



Fwd: Request for town to notify pregnant women about the latest study on fluoride's link to reduced IQ in children

Bryan Moss

Mon, Dec 9, 2019

To: Stephen Vigeant, Jennie Fishman, George Abraham

Cc: Kerry Stockwell <kstockwell@shrewsburyma.gov>, Kevin Mizikar <kmizikar@shrewsburyma.gov>

Dear Board of Health,

Thank you for the opportunity to present at the BOH 10/23/19 meeting on the topic of notifying pregnant women of the recent study published in JAMA Pediatrics showing a link between fluoride and lower IQ in children.

During my presentation to the BOH, I highlighted the fact that the Town of Shrewsbury has recently established a precedent in the PFAS example where the town notified water customers even though the exposure is lower than the regulatory requirement to notify customers. Moreover, the recent PFAS notification clearly identifies a pregnant woman as a "sensitive consumer" and provides guidance on minimizing exposure. I believe this sets precedent for notifying the town's sensitive consumers (pregnant women) of the recent JAMA Pediatrics published study out of an abundance of caution and given the town's commitment to keeping water consumers informed even though there is no regulatory requirement to do so.

October 17, 2019 - Important information regarding PFAS and the Town of Shrewsbury's water supply

<https://shrewsburyma.gov/DocumentCenter/View/6516/Shrewsbury-PFAS-in-Drinking-Water-Supply-Notice---October-17-2019-1>

- "Out of an abundance of caution and given our commitment to keep you informed, we are providing this information even though the levels do not trigger a notice under drinking water regulations."
- "These results are below EPA's and MassDEP's current health advisory guidelines and are also below the new 20 ppt guideline now under consideration by MassDEP. Nevertheless, if you are a sensitive consumer (pregnant women, nursing mothers, and infants) you can minimize your exposure by using bottled water that has been tested for PFAS for drinking, making infant formula and cooking foods that absorb water or use a home water treatment system that is certified to remove PFAS by an independent testing group such as NSF International, Underwriters Laboratories, Water Quality Association, or the CSA Group."

Also, in response to my presentation, I believe there was a comment from the board that this is just one study; however, there have been several recent studies (and a draft report) of importance supporting the link between fluoride exposure and lower IQ of the child. These studies/report were published after the two Town Meeting citizens petitions in May 2015 and September 2016 and therefore, are new evidence to consider since those previous discussions. Here are some additional recent studies for your review (note: I included the JAMA study again so you can see the pattern over the past few years.

11/18/19 - Till et al. (2019) - Fluoride exposure from infant formula and child IQ in a Canadian birth cohort

<https://www.sciencedirect.com/science/article/pii/S0160412019326145?via%3Dihub>

- This study was funded by the U.S. National Institute of Environmental Health Sciences (NIEHS) and published in Environment International.
- "Exposure to increasing levels of fluoride in tap water was associated with diminished non-verbal intellectual abilities; the effect was more pronounced among formula-fed children."

09/06/19 - DRAFT NTP MONOGRAPH ON THE SYSTEMATIC REVIEW OF FLUORIDE EXPOSURE AND NEURODEVELOPMENTAL AND COGNITIVE HEALTH EFFECTS

https://www.asdwa.org/wp-content/uploads/2019/10/draft_fluoride_monograph_20190906_5081.pdf

- the National Toxicology Program (NTP) published a draft review of fluoride's neurotoxicity concluding the following.
"...Fluoride is presumed to be a cognitive neurodevelopmental hazard to humans. This conclusion is based on a consistent pattern of findings in human studies across several different populations showing that higher fluoride exposure is associated with decreased IQ or other cognitive impairments in children."

- When the National Academy of Sciences completes its peer review, the NTP could raise the classification of fluoride even higher to a 'known' from 'presumed' neurodevelopmental hazard to humans. Whether or not they raise the classification even higher after the peer review, the weight of scientific evidence in the NTP review should be sufficient to demonstrate the risks of fluoridation.

08/19/19 - Green et al. (2019) - Association Between Maternal Fluoride Exposure During Pregnancy and IQ Scores in Offspring in Canada

<https://jamanetwork.com/journals/jamapediatrics/fullarticle/2748634#224604298>

- This study was funded by the U.S. National Institute of Environmental Health Sciences (NIEHS) and published in JAMA Pediatrics.
- "In this study, maternal exposure to higher levels of fluoride during pregnancy was associated with lower IQ scores in children aged 3 to 4 years. These findings indicate the possible need to reduce fluoride intake during pregnancy."

09/19/17 - Bashash et al. (2017) - Prenatal Fluoride Exposure and Cognitive Outcomes in Children at 4 and 6–12 Years of Age in Mexico

<https://ehp.niehs.nih.gov/doi/10.1289/ehp655>

- This study was funded by the U.S. National Institutes of Health, the U.S. Environmental Protection Agency, and the U.S. NIEHS and published in Environmental Health Perspectives.
- "In this study, higher prenatal fluoride exposure, in the general range of exposures reported for other general population samples of pregnant women and nonpregnant adults, was associated with lower scores on tests of cognitive function in the offspring at age 4 and 6–12 y."

Additionally, it is important to note that the effects of fluoride in the JAMA study are comparable to the effects of lead, and if these findings are true, there should be as much concern about prenatal fluoride exposure. Also, the JAMA study authors looked for the evidence to suggest that fluoride is safe and effective during pregnancy; however, when they looked for the evidence to suggest that it's safe, they did not find any studies done on pregnant women. This means that there is no evidence that swallowing fluoride is safe for pregnant women or their fetus. So if there isn't even one study to prove swallowing fluoride is safe for pregnant women and the fetus, how could the town ignore multiple US Government funded studies and report that show harm to the fetus and then also decide not to provide that new information to the consumers so they can make an informed decision?

Since the town is the party responsible for adding fluoride to the drinking water, it is the town's responsibility to inform sensitive water consumers such as pregnant women of any potential risk of drinking Shrewsbury's fluoridated drinking water.

It has been 4 years since I first asked the Board of Health to consider the affect of fluoride on the child's brain/IQ and with these most recent studies/report supporting the previous studies, I hope that the town will honor its commitment to keep its sensitive consumers informed so that they can make a more informed decision on whether or not to drink the fluoridated water.

Thank you,
Bryan Moss

----- Forwarded message -----

From: **Bryan Moss**

Date: Tue, Oct 15, 2019

Subject: Fwd: Request for town to notify pregnant women about the latest study on fluoride's link to reduced IQ in children

To: Kerry Stockwell <kstockwell@shrewsburyma.gov>

Cc: Stephen Vigeant, Jennie Fishman, George Abraham

Hi Kerry,

I would like to request to be placed on the October 23rd BOH agenda to discuss a recently published study in JAMA Pediatrics that identifies a link between fluoride exposure during pregnancy and lower IQ in children. I would like to request to speak along with Melissa Pride-Fahs and Catherine Rajwani for 15 minutes (or whatever amount of time that can be granted to us given the shorter 1 hour meeting) to introduce these concerns to the board.

We are requesting that the Board of Health notify pregnant woman of the study so that pregnant women can make an informed decision on whether or not they want to avoid drinking Shrewsbury's fluoridated water during pregnancy.

Please find all of the supporting information in the email below that was sent to the town on September 1st, 2019.

Thank you,
Bryan Moss

----- Forwarded message -----

From: **Bryan Moss**

Date: Sun, Sep 1, 2019

Subject: Request for town to notify pregnant women about the latest study on fluoride's link to reduced IQ in children

To: Kevin Mizikar <kmizikar@shrewsburyma.gov>

Hi Kevin,

As discussed at our meeting on Thursday, the world's premier pediatric journal has published last week a new government-funded study linking exposure to "optimally" fluoridated water during pregnancy to lowered IQ for the child. This means that pregnant women who drink fluoride-treated water may have children with lower IQs. While a cavity can be repaired, a child's brain cannot.

In response to this newly released study, I am requesting that the town notify pregnant woman of the study so that pregnant women can make an informed decision on whether or not they want to avoid drinking Shrewsbury's fluoridated water during pregnancy.

While this may seemed rushed or new information, it is not. Over 4 years ago, I provided information to the town identifying the link between fluoride to lower IQ and requested the town *"immediately suspend Shrewsbury's water fluoridation program until this matter can be fully investigated, and we can be certain that any fluoride added to the drinking water is having no adverse effect on children's minds."* I also brought up the neurotoxicity concern to the town two times after that in the May 2015 ATM and the Sept 2016 STM.

- <https://sustainableshrewsbury.files.wordpress.com/2018/03/letter-boh-suspend-fluoridation-request-0413151.pdf>

In August 2016, I also provided the Selectmen, Finance Committee, Board of Health, Town Manager, and Water Superintendent the following information of the risks of fluoride. I had identified the neurotoxicity issue again as well as many other issues.

- <https://sustainableshrewsbury.files.wordpress.com/2018/03/supplemental-2016-sep-stm-safe-drinking-water-protection-bylaw.pdf>

The longer the town waits to notify pregnant women in town, the longer their unborn children are exposed to fluoride and the more unborn children that will be impacted and exposed to the fluoride that the town of Shrewsbury puts into its drinking water supply.

Below is the link to the new study as well as some related information. I highly recommend listening to the 13 minute Editor's Summary audio podcast.

August 19, 2019 - Association Between Maternal Fluoride Exposure During Pregnancy and IQ Scores in Offspring in Canada

The American Medical Association's journal on pediatrics (JAMA Pediatrics) has published the second U.S. Government-funded study linking low-levels of fluoride exposure during fetal development to cognitive impairment. The observational study, entitled Association Between Maternal Fluoride Exposure During Pregnancy and IQ Scores in Offspring in Canada, was led by a team at York University in Ontario, Canada and looked at 512 mother-child pairs from six major Canadian cities. It was funded by the Canadian government and the U.S. National Institute of Environmental Health Science.

- <https://jamanetwork.com/journals/jamapediatrics/fullarticle/2748634#224604298>

JAMA Pediatrics Editors' Summary - 12min 40sec Audio - by Dimitri Christakis, MD, MPH, Editor in Chief, and Frederick Rivara, MD, MPH, Editor in Chief of JAMA Network Open

A must-hear twelve-minute podcast featuring AMA Pediatrics Editor in Chief, Dimitri Christakis, MD, MPH, and Frederick Rivara, MD, MPH, Editor in Chief of JAMA Network Open, was also released alongside the study. The editors express how "very concerning" and "startling" the evidence is against fluoridation, and how the neurological damage is "on par with lead." They praise the high quality of this study, and call for additional NIH funding of more fluoride research. Before publication, the study was subjected to two statistical reviews, with the researchers combing through the data to make sure that the results were not skewed by the mothers' education, income levels, or other factors. **Most importantly, they recommend that pregnant women avoid drinking fluoridated water.**

- <https://edhub.ama-assn.org/jn-learning/audio-player/17802991>

Editor's Note - Decision to Publish Study on Maternal Fluoride Exposure During Pregnancy

"It is the only editor's note I've ever written," Dimitri Christakis, editor in chief of JAMA Pediatrics and a pediatrician, told The Daily Beast. "There was concern on the journal's editorial team about how this would play out in the public eye and what the public-health implications would be. The effects of this study are comparable to the effects of lead, and if these findings are true there should be as much concern about prenatal fluoride exposure,"

- <https://jamanetwork.com/journals/jamapediatrics/article-abstract/2748628>

Editorial - Is Fluoride Potentially Neurotoxic?

In the editorial piece by Harvard Professor Dr. David Bellinger (note: he is one of the world's leading neuro-scientists) that accompanies the study, he provides an overview of recent fluoride/IQ research, and highlights the strengths of the study and need for additional research. Though he also gives the following warning:

The hypothesis that fluoride is a neurodevelopmental toxicant must now be given serious consideration...It is instructive to recall that the hypothesis that subclinical lead exposures pose a neurodevelopmental hazard was bitterly contested in the 1980s and 1990s, and it was only the weight of evidence that eventually accumulated that led to the now widely held consensus that no level of lead exposure is safe...If the hypothesis is true, the implications are worrisome. Exposure to fluoride has increased substantially in recent decades...If the effect sizes reported by Green et al and others are valid, the total cognitive loss at the population level that might be associated with children's prenatal exposure to fluoride could be substantial.

- <https://jamanetwork.com/journals/jamapediatrics/article-abstract/2748626>

The full pdf version of the editorial is also available here:

- <http://fluoridealert.org/wp-content/uploads/bellinger-editorial.2019.pdf>

Please let me know what the town's plans are to notify pregnant women.

Please also let me know if you have any questions and I appreciate your attention on this important matter.

Thank you,
Bryan Moss
Town Meeting Member, Precinct 8