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A JOINT AIR QUALITY AND PUBLIC HEALTH OFFICER
Media Advisory

Health Recommendations to Reduce the Impact from Wildfire Smoke

The Butte County Air Quality Management District and the Butte County Department of Public Health are providing this advisory with more information on ways the public can reduce the health impacts of wildfire smoke.

Health Effects of Smoke

Smoke is made up of a complex mixture of gases and fine particles produced when wood and other organic matter burn. The biggest health threat from smoke comes from fine particles. These microscopic particles can get into your eyes and respiratory system, where they can cause health problems such as burning eyes, runny nose, and illnesses such as bronchitis. Fine particles also can aggravate chronic heart and lung diseases – and even are linked to premature deaths in people with these conditions. If you have heart or lung disease, such as congestive heart failure, angina, chronic obstructive pulmonary disease, emphysema or asthma, you may experience health effects earlier and at lower smoke levels than healthy people.

Older adults are more likely to be affected by smoke, possibly because they are more likely to have heart or lung diseases than younger people. Children also are more susceptible to smoke for several reasons: their respiratory systems are still developing; they breathe more air (and air pollution) per pound of body weight than adults; and they're more likely to be active outdoors. (Information provided by U.S. EPA)

How to reduce the impact of smoke on your health

Stay indoors

- Indoor levels of smoke in a well sealed home can usually reduce exposure to outdoor air pollution by about a third.
- Even a poorly sealed home may have levels 1/3 less than those in outdoor air.

- If you have air conditioning run it on recirculation mode (do not draw in outside air).
- It may also help to run your heater on “fan only” mode which will allow the filter to help clean the air.
- All People should drink plenty of fluids; people who must spend time outdoors should drink even more.

Reduce Activity

- Outdoor exercise is strongly not recommended during periods of smoky conditions.
- Reducing physical activity, even indoors, is an effective way to reduce health impacts. While exercising people can breath as much as 10-20 times more then a “resting level.”

Reduce other sources of pollution in your home

- Cooking, smoking, vacuuming, wood stoves and other activities can generate additional air pollution inside your home – try to minimize or eliminate the use of these devices until the air pollution levels are reduced.

Room Air Cleaners

- Room air cleaners can be effective; however some models generate ozone which can actually negatively impact indoor air quality. Also, ozone air cleaners will not remove particle pollution. Do not use models that emit Ozone.
- Look for HEPA models with the highest CADR (clean air delivery rate).
- A room air cleaner will not help clean you entire house – but it can help create a “clean space,” for sleeping, resting and recovering.

Humidifiers

- Humidifiers will not significantly reduce air pollution, but they may reduce eye and nose irritation.

Inside your car

- Operate your car’s air conditioning in recirculation mode (sometimes called “Max A/C”). This will reduce the pollution levels inside your car. If it gets too cold regulate the temperature to a warmer setting, but leave the A/C in recirculation mode.
- If you must work outside use your car as a “clean air shelter” to take breaks from the smoke (normally we ask you don’t idle your car, but in this case it is okay).

Masks

- It is best not to be outside during periods of unhealthy air quality – If you must be outside you can use a mask rated N-95 or higher. (P-95 or R-95 is acceptable).
- Standard paper dust masks are not effective in reducing smoke particles. To be effective you must use a mask rated N-95 or Higher. (P-95 or R-95 is acceptable).
- Masks can cause stress on unhealthy individuals because they make breathing harder – check with your doctor to make sure you are healthy enough to wear respiratory protection.

- Masks must be air tight and properly fitted to work – please always read the instructions that came with the mask. The mask must seal correctly on your face. Those with facial hair are unlikely to get a good seal.

Safe Cleanup of Fire Ash

Wildfires can deposit large amounts of ash on indoor and outdoor surfaces. Ash deposited by forest fires is relatively nontoxic and similar to ash that might be found in fireplaces. If ash is inhaled, it can be irritating to the nose and throat and may cause coughing. Exposure to ash in air might trigger breathing difficulties or attacks in people who have asthma. To avoid possible health problems from contact with ash, the following measures are recommended:

- Do not use leaf blowers; gentle sweeping of indoor and outdoor surfaces followed by wet mopping is the best procedure for removing ash in most cases. A damp cloth or wet mop may be all that is needed.
- Do not allow children or pets to work in, clean up, or play in the ash.
- Wash ash off toys before children play with them.
- Clean ash off house pets.
- Wear gloves, long-sleeved shirts, and long pants and avoid skin contact.
- If you do get ash on your skin, wash it off as soon as possible.
- If you have a vegetable garden or fruit trees, wash the fruit or vegetables thoroughly before eating them.
- Avoid getting ash into the air as much as possible. Do not use leaf blowers or take other actions that will put ash into the air.
- Shop vacuums and other common vacuum cleaners do not filter out small ash particles, but instead blow such particles out the exhaust into the air where they can be breathed. Therefore, using shop vacuums and other non-HEPA (high efficiency particulate arresting) filter vacuums is not recommended for cleaning up ash. HEPA filter vacuums can be used, if available.
- A disposable particulate respirator (also commonly referred to as a “mask”) rated P-95 or N95 that forms a close seal on your face will provide some protection against inhaling ash and other dusts.
- If respirators are not available, simple dust masks or other face coverings will help keep grit and dust out of your mouth and nose, but will not protect your lungs.
- People with heart or lung disease should consult their physician(s) before using a respirator during post-fire cleanup.

This information will be updated as necessary and posted to the District Web site as available at www.bcagmd.org. The District office number during regular business hours is **891-2882 or 888-891-2882**. For questions regarding health concerns relative to the smoke from the wildfires, please contact your personal health care provider or Butte County Public Health Department at **538-7581** or visit their Web site at www.buttecounty.net/publichealth.