

HEALTHY KIDS
Metals
INFORMATION

Why did we measure metals in kids?

Metals occur naturally in the environment and are commonly found in water, food and air. Metals are also used in industry, consumer products and agriculture. Some metals, like manganese and chromium, are essential nutrients at low levels. If children or developing babies come in contact with higher levels of some metals, it may lead to harmful health effects. These effects include learning and behavior problems, allergic reactions, damage to the heart and kidneys, and cancer.

There are many metals. Healthy Kids measured five: **ARSENIC, CHROMIUM, COBALT, MANGANESE, NICKEL**

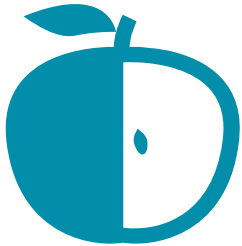
How do kids come in contact with the metals in Healthy Kids?

How can you protect them?

HOW: Eating some foods

WHICH METAL: All 5 metals, especially arsenic

WHAT YOU CAN DO:



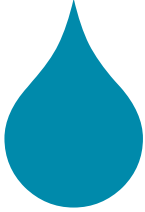
- Provide your child with a well-balanced diet with a variety of foods so they do not eat the same foods every day.
- Rice is the main source of arsenic in food. If your child eats rice multiple times per week:
 - Offer a variety of whole grains such as wheat, quinoa, corn, oats.
 - Rinse rice well before cooking.
 - Limit consumption of other rice products brown rice syrup, rice cakes, rice milk, rice cereals, rice pasta.
 - Serve different types of rice. Some types have more arsenic.
 - More on arsenic and rice: <https://bit.ly/1QmZeEF>
- Give your child a variety of juices, and offer water instead to reduce sugar intake. Some apple, pear and grape juices have arsenic.
- Learn about how your yard was used in the past before growing vegetables. Visit this link for tips: <https://bit.ly/2NvumJ9>

HOW: Breathing secondhand smoke from cigarettes

WHICH METAL: All 5 metals

WHAT YOU CAN DO:

- If you smoke, smoke outside the home or car away from your child. Talk to your doctor about quitting and get the right help you need to quit for good. For free help call 888-354-7526 or visit www.quitplan.com or <https://bit.ly/2VguYoy>
- Avoid areas where your child might breathe secondhand smoke. Ask people not to smoke around your child. Find information about smoke-free housing options in Minnesota: <https://bit.ly/2g7H9zS>

HOW: Drinking Water**WHICH METALS:** Arsenic, manganese, chromium**WHAT YOU CAN DO:** **If you get your drinking water from a public water system, such as city**

- Your water is regularly tested and treated for arsenic and chromium to meet U.S. Environmental Protection Agency standards.
- Some public water systems also test for manganese, but they are not required to. You can contact your public water system to ask if they do. Minneapolis city water is low in manganese. Minnesota has guidance for manganese in drinking water. Learn more: <https://bit.ly/2T3U65c>
- Check water testing results where you live: health.mn.gov/ccr

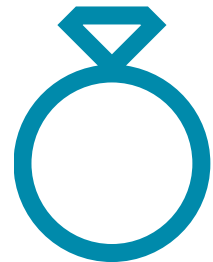
If you get your drinking water from a private well

- MDH recommends testing well water for five contaminants, including manganese (before giving water to an infant) and arsenic: <https://bit.ly/2TgoSau>. Contact an accredited laboratory or ask your county if they do testing: <https://bit.ly/2SqxE0x>
- MDH recommends treating water with arsenic above 10 micrograms per liter ($\mu\text{g/L}$) or finding an alternate source of water: <https://bit.ly/2TjfH95>. Even levels of arsenic below 10 $\mu\text{g/L}$ may be harmful.
- Do not give water to an infant or use it to prepare infant formula if it has manganese above 100 $\mu\text{g/L}$: <https://bit.ly/2T3U65c>
- If everyone in your household is more than one year old, a safe level of manganese in your drinking water is 300 $\mu\text{g/L}$ or less.

HOW: Wearing some children's jewelry**WHICH METALS:** Nickel

WHAT YOU CAN DO:

- Keep jewelry away from small children. Do not allow your child to mouth, bite or swallow children's jewelry.
- Products labeled as made in the U.S. are least likely to contain unsafe levels of metals. Learn more: <https://bit.ly/2Xr5VkB>

**HOW: Metals in and around the home****WHICH METALS:** Arsenic

WHAT YOU CAN DO:

- Take shoes off before entering the house, dust and mop regularly, and have your child wash hands before meals. Metals can be tracked into the house as dirt and dust.
- Some outdoor wood structures like decks or play equipment may have been treated with arsenic if they were built before 2004 and are not cedar or redwood. Children can come in contact with arsenic by playing around these wood structures. Learn more: <https://bit.ly/2RX6TVK>