

## Many People Have Old Woodstoves



- More than 10 million people across the country, use woodstoves that can be freestanding or a fireplace insert.
- Nearly 75 percent of these woodstoves are older and emit a significant amount of pollution

## New Stoves Burn Better



Woodstoves built after 1990 burn cleaner and pollute less. These EPA-certified woodstoves create the right conditions inside the appliance for firewood to be burned with complete combustion. This means a more efficient stove for you - and cleaner air for you and your neighbors.

## Don't Overlook the Chimney



- Improperly installed chimneys can cause smoke to come back into your home
- Your chimney should be the correct size for your woodstove
- Be sure to maintain proper clearance from combustible materials

### Is Your Stove EPA-Certified?

Look at the back of the woodstove for a metal plate like the one below. This signifies that it has been certified by EPA. If you can't tell, contact a hearth specialty retailer.



## Benefits of Replacing Old with New

### PROTECTS HEALTH:

- Reduces particle pollution by about 70 percent
- Improves the air in your community and inside your home
- Helps protect health of children and adults with heart and respiratory disease (e.g. asthma)
- Reduces exposure to toxic pollutants that have been linked to cancer and other serious health problems

### SAVES MONEY:

- New woodstoves are about 50 percent more efficient
- They use about 1/3 less firewood for the same amount of heat

### IMPROVES FIRE SAFETY:

- Improperly installed woodstoves and chimneys can destroy homes
- In a single year, 4,000 fires caused by woodstoves and heaters resulted in 50 deaths and \$45 million in property damage (*National Fire Protection Agency*)
- Chimney fires can be caused by creosote buildup in chimney pipes, improper woodstove maintenance, and faulty installation

### Chimney Inspections

Even when installed properly, woodstoves and chimneys still need to be inspected by a certified chimney sweep once a year.

—Chimney Safety Institute of America

### How to Changeout

Learn how to replace your stove through the Great Michigan Woodstove Changeout. Information is available on Michigan United Conservation Club's Web Site. You can also use the site to locate participating hearth specialty retailers in your area to guide you through the process.

Visit [www.mucc.org](http://www.mucc.org)

# Q&A

## Wood Smoke Q & A

### Q. What's in Wood Smoke?

**A.** Smoke from woodstoves results from a fire that doesn't adequately burn - a process known as incomplete combustion. Wood smoke contains many pollutants, including:

- ▶ Fine particle pollution, or PM<sub>2.5</sub>
- ▶ Carbon monoxide (CO)
- ▶ Nitrogen oxides (NOx)
- ▶ Volatile organic compounds (VOCs)
- ▶ Benzo (a) pyrene
- ▶ Formaldehyde
- ▶ Dioxins
- ▶ Furans

### Q. Who's Affected by Wood Smoke?

**A.** Wood smoke can affect everyone, but children under 18, older adults, people with diabetes, heart disease, asthma or other lung diseases are the most vulnerable. Particle pollution - like the particles in wood smoke - can work their way deep into the lungs, potentially causing serious health problems. These problems range from burning eyes and runny noses to bronchitis, asthma attacks and even heart attacks.

## Make Your Fire Cleaner

Building small hot fires and keeping ashes cleaned from the stove can make your stove more efficient. That means you'll use less firewood - and you'll reduce smoke right in your neighborhood. Making sure your firewood is seasoned - and never burning trash or treated wood - also help keep your community's air cleaner. For more tips on burning cleaner, go to [www.epa.gov/woodstoves](http://www.epa.gov/woodstoves).

### Old Woodstove Waste



**SAVE**

### New Technology Stoves Save



**If** you heat your home with a woodstove manufactured before 1990, you could be wasting your money, risking your property and creating indoor and outdoor air pollution that affects your healthy. **Why?** The reason is that your woodstove is outdated and inefficient.

**You** can reduce these risks by replacing your old woodstove with new and cleaner technology - whether it's a gas, pellet, corn, or electric woodstove. Masonry heaters are another option. Changing out your old woodstove can help you breathe cleaner air while reducing your home heating bills and minimizing your risk of property damage.

Learn more about replacing old woodstoves through the **Great Michigan Woodstove Changeout**. Visit [www.mucc.org](http://www.mucc.org) or [www.woodstovechangeout.org](http://www.woodstovechangeout.org)



**EPA and Partners Working Together**  
Through campaigns like the **Great Michigan Woodstove Changeout**, EPA is working with the hearth industry, state, local and tribal air agencies, and other organizations to encourage people to replace old woodstoves with more efficient and cleaner-burning technology.

#### Partners

Hearth, Patio & Barbecue Association  
Michigan Department of Environmental Quality  
Michigan United Conservation Clubs  
U.S. Department of Energy

[www.mucc.org](http://www.mucc.org)  
[www.epa.gov/woodstoves](http://www.epa.gov/woodstoves)

#### What to Do with Your Old Stove

To help keep your air cleaner, make sure your old woodstove isn't used again. Ask a hearth specialty retailer or a local steel recycler for information on recycling old woodstoves. For details, go to [www.epa.gov/woodstoves](http://www.epa.gov/woodstoves).

**Cleaner Air.  
Cheaper Heat.  
Safer Home.**



Replace Your  
Old Woodstove  
and Save!



A U.S. Environmental Protection Agency Partnership