Lead exposure – **even at low levels** – can harm children’s developing brain, resulting in learning and behavioral problems and lower IQs. Sources of lead exposure could include paint, dust, soil, water, food, and consumer products. While lead-based paint – particularly in older homes – is the most common source of exposure for children with lead poisoning, the events in Flint, Michigan and other US cities have drawn national attention to the risks of lead in drinking water.

Sources of drinking water rarely contain lead. However, lead can enter drinking water when water pipes and plumbing fixtures (like faucets and fountains) containing lead corrode, especially where the water is acidic or has low mineral content. There are three main sources of lead in water in homes or other buildings:

- **Lead pipes**: Lead service lines (LSLs) are lead pipes that connect the water main under the street to a building’s plumbing. Lead pipes can also be in the interior of buildings. Congress banned use of lead pipes in 1986.
- **Leaded solder**: Solder is the material used to connect copper pipes and fittings. Congress banned the use of leaded solder above 0.2% in 1986.
- **Leaded alloys**: Brass is a common material used in faucets and other plumbing products. Congress limited the amount of lead in brass to 8% in 1986 and further limited it to 0.25% in 2011 (effective 2014).

Older buildings are more likely to have LSLs or lead in materials used for interior plumbing. Water utilities implement a process called corrosion control to limit the leaching of lead – but such measures cannot completely eliminate the risk. The only permanent solution is removing the sources of lead in contact with water that may be consumed.

When present, LSLs are the largest potential source of lead in drinking water. LSLs can contribute to dissolved lead as well as particulate lead that can directly enter the water people drink or become trapped in the faucet aerator and release lead over time. Even though Congress banned these lead pipes over 30 years ago, an estimated 6-10 million homes across the nation still have LSLs – which can unpredictably release lead into the water. Removing LSLs provides an opportunity to significantly reduce the potential for children to be exposed to lead in drinking water.

LSLs are rarely found in sizes greater than 2” in diameter, so larger buildings, such as schools or large apartment or commercial buildings, are less likely to have them. However, smaller buildings, such as home-based child care facilities or small school annexes, may have them. As children spend a large
portion of their day in child care facilities or schools, it is critical to ensure the safety of the drinking water in these buildings.

Across the US, many communities, water utilities, and states are taking on the challenge posed by LSLs by establishing and supporting programs to replace these lead pipes.

What can you do to ensure safe drinking water and protect children?

- **Read more about lead in drinking water and LSLs:**
  - LSL Replacement Collaborative toolkit: [Resources for Concerned Consumers](#).
  - Environmental Protection Agency: [Basic Information about Lead in Drinking Water](#).
  - WK Kellogg Foundation and Horsley Witten Group: Lead in drinking water (for [homeowners](#) and for [renters and condo owners](#)).

- **Learn if there is an LSL at your home or places where your child learns and plays:**
  - Reach out to your local water utility and ask if they know what material the service line is at your home.
  - Check out [NPR’s interactive tool](#) to learn how to see if you have a lead service line.
  - Ask the child care facility operator or school building manager if they know the material of the service line at the building and whether they’ve tested their water for lead to identify problematic fixtures.

- **Raise your voice in support of LSL replacement!**
  - Ask your local elected official what they are doing to support LSL replacement in your community. Tell them it’s an important topic for you.