Important News About Air Quality in our Community

The City of Hillsboro and Washington County are working together and with other partners to improve the air quality in our community. Of specific concern is an increase in fine particulates called PM2.5, which can pose serious health concerns. There are many factors contributing to particulate emissions, including things that are out of our control like geography and weather, but Hillsboro residents can help improve our air quality!

What is the situation?

The quality of the air we breathe in the City of Hillsboro does not always meet health-based federal standards in the winter.

An Oregon Department of Environmental Quality (DEQ) air quality monitoring site near Hare Field has detected an increase in fine particulates two of the past three winters. The monitoring shows a pattern common to other communities with higher particulate pollution — levels increase when people come home in the evening and use their wood stoves and fireplaces.

What is causing the pollution?

The primary source of PM2.5 pollution is residential wood burning in wood stoves and fireplaces.

What are the health concerns?

Here's what Dr. Christina Baumann, Washington County's health officer, has to say:

"Wood smoke can cause short-term and long-term health problems. The fine particles released into the air by burning wood are so small that they can be inhaled deep into the lungs. Studies have shown a link between high levels of fine particles in the air and increases in respiratory symptoms, asthma attacks, bronchitis and cardiac events.

Some people, especially children and individuals with lung or heart disease, are more sensitive to particulate air pollution. By decreasing the amount of wood smoke released during the winter months, we can help protect the health of our community."



What else is causing the pollution?

Additional sources include residential open burning, prescribed forest burning, road and construction dust, cars and trucks, and industrial boilers.

Industrial boilers? Does this mean at businesses like Intel?

No. This refers to industrial facilities that utilize a hog-fuel boiler that burns biomass materials. These facilities don't have an air quality permit because their emission levels are too small to require one. Industrial processes (at places like Intel) account for less than two percent of the PM2.5 pollution.

When are we likely to have poor air quality?

The months of highest risk are November through February, when we are more likely to have air inversions. This is when cold air close to the ground is trapped by a layer of warmer air. As the inversion continues, air becomes stagnant and pollution becomes trapped close to the ground. The graphic below illustrates an air inversion.



Q&A continues on back page. The inside pages provide helpful information on the safest and most efficient ways to burn wood.

LEARN Before You Burn

Burn the right wood, the right way, in the right appliance



Save money and time. Burn only dry, seasoned wood and maintain a hot fire.



Keep your home safer. Have a certified technician install and annually service your appliance.



Make your home healthier. Upgrade to an efficient, EPA-approved wood-burning appliance.







epa.gov/burnwise

Burn () Wise Program of U.S. EPA

BURN THE RIGHT WOOD, THE RIGHT WAY, IN THE RIGHT WOOD-BURNING APPLIANCE

Did you know that by changing the way you burn wood you can save money, reduce air pollution and protect your health?

Here are a few simple tips to make your fire burn hotter, keep your wallet fatter and keep your local air cleaner and healthier.

Season all firewood. All firewood should be split, securely covered or stored, and aged for at least six months. Seasoned wood burns hotter, cuts fuel consumption and reduces the amount of smoke your appliance produces.

Choose the right firewood. Hardwoods are the best. Never burn trash or treated wood which can emit toxic air pollutants.

Start it right. Use only clean newspaper or dry kindling to start a fire. Never use gasoline, kerosene, charcoal starter, or a propane torch.

Don't let the fire smolder. Many people think they should let a fire smolder overnight. But reducing the air supply does little for heating and increases air pollution. Clean ashes from your wood-burning appliance. Excess ashes can clog the air intake vents reducing efficiency. Be sure to dispose of ashes in a metal container away from the house or any flammable material to reduce the risk of fire.

Keep your chimney clean. A clean chimney provides good draft for your wood-burning appliance and reduces the risk of a chimney fire. Have a certified professional inspect your chimney once a year.

Be a good neighbor. Follow best practices for burning wood. Always remember to comply with state and local codes and check your local air quality forecast.

Follow instructions. Operate your woodburning appliance according to the manufacturer's instructions and follow all maintenance procedures.

Upgrade to cleaner equipment. EPAcertified wood stoves and fireplace inserts burn cleaner and burn wood more efficiently emitting less particle pollution than older models.

Size matters. Choose the right-sized appliance for your needs. If your woodburning appliance is too big for your room or house, the fuel will smolder and create more air pollution.



SEPA For more information on how to burn wise, go to www.epa.gov/burnwise

EPA-456/F-09-004

How can I help?

We are asking residents to **limit** recreational or unnecessary wood and yard debris burning when the Air Quality Index (AQI) is between 51-94. We are asking that you **refrain** from burning when the level is 95 and above. See chart below.

How will I know what the AQI number is?

- Sign up at www.publicalerts.org to receive notifications by text, email or phone about air quality advisories and other important and timely health and safety news.
- Follow the City and County's Facebook and Twitter pages and watch for posts there.
- Visit www.co.washington.or.us/air for the daily air quality forecast.

What if a wood stove or fireplace is my only heat source?

We are *not* asking you not to burn wood. However, please burn only dry, seasoned wood, and be sure to maintain a hot fire. The inside of this publication includes a lot of helpful information on the safest, cleanest and most efficient way to burn wood.

	-	
Good	0-50	Air quality is considered satisfactory, and air pollution poses little or no risk.
Moderate	51-100	Air quality is acceptable; however, for some pollutants there may be a moderate health concern for a very small number of people who are unusually sensitive to air pollution.
Unhealthy for Sensitive Groups	101-150	Members of sensitive groups may experience health effects. The general public is not likely to be affected.
Unhealthy	151-200	Everyone may begin to experience health effects; members of sensitive groups may experience more serious health effects.
Very Unhealthy	201-300	Health warnings of emergency conditions. The entire population is more likely to be affected.
Hazardous	301-500	Health alert: everyone may experience more serious health effects.

AIR QUALITY INDEX (AQI)

Should I replace my old wood stove?

Wood stoves manufactured before 1990 are inefficient. They waste firewood, pollute the air in your neighborhood and home, and create dust inside your home. Do you:

- Smell smoke in the house?
- > Notice smoke coming from the chimney?
- See more dust around the house when you use the wood stove?
- Experience watery eyes and stuffy noses with use of the wood stove?
- Have to constantly feed the stove with wood?

If you answered "Yes" to any of these items, consider replacing your old wood stove. This can reduce smoke and dust as well as cut heating expenses.

Are there any financial incentives being offered if I replace my old wood stove?

Not yet, but we are working with the EPA, Oregon DEQ, local utilities and other agencies to determine if an incentive program is possible in Washington County.

Where can I learn more?

- City of Hillsboro www.Hillsboro-Oregon.gov/airquality 503-681-6219
- Washington County www.co.washington.or.us/air 503-846-8722
- Hillsboro Fire Department Burn Line (For outdoor burning only) 503-681-6204
- www.epa.gov/burnwise
- > www.airnow.gov
- www.publicalerts.org

