

Whatcom County Smile Survey Results 2015-2016

May 2018

Whatcom County Health Department

The purpose of the Whatcom County Smile Survey is to provide current surveillance information to support the development of programs and policies that ensure all children in Whatcom County are healthy and ready to learn. This fact sheet discusses the oral health findings for Whatcom County preschoolers and elementary school children.

During the 2015-2016 school year the Washington State Department of Health Oral Health Program conducted the fifth statewide oral health screening survey of four groups of children: low-income preschoolers enrolled in Head Start and ECEAP programs and public school kindergartners, second and third graders. Concurrently, Whatcom County Health Department partnered with Unity Care NW (formerly known as Interfaith Community Health Center) to conduct a Smile Survey within Whatcom County. As part of this assessment, 281 preschool children from 16 Head Start and ECEAP programs and 1,903 kindergarten, second and third grade children in 15 public elementary schools received a brief oral health screening.

Survey Results: Highlights

Child oral health outcomes in Whatcom County are similar to Washington State. Data indicate that the prevalence of dental sealants, a preventative dental health intervention, among children in kindergarten was significantly higher in 2015 than previous years, following the same trend as Washington State. In addition, survey results suggest an equitable distribution of dental sealants among all racial and ethnic groups. Despite these positive trends, rates of tooth decay are too high, and disparity gaps are too large. More progress is needed to improve oral health among Whatcom County's children.

Decay experience

"Decay experience" is defined by the presence of dental caries and is an indicator of how well efforts aimed at preventing tooth decay are working.

The prevalence of dental caries among Whatcom County kindergartners, second and third graders was similar to Washington State. There was no statistical difference in the prevalence of dental caries from 2010-2015 among any age group in Whatcom County.

Definitions and Key Terms

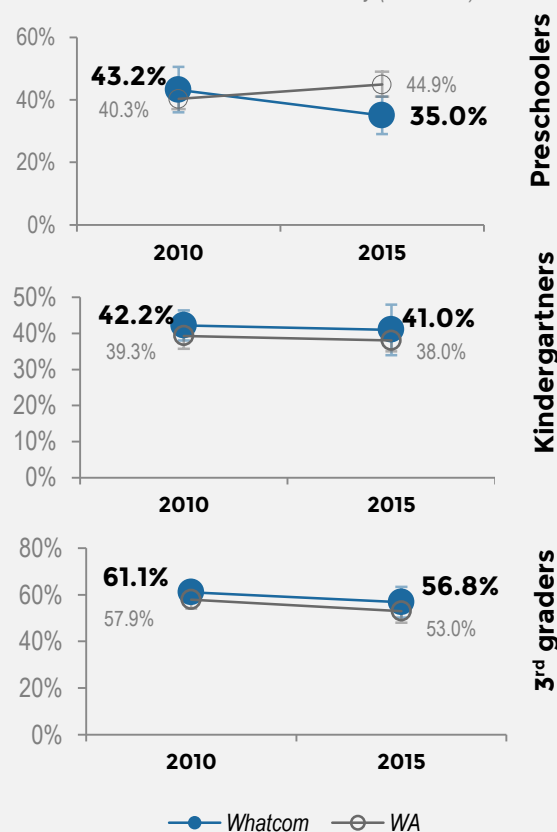
Caries – decay of the tooth caused by bacteria, commonly called cavities

Untreated decay – the presence of an obvious breakdown of the tooth's enamel surface

Sealants – smooth, resinous coatings placed on the chewing surfaces of molar teeth to prevent dental decay

Fig. 1: Decay Experience, 2010-15
Whatcom County vs. WA State

Percent of students with observed decay (i.e. caries)



Untreated decay

Untreated decay is an indicator of barriers to accessing care and treatment for oral health disease.

Fourteen percent (14%) of Whatcom County kindergarteners through third graders had untreated decay, which is better than the Healthy People 2020 oral health target of 25.9%.

Untreated decay rates for all Whatcom County preschoolers, kindergartners, second and third graders were similar to Washington State rates. There was no statistical difference in Whatcom County rates from 2010 to 2015.

Dental sealants

Sealants are a safe, economical, and highly effective way to prevent tooth decay on the chewing surfaces of the back teeth.

Dental sealant prevalence in Whatcom County kindergartners was significantly higher in 2015 compared to 2010, following the same trend as Washington State. Dental sealant prevalence in Whatcom County third graders was similar to Washington State and has remained unchanged since 2010.

Fifty-five percent (55%) of Whatcom County children in second and third grade had dental sealants. This is better than the Healthy People 2020 oral health target of 28.1%. Students with sealants were slightly less likely to have untreated decay (not statistically significant). There were no significant differences in sealants prevalence by race and ethnicity, income, or language spoken.

Fig. 2: Untreated Decay, 2010-15
Whatcom County vs. WA State

Percent of students with untreated decay

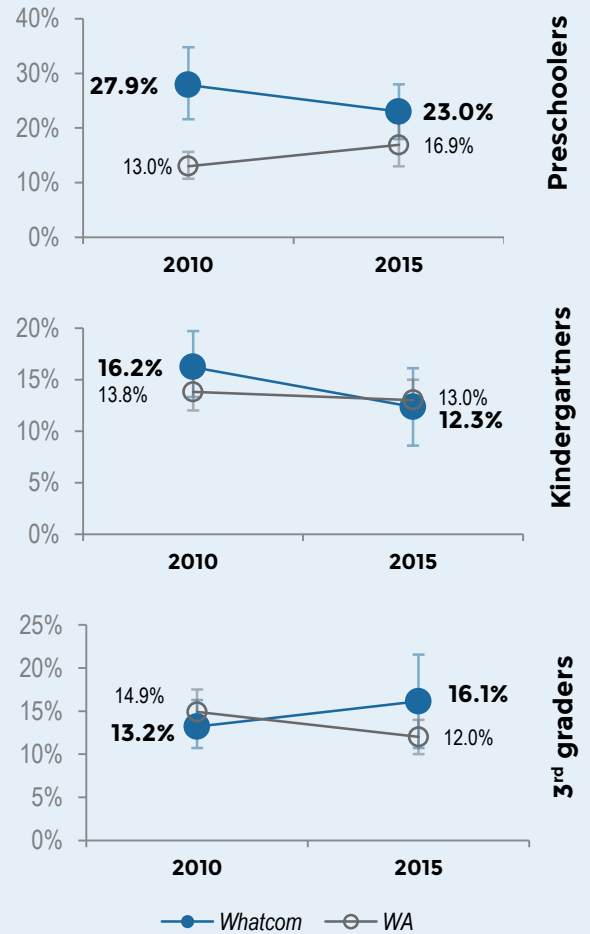


Fig. 3: Dental Sealants, 2010-15

Whatcom County vs. WA State

Percent of students with dental sealants

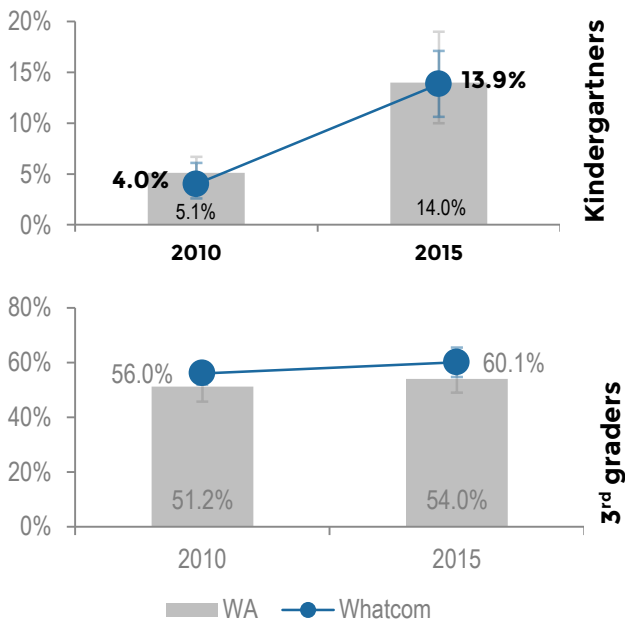
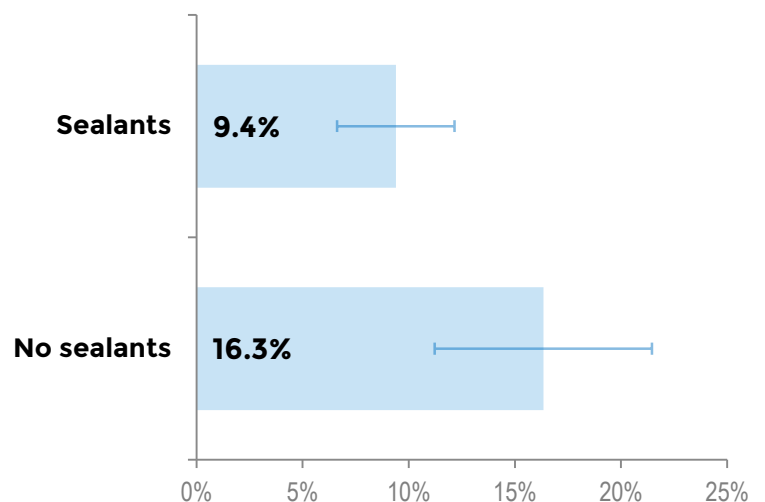


Fig. 4: Untreated Decay by Sealant Prevalence

All ages, Whatcom County

Percent of students with untreated decay



Oral health disparities

For second and third grade combined data

Fig. 5: Decay and Untreated Decay by Income
2nd and 3rd graders, Whatcom County

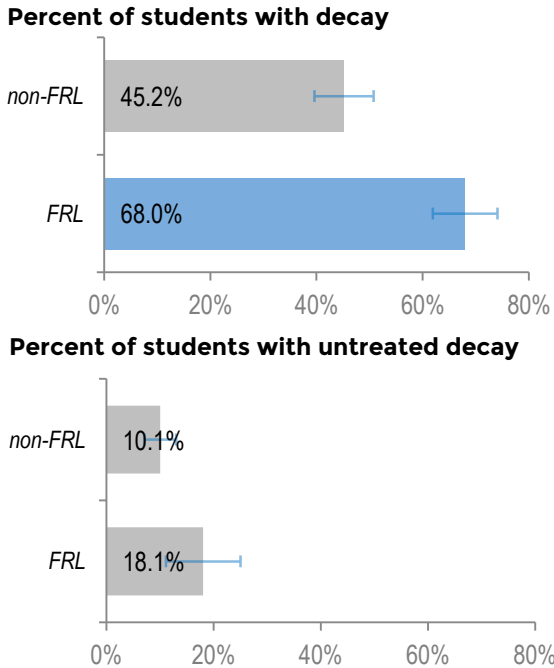
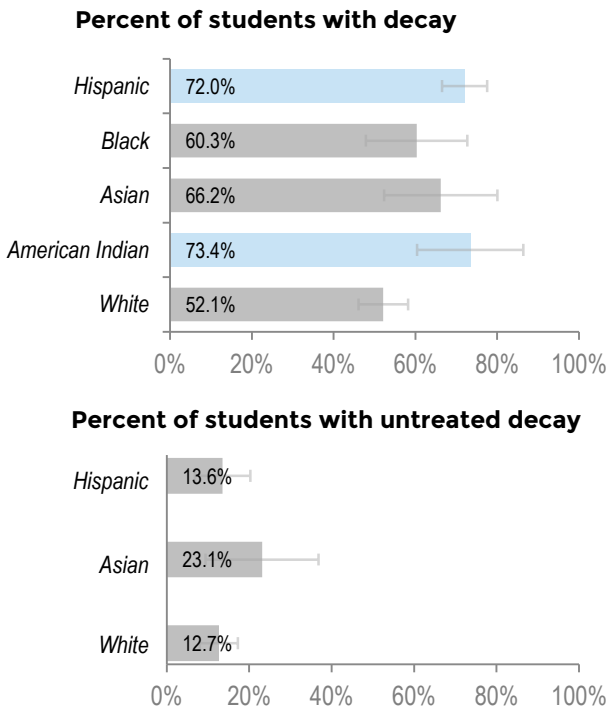


Fig. 6: Decay and Untreated Decay* by Race and Ethnicity
2nd and 3rd graders, Whatcom County



Data for Whatcom County second and third graders was examined for health disparities. Significant oral health inequities exist for Whatcom County and Washington State children who live in lower-income households. Low income is the most significant predictor of poor oral health in children in Whatcom County. For rates of decay, there are also disparities by race and ethnicity and by language spoken in the home.

Disparities by income: Children from lower-income households have poorer oral health outcomes than higher-income peers.

- Decay is higher among students eligible for free and reduced lunch (FRL, a commonly-used indicator of students' household income).
- Untreated decay is higher (not statistically significant) in lower-income students.

Disparities by race and ethnicity: Whatcom County American Indian and Hispanic children in second and third grades had the highest rates of decay experience. White children had the lowest rates of decay. There was no statistical difference in untreated decay by race and ethnicity.

*Untreated decay rates for black and American Indian children were suppressed due to low sample sizes.

Disparities by primary language spoken at home:

Children who live in Spanish-speaking households have a statistically higher rate of decay experience than those whose primary language spoken in the home is English. There was no statistical difference in untreated decay based on language.

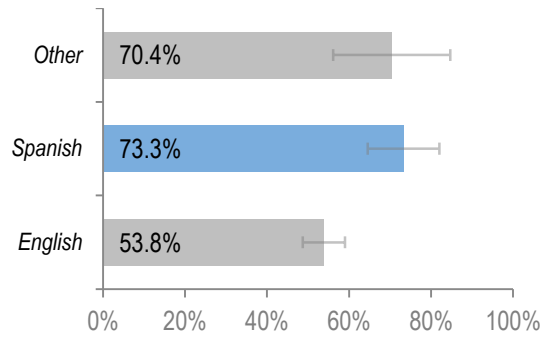
**Untreated decay rates for languages other than Spanish and English were suppressed due to low sample sizes.*

Disparities by school district: Decay experience is lower for students in Bellingham and Ferndale school districts compared to students in other county districts. Untreated decay is similar across districts.

Fig. 7: Decay and Untreated Decay by Language Spoken

2nd and 3rd graders, Whatcom County

Percent of students with decay



Percent of students with untreated decay

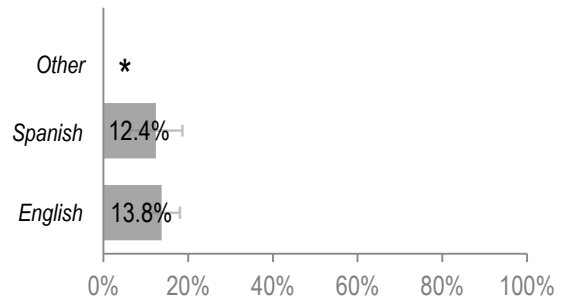
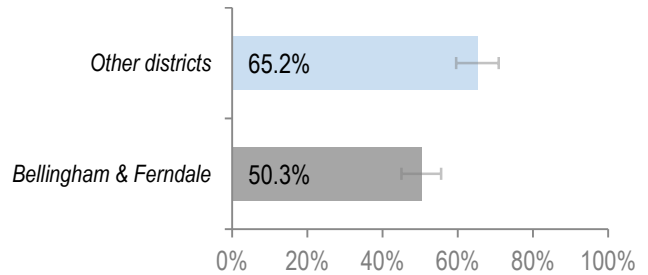


Fig. 8: Decay and Untreated Decay by School District

2nd and 3rd graders, Whatcom County

Percent of students with decay



Percent of students with untreated decay

