

Joining the Dots on Australian Fluoridation Fraud

By Professor Paul Connett

<http://www.fluoridealert.org>

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I would like to draw your attention to four events in Australia, which I believe demonstrate the corruption of science needed to propagate the discredited practice of water fluoridation in that country. Just join the dots.

Here are the four events:

- A letter from Pieta-Ray Laut, Executive Director, Public Health Association of Australia (PHAA) to Professor Warwick Anderson, Chief Executive Officer, National Health and Medical Research Council (NHMRC), dated 20 February 2007. Note the [NHMRC](#) is an agency of the Australian government. See letter at end.
- The publication of the NHMRC report in November 2007: [A Systematic Review of the Efficacy and Safety of Fluoridation](#).
- An article attacking opponents of fluoridation by Jason Armfield in the online journal *Australia and New Zealand Health Policy*, December, 2007, titled: [When public action undermines public health: a critical examination of antifluoridationist literature](#) - and my response to it at this same site.
- The forcing through of mandatory water fluoridation on Queensland in February 2008 by Premier Anna Bligh. This of course, can be coupled with other ongoing efforts to force fluoridation on communities in NSW and Victoria, without giving them a chance to vote on the matter.

Elsewhere I have commented at some length on the "Easleyan" hatchet job on people opposed to fluoridation by Jason Armfield, and readers know well of our fruitless efforts to try to inform Premier Bligh on the dangers and ineffectiveness of fluoridation before she forced the practice on Queensland. Here I will focus on the NHMRC (2007) review and the PHAA letter.

The NHMRC (2007) report.

This report is being cited around the fluoridating world as the final word on the "safety and effectiveness" of water fluoridation. However, as far as addressing health concerns, a careful reading of this report indicates that at best, it is a work of professional incompetence or, at worst, an example of scientific fraud, in which scientific information is manipulated to support a preordained conclusion. There are six fundamental problems with this report.

1. The NHMRC's failure to make it clear that very little original work has been done investigating the health of fluoridated communities in Australia.

I think the average reader of a governmental report on fluoridation in a country which has been fluoridating its water for over 50 years would expect to read studies performed in their own country. However, virtually no health studies have been done in Australia on any organ or tissue other than the teeth. This is a particularly egregious omission because a previous review from this same agency over 17 years ago (NHMRC 1991) actually recommended that some health studies be done.

This included recommending that fluoride bone levels be measured so that there would be a better handle on epidemiological studies on the bone. Not only were these bone levels not obtained, but no epidemiological studies on the bone were done either. The NHMRC (1991) also recommended that the many anecdotal reports that some citizens are particularly sensitive to fluoride be investigated scientifically. This also has not been done. The guiding principle in Australia - as well as other fluoridating countries - seems to be "if you don't look, you don't find." Which also means that when you apply systematic reviews to the literature - no matter how sophisticated the analyses might be - it is highly likely that there will be no damage to report.

2. The dominant interest in the report is on one organ: the teeth.

Of the 183 pages in the report, only a few pages in the text are devoted to health concerns.

26 pages to dental caries

23 pages to dental fluorosis

6 pages to bone fractures

7 pages to cancer

6 pages to other possible health effects

In other words more pages were devoted to both dental caries and dental fluorosis than all the other health issues combined. Once again we are reminded that the whole issue of water fluoridation, especially the money spent on research, has been captured and controlled by the dental lobby.

3. The NHMRC's cavalier dismissal of the relevance of the NRC (2006) report.

Even though citizens in Australia had requested that the NHMRC panel pay special attention to the NRC (2006) report, the authors dismissed this landmark 507-page report by the National Research Council: *Fluoride In Drinking Water: A Scientific Review of EPA's Standards*, (NRC 2006, referred to as "NAS, 2006 below") in just two sentences:

"The reader is also referred to recent comprehensive reports regarding water fluoridation published by the World Health Organization (WHO, 2006) and the National Research Council of the National Academies (NAS, 2006). The NAS report refers to adverse health effects from fluoride at 2 - 4 mg/L, the reader is alerted to the fact that fluoridation of Australia's drinking water occurs in the range of 0.6 to 1.1 mg/L."

Such a dismissal of this important review - which took the panel 3.5 years to write - is unbelievable. The reason they give betrays a very poor understanding of toxicology.

First, for most toxic substances regulatory bodies are forced to use high dose animal experiments to extrapolate to concerns about low doses for humans. In the case of fluoride we have the luxury of being able to use dozens of relatively low dose human studies from India and China to inform our judgments.

Second, unless the study involves a very large number of subjects, when extrapolating to a "safe" level for a whole population, it is necessary to apply a safety factor (a margin of safety) to take into account the very large range of sensitivity to any toxic substance we can expect in a human population (intra-species variation). The factor usually chosen for this purpose is 10. Thus to dismiss findings of health effects reported in studies involving a small number of subjects consuming water between 2 and 4 ppm as irrelevant to a whole population consuming water at 1 ppm, is ridiculous.

Third, some of the studies reviewed in the NRC (2006) found or estimated effects at lower than 2 ppm (for example, Lin, 1991; Xiang, 2003).

Fourth, the NRC panel did an extensive exposure analysis (chapter 2) and concluded that some subsets of the population are already exceeding so called "safe" doses in drinking water fluoridated at 1 ppm. These include bottle-fed infants; above average water consumers like athletes, outdoor workers in hot climates, military personnel and people with diabetes; people with impaired kidney function and people who are borderline iodine deficient, which is a common problem in Australia.

4. The NHMRC's over-reliance on the York Review.

Instead of using the NRC (2006) review as their starting point the NHMRC panel went back to the York Review (McDonagh et al., 2000). However, they did this without acknowledging the caveats issued by those associated with this report. In particular, see the [letter from professor Trevor Sheldon](#) to the House of Lords. In fact, much of the NHMRC review is simply duplicating large parts of the analysis in the York Review! Like the York Review they spent much of their time on teeth, bones and cancer and bundled all the other health issues into one section. This section consisted of less than 6 pages, much of it being material reproduced from the York Review. They virtually ignore the issue of a possible relationship between fluoride exposure and the lowering of IQ in children (see point 6 below) as well as fluoride's impact on the thyroid and other parts of the endocrine system. These issues were extensively covered in the NRC (2006) report which they chose to ignore.

5. The NHMRC's questionable downplaying of the Bassin osteosarcoma study.

The NHMRC downplayed the important finding by Dr. Elise Bassin that young boys exposed to fluoridated water between their 6th and 8th years had a 5 to 7-fold increased risk of succumbing to osteosarcoma by the age of 20 using a "letter." So here we have a panel being extremely particular about what papers qualify for their analyses, but are willing to downplay a well conducted case-control study using a yet to be published study promised in a letter! Moreover, just in case people don't read the full text of the NHMRC review, the authors use exactly the same device and verbage in their Executive Summary.

Worse, the letter they use comes from none other than Professor Chester Douglass whose position on this whole matter is highly suspect. First, he is a co-author of a previous report which expressed concerns that a positive finding on osteosarcoma could threaten the fluoridation program (JADA 122:39-45, April 1991); second he has received government funding of over \$1 million for his research on osteosarcoma and yet has published virtually nothing on the subject for over 18 years;

third he is a consultant for Colgate, a manufacturer of fluoridated dental products and fourth he concealed Bassin's work from his peers, the public, the NRC panel and his funders for the three years between the successful defense of her thesis and its discovery in the rare books section of a Harvard library. Moreover, the Douglass study which is supposed to rebut Bassin's work - promised for the Summer of 2006 - has yet to appear in print.

More significantly, the methodology Douglass has used is unlikely to challenge her finding since he is comparing osteosarcoma rates with bone levels of fluoride. As these levels are taken after the cases have been identified they give only a cumulative measure of fluoride exposure: i.e. these bone concentrations give no information on what levels of exposure the victims had to fluoride between the critical 6th to 8th years.

6. The NHMRC's failure to adequately cover the most recent literature indicating health problems, especially the studies relating fluoride exposure to the lowering of IQ in children.

In the small section in the NHMRC report which reviews other harms from fluoridation (pp 105-110), one of the York Review tables identified two IQ studies (Lin et al., 1991 and Zhao et al., 1996). However, the NHMRC search appears to have found no more. This is strange since had they actually read the NRC (2006) review, rather than dismissing its relevance, they would have found a whole chapter devoted to the brain, and in this they would have found three more IQ studies: Li et al., 1995; Lu et al., 2000; Xiang et al., 2003.

To make matters even worse, the NHMRC panel handled one of the two studies they do cite in a critically misleading fashion. They state:

"Lin (1991) found a significant association of combined low iodine and **high** fluoride with goiter and mental retardation." (my emphasis).

However, the **level of fluoride in this study was not high at all, it was 0.88 ppm** - i.e. less than 1 ppm! So not only did the NHMRC authors not take advantage of the research in the NRC (2006) review, which revealed the three extra IQ studies, but they haven't even read (or poorly read) one of the two IQ studies they actually do cite!

It should also be pointed out that the single sentence I have quoted above is the only reference they make to the fact that fluoride might damage the brain!

They state in their methodology that they only reviewed the literature in English published between 1996 and December 2006 so that gives them a possible excuse for ignoring the following studies: Seraj et al, 2006 (only the abstract was in English, the rest was in Persian); Trivedi, 2007; and Wang, et al., 2007. Even if they missed the chapter on the brain in the NRC (2006) report they should have been tipped off that this was an issue by the study by Zhao et al, 1996 (cited by the York Review) and listed in a table they reproduce. This study was published in the journal *Fluoride*. Serious researchers would have searched the archives of this journal - which are readily available on the internet - to see if this journal had published any more IQ studies since 1996 - and they have. They could also have found references to many of these studies had they bothered to visit our website. Under Health Studies, FAN has a whole section on fluoride and the brain - and it has been there for several years.

To have missed so much in the literature - and all the clues that it was there - would have been bad if we were talking about a term paper written by an undergraduate, but for a body on which a whole country is relying for health advice this is extremely shoddy research. But the more serious question is whether the handling of this issue by the NHMRC was a product of academic incompetence or a deliberate attempt to mislead the public. Which is easier to believe?

However, whatever excuses people care to make to explain the NHMRC panel on this matter, this ignorance should go no further. Those who glibly cite this NHMRC review as an authority on fluoridation's safety should be warned that there are now TWENTY THREE published studies which indicate that fluoride lowers IQ in children and these have been subjected to two systematic reviews, Connett and Limeback (2008) and Tang et al. (2008).

Nor does the matter end there. There are other Chinese studies which show that fluoride damages the fetal brain, as well as altering behavior of neonates and workers in the aluminum industry. Moreover, 12 Chinese studies on the brain (11 newly translated) have been reproduced in the journal [FLUORIDE](#), so there is no excuse for government fluoridation promoters to continue to ignore this large body of Chinese work. In a future bulletin we will give a full citation list for all these studies on the brain, along with links where the full papers can be accessed.

Meanwhile, this NHMRC (2007) review is still being cited by fluoridation promoters in Canada (Dr. Peter Cooney, Chief Dental Officer), the UK (Dr. Barry Cockcroft, Chief Dental Officer) and the US (Dr. William Bailey at the CDC' Oral Health Division) as evidence that fluoridation is "safe." They will doubtless continue to do so, despite what I have written above, because, sadly like health authorities in Australia their agenda is to promote water fluoridation whatever the cost to public health.

The PHAA letter to the NHMRC.

Professor Warwick Anderson,
Chief Executive Officer,
National Health and medical Research Council,
GPO 1421,
CANBERRA, ACT 2601

20 February 2007

Dear Professor Anderson

Fluoridation Standards

The Public Health Association of Australia (PHAA) is a forum for the promotion of the health of the public as well as being a professional resource for public health personnel. The PHAA has a strong interest in Oral Health.

The PHAA notes that while State and Territorial governments have made significant commitments recently to progress water fluoridation in Australia, the lack of a current statement of support for water fluoridation by NHMRC is a substantial threat to this work.

Groups opposed to water fluoridation currently refer to the NHMRC response:

"The NHMRC does not have a separate formal statement about fluoridation of the water supplies" (1) as evidence of a lack of support for water fluoridation.

At the 162 session of the NHMRC in September 2006, members supported the publication of the NHMRC's support of water fluoridation. PHAA acknowledges that recent NHMRC selective tender for the conduct of a systematic review of fluorides and health in Australia will be the first step in addressing this responsibility for raising the standard of individual and public health.

The Public Health Association of Australia is keen to see this work expedited and would be happy to contribute towards the development of a statement supporting water fluoridation in order to help reduce the confusion around this issue. Equally we would be happy to participate in a public workshop around this issue, as discussed in the 162 session.

We would be happy to talk this issue over with you or your staff should you think that would be helpful. I can be contacted on (02) 62852373 or at plaut@phaa.net.au

Yours sincerely,

Pieta-Ray Laut,
Executive Director
20 February 2007

For [reference 1 see footnote on the original letter.](#)