



March 14, 2018

**Updated 3/23/2018*

NE Portland Scrap Yard Fire FAQ

What kinds of chemicals are in the smoke?

Smoke is a mixture of gases and fine particles (particulate matter or PM). Smoke from burning tires may contain cyanide, carbon monoxide, sulfur dioxide, and other dangerous chemicals. “Black smoke” fires from manmade sources such as auto salvage yards or tires can have larger amounts of particulate matter and toxic chemicals. Black smoke can contain many different chemicals, including asbestos, aldehydes, acid gases, sulfur dioxide, nitrogen oxides, polycyclic aromatic hydrocarbons (PAHs), benzene, toluene, styrene, metals and dioxins. Each tire is the equivalent of burning 2 gallons of oil.

What are the health effects of those chemicals?

It can harm people’s eyes, irritate their respiratory system, and worsen chronic heart and lung diseases.

Particulate matter (also called “PM”) is the biggest risk to the public’s health. The potential health effects vary based on the type of substances burning, atmospheric conditions and, most importantly, the size of the particles. These sort of fires can be particularly irritating because the smoke can contain large amounts of sulfur dioxide. Sulfur dioxide can irritate a person’s lungs at low concentrations.

The acute health effects that result from exposure to these types of fires include eye, nose and throat irritation, exacerbation of asthma and respiratory conditions and potential exacerbation of pre-existing heart disease. The most serious health impacts from exposure to tire fire smoke appears to be effects on those with preexisting cardiovascular disease or respiratory conditions such as asthma.

What should I do when I return home to make my house safe?

Watch and listen to announcements from officials about clean up. Guidance may change based on what they learn about the fire.

If you see ash or a layer of dust, keep children away until it has been cleaned. Avoid activities that could stir up ash and make it airborne again, like dry sweeping or using a leaf blower.

It is okay to clean up any visible ash or soot on your own as long as you follow some simple safety precautions. Protect yourself when cleaning up ash or dust from the fire by using rubber gloves. Use a vacuum with a high efficiency HEPA filter or a damp cloth to clean surfaces indoors. Use a wet mop on floors.

Wash any ash off of your body or clothing right away.

High efficiency filters (HEPA) can help remove particles from indoor air, but they will be most effective if they are the right size. Make sure your filter is designed for the size of the space or room where you plan to use it.

Do not rely on 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. There are specially designed air filters worn on the face called respirators. These must be fitted, tested and properly worn to protect against smoke. People who do not properly wear their respirator may gain a false sense of security. If you choose to wear a respirator, select an "N95" respirator, and make sure you find someone who has been trained to help you select the right size, test the seal and teach you how to use it. It may offer some protection if used correctly. For more information about effective masks, see the [Respirator Fact Sheet](#) provided by CDC's National Institute for Occupational Safety and Health.

Should I go to the doctor?

Talk to your doctor if you think you are sick. Symptoms that could be related to smoke include wheezing, difficulty breathing, irritation of eyes, nose, or throat, chest tightness, lightheadedness, or unusual tiredness.

What about my garden?

It is always important to follow simple steps to reduce exposure to toxic substances when gardening:

- Do not eat soil or dirt.
- Wash, soak or peel plants to avoid eating dust and soil particles.
- Water plants near the bottom of the plants, to prevent soil from splashing up onto plants. Avoid overhead watering.
- Take off shoes and wipe down pets to avoid tracking soil into your home.
- Wash your hands.
- Eat a diet rich in fresh fruits and vegetables, from a variety of sources. Eating a variety of fresh fruits and vegetables protects the body from absorbing some

substances and helps with many other chronic health conditions. Review OHA's fact sheet on Air Toxics-Metals and the "Protective benefits of eating a diet rich in calcium, iron, vitamin C and other micronutrients."

Fruit from trees that are in bloom is not likely to be affected by the smoke. Always remember to wash fruit from trees in your yard or community gardens.

Federal, state, and local agencies are monitoring the effects of the smoke from the auto salvage yard fire on the surrounding area. While smoke from fires at such facilities can contain toxic chemicals of synthetic rubber compounds and other materials, it is unlikely that a significant amount of the particulate matter from the smoke will impact soil and gardens in the area.* Plants will not necessarily absorb particles from the smoke, and it is unlikely that toxics will accumulate in plants in dangerous amounts.

**Updated 3/23/2018*