



Lewis County Public Health & Social Services

Health Beat

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Wildfire Smoke and Your Health

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Breathing in smoke is bad for you, whether that smoke comes from cigarettes, wood stoves, or a burn pile in the back yard. In the heat of the Washington summer, however, there are also health impacts from smoke related to wildfires. According to news reports, 2017 was a record-breaking year for wildfires in Washington State. It's important to understand that while research efforts to better understand specific health impacts are underway, much is still not fully understood. It is clear, however, that the fine particles and toxins in wood smoke cause health problems for a wide variety of people.

According to the Washington State Department of Health, wildfire smoke is a mix of gases and fine particles from burning vegetation, building materials, and other materials. Wildfire smoke can make anyone sick. Even someone who is healthy can get sick if there is enough smoke in the air. Breathing in smoke can have immediate health effects, including:

- Coughing
- Trouble breathing normally
- Wheezing and shortness of breath
- Asthma attack
- Chest pain
- Fast heartbeat
- Stinging eyes
- Scratchy throat

- Runny nose
- Irritated sinuses
- Headaches
- Tiredness

Research on the impact of wildfires on public health has been increasing, and the past year of wildfires has provided lots of data to look at. See this story from NPR on the wildfires in Montana, for example. <https://www.npr.org/sections/health-shots/2018/02/24/583950017/montana-wildfires-provide-a-wealth-of-data-on-health-effects-of-smoke-exposure>

While Lewis County didn't go through the intense smokiness last year that some places did, we have had years where prevailing wind shifts can bring eastern Washington fire smoke into our region. In addition, we are seeing a rise in the number and size of wildfires here in Western Washington, including one last year just a few miles north of us that crossed over six lanes of Interstate 5.

Whether the smoke source is far or near, there can be health impacts from bad air quality, especially for people who are at higher risk, such as:

- People with heart or lung disease, including asthma or COPD
- Older adults
- Children, including teenagers
- Pregnant women

If you fall into one of these higher risk categories, talk with your healthcare provider and have a plan, as well as an extra supply of medications, such as inhalers, if you have a pre-existing health condition.

There are additional steps you can take to help protect yourself from the impacts of wildfire smoke. Start by keep track of our local air quality at https://www.airnow.gov/index.cfm?action=airnow.local_city&zipcode=98532&submit=Go or go to <http://www.WAsmoke.blogspot.com> to track wildfire smoke in the state.

Be sensible about your outdoor activities during a fire event, especially if you are a person with higher risk factors. If it looks or smells smoky, stay indoors, and keep kids in, until the air quality improves. If you don't have air conditioning, indoor spaces can get dangerously hot in the summer. If this is the case for you, look for an alternative place to stay, such as with another family member, or somewhere with air conditioning.

Air filters are available that can help keep particle levels lower inside. The Environmental Protection Agency has a guide to home air cleaners at <https://www.epa.gov/indoor-air-quality->

[iaq/guide-air-cleaners-home](#). If you do choose to purchase an indoor air filter, avoid those that “generate ozone” as they can actually increase the air pollution in your home.

Wearing a mask can help, but if you already have respiratory difficulties, you should talk to your doctor or healthcare provider before using a mask as the mask can have negative effects on some people.

If you are medically able to wear a mask, it should be an “N95” mask. Most paper masks that you can buy at the local hardware store are good at trapping large particles, such as sawdust, but not the fine particles in smoke. An “N95” mask, properly worn, will offer some protection. If you decide to keep a mask on hand, see the Respirator Fact Sheet provided by the National Institute for Occupational Safety and Health at <https://www.cdc.gov/niosh/docs/2003-144/>.

Another good thing to do to help you stay informed is to sign up for Lewis County Alert through the Lewis County Emergency Management Department. You can learn more here: <https://lewiscountywa.gov/emergency-management/lewis-county-alert>

Bad air quality due to wildfire smoke is uncomfortable for most people. For those with health issues, it can be dangerous. It’s always good when preparing for the unknown to hope for the best, and plan for the worst. Fire season is already upon us, and the time is right to make sure you can maintain your health and the health of your family during a wildfire smoke event. For more expert information on how smoke can affect you and how to best protect yourself go to <https://airnow.gov/index.cfm?action=smoke.index>

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