



the burden of oral disease

Children

Oral Disease in Children

Dental caries (tooth decay) is the most common chronic disease in American children,¹ and more children lack dental care than any other needed health care service.² According to the 2000 Surgeon General's Report on Oral Health, children miss approximately 51 million hours of school annually because of oral health issues in the United States.¹ Lack of optimal oral health can permeate every aspect of a child's life. The pain associated with untreated dental caries can impede a child's ability to eat, talk, sleep, learn, and enjoy playtime activities. Oral health is crucial for the mental, physical, and social well-being of children.¹

Nationwide, 21.3% of children 6-11 years have caries experience [at least one tooth with either untreated or treated (restored or filled) tooth decay].³ Within this age division, caries experience is more common in children 9-11 years (28.8%) than children 6-8 years (13.8%).³ Additionally, 5.6% of 6-11 year old children suffer from untreated dental caries.³ For the measures of both caries experience and untreated decay, black and Hispanic children disproportionately suffer when compared to non-Hispanic white children.³

Risk and Protective Factors for Oral Disease in Children

Children who consume sugary foods and beverages are considered to be at high risk for dental caries.⁴ Poor oral hygiene increases this risk further. Additionally, children raised in families of low socioeconomic status are at an increased risk for tooth decay.¹

One of the primary ways to prevent dental caries in children is through the use of fluoride.⁵ A convenient and effective way for children to gain access to fluoride is through optimally fluoridated community water systems.

According to a review completed by the Community Preventive Services Task Force, children living in communities with optimally fluoridated water suffer from fewer dental caries than those without access to fluoridated water.⁶

Children can also receive fluoride through varnishes applied by health care providers directly to the teeth. Numerous peer-reviewed research articles have found that fluoride varnish can prevent 43% of caries in the permanent teeth of children and 37% of caries in primary (baby) teeth.⁷ Children can also receive protection through the daily use of fluoridated toothpaste.⁵

Another effective way to prevent tooth decay in children is to use dental sealants. Dental sealants are a protective coating placed on the chewing surface of molar teeth. They can reduce dental caries by over 70%.¹

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How is Iowa Doing?

Healthy People 2020 has set goals to reduce the proportion of children with dental caries experience and untreated dental decay. By 2020, Healthy People's goal is to reduce the proportion of 6-9 year old children with caries experience to 49%.¹⁰ In 2016, Iowa conducted an open mouth survey of third grade students across the state. This survey found that 53.6% of these students had caries experience, resulting in Iowa falling short of meeting this Healthy People objective.¹¹ Additionally, Healthy People set the goal to reduce the proportion of 6-9 year old children with untreated decay to 25.9%.¹⁰ Only 16% of Iowa third graders were suffering from untreated decay at the time of this 2016 survey.¹¹ Iowa has met this Healthy People objective.

Healthy People 2020 also set the goal to increase the number of 6-9 year old children with dental sealants on one or more permanent first molar teeth to 28.1%.¹⁰ The 2016 Iowa open mouth survey found that 59.4% of third graders had at least one sealant, resulting in Iowa meeting this Healthy People objective.¹¹

In 2010, the Iowa Child and Family Household Health Survey asked parents of children ages 5-9 years about the physical and oral health of their children. Just over 37% reported the overall oral health of their children to be excellent. This number was much higher (65.4%) for overall physical health.¹²

What is Iowa Doing?

Iowa has been providing gap-filling preventive services and care coordination through the I-Smile™ dental home initiative since 2006. Twenty-three I-Smile™ Coordinators work to ensure at-risk and low income children in all 99 of Iowa's counties are able to receive oral health services and establish dental homes. In 2015, more than 86,000 out of the total 143,000 Medicaid-enrolled Iowa children ages 6-14 years received an oral health service.¹³

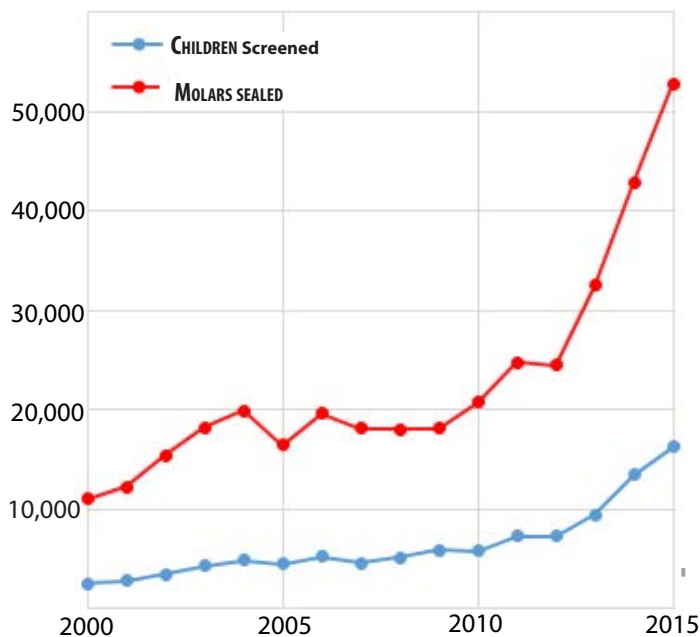
In Iowa, many children receive access to preventive dental services through I-Smile™ @ School (school-based sealant) programs. These programs provide dental screenings, dental sealants, fluoride varnish, oral health education, and referrals to dentists.



School-based sealant programs (SBSPs) are considered a best practice by the Association of State and Territorial Dental Directors and recommended by the Community Preventive Services Task Force.⁸⁻⁹

Iowa children have benefited from SBSPs for many years. In the 2012-2013 school year, seven contracted SBSPs provided services to just over 7,000 children in 26 counties.¹⁴ Enhanced funding for the next three school years allowed the program to expand. For the 2015-2016 school year, 18 contractors provided services to over 16,000 children in 78 counties.¹⁵

IDPH SCHOOL-BASED SEALANT PROGRAMS



Source: Routine IDPH program data
Includes children screened and molars sealed for IDPH school-based sealant programs

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Fact sheet references and additional information can be found at <https://idph.iowa.gov/ohds/oral-health-center/reports>