

# MANGANESE IN MUNICIPAL WELL WATER

What is it?

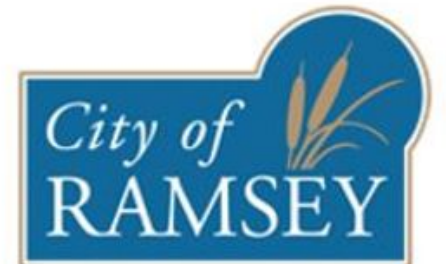
Is it harmful?

What is the City doing about it?

What can I do about it?

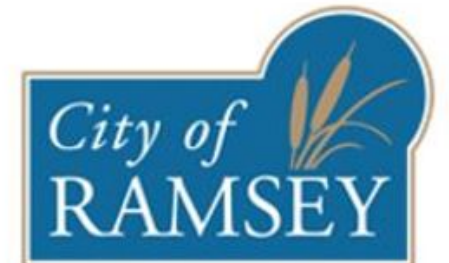
# DO I HAVE MUNICIPAL WELL WATER OR A PRIVATE WELL?

- **City Municipal Well Water:**
- Eight wells
- Serves 5,600 households
- All interconnected
- **Private Well Water:**
- If you are on a private well, you are responsible for having it tested for safety.



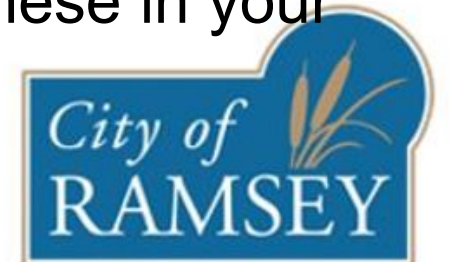
# WHAT IS MANGANESE?

- Manganese is a naturally occurring element in rocks and soil and is usually present in Minnesota ground and surface water
- Manganese is also present in food
- You need some manganese to stay healthy, but too much can be harmful
- Access manganese in water can be harmful because of how quickly it's absorbed in the bloodstream



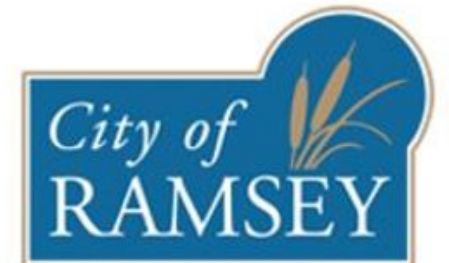
# HOW MUCH MANGANESE DO I NEED?

- Recent scientific studies of manganese exposure prompted the Minnesota Department of Health to create new guidance values
- The MDH recommends
  - If you have an infant who drinks tap water or drinks formula made with tap water, a safe level of manganese in your water is 100 parts per billion (ppb) or less.
  - If you have an infant who never drinks tap water or formula made with tap water, a safe level of manganese in your water is 300 ppb or less
  - If everyone is more than one year old, a safe level of manganese in your water is 300 ppb or less.



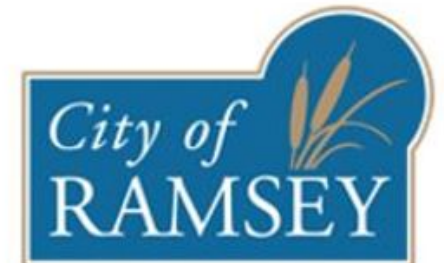
# WHAT ARE THE LEVELS IN THE CITY'S WELLS?

- The City regularly has its well water tested
- Participant in the UCCMR4 (Ramsey is 1 of 100 MN cities that participate in the program. Approximately 1,000 MN water systems
- This year, two of the City's eight wells tested above the recommended guidelines for bottle-fed infants
- Two more tested above the recommended guidelines for bottle-fed infants, children and adults



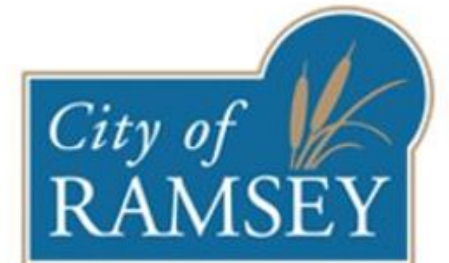
# CITY OF RAMSEY WELL TESTING RESULTS FROM MINNESOTA DEPARTMENT OF HEALTH

City	Location	Element	Result	Unit	Lab
Ramsey	Well #1	Manganese	320	ppb	Minnesota Department of Health--Env. Laboratory
Ramsey	Well #2	Manganese	N/A	N/A	Well #2 not tested; exclusively used for irrigation
Ramsey	Well #3	Manganese	229	ppb	Minnesota Department of Health--Env. Laboratory
Ramsey	Well #4	Manganese	371	ppb	Minnesota Department of Health--Env. Laboratory
Ramsey	Well #5	Manganese	21.8	ppb	Minnesota Department of Health--Env. Laboratory
Ramsey	Well #6	Manganese	22.6	ppb	Minnesota Department of Health--Env. Laboratory
Ramsey	Well #7	Manganese	51.5	ppb	Minnesota Department of Health--Env. Laboratory
Ramsey	Well #8	Manganese	223	ppb	Minnesota Department of Health--Env. Laboratory



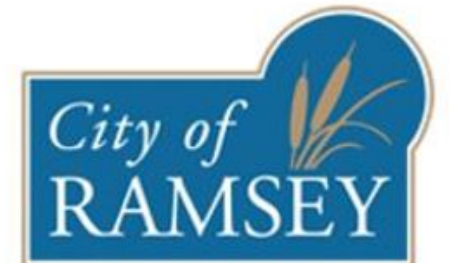
# CITY SOLUTION

- As soon as we were notified of the elevated manganese levels, the City began using wells lowest in manganese
- These wells cannot always meet the City's demand for water. Because of this, the City will mix the wells in an effort to lower manganese levels
- Long term solution options include: drilling new drinking water wells, installing City filtration systems, constructing a water treatment plant, using water from neighboring municipal water systems



# WHAT CAN I DO?

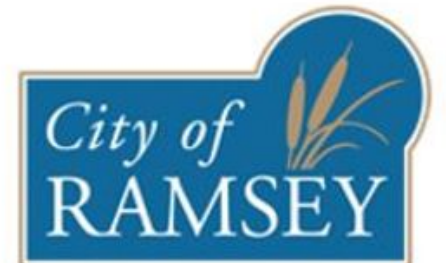
- Test levels from your tap
- Drink bottled water and use it to mix infant formula; look for one that is NOT labeled “mineral water”
- Install home water treatment device
  - Refrigerator water filters
  - Pour-through pitchers
  - Faucet units
  - Water softeners





## LEARN MORE:

- Minnesota Department of Health's website
- Anoka County tests for manganese and other metals; pick up test kit
- City website
- City Water Hotline: 763-576-4353



# QUESTIONS?

- Thank you

