

## **Drinking Water Safety**

The Sanitarian's Office of EH&S is available to help ensure all water available for consumption or food preparation at the University is wholesome and not contaminated. "Potable" is the term used for wholesome drinking water that is free or below threshold levels of pathogens, chemicals, or other contaminants that could cause disease or injury. In addition, the term potable also takes into account the aesthetic quality of the water including taste, appearance and odors.

Drinking water is tested for various contaminants on a daily basis at various points of the distribution system by both the Rochester Water Authority (the supplier), and the Monroe County Health Department (the regulator). Some of sample sites are in University buildings; consequently, the University does not actively test for broad-based contamination. The Sanitarian's Office receives a monthly brochure from the Rochester Water Authority that provides a tremendous amount of testing data, and rarely are there issues noted in any capacity with the water quality. However, if you have a concern regarding water quality within the University Community, you can call the Sanitarian's Office at 275-3241 or email the Senior Sanitarian at [pcastronovo@safety.rochester.edu](mailto:pcastronovo@safety.rochester.edu).

A few points of information:

- Most drinking water complaints to the Sanitarian's Office have been due to discolored or turbid water. One reason for this is due to low water usage in old pipes (such as drawing water near the end of a line after a long weekend). Another reason is due to routine fire system testing or hydrant flushing near the building you are in. A third cause could be from a water main break that needed repair. In all of these cases, the problem is quite temporary and can be generally solved by flushing the water at the faucets. The important thing to consider is that although the water under the above scenarios may be aesthetically unpleasing or even unacceptable, the health risk is very low, or even non-existent.
- Fewer complaints are received for noticeable off-odors or taste. These complaints are generally received in the heat of the summer when Hemlock Lake is warmer and algae grow. The City takes steps to reduce the effect on odor and taste caused by algae; however, it is sometimes inevitable that there will be some issues with this, and again, the vast majority of time the only concern is aesthetics.
- Lead in drinking water due to lead based solder or lead based lines have been a national concern for some time. However, various EPA regulations over the last 25 years, including mandatory testing from water suppliers with required action levels, suggests that we should have little concern with lead levels in general from our drinking water. In addition, there were major concerns in the 1990's with drinking fountains that may have had lead lined tanks. Consequently, the Sanitarian's Office and University Facilities embarked on a program to have every suspect water fountain tested for lead. Any fountains shown to put out a level beyond EPA limits were removed or replaced.
- Microbiological contamination such as samples containing e-coli is the most likely cause of water becoming non-potable. However, for a public water system stemming from surface water and going through a water treatment system such as our water does, the occurrence of this kind of contamination is rare. The source of most University water is Hemlock Lake. The last time there was a wide-spread concern of microbiological contamination was in 1986. At that time the Health Department issued a boil water advisory for over a week based on finding e-coli contamination, due to what was believed to be from gypsy moth caterpillars. The University followed all the steps and guidance issued by the Monroe County Health Department and there

was no known or suspected illnesses at the University associated with the water. To the Sanitarian's Office knowledge, over many past years, there have been no samples taken by any government agency or private lab that has revealed any type of gastrointestinal pathogen in our drinking water. This included samples taken for or by independent, certified labs due to water quality concerns or complaints received by the Sanitarian's Office.

- It is prudent to use only cold water for consumption purposes, including the making of coffee. Hot water goes through a hot water tank where chemical additives are injected for concerns like preventing scale build up or preventing mold growth. Although not normally in quantities that are harmful, why expose yourself and others to these additives? Also, warm/hot water will leach heavy metals such as lead out of lines at a faster rate than cold water. Again, there is no reason to consume even tiny, elevated levels of these metals if it can be avoided.

To summarize, the water that comes out of the University taps is high quality, potable water that is regulated and tested very closely. The use of bottled water or water coolers is generally unnecessary as long as there is cold water conveniently available from a satisfactory device such as a drinking fountain or a sanitary sink. However, don't hesitate to contact the Sanitarian's Office if you have any questions or concerns regarding drinking water quality and/or safety at the University.