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**Fluoride in Drinking Water: A Scientific Review of EPA's Standards  
ADA Responses to the Report  
As of 3/22/06**

On March 22, 2006, the National Academies' National Research Council released a report following a review of studies and data relating to fluoride in drinking water that has been published since 1993.

**Does this report question the safety of community water fluoridation?**

No. Community water fluoridation remains the model for dental disease prevention, saving Americans billions of dollars and untold suffering every year. In fact, community water fluoridation was not part of the committee's charge. This report deals with the EPA's maximum goal of 4 parts per million (ppm) of *naturally* occurring fluoride in drinking water, as compared to the optimal fluoride levels of 0.7-1.2 ppm in fluoridated community water systems.

**Has the ADA's Position on community water fluoridation changed?**

No. The American Dental Association supports community water fluoridation as a safe, beneficial and cost-effective way to prevent tooth decay. Past comprehensive reviews of the safety and effectiveness of fluoride in water have concluded that water fluoridation is safe and the most cost-effective way to prevent tooth decay among populations living in areas with adequate community water supply systems. In fact, the Centers for Disease Control and Prevention (CDC) proclaimed community water fluoridation one of 10 great public health achievements of the 20<sup>th</sup> century.

**Then, why was this report necessary?**

This new report was prompted as part of a routine, periodic review by the Environmental Protection Agency (EPA). EPA, the federal agency with authority to regulate public water supplies, determined that enough new scientific studies had been published since 1993 to warrant a thorough review. EPA contracted with the National Research Council (NRC) for the review.

**What did the report examine?**

The NRC was asked to examine whether the amount of *naturally* occurring fluoride allowed in drinking water poses a health risk.

**What conclusion did the report make?**

The report concludes that the EPA's maximum level goal for *naturally* occurring fluoride in drinking water should be lowered.



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### **What led to this conclusion?**

The report cites severe dental fluorosis, also known as enamel fluorosis, as one of the reasons for the new recommendation. Severe fluorosis, where teeth appear discolored and sometimes pitted is found in about 10 percent of children in communities with water fluoride concentrations at or near 4ppm, according to the report. That concentration of fluoride is nearly four times the optimum amount recommended by the U.S. Public Health Service, CDC and ADA to prevent tooth decay.

The report says that if the EPA's maximum level goal for *naturally* occurring fluoride in drinking water is lowered from 4ppm to 2ppm, it would eliminate severe dental fluorosis.

The report also indicated that lowering the EPA's maximum fluoride goal will reduce the risk of bone fracture and possibly skeletal fluorosis in certain at risk patients who have excessively high water sources over long periods of time.

### **What action will be taken on the report's recommendations?**

The report and recommendations will be considered by the EPA. The EPA may decide that no action is necessary at this time. If the EPA decides a change in the current regulations is necessary, the agency will initiate the process on the proposed changes. That usually includes publishing the proposed changes for public comment, possibly holding public hearings and publishing final rule changes.

If EPA eventually lowers its maximum recommended fluoride level to 2ppm, this new level would have no effect on the optimal amount of fluoride that the ADA and other public health agencies recommend to prevent tooth decay.

### **What are ADA's next steps?**

As a science based organization, the ADA welcomes this opportunity to review the science surrounding fluoride in drinking water. The ADA will carefully review the approximately 500-page report and its recommendations and provide additional information to the public and the dental profession. The ADA will also monitor the EPA's review of the report.

### **What is important to remember about the report?**

This report is limited to a review of the level of *naturally* occurring fluoride currently recommended in drinking water - a level many (2 to 5) times higher than the level of fluoride used in optimally fluoridated community water systems. Nothing in this report calls into question the optimal levels of 0.7-1.2 parts per million in fluoridated community water systems.



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### **What helpful advice can we give?**

The ADA continues to support the optimal levels of 0.7-1.2ppm in fluoridated community water systems and its contributions in preventing tooth decay. One part per million is the equivalent to about one cent in \$10,000. Everyone deserves optimal levels of fluoride in drinking water. Everyone deserves optimal oral health.

You can learn about the level of fluoride in your water by contacting your water supplier. If you use a private well, contact your local health department to learn where to get your water tested. Health professionals use this information when considering the use of dietary supplements.

While too much of any good thing has the potential to have unintended results, there are simple, effective ways to help insure children do not ingest too much fluoride. The good news is that parents and other caregivers can monitor the use of all fluoride-containing products by children younger than 6 years by placing only a pea-sized amount of fluoride toothpaste on a young child's toothbrush at each brushing. Young children should be supervised while brushing or using a mouthrinse so they learn to spit, and not to swallow. Before the age of two, children should not be allowed to use a fluoride toothpaste for brushing.

**Additional information will appear on [ada.org](http://ada.org) after the report has been reviewed.**