

Canadian Association of Physicians for the Environment

Statement on drinking water fluoridation

The Canadian Association of Physicians for the Environment (CAPE) does not support fluoridation of drinking water for the following reasons.

- 1) The decline in caries in communities that are fluoridated has been highly significant -- but so has the decline that has occurred in non-fluoridated communities. There has, in fact, been a general decline in dental caries throughout the Western world, and the decline in fluoridated cities has not exceeded that in non-fluoridated communities. For example, BC drinking water is 95% non-fluoridated, whereas drinking water in Alberta is 75% fluoridated; yet the two provinces have similar rates of caries. Furthermore, Europe is 98% non-fluoridated, but global European dental health is generally equivalent to or better than that in North America. Whatever the reason for the decline in dental caries, it can not be concluded that it is the result of drinking water fluoridation.
- 2) The incidence of toxic effects in humans from fluoridation may well have been underestimated. The most serious potential association is with osteosarcoma in boys, which appears to have been loosely associated with age of exposure to fluoride. It is true that the CDC has (as has the original researcher) acknowledged that current data are tentative, but a further larger-scale study is pending from the Harvard School of Dentistry. At the very least, such data are grounds for caution.
- 3) Animal studies have shown a wide range of adverse effects associated with fluoride. It has been shown to be a potential immunotoxin, embryotoxin, neurotoxin and harmful to bony tissues, including both dental and ordinary bone. In addition, it can damage (inhibit) thyroid function in several species, including humans. Its effect on ecosystem balance has been little researched, but is unlikely to be positive.
- 4) The intake of fluoride from drinking water is uncontrolled, and can lead to dental fluorosis in children who are inclined to drink large amounts of water. Both natural and artificially fluoridated water can cause this effect, which is, of course, simply a visible representation of an effect on the entire bony skeleton. The cost of repairing teeth damaged by fluorosis is not trivial; moderate to severe effects can require \$15,000 or more in dental fees.

It seems clear that a) fluoridation is unlikely to be the cause of the decline in caries in Europe and North America b) the potential for adverse effects is real, and c) current evidence points in the direction of caution. Over the last decade, recommendations with respect to acceptable fluoride exposure have steadily declined, and cautions have increased. Any dental benefit that may accrue from fluoride exposure is fully achieved by controlled topical application of fluoride compounds by trained dental professionals, not by fluoride ingestion. [The analysis of Dr. Hardy Limeback (www.fluoridealert.org/limeback.htm), Head, Preventive Dentistry, at the University of Toronto, further clarifies these points.]

On the basis of this "weight of evidence" we believe that fluoridation of drinking water is scientifically untenable, and should not be part of a public health initiative or program.

Sep-08