Choose the Right Stove, Burn Clean: Our Lungs Will Thank You

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Many of us choose to live in Montana because we value pristine air and water.

Yet, when the health department last looked at statistics related to lung health in Lewis and Clark County, we were dismayed to find that we have more breathing problems per capita than other parts of the state and nation.

Just look at these statistics from our most recent Community Health Report. They show that residents of Lewis and Clark County are more likely:

- To have lung cancer. (The rate in our county is 51 cases per 100,000 people compared to 45 in Montana and 48 in the nation).
- To visit a hospital emergency room because of chronic obstructive pulmonary disease (COPD). (In the county, 904 ER visits per 100,000 are related to COPD compared to 805 for the state).
- To be hospitalized for COPD. (In the county, 860 hospital admissions per 100,000 people are for COPD compared to 717 for the state).
- To have asthma. (Fifteen percent of county residents have been diagnosed with asthma compared to 13 percent for the state and 14 percent for the nation).

Smoke from wood stoves and fireplaces is a significant and preventable source of winter air pollution in Lewis and Clark County. When pollution builds up during temperature inversions, it can cause reduced lung function, headaches, and chronic bronchitis. It can also make existing lung disease worse.

If you choose to burn wood (or other solid fuels), here are two ways you can help all of us to breathe a little easier.

Choose the Right Stove

In 2015, the U.S. Environmental Agency (EPA) began requiring makers of wood-burning stoves to reduce the pollution the devices produce by about 90 percent compared to older models. Stoves that meet these rigorous standards are considered to be EPA-certified. They’re designed with better insulation and improved air flow, which makes them more efficient and results in less smoke.
So if you’re considering buying a new wood stove or wood-burning fireplace insert, look for an EPA-certified device. You’ll be able to find one at any stove retailer.

One advantage of owning an EPA-certified stove is that you’re likely to use about a third less firewood – and that means paying for and hauling less firewood, too. Another is that the air inside your home will be cleaner, so your family will be better protected. Pellet stoves are among the cleanest-burning stoves available.

Avoid buying secondhand models that aren’t EPA-certified. They may save you money in the short-run, but you might end up spending more for health-care costs down the road.

If you have an existing stove, you can determine whether it’s EPA-certified by looking for a metal certification label on the back of the stove. Don’t confuse the Underwriters Laboratory (UL) safety label for a certification label; they’re not the same thing.

You can find a list of EPA-certified wood stoves at www.epa.gov/compliance/list-epa-certified-wood-stoves.

**Burn Smart, Burn Clean**

When you burn a hot, smokeless fire in your woodstove or fireplace, you protect air quality in your own home and outdoors. You also use less wood and reduce the risk of a house fire.

Here’s how to burn smart and clean:

- **Burn only dry, well-seasoned wood.** This reduces smoke and produces more heat.
- **Start your fire with small, dry kindling to establish a hot flame.** Gradually add wood of 4-5 inches in diameter to maintain a hot, clean fire.
- **Keep the damper open enough to maintain a clean, hot fire.** Smoldering fires cause six times more pollution than hot, clean fires.
- **Don’t pack too many logs in your stove.** Smaller, hotter fires are more efficient and less polluting.
- **Check for creosote buildup.** A clean chimney increases wood-burning efficiency and reduces the chance of dangerous chimney fires.
- **Avoid burning during warm weather.** Burning when the outside temperature is above 40 degrees Fahrenheit requires constant dampening. That increases smoke production.
- **Go outside and check your chimney for smoke.** About 15 minutes after you start your fire, you should see very little smoke coming from the chimney.
- **Check local air quality daily.** Be sure to follow health department advisories and restrict burning when air-quality warnings are issued. To sign up for daily advisories, email outdooraq@lccountymt.gov, or call 447-1644.

Help protect your health and that of your family, friends, and neighbors. Burn wood wisely.

For more information, call the Environmental Services Division of Lewis and Clark Public Health at 447-8351, email outdoorAQ@lccountymt.gov, or visit www.HelenaAir.org.