



Dental Public Health Activities & Practices

Practice Number: 51003
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SECTION I: PRACTICE OVERVIEW		
Name of the Practice: Fluoride Mouthrinse Program		
Public Health Functions: Assurance – Population-based Intervention Assurance – Building Linkages & Partnership for Intervention		
HP 2010 Objectives: 21-1 Reduce dental caries experience in children. 21-2 Reduce untreated dental decay in children and adults. 21-12 Increase preventive dental services for low-income children and adolescents.		
State: Vermont	Region: Northeast Region I	Key Words: Fluoride, fluoride mouthrinse, FMR, school program, prevention
Abstract: The Vermont Department of Health, Dental Health Services administers a Fluoride Mouthrinse Program targeting public schools in communities with drinking water below optimal fluoride level. The program provides weekly 0.2% fluoride mouthrinse for children in grades 1 through 8. Of the 193 eligible schools, 173 schools with 17,829 students are participating in the program during the 2001-02 school year. Three Dental Educators (dental hygienists) from Dental Health Services manage the program, each devoting 25% of their time. The Dental Educators communicate with the schools, provide a fluoride ordering protocol to the schools, train new school nurses and school fluoride coordinators to conduct weekly rinses, and track participation.		
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SECTION II: PRACTICE DESCRIPTION

History of the Practice:

Established in 1976, the Fluoride Mouthrinse Program is having its 25th year anniversary. The program was promoted to help reduce tooth decay in non-fluoridated communities in Vermont. The program began with the need to mix fluoride solution for dispensing but today uses a convenient pre-packaged individual one-unit dose.

Justification of the Practice:

Presently in 2002, Vermont has 55.5% of the state population served by public water systems receiving fluoridated water. Vermont's Fluoride Mouthrinse Program aims to help prevent dental caries among children living in fluoride deficient areas. The results of research done during the past 10 years have shown that children who have used the weekly rinse solution (0.2%) have about 30% fewer cavities than otherwise expected.

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

Dental Health Services at the Vermont Department of Health administers the Fluoride Mouthrinse Program. The program is free to public schools in non-fluoridated communities. The Program is managed by 3 Dental Health Educators (1 full-time and 2 part-time registered dental hygienists), each devoting approximately 25% of their time. The Dental Health Educators oversee the training of personnel in all participating schools to implement weekly fluoride mouthrinses and distribute fluoride supplies. The program is further supported through collaborations with school principals, school nurses, LPNs, teachers, volunteers, and other health personnel from the schools and the Department of Health.

Every school year, the Department of Health, Dental Health Services initiates contact with the school by mailing the program registration in late August. It consists of a cover letter, in-service training schedule for new personnel and a written agreement to be signed by the principal. The agreement states: "The Fluoride Mouthrinse Program will be conducted according to the guidelines in the Vermont Fluoride Mouthrinse Manual. Participation is voluntary. If circumstances develop that interfere with the program management and effectiveness, the school program will be dismissed (from the FMR program)." Next, the program forwards the schools a medical order (prescription for the fluoride mouthrinses) and practice protocol to administer the fluoride. Recommendations are made to the school to send the permission forms home for parents to enroll their children for the Fluoride Mouthrinse Program. After permission forms are received, the school nurse or the school fluoride coordinator begins the program with weekly 0.2 % fluoride mouthrinses. Fluoride mouthrinses are provided once a week, usually the same day every week. The program currently uses a unit dose fluoride, which is significantly more efficient, and mixing of the fluoride solution for dispensing is no longer needed. In January, the mid-year mailing is made. The mailing gathers information on each school's student participation and volunteers helping the program, obtains requests for preferred fluoride mouthrinse flavoring to help future orders, and provides a news update. During May, the end of the year mailing forwards a certificate of appreciation to the school for their participation in the program and information for the next school year (such as a new accidental ingestion tally sheet, a tentative in-service schedule and a new parental permission form for copying).

New school nurses or school fluoride coordinators in the program are required to attend a training workshop prior to administering the program. The Dental Health Educators provide the training. In this training workshop, the Fluoride Manual is reviewed, a fluoride instructional video is presented, and fluoride supply is distributed. A follow-up phone call is made in the Fall to see how the program is progressing. Each school administering the program receives a Fluoride Mouthrinse Program manual with instructions and reference information.

The Department of Health, Dental Services forwards a protocol for ordering fluoride to all schools in the Fall and Spring of each school year. Each school orders their fluoride through a pre-selected distributor who will directly deliver the unit dose fluoride to the schools.

For the school year 2001-02, a total of 174 out of 193 eligible public schools are participating in the Fluoride Mouthrinse Program. The program provides 17,829 children in grades one through eight with fluoride mouthrinses.

Budget Estimates and Formulas of the Practice:

- Fluoride supplies – Fluoride mouthrinses for 17,829 children in 174 participating schools totaled approximately \$13,750 (928 cases ordered for 2001-02 school year; 288 doses per case; \$14.85 per case).
- Dental Health Educators' mileage and salary – Salary range for a Dental Health Educator is \$16.00 to \$18.00 per hour. Dental Health Educators use the state van for travel or their own vehicle at a reimbursement rate of \$0.34 per mile.
- Program manuals – Cost for the binders and printing (in-house copying of the material) is approximately \$1,200 for each school year. Program manuals are distributed to new participating schools and updated inserts for the manual are provided to continuing schools.

Lessons Learned and/or Plans for Improvement:

Follow-up is key to success for this program. Dental Health Educators must be sure that fluoride coordinators for the schools are trained and have the understanding that fluoride is a prescription drug. The program needs to provide an annual update and review of the fluoride manual, specially focusing on information related to risk management, the MSDS sheet and the yearly medical order. The manual revisions need to be reviewed each year with the fluoride coordinators either through a mailing or at a workshop. Follow up phone calls needs to be made to each of the new coordinators to see how they are progressing with the program.

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

- Fluoride Mouthrinse Manual: " *Vermont Kids' Miles of Smiles*"
- Instructional video for fluoride mouthrinse
- Information on the unit dose for fluoride mouthrinse
- For information on fluoride products: Medical Product Labs, 9990 Global Road, Box 14366, Philadelphia, PA 19115, Phone: 215-677-5200.

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)?

Research results have concluded that over the past 10 years children who utilize this program have 30% fewer cavities than otherwise expected. In 2001-02, 174 public schools in non-fluoridated communities are participating in Vermont's Fluoride Mouthrinse Program. The program, after 25 years, has reached full capacity in offering and facilitating free fluoride mouthrinses to the schools. The program is very effective when the principal and school nurse promote the program in their school. The program also serves to raise awareness for oral health with the weekly dental activity of fluoride mouthrinsing.

Efficiency

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

The Fluoride Mouthrinse Program is cost effective and accessible to a large population, especially those who live in a fluoride deficient area. Cost of fluoride supply is approximately \$0.77 for each child in the program. Three Health Educators (one full-time and two part-time dental hygienists) devote 25% each of their time on the FMR Program supporting the schools. The schools provide staff support to administer the programs with school nurses setting up the program and coordinating with teachers and volunteers on obtaining parental permissions and weekly rinsing.

Demonstrated Sustainability

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

The Fluoride Mouthrinse Program has been established for 25 years in Vermont and the number of children served by the program has grown through the years. The program is sustained by funding through the Prevention Block Grant; this funding has been reliable over the years. The program is also well received by schools and families as shown with consistent enrollments for schools enrolled in the program for many years and growing enrollments with new participating schools.

Collaboration/Integration

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

This practice has built partnerships in addressing dental disease. It has brought dental health awareness into the classroom through the weekly fluoride mouthrinsing. The teamwork involved within the structure of each school to run the program has created an effective partnership among school personnel. In some schools, the Fluoride Mouthrinse Program has integrated the Tooth Tutor Dental Access Program, which is a part of the EPSDT School-Based Health Access Program. Partners for the Fluoride Mouthrinse Program include the Department of Education, State School Nurses Association, State Dental Society and the Vermont State Dental Hygienist Association.

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 Fluoride Mouthrinse Program supports the HP 2010 objectives in reducing dental caries experience and untreated dental decay in children, and increasing preventive dental services for low-income children. The program works toward the Surgeon General's Report on Oral Health to reduce disparities in oral health.

Extent of Use Among States

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

ASTDD State Synopsis showed that in 2000, 30 states reported having school fluoride mouthrinse programs (AL, AZ, CO, GA, HI, ID, IL, IN, IA, ME, MA, MI, MS, MO, MT, NB, NH, NJ, NM, NY, NC, ND, OH, OR, UT, VT, VA, WV, WI, and WY).