

## News Release

Faye Malek, Family Living Educator  
Manitowoc County UW-Extension  
P.O. Box 1150, 4319 Expo Drive  
Manitowoc, WI 54221-1150

November 6, 2005

---

### Energy Efficiency in the Home

---

As we watch our energy costs rise for everything from filling up our vehicles to paying for our monthly home utility bills, the need for conservation and efficient energy use is critical. Most individuals and families may not be ready or interested in purchasing new more energy efficient appliances or new homes, however, maximizing conservation efforts and improving efficiency with what we currently have can be an immediate effective approach.

The information in this article will provide strategies to implement energy conservation and efficiency from a practical perspective concentrating on the areas of highest energy use in the typical Midwestern home.

Heating and cooling account for well over half (56%) of the energy use in a typical U.S. home that affects comfort and impacts cost significantly. Begin by reviewing how you currently control the heating of your home. Based on information from the 2002 Wisconsin Focus on Energy, as many as one third of Wisconsin homes are poorly insulated, yet insulation can pay for itself in as little as two years. So managing your home heating to maximize efficiency is an important step. A few no or low cost tips:

- Lowering the thermostat from 72 to 65 degrees can save up to 10% on your heating bill. Heating costs are decreased over time with even a 1-2 degree decrease. Lowering the thermostat to as low as 60 degrees F. during sleeping hours may be an acceptable temperature for some individuals and families.
- Keep furniture, draperies and curtains away from air registers or radiators and don't block cold air returns.
- Keep baseboards and registers clean and free of dust.
- Remove room size air conditioners from windows during the winter months.
- Close off unneeded rooms.

Thermostats provide direct control over your heating system. Using the thermostat allows you to regulate the amount of heat to match your family's needs. There are two basic types of thermostats, standard and programmable. A programmable thermostat conveniently raises and lowers your temperature settings automatically based on settings you determine through programming. If used correctly, a programmable thermostat will pay for itself in about two years. You can get the same benefit with a standard thermostat if you are willing to regularly change the temperature setting as the need for heat changes throughout the day and for the night. The life expectancy of an average home heating system is approximately 17-20 years.

Heating water is the second largest energy user in a typical Midwestern home. Hot water is used primarily for personal showers and baths, laundry, and dishwashing either automatic or hand washing. Setting your water heater at 120 F. instead of 140 F can save you energy dollars monthly and also increase the life expectancy of the hot water heater which is approximately 10 years. Unless your water heater has an R-value of at least R-24, insulating a conventional hot water heater can reduce standby heat losses by 25-45% resulting in a savings of approximately 4-9% in water heating costs. If you do not know the R-value of your water heater than one that is warm to the touch needs additional insulation. Insulating a hot water heater with a pre-cut jacket or blanket is available for between \$10-20 and pays for itself in one year. Choose one with an insulating value of at least R-8.

Using warm or cold water for home laundry can significantly impact the cost of heating water. When hot water heaters wear out it occurs suddenly leaving consumers with little if any time to comparison shop. There is a trade off between cost and energy efficiency. The most efficient heaters will cost more, but the saving over time may be worth the initial cost. Turning off the conventional water heater when away from home for a few days is an energy saving strategy many forget to do.

If you live in a typical U.S. home, your appliances and home electronics are responsible for about 20% of your energy bills. These appliances include all large and small home appliances, computers and all electronics devices and entertainment systems. In some homes, several of the same appliances are found in various rooms for greater convenience and efficiency. These may include televisions, computers, entertainment systems and various smaller appliances. Monitor and limit use of the same television channel on in different rooms of the home. Turn off computers when not in use. They use small amounts but still use some electricity while turned on.

Low or no-cost appliance tips:

- Keep the condenser coils, which are located under or behind the appliance, clean on the refrigerator and freezer. Unplug the appliance before cleaning.
- Determine needs before opening refrigerator or freezer doors and close quickly.
- Place refrigerators and freezers away from direct sunlight and heat sources.
- Wash only full loads of laundry and dishes.
- Clean lint filter on your clothes dryer after each load and even a couple of times during the drying of high lint items such as some rugs or blankets.

Air leaks in the home occur under doors, where different materials meet such as brick and siding, between the foundation and walls, and between the chimney and the siding. Also inspect areas for any cracks or gaps that may cause air leaks: door and window frames, outdoor water faucets, vents and fans, air conditioners, where dryer vents pass through walls, electrical and gas service entrances, and cable TV and telephone lines. Consider adding insulation at the bottom of outside doors, behind electrical outlet plates, around windows and other possible air leaks areas.

---

An EEO/Affirmative Action employer, University of Wisconsin-Extension provides equal opportunities in employment and programming, including Title IX and ADA requirements. Please make requests for reasonable accommodations to ensure equal access to educational programs as early as possible preceding the scheduled program, service or activity.

- END -