



# Dental Public Health Activity Descriptive Report Submission Form

The Best Practices Committee requests that you complete the Descriptive Report Submission Form as follow-up to acceptance of your State Activity Submission as an example of a best practice.

Please provide a more detailed description of your **successful dental public health activity** by fully completing this form. Expand the submission form as needed but within any limitations noted.

ASTDD Best Practices: [Strength of Evidence Supporting Best Practice Approaches](#)  
Systematic vs. Narrative Reviews: <http://libguides.mssm.edu/c.php?g=168543&p=1107631>

**NOTE: Please use Verdana 9 font.**

| CONTACT PERSON PREPARING THE SUBMISSION AND TO ANSWER QUESTIONS  |
|--|
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| PROVIDE CONTACT INFORMATION FOR ONE ADDITIONAL PERSON WHO COULD ANSWER QUESTIONS REGARDING THIS PROGRAM  |
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**SECTION I: ACTIVITY OVERVIEW**

**Title of the dental public health activity:**

**New Mexico School-Based Prevention Program**

**Public Health Functions\*:** Check one or more categories related to the activity.

| "X"                       | <b>Assessment</b>   |
|---------------------------|---|
|                           | 1. Assess oral health status and implement an oral health surveillance system.  |
|                           | 2. Analyze determinants of oral health and respond to health hazards in the community   |
|                           | 3. Assess public perceptions about oral health issues and educate/empower them to achieve and maintain optimal oral health                      |
| <b>Policy Development</b> |   |
| x                         | 4. Mobilize community partners to leverage resources and advocate for/act on oral health issues   |
| x                         | 5. Develop and implement policies and systematic plans that support state and community oral health efforts                                     |
| <b>Assurance</b>          |   |
|                           | 6. Review, educate about and enforce laws and regulations that promote oral health and ensure safe oral health practices                        |
| x                         | 7. Reduce barriers to care and assure utilization of personal and population-based oral health services   |
|                           | 8. Assure an adequate and competent public and private oral health workforce  |
| x                         | 9. Evaluate effectiveness, accessibility and quality of personal and population-based oral health promotion activities and oral health services |
|                           | 10. Conduct and review research for new insights and innovative solutions to oral health problems   |

**[\\*ASTDD Guidelines for State and Territorial Oral Health Programs that includes 10 Essential Public Health Services to Promote Oral Health](#)**

**Healthy People 2020 Objectives:** Check one or more key objectives related to the activity. If appropriate, add other national or state HP 2020 Objectives, such as tobacco use or injury.

| "X" | <b><u>Healthy People 2020 Oral Health Objectives</u></b> |   |
|-----|--|---|
| x   | OH-1   | Reduce the proportion of children and adolescents who have dental caries experience in their primary or permanent teeth               |
| x   | OH-2   | Reduce the proportion of children and adolescents with untreated dental decay   |
|     | OH-3   | Reduce the proportion of adults with untreated dental decay   |
|     | OH-4   | Reduce the proportion of adults who have ever had a permanent tooth extracted because of dental caries or periodontal disease         |
|     | OH-5   | Reduce the proportion of adults aged 45 to 74 years with moderate or severe periodontitis   |
|     | OH-6   | Increase the proportion of oral and pharyngeal cancers detected at the earliest stage   |
|     | OH-7   | Increase the proportion of children, adolescents, and adults who used the oral health care system in the past year                    |
|     | OH-8   | Increase the proportion of low-income children and adolescents who received any preventive dental service during the past year        |
| x   | OH-9   | Increase the proportion of school-based health centers with an oral health component  |
|     | OH-10  | Increase the proportion of local health departments and Federally Qualified Health Centers (FQHCs) that have an oral health component |
|     | OH-11  | Increase the proportion of patients who receive oral health services at Federally Qualified Health Centers each year                  |

|   |       |   |
|---|-------|---|
| x | OH-12 | Increase the proportion of children and adolescents who have received dental sealants on their molar teeth  |
|   | OH-13 | Increase the proportion of the U.S. population served by community water systems with optimally fluoridated water   |
|   | OH-14 | Increase the proportion of adults who receive preventive interventions in dental offices  |
|   | OH-15 | Increase the number of States and the District of Columbia that have a system for recording and referring infants and children with cleft lips and cleft palates to craniofacial anomaly rehabilitative teams |
|   | OH-16 | Increase the number of States and the District of Columbia that have an oral and craniofacial health surveillance system  |
|   | OH-17 | Increase health agencies that have a dental public health program directed by a dental professional with public health training   |

|            |  |  |
|------------|--|--|
| <b>"X"</b> | <b>Other national or state <a href="#">Healthy People 2020 Objectives</a>: (list objective number and topic)</b> |  |
|            |  |  |
|            |  |  |
|            |  |  |

**Provide 3-5 Key Words (e.g. fluoride, sealants, access to care, coalitions, policy, Medicaid, etc.) These will assist those looking for information on this topic:**

School-based program, dental sealants, fluoride varnish, oral health promotion, community water fluoridation, mobile dental services, children services

**Executive Summary: Complete after Section II: Detailed Activity Description. Please limit to 300 words in one or two paragraphs.**

Provide a brief description of the dental public health activity. Include information on: (1) what is being done; (2) who is doing it and why; (3) associated costs; (4) outcomes achieved (5) lessons learned, both positive and negative.

The New Mexico Department of Health (DOH), Office of Oral Health (OOH) administers a school-based dental sealant program that provides oral health education, dental screenings, and dental sealant applications on first and second permanent molars. The dental sealant program was developed to provide preventive services for school children to reduce tooth decay, since many low-income children have limited or no access to preventive dental care. In rural areas, all elementary school children are eligible to participate in the dental sealant program. In urban areas, the services are limited to the first, second and third grade students. The program is supported by state staff and by contracted private dental providers. For the program conducted by the state staff, dental case management services are also included. The services are provided for those children with Class II or III caries. The dental case manager work with the parents or guardians of the children to ensure that the child sees a dentist for further treatment or helping them secure a dental home. The New Mexico DOH General Fund along with Federal grants support the program allowing services to be offered at no cost to the parents or guardians and to participating schools. Elementary schools qualify for the program if they have at least 50% or more of its student population on the free and reduced school lunch program. In addition to the dental sealant program, the Office also conducts a fluoride varnish program targeting pre-school aged children in New Mexico. The program consists of providing oral health education, a dental assessment, application of the fluoride varnish (3 times a year), parental notification recommending seeing a dentist if needed, and dental case management services for those with Class II or III. Funding for the dental sealant program is from the State General Fund. The Fluoride Varnish Program is supported by the State General Fund and CDC Funds.

The Department of Health's Strategic Plan FY 17 had identified a number of health indicators to improve the health status of New Mexicans. Oral health is one of the 12. The following are the program strategies for New Mexico:

- Increase the number of dental providers serving the uninsured and low income
- Increase the number of Medicaid dental providers
- Increase the number of children receiving preventive services
- Promote the importance of oral health
- Increase the consumption of fluoridated water.

Both the dental sealant and fluoride varnish program contribute the Department's goal to improve the health status of New Mexicans.

## SECTION II: DETAILED ACTIVITY DESCRIPTION

Provide detailed narrative about the dental public health activity using the headings provided and answering the questions. Include specifics to help readers understand what you are doing and how it's being done. References and links to information may be included.

**\*\*Complete using Verdana 9 font.**

### **Rationale and History of the Activity:**

1. What were the key issues that led to the initiation of this activity?

Chapter 24 of the New Mexico Health and Safety Code mandates the Department of Health (DOH) operate a dental public health program. Because of the mandate, the DOH allocates state funds to operate the Office of Oral Health. The funding supports state staff and contract staff to promote oral health, provide preventive and treatment services to the uninsured and low-income residents and work closely with our sister programs integrating the programs. In 1975 the Office of Oral Health began the dental sealant mobile program and in 2000 the mobile fluoride prevention programs. In 2006 the program conducted a third-grade surveillance survey. The survey identified that 64.6% of NM 3<sup>rd</sup> graders experienced dental caries and 37% had untreated tooth decay. Current program data shows that about 26% of elementary school aged children have untreated tooth decay. Pre-school aged children have 14% active tooth decay. The Department has identified twelve health indicators to improve the health status of New Mexico residents, of the twelve – oral health is one of them. 32 of 33 NM counties are designated as dental professional shortage areas. The state also has few Medicaid dentist providers. In addition, NM is an economically depressed and is a rural/frontier state. There are multiple barriers which many of the low-income and underinsured residents face seeking oral health, medical, and behavioral health. The Department of Health's FY 17 – 19 Strategic Plan calls for the prevention of oral disease, chronic diseases and behavioral health issues. The Office of Oral Health goals are to increase preventive services, increase access to oral health care, improve healthy eating, and increase consumption of fluoridated water.

2. What rationale/evidence (may be anecdotal) did you use to support the implementation of this activity?

Studies have shown that school-linked or school-based programs are successful in reaching low-income children and increasing access to care. Utilization of Registered Dental Hygienists has made the practice of placing dental sealants very efficient in NM without the supervision of a dentists.

The Task Force on Community Preventive Services recommends school-based and school-linked sealant programs for prevention of dental caries based on a systematic review of scientific evidence (MMWR November 30, 2001). NM's school-based dental sealant program is an evidence-based strategy. Furthermore, the dental sealant program addresses the 2020 Healthy People Oral Health Objectives and supports a national effort to reduce children's and adolescent caries experience and increase the placement of dental sealants on permanent molars.

The use of fluoride varnish and dental sealants prevents dental caries (tooth decay). Optimally fluoridated community water can prevent tooth decay in about 80% of the smooth surfaces of teeth and in 20% of fissured chewing surfaces of the teeth. Dental sealants are more effective in preventing dental caries in fissured surfaces and pits of teeth. If dental sealants are properly applied to newly erupted permanent molars on the chewing surfaces and pits, sealants can be 100% effective in preventing tooth decay in these areas. Benefits of dental sealants begin after application and are effective as long as the sealants are retained. Research has documented the effectiveness of

dental sealants in reducing dental decay even when the dental sealants are partially retained. Several studies have shown the combination of fluorides and dental sealants can reduce the incidence of tooth decay up to 85%.

The NM 2006 Oral Health Surveillance Survey reports that 23% of the state’s children in 3<sup>rd</sup> grade have experienced dental caries. NM children from low income families, of a minority racial/ethnic group or an immigrant population, lack dental insurance, or live in dental provider shortage or isolated rural area have higher risk to tooth decay. Many low-income children in NM have limited or no access to preventive dental care. NM is classified as a health care professional shortage state with 32 out of 33 counties designated as such. New Mexico also ranks 49<sup>th</sup> of 50 states in per capita dentists. Studies have shown that school-based programs are successful in reaching the low-income children and underserved rural areas.

3. What month and year did the activity begin and what milestones have occurred along the way? (May include a timeline.)

In 1978, the New Mexico Department of Health (DOH), Office of Oral Health (OOH) began delivering dental sealant services to the state’s elementary schools. The school-based dental sealant program provides direct services with OOH staff applying dental sealants to school children. The success of the program is greatly contributed to the partnerships established with the elementary schools across the state.

In 2006, the program further expanded its services by contracting with private dental providers to provide dental sealant services in underserved areas. The dental sealant program has now become a substantive part of the school health services in many elementary schools. The Office of School Health also provides oral health services at selected School Health Centers throughout the state.

The sections below follow a logic model format. For more information on logic models go to: [W.K. Kellogg Foundation: Logic Model Development Guide](#)

| INPUTS | PROGRAM ACTIVITIES | OUTPUTS | OUTCOMES |
|--------|--------------------|---------|----------|
|--------|--------------------|---------|----------|

1. What resources were needed to carry out the activity? (e.g., staffing, volunteers, funding, partnerships, collaborations with various organizations, etc.)

Program Staff and Contractors

The dental sealant program’s state staff consists of: 3.0 Full Time Equivalent (FTE) dental hygienists, 3 FTE dental assistants, 1.5 FTE dental case managers, and 1 FTE contract dentist. The state staff members form three dental sealant teams. Each team consists of a dental hygienist and dental assistant who travel to schedule to provide screenings and sealants. OOH staff provides dental sealant services through a mobile program with portable equipment. Students participating in the state sponsored sealant program receive dental case management services to ensure that treatment is provided for those children with untreated tooth decay or other issue. The OOH Program Director provides oversight for the dental sealant program and the collection of client/service data statewide.

Fluoride Varnish clinics are coordinated by the Dental Case Manager and dental hygienists. Children participating in the clinics (3 times a year) received oral health education, an assessment, application of the varnish, parents are informed of the services provided and the staff contact the parents should a child need additional treatment.

In order to provide preventive services to other children and adolescents living in rural and frontier areas of the state OOH has contracts with private/public and educational dental providers to provide sealant services to schools not reached by state staff. The contractor’s conduct oral health education, screen or examine, apply sealants, and notify parents that a child needs further dental care. The contractors provide services at schools or at a fixed facility.

In addition to the preventive services, some of the contractors will also provide treatment services.

The State Office of Oral Health has been an advocate for promoting prevention – increased use of

dental sealants and fluoride varnish by all providers.

Dental Case Access Program

The State of NM has five public health regions with satellite office throughout the state. In two of the regions (Santa Fe and Albuquerque), OOH has established a dental case access program. Each access program has a dental case manager who works with the dental sealant teams to identify children in the region requiring case management. The dental case access program alerts parents of their children’s need to obtain restorative care, assists the child/family to secure a dental home, and helps the children complete their treatment plans. The Registered Dental Hygienists also provide dental case management services in other parts of the state.

Collaboration/Integration

The dental sealant program is a substantive part of the school health services in NM elementary schools and will be expanded to middle and high schools. The school officials and personnel (superintendents, principals, school nurses and teachers) are strong partners of the dental sealant program. State contractors providing dental sealant services continue to perform exceptionally.

| INPUTS | <b>PROGRAM ACTIVITIES</b> | OUTPUTS | OUTCOMES |
|--------|---------------------------|---------|----------|
|--------|---------------------------|---------|----------|

- 2. Please provide a detailed description the key aspects of the activity, including the following aspects: administration, operations, and services.

Program Administration

The dental sealant program is administered through the OOH headquarters and through regional offices located in two of the state’s public health regions. The OOH oversees the state staff and contracts with private dental providers and the New Mexico University Dental Health Sciences to provide services beyond the state staff activities and coordinates the statewide program activities with the providers. Each regional office is responsible for the scheduling and coordination of dental sealant services within their geographic area.

Program Operation

The current dental sealant program staff have many years of experiences in implementing a school based dental sealant prevention program using mobile equipment. Program staff strives to assure efficient operation by addressing the following:

- Make sure that all staff members are familiar with how the portable equipment should be transported, set-up and taken-down prior to bringing services to schools. This helps to work out equipment problems and maintain a long service life for equipment.
- Make sure the school provides adequate space to set up equipment including: (1) the setup area has the proper type and number of outlets for electrical hook-ups, (2) access to running water that is close to the setup area, and (3) easy entry to transport equipment and supplies to the setup area.
- Make sure portable dental equipment and supplies can be transported easily in available vehicles. OOH has three 12-passenger vans to transport equipment, supplies and staff to the schools. Equipment and supplies can be transported and set up easily by two people.

Program Services

For the state staff, program services begin with distributing an educational sealant video to the schools or conducting bilingual oral health education. Bilingual consent forms authorizing treatment, informational pamphlets about the benefits of sealants, and general oral health information are given to the schools for the parents/guardians. Class lists of students are returned to the OOH. OOH retains the students’ charts and consent forms from the previous school year, which enables the dental sealant program staff to check and reapply any lost sealants. The program aims to retain all dental sealants placed the previous year.

Consent forms are collected and organized by class list. Dental screenings are then scheduled. The screenings are completed by a licensed dentist who travels to the schools with program staff. The dentist screens the children who have a signed consent form. During the screenings, each child is evaluated to determine their need for sealants. On the same scheduled days, the students previously treated are screened to check for sealant retention. A follow-up letter (along with a toothbrush) is sent home explaining services needed or providing the reason why a child's teeth were not suitable for dental sealants.

In NM, registered dental hygienists are allowed to assess children without direct supervision of a dentist and apply dental sealants. Certified dental assistants can also place dental sealants under the direct supervision of a registered dental hygienist or licensed dentist. Currently, the dental sealant program has dental assistants that are certified in placing dental sealants. The dental hygienists and dental assistants travel throughout the state providing dental sealant services to participating elementary school children.

After completing the placement of dental sealants, another follow-up letter to the parent/guardian goes home with each child. The letter includes the following information:

- How many sealants were provided?
- The reason why sealants were not provided, if this situation arose.
- Recommendations for further dental treatment, and
- The method to contact the program.

| INPUTS | PROGRAM ACTIVITIES | <b>OUTPUTS</b> | OUTCOMES |
|--------|--------------------|----------------|----------|
|--------|--------------------|----------------|----------|

3. What outputs or direct products resulted from program activities? (e.g., number of clients served, number of services units delivered, products developed, accomplishments, etc.)

Program Population and Eligibility

Elementary schools qualify for the program if they have at least 50% or more of its student population on the free and reduced school lunch program. In rural areas, all elementary school children in grades 1-6 are eligible to participate in the dental sealant program. In urban areas, only children in grades 1-3 are eligible for the program. The dental sealant program offers services at no cost to the parents/guardians and participating schools. In addition, children identified with caries are contacted by the Dental Case Manager to assist families secure a dental home.

Outputs

For the school year 2016-17:

- 3,847 students received sealants.
- 2,313 students received fluoride varnish applications (3 times a year)

| INPUTS | PROGRAM ACTIVITIES | OUTPUTS | <b>OUTCOMES</b> |
|--------|--------------------|---------|-----------------|
|--------|--------------------|---------|-----------------|

4. What outcomes did the program achieve? (e.g., health statuses, knowledge, behavior, care delivery system, impact on target population, etc.) Please include the following aspects:

- a. How outcomes are measured
- b. How often they are/were measured
- c. Data sources used
- d. Whether intended to be short-term (attainable within 1-3 years), intermediate (achievable within 4-6 years), or long-term (impact achieved in 7-10 years)

Program Evaluation

The evaluation of the dental sealant program is designed using a goal attainment model. The program consent form requires a signature from a parent/guardian to allow treatment and follow-

up for evaluation of care. The program staff checks the retention of the dental sealants placed in the previous school year and evaluates if recommended dental treatment has been completed.

Follow-up has demonstrated that the program has a retention rate of 85% or better. The program monitors retention rates since a retained dental sealant fully protects at-risk tooth surface from tooth decay, averting dental disease, and saving treatment dollars. High sealant retention rate is required for an effective preventive program.

The Department of Health has established performance measures for various programs. OOH also measures its effectiveness by measuring its success or lack of success in meeting our estimated measures.

### Outcomes

The impact of the program is demonstrated by the following:

- Increased dental sealant prevalence has been observed in the four public health regions of the state. OOH target population is rural/frontier areas of the state.

### **Budgetary Information:**

NOTE: Charts and tables may be used to provide clarity.

1. What is the annual budget for this activity?

The overall OOH budget is \$1.8 million. OOH allocates an estimated \$700,000 general fund for the school-linked dental sealant program.

2. What are the costs associated with the activity? (Including staffing, materials, equipment, etc.)

The budget allocations provide funds for staff salaries (6.5 FTE's), office supplies, clinical supplies, maintenance/repair of portable equipment, travel/gas/vehicles, staff training, and funds to private vendors.

Over \$598,000 dollars are allocated for staff salaries. \$1,045,000 are allocated for contract staff supporting OOH and for local providers and supports our oral health promotion campaign. \$225,000 funds support the program (education material, clinical supplies, vehicle operations)

3. How is the activity funded?

Funding for the dental sealant program is from the State General Fund. The Fluoride Varnish Program is supported by the State General Fund and CDC Funds.

4. What is the plan for sustainability?

The OOH began providing dental sealant services in 1978 to NM elementary school children. The dental sealant program has been in operation for more than 40 years. Program infrastructure includes state funding, employed full-time dental staff, and partnerships with schools across the state. The program has increased its capacity over time and continues to be supported by the state general fund. Of the 135 schools served by state staff 90% of the schools participating continue to participate each year despite the increased number of corporate dental providers.

### **Lessons Learned and/or Plans for Addressing Challenges:**

1. What important lessons were learned that would be useful for others looking to implement a similar activity? Was there anything you would do differently?
  - It is critical to have good communication with schools to ensure that there is adequate space for the equipment, students are present for the services, and consent forms have been collected by the schools.

- Clearly communicate the program’s expectations to each school; be sure the school nurse understands the program’s requirement for space (many schools have limited space) and the length of time needed to complete the sealant services.
- Always have back-up equipment. Since the program requires traveling to schools that are located one to two hours from the home office, time is wasted if there is a need to return to the office for replacement equipment.
- Remain flexible with scheduling screening and treatment days and how to set up in each school.

Plans for improvement

- OOH is planning to develop a new database to better track the dental sealant program services, retention rates, and identify the prevalence of dental caries.
- Increase the number of schools participating in the dental sealant program and expanding the program to adolescents through school based health centers.
- Increasing the number of consent forms obtained by the local schools by providing incentives to the school nurse and teachers.
- Continued partnership with local communities to promote school based oral health programs.

2. What challenges did the activity encounter and how were those addressed?

In many NM schools lack full time nurses often, a nurse may be assigned to several schools and help us secure the consent forms from the students and changes in personnel, without them we must work with several staff to ensure that the consent forms are distributed and collected prior to the clinics. OOH has been working with the NM Office of School and Adolescent Health, School Health Nurse to educate the school nurses about the program and their role in helping distribute and collecting consent forms. NM will also be establishing a Dental Sealant Workgroup to address this issue.

Corporate dentistry is a competitor for the same targeted population. Corporate dentistry does not report data to OOH however; data is reported to the NM Medicaid program to be reimbursed. Corporate dentistry is providing more services in the larger cities but do not appear in rural/frontier areas of the state.

**Available Information Resources:**

Share any models, tools, and/or guidelines developed by the program specifically for this activity that may be useful to others seeking additional information. Hyperlink resources if possible.

- Seal American the Prevention Intervention  
<http://www.mchoralhealth.org/seal/>
- The Association of State and Territorial Dental Directors dental sealant program.  
<http://www.astdd.org/school-based-dental-sealant-programs-introduction/>
- Preventing Dental Caries Through School-Based Sealant Programs: Updated Recommendations and Reviews of Evidence  
<http://jada.ada.org/content/140/11/1356.long>

| <b>TO BE COMPLETED BY ASTDD</b> |   |
|---------------------------------|---|
| Descriptive Report Number:      | 34001   |
| Associated BPARs:               | Fluoride in Schools<br>School-based Dental Sealant Programs                       |
| Submitted by:                   | Office of Oral Health, Public Health Division, New Mexico<br>Department of Health |

|                      |                               |
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