

THE TRAGIC TRUTH:

Children's Oral Health Declines in NC Post-COVID



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The World Health Organization declared an end to the COVID-19 pandemic in May of 2023, three years after its onset. Although the pandemic has ended, its aftermath can be seen in the declining oral health of kindergartners in North Carolina (NC). With the temporary shutdown of dental offices and closure of schools across the state, the pandemic posed early challenges to accessing and delivering oral health care, including school-based oral health services. Untreated dental decay is the highest it has been in years and disparities continue to exist across racially and ethnically marginalized populations.

As one of the most common chronic childhood diseases, dental decay is largely preventable, yet continues to pose significant risk to the health and well-being of all children, especially low-income and minority children. School-based oral health services improve access to dental care by providing preventive services such as dental sealants, fluoride, and dental screenings that can identify early or urgent dental needs and connect children to care. For children who are most at-risk, schools may be the only source of dental care they receive.

Dental screenings also serve to monitor the oral health status of communities, which is a key responsibility of the North Carolina Oral Health Section (OHS). On an annual basis, the OHS collects oral health data on kindergartners using the Basic Screening Survey (BSS)¹ in a systematic sample of schools across the state. This state-wide data is used to track trends in oral health, advise policy makers, and inform future dental public health programs and services for children.

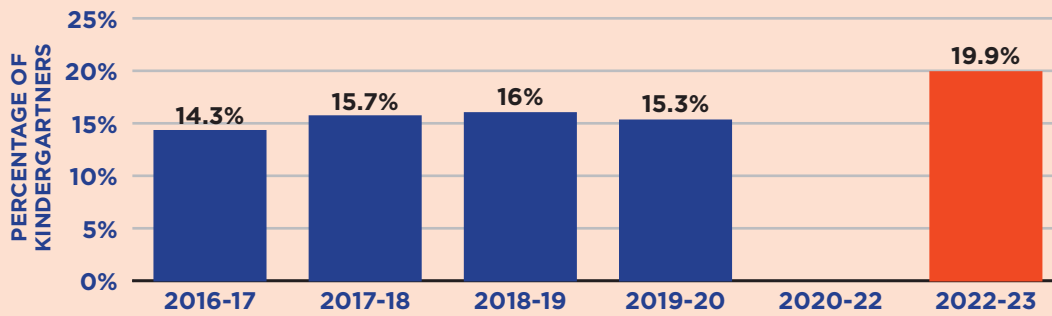
Recent BSS data shows that despite slight fluctuations in kindergarten oral health indicators in the years preceding the pandemic, the current rate of **untreated decay** among kindergartners is the **highest** observed in five years, while rates of **treated decay** and **no decay experience** are at their **lowest** (Figures 1, 2 and 3 respectively).

WHAT ARE THE ORAL HEALTH INDICATORS AND WHY ARE THEY IMPORTANT TO MEASURE?

- **UNTREATED DECAY** = Cavities that have not been filled. Can indicate how well communities are able to access and use dental services.
- **TREATED DECAY** = Cavities that have been filled or teeth pulled due to cavities. Can also indicate how well communities are able to access and use dental services.
- **NO DECAY EXPERIENCE** = No filled or unfilled cavities. The most important indicator – suggests how well the overall oral health system and other determinants of health support optimal oral health of communities.

¹ Association of State and Territorial Dental Directors. (2017). Basic screening surveys: an approach to monitoring community oral health.

FIGURE 1. "UNTREATED DECAY" LEAPS POST PANDEMIC, HIGHEST IN 5 YEARS



3-FOLD RISE IN UNTREATED DECAY

among **Native Hawaiian/Pacific Islander** kindergartners post pandemic compared to **Asian** kindergartners with no increase in untreated decay post pandemic.



2.5x DECREASE IN TREATED DECAY

among **Native Hawaiian/Pacific Islander** kindergartners post pandemic. **American Indian/Alaskan Native** and **Asian** kindergartners also had less treated decay post pandemic.



FIGURE 2. LESS "TREATED DECAY" POST PANDEMIC, LOWEST IN 5 YEARS

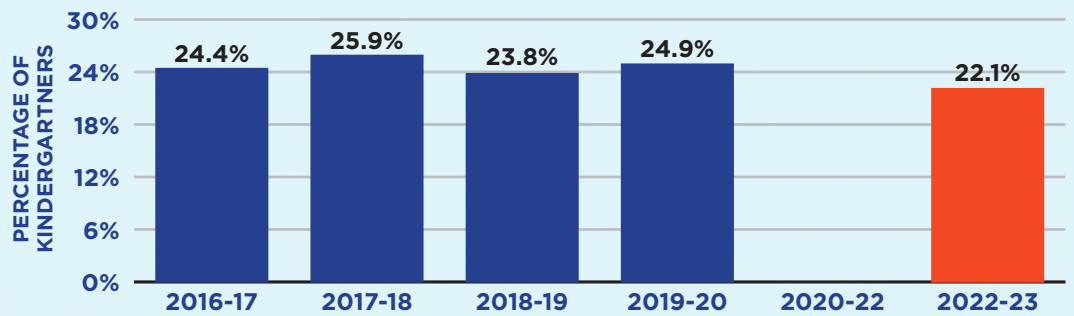
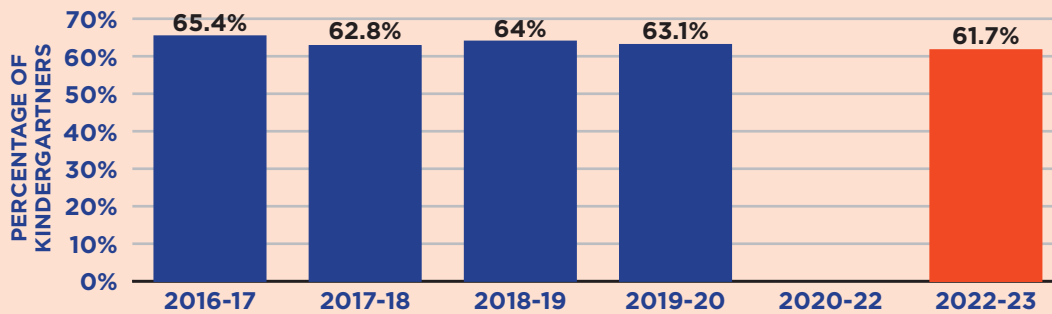


FIGURE 3. LESS "NO DECAY EXPERIENCE" POST PANDEMIC, LOWEST IN 5 YEARS



3 IN 5 KINDERGARTNERS HAVE NO DECAY EXPERIENCE

however **White** kindergartners were consistently more likely to have never experienced tooth decay, both before and after the pandemic.

IMPORTANCE! COVID-19 is here to stay, but declining trends in the oral health of NC's children must not continue. It is essential to recognize that poor oral health can significantly impact a child's quality of life, school performance, and future success. The NC OHS will continue to monitor oral health trends and provide school-based preventive oral health services to help mitigate the negative effects of the pandemic.

Data Source: NC Oral Health Section Surveillance Program. "Pre-pandemic" encompasses school years 2016-2020, and "post-pandemic" pertains to 2022-23. Surveillance data for 2020-2022 excluded due to data insufficiency.

All available oral health surveillance data by region, county and race-ethnicity can be accessed on the [OHS Stats & Data](#) page. For questions related to North Carolina oral health and related data, contact oralhealthdata@s.