



FACT SHEET APRIL 19, 2007

ADAPTED FOR RAVALLI COUNTY MONTANA SEPTEMBER 12, 2012

Wildfires

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.

Factor affecting your exposure rate include:

- General health
- Hours of outdoor activity
- Graphic proximity to the smoke
- Quality of indoor air filtration

How to tell if smoke is affecting you

Smoke can cause—

- Coughing
- A scratchy throat
- Irritated sinuses
- Shortness of breath
- Chest pain
- Headaches
- Stinging eyes
- A runny nose
- Asthma exacerbations
- General tired feeling

If you have heart or lung disease, smoke might make your symptoms worse. People who have heart disease might experience—

- Chest pain
- Shortness of breath
- Rapid heartbeat
- 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
- Chest discomfort
- Cough with or without mucus
- Wheezing and shortness of breath

Even healthy people may experience some of these symptoms when smoke levels are high enough.

Forest fires release particulates and toxins, to include: carbon dioxide, sulfur dioxide, formaldehyde, acetaldehyde, benzene, toluene and other toxins into the air.

Cumulative effects of prolonged exposure

- Decreased lung function
- Cardiovascular disease
- Respiratory health effects
- Higher frequency of wheezing in children under 5

Know whether you are at risk

If you have heart or lung disease, such as congestive heart failure, angina, COPD, emphysema, or asthma, you are at higher risk of having health problems 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 are more likely to be affected by health threats from smoke because their airways are still developing and because they breathe more air per pound of body weight than adults. Children also are more likely to be active outdoors.

Protect yourself

Prolonged exposure to smoke has a cumulative effect. The best protection is to limit your exposure to smoke. The following are ways to protect your health:

Pay attention to local air quality reports. Listen and watch for news or health warnings about smoke. Check the county web site at www.rc.mt.gov/environmental. Hourly conditions, cumulative exposure and archived information is available at the Montana State "Current Health Effects Category by Community" site at <http://todaysair.mt.gov/AirDataMap.aspx>. Also pay attention to public health messages about taking additional safety measures.

Refer to visibility guides. There is one monitor at the Ravalli County Courthouse that measures the amount of particles that are in the air. Refer to the guidelines provided by Ravalli County Environmental Health to help estimate the AQI based on how far they can see.

If you are advised to stay indoors, keep indoor air as clean as possible. Keep windows and doors closed unless it is extremely hot outside. Run an air conditioner if you have one, but keep the fresh-air intake closed and the filter clean to prevent outdoor smoke from getting inside. If you do not have an air conditioner and it is too warm to stay inside with the windows closed, seek shelter elsewhere.

Do not add to indoor pollution. When smoke levels are high, do not use anything that burns, such as candles, fireplaces, or gas stoves. Do not vacuum, because vacuuming stirs up particles already inside your home. Do not smoke, because smoking puts even more pollution into the air.

Follow your doctor's advice about medicines and about your respiratory management plan if you have asthma or another lung disease, Call your doctor if your symptoms worsen.

Do not rely on dust masks for protection. Paper "comfort" or "dust" masks commonly found at hardware stores are designed to trap large particles, such as sawdust. These masks will not protect your lungs from smoke. An "N95" mask, *properly worn*, will offer some protection. However, these respirators only protect against particulate in the air. They *do not* protect against chemicals, gases or vapors, and are intended only for low hazard levels. There may be too much unseen particulate for this respirator to provide adequate protection.



Evacuate the area until the AQI is at a safer level. The best way to protect your health is to not be where the smoke is. Stay with friends or family not impacted by smoke until the health risk has passed.