

WATER FLUORIDATION AND ENVIRONMENTAL JUSTICE

A report submitted to the Environmental Justice Interagency Working Group
from The Fluoride Action Network

<http://fluoridealert.org/>

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“Federal agencies must identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations.”

Presidential Executive Order 12898 of February 11, 1994

Read the full report at

<http://fluoridealert.org/wp-content/uploads/ej-report.sept-25-2015.pdf>

EXECUTIVE SUMMARY

Evidence is presented that artificial water fluoridation as promoted by federal agencies has been ineffective in fighting tooth decay and in addition causes *“disproportionately high and adverse human health...effects...on minority populations and low-income populations”* in violation of Presidential Executive Order 12898 of February 11, 1994. This problem has been seriously compounded by the failure of these same agencies to warn communities of color of their special vulnerabilities to fluoride exposure in general and the water fluoridation program in particular. The agencies' actions are fueling calls by civil rights and environmental leaders for investigative hearings by Congress.

The way the EPA Office of Water is approaching its requirement to establish a safe level of fluoride in drinking water is not scientifically defensible, is politically compromised and makes absolutely no attempt to address numerous environmental justice issues that arise from water fluoridation.

There are more positive, effective, and comprehensive ways of fighting tooth decay, which also prevent disproportionate harm to poor families and communities of color and do not violate their civil rights.

Those who promote fluoridation correctly claim that most of tooth decay is concentrated in low-income families and those from communities of color. That is why it is tragic that 80% of dentists in the U.S. refuse to treat children on Medicaid. The poor need special and focused attention. Putting a toxic substance into everyone's drinking water is a very poor substitute.

Water fluoridation has not evened-up the playing field as evidenced by the numerous reports of the dental crises being reported among low-income and communities of color in large U.S. cities that have been fluoridated for over 20 years. Far from helping low-income families and communities of color, fluoridation causes them disproportionate harm.

Officials in the US Public Health Service knew as early as 1962 that African-Americans had a higher prevalence of dental fluorosis than whites. Dental researchers have continued to report this over many decades. In 2005 the CDC reported that both Blacks and Hispanic children had higher rates of dental fluorosis particularly in its most disfiguring categories (moderate and severe). However, in all this time neither the CDC nor any other federal agency that promotes water fluoridation has sought to warn communities of color of their particular vulnerability with respect to this permanent visually objectionable injury from systemic exposure to fluoride. Nor have they indicated what this means: their children have been over-exposed to fluoride before their permanent teeth have erupted and this over-exposure might indicate they have been damaged in other ways. This failure to warn communities of color of this problem is a clear example of environmental *injustice*.

When the US Public Health Service endorsed fluoridation in 1950 (before any trial had been completed or any meaningful health study had been published) it quickly fossilized into a policy that was considered beyond debate. Although the FDA has never *approved* any fluoride containing substance intended to be ingested for the purpose of reducing tooth decay it has *rejected* fluoride-containing vitamins stating that, "there is no substantial evidence of drug effectiveness as prescribed, recommended, or suggested in its labeling." Drug therapy 1975.

Water fluoridation has never been subjected to an individual-based random control trial (RCT) for either effectiveness or safety. Very few basic health studies have been conducted in fluoridated countries and only in recent years have some of the studies of serious toxic and health effects of fluoride (e.g. lowered IQ) been published, and mainly in non-fluoridated countries.

Fluoride is not an essential nutrient. There is no need to swallow it: fluoride's beneficial action can be achieved with direct application of fluoridated toothpaste onto the tooth surface. Tooth decay in children from low-income families is not caused by too little fluoride but poor nutrition, including far too much sugar.

The EJ issue goes beyond just dental fluorosis and the failure of the government agencies to warn communities of color about their vulnerability. Fluoridation penalizes families of low-income in the following ways.

- 1) They cannot afford to avoid fluoridated water if they want to do so because both removal equipment and bottled water (for drinking and cooking) is very expensive.
- 2) They cannot afford the expensive treatments to conceal the effects of dental fluorosis (a discoloration and mottling of the enamel).
- 3) Dental fluorosis rates are higher in fluoridated communities especially in Black and Hispanic populations than White.

- 4) Fluoride's toxicity is made worse by poor nutrition.
- 5) Lactose intolerance is more frequent among Blacks and other ethnic groups than white, and less consumption of dairy products means lower exposure to calcium, which helps to protect against absorption of fluoride from the gut.
- 6) Low-income families from communities of color are less likely to breast-feed their children. Low fluoride ready-to-feed formula is more expensive as is distilled water, therefore when baby formula is made up with fluoridated water, the baby gets over 100 times more fluoride than a breast-fed child.
- 7) Fluoride has been associated with lowered IQ in children in 45 studies (as of Sept 2015).
- 8) Children living in the inner cities are more likely to be exposed to lead from flaking old paint, air pollution, etc. leading to cognitive damage. Exposure to fluoride adds to this toxic burden. Research from the University of North Carolina demonstrated that the chemicals used in fluoridation increase the leaching of lead from brass plumbing fixtures into drinking water.
- 9) Communities of color have a greater incidence of kidney disease. Because poor kidney function makes it more difficult for the body to get rid of fluoride, kidney patients must avoid as much exposure to fluoride as possible.
- 10) Communities of color have a greater incidence of diabetes, which can lead to increased consumption of water, which in turns leads to a greater consumption of fluoride.

Two strategic goals in the Interagency Working Group on environmental justice (EJ IWG) action agenda for fiscal years 2016-2018, create a very positive framework within which we can move forward on this issue. These strategic goals are:

- I. Enhance communication and coordination to improve the health, quality of life, health, and economic opportunities in overburdened communities;
- II. Enhance multi-agency support of holistic community-based solutions to solve environmental justice issues;

These goals challenge us to find a plan not just to fight tooth decay in children but also to improve their "health, quality of life, and economic opportunities" and to do so with "community-based solutions," which will involve "multi-agency support."

We have taken up this challenge in our 5-step alternative plan to water fluoridation. Our positive, creative and holistic plan aims to fight tooth decay in low-income children but also find ways to improve their health, their fitness, their quality of life, their intellectual development and possibly even their employment within the community. We would like to go further. Our plan also works on other aspects of community development, including its food supply, its discarded resources, its local employment and business opportunities and the need to lower its carbon footprint.

In our 5-step program we are proposing that we start with ending water fluoridation in Step 1, and then use the money saved on chemicals, equipment and promotion to finance

Step 2. This second step involves an educational program for young children modeled after programs in Scotland and Denmark. One aim of this is to reduce sugar consumption. If that is done well it will also help to fight obesity and that over the long-term will produce huge savings in health costs. This should encourage the HHS to provide additional funding needed for Step 2 and some of the funding for Steps 3 and 4.

Here is a summary of the 5 steps:

- 1) **End water fluoridation.** The EPA's Office of Water could do this swiftly if they were instructed to determine a safe level of fluoride to protect all children from lowered IQ. This would not only remove a threat to children's intellectual development and future economic potential, but it would also end a number of extra and unnecessary health threats for communities of color, especially for people with poor kidney function; borderline iodine deficiency and diabetes. Never has turning off a tap promised so much.
- 2) **Establish the equivalent of both Scotland's very successful Childsmile program and the Danish program for pre-schoolers,** in all pre-school programs, kindergarten and primary schools (and possibly churches) and WIC programs in low-income areas.
- 3) **Set up dental clinics either in schools or stand-alone facilities** in the inner city and other low-income areas. In these we should use trained dental nurses to restore decay-damaged teeth and to remove infected ones.
- 4) **Expand these dental clinics into community centers** aimed at improving the child's overall health. They could support better nutrition, physical fitness and cultural activities. Ideally these community centers would be linked to local community gardens and farms close to the city.
- 5) **Further expand these community centers** into job-creating operations and a foundation for local business opportunities. (One concrete way of doing this is to integrate a "reuse and repair" operation into the Zero Waste approach for handling discarded materials.)

More than anything else a scientifically balanced approach allows the transition from the politics of "no" to the politics of "yes." Once we get off the shortsighted notion that we can battle tooth decay by putting a neurotoxic chemical into the public drinking water, we can unleash not only the full potential of the children from low-income communities, but also of the communities themselves. The three key words are education, nutrition, and justice. We need education (not fluoridation) to fight tooth decay and obesity. We need better nutrition to keep our children and ourselves as healthy as possible and we need Environmental Justice for all.

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