



Complete Summary

GUIDELINE TITLE

Clinical guideline on fluoride therapy.

BIBLIOGRAPHIC SOURCE(S)

American Academy of Pediatric Dentistry. Clinical guideline on fluoride therapy. Chicago (IL): American Academy of Pediatric Dentistry; 2003. 2 p. [14 references]

GUIDELINE STATUS

Note: This guideline has been updated. The National Guideline Clearinghouse (NGC) is working to update this summary.

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SCOPE

DISEASE/CONDITION(S)

Dental caries

GUIDELINE CATEGORY

Prevention

CLINICAL SPECIALTY

Dentistry
Pediatrics

INTENDED USERS

Dentists

GUIDELINE OBJECTIVE(S)

To help practitioners and parents/caregivers make decisions concerning appropriate use of fluoride as part of the comprehensive oral health care for infants, children, adolescents, and persons with special health care needs

TARGET POPULATION

Infants, children, adolescents, and persons with special health care needs

INTERVENTIONS AND PRACTICES CONSIDERED

1. Systemically administered fluoride supplements
2. Professionally applied topical fluoride treatment
3. Self- or parentally-applied fluoride:
 - Fluoride-containing toothpaste
 - Home fluoride programs using fluoride mouth rinses or brush-on fluoride gels

MAJOR OUTCOMES CONSIDERED

Not stated

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

A thorough review of the scientific literature pertaining to the use of systemic and topical fluoride was completed to revise and update the guideline on fluoride therapy.

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Not stated

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Not applicable

METHODS USED TO ANALYZE THE EVIDENCE

Review

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

The oral health policies and clinical guidelines of the American Academy of Pediatric Dentistry (AAPD) are developed under the direction of the Board of Trustees, utilizing the resources and expertise of its membership operating through the Council on Clinical Affairs (CCA).

Proposals to develop or modify policies and guidelines may originate from 4 sources:

1. the officers or trustees acting at any meeting of the Board of Trustees
2. a council, committee, or task force in its report to the Board of Trustees
3. any member of the AAPD acting through the Reference Committee hearing of the General Assembly at the Annual Session
4. officers, trustees, council and committee chairs, or other participants at the AAPD's Annual Strategic Planning Session

Regardless of the source, proposals are considered carefully, and those deemed sufficiently meritorious by a majority vote of the Board of Trustees are referred to the CCA for development or review/revision.

Once a charge (directive from the Board of Trustees) for development or review/revision of an oral health policy or clinical guideline is sent to the CCA, it is assigned to 1 or more members of the CCA for completion. CCA members are instructed to follow the specified format for a policy or guideline. All oral health policies and clinical guidelines are based on 2 sources of evidence: (1) the scientific literature; and (2) experts in the field. Members may call upon any expert as a consultant to the council to provide expert opinion. The Council on Scientific Affairs provides input as to the scientific validity of a policy or guideline.

The CCA meets on an interim basis (midwinter) to discuss proposed oral health policies and clinical guidelines. Each new or reviewed/revise policy and guideline is reviewed, discussed, and confirmed by the entire council.

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Once developed by the Council on Clinical Affairs (CCA), the proposed policy or guideline is submitted for the consideration of the Board of Trustees. While the board may request revision, in which case it is returned to the council for modification, once accepted by majority vote of the board, it is referred for Reference Committee hearing at the upcoming Annual Session. At the Reference Committee hearing, the membership may provide comment or suggestion for alteration of the document before presentation to the General Assembly. The final document then is presented for ratification by a majority vote of the membership present and voting at the General Assembly. If accepted by the General Assembly, either as proposed or as amended by that body, the document then becomes the official American Academy of Pediatric Dentistry (AAPD) oral health policy or clinical guideline for publication in the AAPD's Reference Manual and on the AAPD's Web site.

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

Note: This guideline has been updated. The National Guideline Clearinghouse (NGC) is working to update this summary. The recommendations that follow are based on the previous version of the guideline.

Systemically Administered Fluoride Supplements

Fluoride supplements should be considered for all children drinking fluoride-deficient (<0.6 parts per million [ppm]) water. After the fluoride level of the water supply or supplies has been determined, either through contacting public health officials or water analysis, and after evaluating other dietary sources of fluoride and assessing the infant's, child's, or adolescent's caries risk, the daily fluoride supplement dosage schedule can be determined using the Dietary Fluoride Supplementation Schedule (see table below).

Table: Dietary Fluoride Supplementation Schedule

Age	<0.3 ppm F	0.3-0.6 ppm F	>0.6 ppm F
Birth-6 months	0	0	0
6 months-3 years	0.25 mg	0	0
3-6 years	0.50 mg	0.25 mg	0
6 years up to at least 16 years	1.00 mg	0.50 mg	0

Professionally Applied Topical Fluoride Treatment

Professional topical fluoride treatments should be based on caries-risk assessment ("Recommendations for using fluoride," 2001). A pumice prophylaxis is not an essential prerequisite to this treatment (Johnston & Lewis, 1995). Appropriate precautionary measures should be taken to prevent swallowing of any professionally applied topical fluoride.

Self- or Parentally-Applied Fluoride

The use of fluoride-containing toothpaste should be recommended as a primary preventive procedure. Because ingestion of fluoridated toothpaste carries an increased risk of fluorosis, this risk must be weighed against the benefit of caries prevention in determining the use of a fluoridated toothpaste by a child ("Recommendations for using fluoride," 2001). Parents/caregivers should be counseled on the frequency of tooth-brushing and use no more than a "pea-size" amount of toothpaste (Pang & Vann, 1992).

Children at high risk for caries (e.g., children with orthodontic/prosthetic appliances, with reduced salivary function, who are unable to clean teeth properly, are at dietary risk, have mothers or siblings with caries, or have high oral levels of cariogenic bacteria) or children with active caries should be considered for additional fluoride therapy. Home fluoride programs using fluoride mouth rinses or brush-on fluoride gels should be recommended for use by school-aged child at high risk for caries. If a patient at high risk for caries cannot or will not comply with home fluoride therapy, frequent professional fluoride treatments may be substituted.

CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

REFERENCES SUPPORTING THE RECOMMENDATIONS

[References open in a new window](#)

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

All oral health policies and clinical guidelines are based on 2 sources of evidence: (1) the scientific literature; and (2) experts in the field.

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

Use of fluorides for the prevention and control of caries is documented to be both safe and highly effective. Daily fluoride exposure through water supplies or

supplementation and monitored use of fluoride toothpaste after 6 months of age can be effective primary preventive procedures.

POTENTIAL HARMS

The use of fluoridated toothpaste in children who cannot expectorate predictably carries an increased risk of dental fluorosis.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

IMPLEMENTATION TOOLS

Chart Documentation/Checklists/Forms
Resources

For information about [availability](#), see the "Availability of Companion Documents" and "Patient Resources" fields below.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Staying Healthy

IOM DOMAIN

Effectiveness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

American Academy of Pediatric Dentistry. Clinical guideline on fluoride therapy. Chicago (IL): American Academy of Pediatric Dentistry; 2003. 2 p. [14 references]

ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

2003

GUIDELINE DEVELOPER(S)

American Academy of Pediatric Dentistry - Professional Association

SOURCE(S) OF FUNDING

American Academy of Pediatric Dentistry

GUIDELINE COMMITTEE

Liaison with Other Groups Committee

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Not stated

FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

GUIDELINE STATUS

Note: This guideline has been updated. The National Guideline Clearinghouse (NGC) is working to update this summary.

GUIDELINE AVAILABILITY

Electronic copies of the updated guideline: Available from the [American Academy of Pediatric Dentistry Web site](#).

Print copies: Available from the American Academy of Pediatric Dentistry, 211 East Chicago Avenue, Suite 700, Chicago, Illinois 60611

AVAILABILITY OF COMPANION DOCUMENTS

Information about the American Academy of Pediatric Dentistry (AAPD) mission and guideline development process is available on the [AAPD Web site](#).

The following implementation tools are available for download from the AAPD Web site:

- [Dental growth and development chart](#)
- [American Academy of Pediatric Dentistry Caries-Risk Assessment Tool \(CAT\)](#)

PATIENT RESOURCES

None available

NGC STATUS

This NGC summary was completed by ECRI on March 7, 2005. The information was verified by the guideline developer on April 18, 2005.

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