

## Request to Speak to a Committee of Council

4.17

If your request is for a specific committee meeting, this form must be received by NOON the day before the scheduled committee meeting. Requests for Monday meetings must be received the Friday before the meeting. Requests for meetings scheduled for the day after a statutory holiday must be received the last business day before the meeting.

### Standing Committee Requested

Kindly indicate which Standing Committee: \*

Board of Health

### Requestor Information

Name of Individual: \* Simon J. Kiss

Name of Organization: Wilfrid Laurier University

Do you or your organization represent a lobbyist (voluntary)  Yes  
 No

Contact Number: \* 289-389-3335

Email Address: \* skiss@wlu.ca

Mailing Address: \* #2, 160 Hess Street South, Hamilton, ON, L8P 3N9

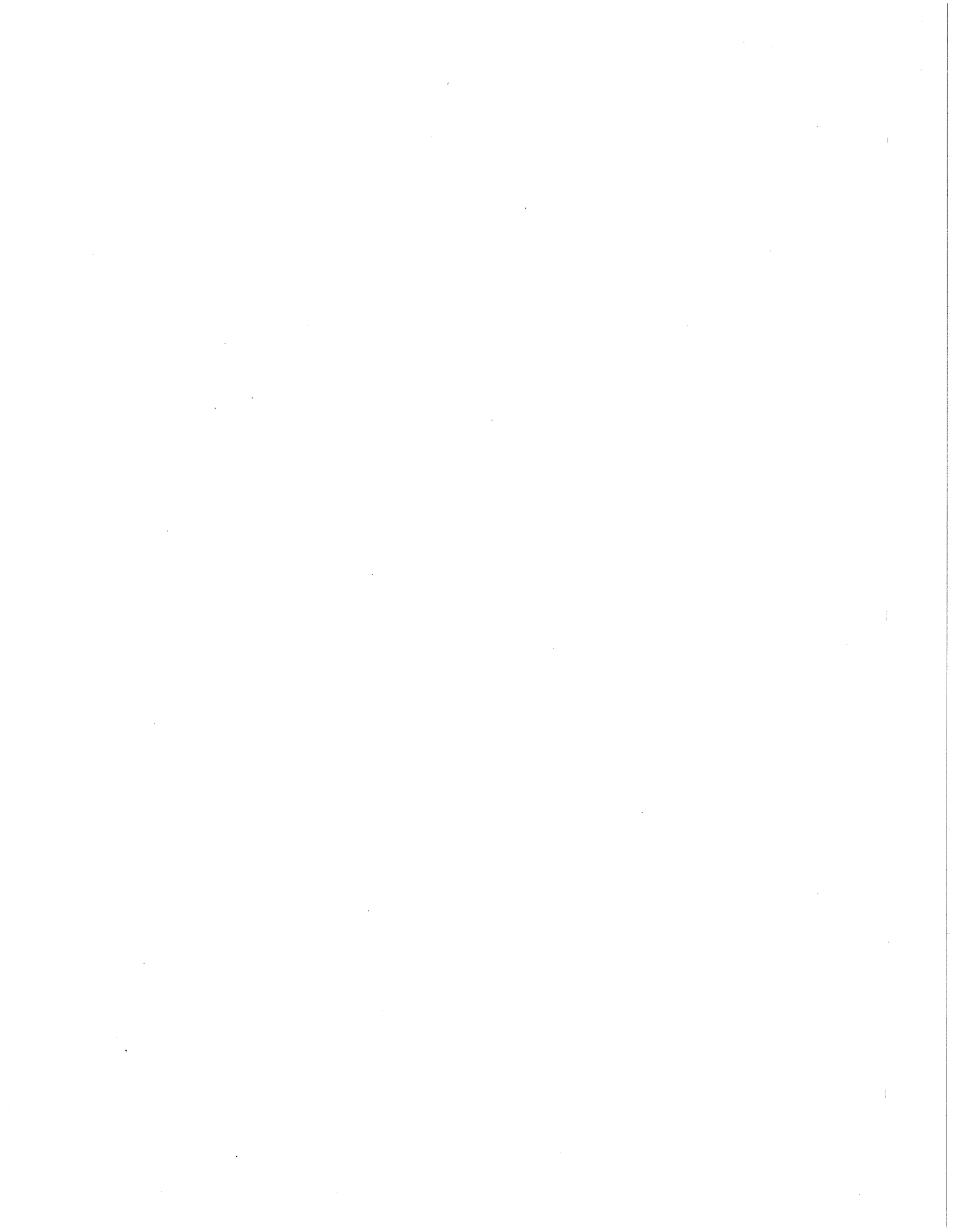
Reason(s) for delegation request: \* I have conducted research into the politics and public opinions toward fluoridation in the City of Waterloo, which overturned fluoridation last year in a referendum.

Will you be submitting a formal presentation?\*  Yes  
 No

Requests to speak to Council are forwarded to the Standing Committee for consideration. Once considered by Committee, and approved, you will be notified of the date for your presentation.

This form is not for the purpose of presenting unsolicited proposals by Vendors to Committee. Such proposals are subject to a competitive process as required by the City's Purchasing Policy.

Personal information collected on this form is authorized under Section 5.10(2) of the City's Procedural By-law No. 10-053 for the purpose of contacting individuals and/or organizations requesting an opportunity to appear as a delegation before a Standing Committee and will be published with the Committee Agenda. The Voluntary Lobbyist Registry is a public document and will be available for viewing in the City Clerk's office. The Procedural By-law is a requirement of Section 238(2) of the Municipal Act. Questions about its collection can be directed to the Manager, Legislative Services / Deputy Clerk, City Hall, 71 Main St. W., Hamilton, ON L8P 4Y5 (905 546-2424 ext. 4304).



# Risk, Science and Politics : Why Hamilton Should Continue To Fluoridate Its Water Supply

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<http://www.lispop.ca>

April 13, 2012

I am a political scientist at Wilfrid Laurier University and one of my major research interests is the politics of the environment and risk perception. Rather than seeing risks as objective phenomena, I see risks as political constructs. Science is very good at ascertaining relations between facts, but risks are much more than that. Inevitably, risks involve some kind of cost benefit calculation that \*must\* rely on individual values for its completion. That makes risks inherently political. With this perspective in mind, a colleague and I associated with the Laurier Institute For The Study Of Public Opinion And Policy, conducted a public opinion survey of voters in Waterloo about their views on fluoridation. Voters there overturned municipal fluoridation in 2010, which we thought surprising and curious. In the presentation to the Hamilton Board of Health, I will make the case that risks inherently involve value (political) judgements and that scientific evidence should be evaluated with this in mind.

Opposition to water fluoridation has a long history and has two major political roots. Most people consider opposition to water fluoridation to be a manifestation of radical libertarianism and anti-communism. The archetypal image here is the mad general in *Dr. Strangelove* who feels that water fluoridation is a manifestation of a communist plot. Indeed, libertarian opposition to medical treatment by the state. The second, source of opposition - and one which actually predates the anti-communist strand - is the opposition to modern food production and medicine. Thus, many of the original opponents to municipal fluoridation in the United States, Canada and Great Britain were actually people who were active in the organic

food and alternative medicine movements, including the anti-vaccination movements. This is why opposition to fluoridation does not map itself easily onto the traditional left-right divide of the political spectrum.

We found evidence of this in our survey. We found that some of the strongest predictors of anti-fluoridation attitudes was a mistrust of modern medicine and a fear of vaccinations.

Given that none of us are physical scientists, but acknowledging that Health Canada has studied and supported municipal fluoridation as both safe and beneficial, I would encourage the Board of Health to think about its own political values and the political values of the people who oppose it. Framing the debate in this way, the Board will start to see that the opponents of municipal fluoridation are not just motivated by any scientific evidence they can muster, but they are motivated by their own values of hostility to modern medicine (including vaccines) and to bureaucracies such as the public health department taking important actions to improve citizens' health.

## Survey Notes

This public opinion survey was conducted in July 2011 by the Survey Research Center of the University of Waterloo. It as a random probability sample of 610 residents of the region of Waterloo (540 landlines and 70 cell phone residents).

## Selected Findings From The Survey

## Possible Dependent Variables

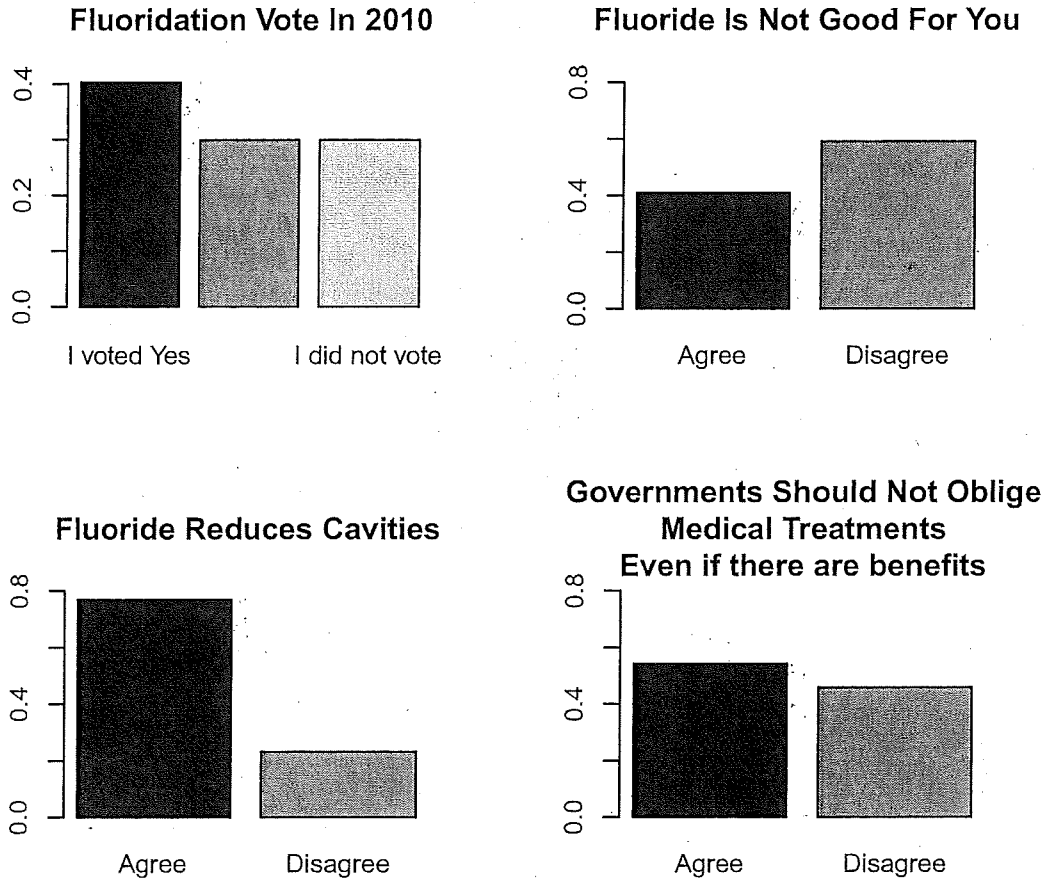


Figure 1: These graphs show the distribution of opinions from our public opinion survey of Waterloo residents (summer 2011) on some dependent variables. Notice that most people agree that fluoride reduces cavities, but there is a strong minority of people who agree that fluoride is not good for you. Moreover, on the question of whether the government should oblige mandatory medical treatments, people are split 50 -50.

## Fluoride Clusters

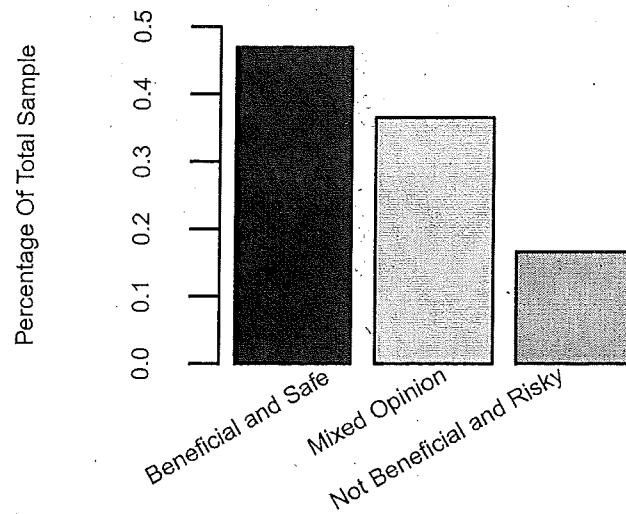


Figure 2: We combined people based on their combined responses to the questions about whether there were *benefits* to fluoridation and whether there were *risks* to fluoridation. Those who said it was beneficial and safe (by far, the plurality of people) were put in one cluster; those who thought there were no benefits and some risks were put in another cluster. The rest of the people mostly believed that there were benefits to fluoridation but maybe some risks and they were put in a third cluster

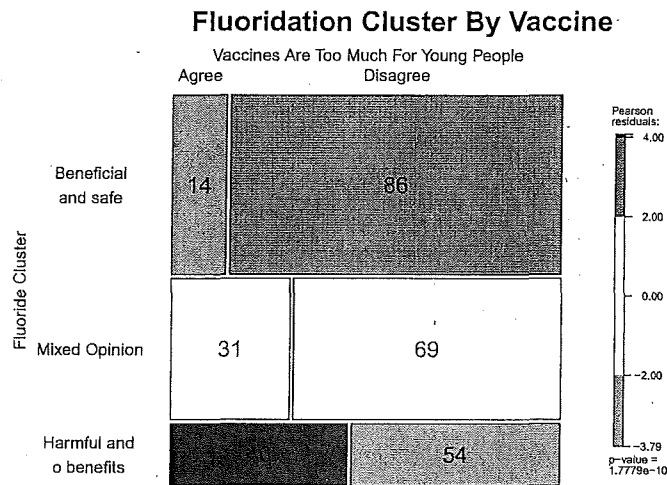


Figure 3: This is called a mosaic plot and it shows the distribution of views on fluoridation by views on vaccine skepticism. First, the graph is split vertically, according to how many people are in each fluoride cluster. Notice that the thickest, widest row corresponds to those who think that fluoridation is both beneficial and safe and that the rows get narrow moving down the graph. This corresponds to the distribution of opinions in Figure 2. Then, the cells are split vertically according to the distribution of opinions about vaccine skepticism. The numbers in each cell are *row* percentages; thus, 14% of people who believe that fluoridation is safe and beneficial believe also that vaccines are too much for young people to handle, while 86% of people who believe that fluoridation is safe and beneficial believe that vaccines are safe for children. By contrast, 46% of people who believe that fluoridation has no benefits and is risky also believe that vaccines are too much for young people to handle. Note also, as one moves downward toward fluoridation skepticism, vaccine skepticism also rises. If these two opinions were totally independent of each other, we would not expect to see this kind of pattern. The color codes simply represent over representation and underrepresentation compared to a strictly random distribution. Cells shaded pink have statistically significantly *less* respondents than we would expect by chance alone, while cells shaded blue have statistically significantly *more* respondents. One can tell, there is an overrepresentation of fluoridation skeptics who are also vaccine skeptics and there is an overrepresentation of fluoridation trusters who are also vaccine trusters. The authors also fit a multivariate model controlling for age, education and gender and found that the relationship with vaccine skepticism held strongly.

