



FROM THE FIRST TOOTH

HEALTHY SMILES FOR LIFE

From the First Tooth is a statewide children's oral health initiative that works with primary care practices to integrate preventive oral health care into the well-child visit for children ages 6-months up to 21 years. FTFT provides technical assistance to practices as they work to integrate **oral health evaluations, fluoride varnish application, parent and caregiver education, and referral to a dental provider** as a standard of care.

Funded by the Sadie & Harry Davis Foundation, FTFT initiated in 2008 through a pilot program working with 6 organizations and 17 sites. The goal of the pilot was to address an unmet need for preventive oral health care for children ages 6-months through 4 years. As of August 2024, 184 primary care practices participate in the program from all of Maine's 16 counties.

Vision: All children in Maine have access to quality oral health care

Mission: To promote and support the integration of oral health into primary care for all children in Maine

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Dental Caries: What you Need to Know

Dental caries is one of the most common chronic diseases of childhood. Approximately 1 in 4 preschool aged children have experienced dental caries in their primary teeth and approximately 1 in 6 children ages 6-to-11-year experience dental caries in their permanent teeth. The consequences of untreated decay include pain and infection, impaired speech, delays in learning, problems with eating, social development, and, potentially, reduced quality of life.¹

Multiple interrelated social and demographic factors --including income, race, parents' access to dental care, and educational level--can affect children's access to preventive dental care.² In the United States, 25% of children ages 2 to 5 years from low socioeconomic and minority groups experienced 80% of dental disease.³

Unfortunately, U.S. populations with the greatest burden of dental caries are the least likely to have access to dental care. Without access to regular preventive dental services, dental care for many children is postponed until the disease has to be treated in the operating room or symptoms such as toothaches and facial abscesses become so acute that care is sought in hospital emergency departments. The latter consequence of failed prevention not only is wasteful and costly to the healthcare system, but also rarely addresses the problem, as few emergency departments deliver comprehensive dental services.

¹ National Institutes of Health. Oral Health in America: Advances and Challenges. Bethesda, MD: US Department of Health and Human Services, National Institutes of Health, National Institute of Dental and Craniofacial Research, 2021.

²Marmot M, Bell R. Social determinants and dental health. *Adv Dent Res.* 2011;23(2):201– 6.

³ Clark MB, Slayton RL, AAP SECTION ON ORAL HEALTH. Fluoride Use in Caries Prevention in the Primary Care Setting. *Pediatrics.* 2020;146(6):e2020034637

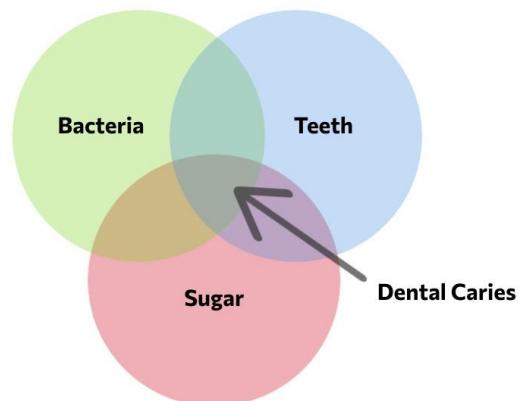
Moreover, in the current healthcare system, dentists generally play a limited role in an infant's health. The U.S. Public Health Service Oral Health Coordinating Committee suggests that pediatricians play a more active role in addressing infant oral health. The U.S. Department of Health and Human Services Oral Health Strategic Framework has provided a foundation of evidence-based solutions to many healthcare access issues and is beginning to address oral health care and reshape the dental care system for young children.⁴

Often healthcare providers see children more than six times in their first year for well-child visits before the child ever sees a dentist. The medical home can play a vital role in improving the oral health of children. In fact, the American Academy of Pediatrics established a policy stating that every child, 6 months through 5 years old, should receive an oral health assessment by a healthcare professional, including a caries risk assessment during the well child visit.⁵

Etiology of Early Childhood Caries

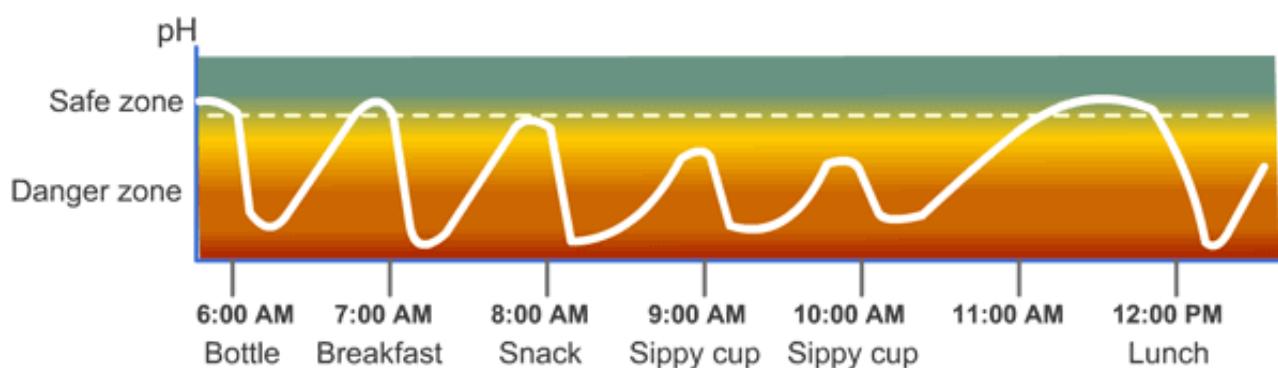
The Triad

Dental caries is a multi-step process that results in destruction of the tooth structure. Oral bacteria (*Streptococcus mutans*) metabolize the sugars from fermentable carbohydrates into acid. The acid demineralizes the tooth enamel. If the cycle of acid production and demineralization continues, the enamel becomes weakened and breaks down into a cavity.



It is not just what but also how often children eat!

- Oral bacteria produce acids that persist for 20–40 minutes after ingesting fermentable carbohydrates.
- Oral acids lead to enamel demineralization.
- Remineralization occurs when acid is buffered by saliva.
- If fermentable carbohydrates are consumed frequently, there is insufficient time for the remineralization process to occur. The tooth is subjected to continued demineralization, and the caries process progresses.
- If fermentable carbohydrates are consumed infrequently, teeth are able to fully remineralize, and the caries process halts.⁶



⁴ U.S. Department of Health and Human Services Oral Health Coordinating Committee. U.S. Department of Health and Human Services Oral Health Strategic Framework, 2014–2017. Public Health Rep. 2016 Mar-Apr;131(2):242-57. PMID: 26957659; PMCID: PMC4765973.

⁵ Policy statement: oral health risk assessment timing and establishment of the dental home. (2003). Pediatrics. 111(5), 1113–1116

⁶ Krol DM, Whelan K; AAP Section on Oral Health. Maintaining and Improving the Oral Health of Young Children. Pediatrics. 2023;151(1):e2022060417