

What is Tooth Decay? How can it be prevented?



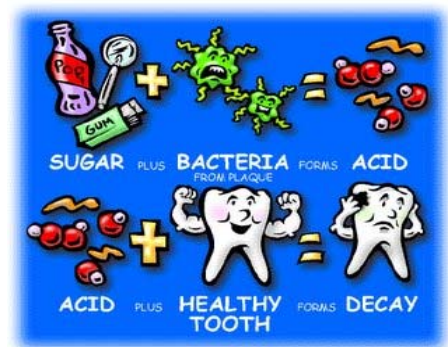
Oral Health in Massachusetts: A Fact Sheet

What is the public health issue?

Tooth decay is a preventable chronic disease that affects almost everyone. Untreated tooth decay or dental cavities can cause pain and tooth loss, which can have negative effects on a child's self esteem. Tooth decay can also affect eating, sleeping, learning, and proper nutrition, as well as employability. In the US more than 55 million school hours are lost by children each year due to dental related illness. Adults lose more than 164 hours of work each year due to oral health problems or dental visits.

How does tooth decay form?

Tooth decay is an infectious disease, meaning the bacteria that cause tooth decay can spread from person to person. The disease starts after eating or drinking something with starch or sugar. Bacteria (germs) in the mouth "eat" these carbohydrates, which allow them to grow and collect together on the tooth. This collection of bacteria is called dental plaque. The bacteria in dental plaque continue to eat carbohydrates and produce acids. These acids weaken the tooth and a hole, or a "cavity," is formed. Some factors that increase a person's risk for tooth decay include certain medications, limited amounts of saliva, a diet high in sugar and carbohydrates, some chronic illnesses, and infrequent oral hygiene practices.



What prevents tooth decay?

Tooth decay can be prevented by following three important prevention strategies:

1. Mechanically removing dental plaque bacteria with a toothbrush every morning and before bedtime, using a very small smear or pea-sized amount of fluoride toothpaste to strengthen the tooth.
2. **Decreasing the frequency** (number of times per day) a person consumes foods/drinks high in **sugar and carbohydrates**.
3. Regularly drinking fluoridated water.

Why is toothbrushing so important?

When done routinely and properly, toothbrushing can reduce the amount of plaque which contains the bacteria associated with gum disease and tooth decay, as well as provide the cavity-preventing benefits of fluoride." Toothbrushing is important for two major reasons:



1. Brushing teeth removes plaque, which contains tooth decay causing germs. Plaque tends to form after meals or drinks that contain any sugar or carbohydrates. Brushing after eating/drinking can remove and control the growth of plaque bacteria (germs) that forms on the teeth.
2. Brushing with toothpaste that contains fluoride makes the tooth stronger and less at-risk for developing tooth decay.

Toothbrushing Instructions

Toothbrushing should be done each morning and before bedtime each night with a **soft bristled** brush. It is especially important to brush all teeth surfaces by gently moving the brush in small circles to remove plaque and food debris, and deliver fluoride from the toothpaste. Also, don't forget to brush the tongue.

Up until about age 8, most children do not have the fine motor skills to independently brush their teeth effectively.

Children need adult supervision and assistance in order to brush safely, correctly, and thoroughly.

Instructions for using Fluoride Toothpaste

Toothpaste chosen for young children should be a general mint flavor. Using fruity flavors encourages children to eat the toothpaste, which is not advised.

- **Children under 2 years of age** should:
 - Use a small smear of fluoride toothpaste;
 - **Spit** it all out in the sink; and
 - Do **NOT rinse with water after brushing.**



- **Children over 2 years of age** should:
 - Use a **pea-sized** amount of fluoride toothpaste;
 - **Spit** it all out in the sink; and
 - **Rinse** with a little tap water.



Choosing a Toothbrush

Choose a toothbrush that is appropriate for the age, size and manual ability of the user. For all children and adults, **only toothbrushes with soft bristles should be used.** Medium and hard bristles can damage the gums and teeth.



A toothbrush should be thrown away and replaced with a new one when: 1. The bristles look frayed and worn; 2. A child has been ill with a cold, flu, or bacterial infection; and/or 3. The toothbrush is 3 months old.

How to brush

- Take one to two minutes to brush well.
- Use a small amount of fluoride toothpaste and a small, soft brush.

1 Top insides
Jiggle along every tooth making sure you clean down to the gums.

2 Bottom insides
Jiggle along every tooth making sure you clean down to the gums.

3 Chewing surfaces
Brush along the top and bottom back teeth.

4 Outsides
Brush using a circular or up and down motion. Start on one side and go all the way to the other side.

Clean your teeth like this two times every day.

Parents should assist with toothbrushing until child is about eight years of age.

Keep toothpaste out of reach of small children.

Image courtesy of: <http://www.squidoo.com/how-to-get-rid-of-sensitive-teeth>

For more information contact the Massachusetts Department of Public Health
Office of Oral Health at www.mass.gov/dph/oralhealth

