
Manganese Fact Sheet

What is manganese?

Manganese is a naturally occurring element that is essential to human health in low levels. This is not the same as magnesium.

How can manganese enter water?

Manganese is common in groundwater, especially deep, isolated aquifers. Exposure occurs through consumption of water with elevated manganese levels. Manganese is not readily absorbed through the skin (e.g. bathing).

What is the health impact of manganese?

Studies suggest that excessive, sustained exposure to manganese may decrease memory, attention, and motor skills. Infants are at higher risk because they do not metabolize manganese in the same way as older children and adults.

What are the recommended levels of manganese in drinking water?

The EPA advises public water supplies to treat water to less than .050 mg/L, but levels are not currently regulated. The state of Iowa developed a tiered health-based Risk Assessment Advice, advising a maximum .30 mg/L for adults and children over one year of age and .10 mg/L for infants.

How can manganese levels be controlled in drinking water?

Various in-home treatment systems are likely to decrease manganese levels, including softeners, carbon filters, reverse osmosis, adsorption, oxidation and filtration. Consult with a treatment specialist to determine the most appropriate treatment device for the affected household.

References

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