A significant milestone in the fight against fluoride emerged quietly and without much notice from the mainstream media last week. After decades of ignoring research pointing to its dangers and a jingoist like promotion, the government is now calling for a reduction in the amount of fluoride it adds to public water supplies. This decision was based on its negative effect on teeth, described as dental fluorosis. Fourteen years after public health dentists recommended that fluoride levels be reduced to 0.7 ppm (Heller et al.), the Department of Health & Human Services has officially recommended doing so.

Dental fluorosis (white spots on teeth) is the only visible symptom of fluoride overexposure. A recent government report estimated that 41% of adolescents aged 12-15 have dental fluorosis. Because fluoride from water builds up over time in the human body, this reduction will not eliminate the dangers of fluoride. Recent studies indicate a link to bone cancer, bone fractures, thyroid disorder, lowered IQ and more. Further, the reduction of fluoride level may be proof that the warnings from activists, critics and health professionals may be heard after all.

Many of those health professionals who have been blowing the whistle on fluoridation for decades are employees or union contractors of the Environmental Protection Agency (EPA) and other governmental regulation agencies. Their objections, based on alarming scientific studies such as the one linking fluoridation with a sevenfold increase in bone cancer for boys, have heretofore been almost wholly ignored, until now. One reason for this government admission, by the way, likely has to do with limiting liability for those harmful effects, or even establishing immunity for districts who adhere to lowering the fluoride standard against future claims to harm.

At the same time, fluoridation chemicals contain levels of toxins like lead & arsenic which are banned by The Safe Drinking Water Act. The lead factor is partially the result of the acidic nature of fluoride which act to leach lead from home plumbing. (see our "Lead" page)

Furthermore, while fluoride is scheduled for reduction in public water supplies, it is still very common and often dangerously concentrated in many processed food and drinks. These sources should be factored in to determine the overall fluoride exposures.

Though the fluoride dangers are significant enough that we need to continue educating and informing our fellow citizens, those who have long spoken out about this issue can cherish one victory on the road to taking back our nation, our lives and our health. Now, with this important government admission, we must push for complete removal of added fluoride from public waters.
FAN's response to the lowering of fluoride in drinking water
January 8, 2011 - Fluoride Action Network

The wheels of bureaucracy grind slowly. Fourteen years after public health dentists recommended that fluoride levels be reduced to 0.7 ppm (Heller et al.), the Department of Health & Human Services has officially recommended doing so.

Fluoride Action Network is concerned that this new level of fluoride in drinking water has been set too high. It neither protects teeth from dental fluorosis, the stated reason for the lowering, nor does it protect the baby's developing brain, an issue not even mentioned by either the CDC or the EPA.

There have now been over 100 studies reporting that fluoride damages animal brain. There have also been 24 studies that have shown an association between exposure to moderate-to-high levels of fluoride and lowered IQ in children (Connett et al.). While some proponents have criticized the methodology of some of these studies, no fluoridated country (except for one small study in NZ) has attempted to repeat them. Ironically, the 24th IQ study (Xiang et al.) has just been pre-published online by Environmental Health Perspectives. This journal is published by the National Institute for Environmental Health Sciences (NIEHS) which is part of the DHHS. So the DHHS can hardly dismiss this study based upon a weak study design since it was peer-reviewed and deemed suitable for publication by one of its own agencies -- an agency, in fact, that specializes in environmental health research.

• A recent government report estimated that 41% of adolescents aged 12-15 have dental fluorosis (Beltrán-Aguilar et al.). However, the government has not investigated if these adolescents have suffered any other effects from overexposure to fluoride.

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• An infant who receives formula reconstituted with fluoridated tap water at this new level (0.7 ppm), will receive approximately 175 times more fluoride than a breast-fed infant. These infants are not being protected with this new level and CDC, EPA and ADA must clearly inform parents, caregivers, and health providers that infant formula should only be reconstituted with non-fluoridated water. In fact, a failure to be aggressive with such warnings is tantamount to admitting that this apparent concern about dental fluorosis is a sham intended to deflect attention from other more serious health concerns.
In its announcement, the DHHS made no mention of other adverse effects of fluoride in drinking water aside from dental fluorosis. The landmark report published by the National Research Council of the National Academies (NRC 2006) noted three adverse health effects that warranted lowering of the current Maximum Contaminant Level allowed for fluoride in drinking water (currently set at 4 ppm). The following two adverse health effects were not mentioned by DHHS: bone fractures and pre-clinical stages of skeletal fluorosis, which manifests with symptoms identical to arthritis (stiffness of the joints and pain in the joints and bones).

When EPA Assistant Administrator for the Office of Water Peter Silva stated, “EPA’s new analysis will help us make sure that people benefit from tooth decay prevention while at the same time avoiding the unwanted health effects from too much fluoride” (DHHS 2011) he was violating the mandate of the EPA in determining water standards. The EPA regulates contaminants not additives to water. It has no role to play in assessing the purported benefits of additives. Moreover, when determining the maximum contaminant level for contaminants that determination should be based entirely on what is deemed safe. This determination should not be tainted by concerns about purported benefits. Thus this collaboration between the DHHS (actually the oral health division of the CDC) is undermining the EPA’s procedures and represents a clear conflict of interest. The CDC is actively involved in the promotion of water fluoridation and the EPA’s Office of Drinking Water is supposed to be setting water standards which are protective of the whole population, including vulnerable subsets, from known and reasonably anticipated adverse health effects.

The EPA must tell us what is safe and use the best science to do it. Accommodating the CDC’s desire to protect the water fluoridation program at all costs, is a betrayal of the American public’s trust in the EPA. That betrayal is best observed in the willingness of the EPA to do away with a margin of safety in determining a safe reference dose (RfD). The reasoning they used for eliminating a safety factor (or in their jargon, choosing an “uncertainty factor” of 1) was as follows:
"In establishing an estimated oral RfD for fluoride, data on nutritional benefit were assessed in combination with the data on severe dental fluorosis to define a level that provides anticaries protection without causing severe dental fluorosis when consumed daily for a lifetime. Conventional application of uncertainty factors is not always appropriate when carrying out a risk assessment for nutrients and other beneficial substances, especially when there is a relatively small difference between the levels that satisfy need and those that cause adverse effects. For this reason the total uncertainty factor applied was 1." (US EPA, 2010).
What independent observers would conclude based on this tortuous logic is that there is an unacceptable safety margin between a so-called beneficial level and the level that causes harm and that this makes the fluoridation program untenable. Moreover, such analysis only considers the damage to teeth (dental fluorosis)—and doesn’t even begin to address the issue of how small the margin of safety is between the level that purportedly reduces tooth decay and the levels that may cause a lowering of IQ.

According to Kathleen Thiessen, PhD, one of the authors of the NRC 2006 report:
"[W]hile the proposed recommendation for a lower national fluoride level in drinking water is a step in the right direction, and a quiet admission that some people are ingesting too much
fluoride, a number of concerns are not yet addressed. Infants fed reconstituted formula, people with high water consumption (e.g., athletes, laborers, persons with medical conditions such as diabetes insipidus), persons with impaired kidney function (and consequent reduced excretion of fluoride), and persons with a hypersensitivity to fluoride will continue to have fluoride intakes in excess of a safe level, even when the new recommendation is implemented. These people also deserve to be protected." (Thiessen, 2011)

• No mention has been made by the HHS or EPA that the chemicals used to fluoridate drinking water in the US are hazardous waste byproducts of the phosphate fertilizer industry. This is the first time in the history of mankind that highly hazardous waste has been shown to have health benefits, yet no toxicological studies have been performed on them.
Note: The EPA released many pages of analysis that will contribute to a risk assessment to establish a new safe drinking water standard. We have not had time to examine these in detail but we will be responding to those later. The alarming thing to note now is that the EPA water division has clearly signaled its intention to produce (or engineer) an MCLG that avoids challenging the safety of the water fluoridation program. Once again politics has triumphed over science.

References