Neenah Water Utility
211 Walnut Street,
PO Box 426
Neenah, WI 54957-0426

Neenah
WISCONSIN
Water Utility

# LEAD PUBLIC EDUCATION PROGRAM for MUNICIPAL WATER SYSTEMS

## LEAD PUBLIC EDUCATION PROGRAM for MUNINCIPAL WATER SYSTEMS

*Neenah Water Utility found elevated levels of lead in drinking water in some homes or buildings. Lead can cause serious health problems, especially for pregnant women and young children. Please read this information closely to see what you can do to reduce lead in your drinking water.*

**Health effects of Lead**

Lead can cause serious health problems if too much enters your body from dinking water or other sources. It can cause damage to the brain and kidneys, and can interfere with the production of red blood cells that carry oxygen to all parts of your body. The greatest risk of lead exposure is to infants, young children, and pregnant women. Scientists have linked the effects of lead on the brain with lowered IQ in children.

Adults with kidney problems and high blood pressure can be affected, more than healthy adults at lower levels of lead. Lead is stored in the bones, and it can be released later in life. During pregnancy, the child receives lead from the mother's bones while in utero, which may affect the child's brain development.

**Lead in drinking water**

Lead in drinking water, although rarely the sole cause of lead poisoning, can significantly increase a person's total lead exposure, particularly the exposure of infants who drink baby formulas and concentrated juices that are mixed with water. The EPA estimates that drinking water can make up 20% or more of a person's total exposure to lead.

**Sources of Lead in drinking water**

Lead is unusual among drinking water contaminants in that it seldom occurs naturally in water supplies like rivers and lakes. Lead enters drinking water primarily as a result of the corrosion, or wearing away, of materials containing lead in the water distribution system and household plumbing. These materials include lead-based solder used to join copper pipe, brass and chrome plated brass faucets, and in some cases, pipes made of lead that connect your house to the water main (service lines). In 1986, congress banned the use of lead solder containing greater than 0.2% lead, and restricted the lead content of faucets, pipes and other plumbing materials to 8.0%. When water stands in lead pipes or plumbing systems containing lead for several hours or more, the lead may dissolve into your drinking water. This means the first water drawn from the tap in the morning, or later in the afternoon after returning from work or school, can contain fairly high levels of lead.

**Steps you can take to reduce exposure to Lead in drinking Water**

Despite our best efforts mentioned earlier to control water corrosivity and remove lead from the water supply, lead levels in some homes or buildings can be high. To find out whether you need to take action in your own home, have your drinking water tested to determine if it contains excessive concentrations of lead. Testing the water is essential because you cannot see, taste or smell lead in drinking water. Some local laboratories that can provide this service are listed at the end of this brochure. For more information on having your water tested, please call 920-886-6196. If a water test indicates that the drinking water drawn from a tap in your home contains lead above 15 ppb, then you should take the following precautions :

- Let the water run from the tap before using it for drinking or cooking any time the water in a faucet has gone unused for more than 6 hours. The longer water resides in your home's plumbing the more lead it may contain. Flushing the tap means running the cold water faucet until the water gets noticeably colder, usually about 15-30 seconds. If your house has a lead service line to the water main, you may have to flush the water for a longer time, perhaps one minute, before drinking. Although toilet flushing or showering flushes water through a portion of your home's plumbing system, you still need to flush the water in each faucet before using it for drinking or cooking. Flushing tap water is a simple and inexpensive measure you

can take to protect your family's health. It usually uses less than one or 2 gallons of water and costs less than $0.54 per month. To conserve water, fill a couple of bottles for drinking water after flushing the tap, and whenever possible use the first flush water to wash the dishes or water the plants. If you live in a high-rise building, letting the water flow before using it may not work to lessen your risk from lead. The plumbing systems have more and sometimes larger pipes than smaller buildings. Ask your landlord for help in locating the source of the lead and for advice on reducing the lead level.

- Do not cook with, or drink water from the hot water tap. Hot water can dissolve more lead more quickly than cold water. If you need hot water, draw water from the cold tap and heat it on the stove. Also, note that boiling water does NOT reduce lead levels.

- Remove loose lead solder and debris from the plumbing materials installed in newly constructed homes, or homes in which the plumbing has recently been replaced, by removing the faucet strainers from all taps and running the water from 3 to 5 minutes. Thereafter, periodically remove the strainers and flush out any debris that has accumulated over time.

- If your copper pipes are joined with lead solder that has been installed illegally since it was banned in Wisconsin on September 24, 1984, notify the plumber who did the work and request that he or she replace the lead solder with lead-free solder. Lead solder looks dull gray, and when scratched with a key looks shiny. In addition, notify the Department of Natural Resources about the violation.

- Determine whether or not the service line that connects your home or apartment to the water main is made of lead. The best way to determine if your service line is made of lead is by either hiring a licensed plumber to inspect the line or by contacting the plumbing contractor who installed the line. You can identify the plumbing contractor by checking the city's record of building permits which should be maintained in the files of the City of Neenah, Community Development Department. A licensed plumber can at the same time check to see if your home's plumbing contains lead solder, lead pipes or pipe fittings that contain lead. The public water system that delivers water to your home should also maintain records of the materials located in the distribution system. If the service line that connects your dwelling to the water main contributes more than 15 ppb to drinking water, after our comprehensive treatment program is in place, we are required to replace the portion of the line we own. If the line is only partially owned by the Neenah Water Utility, we are required to provide the owner of the privately-owned portion of the line with information on how to replace the privately-owned portion of the service line, and offer to replace that portion of the line at the owner's expense. If we replace only the portion of the line that we own, we also are required to notify you in advance and provide you with information on the steps you can take to minimize exposure to any temporary increase in lead levels that may result from the partial replacement, to take a follow-up sample at our expense from the line within 72 hours after the partial replacement, and to mail or otherwise provide you with the results of that sample within three business days of receiving the results. Acceptable replacement alternatives include copper, steel, iron and plastic pipes.

- Have an electrician check your wiring. If grounding wires from the electrical system are attached to your pipes, corrosion may be greater. Check with a licensed electrician or your local electrical code to determine if your wiring can be grounded elsewhere. DO NOT attempt to change the wiring yourself because improper grounding can cause electrical shock and fire hazards.

- Replace fixtures that are known to contribute lead to drinking water with "lead-free" fixtures. An amendment to the Safe Drinking Water Act that updates the definition of "lead-free", and reduces the amount of lead allowed in some plumbing fixtures becomes effective in 2014. Products that meet this new definition will be clearly marked as "lead-free". The steps described above will reduce the lead concentrations in your drinking water. However, if a water test indicates that the drinking water coming from your tap contains lead concentrations in excess of 15 ppb after flushing, or after we have completed our actions to minimize lead levels, then you may want to take the following additional measures:

  - Purchase or lease a home treatment device. Home treatment devices are limited in that each unit treats only the water that flows from the faucet to which it is connected, and all of the devices require periodic maintenance and replacement. Devices such as reverse osmosis systems or distillers can effectively remove lead from your drinking water. Some activated carbon filters may reduce lead levels at the tap, however all lead reduction claims should be investigated. Be sure to check the actual performance of a specific home treatment device before and after installing the unit.
  - Purchase bottled water for drinking and cooking.

- We are investigating the reason for the elevated lead levels in drinking water, and will take corrective actions, which may include:
  - Installing corrosion control treatment
  - Removing lead service lines
  - Other actions as deemed appropriate

- You can consult a variety of sources for additional information. Your family doctor or pediatrician can perform a blood test for lead and provide you with information about the health effects of lead. **State of Wisconsin Department of Health and Family Services** at 608-266-1865 or the **Winnebago County Health Department** at 920-727-2894 can provide you with information about the health effects of lead and how you can have your child's blood tested.

The following is a list of some state approved laboratories in your area that you can call to have your water tested for lead:

**Badger Laboratories 920-729-1100**

**Clean Water Testing 920-733-7590**

For more information, call us at 920-886-6196, or visit our Web site at http://www.ci.neenah.wi.us/departments/water-dep.

For more information on reducing lead exposure around your home or building and the health effects of lead, visit EPA's Web site at http://www/epa.gov/lead or contact your health care provider.

*I certify that the information and statements contained in this Public Education are true and correct and have been provided to consumers in accordance with the delivery, content, format and deadline requirements of Subchapeter II of ch. NR 809, Wis. Adm. Code.*

Mark Zempel
*Signature*

Mark Zempel
*Name*

920-886-6196
*Area Code— Telephone Number*

234 S Park Avenue
*Street Address*

Neenah, WI 54956
*City, State, Zip*