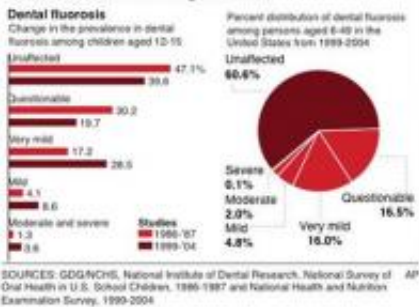


US says too much fluoride causing splotchy teeth

8 January 2011, By MIKE STOBBE , AP Medical Writer

Government lowers recommended level of fluoride in water

The U.S. Department of Health and Human Services recommended lowering the level of fluoride to 0.7 milligrams per liter of water. Since 1962, the standard has fluctuated between 0.7 and 1.2 milligrams. The change comes after a study found increasing numbers of a fluorosis, or discoloration of the teeth, among adolescents.



Graphic charts the prevalence and distribution of dental fluorosis

(AP) -- In a remarkable turnabout, federal health officials say many Americans are now getting too much fluoride because of its presence not just in drinking water but in toothpaste, mouthwash and other products, and it's causing splotches on children's teeth and perhaps more serious problems.

The U.S. Department of Health and Human Services announced plans Friday to lower the recommended level of [fluoride](#) in drinking water for the first time in nearly 50 years, based on a fresh review of the science.

The announcement is likely to renew the battle over fluoridation, even though the addition of fluoride to drinking water is considered one of the greatest public health successes of the 20th century. The U.S. prevalence of decay in at least one tooth among teens has declined from about 90 percent to 60 percent.

The government first began urging municipal water systems to add fluoride in the early 1950s. Since

then, it has been put in [toothpaste](#) and mouthwash. It is also in a lot of [bottled water](#) and in soda. Some kids even take fluoride supplements. Now, young children may be getting too much.

"Like anything else, you can have too much of a good thing," said Dr. Howard Pollick, a professor at the University of California, San Francisco's dental school and spokesman for the American Dental Association.

One reason behind the change: About 2 out of 5 adolescents have tooth streaking or spottiness because of too much fluoride, a government study found recently. In extreme cases, teeth can be pitted by the mineral - though many cases are so mild only dentists notice it. The problem is generally considered cosmetic and not a reason for serious concern.

The splotchy tooth condition, fluorosis, is unexpectedly common in youngsters ages 12 through 15 and appears to have grown more common since the 1980s, according to the [Centers for Disease Control and Prevention](#).

But there are also growing worries about more serious dangers from fluoride.

The Environmental Protection Agency released two new reviews of research on fluoride Friday. One of the studies found that prolonged, high intake of fluoride can increase the risk of brittle bones, fractures and crippling bone abnormalities.

Critics of fluoridated water seized on the proposed change Friday to renew their attacks on it - a battle that dates back to at least the Cold War 1950s, when it was denounced by some as a step toward Communism. Many activists nowadays don't think fluoride is essential, and they praised the government's new steps.

"Anybody who was anti-fluoride was considered

crazy," said Deborah Catrow, who successfully fought a ballot proposal in 2005 that would have added fluoride to drinking water in Springfield, Ohio. "It's amazing that people have been so convinced that this is an OK thing to do."

Dental and medical groups applauded the announcement.

"This change is necessary because Americans have access to more sources of fluoride than they did when water fluoridation was first introduced," Dr. O. Marion Burton, president of the American Academy of Pediatrics, said in a statement.

The fluoridated water standard since 1962 has been a range of 0.7 parts per million for warmer climates where people used to drink more water to 1.2 parts per million in cooler regions. The new proposal from HHS would set the recommended level at just 0.7. Meanwhile, the EPA said it is reviewing whether to lower the maximum allowable level of fluoride in drinking water from the current 4 parts per million.

"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," said Peter Silva, an EPA assistant administrator.

Fluoride is a mineral that exists in water and soil. About 70 years ago, scientists discovered that people whose supplies naturally had more fluoride also had fewer cavities.

In 1945, Grand Rapids, Mich., became the world's first city to add fluoride to its drinking water. Six years later a study found a dramatic decline in tooth decay among children there, and the surgeon general endorsed water fluoridation.

And in 1955, Procter & Gamble Co. marketed the first fluoride toothpaste, Crest, with the slogan "Look, Mom, no cavities!"

But that same year, The New York Times called fluoridation of public water one of the country's "fiercest controversies." The story said some opponents called the campaign for fluoridation "the

work of Communists who want to soften the brains of the American people."

The battles continue for a variety of reasons today.

In New York, the village of Cobleskill outside Albany stopped adding fluoride to its drinking water in 2007 after the longtime water superintendent became convinced the additive was contributing to his knee problems. Two years later, the village reversed the move after dentists and doctors complained.

According to a recent CDC report, nearly 23 percent of children ages 12 to 15 had fluorosis in a study done in 1986-87. That rose to 41 percent in a study that covered 1999 through 2004.

"The report of discoloration has been going up over the years," said Dr. Robert Barsley, a professor at the LSU Health Sciences Center School of Dentistry. "It is not the water that's causing this by any means. It's the extra fluoride products - toothpaste, mouthwash - that people are using. And people want nice white teeth so they brush three times a day."

Susan Jeansonne, oral health program manager for Louisiana Department of Health and Hospitals, said one reason for the problem is children swallowing fluoride toothpaste or eating it.

Toothpaste labels have long recommended that parents supervise children under 6 when they are brushing their teeth; give them only a pea-size amount; and make sure they spit it out. Toddlers under 2 shouldn't use toothpaste with fluoride.

In 2006, the National Academy of Sciences released a report recommending that the EPA lower its maximum allowable level of fluoride in drinking water. The report warned severe fluorosis could occur at 2 parts per million. Also, a majority of the report's authors said a lifetime of [drinking water](#) with fluoride at 4 parts per million or higher could raise the risk of broken bones.

In addition, in 2005, the heads of 11 EPA unions, including ones representing the agency's scientists, pleaded with the EPA to reduce the permissible

level of fluoride in water to zero, citing research suggesting it can cause cancer.

In Europe, fluoride is rarely added to water supplies. In Britain, only about 10 percent of the population has fluoridated water. It has been a controversial issue there, with critics arguing people shouldn't be forced to have "medical treatment" forced on them.

More information: CDC on fluoridation:

<http://www.cdc.gov/fluoridation>

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