Preventing Dental Caries in Children from Birth Through Age Five Years

The U.S. Preventive Services Task Force (Task Force) has issued a final recommendation statement on Prevention of Dental Caries in Children From Birth Through Age Five Years.

This final recommendation statement applies to children from birth through age 5 and to preventive services provided by primary care clinicians. Primary care clinicians include doctors and nurses who provide general health care in a medical setting. This recommendation does not apply to care provided by dentists and other oral health professionals.

The final recommendation statement summarizes what the Task Force learned about the potential benefits and harms of efforts by primary care clinicians to prevent dental caries (tooth decay): (1) Primary care clinicians should prescribe oral fluoride supplements (such as drops, tablets, or lozenges) to children who don’t get enough fluoride from their water supply. The supplements should start when a child is six months old. (2) Primary care clinicians should apply fluoride varnish to the teeth of all infants and children, starting with the appearance of the first primary (“baby”) tooth. (3) There is not enough evidence to say whether having primary care clinicians regularly screen children for dental caries by examining their teeth improves children’s future health.

This fact sheet explains the recommendation and what it might mean for you.

What are dental caries?

Dental caries, also known as tooth decay, occurs when bacteria in the mouth use the sugar in food and drinks to make acids. The acids wear away the outer layer of the tooth (enamel). Tooth decay can eventually lead to a hole, or cavity.

Facts About Tooth Decay and Fluoride

Any child whose teeth have come in can develop tooth decay. This risk is especially high for children whose water supply does not have enough fluoride. Almost half of children ages 2 to 11 have decay in their baby teeth (the first set of teeth that come in).

Tooth decay can be prevented. If tooth decay in children starts and is not treated, it can lead to pain and loss of the affected teeth, and can negatively affect a child’s growth, speech, and appearance.
Fluoride is a mineral that helps strengthen teeth. It is often added to a community’s water supply to help prevent tooth decay. However, many Americans live in communities without fluoridated water. Fluoride supplements (drops, tablets, or lozenges) can decrease the risk of tooth decay for children who live in areas with low levels of fluoride in their water. (Water supply companies are required to produce an annual report that includes information about the fluoride level in the water they provide. Contact your water utility to find out the fluoride level of your water.)

Studies also show that painting a thin coat of fluoride, called fluoride varnish, on the teeth of all young children can prevent tooth decay.

Potential Benefits and Harms of Actions to Prevent Tooth Decay in Young Children

Most young children do not visit a dentist, but they often do see a primary care doctor or nurse. Primary care clinicians, therefore, can complement the important role that dentists play in keeping children’s teeth healthy.

The Task Force reviewed recent studies on the benefits and harms of actions that doctors or nurses can take to prevent tooth decay in infants and children up through age 5. They found two ways that primary care clinicians can help:

- Prescribing fluoride supplements (drops, tablets, or lozenges) to children whose water supply does not have enough fluoride. The supplements should start when children are six months old.
- Putting fluoride varnish on all children’s teeth. This should be started when a child’s first baby tooth has come in.

The Task Force found that any harms from these actions are likely to be small. In nearly all cases in the United States, these harms are very mild changes to the appearance of the teeth, such as small white spots.

The Task Force did not find enough evidence to determine whether regularly screening all children for dental caries will improve a child’s future health. The Task Force found that any harms of screening are likely to be very small.

The Final Recommendations on Preventing Tooth Decay: What Do They Mean?

Here are the Task Force’s final recommendations on actions to prevent tooth decay. The grades are based on the quality and strength of the evidence about the potential benefits and harms of these actions. They also are based on the size of the potential benefits and harms. Task Force recommendation grades are explained in the box at the end of this fact sheet.

When the Task Force recommends a preventive service (Grade B), it is because it has more potential benefits than potential harms. When there is not enough evidence to judge benefits and harms, the Task Force does not make a recommendation for or against—it issues an I Statement. The Notes explain key ideas.

Visit the Task Force Web site to read the full final recommendation statement. The statement explains the evidence the Task Force reviewed and how it decided on the grade. An evidence report provides more detail about the studies the Task Force reviewed.
The Task Force recommends that primary care clinicians prescribe oral fluoride supplementation starting at age 6 months for children whose water supply is deficient in fluoride. Grade B

The Task Force recommends that primary care clinicians apply fluoride varnish to the primary teeth of infants and children starting at the age of primary tooth eruption. Grade B

The Task Force concludes that the current evidence is insufficient to assess the balance of benefits and harms of routine screening examinations for dental caries performed by primary care clinicians in children from birth to age 5 years. I Statement

Taking Action to Prevent Tooth Decay in Young Children

Getting the best health care means making smart decisions about what preventive medications, screening tests, and counseling services to get and when to get them. Many people don't get the medications, tests, or counseling they need. Others get medications, tests, or counseling they don't need or that may be harmful to them.

Task Force recommendations can help you learn about preventive medications, screening tests, and counseling services. These services can keep you and your family healthy and prevent disease. The Task Force recommendations do not cover diagnosis (tests to find out why you are sick) or treatment of disease.

Task Force recommendations also apply to some groups of people, but not others. For example, this recommendation applies only to infants and young children ages five and younger.

Notes

1 primary care clinicians
Health care professionals who provide general health care, including doctors, nurses, physician assistants, and nurse practitioners. This recommendation does not apply to care provided by dentists and other oral health professionals.

oral
Taken by mouth.

supplementation
Getting fluoride through drops, tablets, or lozenges.

deficient
Doesn't have enough (fewer than 6 parts per million).

2 primary teeth
The first set of teeth that come in; also called baby teeth.

starting at the age of primary tooth eruption
Beginning when the first baby tooth has come in.

3 current evidence is insufficient
The Task Force did not find enough information on screening children ages five and younger to determine potential benefits and harms.

screening
Examining a child's entire mouth to see whether a child has dental caries.
Talking to your doctor about preventing tooth decay in infants and young children

You can do many things to keep your children’s teeth healthy and strong. Make sure they have a healthy diet, brush every day with fluoridated toothpaste, and see a dental professional regularly.

Your primary care clinician will likely want to talk with you about applying a fluoride varnish to your child’s teeth once the baby teeth come in. If you live in an area where the local water supply is not fluoridated, he or she may also talk with you about giving your child fluoride supplements. Discuss your child’s risk factors for tooth decay and whether your child is already seeing a dentist. Be comfortable that all your questions have been answered. And consider scientific recommendations, like this one from the Task Force. Use this information to become fully informed about preventing tooth decay.

What is the U.S. Preventive Services Task Force?

The Task Force is an independent group of national experts in prevention and evidence-based medicine. The Task Force works to improve the health of all Americans by making evidence-based recommendations about clinical preventive services such as screenings, counseling services, or preventive medicines. The recommendations apply to people with no signs or symptoms of the disease being discussed.

To develop a recommendation statement, Task Force members consider the best available science and research on a topic. For each topic, the Task Force posts draft documents for public comment, including a draft recommendation statement. All comments are reviewed and considered in developing the final recommendation statement. To learn more, visit the Task Force Web site.

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<tr>
<th>USPSTF Recommendation Grades</th>
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<tr>
<td>Grade</td>
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<tr>
<td>A</td>
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<td>C</td>
<td>Recommendation depends on the patient’s situation.</td>
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<td>D</td>
<td>Not recommended.</td>
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<td>I statement</td>
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Click Here to Learn More About Preventing Tooth Decay

- Take Care of Your Child’s Teeth (healthfinder.gov)
- The Tooth Decay Process: How to Reverse It and Avoid a Cavity (National Institute of Dental and Craniofacial Research)
- Children’s Oral Health (Centers for Disease Control and Prevention)
- Tooth Decay—Early Childhood (MedlinePlus)