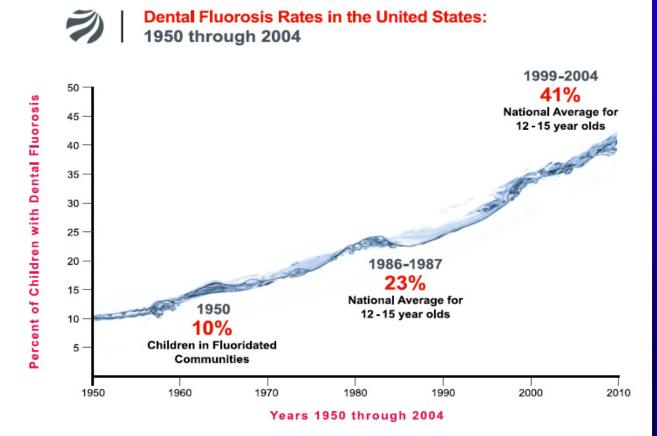
## VOTE "NO" FLUORIDATION Many are Ingesting Too Much Fluoride

BILL OSMUNSON DDS, MPH 6455 SW Griffith Beaverton, OR bill@teachingsmiles.com



Beltran ED, et al. (2010). Prevalence and Severity of Dental Fluorosis in the United States, 1999-2004. NCHS Data Brief No. 53. Figure 3.

National Research Council. (1993). Health Effects of Ingested Fluoride. National Academy Press, Washington DC. p. 4-5.

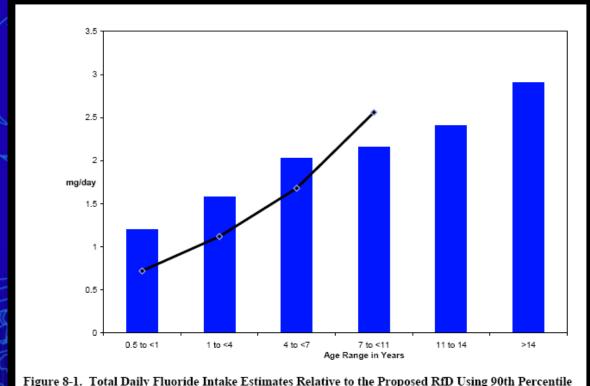


Figure 8-1. Total Daily Fluoride Intake Estimates Relative to the Proposed RfD Using 90th Percentile Drinking Water Intake Data for Consumers Only and the Mean Drinking Water Fluoride Concentration (0.87 mg/L)

## ABOVE BLACK LINE: TOO MUCH FLUORIDE

EPA (Dec 2010)

Dose Response Analysis

For Naturally Occurring F-

#### **GRAPH DOES NOT INCLUDE:**

10% of people drinking the most water – some drink 5 X more water. (blue lines shortened) Increased RfD by 33% - without evidence of safety (black line raised) Infants omitted – 80% of infants ingest too much fluoride with formula made with water. Margin of safety (1:1 NO margin of safety)

Assumes everyone consumes "mean" intake from foods, medications, dental products, etc.



A Pea Size of
Tooth Paste has
0.25 mg of FThe same as 1 glass
of fluoridated water.

Warnings
Keep out of reach of children under 6 yrs. of age. If more than used for brushing is accidentally swallowed, get medical help or contact a Poison Control Center right away.

Directions • adults and children 2 yrs. & older: brush teeth thoroughly after meals or at least twice a day or use as directed by a dentist • do not swallow • to minimize swallowing use a pea-sized amount in children under 6 • supervise children's brushing until good habits are established

If someone wants to ingest more fluoride, swallow a baby pea size of toothpaste

ol Centers reported 24,087 exposures oride. emedicine



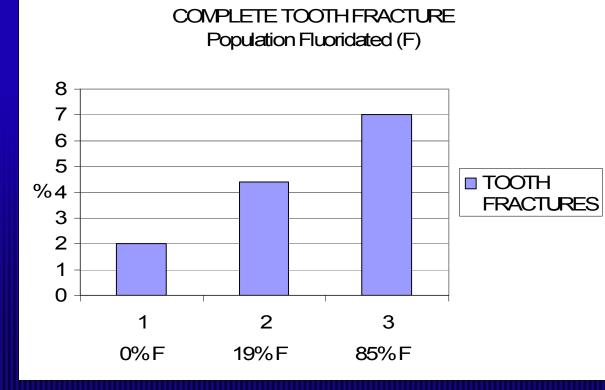
### **Fluorosis**



\$12,000 Treatment

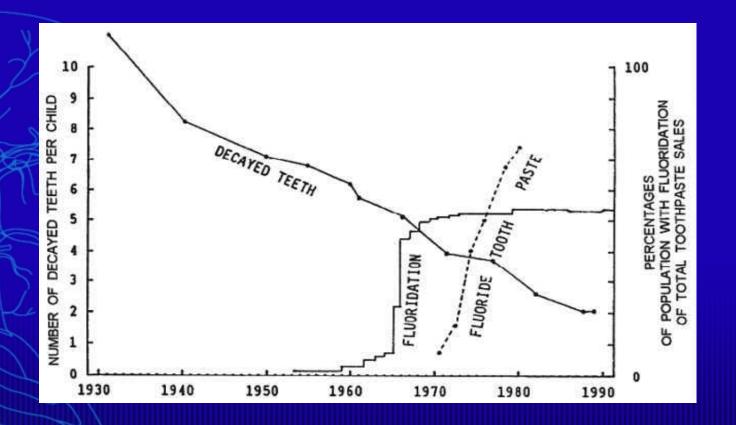
http://www.smilesbysoileau.com

% of office visits with Complete cusp fractures increases With fluoridation.





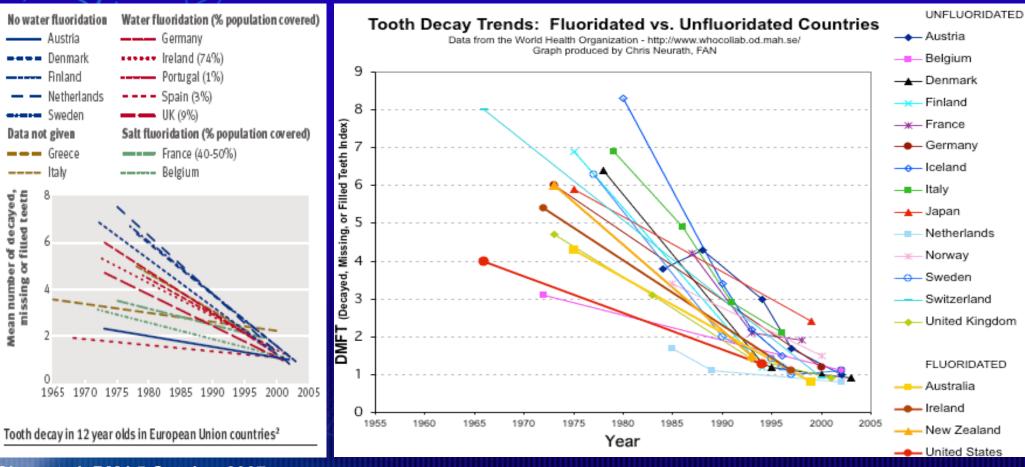
Geurtsen Quintessence 2003
Patel Prim Dental Care 1995
Bader Com Dent Oral Epi 1996 and 2001 and JADA 2004
Vieira Eur J Oral Sci 2006
Fennis Int J Prosth 2002
Osmunson Fluoride 2007



Fluoridation did not prevent decay before fluoridation started. No research controls for the unknown dental caries decline.

Would the caries decline have stopped if fluoridation had not started? Caries continued to decline regardless of fluoridation in all developed countries regardless of fluoridation.

Tooth Decay has declined regardless of fluoridation or fluoride salt.



Chen et al, BMJ 5 October 2007

Neurath, Fluoride J.

Fluoridated vs. Unfluoridated Countries.

Tooth Decay Trends for 12 Year Olds: Data from World Health Organization. (Graph by Chris Neurath).

http://www.fluoridealert.org/health/teeth/caries/who-dmft.html

# Fluoridation does NOT reduce dental expenses

Portland - Not fluoridated \$176/yr. dental expenses (children)

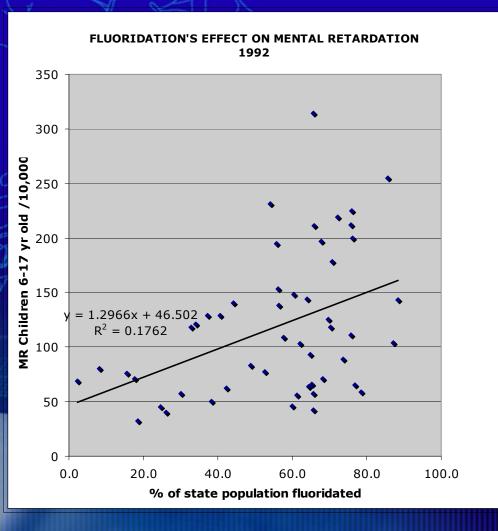
Van., WA - Fluoridated \$180/yr. dental expenses (children)

The Flawed Claim: "Every dollar spent on fluoridation saves \$38"

is based on estimates of assumptions and not supported with quality measured evidence.

	Estimated at		
Locale	member age	NF (\$)	CWF (\$)
Portland metro		n= 30.967	n = 3,185
	10	1,054	1,108
	39	1,224	1,300
	80	2,101	2,253
Marion County		n = 1,482	n = 3,763
	10	1,097	1,086
	39	1,236	1,200
	80	1,882	1,686
Clark County		n = 4,006	n = 4,404
	10	1,261	1,130
	39	1,408	1,287
	80	2,059	1,978

## More Fluoride - More MR



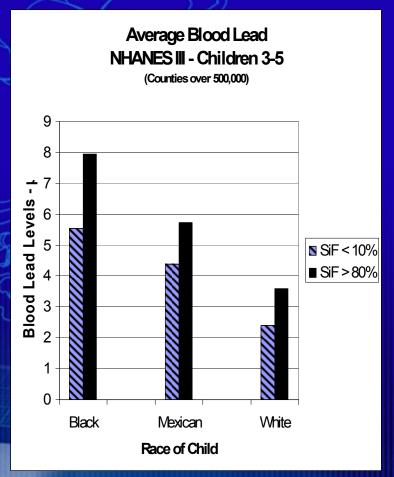
Ranking States on % Whole Pop F-Triples mentally retarded rate from  $50 \text{ to } 160/10,000 = \frac{1}{2} \text{ standard}$ deviation drop = 8 IQ drop

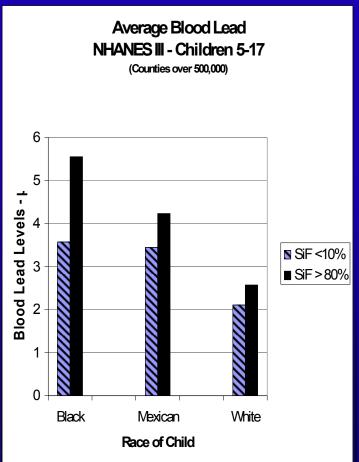
### **LOWER IQ INCREASES**

High School Dropouts
Chronic Welfare Recipients
Incarceration
Living in Poverty
Children with low IQ
Unemployment

http://apps.nccd.cdc.gov/giscvh/map.aspx http://apps.nccd.cdc.gov/nohss/FluoridationV.asp http://pubs.usgs.gov/circ/2004/circ1268/htdocs/table05.html http://www.cdc.gov/mmwR/preview/mmwrhtml/00040023.html

### LEAD: Blood Levels Higher Coplan, Neurotoxicology. 2007





For NHANES III Children 3-5, mean blood lead is significantly associated with fluoridation status (DF 3, F 17.14, p < .0001) and race (DF 2, F 19.35, p < .0001) as well as for poverty income ratio (DF 1, F 66.55, p < .0001). Interaction effect between race and fluoridation status: DF 6, F ;3.333, p < .0029;

Fluoridation chemicals added to water are a contaminated industrial grade product and may contain:

Arsenic, Lead, Mercury, Beryllium, Vanadium, Cadmium, Radium, Silicon, Bauxite, and Radioactive Materials **National Sanitation Foundation**