JOHNS HOPKINS
BLOOMBERG
SCHOOL of PUBLIC HEALTH

September 9, 2018

Alison Perkins-Cohen
Chief of Staff
Baltimore City Public Schools
200 E. North Avenue, Suite 405
Baltimore, MD 21202

Dear Ms. Perkins-Cohen:

Thank you for the opportunity to share some history and some thoughts about the use of bottled water coolers in the Baltimore City Public Schools. In my view, at a time when many other cities are just discovering lead in their school drinking water, Baltimore should be proud that we have protected children from lead hazards in the school drinking water for more than a decade.

In this letter, I will explain the circumstances that led us to cut off the water fountains and provide some thoughts on alternatives to bottled water.

Cutting Off the Water Fountains

On February 26, 2003 -- before my time working for the city -- then Health Commissioner Dr. Peter Beilenson ordered city schools to shut off water fountains, after evidence came to light of lead contamination. The school system switched over to bottled water coolers. Then, with help from a consultant, a protocol was established to turn the water fountains back on. This protocol involved flushing each water system every morning. It also involved repeatedly testing water fountains for evidence of lead in the water.

The protocol did not work. When I was health commissioner in 2007, a parent reported that there *again* was lead in the water in city schools. At the time, nobody had a persuasive explanation for what was going on. The best I could determine was that the lead was coming either from the pipes inside old school buildings or from the water fountain fixtures themselves. Flushing and testing did not remove the risks; indeed, we now know that flushing is only a temporary solution to the problem of lead in drinking water, as studies have shown that leaching from lead in the system results in re-contamination relatively quickly.

At the time, some consultants came to us and proposed repeating the 2003 response: turning off all the water fountains and re-instituting the protocol to turn them back on. I rejected this approach for one simple reason: It had failed. So I recommended to Dr. Andre Alonso, the schools CEO at the time, that he switch the entire school system to bottled water for the foreseeable future.

• 615 North Wolfe Street • Suite W1033D • Baltimore, Maryland 21205 •
Tel: 443-424-8490 • joshua.sharfstein@jhu.edu

I recall one other interesting point from 2007. Switching to bottled water actually cost less than restarting the flushing-and-testing protocol, because the testing and overtime for custodians were not free. In addition to a lower cost, providing bottled water coolers also brought peace of mind. "I honestly prefer the bottled water because it is safer and clean," one mother of a third-grader told the Baltimore Sun. "I am scared for my child to drink tap water."

When the nation began to discover lead in water in other schools, Baltimore received some credit. The New York Times pointed out our city was about a decade ahead of the curve. An interesting point in this story is that Newark tried filtration and other measures -- and failed to keep lead out of the water.

This challenge is far from over. Just last week, on *September 5, 2018,* the Wall Street Journal reported that "schools across the US find elevated lead levels in drinking water."

Alternatives to Bottled Water Coolers

Recently, there has been a push for Baltimore City Public Schools to turn the water fountains back on, by relying on more advanced filtering technology. I understand several schools in Baltimore have already switched to such approaches.

Here are a few thoughts about these alternatives:

First, this is not an emergency. Given that bottled water protects children from lead hazards, there is time to weigh the costs, benefits, and risks of alternatives to bottled water.

Second, before widely adopting a new approach, the school system should be assured of its effectiveness and its ease of implementation. A system that requires significant attention to detail in at the school level may carry hidden costs and risks. What might work in one school might not be so easy to implement in another.

Third, the School System should consult experts to compare the benefits and risks of bottled water coolers with those of new approaches. For example, Dr. Ellen Silbergeld, an expert in water safety at the School of Public Health, has concerns about the potential for bacterial contamination that may occur in some filters. (There is also the potential for contamination with bottled water coolers.)

Fourth, costs should be considered. New approaches may require both capital costs as well as ongoing costs (such as for filter replacement).

The best long-term solution, of course, is to eliminate the hazards in the pipes and fixtures, which I understand is happening through the 21st Century School Buildings Plan.

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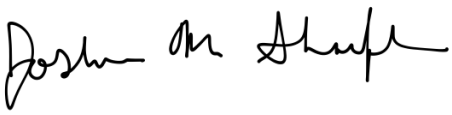
Conclusion

Baltimore protected children from lead in school drinking water years before other cities even noticed they have had a problem. It is totally appropriate to consider alternatives to bottled water. My view is that this should be done with care and diligence.

I hope this information is helpful. Dr. Silbergeld and I would be happy to provide further consultation and assistance.

Sincerely,



Joshua M. Sharfstein, M.D.
Professor of the Practice

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