



Progress and Reach of the SEAL!ND Program

SEAL!ND is a program within the North Dakota Department of Health Oral Health Program.

Cavities are one of the most common chronic conditions among children in the United States.¹ Cavities can be prevented by applying dental sealants to permanent molars. In fact, sealants reduce cavities by 80% within the first two years and are shown to continue protecting against 50% of cavities up to four years after placement.¹

What is SEAL!ND?

SEAL!ND is a school-based dental sealant program that provides oral healthcare to low-income and underserved children in North Dakota.² Managed by the North Dakota Department of Health Oral Health Program³, SEAL!ND receives funding from the Health Resources and Services Administration as well as from the Centers for Disease Control and Prevention (CDC).

Students at participating schools attending pre-kindergarten through grade 12 (and with parent/guardian consent) are eligible to receive the direct preventive services. They also receive a goody bag containing a result sheet (what services the child had done), a toothbrush, toothpaste, and floss.

The public health hygienist (PHH), under standing orders with a dentist, offers:

- Oral health education
- An oral health screen
- Dental sealants
- Application of fluoride varnish

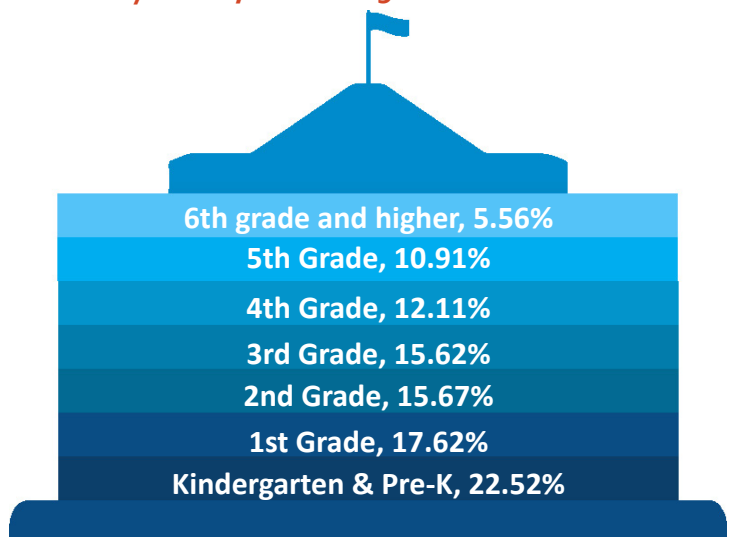
Impact of the SEAL!ND Program

During the 2018-2019 school year, **97 schools** in North Dakota participated in a school-based oral health program. Of those 97 schools, 79 schools participated through the SEAL!ND program, and 48 of those schools met the criteria that 45% or more of the students were on the free and reduced-fee meal program. The following data represent the **1,999 students served** at those 48 schools.

During the 2018-2019 school year, 1,999 children received an oral health screen. More pre-kindergarten students were

screened than any other grade (n=450), following the trend from previous years. Participation in the program decreased among higher grades, which is consistent with CDC best

Figure 1: Percent of Students with an Oral Health Screen by Grade, 2018-2019 School Year

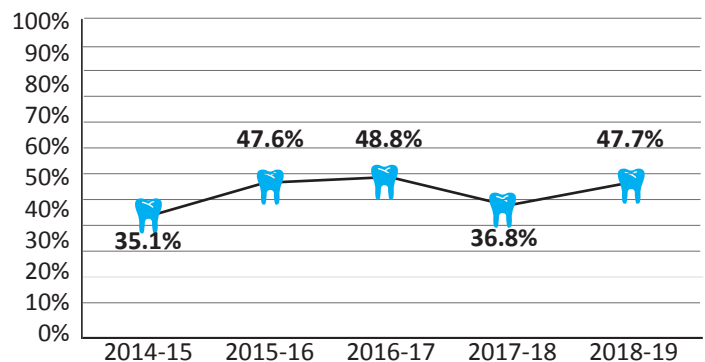


* Total number of students with an oral health screen, n=1,999

Dental Sealants

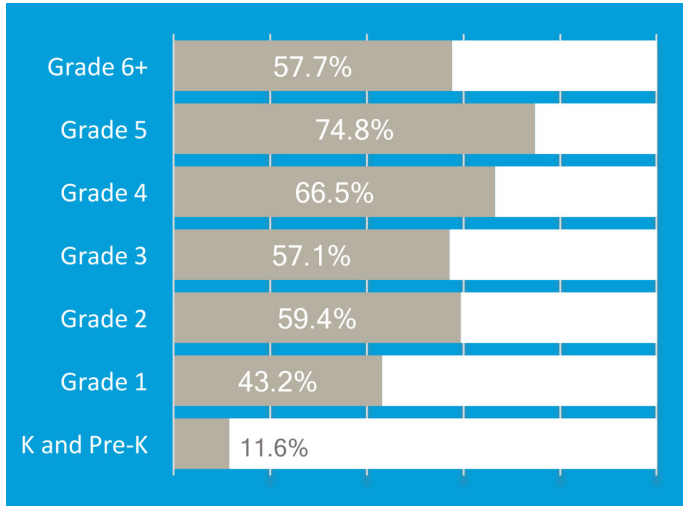
Among the 48 schools, **3,879 molars were sealed** (including first molars, second molars, and other teeth) during the 2018-2019 school year. Roughly one half of all students screened received a dental sealant. See Figure 2.

Figure 2. Percentage of Students that Received Sealants by School Year



Although kindergarten and pre-k students received the greatest proportion of dental screenings, this age group had lower rates of sealant application than any other grade. This is likely because they did not yet have their permanent molars. See Figure 3.

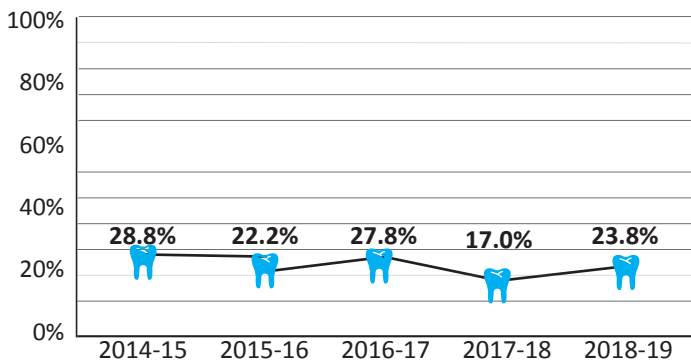
Figure 3: Percent of Students with Sealants Applied by Grade, 2018-2019 School Year



Dental Referral

Generally, a quarter of the students screened are referred for additional dental care. During 2018-2019, **476 students were referred** for dental care; 404 of which were referred for restorative care and 72 for urgent care. Additionally, 495 students had treated decay and 480 students had untreated decay. See Figure 4.

Figure 4. Percent of Students Referred for Dental Care by School Year



Cost Savings

Roughly 1 cavity is prevented for every 3.6 sealants placed. It is then estimated that **688 cavities were averted** from the sealants placed in the 2018-19 school year. In addition to improving the health of students, SEAL!ND **prevented \$53,320 in dental costs**, or \$77.50 per avoided cavity, which is consistent with previous years.

School Satisfaction with SEAL!ND

On average, the participating schools have been happy with the level of communication, resources shared, and the time required to participate in the program. The most significant barrier has been securing a signed consent form from students' guardians. School personnel have shared:

"It has been great!"

"This is a fabulous program!"

"It is a great service to our families."

Data

Data were provided by the North Dakota Department of Health Oral Health Program, and in the evaluation report prepared by the North Dakota State University Center for Social Research and funded by the Centers for Disease Control Prevention DP1810.⁴

Citations

- Centers for Disease Control and Prevention. Children's Oral Health, <https://www.cdc.gov/oralhealth/basics/childrens-oral-health/index.html>.
- North Dakota Oral Health Program. School-Based Sealant Program, <https://oral.health.nd.gov/what-we-do/school-sealant/>.
- North Dakota Oral Health Program. About, <https://oral.health.nd.gov/>.
- North Dakota State University Center for Social Research. Program Evaluation: North Dakota Department of Health Seal!ND 2018-2019.



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For More Information

Visit the North Dakota Oral Health Program webpage at oral.health.nd.gov

Visit the Center for Rural health webpage at ruralhealth.und.edu/what-we-do/oral-health

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