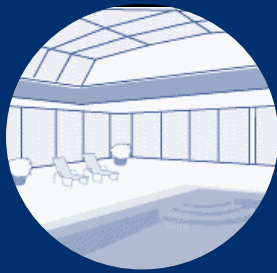


NSF Water Safety Kit



Lead and Home Water Treatment Options

Lead in drinking water remains a major concern for consumers. While the 1996 revisions to the Safe Drinking Water Act significantly changed the lead requirements for materials used in residential plumbing, older fixtures and lead water lines are still in service in many communities around the country, and they can potentially contribute lead into the home's drinking water supply.

Individuals living in older homes should check to see if a lead service line connects the home to the public water system. If the home has a basement, locate the place where the water line comes in through the wall or floor. Is the pipe thick in appearance and a light gray in color? If so, the service line may be lead. The local water department can inspect the line or check their records to confirm if the home is connected to the public water system by a lead service line as well. In many communities there are two parts to the service line. In some communities, the portion between the street and the house may be the homeowner's responsibility to maintain or replace.

In addition to lead service lines, faucets and lead-based solder can also contribute small amounts of lead into drinking water if produced and installed before 1998. As a result, some individuals who don't have lead service lines can still have unsafe levels of lead in their drinking water. If you are concerned about lead in your drinking water, consider having a lead test performed on the tap water to ensure the lead content is below 15 ppb (0.015 mg/L). If it exceeds this level, options include having the lead service line replaced, using a home water treatment product certified for lead reduction, or using certified bottled water.

Home Water Treatment Options

While replacement of the lead service line may be desirable, it isn't always possible. Depending upon the lead levels, home water treatment devices may be a practical choice. There are filters, reverse osmosis units, and distillers certified to reduce lead. Certification means that a sample of a system was independently tested to verify compliance with national product standards. In the case of lead reduction, filters certified for this purpose are required to reduce 150 ppb of lead (0.150 mg/L) to 10 ppb (0.010 mg/L) or less.

In private wells, a low pH can also cause lead leaching, so an acid neutralizing system may be needed to correct the situation. These systems add a chemical additive to the water, such as soda ash or limestone, to boost the pH until the pH is raised above 7.0 and the water become alkaline. These systems can also help to reduce instances of copper leaching that is attributable to low pH.

Most water treatment systems have replaceable components, so product users need to follow the manufacturer's maintenance instructions. For filters, this means changing the filter at the recommended intervals, usually determined in gallons. For reverse osmosis units, this means monitoring the total dissolved solids (TDS) content of the water being produced by the system to ensure the membrane continues to be effective. By proper selection, use, and maintenance, home water treatment systems can help consumers reduce contaminants such as lead from their incoming drinking water supply.

Source: NSF International Water Certification Programs

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