

FLINT, MICHIGAN WATER CRISIS

Dr. Carlton Waterhouse's work engages us to act on the issue of environmental injustice that communities without privileges have faced for a long time. It is important to note how significant these injustices are. The Flint, Michigan water crisis is an example of how a poor community faced the challenge of environmental injustice that Dr. Waterhouse strives to relieve.

Switch to water from the Flint River

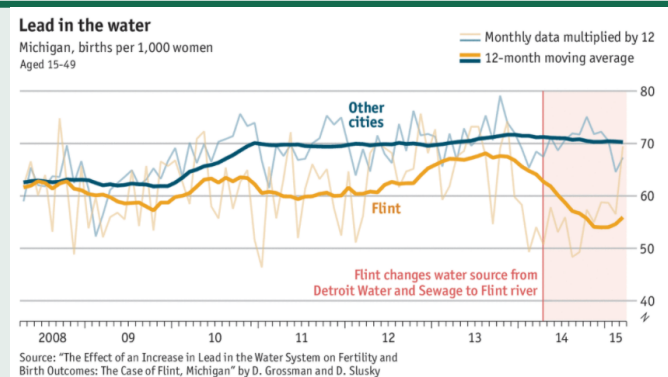
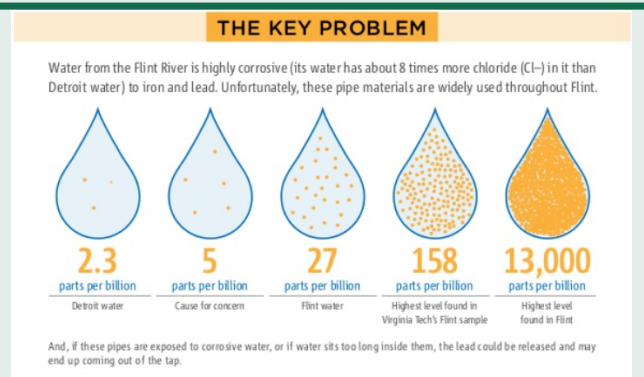
The city of Flint, Michigan switched their water supply from the Detroit Water and Sewerage Department (DWSD) to cut costs on April 25, 2014 (CNN, 2021).

Water became unsafe

With the new water source being the Flint River, lead levels were abnormally high and unsafe for drinking. The water also tested positive for total coliform bacteria, which indicated that the water may have been contaminated with E. coli (CNN, 2021). Flint then ordered a boil water advisory, which occurred multiple times within 4 to 6 months after the water supply change.

Behind the scenes

Flint, Michigan is known as "Vehicle City" since it is home to one of the largest car factory hubs in the United States. When jobs in manufacturing began to wither away, the economy of Flint had nothing else to fall back on (CNN, 2021). The switch in water supply was going to save the government \$5 million in the first year alone. These economic challenges is what urged the municipal government to switch to a cheaper water supply, and ultimately, put the health of all Flint residents at risk.



HEALTH CONCERNS

The corrosive water supply led to the third largest Legionnaires' disease (LD) outbreak in American history (Zahran, McElmurry, Kilgore, Mushinski, Press, Love, Sadler, Swanson, 2018). This outbreak of LD led to about a dozen deaths in the area.

Fertility rate down 12%

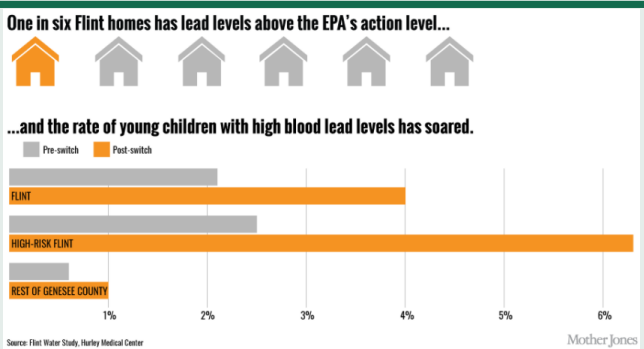
Due to increased levels of lead in the Flint River water supply, there was a sharp 12% decrease in fertility rates as well as an increase in fetal deaths (The Economist, 2017). Exposure to the corrosive water also had permanent long term effects on the youth such as damage to the liver and kidneys.

Visible signs of contamination from residents

Residents of Flint immediately began to notice that the color and smell of the water was off. There were also complaints about rashes obtained from the new water source as well as signs of iron corrosion.

What did the government do?

Despite the constant complaints about the quality of the tap water, the Flint government insisted that the water met federal standards. Only after significant bad press came into the picture did Governor Snyder order Flint to switch the water supply back to the DSWD.



What does this mean?

Communities with families that are poor or less able to relocate face the largest burden. Industries target these communities which leaves residents to face the effects of industrial pollution. This can be seen in the way Flint, MI became a hub for car manufacturing, which polluted the water in the area. Ultimately, the switch to Flint water simply revealed what was already happening. Another example is Saint James Parish, Louisiana, where industries promised an uptick in jobs in exchange for land. This forced residents to live next to hazardous waste sites and elevated air pollution. Due to the environmental damage, Saint James Parish and its surrounding areas experienced some of the highest cancer rates in the country (Cox, 2018). There are other black and brown communities that experience similar environmental injustices, and it will require significant federal intervention to resolve the issue.

Violating EPA action level

The lead levels in the Flint water system surpassed the level where the EPA would intervene by a significant margin.

THE NEXT STEP

There has already been some reform to that mean to prevent crisis like that in Flint such as the Safe Water Drinking Act. In fact, on January 27, 2016 a federal lawsuit was filed against the state alleging the violation of the Safe Water Drinking Act (CNN, 2021). There need to be policy reform that prevents the crisis from happening in the first place. If there was a requirement to have a new water supply thoroughly examined prior to use by the community, the Legionnaires' disease outbreak, deaths, and fertility concerns could have been avoided.

Reference Page

Buckfire, Buckfire &. "The Flint Michigan Water Crisis: Causes & Effects." SlideShare, 14 July 2016, www.slideshare.net/lbuckfire/the-flint-michigan-water-crisis-causes-effects.

Cox, Barteas. "Why Black Americans Are Three Times More Likely to Die from Pollution." Quartz, Quartz, 13 Mar. 2018, qz.com/1226984/environmental-racism-has-left-black-americans-threetimes-more-likely-to-die-from-pollution/.

"Flint Water Crisis Fast Facts." Edited by CNN Editorial Research, CNN, Cable News Network, 14 Jan. 2021, www.cnn.com/2016/03/04/us/flint-water-crisis-fast-facts/index.html.

Lurie, Julia. "Meet the Mom Who Helped Expose Flint's Toxic Water Nightmare." Mother Jones, 21 Jan. 2016, www.motherjones.com/politics/2016/01/mother-exposed-flint-lead-contamination-watercrisis/.

The Economist. "The Water Crisis in Flint, Michigan Has Had Terrible Consequences for Residents' Health." The Economist, The Economist Newspaper, 27 Sept. 2017, www.economist.com/graphic-detail/2017/09/27/the-water-crisis-in-flint-michigan-has-had-terrible-consequences-for-residents-health.

Zahran, S., McElmurry, S. P., Kilgore, P. E., Mushinski, D., Press, J., Love, N. G., Sadler, R. C., & Swanson, M. S., et al. "Assessment of the Legionnaires' Disease Outbreak in Flint, Michigan." PNAS, National Academy of Sciences, 20 Feb. 2018, www.pnas.org/content/115/8/E1730.