

FLUORIDE NOTICE FOR INFANTS

Legislation Overview

In each pea-sized serving of toothpaste there is a quarter of a milligram of pharmaceutical-grade fluoride. It may not sound like a lot, but since 1997 the United States Food and Drug Administration (FDA) has required that all toothpastes containing fluoride sold in the U.S. carry a poison warning on the label to prevent children from swallowing even this small amount. The warning cautions users to:

"WARNING: Keep out of reach of children under 6 years of age. If you accidentally swallow more than used for brushing, seek professional help or contact a poison control center immediately."

But fluoride isn't found only in toothpaste, it's also in our drinking water. In communities with fluoridated water, each 8oz. glass contains a quarter of a milligram of industrial-grade fluoride, **the same amount found in the serving of toothpaste that the FDA warns should not be swallowed by children.** Surprisingly, when fluoride is added to drinking water it is no longer regulated by the FDA, but is instead regulated as a toxic contaminant by the EPA, so the same warning label is not required for tap water even though the **same amount of fluoride is being consumed.**

The lack of a warning is concerning because parents are using fluoridated tap water to reconstitute baby formula, and fluoridated drinking water contains up to **250 times more fluoride than breast milk** (1000 ppb in fluoridated tap water vs. 5-10 ppb in breast milk). This means that babies consuming formula made with fluoridated tap water are exposed to much higher levels of fluoride than a breast-fed infant. A baby drinking fluoridated formula **receives the highest dosage of fluoride among all age groups in the population** whereas a breast-fed infant receives the lowest, and few scientists dispute the concept that mother's milk has the optimal nutrient composition for infants. The American Academy of Pediatrics clearly states:

"Exclusive breastfeeding is the reference or normative model against which all alternative feeding methods must be measured with regard to growth, health, development, and all other short- and long-term outcomes."

As a result, children are being over-exposed to fluoride, with the most recent data from the Centers for Disease Control reporting that **41% of adolescents (ages 12-15) have dental fluorosis.** Dental fluorosis damages teeth, ranging from white flecks to browning and pitting) and is a clear indicator of over-exposure to fluoride before the permanent teeth have erupted. Dental fluorosis is not the only risk from early-life exposure to fluoride. A recent review in The Lancet describes fluoride as "an emerging neurotoxic substance" that may damage the developing brain. In 2006, the National Research Council of the National Academies identified fluoride as an "endocrine disrupter" that may impair thyroid function, while recent research from Harvard University has found a possible connection between fluoride and bone cancer.

Because of the risk for dental fluorosis, the American Dental Association, the CDC, and a growing number of dental researchers - recommend that **children under 12 months of age should not exclusively consume formula reconstituted with fluoridated water.** But while dentists and doctors have been warned, little has been done to warn parents and public health officials. It's time we notify parents and take preventative action to protect New Hampshire's most vulnerable citizens, our children.

The fluoride notice for infants legislation would require that all public water systems place the following notice on billing statements if they choose to add fluoride into the public water supply: **"Your public water supply is fluoridated. According to the Centers for Disease Control and Prevention, if your child under the age of 6 months is exclusively consuming infant formula reconstituted with fluoridated water, there may be an increased chance of dental fluorosis. Consult your child's health care provider for more information.**

STATEMENTS ON INFANT EXPOSURE TO FLUORIDE

“The Vermont Department of Health recommends mixing powdered or concentrated baby formula with water that is fluoride-free, or contains very low levels of fluoride, for feeding infants under 12 months of age. Recent studies have discovered the possibility that infants in this age group may be consuming more fluoride than necessary.”

-Vermont Department of Health. “Fluoridated Water and Infant Formula”
(<http://healthvermont.gov/family/dental/fluoride/formula.aspx>)

“... Infants less than one year old may be getting more than the optimal amount of fluoride (which may increase their risk of enamel fluorosis) if their primary source of nutrition is powdered or liquid concentrate infant formula mixed with water containing fluoride... If using a product that needs to be reconstituted, parents and caregivers should consider using water that has no or low levels of fluoride.”

-American Dental Association. 2006. Interim Guidance on Reconstituted Infant Formula.

"...mixing powdered or liquid infant formula concentrate with fluoridated water on a regular basis for infants primarily fed in this way may increase the chance of a child's developing enamel fluorosis."

- Centers for Disease Control. Feb 2010 Report, Oral Health during Pregnancy and Early Childhood: Evidence-Based Guidelines for Health Professionals.

“...the committee concluded unanimously that the present [allowable level] for fluoride should be lowered. Exposure at the [allowable level] clearly puts children at risk of developing severe enamel fluorosis,”

-National Research Council of the National Academies. 2006. “Fluoride in Drinking Water”

“Babies should not receive fluoride supplementation during the first six months of life, whether they are breastfed or formula-fed.”

-American Academy of Pediatrics. 2009. “Caring for your Baby and Young Child”

“If you add fluoridated water to your infant’s baby formula, you may be putting your child at risk of developing dental fluorosis...in infants and children regular fluoride intake above optimal amounts causes fluorosis in developing teeth...When formula concentrations need to be diluted, it is recommended that parents use bottled water that is fluoride-free...”

-Academy of General Dentistry. 2007. “Monitor Infant’s Fluoride Intake”

"All of [our analyses] were consistent in finding an association between fluoride levels in drinking water and an increased risk of osteosarcoma for males diagnosed before age 20..."

-Bassin EB, Wypij D, Davis RB, Mittleman MA. 2006. Age-specific fluoride exposure in drinking water and osteosarcoma (United States). *Cancer Causes and Control* 17(4). May.

"Our analysis shows that babies who are exclusively formula fed face the highest risk; in Boston, for example, more than 60 percent of the exclusively formula fed babies exceed the safe dose of fluoride on any given day."

-Environmental Working Group, "EWG Analysis of Government Data Finds Babies Over- Exposed to Fluoride in Most Major U.S. Cities", March 22, 2006.

“Regularly mixing a baby’s formula with fluoridated tap water can provide enough fluoride to cause fluorosis – mild white streaks on the teeth or more severe pitting or staining of tooth enamel. Fluorosis can affect both baby teeth and permanent teeth.”

-Mayo Clinic. 2012. “Infant Formula: 7 Steps to Prepare it Safely”

“Parents who are concerned about the risk of enamel fluorosis, can mix liquid concentrate or powdered infant formula with water that is fluoride free or contains low levels of fluoride. “

-New York State Department of Health. 2012. “Fluoride Guidance During Infancy”