

2007 Water Quality and Consumer Confidence Report For Meadow Brook Medical Care Facility

This report covers the drinking water quality for Meadow Brook for the calendar year 2007. This information is a snapshot of the quality of the water that we provided to you in 2007. Included are details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards.

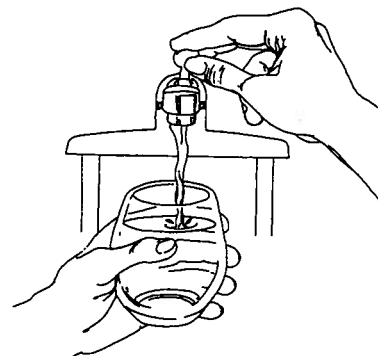
Your water comes from one groundwater well located at the north end of the property. The State performed an assessment of our source water in 2004. To get a copy please call John McCleese at the number listed below.

- **Contaminants and their presence in water:** Drinking Water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the **EPA's Safe Drinking Water Hotline (800-426-4791)**.
- **Vulnerability of sub-populations:** Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune systems disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).
- **Sources of drinking water:** The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. Our water comes from wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in

some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

- Contaminants that may be present in source water include:
 - * **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
 - * **Inorganic contaminants**, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
 - * **Pesticides and herbicides**, which may come from a variety of sources such as agriculture and residential uses.
 - * **Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.
 - * **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can, also come from gas stations, urban stormwater runoff, and septic systems.

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in



bottled water.

Water Quality Data

The table below lists all the drinking water contaminants that we detected during the 2007 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done January 1 – December 31, 2007. The State allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. All of the data is representative of the water quality, but some are more than one year old.

Terms and abbreviations used below:

- **Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below, which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- **Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology
- **N/A:** Not applicable **ND:** not detectable at testing limit **ppb:** parts per billion or micrograms per liter **ppm:** parts per million or milligrams per liter **pCi/l:** picocuries per liter (a measure of radioactivity).
- **Action Level:** The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements that a water system must follow.

Samples Collected at the Wellhouse:

Regulated Chemical Contaminants	MCL	MCLG	Our Water	Sample Date	Violation Yes / No	Typical Source of Contaminants
Arsenic (ppb) ¹	10	0	ND	2/16/05	NO	Erosion of natural deposits
Nitrate	10 mg/l	2	0.6mg/l	8/1/07	NO	Erosion of natural deposits
Chloride	N/A	N/a	ND	8/1/07	NO	Erosion of natural deposits
Fluoride (ppm)	4	4	ND	8/1/07	NO	Erosion of natural deposits

¹ These arsenic values are effective January 23, 2006. Until then, the MCL is 50 ppb and there is no MCLG.

Radioactive Contaminants	MCL	MCLG	Our Water	Sample Date	Violation Yes / No	Typical Source of Contaminants
Alpha emitters (pCi/L)	15	0	.1	1/2/1998	NO	Erosion of natural deposits

Unregulated Chemical Contaminants ²	Our Water	Sample Date	Violation Yes / No	Typical Source of Contaminants
Sodium (ppm)	ND	8/1/07	N/A	Erosion of natural deposits
Sulfate (ppm)	14 mg/l	8/1/07	N/A	Erosion of natural deposits

² Unregulated contaminants are those for which EPA has not established drinking water standards. Monitoring helps EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants.

Samples Collected in the Distribution System:

Contaminants Subject to an Action Level	Action Level	Our Water	Sample Date	Number of Samples Above AL	Typical Source of Contaminants
Lead (ppb) ³	AL = .015	7ppb	8/27/07	3	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppm) ³	AL = 1.3	.19ppb	8/27/07	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives

³ 90 percent of the samples collected were at or below the level reported for our water.

⁴ The MRDL and MRDLG are effective January 1, 2004. Compliance is based on an annual average.

Microbial Contaminants	MCL	MCLG	Positive Samples	Violation Yes / No	Typical Source of Contaminants
Total Coliform Bacteria	1 positive monthly sample (5% of monthly samples positive)	0	0	No	Naturally present in the environment
Fecal Coliform and <i>E. coli</i>	Routine and repeat samples are total coliform positive, and one is also fecal or <i>E. coli</i> positive	0	0	No	Human and animal fecal waste

Source water Assessment:

Your water comes from 1 well 73' deep & draws water from the Boardman/Charlevoix Watershed. The State performed an assessment of our source water in 2004 to determine the susceptibility to potential contamination. The susceptibility rating is on a seven tiered scale from "very low" to "very high", based on geological sensitivity, water chemistry, and contaminant sources. The susceptibility of our source is "moderately low". For more information, or to obtain a copy of the source water assessment report, please contact John McCleese at 1-231-533-8661 ext. 159

Monitoring and Reporting Requirements: The State and EPA require us to test our water on a regular basis to ensure its safety. We met all the monitoring and reporting requirements for 2007

We will update this report annually and will keep you informed of any problems that may occur throughout the year, as they happen. Copies are available by request at Meadow Brook front desk or by the contacts listed in this report. This report will not be sent to you.

We invite public participation in decisions that affect drinking water quality. For more information about your water, or the contents of this report, contact John McCleese at Meadow Brook Medical Care Facility 1-231-533-8661 4543 S-M88web site if applicable)]. For more information about safe drinking water, visit the U.S. Environmental Protection Agency at www.epa.gov/safewater/.

MEADOWBROOK MED CARE FACILITY

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

SOME HOMES IN THE ASSOCIATION HAVE ELEVATED LEAD LEVELS IN THEIR DRINKING WATER. LEAD CAN POSE A SIGNIFICANT RISK TO YOUR HEALTH. PLEASE READ THE FOLLOWING NOTICE FOR FURTHER INFORMATION.

Recent water sampling carried out in accordance with the Michigan Safe Drinking Water Act, 1976 PA 399, as amended (Act 399) mandated procedures has shown lead concentrations in some first draw samples to be above the lead action level of 15 parts per billion. As required by R 325.10410 of Act 399 administrative rules, the following must be distributed by this water utility as part of a local public education program addressing lead in drinking water. We will continue to address this matter in consultation with staff from the Michigan Department of Environmental Quality, Water Bureau. It must be emphasized that the relative risk to public health from lead in drinking water is believed to be minimal under normal water use conditions. Sampling has shown that the source of elevated lead is from either building plumbing or the service line to your building. We continue to recommend that all customers allow water to run for several minutes from drinking water taps prior to use in the mornings or following six or more hours of nonuse in a building.

“SOME HOMES IN THIS COMMUNITY HAVE ELEVATED LEAD LEVELS IN THEIR DRINKING WATER. LEAD CAN POSE A SIGNIFICANT RISK TO YOUR HEALTH. PLEASE READ THE FOLLOWING NOTICE FOR FURTHER INFORMATION.”

INTRODUCTION

The United States Environmental Protection Agency (EPA) and this water utility are concerned about lead in your drinking water. Although most homes have very low levels of lead in their drinking water, some homes in the community have lead levels above the EPA action level of 15 parts per billion (ppb), or 0.015 milligrams of lead per liter of water (mg/L). Under Federal law, we are required to have a program in place to minimize lead in your drinking water. This program includes corrosion control treatment, source water treatment (if warranted), and public education. We are also required to replace the portion of each lead service line that we own if the line contributes lead concentrations of more than 15 ppb after we have completed the comprehensive treatment program. If you have any questions about how we are carrying out the requirements of the lead regulation, please give us a call (see phone number listed at the end of this brochure). This brochure explains the simple steps you can take to protect you and your family by reducing your exposure to lead in drinking water.

HEALTH EFFECTS OF LEAD

Lead is a common metal found throughout the environment in lead-based paint, air, soil, household dust, food, certain types of pottery, porcelain and pewter, and water. Lead can pose a significant risk to your health if too much of it enters your body. Lead builds up in the body over many years and can cause damage to the brain, red blood cells and kidneys. The greatest risk is to young children and pregnant women. Amounts of lead that won't hurt adults can slow down normal mental and physical development of growing bodies. In addition, a child at play often comes into contact with sources of lead contamination—like dirt and dust—that rarely affect an adult. It is important to wash children's hands and toys often, and to try to make sure they only put food in their mouths.

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 percent or more of a person's total exposure to lead.

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 IN THE HOME 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. For more information on having your water tested or if you wish to have a listing of local laboratories certified for lead testing, please call your water supplier.

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 six 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 two gallons of water and costs less than 50 cents 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.

Try not to 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.

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 June, 1988, notify the plumber who did the work and request that he or she replaces the lead solder with lead-free solder. Lead solder looks dull gray, and when scratched with a key, looks shiny. In addition, notify the Michigan Department of Environmental Quality 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 either hiring a licensed plumber to inspect the line or by contracting 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 local building 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 this 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.

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.

You can consult a variety of sources for additional information. State and local government agencies that can be contacted include:

Your water utility can provide you with information about your community's water supply. Please contact John McCleese, Maintenance Director, at 231-533-8661

A list of State Certified Laboratories for testing water quality can be obtained from the Michigan Department of Environmental Quality at 231-775-3960, Extension 6393.

The local building department can provide you with information about building permit records that should contain the names of plumbing contractors that plumbed your home.

Northwest Michigan Community Health Agency at 231-547-6238 can provide you with information about the health effects of lead and how you can have your child's blood tested.

More information about your drinking water is available from the EPA Office of Water home page at: <http://www.epa.gov/safewater/dwinfo.htm>

CERTIFICATION:

WSSN: 64213

I certify that this water supply has fully complied with the public notification regulations in the Michigan Safe Drinking Water, 1976 PA 399, as amended, Administrative Rules.

John McCleese

Signature:

Maintenance Director

Title:

9-18-7

Date

We here at Meadow brook feel that the recent elevated lead concentrations in our August 2007 lead and copper samples may be due to ongoing reconstruction of our Hot water and heating systems. In august approximately 1&1/2-2 weeks prior to sampling we converted from our existing domestic hot water systems to our new systems. Since samples taken in previous years have not indicated any increase in lead concentration levels. We researched the new systems in the affected areas and found the fittings used to tie in to the cold water supply were thread on type brass fittings. These and most brass fittings do contain lead and as with any threaded fitting, pieces of brass containing lead may have been cut off while tightening and ended up inside the water piping if this is the case the problem may be eliminated by a thorough flushing of the system. I can assure you we will conduct a full investigation and follow all of the guidelines set by the DEQ until our lead levels return to a level below the maximum contaminant level or (MCL) of 0.015(PPB). Parts per billion gallons. For further information please feel free to contact me at any time.

Sincerely,

John McCleese
Maintenance Director /Licensed Water Operator
Meadow Brook Medical Care Facility
(231) 533-8661 ext 159

Update: Since the original sample results with elevated lead levels, we have conducted a series of repeat samples. As of June 2008 all of the repeat samples have come back well within the MCL (Maximum Contaminant Level). As stated in the letter above we feel that the elevated Lead concentration level was due to the reconstruction of the hot water system and that after sufficient flushing the lead concentration levels would decrease. We will continue frequent sampling and working with the DEQ and report all findings in the 2008 CCR (Consumer Confidence Report). Please feel free to contact me with any questions or concerns.

Sincerely,

John McCleese
Maintenance Director/Licensed Water Operator
Meadow Brook Medical Care Facility
(231) 533 -8661 ext. 159

6/20/08 JMC