

REDUCE AIR POLLUTION FROM YOUR WOOD BURNING STOVE OR FIREPLACE

Enjoy the Fire, Not the Smoke

Many Lincoln residents burn wood to heat their homes and to enjoy a warm, cozy atmosphere. But how is the smoke from your wood stove or fireplace affecting your family's health, your neighbors and the environment? Are you sure you are burning your wood safely?

Lincoln residents can help reduce air pollution from wood smoke and burn wood more safely and efficiently by following a few easy tips.

✓ **Burn Cleaner Fuels**

Replace old, less efficient, higher polluting wood stoves with cleaner and more efficient heating alternatives such as gas, oil, propane, or electric heat.

Burn only clean, dry, and seasoned wood that has been split and dried for at least 6 months and burn hardwood rather than softwoods. Hardwoods are denser and burn more slowly and evenly, which produces less smoke. Hardwoods also provide more heat energy.

✓ **Heat More Efficiently**

Replace your old wood stove, fireplace insert, or fireplace with an EPA-certified wood stove or EPA-certified fireplace insert. Certified stoves use about one-third as much wood, creating long term cost savings, and circulate more heat into the home instead of out the flue. They also produce less pollution.

Install an EPA-certified wood-burning fireplace insert. Older fireplaces typically lose more heat from the home than they provide.

Install a wood pellet stove, which uses compressed wood waste. It uses excess combustion air to make a fire burn hot and clean. These stoves are considered the most efficient stoves available with efficiency ratings exceeding 80%.

✓ **Change Burn Practices**

Never burn garbage, trash, plastics, rubber, petroleum products, paints, solvents, charcoal/coal, or treated woods. Burning these materials can be toxic and extremely harmful to the occupants of the house and neighbors. These toxins can also foul the catalytic combustor and flue. Burn small, hot fires instead of large, smoldering fires.

Use small pieces of wood and do not overload the stove or fireplace. Clean ashes from the stove regularly. Excess ashes can clog a stove's air intake vent, reducing its efficiency. Be sure to handle the ashes safely to prevent fires.

Health Effects

The smoke created from wood burning can contribute significantly to air pollution and public health problems.

Smoke resulting from improperly burned wood contains harmful pollutants such as hazardous air pollutants (HAPs), fine particle pollution, and volatile organic compounds (VOC). A group of hazardous air pollutants known as polycyclic organic matter includes benzo(a)pyrene, which may cause cancer. Fine particle pollution in smoke can damage lung tissue and lead to serious respiratory problems when breathed in high concentrations.

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Watch the chimney for smoke. Properly burning fires should give off only a wisp of white steam. The darker and thicker the smoke, the more pollutants the fire emits, and the more fuel it wastes.

Do not burn wood when the outdoor air quality is poor. Lincoln Air Quality Advisories are posted at: <http://lincoln.ne.gov/> (keyword: air)

✓ **Inspect and Maintain**

Have a professional inspect and maintain the wood stove and chimney on an annual basis. These inspections are essential to ensure safe and clean wood burning. Also, have a professional clean the chimney regularly to remove creosote buildup. Clean chimneys reduce the chance of a chimney fire.

✓ **Follow Lincoln and Lancaster County Wood Burning Regulations**

Clean, dry, seasoned wood is the only material that can be burned in fireplaces and wood stoves in Lincoln and Lancaster County. It is illegal to burn garbage, treated wood, plastic, and rubber.

Lincoln Municipal Code 8.06 Air Pollution, Section 150, (a) states that:

(a) The emission or escape into the open air from any source or sources whatsoever of smoke, ashes, dust, dirt, grime, acids, fumes, gases, vapors, odors, or any other substances or combinations of substances, in such manner or in such amounts as to endanger or tend to endanger the health, comfort, safety, or welfare of the public, or is unreasonably offensive and objectionable to the public, or shall cause unreasonable injury or damage to property or interfere with the comfortable enjoyment of property or normal conduct of business, is hereby declared to be a public nuisance. It shall be unlawful for any person to cause, permit, or maintain any such public nuisance.

**Additional Wood Burning
Informational Web Sites**

<http://www.epa.gov/burnwise/>

http://www.epa.gov/oaqps001/community/details/i-woodstoves_addl_info.html

<http://www.greenstrides.com/2009/12/11/increase-the-efficiency-of-your-existing-fireplace/>

**Contact the Lincoln-Lancaster County Health Department Air Quality Program at:
402-441-8040**



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