

Understanding Chelation

INFORMATION FOR PATIENTS

The risks of chelation treatment are greater than the benefits most of the time. [MDH](#) and the [Minnesota Poison Control System](#) agree that chelation is not the best treatment for most metal exposures; stopping the exposure is.

What is chelation?

Chelation is a treatment for people who have too much metal in their body. It removes metals and other elements from the body.

Chelators attach to metals in the body. Your body can then get rid of the metals through your urine or feces.

Chelators attach to many elements. This means that chelation may remove important elements that your body needs to function properly. These elements include chromium, zinc, and calcium.

About chelation therapy:

- Consult with your doctor if you are concerned about a recent exposure to a toxic metal. Chelation should never be started without the guidance and close monitoring of a medical doctor in consultation with a medical toxicologist. Serious, and sometimes fatal, side effects have occurred.
- Chelation should only be used when a serious contact with or exposure to a metal is known, the exposure has been stopped, and the levels of metal in the body are correctly evaluated. The therapy should be closely followed by a medical toxicologist or doctor. This treatment is rarely needed.
- Chelation is hardly ever a good treatment for chronic or low-level exposures to metals. The best treatment is removing the exposure.

Testing for metals

Testing is only one part of a correct diagnosis of metal toxicity.

Metal tests may include blood or urine lab tests. Lab tests for metals that use hair, fingernails and toenails are not useful for most metals.

A “provoked” urine test is a test taken after a chelator is given to you. A “provoked” test will raise amounts of most metals in your urine. The results of this test often show up as a “positive” result in people who have no actual metal toxicity.

Understanding test results

People rarely have harmful levels of metals in their bodies.

A test may find small or “detectable” amounts of metals in your body. This does not mean you are poisoned. Finding metals is normal because your body is made up of many elements. Chelation should never be used by people who have normal amounts of metals in the body.

Finding elevated or abnormal amounts of metals in blood or urine typically means that there is an exposure that can be found and stopped.

A “positive provoked” urine test does not mean that you have had an abnormal or major exposure or that you are in need of chelation. Results from a “provoked” lab test may lead to further tests, inappropriate or unnecessary treatments, and avoidable harm.

Chelation is sometimes inappropriately prescribed because test results are not completely understood. This may place you at risk of harm. The [MN Poison Control System](#) or a medical toxicologist can best understand your lab results. [MDH](#) has experts that can help your doctor identify abnormal exposures and understand test results.

How chelation works...

Our bodies typically isolate abnormal amounts of metals to keep them from harming us. Chelators find and attach to elements. Elements are recirculated, redistributed, and possibly re-activated. Your body will then get rid of some of these elements through urine or feces. Elements in circulation in your body will often, over time, return to the amounts present before treatment.

Did you know?

Chromium, calcium, and zinc are needed for your body to function properly. These elements may be removed by chelation.

- Chromium helps manage your blood sugar.
- Zinc is important for normal taste function and for normal red blood cells.
- Calcium is necessary for many body processes. Low calcium may be life-threatening.

Avoid exposure to metals

Exposure to the following sources of lead, arsenic, and mercury may be of concern or may be dangerous:

- Swallowing of products containing lead may be extremely dangerous. Lead is in bullets, sinkers, and lead paint chips and/or dust. Do not eat meat with lead bullet fragments or shot in it; prepare and trim your game well. Lead has been found in some imported, ethnic products like some spices, cosmetics, candies, alternative medicines and toys.

Contact the [MN Poison Control System](#) if you or someone you care for has consumed a lead-containing product.

- Arsenic can be found in old grasshopper baits and pesticides on farms. Swallowing these products is extremely dangerous. Old green-treated wood also contains arsenic. Contact the [MN Poison Control System](#) if you suspect someone has been exposed to arsenic.

Well water in Minnesota may contain naturally high amounts of arsenic. MDH recommends that you test your well for arsenic and other substances. Contact [MDH](#) or your county to learn how you can test your well or to help you understand your test results.

- Mercury exposures can happen when you use imported [skin-lightening creams](#). These products may be extremely dangerous. Talk to your care giver before using any skin-lightening creams.

Reduce your contact with mercury from broken light bulbs (CFLs) or thermometers by completely and safely cleaning up the mercury. [MDH](#) and the [MN Poison Control System](#) can provide information about proper clean up.

- Methyl mercury also comes from eating large predatory fish that are *high in mercury* too often. Eating fish that are *low in mercury* is good for you. Visit the [MDH website](#) for information about what fish you can eat to get the most benefit.

You can find help

Contact the [MN Poison Control System](#) anytime by calling 1-(800) 222-1222 to ask about chelation products and treatments.

Call the [MDH Site Assessment and Consultation Unit](#) if you or your physician have questions about possible exposures to metals or evaluating metal test results.

This information sheet was created as a joint project between the [MDH Site Assessment and Consultation Unit](#) and the [Minnesota Poison Control System](#).

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Understanding Chelation: Information for Patients

URL REFERENCE LIST:

- MDH - <http://www.health.state.mn.us/divs/eh/hazardous/index.html>
- Minnesota Poison Control System - <http://www.mnpoison.org/>
- Minnesota Poison Control System - <http://www.mnpoison.org/>
- MDH - <http://www.health.state.mn.us/divs/eh/hazardous/topics/mercury/index.html>
- Minnesota Poison Control System - <http://www.mnpoison.org/>
- Minnesota Poison Control System - <http://www.mnpoison.org/>
- MDH - <http://www.health.state.mn.us/divs/eh/wells/waterquality/>
- Skin-lightening Creams - <http://www.health.state.mn.us/topics/skin/>
- MDH - <http://www.health.state.mn.us/divs/eh/hazardous/topics/mercury/index.html>
- MDH Website for information about what fish you can eat to get the most benefit - <http://www.health.state.mn.us/divs/eh/fish/eating/safeeating.html>
- Minnesota Poison Control System - <http://www.mnpoison.org/>
- Site Assessment and Consultation Unit (contact information) - <http://www.health.state.mn.us/divs/eh/hazardous/contact.html>
- MDH Site Assessment and Consultation Unit - <http://www.health.state.mn.us/divs/eh/hazardous/index.html>
- Minnesota Poison Control System - <http://www.mnpoison.org/>