# Wildfire Smoke Exposure

# Definition

- Wildfire smoke exposure, mainly from forest fires
- The most common symptoms are coughing, a congested nose and watery eyes

# Health Information

## Wildfires And Smoky Air

- Wildfires include uncontrolled fires in forests, brush, grass, or peat.
- During wildfire season, the air can be smoky for weeks.
- Winds can carry the smoke and ash hundreds of miles.
- Smoke from burning trees or plants can cause coughing (irritant-related cough). Also can cause a congested nose and watery eyes.
- Treatment: trying to stay indoors and running an air cleaner can help.
- Children with asthma can have prolonged asthma attacks.
- Wildfire smoke does not contain anything toxic.

# Care Advice

- 1. Overview:
  - Smoke from wildfires contains particles that can irritate the eyes, nose, throat and lungs.
  - Symptoms can be mild (watery eyes, congested nose, scratchy throat or coughing). Symptoms can sometimes be more severe (trouble breathing, chest tightness or wheezing).
  - Healthy people can start having symptoms if the smoke is bad enough.
  - Most often, symptoms go away quickly once the air has cleared.
  - Here is some care advice that can help.

### 2. High-Risk Patients for Symptoms from Smoke Exposure:

• While unpleasant to many healthy people, wildfire soot and ash can be extra irritating to some people. These high-risk people may need to take extra precautions. The factors below put someone at higher risk:

• Age under 7 years. Young children breathe in more air per pound of body weight. Also, their lungs are still developing.

- Pregnant women and older people (Their lung function not as good as when younger)
- Lung or heart disease
- Respiratory infections such as colds, flu, pneumonia
- Seasonal allergies. Pollen counts are made worse by the smoke.

## 3. Check the Risk Level of Your Air Quality:

• Check your local air quality index. It's usually available as part of your weather report or on your weather app. It is also posted by local public health departments.

- The reading is assigned a number from 0 to 500.
- 0-100 is safe.
- 101-200 can cause symptoms in sensitive people.
- 201-300 can cause symptoms in everyone.
- 301-500 is hazardous to your health. Try to stay indoors. Close your house to outdoor air.

# 4. Stay Indoors:

• Stay indoors. Close the windows and doors.

• Fans, swamp coolers, or window air-conditioning units can help keep air inside the home bearable.

• If it's filtered, run the central air conditioning. You can also run the fan feature on your home heating system (with the heat turned off). You can also use a swamp cooler. Keep the outdoor air intake closed and be sure the filter is clean.

- Filtered air has less smoke than the air outdoors.
- Caution: Running these if they are not filtered can make indoor smoke worse.

#### 5. Use an Air Purifier:

• HEPA filters (High Efficiency Particulate Air filters) are helpful for people who have airborne pollen allergies. They are used in room-air purifiers and vacuum cleaners. They also may be helpful to reduce smoke particles.

• Avoid activities that put more particles into the indoor air. Examples are cigarette smoking, candles and vacuuming.

#### 6. Decrease Exercise:

- Reduce physical activity levels.
- Avoid exercise in smoky air.
- Once indoors, change your clothes if you have been outside for a long period of time.

#### 7. Relocate if Needed (Especially For High-Risk Patients):

• Moving away from the fire area may be helpful for healthy people if the smoke reaches very unhealthy levels. Some people have access to a clean air shelter.

• Those with heart or lung disease might consider staying with someone who lives away from the smoke during the fires.

• Keep enough prescription medicines (more than 5 days). Make sure you bring them with you should you have to move for a while.

• Also, people with asthma should have a written asthma action care plan. If you don't, request one from your doctor. Start rescue medicines at the first sign of any coughing. Be sure to call back if this medicine is needed more than every 4 hours or if symptoms become worse. Also see the asthma handout.

### 8. For Treating Coughs, See the Cough Handout:

• If coughing lasts, also see the Cough handout for your age child.

# Call Your Doctor If

- Trouble breathing occurs
- Wheezing occurs
- Your child becomes worse
- You think your child needs to be seen

### **Pediatric Care Advice**

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