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**Paul Connett's statement for the BSC meeting May 4, 2023**

# *A ringside view of the battle between science and politics over fluoride's neurotoxicity.*

## Introduction

When I first became involved with the fluoridation issue in 1996 (I didn't want the issue for fear of stigmatization from colleagues, but my wife persuaded me to read the scientific articles she had accumulated) it coincided with the publication of the first two Chinese fluoride-IQ studies published in English ( Li 1995, Zhao 1996), which appeared shortly after the Mullenix et al (1995) study on fluoride and animal behavior had been published. Mullenix had warned that her results might indicate fluoride posed a threat to the intelligence of children (Mullenix 1997 transcript)

When Mullenix was fired from her position as the head at the toxicology department at Forsyth Dental Center shortly after her study was published, I got my first ringside view of a process that was to repeat itself many times over the next 27 years.

This process consisted of first the appearance of a "scientific breakthrough" on the dangers posed by fluoride to human health followed by an effort to squash the science by those who are determined to keep the practice of water fluoridation going come what may.

This "scientific punch and political counterpunch" has been going on for nearly 80 years. Below I have provided a chronology of several examples of both the scientific developments followed by efforts to squash or dismiss the findings by the pro-fluoridation lobby. In many cases I have witnessed these developments first-hand.

This sad history has culminated in the most extreme example to date, namely the best review of fluoride's neurotoxicity ever undertaken which is currently being undermined by pro-fluoridation forces within the US department of Health and Human Services (HHS) which goes all the way up to Deputy Administer Rachel Levine who prevented the NTP's final report due for release on May 18, 2022 (which was six years in the making) from being published.

A particularly nasty example of this political effort to derail science was a letter sent to Dr. Christine Till's University in an effort to have her reprimanded or dismissed for unprofessional conduct, when in reality her only offence was to publish top quality studies on fluoride's neurotoxicity. This blatant form of intimidation should have no place in science. (Lennon et al. 2020).

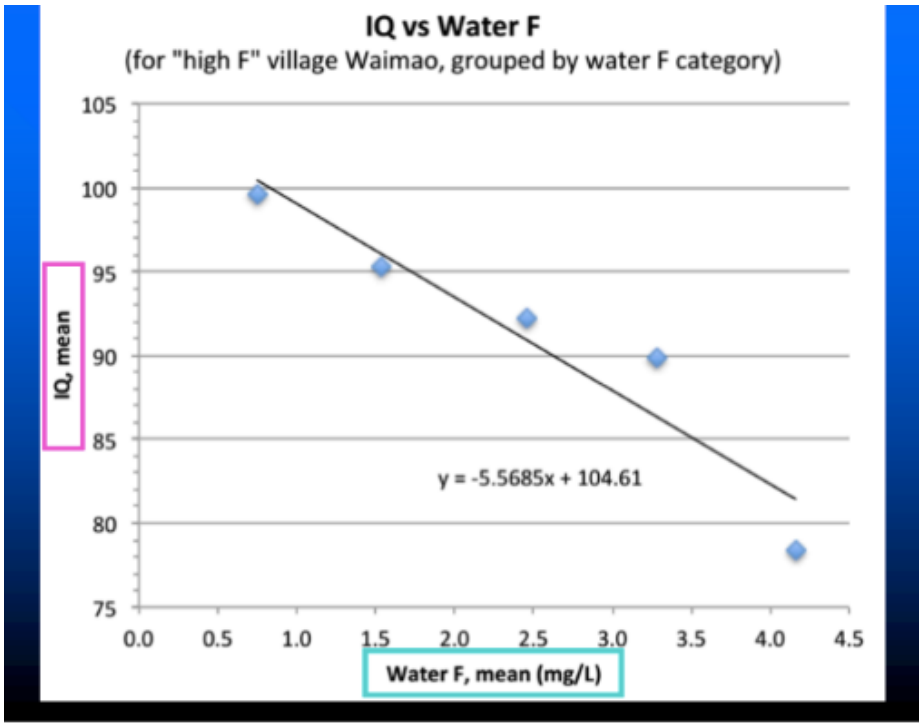
## Chronology of the Science and Politics of Fluoride's Neurotoxicity

**1996** – **My involvement with fluoride began**. This was one year after publication of the Mullenix et al (1995) fluoride and animal behavior study and the publication of the first two IQ Chinese studies published in English (Li, 1995 and Zhao, 1996). These studies are described along with 77 other Fluoride-IQ studies on the Fluoride Action Network (FAN) website, https://fluoridealert.org/researchers/fluoride-iq-studies/the-fluoride-iq-studies/

Shortly after the Mullenix article was published she was fired from Forsyth Dental School in Boston. She was told by her chairman that her work was no longer relevant to dentistry. Mullenix. A videotaped interview I had with her details all the pressures brought to bear upon her from the National Institute of Dental Research (NIDR now NIDCR) and others once her study became known to them. There are disturbing parallels with what is happening today with the NIDCR (and other pro-fluoridation lobbyists) pressures on the NTP and some of the key authors of the NIEHS-funded IQ studies. In Mullenix's case she lost her job, in the case of the NTP we are seeing a blatant attempt by NIDCR and others to suppress their report. I discuss this situation in more detail below.

**2003** – The Xiang et al study (2003 a,b) was one of many studies done in China which compared the IQ of children between two villages, one with lower fluoride exposure and the other with higher fluoride exposure. What made Xiang's study more convincing than others is that the higher-fluoride village had a wide range of fluoride exposures allowing a dose-response assessment just from the single village. Xiang divided that village's data into 5 exposure levels in which the average fluoride water concentration (each household had its own well source) ranged from 0.7 up to 4 mg/L. He found a clear dose-response relationship with no apparent threshold down to the lowest group with 0.7 mg/L water F. Despite claims by fluoridation promoters that he failed to control for key variables such as lead, arsenic, and iodine exposure and that the fluoride exposure was very high compared to artificial water fluoridation programs, this was not the case. The NTP has since rated Xiang's study as having a "low risk of bias" (i.e. of high quality), the earliest fluoride IQ study to achieve this quality rating.

The dose-response relationship in Xiang's "high F" village of Waimao is shown by this graph:




**2003** I included a reference to Xiang's work in my testimony (Connett and Connett, 2003) before the NRC panel, which published its landmark review of fluoride's toxicology in water in 2006 (NRC, 2006). They gave a whole chapter to fluoride's neurotoxicity and **cited 5 fluoride-IQ studies** and called for more research.

**2004** I met Xiang at an ISFR (International Society for Fluoride Research) conference in Wiesbaden, Germany in 2004. At his invitation (Xiang worked for the Chinese CDC) I went to China to observe the two villages where his study was undertaken in Nanjing province. I (and FAN) have remained in close contact with Xiang right up to the present. Xiang has made two trips to the USA in 2007 and 2014 to present his work before academia, the public, and government officials.

**(2004-8)** FAN recognized that there were many additional studies in China that were only available in Chinese-language journals and had been missed by the NRC review. FAN therefore commissioned translations of those Chinese IQ studies into English.

**2008** These FAN translations were published in a special issue of the journal *Fluoride* to coincide with a scientific conference held by the International Society for Fluoride Research (ISFR) in Toronto. The focus of the conference was on fluoride's neurotoxicity, with **18 IQ studies then available.**

**2010** Chelsea Green published a book I co-authored with biophysicist James Beck and biologist Spedding Micklem [*The Case Against Fluoride*] (Connett et al., 2010). **We referenced 23 IQ**

**studies.** We provided 80 pages of references to the scientific literature to support our arguments. Although fluoridation promoters have done their best to dismiss this book, they have failed to this date to provide a scientific critique.

**2012** The *Journal Environmental Health Perspectives* (the journal sponsored by the National Institute of Environmental health Science (NIEHS) publishes the Harvard meta-analysis of **27 IQ studies**. The authors said that although there were limitations in many of the studies, taken together they showed a remarkable consistency. 26 out of 27 showed lower IQ in high versus low-F villages. The average lowering in studies with exposure to fluoride from water was 7 IQ points. Fluoridation promoters claimed that levels of fluoride were much higher than in fluoridation programs. In actuality the average water concentration was less than 4 mg/L (the EPA's MCL and MCLG for fluoride) and several were less than 2 mg/L including the Xiang 2003 study discussed above. Furthermore, a fundamental principle of toxicology and risk assessment is that there is a wide range of susceptibilities so the average response to an average exposure to a toxicant must always be used with safety factors to protect those who are more susceptible. A 10-fold safety factor is a common default and when applied to studies finding loss of IQ at 2 or 4 mg/L would imply that the most susceptible individuals exposed at 0.2 or 0.4 mg/L would likely have lowered IQ.

**2014** FAN brings Xiang to the US EPA
In 2014 FAN invited Xiang to the USA to speak at our conference held near Washington, DC. After the conference we brought Xiang to the EPA offices in DC in an effort to persuade key officials there that their current assumption that the most sensitive endpoint for fluoride's toxicity of *severe* dental fluorosis was incorrect. Xiang's data showed that in his study children with dental fluorosis of *less* than severe degree had lowered IQ, which meant that "lowering of IQ" was a more sensitive endpoint for their estimation of a safe reference dose (RfD) for fluoride needed for a determination of a safe drinking water standard. The EPA never followed up on this critical information. In 2023 the standard MCL and MCLG for fluoride remains at 4 mg/L, a level set in 1986, based on an endpoint of *crippling skeletal fluorosis*.

**2014** Because of New Zealand (NZ) citizens' concerns on the dangers posed by fluoridation and the desire by the NZ government to introduce mandatory fluoridation for the whole country, the NZ Ministry of Health got two prestigious scientists (Sir David Skegg, president of the Royal Society of NZ, and Sir Peter Gluckman, science adviser to the Prime Minister of NZ) to review fluoridation. In their short review which dismissed any health concerns, they erroneously claimed (as have many other fluoridation proponents) that the loss of IQ in the Harvard meta-analysis was "less than one IQ point **and of no practical significance**.'" In reality, the Harvard team reported an average loss of 7 IQ points which has a huge significance at the population level – a loss of 5 IQ points would halve the number of very bright children (IQ > than 130) and increase by 40% the number of children intellectually impaired (IQ < 70). Gluckman and Skegg (or those who ghost-wrote their review) had confused IQ points with standard deviation. ***When* this serious error was pointed out to them they made matters worse,** by changing the text from "less than one IQ point" to "less than one standard deviation" ***but without changing their***

***conclusion*** that this finding was "of no practical significance." (Gluckman & Skegg, 2014). See also my review of this report (Connett, 2014).

## In 2023, the BSC working group made the same serious error in its review of the NTP report.

The BSC WG incorrectly interpreted -0.46 Standardized Mean Difference in the NTP report as "about a half a point in mean IQ" instead of the correct interpretation of about -7 IQ points (for the commonly used IQ scale with mean 100 and SD ±15 points). From the BSC WG report PDF document page 325, the BSC WG said:

> **"The BSC WG has concern about the next sentence in the Discussion section of the draft M-A [Meta-Analysis] Manuscript: "For example, a 5-point decrease in a population's IQ, would nearly double the number of people classified as intellectually disabled (reference 55)." Table 2 of the M-A Manuscript lists the Overall Mean Effect on IQ [this was actually the SMD or Standardized Mean Difference, not IQ Difference] in 55 studies as -0.46 (-0.55, -0.37). Given that the mean effect size is ~ a half a point in mean IQ … the BSC WG recommends that the authors present an example more consistent with their data.**
>
> **Note** in the above quote I have shown the BSC error in red and my correction in blue, PC.

**2016** Based on the accumulating scientific evidence:

1) FAN nominated F neurotoxicity for evaluation by NTP (**FAN, 2015)**. The BSC approved this project.
2) Under provisions in the Toxic Substances Control Act (TSCA) FAN petitioned EPA to ban the deliberate addition of F to public drinking water because of the harm it causes to children's neurodevelopment. (**FAN, 2016)**

**In 2017-2020** the fluoride-IQ database was dramatically improved via studies funded largely by NIEHS and other US and Canadian agencies. See Bashash, 2017; Green, 2019 and Till, 2020.

> 2017 Bashash et al. First of the NIEHS-funded studies. This was a prospective cohort study with individual measurements of exposure (mothers' urinary fluoride levels), covariates, and outcomes, which were IQ of the offspring at 4 years and 8 to 12 years. The study was based on the ELEMENT cohort in Mexico City, an area with fluoridated salt giving exposures intended to be equivalent to those from artificially fluoridated water. Within one minute of the study's release the American Dental Association (ADA) was cited in the Canadian media as dismissing the relevance of this for fluoridation in

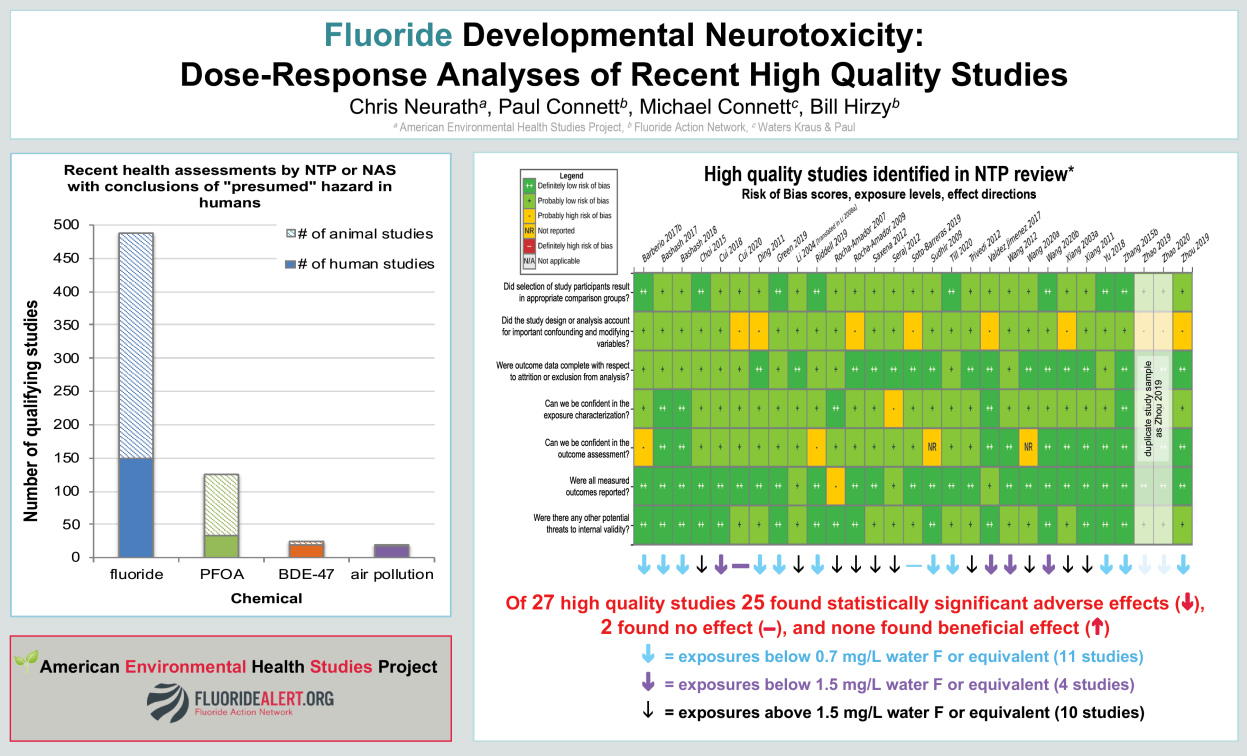
the USA because Mexico does not fluoridate its water (Kirky, 2017). What the ADA failed to acknowledge was the exposure of the pregnant women was based on *urinary fluoride levels,* which is a measure of total exposure to fluoride and thus this study is relatable to any country that has fluoride urinary levels in pregnant women.

2019 Green et al. Another mother-offspring study funded by NIEHS found the same relationship (with boys for maternal urine F concentration, and in both sexes for F intake in mg/d) as Bashash 2017. The study used the MIREC cohort from cities across Canada where the major source of F is artificially fluoridated water at about 0.6 mg/L. This article was accompanied by a review article by Bellinger, a world expert on lead's neurotoxicity (Bellinger, 2019) and a podcast from the *JAMA Pediatrics* editors (JAMA, 2019).

2020 Till et al. This study found a 9 IQ point lowering of IQ per 1 mg/L F concentration increase in the water of baby formula in the babies who were formula fed.

**For all the human fluoride neurotoxicity studies funded by US agencies, see FAN 2023a.**

In **2019 and 2020** the NTP published drafts of its systematic review which largely **vindicated** FAN's concerns. They concluded that fluoride was a "presumed neurotoxicant for children." (NTP 2019, 2020). FAN summarized the NTP's findings in a poster presented at the International Society for Environmental Epidemiology (ISEE) 2020 Conference.




In **2022**, after multiple peer-reviews the NTP scientific team, having considered all criticisms and input, finalized its monograph report with a planned publication date of May 18, 2022.

**The science was clear**. During the past 6 years of the NTP's systematic review, the human studies evidence has steadily grown, with many additional studies rated higher quality (low risk of bias) by NTP. The NTP identified 55 human studies of F and IQ, 52 of which found an adverse effect, in many cases statistically significant. The NTP identified 19 studies it considers "low risk of bias", and 18 of those found adverse neurodevelopmental effects. (Note: there have been eleven IQ studies finding an association between fluoride exposure and lowered IQ published since the NTP's 2020 draft, see FAN 2023b, and one study not finding an association, Ibarluzea et al., 2021.)

**But once again politics intervened.** The findings and conclusions of the NTP evaluation upset dental interests who promote a policy of water fluoridation. Politicization of the NTP report began.

Politicization culminated in a secrecy clampdown on what was previously an open and transparent process. The BSC WG report and all the NTP fluoride neurotoxicity review documents it contains were not made public willingly. They were only made public because of a court order that arose from FAN's lawsuit against the EPA. In fact, the HHS in the lawsuit tried to argue all these documents must be kept secret from the public, even if they were required to

be provided to the parties in the lawsuit. None of this background has been mentioned in the public notices about this BSC meeting being held today and the BSC members themselves may never have been informed of the true circumstances for why they are being asked to take part in the unprecedented process of reviewing an NTP work product that has already undergone at least 3 external peer-reviews and multiple rounds of internal HHS review.

What else besides the NTP's documents themselves have been kept from the public in the secrecy clampdown:

• The apparent decision by NTP to divide the report into a State of the Science monograph and a meta-analysis paper to be submitted for publication in a journal. FAN only became aware of this decision from a court filing by the EPA in the TSCA lawsuit (FAN, 2017) more than a month after the decision had been made. EPA filed a three paragraph written statement from NTP announcing this decision (NTP, 2021). The decision was never announced publicly by NTP and to this date NTP has never posted the statement on their website. The statement offers no cogent explanation for why this drastic change in the protocol for the NTP's evaluation was made, and no revision to the protocol has ever been done, violating NTP's own OHAT methodology for conducting evaluations.

• HHS, at the urging of its subdivisions that promote fluoridation, secretly blocked the public release of what NTP considered to be the final version of their report, just days before its planned release on May 18, 2022. FAN only learned of these behind-the-scenes actions to suppress the NTP report through FOIA documents reluctantly released by HHS almost a year after the events.

• The blocking of what was intended as the final NTP report was not initiated by Dr. Woychik, but by Dr. Rachel Levine, the assistant director of HHS and the head of the Public Health Service which oversees all of NIH, NIDCR, CDC, FDA, and the PHS Surgeon General's office. These agencies include all the divisions that have long standing policies promoting fluoridation.

• The formation of the BSC workgroup itself and its additional review of the NTP monograph and meta-analysis was kept secret from the public. FAN only learned about it a year after it had begun in an affidavit filed by EPA in the federal lawsuit in which FAN is a plaintiff.

• There was never any public notice that the BSC review would take place.

• There was no public notice asking for nominations for the members of the BSC workgroup. However, through FOIA documents obtained almost a year after the fact, FAN learned that notice of the BSC review was given to the very internal HHS agencies that promote fluoridation. Nominations for members of the workgroup were secretly being sought from those internal HHS agencies while the public didn't even know the

review was taking place. Stakeholders such as FAN were never informed of the existence of the BSC review, let alone asked for nominations.

•Also kept secret was that an external peer-review committee had been established and had submitted their comments and unanimously voted to accept the NTP's report more than a year ago. This is the first time an NTP external peer-review process and outcome was kept secret. For all previous chemicals, the external peer-review has had a public meeting and public posting of its conclusions. The secret fluoride neurotoxicity external peer-review unanimously voted to accept the NTP monograph's conclusions a year ago, yet this decision was kept secret from the public.

**All the documents that the workgroup has been reviewing were only released last month because of a court order** in the federal lawsuit, not because of any desire by HHS to make them public. Indeed, in the federal lawsuit, HHS argued against release of those documents and sought to keep them secret indefinitely.

The reason we are all here today is because of the politicization of the NTP report by dental interests who do not like its findings and have tried to water it down, or failing that, tried to suppress it and delay it.

FAN supports the expert and thorough work of the NTP staff who have produced the monograph and meta-analysis. It underwent endless reviews, far more than any other NTP toxicity evaluation. The scientific evidence has not weakened since the 2019 and 2020 drafts, it has actually grown stronger. The conclusions have not materially changed. The support for the conclusions has only been made clearer. Any further delay in finalizing the NTP's evaluation will only delay steps to protect children from harm to their developing brains that is on par with the harm from lead.

This is what Dr. Linda Birnbaum (Director of the NIEHS from 2009 to 2019) in sworn testimony provided in connection with the TSCA lawsuit in 2023]:

"Given NTP's function as an objective source of scientific information for all stakeholders, it is crucial that its work remain strictly independent from partisan or political interests.

Transparency is essential to ensuring the credibility of scientific evaluations, including the health hazard evaluations that NTP performs. As the National Research Council has explained "... Transparency is a requirement that is always present" (NRC 2009, p. 71).

As someone who believes deeply in NTP's science-based mission, I am concerned by the recent course of events with the fluoride monograph. The decision to set aside the results of an external peer review process based on concerns expressed by agencies with strong policy interests on fluoride suggests

the presence of political interference in what should be a strictly scientific endeavor.

Political interference in NTP's scientific evaluations, real or reasonably perceived, will erode and undermine the trust and confidence in NTP's work that is essential to NTP effectively carrying out its mission."

**The larger significance of all this**. For many scientists, myself included, the NTP and its parent body the NIEHS, occupies a special place in public health. It is not burdened with making policy and its researchers can focus on the science underlying toxicological issues. It is imperative that this role be rigorously protected from lobbyists either from industry or government.

In my view it is extremely dangerous for the health of this nation (and beyond) when a wedge is driven between public health policy and honest science. With so many of the policies of our regulatory bodies being undermined by economic and political interests the NIEHS-NTP is the last body standing.

**My plea to the BSC:**

- Please protect the NTP and NIEHS from political interference
- Please ensure that honest science can inform public health policy
- Please allow the public to have one entity in which they can trust when it comes to the toxicity of chemicals which impact their daily lives.

**Addendum: The Elephant in the Room of the NTP Report**

The NTP has struggled with the competing demands of the science versus the politics when it comes to the central question for most people, which is whether fluoride exposures from artificially fluoridated water may pose a neurotoxic risk to at least some people. The NTP's chemical evaluations normally only determine the likelihood of a hazard at any exposure level. They do not normally attempt any dose-response assessment or a human exposure assessment, both of which are essential components in risk assessment which is used to set policies. The NTP is not a policy setting agency.

The protocol for the NTP fluoride neurotoxicity evaluation did not initially include any plans to do any dose-response evaluations or exposure evaluations. The protocol contained no plans for extending hazard assessments to specific exposures including that from artificially fluoridated water. Yet the first draft monograph had inserted into it discussions and judgements about whether the identified hazard might apply to exposures below 1.5 mg/L water F, which the monograph suggested were exposures relevant to most people in the United States. It thus contravened the NTP's own OHAT methodology where a fundamental principle is that systematic reviews should strictly follow a pre-established protocol. FAN has evidence from FOIA documents that these unplanned additions to the monograph were forced on NTP by political pressure from agencies within HHS seeking to defend the policy of fluoridation.

Both NASEM committee peer-reviews pointed out that NTP had deviated from its intended goals and methods by introducing discussions that are essentially risk assessment statements requiring dose-response and exposure assessments. NASEM recommended that NTP avoid this unless it was based on rigorous dose-response assessment and risk assessment which NASEM described in some detail.

In response, NTP revised its protocol to add some limited types of dose-response assessment based on methods of dose-response meta-analysis, although not a complete dose-response analysis, exposure assessment, and risk assessment.

The political pressure on the elephant in the room question comes from fluoridation defenders who want NTP to conclude there is no scientific evidence that artificially fluoridated water poses a neurotoxic risk. Or, failing that, for NTP to say their report did not try to assess the strength of evidence below 1.5 mg/L water F and shouldn't be used by anyone to try to assess the strength of evidence below 1.5 mg/L water F.

The value of 1.5 mg/L water F concentration is an arbitrary level presumably chosen because it is the WHO level recommended as the highest safe level in drinking water. But the WHO set this level in the 1980s and based it entirely on dental fluorosis as the adverse effect to be avoided. Studies finding evidence of fluoride's neurotoxicity did not even exist at the time, so any implication that WHO set the level of 1.5 mg/L as a level that was protective of anything but dental fluorosis is false.

In comparison to the fluoridation policy defenders there is not just FAN, but everyone who wants to know whether artificial fluoridation, which affects 2/3rds of the US population directly, poses a risk of developmental neurotoxicity. That's the elephant that wants to know.

**NTP's attempt to run middle course between the science and politics**

NTP's compromise between the science and the political pressure of fluoridation defenders was to revise their protocol and add the dose-response meta-analyses. However, perhaps to downplay or obscure the findings from the dose-response meta-analyses, which tend to support a conclusion that exposures from artificial fluoridation are neurotoxic, NTP has segregated them into a separate document, the meta-analysis manuscript, which was intended to only be made public after the monograph as a separate article published in some scientific journal.

The NASEM committee never recommended the meta-analysis be separated from the main report. Most of the external peer-reviewers commented that they didn't understand why the meta-analysis was in a different document. Even many of the agency comments (from pro-fluoridation agencies) didn't understand why they were separated. And now, one of the BSC workgroup's main findings is that the two documents should have been kept together.

Keeping them together will make it harder to retain the fiction desired by the fluoridationists that there is no evidence at exposures relevant to artificial fluoridation, or that the NTP report should not be used by anyone to assess whether exposures relevant to artificial fluoridation pose a neurotoxic risk.

**What can be concluded about the elephant question from the latest versions of the NTP monograph and meta-analysis?**

The latest versions of the NTP evaluation have included some types of dose-response assessments, and NTP has explained that there is evidence below 1.5 mg/L water F of neurotoxic hazard (including from some of the studies the NTP rated the highest quality). NTP's latest versions and responses to comments also avoid stating any conclusion that their findings are not relevant to artificial water fluoridation. When pressed by external peer-reviewer comments, NTP expressly stated in responses that they had found evidence that fluoride exposures likely to occur in the United States from artificial fluoridation (they called it "optimal" levels of water F) lowered IQ of children.

In other responses NTP also explicitly stated that there was no observed safe threshold for loss of IQ.

Despite what the fluoridation defenders wish to impose on it, the NTP's evaluation, when including both the monograph and the meta-analysis manuscript can inform risk assessments and the question of whether artificial fluoridation poses a risk of neurotoxic harm.

**A note on risk assessment applied to the findings of the NTP monograph and meta-analysis**

Once it has been shown - in one or more studies - that a chemical poses a hazard to human health at a particular level (i.e. dose) it is necessary to determine a safe level to protect not just the general population from this hazard but the most vulnerable subset of the population. This requires a margin of safety - this involves dividing the lowest toxic dose found in the study by a safety factor. That safety factor must take into account two things: 1) the full range of sensitivity among the whole population to the chemical in question and 2) the full range of exposure (i.e. dose) to the chemical from all sources.

In the case of fluoride and its neurotoxic effects that safety factor must be set no lower than 10 and a case could be made for 50.

Clearly, those who see a threshold of neurotoxic effects at 1.5 mg/L water F as a way of protecting the fluoridation program do not (or do not wish) to understand the principle of these considerations. A safety factor of 10 would mean children (i.e. a whole population of children) should not drink water containing more than 0.15 ppm fluoride. Such a finding would (or should) eliminate the water fluoridation program.

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**Paul Connett's cv**

Dr. Paul Connett is a graduate of Cambridge University and holds a Ph.D. in chemistry from Dartmouth College. From 1983 until he retired in May 2006, Paul taught chemistry at St. Lawrence University in Canton, NY where he specialized in Environmental Chemistry and Toxicology.

Paul Connett has researched the literature on fluoride's toxicity and the fluoridation debate for 27 years. He helped found the Fluoride Action Network (FAN) for which he was the executive director for many years (he stepped down in early 2022). He has given invited presentations on the dangers of fluoridation in many countries. In 2003, he was the only opponent of fluoridation to be invited to present his views in person to US National Research Panel for its Review of the toxicology of fluoride (NRC, 2006).

In 2010, with two other authors (James Beck, MD. PhD and Spedding Micklem, D.Phil (Oxon)) he published the book**, "The Case Against Fluoride"** (Chelsea Green), which contains 80 pages of citations to the scientific literature. As of Nov, 2022, there has yet to be a scientifically referenced critique of this book.

Connett's involvement with the fluoridation debate in 1996 coincided with the publication of the first two Chinese studies (published in English) indicating an association between fluoride exposure and lowered IQ. This is an issue that both Connett and the Fluoride Action Network (FAN) has monitored closely since its inception in 2000. In 2016, FAN took two important initiatives. 1) FAN requested that the US National Toxicology Program (NTP) review the neurotoxicity of fluoride and 2) They petitioned the US EPA to prohibit the deliberate addition of fluoridating chemicals to the US water supply. This has led to a Federal Lawsuit.

Worldwide, Connett is better known for his work on waste management. Over the past 38 years (since 1985) his concerns on waste management have taken him to 49 states in the US, 7 provinces in Canada and 69 other countries.

Much of Paul Connett's work on waste is summarized in the book ***The Zero Waste Solution: Untrashing the Planet One Community at a Time*** *(Chelsea Green, 2013).*