



Lead in Drinking Water

SCI: Buildings 60121, 60194, & 60196 only

These three buildings recently had detections of lead above the drinking water action level of 15 parts per billion. No other buildings at San Clemente Island (SCI) had lead concentrations above the action level. Follow-up samples in these buildings did not detect any lead. However, the Navy must take precautions based upon the lead detections above the lead action levels. For these buildings only - Use cold water for drinking or cooking, never cook using hot water from the tap, and flush the tap 60 seconds before using.

If water tests show my drinking water contains lead, or I suspect there is lead in my drinking water, what can I do to reduce the levels?

- 💧 Use cold water for drinking or cooking. Never cook or mix infant formula using hot water from the tap – use bottled water if at all possible.
- 💧 Make it a practice to run the water at each tap before use – minimum of 60 seconds.
- 💧 Do not consume water that has sat in your home's plumbing for more than six hours. This means the first water drawn from the tap in the morning, or later in the afternoon after returning from work or school, can contain fairly high levels of lead. First, make sure to run water until you feel the temperature change before cooking, drinking, or brushing your teeth, unless otherwise instructed by your utility.
- 💧 Some faucet and pitcher filters can remove lead from drinking water.

Is there a medical test to show whether I've been exposed to lead?

Yes. A blood test is available to measure the amount of lead in your blood and to estimate the amount of your recent exposure to lead. Blood tests are commonly used to screen children for lead poisoning. Your medical provider can provide more information about testing.

Why is lead in drinking water a problem?

Exposure to lead in drinking water can increase the build-up of lead in our bodies due to other routes of lead exposure. Lead in water can be a special problem for infants, whose diets are mostly liquids, such as baby formulas or concentrated juices mixed with water.

What should I do if I suspect that my water contains high lead levels?

If you want to know if your home's drinking water contains unsafe levels of lead, have your water tested. Testing is the only way to confirm if lead is present or absent.

What is the drinking water standard for lead?

EPA set an Action Level for lead at 15 parts per billion (ppb). Water suppliers are required to collect water samples from household taps twice a year and analyze them to find out if lead is present above 15 ppb in more than 10 percent of all homes tested. If it is present above this level, the system must continue to monitor this contaminant twice a year.





What are the health effects of lead in drinking water?

The effects of lead are the same no matter how it enters the body. Lead can affect almost every organ and system. The main target for lead toxicity is the nervous system, both in adults and children. Long-term exposure of adults can result in decreased performance in some tests that measure functions of the nervous system. It may also cause weakness in fingers, wrists, or ankles. Lead exposure also causes a small increase in blood pressure, particularly on middle-aged and older people and can cause anemia. Exposure to high lead levels can severely damage the brain and kidneys in adults or children and ultimately cause death. In pregnant women, high levels of exposure to lead may cause miscarriage. High level exposure in men can damage the organs responsible for sperm production. A child's mental and physical growth can be permanently harmed by too much lead. Exposure to lead is more dangerous for young and unborn children than for adults. Unborn children can be exposed to lead through their mothers. Children can absorb lead more rapidly than adults, so amounts of lead that isn't harmful to an adult can be very harmful to a child.



There is no conclusive proof that lead causes cancer in humans. Kidney tumors have developed in rats and mice that had been given large doses of some kind of lead compounds. The Department of Health and Human Services (DHHS) has determined that lead and lead compounds are reasonably anticipated to be human carcinogens and the EPA has determined that lead is a probable human carcinogen. The International Agency for Research on Cancer (IARC) has determined that inorganic lead is probably carcinogenic to humans and that there is insufficient information to determine whether organic lead compounds will cause cancer in humans.

Lead is commonly used in household plumbing materials and water service lines, also in the production of batteries, ammunition, metal products (solder and pipes), and devices to shield X-rays. Because of health concerns, lead from paints and ceramic products, caulking, and pipe solder has been dramatically reduced in recent years. The use of lead as an additive to gasoline was banned in 1996 in the United States. The greatest exposure to lead is swallowing or breathing in lead paint chips and dust. In some instances, lead is also found in drinking water.

How does lead get into drinking water?

Lead rarely occurs naturally in water; it usually gets into water from the delivery system. Lead can get into drinking water after the water has left the treatment plant and is on its way to people's faucets because of corrosion of lead containing plumbing materials. Many structures built prior to 1988 are more likely to have lead pipes, fixtures and solder. However, new homes are also at risk; even legally "lead-free" plumbing may contain up to 8 percent lead. The most common problem is with brass or chrome-plated brass faucets and fixtures which can leach significant amounts of lead into the water, especially hot water. The amount of lead in the water also depends on the types and amounts of minerals in the water, how long the water stays in the pipes, the amount of wear in the pipes, the water's acidity and its temperature.

According to the California Code of Regulations Title 22 §64679. "A water system with a lead action level exceedance shall offer to sample the tap water of any customer who requests it. The system is not required to pay for collecting or analyzing the sample." If you want your tap water sampled for lead, please contact Len Sinfield at 619-532-2280 or email: Len.Sinfield@Navy.mil.

Additional information can be found at:

<https://www.cnrc.navy.mil/cnrcsw/Programs/index.htm>

<http://www.atsdr.cdc.gov/tfacts13.html>

<http://www.epa.gov/safewater/lead/index.html>

<http://www.cdc.gov/nceh/lead/faq/leadinwater.htm>

Local contact: 619-532-2280 Len.Sinfield@Navy.mil