

HEALTH EFFECTS

Wood Stove and Fireplace Safety Tips to Help 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, that's an alarm that harmful air pollutants are in your home. Wood smoke contains a mixture of air pollutants including microscopic particles. Studies show particle pollution can harm the lungs and heart and even cause early death.

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

People at greater risk from particle pollution, including 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. Burning the right wood, the right way, in the right wood-burning appliance can reduce harmful air pollution.

According to the United States Fire Administration, fires confined to chimneys, flues or flue burners, accounted for 87 percent of residential building heating fires. A clean chimney provides good draft for your wood-burning appliance and reduces the risk of a chimney fire. Have your wood-burning appliance and chimney installed by a certified professional and inspected annually.

Burn the Right Wood

Not all wood is the same. Burn dry, seasoned wood to reduce particle pollution. Softwoods such as Douglas fir need six months to dry and hardwoods such as oak need at least 12 months. Garbage, plastic, treated lumber, and driftwood should never be burned. They emit toxic fumes and particles. **Learn how to prepare wood for burning in the *Split, Stack, Cover and Store* video.**

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 heat literally goes up in smoke. Buy an inexpensive moisture meter at a hardware store to test the wetness of your wood before burning. 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.

Burn in the Right Appliance

Like an old car that belches smoke out of the tailpipe, old wood stoves are bad polluters and less efficient. 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.