Safe, Efficient Wood Burning

Heating with wood makes sense economically for many households. But there's a tradeoff involved when you rely on a woodstove for all or some of your home's winter heat: a woodstove requires much more work and attention than an automatic central heating system does.

Rebecca Blocker, University of Missouri Extension Housing and Environment Specialist recommends, “Protect your family and your property as you enjoy the warmth of Missouri’s renewable energy source, by following these wood-heating safety rules.”

- Burn only wood that has been cut, split and seasoned for at least six months. It takes about a year for cut-and-split firewood to drop from 80 percent moisture content to 20 percent. Green (wet) wood may cause a buildup of dangerous creosote (the hard substance that collects on flues and inside chimneys when combustible gases don't burn in the firebox and condense).

- Don't use artificial logs in your wood stove. Use artificial logs only in fireplaces and always according to the manufacturer's specifications.

- Kindle fires only with paper and dry wood kindling. Never try to start a woodstove fire or speed it up with an accelerant such as charcoal starter, gasoline, kerosene, or a propane torch.

- Don't burn household wastes such as plastics, diapers, magazines, packaging materials, or painted or treated wood. These products release toxic fumes.

- Make sure your woodstove and stovepipe have adequate clearances from combustible surfaces and materials. Combustible materials include furniture, carpets and rugs, curtains, clothing, building walls, and the woodbox. Unless the manufacturer specifies otherwise, all heating surfaces of a woodstove should be at least 36 inches from any combustible material.

- Have your chimney and wood stove(s) cleaned and checked every year. Replace worn gaskets to improve the efficiency of your woodstove as well as its safety. Check the stove, stovepipe, and chimney flue regularly during the heating season.
Consult an expert if you have any uncertainty about how to conduct these checks.

- Store firewood indoors at least three feet from the stove. Never try to dry wet wood by stacking it close to, on top of, or resting against a working woodstove.

- When cleaning ashes out of the woodstove, place the ashes in a covered metal container and set it outside on a dirt or concrete surface at least 36" from any combustibles. Never set a bucket of ashes on a porch or deck. Even "cold" ashes can harbor live coals days or weeks.

- Provide a non-combustible physical barrier so children can't reach the stove.

- Keep at least one fire extinguisher (with 1A:10B:C rating) within easy reach of each wood stove. Make sure you and all family members know how to use them.

- Install smoke detectors on each level of the home and outside bedrooms. Fire safety experts recommend a combination of both ionization detectors and hard-wired photoelectric smoke detectors. The hard-wired photodetection devices should be interconnected, so that when one device detects smoke, they all sound. Wireless units that "talk" to each other via radio waves can minimize the wiring cost. Test detectors once a month. Remember to change the batteries on battery-powered smoke detectors once a year.

- Install carbon monoxide detectors in your home outside bedrooms and on each level of your home.

- Develop a family fire escape plan and practice it at least twice a year. Check out the information from the National Fire Prevention Association on escape planning.

For additional information on safe operation, installation or maintenance of wood stoves, contact Rebecca Blocker, blockerr@missouri.edu. University of Missouri Extension, First Floor, Courthouse Annex, Farmington, MO, 573-756-4539. Visit us online at: www.extension.missouri.edu/stfrancois. Resources: The National Fire Prevention Association and UNH Cooperative Extension.