

Submission to Tecumseh Council
for the record and for consideration
re: fluoridation

Dr. Hardy Limeback BSc PhD (Biochem) DDS

Professor Emeritus, University of Toronto

Former Head of Preventive Dentistry,

Member of the 2006 US NRC Committee on
Fluoride in Drinking Water

Dr. Hardy Limeback Critique

Dear Councilors:

- I am submitting a critique of the slides sent to Windsor by Dr. J. Johnson prior to the decision to re-start fluoridation
(my comments in red)
- I am also sending slides of my own for your consideration which you'll find throughout the critique

The **American** Fluoridation Society formed in response to increasing anti-fluoridation sentiment (e.g. ≈ 6000 professional opposed to fluoridation).

**Speaking up
for water
fluoridation**

The Science Facts vs Personal Opinion

**AMERICAN
FLUORIDATION
SOCIETY**

**Presentation submitted as a Written
Submission by Dr. Johnny Johnson**

CONSOLIDATED AGENDA - DECEMBER 17, 2018
PAGE 419 of Windsor City Council Meeting Windsor, Ontario
Monday, December 17, 2018

Dr. Steven Slott from the AFS is a social media troll. You'll find him on the comments section of the Windsor online papers.

Dr. Johnson's slide

Dr. Johnson, a retired dentist, is the self-proclaimed president of AFS who is funded by industry to present to town councils wherever fluoridation is being considered.

No 'salary' accepted
(except the expenses
paid for by the AFS)

The AFS considers
weak evidence for
effectiveness as gospel
and evidence of harm
as flawed

Disclosures

- Financial: None
- American Fluoridation Society-A group of healthcare professionals that work on a purely volunteer basis to provide evidence-based information on fluoridation
- Provide technical assistance and knowledgeable testimony when requested
- Healthcare professionals whose children and grandchildren are growing up drinking fluoridated water

AFS sends Dr. JJ to where
ever fluoridation is at risk

Added a personal element here
but many dentists actually drink
filtered water at home to avoid
fluoridated water



Dr. Johnson's slide

History of Fluoride's Benefits

Frederick S. McKay

- **1901** – established practice in Colorado Springs, CO
- “Colorado Brown Stain”
 - Only life-long residents (or those who had moved there as infants) had stain
- **1908** – began to investigate extent of condition in surrounding areas

Key Observation: *very few cavities in this population*



Everything changed when they decided to add toxic waste byproduct (this century old data was on natural fluoride)

Actually only a few less cavities, with most exposed kids with disfigured teeth worse than cavities. In fact there are also more cavities in kids with severe fluorosis.

NONE of these problems occur in countries with adequate access to dental care -America fails to provide basic dental care to the poor and thinks fluoridation is the answer -it isn't

Fluoridation has been linked to an increase in diabetes

Why do cavities matter?

The **most common chronic disease** for children and teens. It's at least 2-3 times more common than asthma and 20x diabetes. **Infectious & Transmissible**

- Severe pain (toothaches)
- Difficulty in chewing
- Poor weight gain
- Difficulty concentrating
- Predictor of cavities later in life
- Costly to treat
- Deaths



Deamonte Driver died from an infected tooth because no American dentist would treat him. He was on Medicaid. The system failed him. He lived in fluoridated Prince George County Maryland (next to DC)



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Dr. Johnson's slide

These severe cases of dental decay are used for shock value. Showing baby bottle tooth decay is dishonest. Even if fluoridation works it might save ONE of those teeth from decay but they would never get this bad with adequate access to dental care.

Cavities: Unevenly distributed



- Low-income kids are more than twice as likely to experience tooth decay.
- The disadvantaged bear a disproportionate burden of cavities
- Almost 1/3rd of Windsor's children living in poverty

Inner-city kids in fluoridated cities have 2X more dental decay due to many factors unrelated to fluoride

According to research, low socio-economic status is the main reason for dental decay



(Sources: "Children and Oral Health: Assessing Needs, Coverage, and Access," Kaiser Commission on Medicaid and the Uninsured, June 2012; <https://windstar.com/news/local-news/every-10th-person-in-windsor-arrives-having-a-tooth-in-poverty-report>)

Somebody made this quote up at the CDC
and it stuck.

Environmentalists and public health
critics say it is one of top 10 disasters
of the 21st century

A (big) ounce of prevention

- The CDC has called fluoridation one of “10 great public health achievements of the 20th century.”
- Fluoridation reduces tooth decay by **25%** over a lifetime — protection beyond what is offered by fluoride toothpaste and other preventive methods.
- Over 211 million U.S. residents, 3 out of 4 people, have access to fluoridated water.



This translates to
only 0.5 to 1
fillings saved per
person

**AFTER A LIFETIME
OF DRINKING
FLUORIDATED
WATER**

-percentages
are used
to hide how
little it works

Many states
have
mandatory
fluoridation
-communities
should not be
forced



(Sources: Centers for Disease Control and Prevention, “Ten Great Public Health Achievements in
CONSERVED BY THE AMERICAN FLUORIDATION SOCIETY Updated on April 26, 2013; CDC’s 2014 Fluoridation Statistics;
CDC, “Water Fluoridation Basics,” web content updated on June 17, 2016.)

Dr. Johnson’s slide

Proponents of fluoridation claim they have all the science.

and the opponents have NONE?

The Weight of Science

No widely respected medical and health organizations *opposes* fluoridation

This is blatantly false

2. No adverse health effects from drinking fluoridated water

It is hard to believe that Dr. Johnson claims "ALL FALSE" despite overwhelming peer-reviewed research

says most are true

Claims by Opponents: ALL FALSE

True	WHO data shows cavities coming down all countries the same regardless of CWF	ADA states don't use in infant formula	ADA did in 2006 then backtracked
Sensitivities, yes	Allergies to fluoridation	No Toxicological Testing has been done!	absolutely true
More evidence now	Topical Effect, not systemic	Down Syndrome	inconclusive
True: not one RCT	"Harvard Study" Lowers IQ in children:	Causes ADHD, AIDS, Alzheimer's disease	AIDS: never claimed, others some evidence
Definitely true	Cochrane Oral Health Group says it isn't effective	Breast milk fluoride level-"Mother Nature knows best"	Breast milk IS protective against fluorosis
it IS a waste product not pharmaceutical	...; THYROID PROBLEMS	Effects on the renal, gastrointestinal, and immune systems, reproductive problems	
Yes, even after a plebiscite	PHARMACEUTICAL GRADE FLUORIDE	Fluorosis is sign of toxic effects on body	
	Forced Medication	Government Conspiracy-dentists taught to believe it works but industry needed to dispose of it	

Dr. Johnson's slide

AMERICAN FLUORIDATION SOCIETY

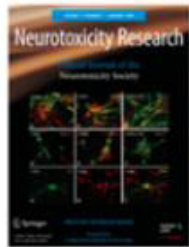
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Accusing conspiracy works, huh?

fluorosis IS actually a sign of fluoride toxicity

Immune effects, yes -others inconclusive

Spencer & Limeback –Medical Hypoth-2018 showed that the NTP rat study was rigged to fail



Neurotoxicity Research

<https://doi.org/10.1007/s12640-018-9870-x>

ORIGINAL ARTICLE

Published online: 05 February 2018

An Evaluation of Neurotoxicity Following Fluoride Exposure from Gestational Through Adult Ages in Long-Evans Hooded Rats

Christopher A. McPherson¹ · Guozhu Zhang² · Richard Gilliam¹ · Sukhdev S. Brar¹ · Ralph Wilson³ · Amy Brix⁴ · Catherine Picut⁵ · G. Jean Harry¹

On over 10 different tests no difference in:

- learning
- memory
- sensory performance
- place preference
- pain perception
- motor performance
- nerve cell death
- brain cell microscopy
- Thyroid hormones
- Heart, liver, kidney, and sexual organs



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Dr. Johnson's slide

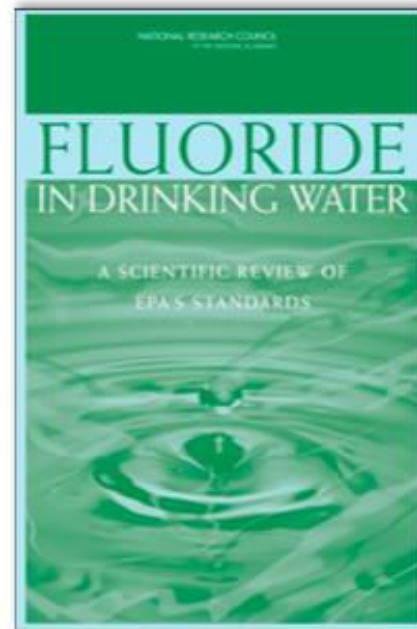
The NTP review of the literature found moderate evidence of neurotoxicity of fluoride.

Anyone reading our report would be worried about even low fluoride exposure which we reviewed. We recommended lowering the max. **Claim:** NRC's 2006 report shows CWF is harmful

This is FALSE



As the report explained, the EPA's maximum limit on fluoride is "set at a concentration at which **no adverse health effects** are expected to occur and the margins of safety are judged 'adequate'."



Dr. Johnson's slide



(Source: "Fluoride in Drinking Water: A Scientific Review of EPA's Standards," National Research Council, The National Academies Press, 2006)

Clearly J. Johnson did NOT read the report The x's certainly do not reflect what is in the report

Was there evidence at 4.0 ppm showing
that fluoride had an effect on ...?

- Tooth enamel ✓
- Liver ✗
- Kidneys ✗
- Endocrine system ✗
- Gastrointestinal system ✗
- Immune system ✗
- Cancer ✗
- Musculoskeletal system ✗
- Reproduction and development ✗
- Neurotoxicity and neurobehavioral ✗
- Genetic damage ✗

Dr. Johnson's slide



(Source: "Fluoride in Drinking Water: A Scientific Review of EPA's Standards," National Research Council of the National Academies Press, 2006)
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28 % of kids now have moderate dental fluorosis that CAN be seen and 2.8% have this kind (severe)

Claim: Fluorosis is a “toxic” effect



- Dental fluorosis is a change in the appearance of tooth enamel due to a high level of exposure to fluoride during the tooth-forming years.
- Dental fluorosis is typically a mild cosmetic effect that:
 - does not cause pain
 - does not affect the health or function of the teeth.It's so subtle most people don't even notice fluorosis.
- Dental fluorosis can **only** occur up to age 8, while permanent teeth are developing.

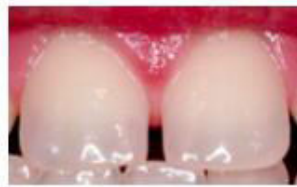
A lifetime accumulation of fluoride in adult teeth makes them brittle and yellow

Dr. Johnson's slide

Significant occurrences of severe fluorosis DOES occur in fluoridated areas

The more fluoride, the more serious dental fluorosis -the majority comes from water (NRC Report)

Variations in tooth enamel (fluorosis)



Normal



Very Mild



Moderate

Improper use of fluoride products



Questionable



Mild



Severe

Not caused by CWF

Dr. Johnson's slide

The Cochrane review was done by dentists, partially funded by the CDC

No randomized clinical trials (estimate based on old, weak studies)

CLAIM: The Cochrane review found no evidence that fluoridation works

- **Wrong.** Cochrane found that fluoridation reduced decay in baby teeth by 35% and reduced decay in permanent teeth by 26%.
- **CDC:** Cochrane used strict criteria that excluded “many valid, peer-reviewed studies (that) document the effectiveness of community water fluoridation.”



Dr. Johnson's slide



(Sources: Centers for Disease Control and Prevention, "Ten Great Public Health Achievements in the 20th Century," web content updated on April 26, 2013; CDC's 2014 Fluoridation Statistics; CDC, "Water Fluoridation and Oral Health," web content updated on June 17, 2016.)

This is what the CDC now admits.

CLAIM: Fluoride works topically, not by being swallowed



Studies show fluoride works through **both** topical and systemic effects.

- It's beneficial before teeth fully appear in a child's mouth
- Continuous exposure to small amounts of fluoride helps both adults and children by remineralizing the tooth enamel.

No study to support that fluoridation works in adults so this is wishful thinking

Dr. Johnson's slide



(Sources: Numerous studies include: K.A. Singh et al., "Relative Effects of Pre- and Post-eruption Water Fluoride on Caries Experience of Permanent First Molars," *Journal of Public Health Dentistry*, 2003, Vol. 63, No. 1; "Fluoride Basics," Centers for Disease Control and Prevention, 2016.)

Fluoridated salt programs have never been shown to work

CLAIM: Europe is 97% fluoridation-free



Dr. Johnson's slide



(Source: World Health Organization literature and "Salt Fluoridation in Europe and in Latin America," *Community Dentistry and Oral Epidemiology*, 2018; 46(2):115-121)
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Most European countries have achieved lower dental decay rates without fluoridation

Claim: CWF is forcible “mass medication”

These
are all
essential.
-fluoride is
not essential.
It's actually
a poison.

- America has a tradition of fortifying foods and drinks to improve human health:

- ✓ Folic acid
- ✓ Vitamin D
- ✓ Calcium
- ✓ Iodine



- U.S. courts have consistently **rejected** this argument against fluoridation.
- Medications are used to **treat** a health problem. Fluoridation (like chlorination) is about **prevention**.

Dr. Johnson's slide

This makes no sense



Claim: Mother nature protects babies from fluoride

This makes
no sense.

- Breast feeding is encouraged by leading scientific groups (nutrition, antibodies, etc.).



However... breast milk is not perfect. For example, it lacks sufficient:

- Vitamin D (brittle bones)
- Vitamin K (clotting)
- Iron (anemia)

Infants are recommended to start supplements of these shortly after birth.

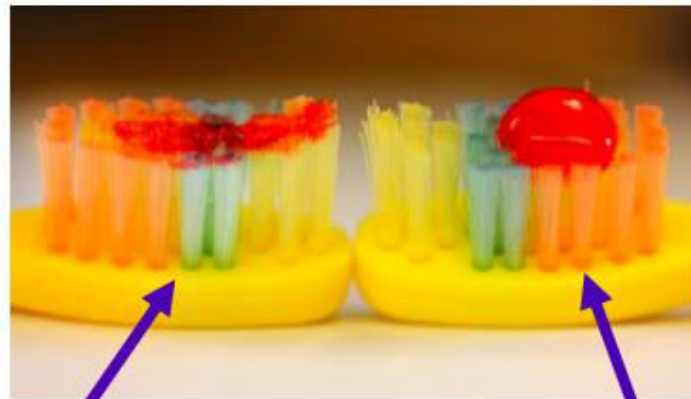


Fluoride
is NOT
recommended
at all
from birth
to 6 mo.

Dr. Johnson's slide

What the ADA is saying is that fluoride is so poisonous they don't want toddlers to be exposed to more than an extremely small amount of fluoride.

The right amount of fluoride toothpaste



Once teeth appear, parents should use a **smear** of fluoride toothpaste (roughly a grain of rice) on their child's brush until age 3

For ages 3 to 6, parents should use a **pea-sized amount** on the toothbrush

Dr. Johnson's slide



(Sources: "ADA Uses Fluoride Toothpaste to Fight High Cavity Rate in Children," a press release issued by the American Dental Association, Feb. 10, 2014; Catherine Saint Louis, "Dental Group Advises Fluoride Toothpaste Before Age 2," New York Times, Feb. 12, 2014.)

Fluoridation in no way can prevent this kind of decay. This is scare mongering.



Which would you rather have?

Cavities

OR

Mild Fluorosis



Dr. Johnson's slide

It is hard to believe that the Surgeon General would advocate for fluoridated beverages (e.g. fruit drinks, pop) to prevent dental decay, since research shows they WORSEN dental decay

CLAIM: There are better alternatives



“A significant advantage of water fluoridation is that anyone, regardless of socioeconomic level, can enjoy these health benefits during their daily lives... simply by drinking fluoridated water or beverages prepared with fluoridated water.”

Dr. David Satcher, U.S. Surgeon General 1998-2002

Dr. Johnson's slide



(Source: David Satcher, "2001 Surgeon General's Statement on Community Water Fluoridation," Centers for Disease Control and Prevention, accessed in Oct. 2017.)
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There is no evidence that fluoridation reduces baby bottle tooth decay or hospital surgeries but the claims are made anyway.

Hospital OR full-mouth restorations are reduced by 2/3 to 3/4 by CWF

- The average cost of treating early childhood decay in hospital ORs in Colorado ranged from \$10,000 to \$15,000 per child
- U.S. and international studies confirm CWF's benefits for children



(Sources: J. Daley, "Tooth Decay: A Silent Epidemic, Especially For Poor Kids In Colo.," Colorado Public Radio, March 12, 2015; An alternative marker for the effectiveness of water fluoridation: hospital extraction rates for dental decay, a two-region study, Elmer et al, British Dental Journal 2014; 216: E10; J. Dental services, costs, and factors associated with hospitalization for Medicaid eligible children, Louisiana 1996-97. Griffin SO, et al, Public Health Dent. 2000 Winter; 60(1):21-7; Hospitalizations for dental infections - Optimally versus non-optimally fluoridated areas in Israel. Klivitsky et al, [http://jada.ada.org/article/S0002-8177\(14\)00115-9/](http://jada.ada.org/article/S0002-8177(14)00115-9/))

Dr. Johnson's slide



The most biased
pro-fluoridation
website



Reference Websites



www.AmericanFluoridationSociety.org

AFS's website provides a variety of fact sheets and other resources to support the efforts of health professionals and advocates. AFS's officers are volunteers who do not receive salaries for their work.



www.cdc.gov/fluoridation

This is the Centers for Disease Control and Prevention's resources related to community water fluoridation. There are a lot of helpful materials, including FAQs.

Dr. Johnson's slide



Who promotes fluoridation in Canada?

- Health Canada
- The Canadian and Ontario Dental Associations
- Public health dentists
- Public Health Agencies
- All medical officers of health
- etc.

Who is accountable for injury to people from fluoridation?

- only municipalities (councilors)

(Ontario Fluoridation Act, Municipal Act, Safe Drinking Water Act)

- water works employees when something goes wrong (Walkerton)
- **not** Medical Officers of Health (who are paid to promote fluoridation) who can't enforce it and so can't be sued if the city fluoridates and ends up hurting some people

Ontario Public Health Paid Fluoridation Promoters

region	name	position	2017 salary
Federal	David Williams	Chief Medical Officer of Health, Public Health and Long-Term Care	\$386,806.68
North Bay/Parry Sound	James Chirico	Medical Officer of Health, Executive Officer	\$311,248.60
Hamilton	Elizabeth Richardson	Medical Officer of Health	\$289,618.34
Simcoe-Muskoka	Charles Gardner	Medical Office of Health	\$283,566.03
Lambton-Sarnia	Sudit Ranade	Medical Officer of Health	\$270,495.24
London	Christopher Mackie	Medical Officer of Health, CEO	\$258,669.21
Windsor	Wajid Ahmed	Acting Medical Officer of Health	\$249,136.28
Toronto	Eileen P DeVilla	Medical Officer of Health*	\$215,871.13
Peel	Jessica Hopkins	Medical Officer of Health*	\$158,389.52

Source: ontario.ca/page/public-sector-salary-disclosure

* appointed in 2017

The great fluoride debate



By Denis Langlois, Sun Times, Owen Sound
Friday, January 31, 2014 10:18:40 EST AM

Dr. Hazel Lynn,
Medical officer of health,
Owen Sound, Ontario



This tooth decay
is NOT caused by
a 'lack of fluoride'
in the drinking
water!!

This is scare-
mongering

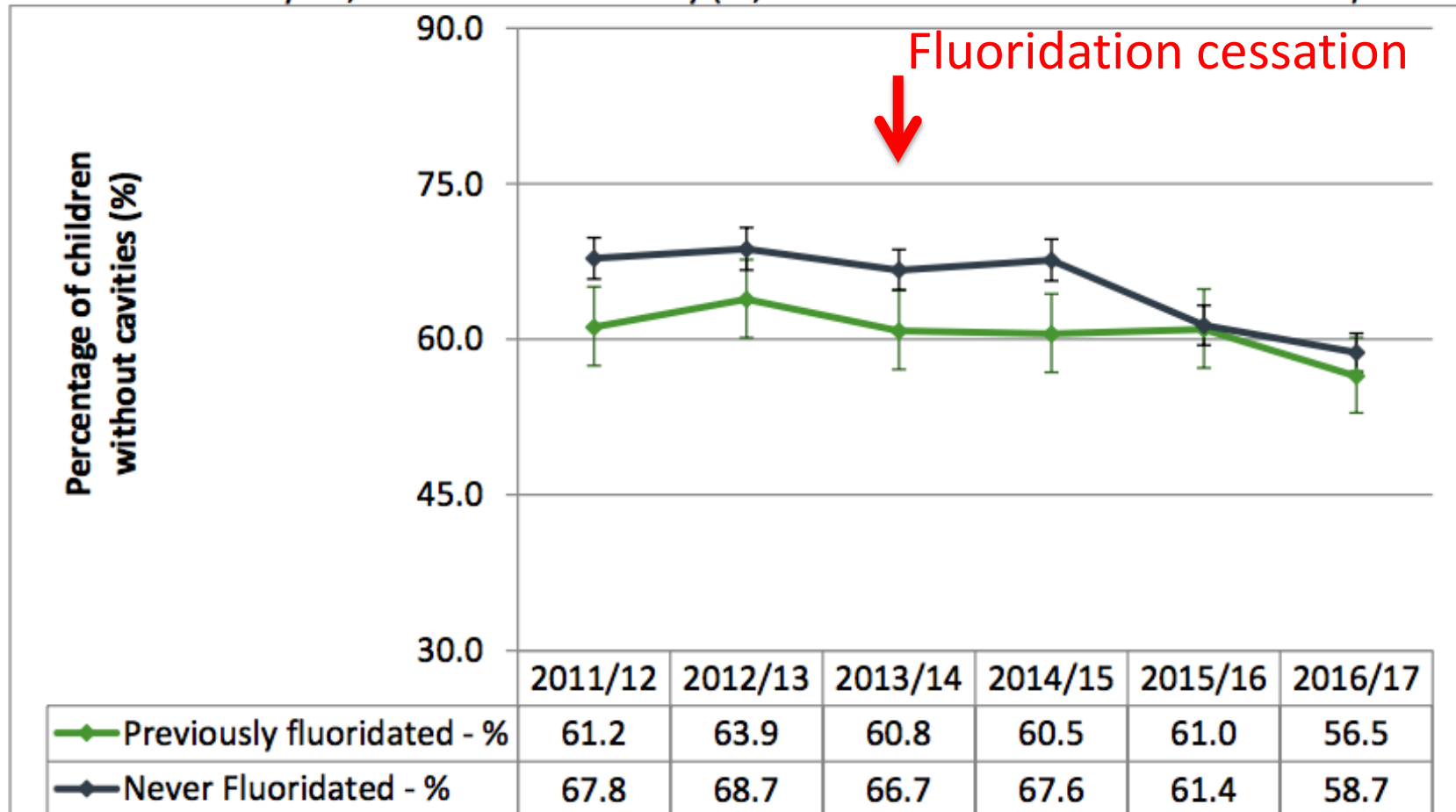
Dr. Lynn's salary
was > \$300,000
before retiring

Medical officer of health Dr. Hazel Lynn holds up a picture of a child's teeth. Lynn said water fluoridation prevents tooth decay and is a safe practice. Others disagree. (JAMES MASTERS/QMI AGENCY)

What happened in Windsor???

Dr. Ahmed misled the Windsor Council by insinuating that fluoridation cessation caused a dramatic increase of dental decay -their own report clearly shows the fluoridation status did not have anything to do with the dental decay rates (see next slide)

Figure 15. The percentage of caries-free children in public schools by community fluoridation status and school year, Windsor-Essex County (JK, SK and Grade 2 combined - 2011-2017).

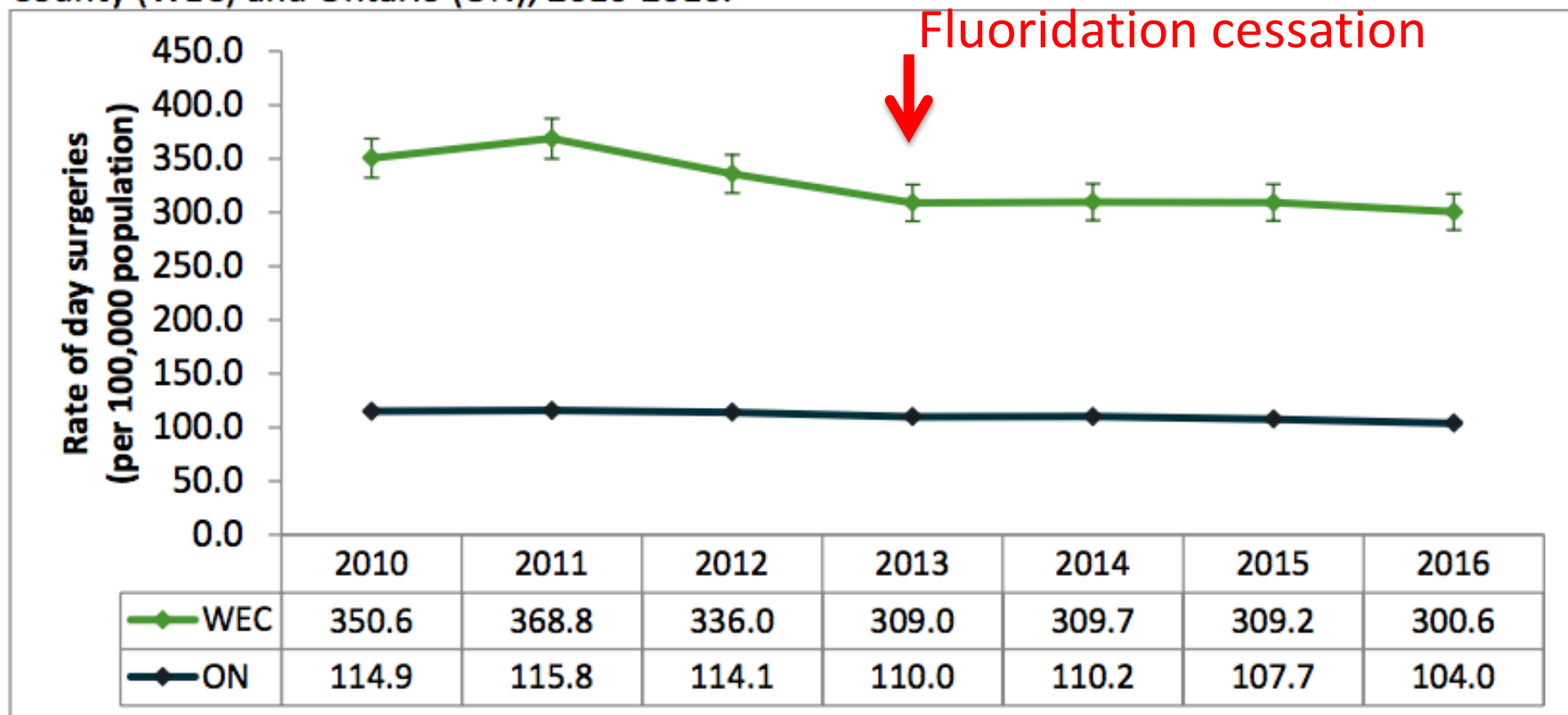


Source: Oral Health Information Support System [2011-2017], Ministry of Health and Long-Term Care (Accessed April 12, 2018).

Note: Never fluoridated refers to Kingsville, Essex, and Leamington; Previously fluoridated refers to Windsor, LaSalle, and Tecumseh. Pelee was excluded to low sample size.

Dr. Ahmed misled the Windsor Council by stating that fluoridation cessation caused a dramatic increase of day surgeries related oral problems -their own report clearly shows they did not change (see next slide)

Figure 8. The rate of day surgeries for oral health (caries-related) issues in Windsor-Essex County (WEC) and Ontario (ON), 2010-2016.



Source: Ambulatory Emergency External Cause [2010-2016], Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: [March 19, 2018].

Dec. 2018: the city of Windsor newly elected council was convinced into reversing a previous council decision and voted to restart fluoridation, based, in part, on the false testimony of an American fluoridation pusher. The on Jan. 6, 2019, AM800 interviewed him, allowing him to further mislead the people of Windsor.

Listen to the interview here.



AM800

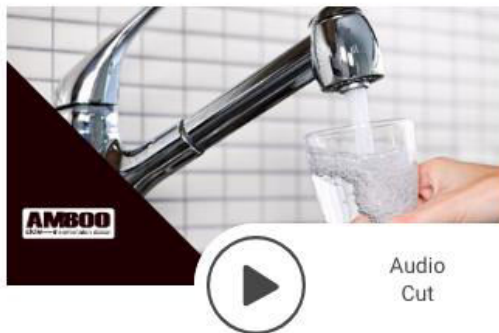
Sunday, January 6th 2019 - 11:44 am

Sunday Morning Live - 10:05am - Should Fluoride Be In Our Water? Part 2

April talks with doctors for fluoride in the water

Sunday Morning Live

iHeartRadio



AM800

Sunday, January 6th 2019 - 11:41 am

Sunday Morning Live - 9:35am - Should Fluoride Be In Our Water? Part 1

April talks with doctors against fluoride

Sunday Morning Live

iHeartRadio

J. Johnson regularly makes stuff up.

He is not a credible source of information

These statements are patently false.

“Dr. Hardy Limeback (member of the 2006 NRC Committee).....he agreed that there were absolutely zero health effects from fluoride in water at what we call the max amt. allowable in the United States of 4 ppm. that is 6 X what Windsor had....”

This is a total fabrication

“Under 2 ppm you do not get staining of the teeth that is brown or pitted.”

Claiming the NRC Report is criminal? Seriously?

....”No Health effects... none of that was found at 4 ppm. “

....”So to pull information out, and to turn that information to suit the needs of which you are trying to accomplish, that is to rob children and adults of a cavity fighting mineral....that is, should be **criminal.**”

What the NRC 2006 Report said about fluoride and TEETH

“the committee concluded unanimously that the present MCLG of 4 mg/L for fluoride should be lowered. Exposure at the MCLG clearly puts children at risk of developing severe enamel fluorosis, a condition that is associated with enamel loss and pitting”



https://www.cdc.gov/fluoridation/faqs/dental_fluorosis/index.htm

With regard to dental fluorosis, we estimated that for a fluoride level of 0.7 ppm the percentage of participants with fluorosis of aesthetic concern was approximately 12% (Cochrane Review, 2015)

NRC 2006 report on fluoride in drinking water

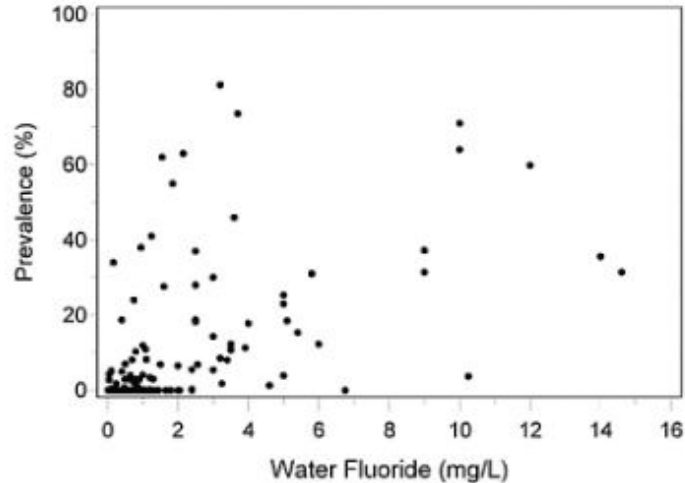


FIGURE 4-3 Prevalence of severe enamel fluorosis at the person level by water fluoride concentration, permanent teeth, age < 20 years, communities outside the United States.

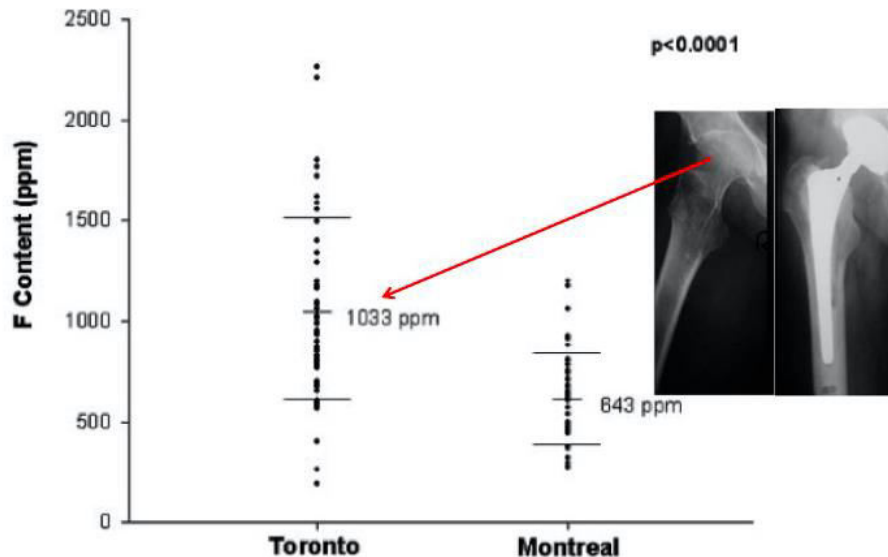
There certainly WAS severe fluorosis reported in the US and outside the US where drinking water had 1 ppm fluoride

Study	Teeth	Fluorosis
United States (Driscoll et al. 1986)	8-16 All	218 Very mild to moderate 54 Severe
United States (Eklund et al. 1987)	27-65 Molars	38 Mild to moderate 125 Severe
	Premolars	38 Mild to moderate 125 Severe
	Anterior	38 Mild to moderate 125 Severe

What the NRC 2006 Report said about fluoride and BONES

“...under certain conditions fluoride can weaken bone and increase the risk of fractures. ... lifetime exposure to fluoride at ...4 mg/L or higher is likely to **increase** fracture rates in the population...

Toronto vs Montreal Bone Study



-actually we showed bone changes with fluoridation

What the NRC 2006 Report said about fluoride and BRAIN EFFECTS

“A few epidemiologic studies of Chinese populations have reported IQ deficits in children exposed to fluoride at 2.5 to 4 mg/L in drinking water. Although the studies lacked sufficient detail for the committee to fully assess their quality and relevance to U.S. populations, the consistency of the results appears significant enough to warrant additional research on the effects of fluoride on intelligence.”

What the NRC 2006 Report said about fluoride and ENDOCRINE EFFECTS

“The chief endocrine effects of fluoride exposures in experimental animals and in **humans** include decreased **thyroid** function, increased calcitonin activity, increased **parathyroid** hormone activity, secondary hyperparathyroidism, **impaired glucose tolerance**, and possible effects on timing of **sexual maturity**. Some of these effects are associated with fluoride intake that is achievable at fluoride concentrations in drinking water of 4 mg/L or less, especially for young children or for individuals with high water intake.”

What the NRC 2006 Report said about fluoride and CANCER

“On the basis of the committee’s collective consideration of data from humans, genotoxicity assays, and studies of mechanisms of action in cell systems (e.g., bone cells in vitro), the evidence on the potential of fluoride to initiate or promote cancers, particularly of the bone, is tentative and mixed.”

This slide from J. Johnson is a total fabrication
-he could not have read the NRC 2006 report

Was there evidence at 4.0 ppm showing
that fluoride had an effect on ...?

- Tooth enamel ✓
- Liver ✗
- Kidneys ✗
- Endocrine system ✗
- Gastrointestinal system ✗
- Immune system ✗
- Cancer ✗
- Musculoskeletal system ✗
- Reproduction and development ✗
- Neurotoxicity and neurobehavioral ✗
- Genetic damage ✗

There is huge confusion regarding fluoride toxicity



fluoride supplement

0.25mg of fluoride

DO NOT
prescribe
for babies

=



Pea-sized dab of toothpaste

0.25mg of fluoride

Monitor children!
Make sure they
SPIT IT OUT!

=



One glass of 0.7ppm water

0.25mg of fluoride

No Risk.
SWALLOW
REPEATEDLY!

Updated Canadian Dental Association Fluoride Recommendation

- The Canadian Dental Association (CDA) no longer recommends fluoride supplements of any kind
- the CDC now recommends a pea size amount of fluoride toothpaste for children > 3 yrs.
- It also recommends a 'rice size' amount for toddlers age 6 mo. to 3 yrs. (NO FLUORIDE under 6 mo. of age)
- the max. intake should be 0.05 to 0.07 mg fluoride/kg/day

Canadian Dental Association Recommendation to prevent dental fluorosis “the total daily fluoride intake from all sources should not exceed 0.05-0.07 mg/kg/day”

Infant Formula
up to 0.5 ppm

Fluoridated water
0.7 – 1.0 ppm

400%
higher

= 0.20 mg fluoride/kg/day



+



=



Who monitors my fluoride intake?

COF-COF.ca

COLGATE SELLS FLUORIDE-FREE TOOTHPASTE BECAUSE OF CONSUMER DEMAND



The ADA recommends a 'rice' size amount of fluoride toothpaste for toddlers **Because swallowing more than THAT is harmful!!!**

Are cities willing to provide safe, fluoride-free water if there is a demand?

When drinking water is fluoridated to 0.7 ppm it is the main reason for the resulting dental fluorosis

- tap water fluoride is by far the largest contributor to total fluoride intake in infants
- dozens of studies show exclusive breast feeding protects infants against dental fluorosis later in life
- dental fluorosis has now been linked to ADHD and lowered IQ

Fluoridation causes more damage to teeth due to dental fluorosis than the damage from decay without fluoridation

Fluoridation- not a good trade off anymore

-40 years of exposure might save one tooth from decay

BUT, look at the dental fluorosis, which costs much more now to treat than the one filling saved.



out of 100 children
100 fillings might be saved
=\$20,000

CDC (2004) "The prevalence of very mild fluorosis increased from 17.2% to 28.5% and mild fluorosis increased from 4.1% to 8.6%. The prevalence of moderate and severe fluorosis increased from 1.3% to 3.6%".

8.6%

Mild



8.6 children out of 100 needing cosmetics at \$1000/child = \$8,600

Moderate



3.6 children requiring cosmetics up to \$20,000/child = \$72,000

3.6%

Severe



Total = \$80,600

2014 Map of Essex County before fluoridation cessation in Windsor

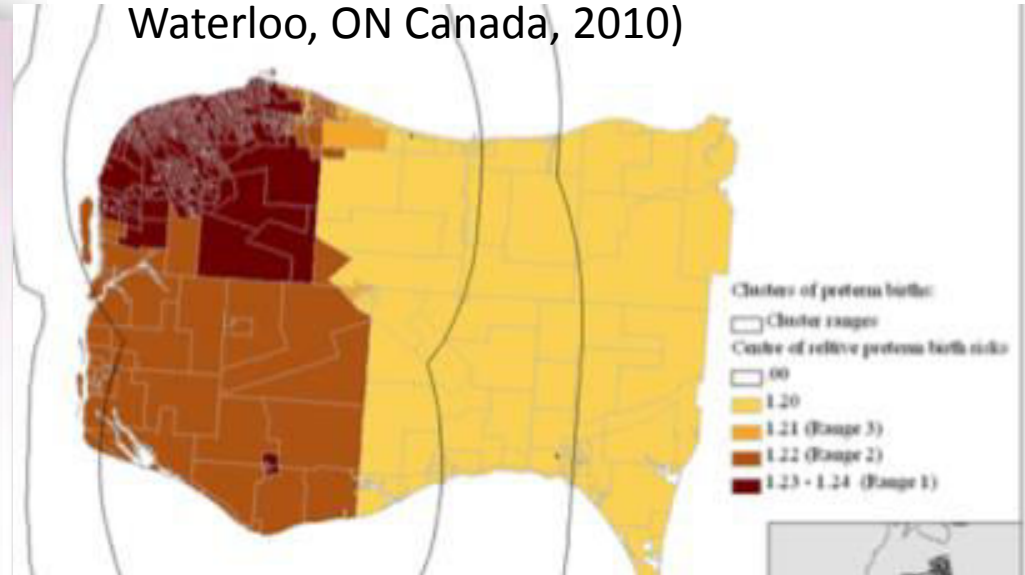


**WINDSOR
LASALLE & TECUMSEH**

*TELL YOUR COUNCIL
YOU WANT YOUR WATER
FLUORIDE FREE
LIKE THE REST OF ESSEX COUNTY
MOST OF CANADA
AND
MOST OF THE WORLD*

FLUORIDES SHOULD NOT BE INGESTED!

Preterm births in Essex County while Windsor was fluoridated (Meng G. PhD Thesis, Univ. Waterloo, ON Canada, 2010)



Recent international research shows that increased fluoride intakes during pregnancy is associated with preterm births

(Jiménez et al, Neurotoxicology, 2017)

-Windsor should be fluoridation free
-there is a risk of increasing pre-term births again if fluoridation is re-introduced in Windsor's drinking water

Prepared by Jennifer Marett and Hardy Limeback

There are several studies now linking prenatal fluoride exposure and negative effects of the offspring

- ADHA
- lowered IQ
- lowered thyroid function
- pre-term births

Conclusion

- do not make the same mistake as Windsor
- you have the power to reverse their decision by convincing LaSalle that both communities refuse to accept fluoridated water from Windsor (the Fluoridation Act requires LaSalle and Tecumseh to agree to Windsor's move)
- protect your citizens, even if you have to find water elsewhere (the town of Essex stayed fluoride free).

Essex town council says 'no' to fluoride in drinking water



Coun. Sherry Bondy raised the motion and said it's not the municipality's responsibility

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In a unanimous vote Tuesday night, Essex town council rejected a proposal to add fluoride to drinking water.

(CBC)