

FACT SHEET



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

Lead and Copper Rule Office of Water Quality

(317) 232-8603 • (800) 451-6027

www.idem.IN.gov

100 N. Senate Ave., Indianapolis, IN 46204

Introduction:

Public Water Systems that supply drinking water must follow certain federal and state safe drinking water regulations. Drinking water is any water supplied for the purpose of human consumption or domestic use. The source of the water can be ground water from wells or surface water from rivers and lakes. The purpose of this fact sheet is to define and explain the health effects lead and copper in drinking water, as well as the requirements for the Lead and Copper Rule.

What is the federal Lead and Copper Rule?	<i>The federal Lead and Copper Rule requires treatment when lead and/or copper in drinking water exceed certain levels. It was published in the Federal Register on June 7, 1991, and became effective on December 7, 1992. .</i>																					
What are the Health Effects of Lead and Copper?	<i>All water is corrosive to metal plumbing materials to some degree. Lead contamination can occur from the corrosion of lead-containing household plumbing. Short-term health effects include interference with red blood cell chemistry; delays in normal physical and mental development in babies and young children; slight deficits in attention span, hearing, and learning abilities of children; and slight increases in the blood pressure of some adults. Long-term health effects can include stroke, kidney disease, and cancer. Copper contamination generally occurs from the corrosion of household plumbing. Copper is an essential nutrient, required by the body in small amounts. However, copper can cause the following health effects: stomach and intestinal distress, liver and kidney damage, and anemia. Persons with Wilson's Disease may be more sensitive than others to the effects of copper contamination.</i>																					
What is an action level?	<i>The action level is the level of lead or copper in a drinking water sample that, if exceeded, triggers the water system to take further action. Concentrations must be under the action levels in at least 90 percent of the samples collected.</i>																					
What are the action levels for lead and copper?	<i>The Lead Action Level is 0.015 milligrams per liter (mg/L) or 15 parts per billion (ppb). The copper action level is 1.3 mg/L.</i>																					
Who is Required to Sample for Lead and Copper?	<i>All Community Water Systems and Nontransient Noncommunity Water Systems must sample. Examples include municipalities, mobile home parks, subdivisions, hospitals, correctional facilities, schools, factories, office buildings, and day care centers.</i>																					
How do I sample for lead and copper? What are the requirements for frequency and quantity?	<p><i>For Community Water Systems, collect samples in homes at the kitchen or bathroom cold water tap after the water has been in contact with the plumbing for at least 6 hours. For Nontransient Noncommunity Water Systems, collect samples from interior drinking water taps after the water has been in contact with the plumbing for at least 6 hours. Initial frequency is 2 consecutive 6-month monitoring periods (January to June and July to December), then may be reduced to once per year for 3 years and, ultimately, to once every 3 years. The number of samples required is based on the population served:</i></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">System Size</th> <th style="text-align: center;"># Required/Initial Monitoring</th> <th style="text-align: center;"># Required/Reduced Monitoring</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">> 100,000</td> <td style="text-align: center;">100</td> <td style="text-align: center;">50</td> </tr> <tr> <td style="text-align: center;">10,001 to 100,000</td> <td style="text-align: center;">60</td> <td style="text-align: center;">30</td> </tr> <tr> <td style="text-align: center;">3,301 to 10,000</td> <td style="text-align: center;">40</td> <td style="text-align: center;">20</td> </tr> <tr> <td style="text-align: center;">501 to 3,300</td> <td style="text-align: center;">20</td> <td style="text-align: center;">10</td> </tr> <tr> <td style="text-align: center;">101 to 500</td> <td style="text-align: center;">10</td> <td style="text-align: center;">5</td> </tr> <tr> <td style="text-align: center;">< 101</td> <td style="text-align: center;">5</td> <td style="text-align: center;">5</td> </tr> </tbody> </table>	System Size	# Required/Initial Monitoring	# Required/Reduced Monitoring	> 100,000	100	50	10,001 to 100,000	60	30	3,301 to 10,000	40	20	501 to 3,300	20	10	101 to 500	10	5	< 101	5	5
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<p>What must I do if an action level is exceeded?</p>	<p>If you exceed either the lead or copper action level, you should contact IDEM's Drinking Water Branch immediately at (317) 234-7430. For lead and copper exceedances, you will be required to:</p> <ul style="list-style-type: none"> • Collect additional samples for water quality parameters (alkalinity, calcium, conductivity, pH, temperature, and orthophosphate and/or silicate if either or both are added to your system) and for lead and copper in your source water, • Make required corrosion control recommendations/treatment(s) to reduce the corrosivity of the water (its ability to leach metals from plumbing), and • Implement an IDEM-approved public education campaign. Community Water Systems must deliver information to each customer, in addition to other outreach requirements. Nontransient Noncommunity Water Systems may obtain approval for electronic distribution of information.
<p>What Is the Consumer Notice of Lead Result in Drinking Water and Certification form?</p>	<p>The Consumer Notice of Lead Result in Drinking Water is a state form that must be completed by the Public Water System (PWS). It contains two parts. The first part is a notice that the PWS must complete and deliver to occupants of each location sampled within 30 days of knowing the sample results. The second part is a certification that the PWS must complete and mail to IDEM, along with a sample copy of the notice sent to consumers, not later than 3 months following the end of the monitoring period.</p>

IDEM's Role:

The Indiana Department of Environmental Management (IDEM) is responsible for protecting human health and the environment while providing for safe industrial, agricultural, commercial and governmental operations vital to a prosperous economy. IDEM's Office of Water Quality, Drinking Water Branch regulates, monitors, permits and licenses drinking water facilities and operators.

Public Water System's Role:

Community Water Systems must understand and comply with regulations for monitoring, treating and reporting. Community Water System owners and operators may contact IDEM's Drinking Water Branch at (317) 234-7430 to request free compliance and technical assistance.

Rule Citations: State rules are found in the Indiana Administrative Code under 327 IAC 8-2-36 through 327 IAC 8-2-47. Federal rules are found in the Code of Federal Regulations at 40 CFR Part 141.

Citizen's Role:

Citizens can find drinking water quality information by visiting IDEM's Drinking Water Watch website at <https://myweb.in.gov/IDEM/DWWW/> and contacting their local Community Water Supply for the latest Consumer Confidence Report. Citizens can find information about source water protection at <http://www.in.gov/idem/4142.htm>.

Additional Information:

- Extensive information on the federal Lead and Copper Rule is provided by the United States Environmental Protection Agency (U.S. EPA) online at <http://water.epa.gov/lawsregs/rulesregs/sdwa/lcr/compliancehelp.cfm>. For Indiana's rules on Drinking Water Standards (327 IAC 8), visit <http://www.in.gov/legislative/iac/t03270/a00080.pdf>.
- IDEM provides compliance information for Indiana Public Water Systems at <http://in.gov/idem/cleanwater/2386.htm>. In addition to IDEM's Office of Water Quality Drinking Water Branch at (317) 234-7430, U.S. EPA's Safe Drinking Water Hotline, at 1-800-426-4791, offers assistance to Public Water System owners and operators and the public.
- For lead prevention information, contact the National Lead Information Center (NLIC) at 1 (800) 424-LEAD [5323].

This fact sheet is intended solely as guidance and does not have the effect of law or represent formal Indiana Department of Environmental Management (IDEM) decisions or final actions. This fact sheet shall be used in conjunction with applicable rules and statutes. It does not replace applicable rules and statutes, and if it conflicts with these rules and statutes, the rules and statutes shall control.