Costs Of Water Fluoridation
Economic Considerations

- Who is responsible for (dental) health care?
- What are the actual costs of water fluoridation for taxpayers?
- What are the costs of targeted topical delivery (TTD), including toothpaste, toothbrushes?
Public dental health care should really be a provincial responsibility.

Is it time to upload this responsibility to the province?
Cost Of Dental Fluorosis Repairs:
$600-$800 per tooth
Veneer Repair Expected To Last 10-15 Years

Photos: Dr. Hardy Limeback http://fluoridealert.org/health/teeth/fluorosis/moderate-severe.html
Costs of Dental Fluorosis: For An Individual

- Fluoridation of water, "has contributed to the birth of a multi-billion dollar industry of tooth bleaching and cosmetic dentistry. More money is being spent now on the treatment of dental fluorosis than what would be spent on dental decay if water fluoridation were halted.” Limeback, H. Oct 22, 1999 International Fluoride Information Network Bulletin # 3. Available from ggvideo@northnet.org
Some individuals have suggested that the dental fluorosis is a “questionable” health concern.

For those who have dental fluorosis, there is nothing “questionable” about the social embarrassment caused by teeth with white or brown specks or the associated costs to repair.

NRC 2006 Report p21 – dental fluorosis is permanent. It cannot be reversed by lowering the intake of fluoride after the exposure occurs.

"The condition is permanent after it develops in children during tooth formation, a period ranging from birth until about the age of 8."
Costs to ordinary citizens who cannot consume fluoridated public water, due to health concerns.

1. Purchasing water that is adequately filtered.

2. Purchasing expensive reverse osmosis or distillation equipment, [$2 - 4,000 plus $500/year for replacement filters].
Who should bear this cost?

- The Citizen?
- Those Promoting/Endorsing Fluoridation?
- Municipalities?
- Canadian/Ontario Dental Association?
- Health Insurance Companies?
- Water System Operators?
- Department Of Health?

To the extent that municipalities are required to provide safe drinking water and sewage to all inhabitants along a supply line (Municipal Act 2007, Part III, Section 86) this fact provides further reason to act, because this service must properly continue.
Associated Health-Related Costs From Fluoride Health Harm

- **Direct costs of medical treatment.** e.g. medications, doctor visits, physical therapy, special equipment such as braces or crutches, and costs of hospitalization.

- **Lost work.** e.g. Workplace Safety and Insurance Board (WSIB) - workplace hazard, public health-related loss of earnings

- **Lost School Time** (children and adults)

- **Special education.** e.g. autism, ADD, ADHD, Down Syndrome

- **Home and institutional care.**

- **Foregone future earnings.**

Associated Environmental Costs

- The Grand River is the third most polluted river in Ontario.
- Our ground water resources are limited.
- Can we afford to continue polluting our source water, particularly for no valid reason?
15. (1) Every individual is equal before and under the law and has the right to the equal protection and equal benefit of the law without discrimination and, in particular, without discrimination based on race, national or ethnic origin, colour, religion, sex, age or mental or physical disability.
Any law or action, which imposes burdens, obligations or disadvantages to minorities is discriminatory.

Assumption: discrimination of minorities does not benefit society.
Costs of water fluoridation to municipalities.

- Region states that fluoridation costs are 60 cents per person per year.

- In 2004: “costs are about $3.00 per capita per annum” Chief Dental Officer for Health Canada, January 2004

- Due to shortage of fluoridation chemicals, their costs are rising. But hold on … do we want to import toxic waste into our Country from China, or from anywhere?

- Population of Waterloo = 115,000

- $3.00 x 115,000 people = $345,000 / year
Targeted Topical Delivery (TTD)

- Toothbrushes and toothpaste cost ~$1 each.
- Estimate: 10% (?) needing assistance to buy toothbrushes.
- 10% of 115,000 = 11,500 individuals may need toothbrushes.
- $345,000 spent on water fluoridation would buy a lot of toothbrushes and toothpaste for 11,500 individuals.
What does the current research say about the best method of delivering fluoride?

- Using fluoride on the surface of teeth (topical use) is more effective e.g. toothpaste

- Drinking fluoride (systemic use), at the recommended doses, causes health harm to susceptible individuals, and provides no significant results preventing cavities.
Costs Of Water Fluoridation: For Municipal Taxpayers

- (Dental) Health Care is a provincial responsibility.
- Dental Fluorosis has social and economic costs to taxpayers.
- Avoiding fluoridated water is expensive to taxpayers.
- Municipal compliance with the SDWA will save the taxpayers from paying the municipal liability costs.
Recap:

To discontinue drinking water fluoridation in favour of **Targeted Topical Delivery** (use of toothbrushes and toothpaste for those who need it)

- saves taxpayers’ money
- better targets those who need dental help
- better protects citizens from fluoride toxicity
- better protects the environment/ecosystem
- allows us to comply with SDWA and other relevant laws