

The Oral Health and Body Mass Index of Illinois Third-Grade Children

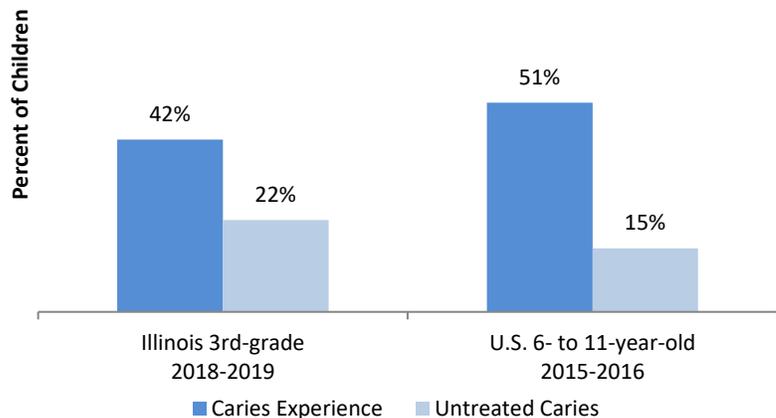
Key Findings: Oral Health, 2018-19

- Caries experience (presence of untreated and treated dental caries) in Illinois' third-grade children is 41.6%, lower than the national average for similarly aged children (51%).
- Fifty-three percent of Illinois' third-grade children have at least one dental sealant present in a permanent molar.
- The overall untreated dental caries rate for Illinois' third-grade children remained unchanged from 2013-14 (22.2%); however, it is higher than the national data reported for a similarly aged child (15.3%).
- In Illinois, Non-Hispanic (NH) Asian and NH Black children's data showed significant disparities. NH Asian children had the highest rate of untreated dental caries (28.8%) followed by NH Black children (26.7%).
- An estimated 4% of Illinois' third-grade children required immediate dental treatment (due to pain, swelling, or infection). This represents about 5,600 third-grade children with pain or infection from a dental issue, double the immediate need estimate as compared to the 2013-14 survey.

Good oral health and healthy weight are important to a child's social, physical, and mental development. To assess the current oral health and weight status of Illinois' elementary-school children, the Illinois Department of Public Health's Division of Oral Health coordinated a statewide oral health survey of third-grade children attending Illinois' public schools. A total of 2,921 third-grade children received a dental screening at 95 participating schools during the 2018-19 school year. This data brief presents information on the prevalence of dental caries (tooth decay or cavities) in the primary and permanent teeth of Illinois' third-grade children. Illinois' data are compared to the similarly aged general U.S. population screened between 2015-16 as part of the National Health and Nutrition Examination Survey (NHANES)². This data brief also describes the prevalence of dental sealants, a preventive dental treatment. Additionally, body mass index data is presented, as well as new data about beverage consumption.

Prevalence of caries experience and untreated caries

Figure 1. Prevalence of caries experience and untreated dental caries in the primary and permanent teeth of Illinois' third-grade children compared to the general U.S. population of 6- to 11-year-old children.



Sources: Illinois Healthy Smiles Healthy Growth Oral Health Survey, 2018-19
National Center for Health Statistics (NCHS) Data Brief No. 307, April 2018

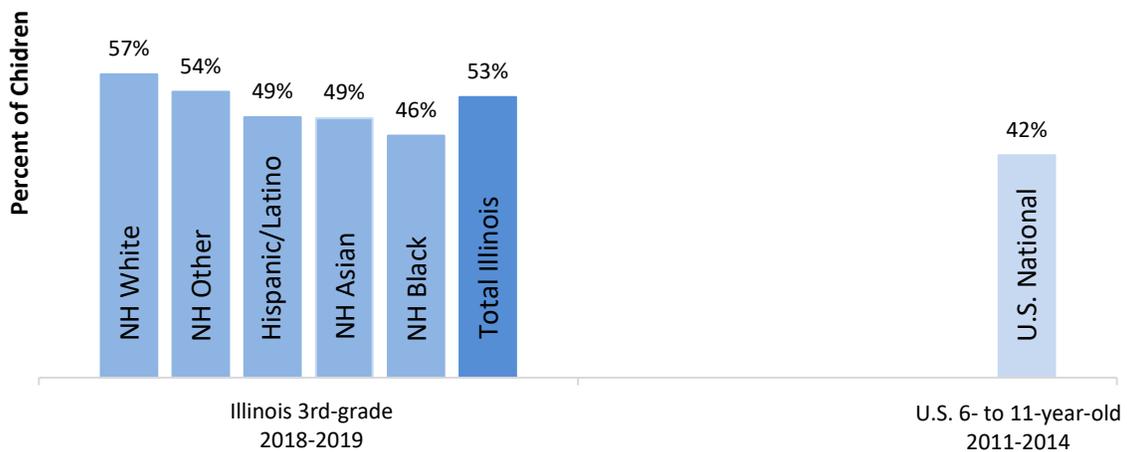
Caries experience means a child has had tooth decay in the primary (baby) and/or permanent (adult) teeth in his or her lifetime. Caries experience can be evidence of past treated decay (fillings, crowns, or teeth extracted because of decay) or present untreated decay (untreated dental caries or cavities). In 2018-19, more than 4 in 10 third-grade children in Illinois (41.6%) had caries experience, compared to 51% of 6- to 11-year-old children in the general U.S. population (NCHS, 2018).

Left untreated, dental caries can have serious consequences, including pain and suffering, difficulty chewing (which compromises children’s nutrition and can slow their development), difficulty speaking, and lost days in school. Nearly a quarter of Illinois’ third-grade children (22.2%) had untreated caries. This compares to 15% of 6- to 11-year-old children in the general U.S. population (NCHS, 2018).

Prevalence of dental sealants

Dental sealants are thin plastic coatings applied to the grooves on the chewing surfaces of permanent molars to protect them from tooth decay. Most tooth decay in children occurs on these surfaces. Sealants protect the chewing surfaces from tooth decay by keeping germs and food particles out of these grooves. More than 5-in-10 (53%) third-grade children in Illinois had at least one protective dental sealant, compared to 42% of the general U.S. population of 6- to 11-year-old children (NHANES, 2011-14).

Figure 2. Prevalence of dental sealants by race/ethnicity in the permanent molar teeth of Illinois’ third-grade children compared to the general U.S. population of 6- to 11-year-old children.



Sources: Illinois Healthy Smiles Healthy Growth Oral Health Survey, 2018-19
National Health and Nutrition Examination Survey (NHANES), 2011-14

Overweight and Obesity Findings, as Calculated Through Body Mass Index (BMI)

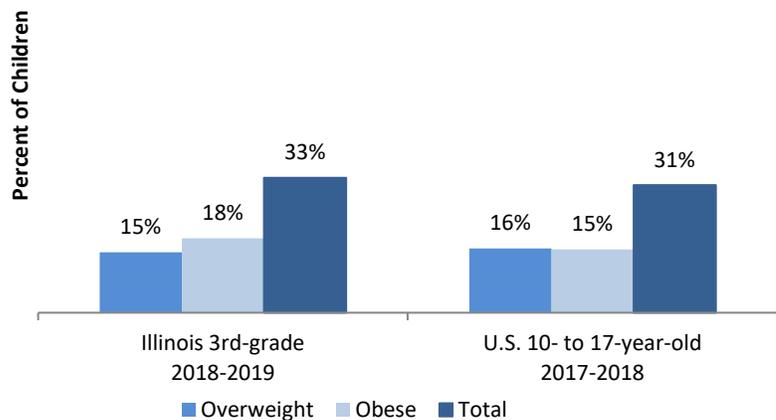
Key Findings: Body Mass Index Status, 2018-19

- About 1 in 5 (18.0%) of Illinois' third-grade children lives with obesity as defined by the U.S. Centers for Disease Control and Prevention (CDC). This is slightly higher than the national average of 15.4% for children 10- to 17-years of age.
- Overweight and obesity decreased in Illinois' third-grade children to 32.6% in 2018-19, from a high of 41.0% in 2003-04., However, it is still higher compared to the national average of 30.8% for children 10-17 years of age.
- About 1 in 3 (30.2%) Hispanic/Latino third-grade children were affected by obesity. These Illinois' children share a disproportional burden of obesity.
- 1 in 2 Illinois' Hispanic/Latino third-grade children were affected by the combination of overweight and obesity.
- Third-grade children eligible for Free and Reduced Meal Program (FRMP) are more affected by overweight and obesity (37.6%) than non-eligible children (24.3%).

Food and beverage consumption habits, in addition to levels of physical activity, greatly impact weight status and are risk factors for oral disease, obesity, diabetes, cardiovascular disease, and cancer. In addition, excessive weight in children may limit the ability to engage with peers in positive relationships, as well as to learn and maintain markers of physical and emotional health. Body Mass Index (BMI) results indicate 18% of Illinois' third-grade children attending public schools are obese, and about 1 in 3 children (32.6%) are either overweight or obese. Disparities in overweight and obesity in Illinois' third-grade children were found by racial/ethnic groups, geography, and incomes levels.

Prevalence of overweight and obesity.

Figure 3. Prevalence of overweight and obesity in Illinois' third-grade children compared to the general U.S. population of 10- to 17-year-old children.



Sources: Illinois Healthy Smiles Healthy Growth Oral Health Survey, 2018-19
National Survey of Children's Health, 2017-18