

# North Carver Water District has Very Important Information about Manganese in Your Drinking Water

# -- Translate it or speak with someone who understands it --

# What happened?

Water samples collected in Quarter 3 of 2023 indicate the following manganese levels:

	10000 Finished Water	10002 Tractor Supply	10003 185 Plymouth St
July	0.675	0.255	0.538
August	0.575	0.104	0.325
September	0.738	0.170	0.348

These results are measured in milligrams per liter (mg/L), and all results in red were in excess of the Massachusetts Department of Environmental Protection (MassDEP) advisory level of 0.3 mg/L. While manganese is necessary for proper nutrition, an excess could adversely affect health.

#### What should I do?

- **Infant formula should be** prepared **with bottled water** or made with water from an alternate source with manganese levels below 0.3 mg/L.
- Use bottled water for infants less than 1 year of age or water from a source with a manganese level below 0.3 mg/L.
- The general population may continue to use the water since it is anticipated that this issue will be resolved before long-term exposures occur.
- If you have health related concerns about manganese, contact your health care provider.
- For more information on manganese including treatment options see attached "MassDEP Manganese Fact Sheet Questions and Answers for Consumers." This Fact Sheet is at: <a href="https://www.mass.gov/doc/manganese-in-drinking-water-typical-questions-and-answers-for-consumers/download">https://www.mass.gov/doc/manganese-in-drinking-water-typical-questions-and-answers-for-consumers/download</a>.

## What does this mean?

Drinking water may naturally have manganese which is necessary for proper nutrition, but an excess could adversely affect health. MassDEP advises that people drink water with manganese levels less than 0.3 mg/L over a lifetime, and also advises that people limit their consumption of water with levels over 1 mg/L, primarily to decrease the possibility of adverse neurological effects. Infants up to 1 year of age should not be given water with manganese over 0.3 mg/L, nor should formula for infants be made with that water for more than a total of 10 days throughout the year. The general population water concentration exposure limits of 0.3 and 1 mg/L have been set based upon typical daily dietary manganese intake levels not known to be associated with adverse health effects. This does not imply that intakes above these levels will necessarily cause health problems. Individual requirements for, as well as adverse effects from manganese can be highly variable.

# What is being done?

Since June, we have been sampling from the three locations noted above on a monthly basis. We have been collecting additional samples in the pumphouse on a weekly basis to guide us as we make adjustments to the treatment to lower the manganese concentrations. We have also been working with the system manufacturers for suggested process control changes along with computer program changes to allow the plant treat the water based on updated data. Finally, we have been working with MassDEP to keep you informed of all current information on this issue.

If you have questions for our water department, please contact Small Water Systems Services at 978-486-1008.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses).

This advisory is being sent to you by North Carver Water District, PWS ID# 4052072. Date distributed: