

**What the Eyes Don't See: A Story of Crisis, Resistance, and Hope in an American City
(2018) by Mona Hanna-Attisha**

Policy response essay assignment

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Summary of Flint Water crisis

What the Eyes Don't See: A Story of Crisis, Resistance, and Hope in an American City (2018) by Mona Hanna-Attisha presents a comprehensive analysis of the role of unscrupulous government in poisoning Flint residents with lead and its consequent coverups when exposed. This story also highlights how minorities and low-income communities are disproportionately affected in American society through erroneous prudent policies and environmental injustices. The Flint water crisis is a government created environmental disaster. Mona always assumed that Flint water is safe for drinking and recommended her patients to use Flint water for mixing baby formula, until she discovered from her friend Elin who learnt from Miguel Del Toral, that Flint has not used any corrosive measures when the city shifted its water source from Detroit water systems to Flint river which resulted in leaching of lead from the pipes into the water, which led Mona in the path of exposing the water crisis in the Flint.

Dr. Mona begins by contacting local and state officials to obtain state level child blood statistics. Unfortunately, officials deny her plea claiming that the water meets federal standards and is safe to drink. Mona begins to question herself, only because Flint is poor and dominated by the African American community is driving indifference among officials? Despite the fact that lead has adverse effects on a child's development, lead in water was not regulated by the federal government. Realizing that she and her team were unlikely to receive cooperation from local, county and state officials they worked to find help within the pediatric department, and they reached out to Dr. Marc Edwards (researcher on water and corrosion). The team has conducted researchers and collected concrete evidence that lead has been poisoning Flint kids for over two years demonstrating environmental injustice. The team held a press conference and disclosed its findings, revealing that Flint babies are drinking water contaminated with lead and they received a barrage of criticism from officials. Dr. Mona and team eventually won at the end and authorities were compelled to admit Dr. Mona research is sound.

Policy Issues

A myriad of wrong decisions, inadequacies, and policy violations by local, county and state officials has resulted in decreased water quality, increased amount of lead in water, increased Legionella susceptibility, and damage to infrastructure. Democratically elected mayor will represent the public and always fight for their best interests, but an unelected EM appointed by the governor will work under the governor's directives to balance the city budget rather than thinking about public safety. When EM and members of the governor's office decided to use the polluted Flint River as an interim source of water supply as a budget cutting measure, they jeopardized public safety and violated constitutional rights to "bodily integrity".

Despite the fact that the Flint River was used for industrial waste dumping for decades, the Michigan Department of Environmental Quality (MDEQ), and the federal Environmental Protection Agency (EPA) declared that the water is safe for drinking. Even when Marc Edwards

and del Toral began "citizen testing" and discovered high levels of lead in the water MDEQ continued to disregard it, claiming that water meets federal standards and is safe for drinking. Despite knowing from the DC water crisis that "water treatment is an art" and massive sampling is required when switches are made in any water source and investigations by water experts concluded water contained lead, government officials have not done proper testing which is potential violation of "Safe Drinking Water Act" and continued to declare that the water was safe for drinking.

Even though, in the American water system corrosion control measures are the standard practices used to prevent leaching of lead and other metals from water pipes into the water, the city has not used corrosion control while switching its water source from Lake Huron and Detroit River. Therefore, Flint River water being more acidic has scoured rust from the pipes which acted as a protective layer against the lead water pipes, resulting in leaching of lead from the pipes into the water. Officials have violated "Lead and Copper Rule" by not using corrosion control.

In Michigan there is inconsistency in public health funding, which compels counties and municipalities to rely on their own taxes to continue services. As a result, impoverished counties will have lower revenues than rich counties, resulting in significant health disparities among Michigan residents. Moreover, for the Flint citizens the situation is made worse by the fact that the state has been cutting resource allocations to the city for years, which made it hard for the city to maintain and modernize its ancient water infrastructure, which resulted in leaching of lead from the pipes, making residents to pay highest price due incompetant government. Inadequate public health funding has resulted in "health disparities" among Flint residents.

Years ago, the CDC recommended that all children have their lead levels tested regularly. As a result of the public health triumph of getting lead out of gasoline and paints, rates of lead exposure have gradually decreased, and the recommendations have been relaxed. This policy relaxation is a mistake because new research revealed that there are no safe lead levels for children. Edwards and Virginia tech research team released a report stating that a substantial percentage of flint families have lead levels above 15 ppb, the number that the federal government considers to be safe, although there are no true safe levels of lead. Public health officials always assumed paint and paint dust are the only sources of lead and many didn't know that lead exposure can occur through water also. Moreover, in the United States millions of water pipes are made from lead, with many of them found in older, low income and minority households. Despite knowing the adverse effects of lead poison on a child's mental and physical development, the federal government has done very little to regulate lead in water.

Flint residents tried to raise the alarm and started complaining about the smell, color, and taste of water as soon as the water source switch was made. LeeAnne Walters (Flint resident), has expressed to the authorities that her children have high blood lead levels and one of her children stopped growing after the water switch even after flushing, a guideline recommended by MDEQ. Government officials should have initiated an inquiry as soon as undisputed proof of lead exposure and poisoning has surfaced but there were persistent delays in organizing effective

responses to the resulting public health problems, despite knowing the adverse effects of lead on child's development and officials threw out water samples with high lead levels. The government responded with callousness to residents' concerns only because Flint is a low-income community, dominated by an African American population with a long history of racist policies. Which stands as an example of government induced environmental injustice.

Future Recommendations

From the book we learned that the state of Michigan is being delegated "primacy" by MDEQ i.e., MDEQ is responsible for imposing the Safe Drinking Water Act, Lead and Copper Rule and other environmental regulations in Michigan state. Unfortunately, MDEQ has not done effective sampling and testing while switching its water source and moreover MDEQ "was gaming the system and sampling in a way to get the results it wanted". MDEQ has also not used corrosion measures which resulted in leaching of lead from the pipes into the water. Therefore, MDEQ played a significant role in poisoning Flint residents with lead water, and I recommend hereafter, MDEQ should no longer be considered "primacy" for environmental regulations in Michigan State and Environmental Protection Agency (EPA) of the United states should take over the state as "Primacy".

Develop programs and provide internships to train EPA workforce to learn about and gain hands-on experience on water system operations and designate competent individuals to oversee future water operations such as repeated effective sampling and use of corrosive measures in Flint, Michigan to ensure that they follow Safe Drinking Water Act and Lead and Copper Rule.

In the future the governor's office should always ensure to engage elected officials and subject matter experts of Michigan state while making key decisions related to public health safety because Emergency Managers mostly concentrate on cost cutting measures to stabilize the city economically and may ignore public safety in that process. The Genesee County Health Department should collaborate with local healthcare professionals and healthcare organizations to mitigate the risk of lead poisoning in Flint residents.

The Federal standards of lead should be changed as there are no safe levels of lead. The federal government and state of Michigan should grant funds for EPA to

- Conduct blood lead screenings on a regular basis for Flint citizens to determine if lead exposure from drinking treated water is reducing or not.
- Develop infrastructure projects to replace corroded Flint water systems.
- Conduct a massive repeated thorough sampling of water on a regular basis.

Create a multi stakeholder group to develop and implement effective policies and programs that target

- Vulnerable population who got affected by drinking lead contaminated water
- Children who got exposed to lead poisoning, because they are at the highest risk of developing impairments in their adulthood as the result of drinking Flint water.
- Social determinants of poor health in Flint, Michigan

- Develop policies that encourage low income, minority communities and people of black to daringly communicate their concerns and their concerns should not be neglected by any officials and should be addressed immediately.

Make a registry of all the Flint children exposed to lead and provide them access to federal nutritional and educational programs, age related screening, and frequent follow ups for their behavioral and developmental problems through certified health care practitioners.

Establish a cabinet level public health post in every state, using the Flint Water crisis as a serious example, to ensure that every key decision made in state has an acceptance of public health, ensuring that the decision doesn't jeopardize public safety, and to be given absolute right to decline or terminate any decision or project that endangers public safety.