

HIGH SCHOOL & I/DD ORAL HEALTH DATA BRIEF

2019-2020 North Carolina Oral Health Section High School & I/DD Basic Screening Survey

Background

Tooth decay is one of the most common chronic conditions of childhood. Individuals with intellectual and developmental disabilities (I/DD) have higher levels of dental plaque, more untreated decay, more gum disease, fewer filled teeth, and more missing teeth than their counterparts without I/DD.¹ Additionally, adolescents with I/DD have more difficulty obtaining oral health services than their siblings without I/DD.¹ In 2019, the NC Oral Health Section (OHS) conducted its first ever statewide oral health assessment of high school students with I/DD in North Carolina to gather baseline surveillance data for this compounded vulnerable population group.

Methods

The OHS worked with the North Carolina Department of Public Instruction to secure its list of specialty public high schools enrolling exceptional students. Specifically, the OHS wanted schools that targeted teenagers diagnosed with I/DD. All listed schools were approached to participate in this dental public health surveillance activity. Using the Basic Screening Survey (BSS) for Children developed by the Association of State and Territorial Dental Directors (ASTDD), assessments were completed by public health dental hygienists who were especially trained to offer screenings in this population. Parental consent to participate was obtained for each screening.

Results

Results from the surveillance effort show that the state average for untreated decay was 8.8%. Rates by grade for untreated decay ranged from 3.7% to 11.9%. Grade 9, as these children enter high school, was significantly lower at 3.7% than the other grades. Over half (55.4%) had no decay and no evidence of previous dental treatment. Only 2.7% of students screened in this vulnerable population group were found to have urgent dental needs that required immediate referral to dental care.

Table 1: Oral Health Status – I/DD Population

Oral health data by grade level

Grade	# Screened	% UD	% TD	% ND	% PSLs	% UN
9	54	3.7	44.4	53.7	16.7	3.7
10	83	10.8	21.7	68.7	6.0	1.2
11	59	11.9	33.9	57.6	11.9	1.7
12	136	8.8	47.1	47.1	14.7	3.7
State Total	332	9.0	38.0	55.4	12.3	2.7

Key: % untreated decay (% UD); % treated decay (% TD); % no decay (% ND); % received at least one sealant [permanent or primary molar] (% PSLs); and % needing urgent dental care (% UN).

Discussion

Oral assessments were conducted on 332 high school students (grades 9-12) with I/DD diagnoses. Although the younger age group of 9th graders had the lowest percentage of untreated decay, they tied with 12th graders as having the highest percentage of urgent needs. Overarchingly, the urgent needs rate of 2.7% is close to the rate found in kindergarteners and pre-kindergarteners for North Carolina. This may speak to the fact that children overall are a vulnerable population group and sub-groupings of further segregated populations, might have rates near the more broadly identified group.

It is important to note that only seven out of the 10 regions of the state are represented in this data (i.e., regions 2-5, & 7). The three other regions either did not have any special education public high schools or access to the schools was refused. In addition, this Child BSS activity was planned to take place as the COVID-19 pandemic arrived. Some dental screenings were delayed until, at the end of the 2020 calendar year, it became clear that the project rely on the data already collected.

References

1. Zhou N, Ming Wong H, Feng Wen Y, McGarth C. Oral health status of children and adolescents with intellectual disabilities: a systematic review and meta-analysis. *Dev Med Child Neurol.* 2017; 59(10): 1019-1026. doi: 10.1111/dmcn.13486.

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