

Metabolic Solutions Report

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Fluoridation and Arsenic: The Hidden Hazards Behind the Faucet

Ninety percent of the fluoride we use to fluoridate US water systems comes directly from the pollution-scrubbing systems of the phosphate fertilizer industry.

This hydrofluorosilicic acid is an industrial-grade (not a pharmaceutical-grade) product that contains trace amounts of

lead

mercury

arsenic

Fluoridation backers claim that when these heavy metals are poured into water supplies they are diluted to the point that they pose no threat. As Thomas Reeves of the US Centers for Disease Control and Prevention remarked last October, "It's really not a problem."

On September 5, 2000, however, EPA Assistant Administrator Charles Fox informed the US House Committee on Science that "there are no water quality criteria for fluoride either for the protection of aquatic life or for the protection of human health."

In a July 7, 2000 letter to Congress, the National Sanitation Foundation International (NSFI) reported that its tests indicated that the most common contaminant detected in the fluoridation product is arsenic and that occurred about five times more frequently than any other contaminant.

The NSFI showed that the average arsenic levels in the fluoridation agent were well above the "maximum allowable level" for water treatment chemicals.

In 1999, a National Academy of Sciences (NAS) subcommittee review concluded that the EPA's Maximum Contaminant Level (MCL) for arsenic was "grossly inadequate for protecting public health." The EPA's exposure level of 50 parts per billion (ppb) was set back in 1942 "before arsenic was known to cause cancer."

With arsenic now classified as a Class 1 human carcinogen, the EPA has proposed reducing the MCL from 50 ppb to 5 ppb.

The decision to drastically reduce permitted arsenic levels also was prompted by numerous studies showing that low concentrations of arsenic in the drinking water can cause these types of cancers

- prostate • kidney
- skin • liver
- bladder • lung

The non-cancerous effects include skin pigmentation and callous-like skin growths, damage to reproductive/developmental functions, and a host of gastrointestinal, cardiovascular, hormonal, hematological, pulmonary, neurological, and immunological problems.

The Natural Resources Defense Council (NRDC) has challenged the EPA to abandon its support for water fluoridation chemicals and has proposed lowering the federal MCL standard for arsenic to 3 ppb.

According to NRDC estimates (based on National Academy of Science data), the EPA's 50-ppb arsenic standard could account for one cancer in every 100 people who drink two liters of water a day.

The American Water Works Association (AWWA) sets and implements water quality standards for all water treatment chemicals. In the October 2000 issue of AWWA's journal, Opflow, C. Wang, D.B. Smith, and G.M. Huntly describe how "Treatment Chemicals Contribute to Arsenic Levels."

The authors report that if the EPA standard for arsenic were set at 5 ppb, about 10 percent of the MCL for arsenic exposure would come directly from water treatment chemicals. They concluded that, even if the MCL was set at the NRDC's 3 ppb limit, "about 90 percent of the arsenic that would be contributed by treatment would be attributed to fluoride addition."

The NRDC admits that "even a relatively strict arsenic standard of 3 ppb could pose a fatal cancer risk several times higher than EPA has traditionally accepted in drinking water." The NAS has determined that just .5 ppb of arsenic in water "presents the highest cancer risk EPA traditionally allows in tap water."

Recent epidemiological work from Finland found that people drinking water with 0.1 to 0.5 ppb arsenic had approximately 50 percent greater-than-average risk of getting bladder cancer. This is exactly the range of arsenic we can expect to add to the water from the use of hydrofluorosilicic acid.

Using NAS data, the NRDC estimates the risk of developing fatal cancers from drinking water with 3 ppb arsenic would be 1 in 10,000. The EPA's normal risk-standard for chemical exposure is 1 in 1,000,000.

On March 20, in an unexpected and disturbing move, "President" Bush ordered "EPA Administrator" Christie Todd Whitman to rescind the Clinton Administration's decision to lower arsenic levels to the prevailing world standard.

For more on the cover-up of the source of the materials used to fluoridate drinking water check www.fluoridealert.org and <http://www.nrdc.org>

From an article by George Glasser and a report by Paul Connett, PhD, Professor of Chemistry at St. Lawrence University and head of the Fluoride Action Network (FAN).

Earth Island Journal

Breaking News on Arsenic in the Water Supply - The Natural Resources Defense Council is taking the Bush administration to court over its decision to suspend tighter arsenic standards for drinking water that had been adopted by the Clinton administration last year.

For more on this story [CLICK HERE](#).

DR. MERCOLA'S COMMENT:

The toxic chemicals used to fluoridate much of the public water supplies in the US are not something that you want to be consuming. The risks are just not worth the "supposed" benefits to teeth, which are minimal at best. That is why only about 2% of Europeans are currently drinking fluoridated water.

Hopefully, the tide is turning on fluoridation. The scientific evidence against it is becoming too great to ignore and the great power of the Internet is allowing this information to reach the public. No longer can the information just be swept under the rug and hidden away.

In addition to fluoride, arsenic is a highly toxic substance and should be avoided as much as possible. Certainly, intentionally adding it to our drinking water is absurd.