



## **Frequently Asked Questions Regarding Health and Wildfires**

**June 2011**

### **What is the health threat from wildfire smoke?**

Smoke from wildfires is a mixture of gases and fine particles from burning trees and other plant materials. Smoke can hurt your eyes, irritate your respiratory system and worsen chronic heart and lung diseases. Fortunately, most persons who are exposed to thick smoke will not have health problems. How much and how long you are exposed to the smoke, as well as your age and degree of susceptibility play a role in determining whether or not someone will experience smoke-related problems. If you are experiencing serious medical problems for any reason, seek medical treatment immediately.

### **How can I tell if the smoke is affecting my family or me?**

- Smoke can cause coughing, scratchy throat, irritated sinuses, shortness of breath, chest pain, headaches, stinging eyes and runny nose
- If you have heart or lung disease, smoke might make your symptoms worse
- People who have heart disease might experience chest pain, rapid heartbeat, shortness of breath and fatigue
- Smoke may worsen symptoms for people who have pre-existing respiratory conditions, such as respiratory allergies, asthma and chronic obstructive pulmonary disease (COPD) in the following ways:
  - Inability to breathe normally
  - Cough with or without mucus
  - Chest discomfort
  - Wheezing and shortness of breath
- When smoke levels are high enough, even healthy people may experience some of these symptoms

### **How can I protect myself and my family from the harmful effects of smoke?**

Limit your exposure to the smoke by:

- Staying indoors whenever possible
- Using air conditioners (air conditioned homes usually have lower air exchange rates than homes that use open windows for ventilation)
- Using mechanical air cleaners
- Keeping windows closed while driving in a vehicle
- Doing less strenuous physical activity (fast walking rather than jogging)
- Minimizing other sources of air pollution (smoking tobacco, using wood burning stoves, burning candles or incense and vacuuming)



### **Will I suffocate in my house?**

No. The most common call for evacuation during a wildfire is due to the direct threat of the fire, not smoke. Leaving the area of thick smoke may be an option for those who are sensitive to smoke. However, it is often difficult to predict the duration, intensity and direction of smoke, making this an unattractive choice to many people.

During severe smoke events, local clean air shelters may be designated to provide residents with a cool place to get out of the smoke, or individuals may choose to visit these locations on their own. These places may include large commercial buildings, educational facilities, shopping malls, movie theaters or any place with effective air conditioning and particle filtration.

### **Should I wear a mask or N95 respirator?**

The Department of Health does not recommend the wearing of any masks or respirators at this time.

### **Will a wet towel or bandana provide any help?**

The Department of Health does not recommend using wet towels or bandanas. Since wet towels or bandanas may not be sealed to the face and their capacity to filter very small particles is unknown, they will likely provide little to no protection. They are also not certified as effective respirators by National Institute for Occupational Safety and Health (NIOSH).

### **What should I do if I must drive to work?**

Individuals can reduce the amount of smoke particles in their vehicles by keeping the windows closed. The car's ventilation systems typically remove a portion of the particle coming in from outside. For best results, individuals may want to use the recirculate air feature found in most cars, which will help keep the particulate levels lower.

### **Our community has an outdoor game scheduled for this evening. Should we cancel it?**

All persons in areas affected by the wildfire smoke are being advised to limit outdoor activity and stay indoors whenever possible to minimize exposure to the smoke. Contact your local emergency management officials for more guidance.

### **Do air-purifying machines help remove smoke particles inside buildings?**

Some air cleaners may be effective at reducing indoor particle levels, but most are not effective at removing gases and odors and also tend to be expensive. Some devices, known as ozone generators, personal ozone devices, "energized oxygen," "triatomic oxygen," "activated oxygen" and "pure air" generators are sold as air cleaners, but they are not recommended for use in occupied buildings. Ozone does not remove particles from the air and would not be effective during smoke events. Ozone itself is toxic and a regulated outside air pollutant. We advise the public to avoid exposure to ozone indoors by not using air cleaners that produce ozone. For additional information, review the U.S. Environmental Protection Agency document: "Ozone Generators That Are Sold As Air Cleaners" at [www.epa.gov/iaq/pubs/ozonegen.html](http://www.epa.gov/iaq/pubs/ozonegen.html). Also, humidifiers or de-humidifiers are not technically air cleaners and will not significantly reduce the amount of particles in the air during a smoke event.

### **What should I do about closing up my house when it is so hot in there?**

If you do not have an air conditioner and if it is too warm to stay inside with the windows closed, seek alternative shelter.

### **If I have respiratory problems and can't reach my doctor, where should I go?**

If you have a medical emergency, you should call 911 or go the hospital emergency room immediately.

### **What do I bring if I'm told to evacuate my home?**

If asked to evacuate your home, be sure to bring your important family documents (birth certificates, wills, insurance policies), valuables and your family disaster supply kit. Your disaster supply kit should contain enough food, water and supplies to sustain your family for at least three days. Do not forget any medications or special items such as a first aid kit. For additional information on how to prepare your family for disasters, review the "Family Preparedness Guide" at [www.doh.state.fl.us/rw\\_webmaster/prepareenglish06.pdf](http://www.doh.state.fl.us/rw_webmaster/prepareenglish06.pdf). It is extremely important for families to create their own disaster plan before a disaster strikes so they are quickly able to determine what valuables they may want to bring, what items need to be stored and how to preserve keepsakes.

### **I operate a nonresidential building with outside air intakes. Should I close the outside air intakes during a wildfire smoke event?**

Every nonresidential building has a uniquely designed ventilation system, where even temporary changes can have an impact on building occupants and indoor air quality. We recommend you consult with a heating, ventilation and air-conditioning professional for guidance on this issue.

### **Where can I find information about the air quality in the area I live?**

The Florida Department of Environmental Protection provides updated information on outdoor air quality in Florida at <http://www.floridadep.org/air/airquality.htm>.

### **As an employee or volunteer, I am working in an area where I am exposed to wildfire smoke. What type of respiratory protection should I use?**

Consult with your employer or the agency with which you are volunteering. The U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) requires all employers to establish respiratory protection programs for their employees to use when it is deemed necessary.

For additional information about respiratory protection standards, visit [www.osha.gov/SLTC/respiratoryprotection/index.html](http://www.osha.gov/SLTC/respiratoryprotection/index.html) or call OSHA at 1-800-321-OSHA or the National Institute for Occupational Safety & Health (NIOSH) at 1-800-35-NIOSH.

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