

Abstract

Project Title: What's in Your Water?

Project ID: 127

A few years ago, the drinking water source was changed from Port Huron to the Flint river water which is unclean and corrosive, as a result many people and kids suffered from lead poisoning. Lead is a bluish-white lustrous metal which occurs naturally in the environment and if eaten it is dangerous. I live in Flint and I wanted to conduct a project to test the corrosiveness of the Flint river water. I want to prove that the Flint river water is corrosive so no one will drink it and end up with lead poisoning.

My hypothesis is that the Flint river water is corrosive and if it goes through the metal pipes then the water will be contaminated with the lead because the water will leach away lead from the pipe leading to increased level of the lead in the drinking water.

I performed an experiment placing metal pipes in the Flint river water and clean bottled water for 3 weeks. Using a lead test kit, I compared the lead level in both types of water before and after placing the pipes. I repeated this three times and took the average readings.

For the clean water, the average lead level before I placed the pipes was 0 ppb (parts per billion) and after placing the pipes the level was 0.6 ppb. For the Flint river water, the average before placing the pipes was 2.6 ppb and after placing the pipes it was 21.6 ppb.

In conclusion my hypothesis is correct. The Flint river water is corrosive and if it passes through metal pipes it will take away the lead and increases the level of lead in the water.