SEAL : Dental Sealant Program
MICHIGAN

2019-2020

193
Schools
Served

6,203
Students
Screened

6,170
Received Fluoride
Varnish

14,334
Sealants
Placed

SEAL! Michigan Need for Further Treatment	
Referred for Treatment Minor Decay or Discomfort 98.6%	
Urgent Dental Care Needs Severe Decay, Abscessed, Pain, etc.	6.0%

Did you know?

A sealant is a thin protective coating that is placed on the chewing surface of the molar.

On average it takes **5 minutes** to place each sealant.



National & State Statistics

FACTS:

- Sealants protect against ≥80% of cavities for up to TWO YEARS¹
- Students miss about 51 million school hours a year due to dental related issues²
- Sealants are the BEST practice approach at preventing decay⁴

National & State Comparison Ages 5-19 Years ³

	United States	Michigan
Experience Decay Fillings, Crowns, Missing Teeth	45.8%	48.1%
Untreated Cavities	18.0%	37.0%

References

¹Centers for Disease Control and Prevention: Vital Signs. (2016) Dental sealants prevent cavities: Effective protection for children—Vital Signs website. https://www.cdc.gov/vitalsigns/pdf/2016-10-vitalsigns.pdf

²Edelstein, B. & Reisine, S. (2015). Fifty-one million. *The Journal of the American Dental Association, 146*(8). 565-566. doi https://doi.org/10.1016/j.adaj.2015.06.003

³Fleming, E., Afful, J. (2018). Prevalence of total and untreated dental caries amount youth: United States, 2015-2016. *National Center for Health Statistics*, 307. Retrieved from https://www.cdc.gov/nchs/data/databriefs/db307.pdf

⁴School-based dental sealant programs. (2015). *Association of State and Territorial Dental Director*. Retrieved from https://www.astdd.org/docs/bparselants-update-03-2015.pdf

SEAL! Michigan

Michigan Dental Sealant Program

All Grantees Data Report

2019-2020 School Year Fiscal Year 2020



Report Purpose

This report is intended to provide a descriptive summary of the patient population serviced by grantees participating in the SEAL! Michigan Dental Sealant Program within the Michigan Department of Health and Human Services during the grant period October 1, 2019-September 30, 2020. Data was obtained from child-level forms submitted by grantees to the Michigan Department of Health and Human Services.

Program-level data are provided in each table and include the total number of patient records with missing data for each reported element. Program Managers should examine areas to improve data quality and collection.

*Note: As a response to the COVID-19 Pandemic, schools and preventive dentistry were both closed under Executive Order No. 2020-17 between March 21, 2020 and May 29, 2020. Thus, SEAL! Michigan providers were unable to serve students via school-based care for several months as the Executive Order expanded into summer vacation.

Demographics Results

Table 1. Gender of Students Screened			
All Grantees			
	Number of Students Percent (%)		
Male	2,961	47.7	
Female	3,207	51.7	
Total	6,168	99.4	
Missing	35	0.6	

A total of 6,203 students were screened between
 October 1, 2019 and September 30, 2020 with 47.7%
 being male and 51.7% being female.

Table 2. Current Grade of Students Screened		
	All Grantees	
	Number of Students	Percent (%)
Kindergarten	817	13.4
1st	1,238	20.3
2nd	1,379	22.6
3rd	580	9.5
4th	587	9.6
5th	529	8.7
6th	509	8.3
7th	326	5.3
8th	110	1.8
9th	13	0.2
10th	12	0.2
11th	5	0.1
12th	8	0.1
Total	6,113	98.5
Missing	90	1.5

- Students from kindergarten through 12th grade were screened, the majority coming from 1st and 2nd grade.
- The average age of the students was 8.2 years and the range was between 4 and 19 years.

Table 3. Race of Students Screened		
	All Grantees	
	Number of Students	Percent (%)
Black	766	12.4
White	3,659	59.0
Asian	162	2.6
Hispanic	455	7.3
Arab American	11	0.2
American Indian/Alaskan Native	106	1.7
Native Hawaiian/Pacific Islander	1	0.0
Other	30	0.5
More than One Race	1,013	16.3
Unknown	0	0.0
Total	6,203	100.0
Missing	0	0.0

- The students were of various racial and ethnic backgrounds including Arab American, Hispanic and Black.
- More than half of the students were white, 12.4% were Black and 16.3% were multiracial.

Table 4. Special Health Care Need Status of Students Screened		
	All Grantees	
	Number of Students Percent (%)	
Has Special Health Care Needs	1,485	23.9
No Special Health Care Needs	4,638	74.8
Total	6,123	98.7
Missing	80	1.3

 One in four students had special health care needs which included those needing more medical care and those receiving special therapy, counseling or treatment.

Table 5. Insurance Status of Students Screened		
	All Grantees	
	Number of Students	Percent (%)
Medicaid	50	0.8
Private	895	14.4
Healthy Kids Dental	3,472	56.0
Other	158	2.5
None	1,202	19.4
Unknown	364	5.9
Total	6,141	99.0
Missing	62	1.0

- Over half of the students were on Healthy Kids Dental Insurance and 0.8% of the students had Medicaid insurance.
- One in five had no dental insurance.

Screening Results

Table 6. Untreated Cavity Status of Students Screened		
	All Grantees	
	Number of Students	Percent (%)
Untreated Cavities Present	2,147	34.6
No Untreated Cavities	4,035	65.0
Total	6,182	99.7
Missing	21	0.3

 At the time of the screening 34.6% of the students had untreated cavities.

Table 7. Caries Experience of Students Screened		
	All Grantees	
	Number of Students	Percent (%)
Caries Experience	3,051	49.2
No Caries Experience	3,100	50.0
Total	6,151	99.2
Missing	52	0.8

 Almost half, 49.2%, of the students screened had evidence of past caries experience (i.e. fillings, crowns, or missing teeth due to extractions).

Table 8. Presence of Sealants among Students Screened		
	All Grantees	
	Number of Students	Percent (%)
Sealants Present	2,445	39.4
No Sealants Present	3,727	60.1
Total	6,172	99.5
Missing	31	0.5

 At the time of the screening, 39.4% of the students had at least one sealant present.

Table 9. Urgency of Needed Treatment among Students Screened		
	All Grantees	
	Number of Students	Percent (%)
No Obvious Problem	4,053	65.3
Early Dental Care	1,761	28.4
Urgent Care Needed	368	5.9
Total	6,182	99.7
Missing	21	0.3

- One in three students were in need of early dental care.
- Almost 6% of the students were in need of urgent dental care.

Table 10. Referral for Treatment Recommended for Students Screened		
	All Grantees	
	Number of Students Percent (%)	
Referred for Treatment	6,119	98.6
Not Referred for Treatment	51	0.8
Total	6,170	99.5
Missing	33	0.5

SEAL! Michigan recommends all students be referred to a dental home after being screened. Referrals could include paperwork and a list of dental referrals, in the 2019-2020 school year, 98.6% of students were referred for treatment.

Table 11. Referral Status by Urgency of Needed Treatment among Students Screened		
	All Grantees Referred for Treatment	
Treatment Urgency	Yes	No
No Obvious Problem	3,992	40
Early Dental Care	1,744	8
Urgent Care Needed	365	2

 Of those students referred for dental treatment, 28.6% were in need of early dental care and 6.0% needed urgent care.

Table 12. Number of Decayed or Filled First Molars per Student Screened		
	All Grantees	
Number of First Molars	Number of Students	Percent (%)
0	5,031	81.1
1	409	6.6
2	286	4.6
3	153	2.5
4	315	5.1
Total	6,194	99.9
Missing	9	0.1

- More than 80% of the students screened had no decayed or filled first molars.
- Of the students screened, 5.1% had evidence of decay or fillings on all four first molars.

Table 13. Number of Decayed or Filled Second Molars per Student Screened		
	All Grantees	
Number of Second Molars	Number of Students	Percent (%)
0	6,045	97.5
1	62	1.0
2	38	0.6
3	10	0.2
4	21	0.3
Total	6,176	99.6
Missing	27	0.4

- Of the students screened, 97.5% had no decay or fillings on their second molars.
- One in 300 had decay or fillings on all four of their second molars.

Preventive Services Results

Table 14. Number of First Molars Sealed per Student Screened		
	All Grantees	
Number of First Molars	Number of Students	Percent (%)
0	3,358	54.1
1	405	6.5
2	517	8.3
3	333	5.4
4	1,567	25.3
Total*	6,180	99.6
Missing	23	0.4

- Almost half of screened students received at least one sealant on a first molar; 6.5% received one sealant, 8.3% received two sealants, 5.4% received three sealants and 25.3% received sealants on all four first molars.
- In total 8,706 sealants were placed on first molars.

*Total number of first molars sealed by all grantees: 8,706

Table 15. Number of Second Molars Sealed per Student Screened		
	All Grantees	
Number of Second Molars	Number of Students	Percent (%)
0	5,547	89.4
1	138	2.2
2	162	2.6
3	86	1.4
4	235	3.8
Total*	6,168	99.4
Missing	35	0.6

- One in 10 of students received at least one sealant on a second molar;
 2.2% received one sealant, 2.6% received two sealants, 1.4% received three sealants and 3.8% received sealants on all four second molars.
- In total, 1,660 sealants were placed on second molars.

^{*}Total number of second molars sealed by all grantees: 1,660

Table 16. Number of Other Teeth Sealed per Student Screened		
	All Grantees	
Number of Other Teeth	Number of Students	Percent (%)
0	5,349	86.2
1	117	1.9
2	99	1.6
3	76	1.2
4	105	1.7
5	54	0.9
6	75	1.2
7	75	1.2
8	220	3.5
Total*	6,170	99.5
Missing	33	0.5

 ^{13.3%} of students received a sealant on a tooth other than the first or second molar.

^{*}Total number of other teeth sealed by all grantees: 3,968

Table 17. Type of Fluoride Treatment Given to Students Screened		
	All Grantees	
	Number of Students	Percent (%)
Varnish	5,354	86.3
Gel/Foam/Rinse	0	0.0
None	816	13.2
Total	6,170	99.5
Missing	33	0.5

 Fluoridation is recommended at these screenings, 86.3% of students received a fluoride varnish treatment.

[•] In total 3,968 sealants were placed on teeth other than a first or second molar.