

# Lead in Drinking Water Prevention Act

## SB550

became law Jan. 16, 2017

Cindy Skrukrud, Sierra Club  
Illinois Chapter

# Flint Drinking Water Crisis

- In 2014, Flint switched its water source to the Flint River because of financial issues with its water department.
- The water from the Flint River more corrosive (leaching) than water from Lake Huron, its previous water source, supplied by Detroit.
- Lead levels were found above 5 ppb, which is the level for concern, up to 13,000 ppm



There is no safe level of lead in  
our children's drinking water.

# Lead exposure in children

- Children and infants are far more at risk than adults because of different physical qualities in the blood to brain connection, increased absorption in the digestive system, and hand to mouth behavior.
- Even low levels of exposure have been linked to central and peripheral nervous system, learning disabilities, shorter stature, impaired hearing, and impaired formation and function of blood cells as well as linked to violent behavior.

# Sources of lead

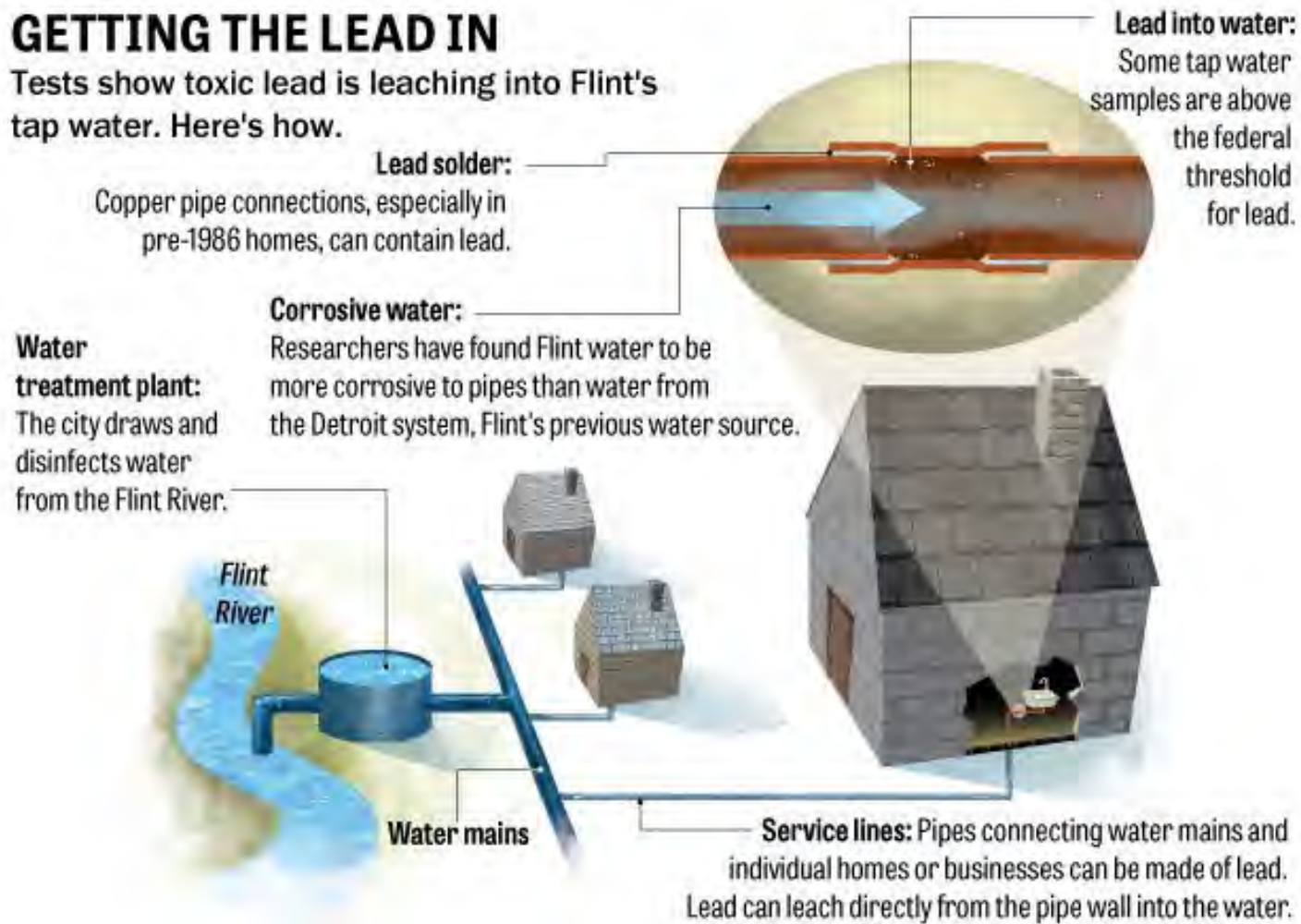
- Lead accumulates in the body.
- 80% of exposure in children is from paint. The CDC estimates that 20% of the exposure is from lead in drinking water.
- In children under 18 months, 40-60% of lead exposure is from drinking water.

SB2300 passed in 2016, which requires mitigation of lead based paint in rental properties.

- Lead service lines common 1800's through WWII, allowed in some town until 1980's.
- Lead solder up til 1986.
- Lead in fixtures til 2014 (now < 0.25% by weight)

## GETTING THE LEAD IN

Tests show toxic lead is leaching into Flint's tap water. Here's how.



Source: <https://micondolaw.com/2016/01/20/failing-infrastructure-how-to-handle-common-element-lead-pipes-in-your-condominium/>

# SB550

- Requires all primary schools in the state built before 2000 to have all drinking water sources tested for lead.
- Requires this information be given to parents.
- Requires day cares built before 2000 to be tested.
- Requires water suppliers to begin a comprehensive inventory of lead service lines.
- Requires notice when there is construction of water mains of potential lead exposure.



# Mitigation

- The CDC recommends that all sources of lead be controlled or eliminated.
- Corrosion control works to protect lead from leaching, but stagnant water, corrosion of lead solder, in home lead fixtures, can all pose significant risk.
- Flushing water and total lead filters can bring lead down to zero.
- Replacing lead pipes and fixtures the ultimate goal.



## REFERENCES

- **Illinois Department of Public Health (IDPH) web site**
  - <http://www.dph.illinois.gov/topics-services/environmental-health-protection/lead-in-water>
- **Illinois Section AWWA (ISAWWA) web site**
  - <http://www.isawwa.org>
- **USEPA Web site**
  - <https://www.epa.gov/lead/learn-about-lead>
- **IEPA web site**
  - <http://www.epa.illinois.gov/highlights/resources-on-lead>
- **Centers for Disease Control (CDC) web site**
  - <https://www.cdc.gov/nceh/lead/leadinwater/>