False and Misleading statements by the Royal College of Dental Surgeons of Ontario
prepared by
Carole Clinch, BA, BPHE,
Research Coordinator, People for Safe Drinking Water

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To:
Peggi Mace, Communications Director, RCDSO
City Clerk, City of Waterloo
Ontario Environmental Commissioner
Canadian Environmental Commissioner
Ministry of the Environment
Ontario Ombudsman

On Oct 21 2009, the Waterloo Chronicle published an article where the RCDSO provides false and misleading information to this newspaper and the citizens of Waterloo.

The propensity of politically sensitive organizations to make false and misleading statements regarding artificial water fluoridation seems to be a world-wide problem. The Chairman of the York Review states:

“It is particularly worrying then that statements which mislead the public about the review's findings have been made in press releases and briefings by the British Dental Association, British Medical Association, the National Alliance for Equity in Dental Health and the British Fluoridation Society.”

1. "There are no radioactive materials included [in fluoridation chemicals]." Waterloo Chronicle article, dated October 21, 2009

This was in reference to hydrofluorosilicic acid, the chemical used in the Region of Waterloo, including Waterloo, St. Jacobs, Elmira, parts of Woolwich, Wilmot and Kitchener for the purposes of artificial water fluoridation. Please note that the citizens of St. Jacobs, Elmira, Woolwich, Wilmot and Kitchener have not been informed of artificial water fluoridation in their drinking water nor have they given their consent, either by council vote or by plebiscite, as required by law.

The RCDSO knew or should have known that the certifying body called the American Water Works Association (AWWA B703-06) standard for Fluoride shows clearly that radioactive materials are in these chemicals, therefore added to drinking water. See excerpt below from Table B.1, Fluosilicic acid-contaminants, page 13. The AWWA standard B703-00 also states;

"The transfer of contaminants from chemicals to processed water or the residual solids is becoming a problem of greater concern." page ix.

Table B.1 Impurity analytic methods
<table>
<thead>
<tr>
<th>Contaminant</th>
<th>Maximum Allowable Concentration Level</th>
<th>Single Product Allowable Concentration (SPAC)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MCL/MAC mg/L</td>
<td>mg/L</td>
</tr>
<tr>
<td>Radionuclides</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beta particle and photon activity</td>
<td>4 mrem/y</td>
<td>0.4 mrem/y</td>
</tr>
<tr>
<td>Gross alpha particle activity</td>
<td>15 pCi/L</td>
<td>1.5 pCi/L</td>
</tr>
<tr>
<td>Radium 226 and 228 (combined)</td>
<td>5 pCi/L</td>
<td>0.5 pCi/L</td>
</tr>
<tr>
<td>Uranium</td>
<td>30 µg/L</td>
<td>3.0 µg/L</td>
</tr>
</tbody>
</table>

2. "It’s certified by a number of bodies including Health Canada, the National Sanitation Foundation and America National Standards Institute."

The RCDSO knew or should have known that no government agency in Canada or the USA certifies water fluoridation chemicals.

"Although these products and materials are not currently regulated at the national level, Health Canada recognizes the importance that they be effective and safe."


"MOE has no jurisdiction over the manufacture or sale of drinking water treatment chemicals." SOURCE: Mirek Tybinkowski, M.Eng., P.Eng, Water & Wastewater Specialist, Safe Drinking Water Branch, letter dated June 11, 2007

Furthermore, Mr. Stan Hazan General Manager, Drinking Water Additives Certification Program, National Sanitation Foundation (NSF), admitted under oath in 2004 that,

" NSF failed to follow its own Standard 60 procedures"

In a letter to Dr. Bill Osmunson, DDS, MPH, 2/1/07, NSF stated:

"The NSF International does not evaluate safety of the chemicals added to water for the purpose of the treatment or mitigation of disease in humans, and does not evaluate the product added to water but only the impurities within the product."

3. “As for the cost associated with fluoridation, Dr. Stechey said the U.S. Centers for Disease Control and Prevention reports the annual cost of fluoridation is approximately 50 cents in communities equal to 20,000 people to approximately $3 per person in communities equal to $5,000 in in 1995 dollars for all but the smallest water systems.”

"Another major benefit is that it reduces the cost of dental care in Canada."

The RCDSO knew or should have known that the costs cited for artificial water fluoridation
by the US Centers for Disease Control are only chemical costs. This CDC assessment does NOT include:

capital costs to maintain the infrastructure required to deliver these chemicals, extra costs to replace this infrastructure due to the corrosive nature of fluorosilicates, manpower costs for installing and maintaining these infrastructures, damage to fisheries, wildlife and agriculture (environmental costs) of adding a toxic substance (CEPA-designated) and Hazardous Waste (Environment Canada-designated) to drinking water and source water, carbon footprint for delivering these chemicals across the globe, public costs to hire and pay people to promote AWF, direct medical costs to treat fluorosis diseases (soft tissue, skeletal, dental), time lost from work and school due to fluorosis diseases, WSIB costs, insurance costs to cover health damages, loss of foregone earnings due to medical harm, home and institutional care due to medical harm, litigation costs, etc.

The RCDSO knew or should have known that this claim was made by Griffin et al 2001;61(2). You should also have known that this paper uses 30 year old data which is no longer valid and that this paper makes many false assumptions, which makes their conclusions invalid:

• It incorrectly assumes that with water fluoridation NO other mode of fluoride application in a dental office would be required.

• It incorrectly assumes that costs for treating dental fluorosis would be "negligible" and were not included. Dental fluorosis is highly prevalent (25-70% of the population) and the costs to repair are significant.

• Included in the $38 saved, the paper incorrectly assumed $18.12 per hour wages lost for time taken visiting the dentist - for every person. Many children are not earning and many salaried people would not lose wages for visiting a dentist.

• Many costs of artificial water fluoridation were not included, as listed above.


"I think a problem with a lot of the literature on fluoridation, it was biased in that it only considered the benefits and it didn't consider the other side of the coin which was the risks."

The RCDSO knew or should have known that recent research which does not have the above methodological flaws, demonstrates that in the nonfluoridated city of Portland, Oregon, citizens spend less ($176 per person per year) on dental care than in fluoridated Vancouver, Washington ($180 per person per year).

Children in Need of Treatment (C.I.N.O.T.) cost per capita in nonfluoridated Thunder Bay was $1.60 in 1991. CINOT cost per capita in fluoridated Toronto was $7.06. (Hettenhausen DDS, MPH, Extraordinary Dental Health in Thunder Bay. Dental Bites – see attached)
Any claims that artificial water fluoridation is cost effective is not supported by this evidence.

4. “The big advantage of water fluoridation is that it benefits all residents in a community—”

The RCDSO knew or should have known that there are no studies which demonstrate that the three common forms of fluoride used in artificial water fluoridation, in the concentrations currently used, are effective in the prevention of cavities, when all important factors influencing oral health are adequately controlled.

When asked to provide primary literature which demonstrates benefits from artificial water fluoridation for anyone, the RCDSO only provided review articles from politically sensitive organizations and individuals who have a 60 year old policy to defend and multiple conflicts of interest. They omitted the York Review 2000, the NRC Review 1977, 2006, the Quebec Ministry of the Environment Review 1979, the Pizzo Review 2007 – all of which disagree with the conclusions of the RCDSO. Very selective use of the research data to support your conclusions is scientifically unacceptable, making the conclusions of the RCDSO invalid.

The RCDSO knew or should have known about the recent research by dentists and members of the Public Health Service which refutes their claim of “safe and effective”, such as:

“These findings suggest that achieving a caries-free status may have relatively little to do with fluoride intake, while fluorosis is clearly more dependent on fluoride intake.”


The RCDSO knew or should have known that the National Research Council Review 2006, includes information demonstrating that many susceptible individuals will be ingesting what is considered to be toxic dose (5mg/kg), where known harm will occur, especially young children. Please see Table A.

April 28, 2009, the CDA President stated that ~20 per cent of Canada’s population experiences ~80 per cent of the cavities. Since low socio-economic groups currently using artificially fluoridated water have the highest rates of cavities, it seems evident that artificial water fluoridation does not prevent cavities, especially in these low-socioeconomic groups, as claimed.

Three of the 6 authors of the Health Canada Review panel have published papers demonstrating that artificial water fluoridation is not safe and not effective. Surprisingly, these papers were omitted from the proposed 2009 Health Canada review document.

Two papers by one member of the Health Canada review panel (Kingston-Newburg trial – 50 years later) (Kumar) demonstrate that there are no benefits from artificial water fluoridation.
The 2009 study by Kumar (tinyurl.com/MoneyDownTheDrain) shows that 7- to 17-year-olds have similar cavity rates in their permanent teeth whether their water supply is fluoridated or not.

Any claims that artificial water fluoridation helps to prevent cavities, especially for those in lower socio-economic brackets, is not supported by this evidence.

5. “Halton Region voted to turn off water fluoridation” according to RCDSO

On Mon, Mar 16, 2009 Ms Peggi Mace, Communications Director of the RCDSO, wrote a letter stating; “Thank you for drawing our attention to this inadvertent error ... we will run a correction in a future issue of the magazine.”

The letter refers to the false statement by the RCDSO in their journal “Dispatch” that Halton Region had voted to continue artificial water fluoridation. Halton Region Health and Social Services board voted to turn off artificial water fluoridation by a vote of 5-2 on November 13, 2008. A final vote by the whole council has not been made. The RCDSO was present in Halton Region chambers when these deliberations occurred. To date they have not corrected this error in their magazine. The President of the Ontario Dental Association (ODA) recently reported this misinformation to Thunder Bay city council on July 20, 2009, even though the ODA were also present when the Halton HSS board voted to discontinue artificial water fluoridation.

6. RCDSO states: "no credible evidence supports an association between fluoridation and any of these conditions."

- Does the the RCDSO not consider the American Dental Association to be a “credible” source of information? They recommend that children use water; “purified, distilled, deionized, demineralized, or produced through reverse osmosis.”
- Does the RCDSO not consider the US Centers for Disease Control to be a “credible” source of information? They also recommend on their website that parents using infant formula should not use fluoridated drinking water.
- Does the RCDSO not consider the Scientific Committee of the Food Safety Authority of Ireland a “credible” source of information? They state: “the precautionary principle should apply and recommends that infant formula should not be re-constituted with fluoridated tap water.”
- Does the RCDSO not consider the Harvard 2006, peer-reviewed bone cancer study by Bassin, who is a dentist and PhD, a “credible” source?
- Does the RCDSO not consider the National Research Council 2006 Review “credible” evidence?
- Does the RCDSO not consider the Quebec Ministry of the Environment Review "credible" evidence?

7. RCDSO misrepresents the WHO
The RCDSO knew or should have known that the WHO Official policy positions are included in criteria documents with numbers. There is no WHO criteria which states that the WHO officially supports artificial water fluoridation. WHO states clearly that they are not responsible for the opinions expressed by consultants working for the WHO:

“This report contains the collective views of an international group of experts and does not necessarily represent the decisions or the stated policy of ... the World Health Organization.” WHO ENVIRONMENTAL HEALTH CRITERIA 36, 1984 http://www.inchem.org/documents/ehc/ehc/ehc36.htm

Unless Dr. Steckey can find such a criteria document with number, the RCDSO falsely represents the WHO “official” position.

Final Comments

A failure to correct these errors and a propensity to continue repeating this misinformation by the dental community is disturbing.

This misinformation casts doubt upon the professional integrity of dentists in Canada.

If we cannot trust the RCDSO to provide us with correct information on the subject of artificial water fluoridation, can we trust them to provide us with correct information on other issues?

Sincerely,

Carole Clinch, BA, BPHE
Research Coordinator, People for Safe Drinking Water
