MEDICAL OFFICER OF HEALTH – Region of Waterloo (ROW), Ontario
Errors and Omissions

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Introduction

The Scientific Method underpinning research presupposes a willingness to continually re-
examine scientific evidence and assumptions. Any individual(s) who distort(s) or
misrepresent(s) scientific evidence and known facts for reasons of ignorance, political
expedience, financial gain, or self-interest imperil(s) the integrity of scientific discourse.

Unfortunately many incorrect statements have been made by the region's medical officer of
health. These incorrect statements are easy to validate by sources available to the public.
These allegations have never been refuted. The many incorrect statements by the region's
medical officer of health call into question her reliability and integrity on factual matters of
public record.

Based on comments made in the British Medical Journal and by the chair of the York Review
2000, a lack of scientific integrity and objectivity on the subject of artificial water fluoridation
seems to be an international problem:

“Department of Health’s objectivity is questionable—it funded the British Fluoridation
Society and, along with many other supporters of fluoridation, it used the York Review's
findings selectively to give an overoptimistic assessment of the evidence in favour of
fluoridation.” Cheng KK, Chalmer I, Sheldon TA 2007 British Medical Journal October
6, 335: 699-702.

“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.” Chair of York Review 2000 available at:
www.yorkshiretoday.co.uk/ViewArticle2.aspx?SectionID=101&ArticleID=1651774

False and misleading statements by Health Canada, the Medical Officer of Health for Ontario,
the regulatory body of dentists in Ontario (RCDSO), and other members of the public health
service have now been documented. Proof of this misinformation is easy to verify from the
public record. These allegations have never been refuted. Available at:
Medical Office of Health for the ROW

Dr. Liana Nolan made the following statement to Waterloo City Council on January 18, 2008 (transcribed by city staff) and continues to make this statement.

**FALSE Statement #1:** "It’s... water fluoridation is supported by a number of agencies, some of which were referred to earlier that include Health Canada, the Canadian Dental Association, the US Centers for Disease Control, and the World Health Organization."

The World Health Organization presents all official policy positions in what are called criteria documents (e.g. Criteria Document # 299). The WHO has produced no official policy position regarding water fluoridation. The WHO have produced no criteria document on this subject. The WHO have also stated repeatedly that they are not responsible for comments made by consultants working for their organization.

None of the above agencies have a policy position regarding the actual fluoridation chemicals used.

The next statement was also made by the medical officer of health to the City of Waterloo, on Jan 18, 2008 (transcribed by city staff):

**FALSE statement #2:** "we have valves that stop Waterloo water from going into Kitchener, and stop Kitchener water from going into Waterloo."

Dr. Nolan seems to lack an understanding of basic principles of physics and how they apply to water fluoridation infrastructure.

The Region of Waterloo is adding hydrofluorosilicic acid to St. Jacobs, Elmira, parts of Kitchener, Wilmot, Woolwich townships as stated in ROW public documents (Report: CR-CLK-08-004/CR-RS-08-026, File Code L11-00). This is occurring without public knowledge or consent, as required by government legislation.

“concerning the continued fluoridation of the water for the City of Waterloo, portions of Woolwich Township including Elmira and St. Jacob’s, Country Squire Road, and the Farmer’s Market area, and small portions of Kitchener and Wilmot, to coincide with the next municipal election”

This third statement from Dr. Liana Nolan to the City of Waterloo is also incorrect from Jan 18, 2008 ((transcribed by city of Waterloo staff):

**FALSE statement #3:** "The compound itself, HFSA, is actually a gas, and so in order to use it and ship it, it’s compressed."

Dr. Nolan seems to lack even a basic understanding of water fluoridation chemicals. Hydrofluorosilicic acid is not a gas. It is a liquid delivered in tanker trucks. Hydrofluorosilicic acid also is not compressed.
The fourth statement by Dr. Nolan to the City of Waterloo, on Jan 18, 2008 (transcribed by city of Waterloo staff)

**FALSE statement #4:** Cambridge has “high natural fluoride levels.”

The mean fluoride concentrations in Cambridge are 0.3 mg/L. The Public Health has stated repeatedly that fluoride concentration levels below 0.5mg/L are not effective in the prevention of cavities. The US Centers for Disease Control state that 1.2mg/L fluoride concentrations are required in Southern Ontario (see quote below). The US CDC also state that fluoride works topically, not by ingestion, in multiple documents.

p 36, NRC Review 2006
“Cairo is considered nonfluoridated, with a reported water fluoride concentration of 0.3 mg/L (Hossny et al. 2003)”

Record Oct 17, 2009
“in Waterloo the artificial rate is between 0.5 an d0.8 parts per million. This is just above the threshold said to help prevent tooth decay.”

Dr. Hawkins, DDS, Public Health Service representative from Halton Region, Rogers TV Transcript for Mike Farwell Live; January 24, 2008
“The effect once you get below .5 you are not going to have the preventative effect that you want.”

US CDC
1.2 mg/L fluoride concentrations are necessary to be effective in the prevention of teeth in Canada. “Studies have shown that even a drop of 0.2 mg/L below the optimum (fluoride) level can reduce dental benefits significantly.” CDC Fluoridation Course 3017-G, pg. 8, para. 3

The Ontario MOE guidelines for AWF are under review, but since 2000 have been 0.5-0.8 mg/L.

Before 2000 all Canadian cities fluoridated at 1.0 to 1.2 ppm.

Dr. Nolan states in the Record Oct 17, 2009

**FALSE statement #5:** “And there’s no known health risks associated with drinking fluoridated water within the recommended levels.”

The Carcinogen Identification Committee of the California Environmental Protection Agency’s Office of Environmental Health Hazard Assessment (OEHHA) has now selected fluoride for the possible listing for cancer hazard identification. (1) Fluoride seems to satisfy the US EPA 2005 Guidelines as “Likely to be Carcinogenic to Humans” or Category 2.(2)

The National Research Council Review 2006 demonstrates how water intake varies by a factor of 10. This means that the fluoride intake also varies by a factor of 10. How individuals
metabolize and excrete fluoride is also hugely variable, dependent on body size, health of kidneys, nutritional status, etc.

Dr. Nolan has not made any attempt to assess health harm known to be caused by fluoride over-exposure, such as dental fluorosis, hypersensitive reactions, soft-tissue fluorosis (e.g., thyroid suppression, learning disabilities), skeletal fluorosis defined as arthritic-like pain, etc. Without such an assessment, is it valid to claim that there are no side effects from the ingestion of fluoride in drinking water?

The Medical Officer of Health for Halton has assessed dental fluorosis rates for 2005-2007. His data shows that 48% of 9 and 13 year old children in Oakville have dental fluorosis. 10-11% of children in Halton Region have moderate to severe dental fluorosis. Like Burton’s lead line along the gums of teeth which is used as a bio-marker for lead toxicity, dental fluorosis is a visible sign of fluoride over-exposure.

Record Oct 17, 2009

**FALSE statement #6:** “It is a safe and effective way to prevent tooth decay, for a large number of people at a low cost.”

Recent peer-reviewed research done by a graduate student at the University of Toronto was commissioned by the head of the Dental Public Health department in Toronto, Dr. Hazel Stewart. (Azarpazhooh A, Stewart H. Oral Health Consequences of the Cessation of Water Fluoridation in Toronto 2006 August.) This paper demonstrates no oral health benefit from artificial water fluoridation. Recent research by another graduate student at the University of Toronto (D. Ito 2007, past president of the Ontario Public Health Dentistry Association) also demonstrated no oral health benefit from artificial water fluoridation.

Research done in Europe by Dr. Ziegelbecker and research done Dr. Sutton in Australia demonstrated that the early fluoridation trials and early research (e.g., 21 city study by Dean) were scientifically invalid because of serious methodological flaws. These analyses were largely responsible for the discontinuation of artificial water fluoridation in Europe and have never been refuted. For more information on this research, please contact: caclinch@gmail.com

A recent report from Oshawa demonstrates that cavity rates are very high, especially in the lower socio-economic neighbourhoods of this fluoridated city. If artificial water fluoridation helps in the prevention of cavities, especially for the socially disadvantaged, as claimed, high rates of oral health problems would not be expected to be selectively high in these neighbourhoods.

A recent published paper in the *Journal of Public Health Dentistry* by one member of the Health Canada panel (Levy) states that, “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 authors go on to say, “Current evidence strongly suggests that fluorides work primarily by topical means through direct action on the teeth and dental plaque. Thus ingestion of fluoride is not essential for caries prevention.”
3 members of the Health Canada panel on artificial water fluoridation have recently published papers demonstrating that artificial water fluoridation is not effective \( \text{(Kumar Clark Levy)} \).

Children in Need of Treatment (C.I.N.O.T.) cost per capita in unfluoridated Thunder Bay was $1.60 in 1991. CINOT cost per capita in fluoridated Toronto was $7.06. (Dr. Hettenhausen – see attached)

Any claims that artificial water fluoridation helps to prevent cavities, especially for those in lower socio-economic brackets, is not convincing in the face of such evidence. Any claims that artificial water fluoridation is cost effective is also not convincing.

**Citations**

1. Announcement of Chemicals Selected by OEHHA for Consideration for Listing by the Carcinogen Identification Committee and Request for Relevant Information on the Carcinogenic Hazards of These Chemicals under Proposition 65 available at: [http://www.oehha.ca.gov/prop65/CRNR_notices/state_listing/data_callin/sqe101509.html](http://www.oehha.ca.gov/prop65/CRNR_notices/state_listing/data_callin/sqe101509.html)