

HEALTH EFFECTS

Wood Stove and Fireplace Safety Tips to Protect Your Health

Home fire safety tips include more than installing fire alarms and developing a fire escape plan. While less obvious, wood stoves and other wood-burning appliances can produce pollutants that can harm your health if not addressed.

If you smell smoke inside your home, then harmful air pollutants are present. Wood smoke contains a mixture of air pollutants, including microscopic particles. Studies show that this particle pollution can harm the lungs and heart and even cause early death.

Particle pollution from wood smoke can trigger asthma attacks, cause coughing, wheezing, and chest tightness, impair lung development in children and increase symptoms of chronic obstructive pulmonary disease (COPD). For people with heart disease, particle pollution is linked to heart attacks, irregular heartbeat, heart failure, and stroke.

People at greater risk from wood smoke are older adults, children and teens, and people with certain health conditions such as heart or lung disease and asthma. Some studies indicate diabetes and obesity may increase the risk. New or expectant mothers may also want to take precautions to protect the health of their babies.

According to the National Fire Protection Association, the leading factor contributing to fires from home heating (30%) was due to having a dirty chimney (i.e., creosote buildup). A clean chimney provides good draft for your wood-burning appliance and reduces the risk of a chimney fire. It is important that your wood-burning appliance is installed by a certified professional. Also, have your chimney inspected annually and make sure you are burning the right wood, the right way, and in the right appliance.



Burn the Right Wood

Not all wood is the same. Burn dry, seasoned wood to reduce particle pollution. Split wood dries much faster. Softwoods, such as Douglas fir, need six months to dry. Hardwoods like oak need at least 12 months. Never burn garbage, plastic, treated lumber, or driftwood-- they emit toxic fumes and particles.

Learn how to prepare wood for burning in the [Split, Stack, Cover and Store video \(https://www.youtube.com/watch?v=yo1--Zrh11s\)](https://www.youtube.com/watch?v=yo1--Zrh11s).

Burn the Right Way

Wet wood is a problem for your health and your pocketbook. It creates a lot of smoke and burns inefficiently, meaning the potential heat literally goes up in smoke. You can buy a basic moisture meter (\$20-\$40) at a hardware store or online to test the wetness of your wood before burning. Split the wood and test the newly split side of the wood for an accurate reading. Wood should only be used if the moisture content is 20 percent or less.

Learn how to check your wood for moisture in the [Wet Wood is a Waste video \(https://www.youtube.com/watch?v=yo1--Zrh11s\)](https://www.youtube.com/watch?v=yo1--Zrh11s).

Burn in the Right Appliance

Like an old car that belches smoke out of the tailpipe, old wood stoves are bad polluters and burn less efficiently. Newer, EPA-certified wood stoves and fireplace inserts (wood stoves designed to fit into a fireplace), reduce air pollutants by 70 percent compared to older models.

Find cleaner-burning appliances at www.epa.gov/burnwise.