

Utah Health Status Update:

Seal Your Smile School-based Sealant Program: Addressing Oral Health Disparities in Children

December 2018

Oral health is critical to health and wellbeing; yet, many groups experience a severe and disproportionate burden of oral health disease. These disparities often manifest because of underlying disparities in access to care influenced by social, economic, and environmental determinants.

School-based sealant programs (SBSPs) are a CDC best practice to increase access to preventive dental care for vulnerable populations. Sealants are thin, plastic coatings that protect against 80% of cavities for up to two years.

Seal Your Smile

In fall 2016, the Utah Department of Health (UDOH) Family Dental Plan (FDP), the state dental clinic program, created Seal Your Smile, a SBSP, in response to needs expressed by local school districts.

In 2017, the Salt Lake Education Fund, received a primary care grant and contracted with the FDP to implement the Seal Your Smile program in 12 elementary schools in Salt Lake City School District, all with more than 50% of students dependent on free/reduced lunch.

Teachers distributed more than 5,500 permission slips, in English and Spanish, across grades Pre-K–6. Permission slips provided program information and collected information on student demographics, insurance, and health/dental history.

Week-long dental clinics were held September–December 2017, with follow-up clinics March–May 2018. The program was implemented by a clinic coordinator and dental hygienists who provided dental screenings (including assessing number of untreated and treated cavities [fillings], dental pain, and sealant eligibility), sealant and/or fluoride varnish application, and collected urgency of care data. Only students returning signed permission slips participated.

The UDOH Office of Health Disparities collaborated with the FDP to manage and analyze the data. Data were stored in REDCap, a secure online database and exported to Excel for analysis; when applicable, unpaired t-tests were used to assess statistical significance ($p < 0.05$).

Program Outcomes

- 2,182 dental screenings
 - 1,215 untreated cavities observed in 809 children
 - 2,065 treated cavities observed in 1,072 children
- 4,235 sealants placed on 1,442 eligible children
- 2,158 children received fluoride varnish treatment

Key Findings

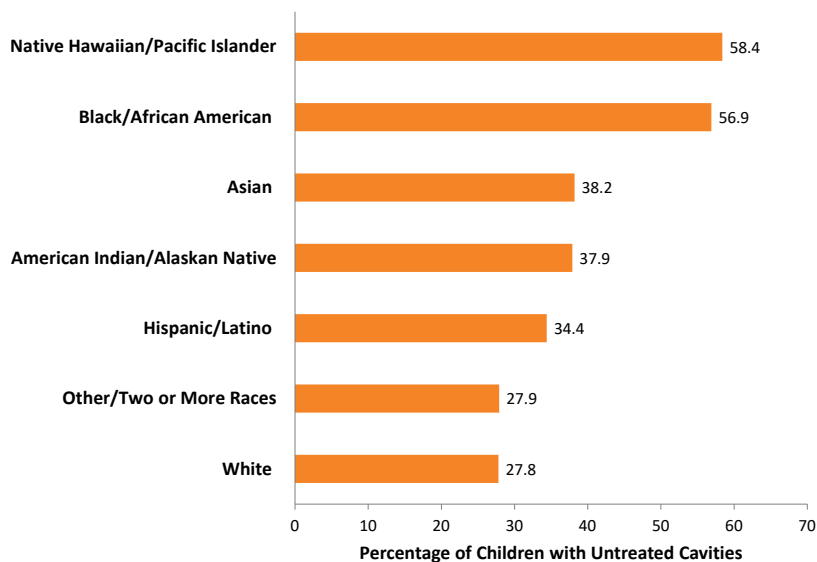
- Participation was dominated by racial/ethnic minority groups and unexpectedly children with dental insurance.

KEY FINDINGS

- More than half of the Native Hawaiian/Pacific Islander (58.4%) and Black African American (56.9%) children that were screened had untreated cavities.
- Asian children had the highest average number of untreated cavities (3.3).
- 320 (14.7%) children complained of tooth pain and nearly half of those children had dental insurance.
- Children with dental insurance comprised an unexpectedly high proportion (46.9%) of those with unmet dental needs.
- 83.3% (1,817) of students had a follow-up screening. Of those, 64.1% still had untreated cavities and 12.1% were still experiencing pain.

Untreated Cavities

Figure 1. Percentage of children with untreated cavities by race/ethnicity, Utah, 2017



Source: Seal Your Smile Program

- Children from racial/ethnic minority groups experienced a higher prevalence and number of untreated cavities compared to White children (Figures 1 and 2).
- Children from minority groups were less likely to have an established dentist.
- 320 (14.7%) children complained of tooth pain and nearly half of those children were insured (Figure 3).
- Children with dental insurance comprised an unexpectedly high proportion (46.9%) of those with unmet dental needs.
- No substantial difference was observed in the average number of sealants placed when students were grouped by 1) having an established dentist, 2) time since last dental visit, and 3) insurance status.
- 1,817 students, or 83.3% of those initially screened were re-screened.
 - 424 (64.1%) still had untreated cavities.
 - 33 (12.1%) were still experiencing pain.

Conclusion

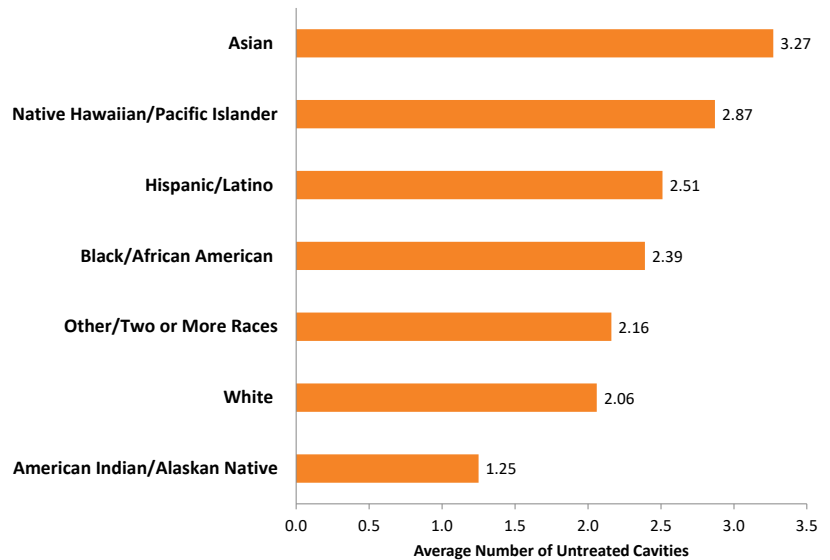
These findings illuminate the extent of oral health disparities in Utah communities and demonstrate the need for SBSPs. They suggest simply having insurance may not be adequate to achieve good oral health and that children may be experiencing limited access to care despite having dental insurance. Thus, children of all appropriate ages, racial/ethnic backgrounds, and socioeconomic statuses can benefit from SBSPs, even the insured. A copy of the full report may be found at <http://health.utah.gov/disparities/data/ohd/SealYourSmileReport-Sept-2018.pdf>.

UDOH ANNOUNCEMENT:

The UDOH-Environmental Sanitation Program conducted an analysis of data from retail food inspections conducted in 2016 by local inspectors. This analysis compared inspection results to the top five foodborne illness risk factors, as identified by the CDC and the FDA interventions for these risk factors. Results from the study can be found at http://health.utah.gov/epi/community/sanitation/foodSafety/Utah%20Risk%20Factor%20Study_2016-2017.pdf.

Average Number of Untreated Cavities

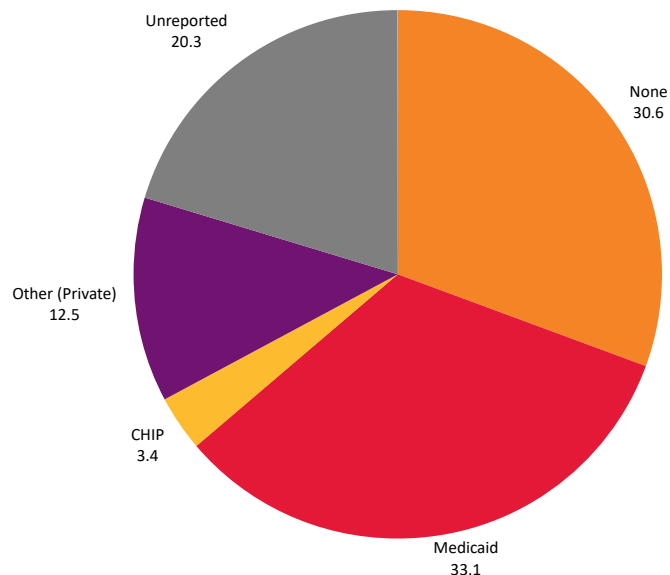
Figure 2. Average number of untreated cavities by race/ethnicity, Utah, 2017



Source: Seal Your Smile Program

Insurance Among Children with Pain

Figure 3. Percentage of children with each type of dental insurance, children with complaints of pain, Utah, 2017



Source: Seal Your Smile Program

For additional information about this topic, contact Brittney Okada, 385-315-0220, bokada@utah.gov; or the Office of Public Health Assessment, Utah Department of Health, (801) 538-9191, chdata@utah.gov.

Breaking News, December 2018

Cross-Cultural Education and Training of Oral Health Education Institutions in Utah

Since 2016, the Utah Department of Health (UDOH) Office of Health Disparities (OHD) worked to improve oral health outcomes among underserved communities. In spring 2018, the OHD conducted a survey among oral health education institutions in Utah. In addition to gathering baseline data, the purpose of the survey was to gain an understanding of the cross-cultural curricula within those institutions and to identify whether they were interested in furthering the cross-cultural experience of their students through community partnerships.

Thirty-four institutions were contacted. The response rates were 100% for dental residencies (3 of 3) and dental schools (2 of 2); 83% for dental hygiene (5 of 6); and 39% for dental assisting schools (9 of 23).

Key findings from the survey include:

- The majority of institutions address cross-cultural issues either in classroom and/or extracurricular settings.
- The largest motivator to offer this type of training was an increasingly diverse patient population.
- The largest overall barriers to providing cross-cultural training were competing curricular time, lack of leadership commitment, and limited financial resources.
- The cross-cultural topics most addressed were disabilities (physical and mental) and linguistic barriers. The least addressed were ageism and gender issues.
- Institutions with longer programs tended to offer students more training opportunities and rated their level of cross-cultural competence as higher.

Institutions that are equipped to address cross-cultural issues will develop a generation of oral health professionals who can positively influence populations facing oral health disparities.

The full report can be found at <https://health.utah.gov/disparities/data/ohd/UT-oral-health-education-survey-August-2018.pdf>.

Community Health Spotlight, December 2018

Medicaid Dental Benefits for Individuals with Disabilities

Dental benefits are now available to Utah Medicaid members who are visually impaired or have a disability, and are 21 years of age or older. Utah Senate Bill 274 (2017) and Utah Senate Bill 39 (2016) directed this policy change. Previously only children and pregnant women were eligible for dental care. It is anticipated this will affect approximately 34,500 individuals statewide.

In January 2019, dental services will be provided through the following dental managed care plans statewide: Managed Care of North America (MCNA) and Premier Access. However, Medicaid members may choose to receive dental care at the University of Utah School of Dentistry.

Medicaid members who are not eligible for dental coverage can use the Family Dental Plan (FDP). The FDP provides dental services for adult Medicaid members who do not have dental coverage. The services are the same as Medicaid services. The patient must pay for services at the same rate Medicaid pays. Payment must be made at the time of service by cash or check with proper identification.

More information about Medicaid dental coverage and providers can be found at <https://medicaid.utah.gov/dental-coverage-and-plans> or by calling a Health Program Representative (HPR) at 1-866-608-9422.

Monthly Health Indicators Report

(Data Through October 2018)

Monthly Report of Notifiable Diseases, October 2018	Current Month # Cases	Current Month # Expected Cases (5-yr average)	# Cases YTD	# Expected YTD (5-yr average)	YTD Standard Morbidity Ratio (obs/exp)
Campylobacteriosis (<i>Campylobacter</i>)	18	44	444	465	1.0
Shiga toxin-producing <i>Escherichia coli</i> (<i>E. coli</i>)	23	11	169	87	1.9
Hepatitis A (infectious hepatitis)	2	7	132	22	5.9
Hepatitis B, acute infections (serum hepatitis)	0	2	14	9	1.6
Influenza*	Weekly updates at http://health.utah.gov/epi/diseases/influenza				
Meningococcal Disease	0	0	3	3	1.2
Pertussis (Whooping Cough)	12	35	277	600	0.5
Salmonellosis (<i>Salmonella</i>)	14	28	291	328	0.9
Shigellosis (<i>Shigella</i>)	3	6	50	37	1.3
Varicella (Chickenpox)	11	20	113	190	0.6
Quarterly Report of Notifiable Diseases, 3rd Qtr 2018	Current Quarter # Cases	Current Quarter # Expected Cases (5-yr average)	# Cases YTD	# Expected YTD (5-yr average)	YTD Standard Morbidity Ratio (obs/exp)
HIV/AIDS†	35	30	99	91	1.1
Chlamydia	2,688	2,099	7,905	4,354	1.8
Gonorrhea	764	387	2,169	770	2.8
Syphilis	46	22	111	42	2.7
Tuberculosis	5	8	15	22	0.7
Medicaid Expenditures (in Millions) for the Month of October 2018‡	Current Month	Expected/Budgeted for Month	Fiscal YTD	Budgeted Fiscal YTD	Variance - over (under) budget
Mental Health Services§	\$ 13.9	\$ 13.6	\$ 57.0	\$ 58.0	\$ (1.0)
Inpatient Hospital Services	\$ 13.4	\$ 13.6	\$ 46.8	\$ 48.6	\$ (1.8)
Outpatient Hospital Services	\$ 4.3	\$ 4.6	\$ 11.1	\$ 11.9	\$ (0.8)
Nursing Home Services	\$ 19.9	\$ 19.3	\$ 64.5	\$ 65.7	\$ (1.2)
Pharmacy Services	\$ 10.1	\$ 10.5	\$ 41.7	\$ 43.5	\$ (1.8)
Physician/Osteo Services	\$ 4.1	\$ 4.3	\$ 19.0	\$ 19.3	\$ (0.4)
Medicaid Expansion Services	\$ 7.1	\$ 7.4	\$ 28.8	\$ 30.6	\$ (1.9)
TOTAL MEDICAID#	\$ 180.6	\$ 181.7	\$ 785.2	\$ 790.4	\$ (5.3)

Program Enrollment for the Month of October 2018	Current Month	Previous Month	% Change** From Previous Month	1 Year Ago	% Change** From 1 Year Ago
Medicaid	271,384	272,050	-0.2%	281,676	-3.7%
PCN (Primary Care Network)	15,149	15,658	-3.3%	14,332	+5.7%
CHIP (Children's Health Ins. Plan)	18,564	18,651	-0.5%	19,439	-4.5%
Health Care System Measures (Year)	Annual Visits			Annual Charges	
	Number of Events	Visits per 1,000 Utahns	% Change** From Previous Year	Total Charges in Millions	% Change** From Previous Year
Overall Hospitalizations (2016)	297,106	97.4	+3.0%	\$ 8,638.0	+8.4%
Non-maternity Hospitalizations (2016)	198,257	65.0	+2.0%	\$ 7,466.1	+9.2%
Emergency Department Encounters** (2016)	756,376	247.9	+7.6%	\$ 2,286.3	+21.7%
Outpatient Surgery (2016)	491,566	161.1	+4.9%	\$ 3,000.6	-0.3%
Annual Community Health Measures	Current Data Year	Number Affected	Percent/Rate	% Change** From Previous Year	State Rank** (1 is best)
Obesity (Adults 18+)	2017	548,100	25.2%	-0.4%	7 (2017)
Cigarette Smoking (Adults 18+)	2017	193,600	8.9%	+1.1%	1 (2017)
Influenza Immunization (Adults 65+)	2017	187,900	56.0%	+2.0%	40 (2017)
Health Insurance Coverage (Uninsured)	2017	304,000	9.8%	+12.6%	n/a
Motor Vehicle Traffic Crash Injury Deaths	2017	280	9.0 / 100,000	+6.9%	16 (2016)
Poisoning Deaths	2017	714	23.0 / 100,000	-0.3%	33 (2016)
Suicide Deaths	2017	663	21.4 / 100,000	+6.3%	47 (2016)
Diabetes Prevalence (Adults 18+)	2017	154,400	7.1%	-1.4%	6 (2017)
Poor Mental Health (Adults 18+)	2017	395,900	18.2%	+7.1%	22 (2017)
Coronary Heart Disease Deaths	2017	1,692	54.5 / 100,000	+1.8%	4 (2016)
All Cancer Deaths	2017	3,160	101.9 / 100,000	-0.4%	1 (2016)
Stroke Deaths	2017	888	28.6 / 100,000	-6.0%	32 (2016)
Births to Adolescents (Ages 15-17)	2017	420	5.8 / 1,000	-7.6%	13 (2017)
Early Prenatal Care	2017	37,395	77.0%	+2.3%	n/a
Infant Mortality	2017	282	5.8 / 1,000	+7.0%	15 (2016)
Childhood Immunization (4:3:1:3:3:1)	2017	35,600	70.2%	-4.6%	46 (2017)

* Influenza activity was minimal in October 2018. Five influenza-associated hospitalizations have been confirmed from September 30, 2018 to October 30, 2018. Active influenza surveillance has begun for the 2018/19 influenza season. More information and weekly reports can be found at http://health.utah.gov/epi/diseases/influenza/surveillance/2018-2019/Utah_Weekly_Influenza_Report.html.

† Diagnosed HIV infections, regardless of AIDS diagnosis.

‡ This state fiscal year (SFY) 2018 report includes supplemental payments to better match the SFY 2018 Medicaid Forecast Budget which costs have not been included in previous years.

§ The SFY 2018 Medicaid Forecast Budget includes Mental Health and Substance Abuse services together while this report only accounts for Mental Health services. This is to stay consistent with the previous years reports.

Medicaid Expansion Services was added to the Medicaid program in SFY 2018. Total Medicaid costs exclude the Prism Project.

** Relative percent change. Percent change could be due to random variation.

†† Treat and release only.

‡‡ State rank based on age-adjusted rates where applicable.

Notes: Data for notifiable diseases are preliminary and subject to change upon the completion of ongoing disease investigations. Active surveillance for West Nile Virus will start in June for the 2019 season.