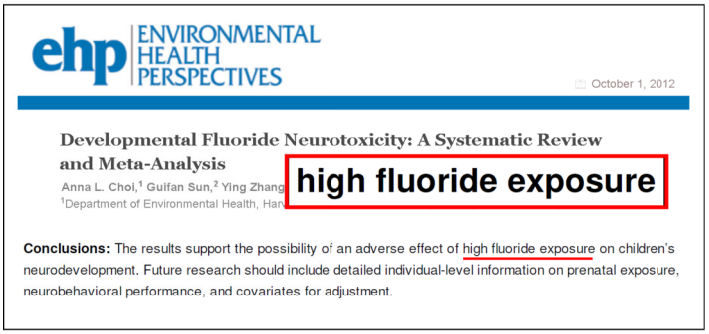
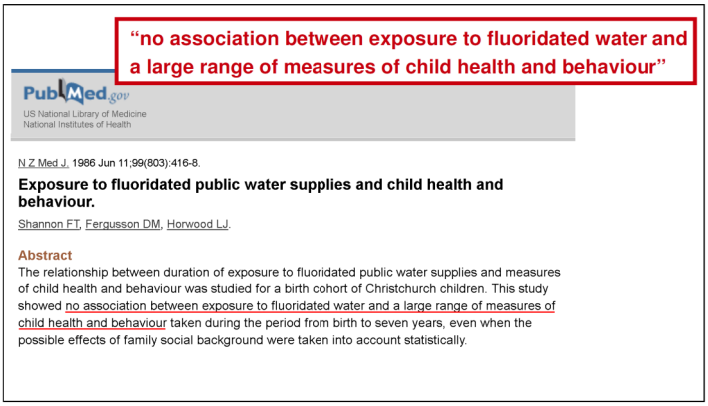
New front burner fluoridation issues are common. In Oregon 2005 it was Salmon Runs. Fluoridation's effect on natural rivers such as the Columbia is too small to have any conceivable impact on Salmon. Since 2003 it is Chinese epidemiological IQ reports.

Here is the paper at the heart of the furor, a metanalysis of mostly Chinese papers on IQ and fluoride exposures.

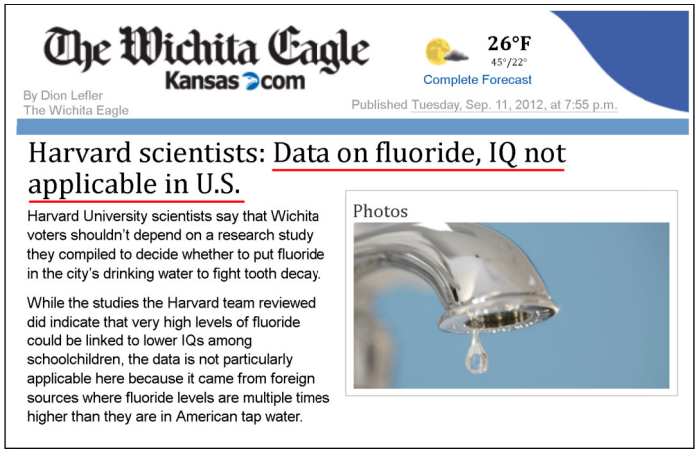
Note the author's choice of words "high fluoride."



Fluoridated water and neurodevelopment has been previously studied. Here 1986 New Zealand research shows no ill effect.

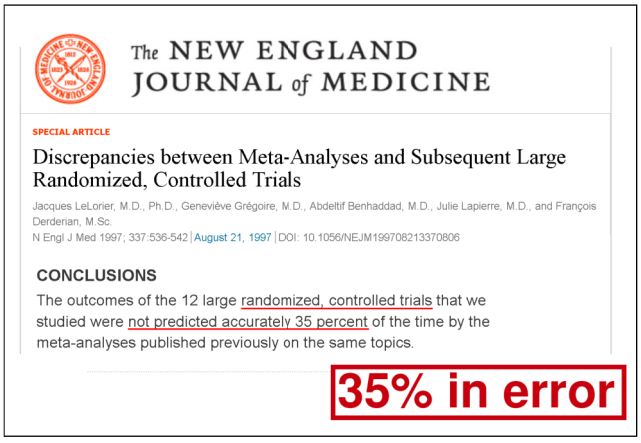


The Wichita Eagle quotes the authors that fluoridation voters should not consider their study.



And for good reason!!

Meta-analyses of highest quality research, randomized controlled trials, are often mistaken. This analysis combined epidemiological environmental descriptive studies - very low quality information in the author's own judgment.



And the authors very clearly state that these papers have serious deficiencies.

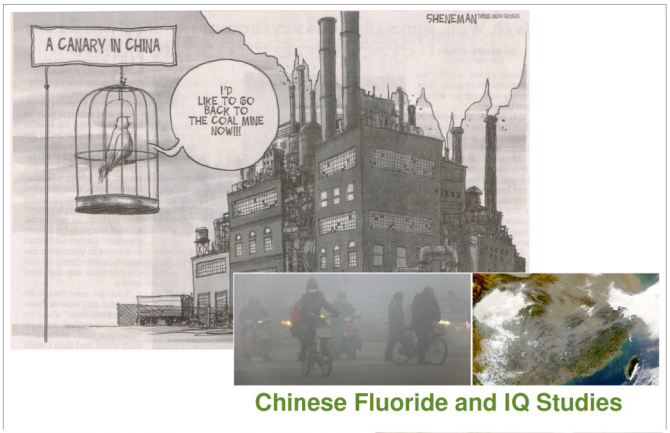
ehp ENVIRONMENTAL HEALTH PERSPECTIVES
October 1, 2012

Developmental Fluoride Neurotoxicity: A Systematic Review and Meta-Analysis

Anna L. Choi,[1] Guifan Sun,[2] Ying Zhang,[3] and Philippe Grandjean[1,4]
[1]Department of Environmental Health, Harvard School of Public Health, Boston, Massachusetts,

"... each of the articles reviewed had deficiencies, in some cases rather serious ones, that limit the conclusions that can be drawn."

China is a polluted place.. Pollution, visible both on the ground and from space is good reason these studies should not set US public health policy.



Chinese Fluoride and IQ Studies

Chinese Fluoride and IQ Studies

20% studied environmental pollution, not drinking water

These studies weren't necessarily even about drinking water. Well studied pollution events show exposures exponentially higher than .7 ppm water.

Chinese Fluoride and IQ Studies

20% studied environmental pollution, not drinking water

15% were complicated by iodine and arsenic effects

Known issues were specifically recognized in a few of the papers and not properly ruled out in most.

Chinese Fluoride and IQ Studies

20% studied environmental pollution, not drinking water

15% were complicated by iodine and arsenic effects

80% had the "low fluoride" reference level the same as fluoridation

The reference comparison of "low fluoride" most often was that of fluoridation's concentration. . . .those papers straightforwardly demonstrate fluoridation's safety.

Chinese Fluoride and IQ Studies

20% studied environmental pollution, not drinking water

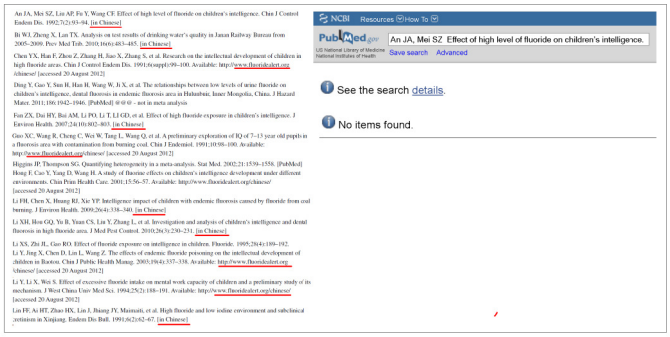
15% were complicated by iodine and arsenic effects

80% had the "low fluoride" reference level the same as fluoridation

Only one of the papers was from a peer reviewed western journal

Almost none were subject to the Western peer review process

And many can be found only on advocacy web pages or not available at all for general analysis and criticism



Cofounders, which make IQ research difficult, were poorly considered. Other environmental pollutants are of particular concern.

Four of the 26 studies didn't specify the high and low fluoride concentrations that were measured. Of the 22 remaining studies, four based the fluoride exposures entirely on coal residues or other non-water measurements.

Chinese Fluoride and IQ Studies

20% studied environmental pollution, not drinking water

15% were complicated by iodine and arsenic effects

80% had the "low fluoride" reference level the same as fluoridation

Only one of the papers was from a peer reviewed western journal

Cofounders were considered in only two studies

This leaves only 18 studies that reported the fluoride exposures and based them on water samples and perhaps most amazingly, the reference group (low fluoride) with higher IQ's drank water with an average of 0.78 ppm, just a bit more than the current 0.70 ppm optimal target.

ehp ENVIRONMENTAL HEALTH PERSPECTIVES

October 1, 2012

Developmental Fluoride Neurotoxicity: A Systematic Review

Average "low" Chinese fluoride = 0.78 ppm

Optimal Fluoride Target in US = 0.7 ppm

neurodevelopment. Future research should include detailed individual-level information on prenatal exposure, neurobehavioral performance, and covariates for adjustment.

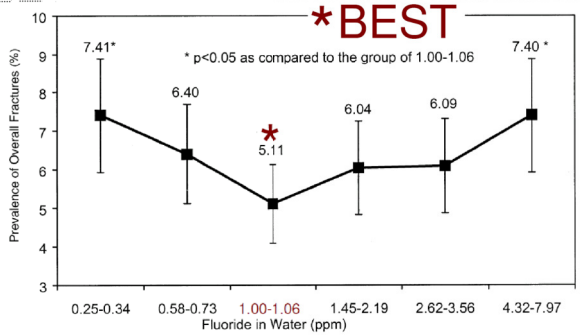
A very important study comparing low, optimal and high water fluoride to bone fracture rates. Fluoridation causes the best skeletal health with as many fractures at low and high water levels.

JBMR Journal of Bone and Mineral Research — ASBMR The American Society for Bone and Mineral Research

J Bone Miner Res. 2001 May;16(5):932-9.

Effect of long-term exposure to fluoride in drinking water on risks of bone fractures.

Li Y, et al Center for Dental Research, Loma Linda University School of Dentistry, California 92350, USA.



The only Chinese Study to compare low, optimal and high fluoride drinking water to IQ found similarly

The author said: "it was discovered that both high and low fluoride had an effect on child intelligence." Both high and low fluoride may disrupt intellectual development.

Poor quality information would never be used to change best clinical practice for individual patients. It is unreasonable to propose that ecologic comparisons from a terribly polluted country composed of studies with these many flaws should set USA public health policy.

CNKI JOURNAL

Chinese Journal of Control of Endemic Diseases

Qin LS, Cui SY. (1990). The influence of drinking water fluoride on pupils IQ, as measured by Rui Wen's standards. Chinese J of the Control of Endemic Diseases 5:203-204.0)

"By testing of the intellectual ability of 447 elementary school students ranging in age from 9 to 10 1/2, it was discovered that both high and low fluoride had an effect on child intelligence. Fluoride levels greater than 2.0 mg/L or less than 0.2 mg/L can disrupt intellectual development."

Fluoride below 0.2 ppm → Lowered IQ

USA Target - 0.7 ppm → Best IQ

Fluoride above 2.0 ppm → Lowered IQ

Because fluoridation opponents were incorrectly labeling the Choi and Grandjean paper "the Harvard Study" and because the meta-analysis has no importance to the scientific evaluation of fluoridation's safety, Boston based oral public health authority Dr. Myron Allukian, a graduate of the Harvard School of Public Health, requested Harvard formally consider the matter.

The deans of the Harvard Medical School, Dental School and School of Public Health (in which Grandjean hold an adjunct position) clearly stated they believe fluoridation to be safe, beneficial and practical. This is the official Harvard position.

HARVARD MEDICAL SCHOOL

HARVARD School of Dental Medicine

HARVARD | SCHOOL OF PUBLIC HEALTH
Powerful ideas for a healthier world

March 22, 2013

Dr. Myron Allukian, Jr.
Immediate Past President, American Association for Community Dental Programs
Associate Clinical Professor, Harvard School of Dental Medicine
Via email: myalluk@aol.com

Dear Dr. Allukian:

As Deans of Harvard Medical School, Harvard School of Dental Medicine and the Harvard School of Public Health, we continue to support community water fluoridation as an effective and safe public health measure for people of all ages.

Numerous reputable studies over the years have consistently demonstrated that community water fluoridation is safe, effective, and practical. Fluoridation has made an enormous impact on improving the oral health of the American people.

Our country is fortunate to have over 204 million Americans living in fluoridated communities and having access to the health and economic benefits of this vital public health measure.

Sincerely,

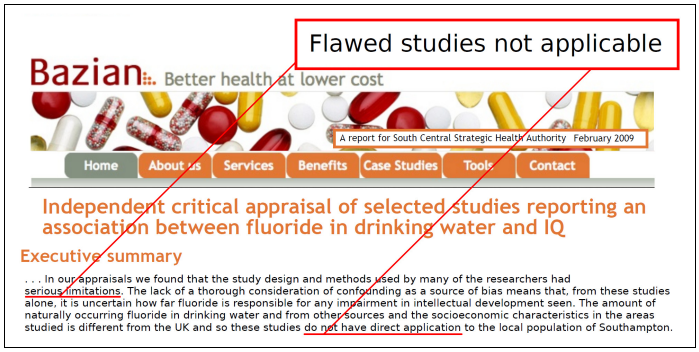
Jeffrey S. Flier, MD
Dean of the Faculty of Medicine
Caroline Shields Walker Professor of Medicine
Harvard Medical School

R. Bruce Donoff, DMD, MD
Dean and Walter C. Guralnick Distinguished Professor of Oral and Maxillofacial Surgery
Harvard School of Dental Medicine

Julio Frenk, MD, MPH, PhD
Dean of the Faculty, Harvard School of Public Health
T & G Angelopoulos Professor of Public Health and International Development,
Harvard School of Public Health and Harvard Kennedy School

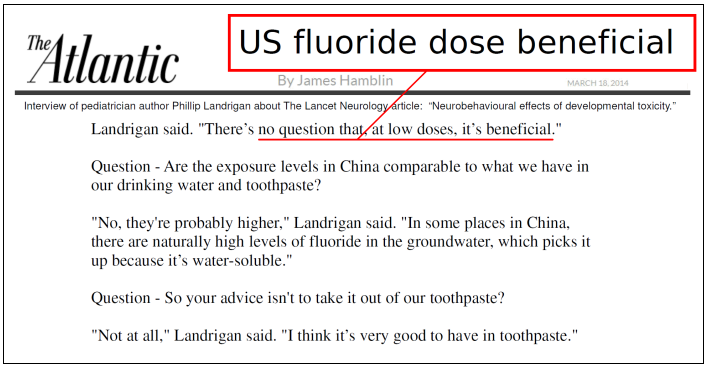
Well funded committees of experts have many times reviewed all of the science related to fluoridation and health concerns. Other than the Qin study, which found optimal fluoride associated with better IQ, none have identified any fluoridation effect on the developing brain.

An independent review from an English Health District found no relevance to the meta-analysis and the decision for fluoridation.



Grandjean, the senior author of the meta-analysis published a paper with a Harvard pediatrician on environmental toxins and brain development in The Lancet Neurology. Fluoride is a very minor element; its only literature reference is Grandjean's prior paper. This paper thus adds nothing to what has been discussed above. It contains nothing new.

In an interview for The Atlantic pediatrician co-author Phillip Landrigan made clear the difference between beneficial low dose fluoride typical of the US and the high doses in China which might be harmful.



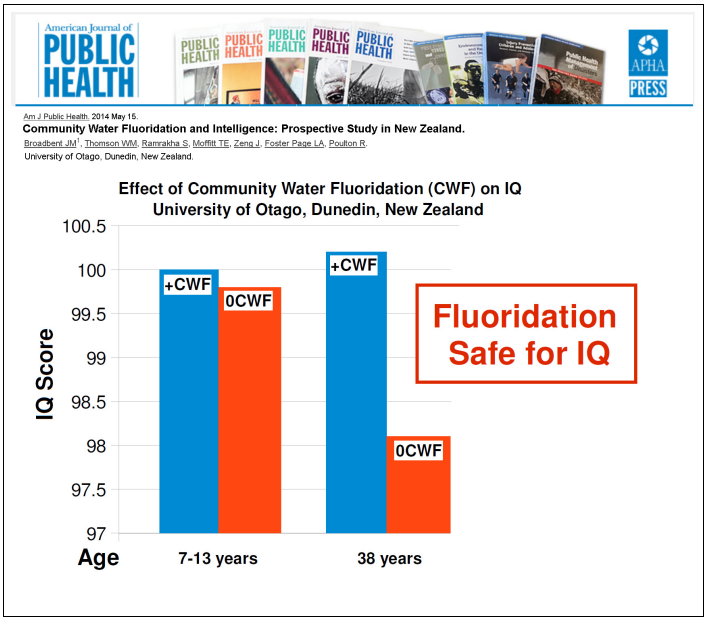
The unsupported claim that fluoridation might be a cause of IQ deficits among children, proved critically important to the City Councilors in Hamilton, New Zealand.

The nearby University of Otago then published an analysis of the ongoing Dunedin Multidisciplinary Health and Development Study. These data included IQ testing and water fluoridation status for over 1000 people followed for 38 years. By comparison only seven of the Chinese studies had sample sizes over 500.

The Otago researchers well controlled for factors other than fluoridation, such as parents' socioeconomic background and breast feeding. New Zealand has none of the general environmental pollution common in China. .

No loss of IQ because of fluoridation was found.

The authors concluded that the "associations between very high fluoride exposure and low IQ reported in previous studies may have been affected by confounding, particularly by urban or rural status."



By:

Charles C. Haynie, M.D.; FACS
Hood River, OR 97031