

# GALVANIZED SERVICE LINES

## Guidance

### WHAT ARE GALVANIZED SERVICE LINES?

**Galvanized Iron Pipes:** Galvanized pipes are iron pipes that have been dipped in a protective zinc coating to prevent corrosion and rust. Galvanized piping was commonly installed in homes built before 1970. Galvanized pipe was an alternative to lead pipe for water supply service lines.

**Service Lines:** Service lines are the underground pipes that deliver water from the water main to a home. Each service line or connection may consist of multiple plumbing material types including, but not limited to lead, copper, galvanized iron and plastic.



### HOW ARE GALVANIZED SERVICE LINES A SOURCE OF LEAD EXPOSURE?

Galvanized iron pipes can serve as a source for lead exposure in two ways.

1. Galvanized service lines can capture lead released from upstream lead service lines. This stored lead can be released into the home. The release can vary in concentration and can happen over a long period of time. In-home galvanized plumbing is also a source of potential lead exposure, if the house has or had a lead service line.
2. The zinc coating on galvanized pipes contains lead that can corrode and leach into drinking water. Older galvanized pipes, manufactured before 2014, contain a higher percentage of lead (between 0.5% and 1.4%); newer galvanized pipes intended for drinking water use must meet the Michigan Plumbing Code requirement (0.25% lead by weight).

### WHAT CAN YOU DO?

**Check if your home has a lead service line.** Homes with lead service lines have a higher risk of having high lead levels in drinking water.

**Check if your home has a galvanized service line or household plumbing.** Homes with galvanized service lines have a higher risk of having high lead levels in drinking water. A magnet will stick to galvanized iron pipes.

**Do not boil water to remove lead.** Boiling will not remove lead.

**Use a properly certified filter.** Read packaging to find a filter that meets NSF/ANSI Standards 53 for the reduction of lead and 42 for particulate (Class I). Be sure to maintain and replace the filter device in accordance with the manufacturer's instructions.

**Learn about your drinking water supply.** Read your community's Consumer Confidence Report that is mailed to each year or can be found at your local water utility's website.

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#### STARTING IN 2021

Community water supplies will be required to start replacing:

- Lead service lines
  - Galvanized lines that are, or were, connected to lead
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SCIENTIFIC SOURCES: Clark, B N., et al. "Lead Release to Drinking Water from Galvanized Steel Pipe Coatings." *Environmental Engineering Science*, vol. 32, no. 8, 2015, pp. 713-21, doi:doi:10.1089/ees.2015.0073.

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McFadden, M, et al. "Contributions to drinking water lead from galvanized iron corrosion scales." *Journal - American Water Works Association*, vol. 103, no. 4, 2011, pp. 76-89, doi:10.1002/j.1551-8833.2011.tb11437.x.

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