



The Division of Public Health

# MANGANESE IN DRINKING WATER

What You Need to Know

## Key Facts

- Manganese (Mn) occurs naturally in rocks and soil in regions of Idaho and may be found in Idaho's drinking water sources. Your body needs some manganese to stay healthy but too much can be harmful.
- **Infants younger than 6 months should not drink water that has manganese over 0.3 mg/L.** (mg/L = milligrams per liter)
- Manganese is not currently regulated in drinking water, but some public water systems test for it.

## What are the health effects of manganese?

- Manganese is an essential nutrient that typically comes from food.
- Formula-fed infants are **most at risk** from consuming too much manganese because some baby formulas already contain manganese.
  - **Infants younger than 6 months** should not drink water that has manganese over the health advisory level of 0.3 mg/L.
  - Formula should not be prepared with water that has manganese over the health advisory level of 0.3 mg/L.
- Children and adults who drink water with high levels of manganese may have:
  - Problems with memory, attention, and motor skills.
  - Learning and behavior issues.

## How do I know if I have manganese in my water?

- Manganese in tap water at levels greater than 0.05 mg/L may stain your bathroom fixtures or laundry black or brown. It may make your water look, smell, or taste bad.
- Your public water system may notify you if manganese levels are above the health advisory level of 0.3 mg/L.
- Contact your public water system or have your tap water tested to find out the level of manganese in your water.
  - All water testing should be done through an accredited laboratory. See the Idaho Bureau of Laboratories' website.
  - If you have a private well, you may want to test your water for manganese.
  - **Consider testing, especially if an infant is drinking your tap water.**



## How can I protect myself and my family ?

- **Do not** prepare baby formula with water that has high levels of manganese (above 0.3 mg/L).
- **Do not** boil the water because this will increase the level of manganese.
- Ensure your family eats a **well-balanced diet** with enough iron to help maintain a healthy level of manganese.
- **Consider filtering your water.**
  - Oxidizing filters, reverse osmosis units, or water softeners may lower manganese levels in tap water.
  - Confirm with the manufacturer that the device can remove manganese.
  - Remember, treatment devices require regular maintenance to ensure the water is safe to drink.
- **Consider using an alternate source** of drinking water, especially for infants.
  - If you choose to use bottled water, manganese may still be present. Contact the bottled water manufacturer for their water quality information.

**0.3** mg/L

Formula-fed infants under 6 months old should not drink water with Mn greater than this level.

### Learn more:

#### **Search for Your Public Water System**

[dww.deq.idaho.gov/IDPDWW/](http://dww.deq.idaho.gov/IDPDWW/)

#### **Find Drinking Water Health Advisories in Idaho**

[www.deq.idaho.gov/water-quality/drinking-water/drinking-water-health-advisories/](http://www.deq.idaho.gov/water-quality/drinking-water/drinking-water-health-advisories/)

#### **Find a Home Water Treatment System**

[www.nsf.org/consumer-resources/water-quality/](http://www.nsf.org/consumer-resources/water-quality/)

#### **Search for Certified Laboratories**

[healthandwelfare.idaho.gov/health/labs/tabid/99/default.aspx](http://healthandwelfare.idaho.gov/health/labs/tabid/99/default.aspx)

#### **Learn more about health effects**

[www.atsdr.cdc.gov/toxfaqs/tfacts151.pdf](http://www.atsdr.cdc.gov/toxfaqs/tfacts151.pdf)

### Contact information:

#### **Idaho Department of Health and Welfare's Environmental Health Program**

(800) 445-8647

[bceh@dhw.idaho.gov](mailto:bceh@dhw.idaho.gov)

[environmentalhealth.dhw.idaho.gov](http://environmentalhealth.dhw.idaho.gov)

#### **Idaho Bureau of Laboratories**

(208) 334-2235

[healthandwelfare.idaho.gov/Health/Labs/EnvironmentalTesting/tabid/189/Default.aspx](http://healthandwelfare.idaho.gov/Health/Labs/EnvironmentalTesting/tabid/189/Default.aspx)

#### **Idaho Department of Environmental Quality**

(208) 373-0502

[www.deq.idaho.gov/water-quality/](http://www.deq.idaho.gov/water-quality/)

#### **Idaho Public Health Districts**

[www.idahopublichealthdistricts.org/](http://www.idahopublichealthdistricts.org/)

