

# ***NEWS RELEASE***

## **FOR IMMEDIATE RELEASE**

**Contact:** Brian Huxtable – RAPCA, 937.225.5931  
Bruno Maier - RAPCA, 937.225.4795

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### **Wood Burning in the Wintertime**

The approach of winter brings the traditional smell of wood burning to the Miami Valley. While the smell of burning wood is nostalgic for some, it can also mean severe breathing problems for many, including the elderly, children, people with heart and lung problems, and those individuals exercising outdoors.

According to Dr. Morton Nelson, Health Commissioner of the Combined Health District of Montgomery County, “wood burning produces much more air pollution than other heating fuels. Wood burning stoves produce significantly more carbon monoxide, particulate matter (soot and dust), and hydrocarbons as a comparable oil furnace. Wood smoke also contains several especially hazardous air pollutants. Wood burning produces very small particles of soot or dust which can penetrate deep into the lungs, as well as several complex chemicals which are thought to cause cancer.”

Dr. Nelson explains that the problem of wood smoke emissions is exaggerated by the time and location. More people in crowded residential areas are using wood to heat their homes. In addition, wood burning most often takes place at night when temperature inversions hold smoke close to the ground. So, while you are enjoying the heat from your stove, your neighbor may be inhaling the smoke produced by it.

Fortunately, owners of wood burning stoves can reduce the amount of air pollution from wood burning by following some simple operating guidelines. Dr. Nelson explains, “The steps to building and maintaining a clean, hot fire will ensure that the wood you use is completely burned, giving you the maximum amount of heat for your dollar, as well as helping to keep the air clean.” He adds, “Reducing the amount of smoke from your stove or fireplace will save dollars in costly chimney cleaning as well as help keep the home safe from potential chimney fires.”

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The Regional Air Pollution Control Agency (RAPCA) suggests three guidelines in reducing emissions from your stove:

- When you purchase a stove, select the proper size stove for the space you will be heating. Selecting a stove which is too large for your needs will produce too much heat unless you close the damper. A fully dampered stove reduces the flow of air in the stove so that combustion is incomplete and the amount of smoke is increased. Purchase a stove that contains a catalyst or is designed for improved combustion efficiency. The initial cost of these stoves is somewhat higher, but you will save money in wood purchases in the long run because of increased burning efficiency. All wood burning stoves must meet EPA emission or efficiency standards. Make sure your stove meets these standards.
- When selecting fuel for your stove, use dry hardwoods which have been seasoned for six months or longer. By burning green, moist wood, you not only produce more smoke, but also lose ten to forty percent of the wood's heat value. Make sure your wood is dry and clean by covering your wood pile, and by raising it off the ground if possible.
- When operating your stove, maintain a clean, hot fire for the least smoke and the best energy efficiency. Allow plenty of air to circulate in the stove when starting a fire as well as while burning. Do not close the damper in your stove entirely. Use logs that are approximately 3 ½ to 5 inches in diameter. Excessively large logs will result in a cooler fire and more smoke. Logs which are too small will burn rapidly, resulting in incomplete combustion. Feed your fire frequently with smaller loads of wood rather than completely filling the firebox. Overcharging will restrict the air flow so that the wood is only partially burned.

Should you have any questions on the proper operation of wood burning stoves, call the Regional Air Pollution Control Agency at 937.225.4435.

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