



## Dental Public Health Activities & Practices

**Practice Number:** 53003  
**Submitted By:** Division of Dental Health, Virginia Department of Health  
**Submission Date:** February 2002  
**Last Updated:** February 2002

<b>SECTION I: PRACTICE OVERVIEW</b>		
<b>Name of the Practice:</b> School Fluoride Mouthrinse Program		
<b>Public Health Functions:</b> Assurance – Building Community Capacity for Intervention Assurance – Building Linkages & Partnerships for Intervention		
<b>HP 2010 Objectives:</b> 21-1 Reduce dental caries experience in children. 21-12 Increase preventive dental services for low-income children and adolescents.		
<b>State:</b> Virginia	<b>Region:</b> East Region IV	<b>Key Words:</b> Fluoride mouthrinse, fluoride, prevention, school based program
<b>Abstract:</b> The Division of Dental Health, Virginia Department of Health administers a school fluoride mouthrinse program. The program is intended for primary school age children in the 1 <sup>st</sup> to the 5 <sup>th</sup> grades in non-fluoridated areas. There are approximately 50,000 children presently participating in 210 schools. The Division provides all of the materials, including the pre-mixed fluoride solution, and monitors each school for quality assurance. The Division also provides training for persons administering the program in the individual schools.		
<b>Contact Persons for Inquiries:</b> Lisa Syrop, DDS, Fluoridation Coordinator, Division of Dental Health, Virginia Department of Health, 109 Governor Street, Richmond, VA 23219, Phone: 804-864-7781, Fax: 804-864-7783, Email: <a href="mailto:lisa.syrop@vdh.virginia.gov">lisa.syrop@vdh.virginia.gov</a>		

## SECTION II: PRACTICE DESCRIPTION

### **History of the Practice:**

This program began in the early 1980's shortly after the completion of the national fluoride mouthrinse study conducted by NIDCR. One of our county school systems participated in that study.

### **Justification of the Practice:**

Program is predicated on the results of the NICDR study, other studies and trend data collected by the Division of Dental Health.

### **Administration, Operations, Services, Personnel, Expertise and Resources of the Practice:**

The Division of Dental Health administers a school fluoride mouthrinse program. A Fluoridation Coordinator provides program planning, administration, and evaluation. The Coordinator also supervises a Fluoride Mouthrinse Coordinator (Health Educator) who provides the day to day administration.

The program is intended for primary school age children in the 1<sup>st</sup> to the 5<sup>th</sup> grades in non-fluoridated areas. The Preventive Health and Health Services Block Grant have continually funded the program. Originally the Division paid for all of the fluoride solution and supplies for two-years, after which time the schools were expected to pick up the cost of the supplies. With the advent of the pre-mixed material the Division pays the entire cost.

There are approximately 50,000 children presently participating in 210 schools in 46 counties. Qualification for schools and participants in the program include no access to fluoridated water, 1<sup>st</sup> through 5<sup>th</sup> grade, and parental permission. Each school provides an annual report on the number of participants.

Annual visits are made by Coordinator to train new personnel and perform quality assurance. The program monitors expiration of fluoride mouthrinse materials, secured storage for fluoride materials, and training for all new school personnel administering the program.

### **Budget Estimates and Formulas of the Practice:**

Costs are based on the salary of one full time staff member and the cost of the fluoride mouthrinse material and a small incentive distributed to volunteers and each participant at the end of the school year. Estimated annual cost per child is \$3.50.

### **Lessons Learned and/or Plans for Improvement:**

The development of the Guidelines for a School Fluoride Mouthrinse Program was critical to its success, as is the periodic personal contact of school personnel participating in the program.

A more comprehensive survey in the state comparing one of the school mouthrinse programs with a non-fluoridated community will be completed this spring of 2002.

### **Available Resources Models, Tools and Guidelines Relevant to the Practice:**

Virginia Guidelines for a School Fluoride Mouthrinse Program

## SECTION III: PRACTICE EVALUATION INFORMATION

### **Impact/Effectiveness**

*Does the practice demonstrate impact, applicability, and benefits to the oral health care and well-being of certain populations or communities (i.e., reference scientific evidence and outcomes of the practice)?*

Studies show that fluoride rinsing reduces new tooth decay by 20 to 50 per cent. The School Fluoride Mouthrinse Program has approximately 50,000 children presently participating in 210 schools in 46 counties. Additional benefits of the program include increased dental awareness on the part of the children, school personnel and parents.

### **Efficiency**

*Does the practice demonstrate cost and resource efficiency where expenses are appropriate to benefits? Are staffing and time requirements realistic and reasonable?*

The Division of Dental Health estimated that children suffer one less tooth surface of decay over the five years in the program.<sup>1</sup> Based on that assumption, it is estimated that over a half-million dollar a year is saved in treatment costs. The estimated cost of \$157, 250 for the program and the salary of one full time staff member for the benefits received seem very reasonable. Estimated annual cost per child is \$3.50 in the School Fluoride Mouthrinse Program.

### Reference:

<sup>1</sup>JPHD, Vol. 49, No.5 Special Issue 1989 pp 310-316, Effectiveness of Mouthrinsing with Fluoride Solutions in Preventing Coronal and Root Caries, Dennis H. Leverett, DDS, MPH

### **Demonstrated Sustainability**

*Does the practice show sustainable benefits and/or is the practice sustainable within populations/communities and between states/territories?*

The program has been in operation since 1981 with continual funding from the Preventive Health and Health Services Block Grant.

The program has grown slowly each year, but has just about reached it full potential in terms of numbers of schools and children eligible to participate.

### **Collaboration/Integration**

*Does the practice build effective partnerships/coalitions among various organizations and integrate oral health with other health projects and issues?*

The program has been an excellent entry into the schools, as the program must receive the approval and support of the School Board, Superintendent, Principals, and teachers. In many cases, schools are locally administering the program.

### **Objectives/Rationale**

*Does the practice address HP 2010 objectives, the Surgeon General's Report on Oral Health, and/or build basic infrastructure and capacity for state/territorial oral health programs?*

The School Fluoride Mouthrinse program supports the Healthy People 2010 objectives of reducing dental caries experience in children and increasing preventive dental services for low-income children and adolescents.

### **Extent of Use Among States**

*Is the practice or aspects of the practice used in other states?*

ASTDD State Synopses showed that between 1998-2000, 35 states and two territories reported having a school fluoride mouthrinse program (AL, AZ, CA, CO, CT, FL, GA, HI, ID, IL, IN, IA, KY, ME, MD, MA, MI, MS, MO, MT, NB, NH, NJ, NM, NY, NC, ND, OH, OR, UT, VT, VA, WV, WI and WY). Two territories reported having fluoride mouthrinse programs (American Samoa and Republic Palau).