

## Flint Water Crisis



### What Happened to Flint's Drinking Water?

The city of Flint, Michigan, suffered a man-made public health crisis caused by failed public policy. Toxic levels of lead in Flint's drinking water beginning in early 2014 harmed the developing brains of young children and caused massive hardship for city residents, who were advised to avoid using the water and have had to rely on bottled water for daily needs for several years. The catastrophe made Flint a national symbol of environmental injustice.

### How Did the Crisis Arise?

An emergency manager appointed by Governor Rick Snyder approved the switch of Flint's drinking water source away from the Detroit water supply. The plan was for Flint to switch over to a new water supplier, Karegnandi Water Authority (KWA). However, KWA was still constructing its pipelines and would not be done with construction until sometime in 2016. Officials decided to use the Flint River water as an interim water source.

As soon as the city's water was drawn from the river, residents complained about the odor, taste, and smell of the water coming out of their faucets. The water supply violated drinking water standards and the city issued water "boiling advisories" to kill off the harmful bacteria *E. coli*. Water tests also revealed high levels of the chlorination byproduct trihalomethane (TTHM), which is linked to cancer and other associated health problems. Despite issuing "boiling advisories," city officials claimed the water was safe to drink.

It was later found that the city wasn't applying anti-corrosive controls to the supply, in violation of federal law. This enabled the water to erode the iron water mains, turning the water brown. Because many of the service lines to homes in Flint were made of lead, the lack of corrosion control meant this toxic metal began leaching into the water supply as well.

### Health Problems Identified

In February 2015, the U.S. EPA notified the Michigan Department of Environmental Quality (MDEQ) it had detected dangerous levels of lead in the water of Flint resident Lee-Anne Walters, who had been concerned the tap water was sickening her children. Her water had 104 parts per billion (ppb) of lead, while the EPA standard was 15 ppb. In March 2015, Flint City Council members voted 7-1 to stop using river water and to reconnect with Detroit. However, the state-appointed emergency manager, Jerry Ambrose overruled the Council, saying the switch would cost too much and that water from Detroit was no safer.

In the summer of 2015, Virginia Tech water quality expert Marc Edwards and pediatrician Dr. Mona Hanna-Attisha began independently researching Flint's water and the impact on the city's residents. Both Edwards and Dr. Hanna-Attisha found high levels of lead in the city's drinking water, which results in elevated blood lead levels in children.

After concluding that Flint water was 19 times more corrosive than Detroit water, Virginia Tech recommended the state declare that the water was not safe for drinking or cooking.

A research team led by Dr. Hanna-Attisha, a pediatrician at Hurley Medical Center, found that the number of children with elevated lead levels in their blood nearly doubled after the city switched its water source. In neighborhoods with the most severe contamination problems, testing showed lead levels tripled.

Their findings were presented to the public in September of 2015. The findings eventually led Flint to reconnect with the Detroit water supply in October 2015, but the switch did not remediate the situation entirely.

### **The Official Response**

In January 2016, Governor Snyder declared a state of emergency with President Obama declaring a federal state of emergency soon after. President Obama issued Flint \$5 million in federal aid along with \$80 million in federal aid to the state of Michigan to repair its aging water infrastructure and supply Flint residents with water filters, bottled water, water filter cartridges, and water test kits.

Four officials -- two of Flint's former emergency managers, who reported directly to the governor, and two water plant officials -- were charged with felonies of false pretenses and conspiracy.

The Michigan Civil Rights Commission issued a 129-page report finding that "deeply embedded institutional, systemic and historical racism" indirectly contributed to the ill-fated decision to tap the Flint River for drinking water as a cost-saving measure.

In April 2018, Governor Snyder announced the end of a free bottled water program in Flint, claiming the water quality has been restored. The program was part of a \$450 million state and federal aid package. The state had been handing out bottled water and filters at several distribution points across the city and said it would stop once the current supply runs out.