

Is lack of fluoride hurting kids?

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Doug Finger/ Staff photographer

Nate Ford, a water plant operator at the Gainesville Regional Utilities Murphree Water Plant, analyzes fluoride levels Tuesday, July 06, 2010.

Editor's note: This is the third of a three-part series looking at the state's record for providing dental treatment to children, particularly those in impoverished areas who lack access to dentists and fluoridated water. Today's story looks at the arguments for and against the fluoridation of our drinking water.

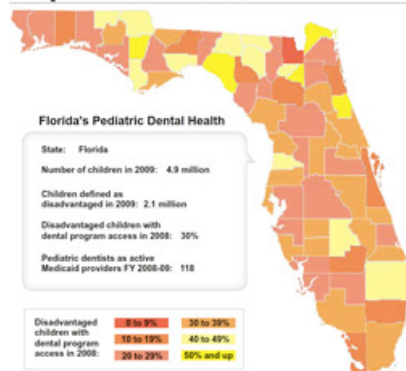
At 8:10 every Tuesday morning during the school year, after all the announcements have been made, Cedar Key School teachers hand out cups with a fluoridated liquid for the children to swish in their mouths for about a minute.

"We have our health nurse here who coordinates it," Cedar Key School Principal Sue Ice said.

The program was put in place because Cedar Key is a community that does not fluoridate its water. The most common way of adding fluoride to water is with the gas hydrofluosilicic acid, which is kept in a tank and connected to the water system via a small PVC pipe.

But some, including those who maintain the water system in Cedar Key, question the methods and wisdom of fluoridating public drinking water.

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"It's a dangerous poison - it's one of the hardest chemicals to work with in the industry," said Jack Hotaling, the Cedar Key Water District general manager. "It's much more cost-effective to have the dentist apply fluoride or use fluoride toothpaste."

In addition to the fluoride program, once a year a volunteer dentist and hygienist visit the school, Ice said, to talk with the elementary students about good oral hygiene.

The Gainesville Sun analyzed statistics from the State Oral Health Improvement Plan for Disadvantaged Floridians, findings from the Pew Center on the States' 2010 "Children's Dental Campaign" report and numbers from the Centers for Disease Control and Prevention and found that Florida has one of the worst records in the country for providing dental care for children who are on Medicaid and live in poor, rural communities.

There are 16 counties in Florida without fluoridated water, all of them rural with fewer than 30,000 children each.

Fluoride, a mineral, is found naturally in almost every water body. In fact, the Florida Department of Public Health's list of optimally fluoridated water systems in the state shows 29 communities with enough natural fluoride to protect their residents' teeth.

Some communities, though, are reluctant to add fluoride to their water systems because of campaigns claiming fluoride is dangerous. The Fluoride Action Network claims that fluoride can lower IQ, create a toxic buildup in the body, discolor teeth and possibly cause bone breaks and a rare form of bone cancer in young males.

The CDC has recognized water fluoridation as "one of 10 great public health achievements of the 20th century" because it has reduced cavity rates. Tooth decay, the CDC says, is the leading childhood disease - five times more prevalent than asthma - and the most preventable.

In 1951, the National Research Council found that water fluoridation was safe and effective and "recommended that any communities with a child population of sufficient size, and that obtained their water from sources free from or low in fluoride, should consider adjusting the concentration to optimum levels for oral health."

Since then, water has been fluoridated for 69 percent of people in a public water system in the United States.

About 70 percent of people in Florida drink fluoridated water. In 1949, Gainesville was the first city in the state to fluoridate its water to prevent tooth decay.

According to the U.S. Department of Health and Human Services, in the 1940s cavities in areas that began fluoridating water dropped by 60 percent. Fluoride toothpaste and mouthwash have since been introduced and been found to reduce tooth decay also, but the U.S. Department of Health and Human Services continues to recommend fluoridating water because "it provides the greatest benefit to those who can least afford preventative and restorative dentistry and reduces dental disease, loss of teeth, time away from work or school, and anesthesia-related risks associated with dental treatment."

The U.S. Department of Health and Human Services studied the issue and found that appropriate levels of fluoridation are safe.

And the American Dental Association continues to endorse water fluoridation to prevent cavities. However, officials with HHS warn that babies should not drink formula made with fluoridated water.

Every dentist who spoke with The Gainesville Sun said fluoridated water is vital to keeping children's teeth healthy.

"There's a long and substantial body of literature about the effectiveness of fluoride in reducing tooth decay," said Dr. Scott Tomar, a professor at the University of Florida's College of Dentistry and an expert on the fluoride issue. "Pretty much every pediatric health authority and dental authority consistently endorses community water fluoridation."

The U.S. Environmental Protection Agency has set the maximum allowed level of fluoride at 4 parts per million. David Richardson, assistant general manager for water and waste water systems for Gainesville Regional Utilities, said the fluoride levels are kept at a constant 0.8 parts per million in Gainesville, well below the EPA safety level.

Last year, the City Commission voted to keep the Gainesville water supply fluoridated, despite protests from a few residents about the safety issues.

One major obstacle for poor children's access to dental care is the lack of pediatric dentists who treat Medicaid patients. According to statistics in the State Oral Health Improvement Plan for Disadvantaged Floridians, out of Florida's 9,804 active licensed dentists, only 118 pediatric dentists are active Medicaid providers - a little more than 1 percent. A handful of other dentists provide services as well. And in Florida, there are 15 counties with no pediatric dentist who takes Medicaid, along with no fluoridated water system.

Dr. Frank Catalanotto, chairman of the University of Florida's department of community dentistry and behavioral science, and researchers from the Pew Center on the States said there were two main reasons so few dentists are active Medicaid providers:

Medicaid pays only 30 cents for every dollar an insured patient would pay. Medicaid bureaucracy often hinders parents from signing up and frequently deletes qualified patients from the database system.

Dr. Bill Martin, an orthodontist in Chiefland who volunteers as a dentist several night a week, said about 60 cents of every dollar paid per patient goes for overhead to run the office. Medicaid reimburses only 30 cents on the dollar.

"Not only do you not make anything, you usually lose something," Martin said.

The situation is the same for pediatric physicians. In response, the Florida Pediatric Society and the Florida Association of Pediatric Dentistry, along with nine parents, filed a class-action lawsuit in 2005 to force Florida to pay doctors and dentists more and to clear up the red-tape issues tangling the system.

"We're not suing for damages - no doctors or patients are going to get rich," said Dr. Louis St. Petery, a pediatric cardiologist and executive vice president of the Florida Pediatric Society. "We just want the state to do the right thing."

The case currently is before Federal District Court Judge Adalberto Jordan in Miami and slowly is being heard piecemeal, a week or two at a time. The case was back on the docket again this month for weeks five and six of hearings, and officials say they don't expect an outcome for years.

"Children covered by Medicaid are supposed to have the same access within the same geographic region as other children," St. Petery said. "Quite frankly, that doesn't occur in Florida or many other states."

St. Petery said the Florida lawsuit follows successful case outcomes in at least three other states: Oklahoma, Michigan and Pennsylvania.

Dr. Rosa Martin, dental director of the Miami-Dade County Health Department, said the health department does not use Medicaid but instead is funded by state, federal and private grants. She said she would like to be able to use Medicaid - and be reimbursed at a rate that is comparable to a private dentist.

"We get, I think it's like, \$4.25 a month per child for complete comprehensive treatment - so \$50 a year - and we're responsible to treat all of the needs of the child," Martin said. "Dentists in private practice can easily bill \$125 per visit - minimum."

Officials with the U.S. Department of Health and Human Services last year reviewed the dental programs of Florida and other states that had low usage rates of dental services among disadvantaged children.

"Improvements in getting low-income children in the state dental care (program) is clearly needed," said Luis Rosero, an HHS spokesman.

HHS officials recommended:

The state recruit new dental providers.

That appointment wait times be reduced.

That families be made aware of how to access preventive dental care for their children.

Officials with the Florida Department of Health say they are planning for a sealant program, as well as keeping track of cavity statistics.

"Please know that DOH remains dedicated to promoting and improving the oral health of all Floridians," department spokeswoman Susan Smith said.

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