



# Poison HOTLINE

Partnership between Iowa Health System and  
University of Iowa Hospitals and Clinics

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## Did you know .....

Many bleach products are now available in a concentrated formula. The concentrated products contain 7-15% sodium hypochlorite (NaClO), versus regular bleach products containing 3-5% NaClO.

Dilute (ie: 3- 5%) NaClO solutions may be moderately irritating to the skin but rarely cause serious burns, except with large volume exposures. The concentrated formula poses a higher risk for the caustic effects from bleach with oral or ocular exposures.

Call the ISPCCC at **1-800-222-1222** with any bleach exposures.

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

## Testing for Heavy Metals

The ISPCCC frequently receives calls regarding heavy metal testing. Most times, the health care practitioner who is calling the ISPCCC has received the results of a urine screen for heavy metals and is asking for assistance in interpreting the results.

Gone are the days when practitioners would “rule-out rheumatologic disease” in a patient by ordering a battery of 14 rheumatological tests and see which tests, if any, came back positive. The same holds true for heavy metal testing. If a practitioner suspects that a heavy metal may be causing a patient’s symptoms, the first step is a thorough history and physical to determine whether or not the patient’s symptoms are consistent with either an acute or chronic exposure to the suspected toxin. The history needs to thoroughly scrutinize the patient’s occupations, hobbies, living and work environments to find any possible sources of heavy metal exposure. Information gathered from the history and physical should allow the list of possibilities to be narrowed to a few possible heavy metals, which can then be tested for.

The best testing method for heavy metals depends upon which heavy metal is being tested for, the species of the heavy metal (e.g. organic versus inorganic), the time frame of the exposure, and the metal’s natural elimination pathway from the body. Specimens used for heavy metal testing include serum (acute selenium toxicity, etc), whole blood (chronic selenium toxicity, lead, mercury, etc) and a 24-hour urine collection (arsenic, thallium, etc). The 24-hour urine collection frequently provides information about the body-burden of the metal and the ability of the body to eliminate said metal. The biological specimens need to be properly collected in the correct collection container to prevent contamination and mishandling which can produce erroneous test results.

Decisions regarding chelation should be based on more than just laboratory results. The patient’s clinical presentation and the efficacy or lack of efficacy of chelation (as reported in the literature) also need to be considered.

A toxicological consultation with the ISPCCC is recommended to help determine if a patient’s symptoms are consistent with a heavy metal exposure and which testing is most appropriate for the particular case.

*Randy E. Crouch, RN, MS  
Certified Specialist in Poison Information*

**POISON**  
**Help**  
**1-800-222-1222**

The logo for Poison Help. It features the word "POISON" in a bold, black, sans-serif font at the top. Below it, the word "Help" is written in a large, bold, black, sans-serif font. To the right of the word "Help" is a red pill bottle with a white cap and a white skull and crossbones symbol on its side. Below the word "Help" and the pill bottle, the phone number "1-800-222-1222" is written in a bold, black, sans-serif font.

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