

# WHY REMOVE LEAD

## The History of Lead Usage

Until it was banned in new home construction in 1986, more than 70% of cities in the US were using lead-based products for conveying water, because it was less expensive and more durable than iron. Lead pipe could be easily bent, allowing pipes to be shaped to conform to the contours of existing buildings or other structures.



NUMBER OF CITIES USING LEAD UNTIL 1986



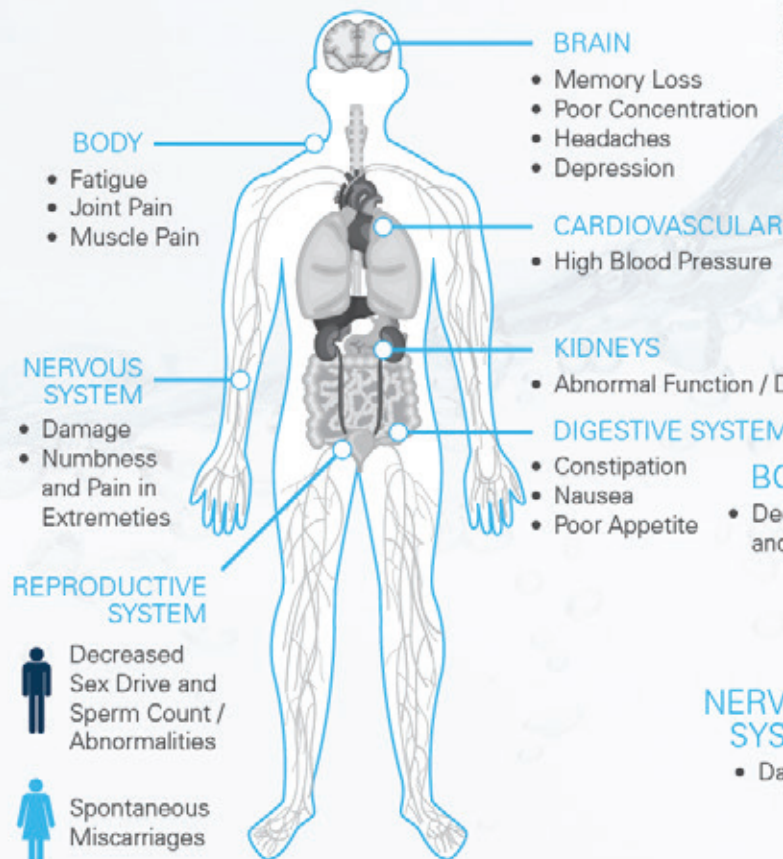
## How Lead Gets into Drinking Water

Lead can enter drinking water when service lines that contain lead corrode, especially where the water has high acidity or low mineral content that corrodes pipes and fixtures. This most often happens in the pipes that carry water from the water treatment plant to water mains under the street supplying homes. Lead release is heavily influenced by the chemistry of the water delivered by the water system and by physical disturbances such as road construction or water main replacements.

# HEALTH EFFECTS OF LEAD

## How Lead Affects Adults

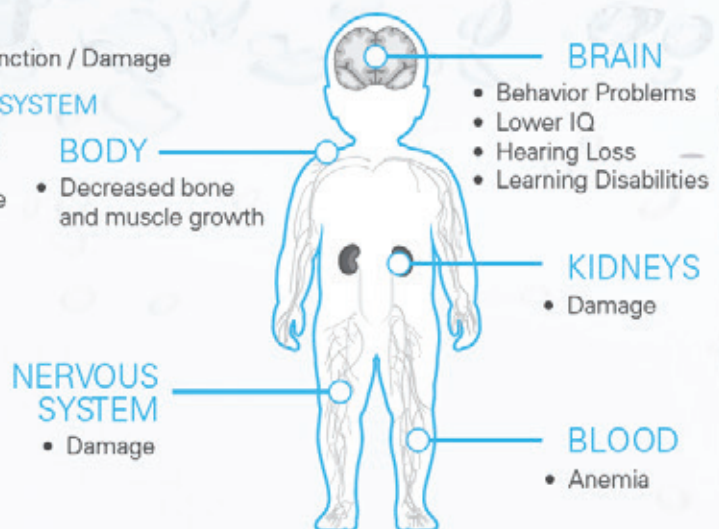
Keep in mind that there is no safe level of lead for the human body and unlike other metals, it has no useful biological function. Even low concentrations of lead in water can cause a significant increase in blood lead levels and any damage is irreversible.



## The Affects on Children

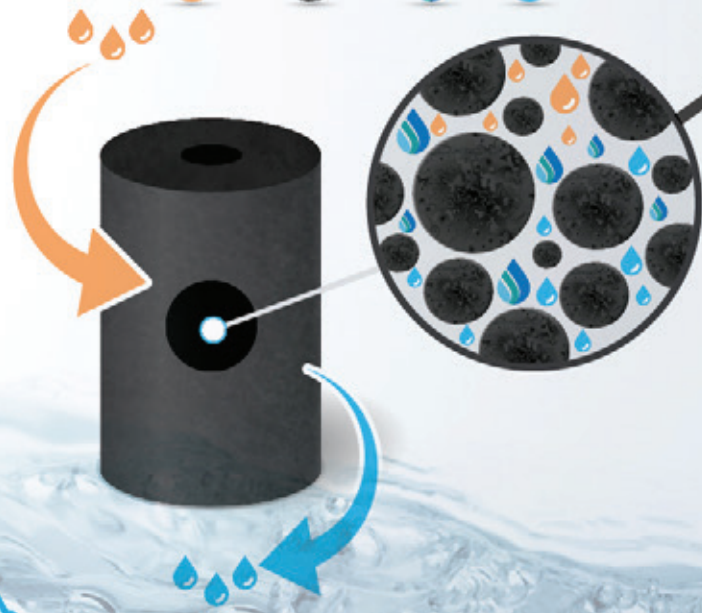
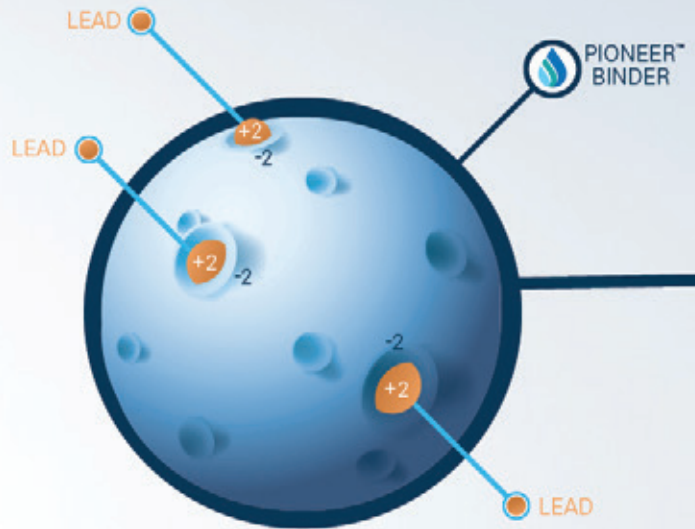
Lead is a potent neurotoxin which has significant effects on childhood health and development. According to the Centers for Disease Control and Prevention, lead exposure can affect nearly every system in a child's body, inhibiting the development of both physical and mental abilities.

The health effects information on this page is not intended to catalog all possible health effects for lead. Rather, it is intended to let you know about the most significant and probable health effects associated with lead in drinking water.





# HOW PIONEER REMOVES LEAD



## FILTRATION EVERYWHERE TECHNOLOGY®

PIONEER provides the best filtration solution - starting at the source and giving peace-of-mind throughout the entire home.

## OTHER HARMFUL ELEMENTS PIONEER REMOVES FROM YOUR WATER

PIONEER removes lead, which is a colorless, odorless & tasteless metal. In addition to lead, the patented PIONEER filtration system removes >99.95% of Giardia & Crypto, as well as Chlorine & Chloramine(\*).

**Giardia & Crypto** - Waterborne parasite that causes diarrheal disease; very resistant to chlorine-based disinfectants, common in drinking and recreational waters.

**Chlorine & Chloramine (\*)** - Water disinfectants added to municipal water, that have negative health effects and the most harmful exposure is through inhalation and skin adsorption of steam in a shower.

