

Be *Burn Wise!*
Why Smart Wood Burning is Important for Clean Air in Dane County

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Soon, autumn's cooler temperatures will arrive and many Dane County residents will be preparing to keep the home fires burning in a wood stove during the heating season. The Dane County Clean Air Coalition wants to remind residents of steps they can take to reduce fine particles and other emissions that pollute the air. By learning how to *burn wisely*, residents who use wood stoves or fireplace inserts for heat can reduce their emissions from wood burning to protect their homes, their health and the air we all breathe, while reducing heating costs and staying comfortable this winter.

What's in Wood Smoke? Wood smoke is made up of a mixture of components such as carbon monoxide, volatile organic compounds and fine particle pollution that aren't healthy to breathe indoors or out – especially for children, older adults and those with heart disease, asthma or other lung diseases. Excessive smoke from a fireplace or an old (pre-EPA certification) wood stove can affect members of your family and neighbors downwind of the source, as well as contribute to overall threats to outdoor air quality.

Fine Particle Pollution in Dane County: Winter is a Peak Emissions Period

While fine particle pollution can occur year-round, activities such as wood burning, vehicle idling and energy use for heating and lighting that occur in the winter months tend to increase possibilities for higher fine particle levels in the air. A review of our fine particle emissions since 2005 identifies the winter months in Dane County as a peak emission period.

Dane County's air quality currently meets the National Ambient Air Quality Standards (NAAQS) for fine particle pollution (PM_{2.5}). However, the County has come close to reaching non-attainment levels for PM_{2.5} in the last 5 years. As the County grows and federal public health standards are strengthened to reduce the negative health impacts of criteria air pollutants, including PM_{2.5}, it is important that we continue to take steps to reduce our emissions.

Fine Particle Pollution Emissions from Wood Burning in Dane County

Recent EPA Region V data (up to 2008) indicate that the County contributes more than 500 tons-per-year of PM_{2.5} emissions through the use of non EPA-certified wood stoves and fireplace inserts. Dane County is one of only 8 counties across 6 states in EPA's region 5 (MN, WI, IL, IN, MI, OH) that reached this level of PM_{2.5} emissions from non-EPA certified wood stoves and fireplace inserts.

City of Madison / Dane County / Greater Madison Chamber of Commerce / Kraft Foods / Madison Area Metropolitan Planning Organization
Madison Gas & Electric Company / Madison Metropolitan School District / University of Wisconsin-Madison / Wisconsin Department of Administration
Wisconsin Department of Health and Family Services / Wisconsin Department of Natural Resources / Wisconsin Petroleum Council
Wisconsin Petroleum Marketers and Convenience Stores Association

While no single activity will get us to cleaner air, learning to *burn wisely* is one tool that you can use to *do your share for healthy air*.

If you're burning wood this winter, you can have a cheaper, safer, and healthier fire by following these *Burn Wise* tips:

- Burn only dry, seasoned wood. It's better for the air and your wallet. Dry, seasoned wood is more efficient at heating your home and can add up to significant savings over the winter. Look for wood that is darker, has cracks in the end grain, and sounds hollow when hit against another piece of wood or consider using a wood moisture meter.
- Never burn painted or treated wood or trash as these can release a variety of toxic air emissions.
- Maintain your wood stove or fireplace and have a certified technician inspect it yearly. A certified technician can clean dangerous soot from your chimney and keep your wood stove or fireplace working properly, which reduces your risk of a home fire.
- Replace an old, inefficient stove with an EPA-certified wood stove or fireplace insert. These models are more efficient than older models and keep your air cleaner, your home safer and your fuel bill lower, while keeping you warm. An estimated 12 million Americans heat their homes with wood stoves each winter, and nearly three-quarters of these stoves are not EPA-certified. EPA-certified wood stoves emit 70 percent less particle pollution and are approximately 50 percent more energy efficient than wood stoves manufactured before 1990. Go to the U.S. EPA's *Burn Wise* website for more information: <http://www.epa.gov/burnwise/>
- If you have another source of heat, do not use your fireplace or wood stove on winter days that are forecast to be Clean Air Action Days for fine particle pollution.

For more air pollution reduction ideas for Dane County residents and employers, visit www.healthyairdane.org.