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## **2014 9.02 Health Matters Remedies for Smoke Inhalation**

This is Health Matters, with some tips on how to minimize the impact of inhaling wildfire smoke.

Wildfire smoke is a soup of irritants. Consider some of its ingredients: resins from pine, manzanita and oak trees, silicates from dried grasses, volatile and highly irritating oils from poison oak and English ivy, and most likely it contains toxins from plastic debris, old tires, and other trash.

Wildfire smoke impacts the respiratory system and the eyes. When you're exposed the first reaction may be a sore or irritated throat. You may have itchy or burning eyes, or feel short of breath, or find it difficult or painful to breathe. People with pre-existing conditions like asthma, allergies lung disease, emphysema or sinusitis are especially affected, but even healthy people can experience discomfort from inhaling high levels of smoke.

Staying inside and keeping indoor air as clean as possible is the single best solution, but most of us have to go outside at some point. When you do go outside, it's a good idea to remove your clothes and wash them when you return, otherwise you'll soon be breathing in particles attached to your clothing. Another tip for when you go outside is blowing your nose. You want to keep the nose clear. The cilia and the sticky mucus lining the nose trap smoke particles and move them down to the throat. The nose is Nature's filter and conveyer system.

Cilia are hair-like tubules that line the entire respiratory tract from the nose to the lungs. When the density of particles is too much for the nose to handle, they land in the lower respiratory tract. The cilia there move the particles up to the throat. You can see why throat irritation is often the first symptom of smoke inhalation. The throat is receiving irritants from the nose and the lungs.

Once smoke particles accumulate in the lungs, the lining of the lung can become inflamed. This restricts breathing capacity. Irritants in the smoke also increase mucus production and secretion in the lungs. The extra mucus is a mixed blessing. It traps particles, but at the same time it hinders the filtering action of the cilia lining the respiratory passageway.

The mucus reaction to irritants isn't limited to wildfire smoke. It happens with cigarette smoking as well and is, in fact, a major damage smokers face. Tar from tobacco prevents the cilia from filtering and sweeping away irritants, causing long-term inflammation. When wildfire smoke is in the air, it's time to step up your intake of foods that help to detoxify the body; mainly an abundance of fresh fruits and vegetables. Not only do fruits and vegetables detoxify, they facilitate the elimination of harmful irritants and help to rebuild damaged tissue. Lemon water, for example, helps break up phlegm, so do radishes, and of course water. It's important to drink lots of water; up to eight glasses a day for adults. Also, Vitamin A strengthens the mucous lining of the lungs.

When the lungs need to expel irritants, coughing is a healthy response. But when coughing is prolonged, or painful, or shallow, the inflammation can become damaging. Herbs and over-the-counter cough syrups may help. Ginger tea is surprisingly effective; as is Peppermint tea. The old standby Vicks-on-the-chest works too.

Red, itchy, teary or painful eyes are another side effect of heavy wildfire smoke. You can use a commercial eyewash, but plain water works too. Clean cold water compresses applied directly over the eyes will cool and clear them, so will fresh cucumber slices. If you haven't tried cucumber, consider it. Apply 1/4 inch slices directly to each eye. Whatever you use, the best relief comes when you leave the compress on for at least 20 minutes. If the smoke causes a sore or hoarse throat, treat it as you would a cold. Gargle with salt water; one to two teaspoons of salt mixed with a teaspoon of baking soda.

These home remedies are helpful for people who do not have pre-existing conditions. For those who do, keep a look-out for hoarseness, painful breathing, labored breathing, or an overload of phlegm. These signs of respiratory distress mean it's time to see your doctor.

## **Sources and Links**

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*<http://www.betterhomeopathics.com/2008/07/11/more-about-wildfire-smoke-inhalation/>*

*[http://www.anniesremedy.com/chart\\_remedy\\_cough.php](http://www.anniesremedy.com/chart_remedy_cough.php)*