



CAPITAL REGION.

WATER

Application of Fluoride in Drinking Water

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History

- 1940's - Natural Fluoride levels of 1 ppm equate to less dental cavities
- 1945 – Grand Rapids, MI was 1st public water supplier to add Fluoride
- 1962 – US Dept. of Health and Human Services recommends 0.7 – 1.2 ppm of Fluoride in drinking water
- 1971 – City of Harrisburg's Fluoride application permit was approved
- Today – CRW continues Fluoridation at current guidance of 0.7 ppm



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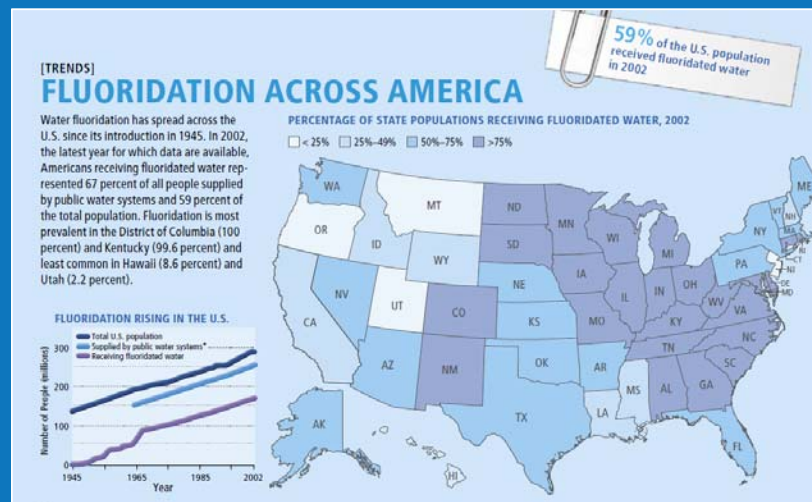
Controversy

Proponents	Opponents
Effective cavity reduction	Poison – Adverse health effects
Benefits poor children the most	Forced medication
Cost-effective cavity prevention	Communist plot
	Not effective

Fluoride Status in the United States

- More than 60% of the US population has a Fluoridated water supply
- 75% of the US population served by large water suppliers have a Fluoridated water supply

Fluoride Status in the United States



Fluoride Status in Pennsylvania

- 55% of PA population has a Fluoridated supply as a result of the large water systems
- Small Water Systems generally do not
- Residential and Community well systems do not

Regulatory Environment

- Government regulators defer Fluoridation as a water supplier / community decision
- State and Federal agency regulations and permit levels apply
- Environmental Protection Agency – Federal Maximum Contaminant Level – 4 ppm
- Department of Environmental Protection – State Primary Maximum Contaminant Level – 2 ppm

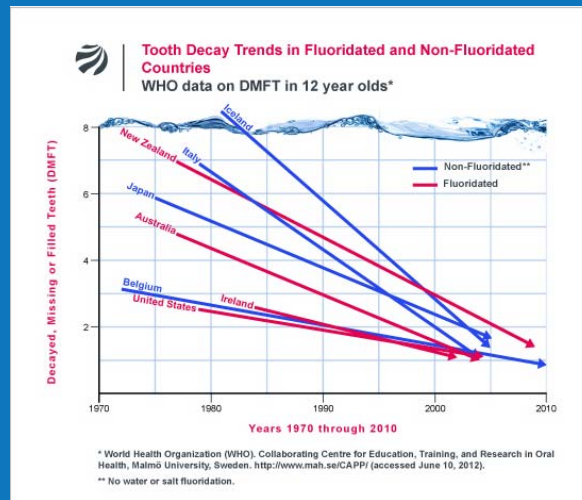


Current Science on Fluoride in Drinking Water

- Quality of scientific evidence is low
- Fluorosis (mottling of teeth) is largest negative
- Adverse effects are not associated
- Benefit is reduction of dental cavities to children of developing ages, but not as significant as once thought



Current Science on Fluoride in Drinking Water



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Community Endorsements / Opinions

- American Water Works Association – neutral
- PADEP – neutral
- Healthcare agencies (USPHS, ADA, AAP, CDC) – full support
- Opposition groups (Fluoride Action Network, etc.) – complete rejection
- *CRW Community?*



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Why Now?

- Water Plant Fluoride equipment needs replaced in 2018
 - >\$130,000 CIP to replace chemical equipment
 - \$20,000 annual O&M costs
- OR*
- Seek customer preference on the topic of Fluoridation and report back to the Board

Questions/Comments