Abstract title. An ethnographic snapshot of vulnerable populations at risk of lead exposure during Flint water crisis.

Author: Yosef Ayala

Abstract

Background: The current water crisis in Flint Michigan has a long and convoluted history. In brief, the water was switched from the Detroit water system to "cut government costs" to the Flint River water system in 2014. The water from the Flint River is so full of bacteria, heavy metals and other unhealthy items; that the required water treatment corroded the old pipes which released lead and copper into the water. In December 2016, the water was switched back to Detroit but the pipes were still releasing lead. My ethnographic snapshot is about the vulnerable populations at risk of lead exposure and the volunteer work to help supply bottled drinking water and health information to the affected residents.

Methods: I joined a volunteer group that went to Flint Michigan that worked with the American Red Cross (ARC). ARC partnered with the Genesee County Health Department (GCHD). Federal assistance groups from Environmental Protection Agency (EPA) the United States Public Health Services (USPHS) were there to support GCHD. I helped provide community outreach whilst distributing cases bottled water.

Results: Flint has 5,000 children <6 years of age and 1,000 pregnant and nursing women whose children were identified as the most vulnerable population for serious health effects from lead exposure. Children absorb 50% of the lead that they ingest whereas adults absorb 3-10%. Additionally, other vulnerable populations are those living in the low-income housing areas with the old lead pipes. GCHD and EPA were able to do water testing in 10,000 (25% of homes) of the homes within the first 2 weeks of February 2016. GCHD and USPHS were to complete blood lead screening for 1,000 (20%) of the children.

Conclusion: GCHD set their goals to have 100% of all homes water tested and 100% of all vulnerable populations' blood lead screening by end of April 2016. The major problem behind this crisis is the governor's denial of this problem and his continual obstruction of GCHD to provide basic services for their community. GCHD has reached out to volunteers to help in as many ways as possible to accomplish these goals.

Keywords: Toxic water, vulnerable populations, disparities