TELEGRAM & GAZETTE

RFK Jr. wants to remove fluoride from water. What would that mean in Central Mass.?

Henry Schwan, Worcester Telegram & Gazette November 14, 2024

President-elect Donald Trump has promised sweeping changes when he enters the White House in January. His comments on the economy and immigration tend to get the most attention, but his views on public health could also have a significant impact on the lives of millions of Americans.

Trump <u>said Thursday</u> he will nominate Robert F. Kennedy Jr. to head the U.S. Department of Health and Human Services.

Kennedy, who endorsed Trump after ending his independent bid for president, has called fluoride a "dangerous neurotoxin" and plans to remove it from the nation's public water systems.

The mineral has been used in U.S. public water systems since 1945 to fight cavities and tooth decay. Today, nearly 75% of Americans have fluoride in their water, and the Centers for Disease Control and Prevention calls the mineral one of the 10 greatest public health achievements in the 20th century.

'Potentially concerning'

Prior to Thursday's report of Trump's bid to make Kennedy his public health czar, one local expert said she is concerned if the Trump administration gives Kennedy the green light to pursue a ban on fluoride.

"It's potentially concerning that the future public health leader at the national level might review this," said Amie Shei, president and chief executive officer at the Health Foundation of Central Massachusetts. "There will be adverse health impacts across the country."



Currently, the federal government can recommend cities and towns add fluoride to their water systems, but states and local boards of health make the final decision.

Last year in Massachusetts, 62% of residents had fluoridated water, according to state records. However, only 120 cities and towns (34%) have fluoridated water, compared to 221 (63%) that don't. Another 10 (3%) have partial fluoridation.

What is fluoride?

It's a chemical of fluorine, the 13th-most common element in the Earth's crust. Naturally found in soil, water and many rocks, fluoride enters the environment when rocks and soil dissolve in water. It's also released from volcanic eruptions and manmade processes.

Why is it added to water?

Almost all water naturally contains fluoride, but usually not enough to prevent cavities. Many communities add it for this reason, as it combines with enamel to make teeth stronger, according to the CDC.

Is it safe?

Yes, according to several leading health organizations, including the CDC, the Environmental Protection Agency, the American Dental Association, the American Academy of Pediatrics and the World Health Organization.

The Massachusetts Dental Society endorses fluoride, saying on its website, "Fluoride is safe. Fluoride is inexpensive. Fluoride benefits everyone — regardless of age and socioeconomic status."

The U.S. Public Health Service that falls under the Department of Health and Human Services recommends 0.7 milligrams per liter to reliably prevent cavities, an amount roughly equal to three drops of water in a 55-gallon barrel. The EPA's safe limit is 2.0 milligrams of fluoride per liter in drinking water.

Excessive fluoride can result in dental fluorosis that causes tooth discoloration, but the risk is for children 8 and younger when tooth enamel is still forming, according to the CDC.

Court ruling: potential health risks

Some news reports indicate a recent court case could potentially open the door for the Trump administration to pursue a fluoride ban. In September, a federal judge in California ruled that the EPA must take action to combat concerns about potential health risks tied to recommended levels of fluoride in public water systems.



The ruling said fluoride at the government's standard of 0.7 milligrams per liter presents an "unreasonable risk" of reduced IQ in children, and the EPA must provide a regulatory response. However, the ruling did not conclude with certainty that fluoride in water injures public health.

The decision cited this year's report from the National Toxicology Program to support credible evidence of a potential risk to lower childhood IQ.

<u>That report</u> said more than twice the recommended limit of fluoride (1.5 milligrams per liter) in drinking water to prevent cavities is linked to lower IQ. However, it noted insufficient data to determine if the 0.7 milligrams per liter has a negative effect on children's IQ.

The American Academy of Pediatrics questioned the report's validity.

Worcester: no fluoride in water

Boston has fluoride in its water system, but Worcester, the second-largest city in New England, largely doesn't. According to state records, 360 homes in Worcester have fluoridated water, with half that number getting water from Holden.

Worcester voters have rejected several ballot initiatives over the years to add fluoride, including the most recent in 2001. The final tally was 56% to 44% against fluoride.

In that election, the Health Foundation of Central Massachusetts poured \$400,000 into a profluoride campaign.

Several reasons account for the majority of Worcester residents historically opposing fluoride, said Shei, the foundation's current leader, including the idea that there's already enough of it in toothpaste and other products. She also cited misinformation circulated about fluoride's health impacts and those who think city officials adding fluoride is government overreach.

"Folks are not interested," said Dr. Matilde Castiel, the city's commissioner of health and human services, to explain why the Worcester Board of Health will likely not take up fluoride anytime soon. The foundation also has no plans to reintroduce the issue, said Shei.

Castiel mentioned that in her experience, Worcester's poorer neighborhoods suffer disproportionately from lack of access to fluoride. During her prior years working in urgent care at Family Health Center, Castiel saw many children missing school because of constant cavities. It's a situation, she said, that is still happening in Worcester.

The CDC said there's evidence that schoolchildren living in communities where water is fluoridated have, on average, 2.25 fewer decayed teeth compared to children not living in fluoridated communities.

Among the top-five most populated communities in Worcester County, Worcester, Leominster and Milford don't have fluoride in their public water system. Shrewsbury and Fitchburg do.

Fitchburg: fluoride supported

Fitchburg has had fluoride in its water since 1975. In the city, 80% of residents tap into the public system, and 20% draw from private wells.

Stephen Curry, the city's public health director, said the city follows the CDC and state Department of Public Health direction that fluoride is proven safe and effective to prevent cavities and boost oral health.

"It's really important in Fitchburg, where there's a higher level of poverty, when folks likely don't have a dentist they visit on a regular basis," said Curry, who has worked in the Fitchburg Health Department for 31 years, the past 17 as director.

Efforts to remove fluoride

Citizen petitions over the years have called for fluoride removal in several Massachusetts communities. One in Fitchburg was voted down last year, 6-5, by the City Council, according to Council President Anthony Zarrella.

Karen Favazza Spencer of Leominster, a self-described "retired analyst in corporate America," said she was recruited by the leaders of last year's repeal effort in Fitchburg because she's a "subject matter expert."

A pending petition at the Massachusetts State House filed on Spencer's behalf by state Sen. John Cronin, D-Lunenburg, calls for eliminating fluoride in public water systems statewide. Cronin's office said he doesn't support the petition.

Spencer shared numerous scientific sources that point to health risks from fluoride, including lower IQ in children due to exposure during pregnancy and drinking formula during infancy, and kidney and thyroid complications during adulthood.

"It's quite clear that fluoridation policy is poisoning brains, bodies and bones from womb to tomb in millions of consumers," said Spencer.

Fluoride also means big bucks for numerous business interests, based on information shared by Spencer, including profits reaped by pharmaceutical companies and dentists — by companies selling toothpaste that contains fluoride and making drugs that contain it, and dentists pushing fluoride treatments and cosmetic treatments to fix dental fluorosis.

"It's a matter of scientific fact and law, which has motivated dozens of communities to end or begin processes to end fluoridation since Sept. 24th," said Spencer's email, referencing the federal court decision that targeted the EPA.

What comes next?

Before the news of Trump deciding to nominate Kennedy, Spencer said there will likely be more pressure on states and local boards of health in places like Fitchburg to end the use of fluoride if Kennedy becomes part of Trump's cabinet.

Curry also sees such a possibility. "Yes, I believe pressure will be placed on the Board of Health. Basically, we have to rely on science, which the board has access to. But if science shows fluoride is more detrimental than positive, then there's always a chance a change would result."

Castiel answered her own rhetorical question. "Will people react if something comes out of the new (Trump) administration? It's a huge possibility."

Shei believes communities with a track record of fluoride in their water systems understand its benefits and will hold fast to keeping it in place. But there could be a strong challenge from Kennedy.

"I think over the next several years, Massachusetts will be called upon to hold the line on a number of issues related to public health and health policy," said Shei. "There are many instances in our long history guided by evidence and wanting to promote public health that will hopefully prevail."