Evidence and Action

How Flint residents and officials responded to a shared water crisis

AWH.P.1.1.C "Gather and evaluate information regarding complex problems, assessing individual and collective actions taken to address them."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline two kinds of evidence about Flint's water problem, circle one action a household took, and number two actions public agencies took. Beside each numbered action, write a few words about its limit.

Flint's Water Crisis

1. In April 2014, Flint, Michigan, began drawing drinking water from the Flint River while officials prepared a new regional supply. The city did not use corrosion control treatment that could have limited damage to pipes. Lead from some plumbing entered tap water. Residents reported brown water, bad smells, and health worries, but appearance alone could not show how much lead was present. Some families bought bottled water or fitted filters. These actions could reduce exposure in their homes, but they cost money and could not repair the public water system. The problem crossed household boundaries because many people shared the same supply.

2. In 2015, residents worked with Virginia Tech researchers to test water samples from Flint homes. Their results found elevated lead in some taps, but homes offered by volunteers did not represent every tap in the city. Pediatrician Mona Hanna-Attisha and colleagues compared children's blood tests from before and after the switch. They reported a rise in the share of children with elevated blood lead levels. Those tests strengthened concerns about exposure, although they could not identify every child's source of lead. Resident reports, water samples, and health records gave officials different kinds of evidence, each with limits.

3. In October 2015, Flint returned to its previous water source, supplied through Detroit's system. Government agencies distributed bottled water and filters, but those steps addressed immediate exposure rather than damaged pipes. Returning to the earlier source did not remove lead-bearing pipes. Flint later began replacing lead and galvanized steel service lines, the pipes connecting water mains to buildings. Replacement addressed a source of future risk but took years and required coordination and funding. Residents' complaints and testing helped push institutions to act, while public agencies could change the water supply and infrastructure. Evaluating the response means asking what each action accomplished and which risks remained.

2 ANSWER WITH EVIDENCE

Use the passage

1. How could bottled water or filters help a family, and why could these actions not solve Flint's shared problem?

2. What did residents' reports tell officials, and what could the water's appearance not establish?

3. How did the water tests and children's blood tests provide different evidence? Give one limit of each.

4. Which collective action addressed a source of future risk rather than only immediate exposure? Why could it not be completed quickly?

3 YOUR TURN

Your own words

Choose a shared problem in your school or town other than Flint's water. In one paragraph, name two kinds of information you would gather and how you would check each, then weigh one individual action and one collective action, including a limit of each.

ANSWER KEY

Evidence and Action

HIGH SCHOOL · AWH.P.1.1.C

PART 1 · READ AND MARK

Underline two kinds of evidence about Flint's water problem, circle one action a household took, and number two actions public agencies took. Beside each numbered action, write a few words about its limit. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	How could bottled water or filters help a family, and why could these actions not solve Flint's shared problem?	**They could reduce a family's exposure to lead, but they cost money and could not repair the public water system.**
2	What did residents' reports tell officials, and what could the water's appearance not establish?	**Residents reported changes in their water and health worries, but appearance could not establish how much lead was in the water.**
3	How did the water tests and children's blood tests provide different evidence? Give one limit of each.	**Water tests found elevated lead in some taps, but volunteer homes did not represent every tap. Blood tests showed a rise in the share of children with elevated blood lead levels, but could not identify every child's source of lead.**
4	Which collective action addressed a source of future risk rather than only immediate exposure? Why could it not be completed quickly?	**Replacing lead and galvanized steel service lines addressed a source of future risk. It took years and required coordination and funding.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

Suppose students have trouble getting to school when buses run late. I would gather student accounts and check whether students on different routes describe the same pattern. I would also request bus arrival records and check that they cover several weeks, not just one day. A student could tell the school about a missed bus, which might help staff respond to that trip but would not change the schedule. The district could review routes and adjust bus times, which could help more students. That change might be limited by the number of buses and drivers available.

Accept other supported distinctions between evidence of water contamination and evidence of exposure. For Part 3, look for checks on both information sources and a plausible benefit and limit for each action.