



The graphic above is a depiction of the breadth and relative concentration of the smoke plume forecast for a three-day period. It was generated by an experimental smoke model by the US Forest Service using known and projected aspects of fire behavior, terrain, and the weather. If you have any comments, questions, or suggestions about the model output, please contact Mr. Trent Proctor, of the USFS at 559-784-1500 x1114, or email him at tprocter@fs.fed.us.

The Air Resources Board and numerous local air quality agencies in Northern California recommend individuals in areas with 'Unhealthy' air quality indexes suspend outdoor activities. For information on air quality in your area go to www.Airnow.gov and use the drop down menu to select California, or go to the North Coast Unified AQMD web site at www.ncuaqmd.org.

The following pictures, from different vantage points, were provided by the North Coast district of the Hoopa Valley earlier this month and demonstrate how visibility can help determine the health category at the moment.



An individual can approximate air quality levels by using simple visibility measurements from weather reports and airport visibility observations. With that information, air quality is classified as *Moderate* if visibility is 6-9 miles , 'Unhealthy for Sensitive Groups' at 3-5 miles, 'Unhealthy' at 1.5 to almost three miles, 'Very Unhealthy' between 1 and 1.5 miles and 'Hazardous' when visibility is less than a mile. A person can also make a estimate of his or her own by estimating the distance to a known object. To do that, be sure you have the sun at your back and use an object at a known distance from your position (Internet mapping programs such as Google or Yahoo Maps can be very helpful).

Air quality and health officials are urging the public to stay informed about regional air pollution levels through local media and air pollution control district web pages, and take the following actions when the air is unhealthy:

- Stay indoors with windows and doors closed. Run window air-conditioners on the "re-circulate" setting, if available;
- Most residential central air conditioning systems re-circulate the air inside the home, so these can be operated normally; however, a small percentage of newer homes have mechanical ventilation systems that actively bring in outdoor air, and these should be turned off or set to a "re-circulate" mode, if available. Do not run swamp coolers or whole house fans;
- Minimize or stop outdoor activities, especially exercise, during smoky conditions; and,
- People in a "high risk" group or those who cannot find adequate shelter from the smoke need to move to an emergency shelter.

If you must be outside in a smoky area, healthy individuals may wish to wear a mask called a "particulate respirator." These resemble common dust masks but are substantially more effective at removing the airborne small particles produced from fires. Choose one that has two straps and has NIOSH, and either N95 or P100 printed on it and follow the manufacturer's instructions carefully. For more information on N-95 or P100 go to the California Department of Public Health web page here.

It is harder to breathe with these masks on so check with your doctor before using one if you have heart or lung disease, and take frequent rests if you must work. Do not use bandanas (wet or dry), paper masks, or tissues held over the mouth and nose as these are ineffective and will not protect your lungs from wildfire smoke. N-95 or P-100 respirators work best when sealed closely to the face. Beards defeat the needed seal.

The most effective way to reduce exposure and avoid the ill effects of smoke is to stay indoors. Eliminate outdoor activities while air quality is in the unhealthy range. Exposure and the ensuing health effects are dependent on the amount of time spent outside, level of exertion, and air quality. Effects can be as mild as irritation of eye, nose and throat; and headache; or as serious as triggered asthma episodes or stresses on weakened cardiovascular systems.

Children and older individuals should be especially careful when the threat of exposure is high. Those with pre-existing heart and lung problems should consider curtailing activities at the AQI level of Unhealthy for Sensitive Groups. Even healthy people may experience some symptoms in smoky conditions.

It is especially important for people with respiratory or heart disease monitor their health. If their symptoms worsen they should immediately consult with their health care providers. Individuals with moderate or severe heart or respiratory disease should consider alternatives and stay away from areas with high smoke concentrations. Such individuals should evaluate whether evacuation might actually cause greater exposure than staying at home using other precautions described above if smoke is already present in substantial quantities.

Additionally, small pets can also be impacted by unhealthy air and should be brought indoors if possible.

Making the decision to cancel or reschedule active outdoor events is difficult, but when smoke levels reach unhealthy levels coupled with very high temperatures, the prudent decision is to protect yours and the health of others.

Public officials may take the precautions of closing schools and businesses, canceling public events and calling for evacuation. If you are evacuated, make sure to drive with the windows rolled up and the air conditioner set to re-circulate.

For current information about local smoke conditions, find your local air quality management group here.

For current and forecast particulate matter AQI information click here.

More information on how to protect yourself is available here.

For a guide for public officials on wildfire smoke go here.

_____

Below are photos of filters used to in monitors that measure particulate matter in the air. The samples ran for about one day. The white filter is a blank unexposed filter. The brown one is from Willits and the blackest one is from Ukiah. The Ukiah sample would be labeled 'Very Unhealthy.' Images courtesy of Mendocino County Air Pollution Control District. You can see their webpage here: http://www.co.mendocino.ca.us/aqmd/index.htm .

The Air Resources Board is a department of the California Environmental Protection Agency. ARB's mission is to promote and protect public health, welfare, and ecological resources through effective reduction of air pollutants while recognizing and considering effects on the economy. The ARB oversees all air pollution control efforts in California to attain and maintain health based air quality standards.

# # # # #