Bright Futures
ORAL HEALTH
Pocket Guide

THIRD EDITION

Bright Futures™

prevention and health promotion for infants, children, adolescents, and their families™

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BRIGHT FUTURES: ORAL HEALTH

Pocket Guide, 3rd Edition

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INTRODUCTION

INTRODUCTION

The Bright Futures project was initiated in 1990 by the Health Resources and Services Administration's (HRSA's) Maternal and Child Health Bureau (MCHB). The mission of the Bright Futures project is to promote and improve the health and well-being of pregnant and postpartum women, infants, children, and adolescents. This is achieved by developing educational materials and fostering partnerships. Bright Futures provides comprehensive, culturally effective, family-centered, community-based health supervision guidelines consistent with the needs of families and health professionals. The Bright Futures guidelines provide the foundation for a coordinated series of educational materials for health professionals and families.

Recognizing oral health as a vital component of health, HRSA's MCHB sponsored the development of *Bright Futures in Practice: Oral Health.* The information contained in *Bright Futures: Oral Health—Pocket Guide* is excerpted from *Bright Futures in Practice: Oral Health,* the cornerstone document *Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents,* and other sources. This pocket guide is designed to be a useful tool for a wide array of health professionals including dentists, dental hygienists, physicians, physician assistants, nurse practitioners, nurses, dietitians, and others to address the oral health needs of pregnant and postpartum women, infants, children, and adolescents.

This pocket guide offers health professionals an overview of preventive oral health

supervision for five periods—pregnancy and postpartum, infancy, early childhood, middle childhood, and adolescence. Although groupings are designed to take advantage of naturally occurring milestones, many oral health issues cut across multiple periods. The information presented in the pocket guide is intended as an overview rather than as a comprehensive description of oral health. The information does not prescribe a specific regimen of care but builds upon existing guidelines and treatment protocols such as those recommended by the Academy of Nutrition and Dietetics, the American Academy of Family Physicians, the American Academy of Pediatric Dentistry, the American Academy of Pediatrics, and the American Dental Association.

Optimal oral health for pregnant and postpartum women, infants, children, and adolescents can be achieved through an effective partnership among families, oral health professionals (e.g., dentists, dental hygienists), and other health professionals (e.g., physicians, physician assistants, nurse practitioners, nurses, dietitians). Health

professionals need to help families understand the causes of oral disease, especially dental caries (tooth decay), and how to prevent or reduce oral disease and injury. By including prevention and early intervention as part of comprehensive oral health services, it may be possible to prevent or reduce future oral disease.

Resistance to tooth decay in pregnant and postpartum women, infants, children, and adolescents is determined partly by physiology and partly by behavior. The younger the child when tooth decay begins, the greater the risk for future decay. Because untreated tooth decay increases in severity, necessitating more extensive and costly treatment secondary to postponing care, timely intervention reduces overall cost associated with treatment. Preventing and/or delaying the onset of tooth decay may

reduce the risk for decay. For this reason, the time to begin preventing oral disease, especially tooth decay, is before teeth begin to erupt.

The first oral examination should occur within 6 months of the eruption of the first

primary tooth and no later than age 12 months. Thereafter the child or adolescent should be seen according to a schedule recommended by the dentist, based on the child's or adolescent's individual needs and susceptibility to disease.

When an oral examination by a dentist is not possible, an infant should receive an oral health risk assessment by age 6 months by a pediatrician or other qualified oral health professional (e.g., dental hygienist) or other health professional. Infants within one of the risk groups listed below should be referred to a dentist as soon as possible.

- Mother or other primary caregiver has active caries
- Parent or other caregiver has low socioeconomic status
- Child receives more than three between-meal foods or beverages containing sugar per day
- Child is put to bed with a bottle or a sippy cup with beverage containing sugar
- Child has special health care needs
- Child is a recent immigrant
- Child has white spot lesions or enamel defects
- Child has visible cavities or fillings
- Child has plaque on teeth

All pregnant and postpartum women, infants, children, and adolescents need dental homes. A dental home is the ongoing relationship between the dentist and the patient, inclusive of all aspects of oral health care delivered in a comprehensive, continuously accessible, coordinated, and

family-centered way. Establishment of the dental home begins no later than age 12 months and includes referrals to dental specialists when appropriate.

A dental home should be able to provide the following:

- Comprehensive oral health care including acute care and preventive services in accordance with accepted guidelines and periodicity schedules
- Comprehensive assessment for oral diseases and conditions
- Individualized preventive oral health program based on risk assessment and periodontal disease risk assessment
- Anticipatory guidance about growth and development issues (e.g., teething, digit or pacifier habits)

- Plan for acute dental-trauma management
- Information about proper care of teeth and gums
- Dietary counseling
- Referrals to dental specialists when care cannot be directly provided within the dental home

If the pregnant or postpartum woman, infant, child, or adolescent does not have a dental home, help the woman or parents find a source of care by doing the following:

- Provide a referral to a dentist in your community. Contact your state or local dental society or pertinent national organizations for a list of such dentists. The following national organizations may be helpful in locating dentists:

  American Academy of Pediatric Dentistry
  211 East Chicago Avenue, Suite 1700
  Chicago, IL 60611-2637
  Phone: (312) 337-2169
  To find a pediatric dentist:
  Website: http://www.aapd.org/finddentist

  American Dental Association
  211 East Chicago Avenue
  Chicago, IL 60611-2678
  Phone: (312) 440-2500
  To find a dentist:
  Website: http://www.mouthhealthy.org/en/find-a-dentist.aspx

- Work with state and local agencies to determine the pregnant or postpartum woman's, infant's, child's, or adolescent's eligibility for public assistance programs such as Medicaid or the Children's Health Insurance Program (CHIP), obtain dental insurance through the Health Insurance Marketplace, or find other sources of funding for oral health care. With this information, help pregnant and postpartum women and parents enroll their child in these programs, get dental insurance, or obtain funding for care.

To learn more about Medicaid and CHIP and how to enroll, contact your state's Medicaid agency or call (877) KIDS-NOW (543-7669).

To find information about health insurance through the Health Insurance Marketplace:

Phone: (800) 318-2596
Website: http://www.healthcare.gov
To find a dentist:
Website: http://www.insurekidsnow.gov

COMPONENTS OF ORAL HEALTH SUPERVISION

COMPONENTS OF ORAL HEALTH SUPERVISION

Optimal oral health supervision for pregnant and postpartum women, infants, children, and adolescents should contain the following components:

Components of Oral Health Supervision	Provided by Oral Health Professionals	Provided by Other Health Professionals
Family preparation	✔	✔
Interview questions	✔	✔
Risk assessment	✔	✔
Examination, including assessment of risk for developing oral disease	✔	
Screening, including recognizing and reporting suspected abuse or neglect	✔	✔
Preventive procedures, such as application of fluoride varnish	✔	✔
Anticipatory guidance	✔	✔
Measurable outcomes	✔	✔
Referrals, as needed	✔	✔

Family Preparation

Just as health professionals prepare for oral health supervision visits, families need to prepare, too. An oral health supervision visit is any dental or medical visit where oral health services are provided. Families can gather health information, prepare questions, and complete forms in anticipation of the visit. This step is an essential component of oral health supervision, and health professionals should give the family information in a culturally and linguistically appropriate manner about how to prepare for the visit.

Interview Questions

The interview addresses key issues (e.g., oral development, teething and tooth eruption, oral hygiene, feeding and eating practices, exposure to fluoride, injury prevention, pregnancy gingivitis) during the oral health supervision visit. The interview should review and discuss information gained from previous oral health supervision visits and address current issues specific to the age and development of the infant, child, adolescent, or pregnant or postpartum woman. Health professionals need to assess whether the child, adolescent, or their parents and pregnant and postpartum women have assumed responsibility for oral health and demonstrate mastery and consistent use of preventive oral health care techniques. As the child, and later the adolescent, becomes more responsible, health professionals should discuss these issues directly with the child or adolescent.

Risk Assessment

Oral health risk assessment, which can be conducted by oral health professionals and other health professionals, is based on the premise that not all infants, children, adolescents, and pregnant and postpartum women are equally likely to develop oral health problems. Thus, individuals at higher risk for oral disease will likely need more complex preventive oral health care and treatment than those at lower risk. Oral health risk assessment involves identifying the risk factors that may impact an individual's oral health. Use the risk assessment tables shown on pages 72–79 to assess the infant's, child's, adolescent's, or pregnant or postpartum woman's risk for oral health issues.

Health professionals may refer to the caries risk assessment tools developed by the American Academy of Pediatric Dentistry, the American Academy of Pediatrics, and the American Dental Association to assist in classifying risk for tooth decay in infants, children, and adolescents based on environmental, physical, and overall health

factors (see caries risk assessment tools described on pages 80–81).

Screening

Health professionals can perform a screening of the lips, tongue, teeth, gums, inside of the cheeks, and roof of the mouth to identify oral disease, especially tooth decay, or other oral conditions (e.g., delayed tooth eruption or premature tooth loss, abscesses, trauma, pregnancy gingivitis) and to provide guidance for management. An oral health screening takes only 2 or 3 minutes.

Screenings are not examinations and do not involve making diagnoses that lead to treatment plans. Only an oral health professional (a dentist or a dental hygienist who is qualified according to state practice acts or regulations to perform examinations) has the education and training needed to conduct oral examinations.

A dental chair is not needed to perform a screening. For infants and children under age 3, the health professional and the parent should sit face to face with their knees

touching, with the child placed in the health professional's and the parent's lap.

The child's head should be nestled securely against the health professional's abdomen, with the child facing the parent. By age 3, children are able to lie flat on an examination table or to sit in front of the parent, with both the child and the parent facing the health professional so that the parent can help position and steady the child. For older children and adolescents, the parent's assistance is not necessary.

With gloved hands, the health professional lifts the lip, views and feels the soft tissues, and views the teeth and the entire mouth. Almost any type of lighting, such as a flashlight, a portable gooseneck lamp, an examination light, or a headlamp, will work for a screening. A tongue depressor or toothbrush can be used to move the tongue and view the teeth. A dental mirror or other similar-sized mirror can make it easier to see behind the teeth and to perform a more thorough screening, but such a mirror is not necessary.

When performing the oral health screening, health professionals should

- Note whether the infant, child, or adolescent is currently in pain or has an abscess on the gums above or below the teeth. An abscess may look like a "gum boil" and may or may not have localized or generalized swelling with or without pus draining from the area. If the infant, child, or adolescent is in pain or has an abscess, refer to a dentist immediately.
- Check whether tooth eruption and loss are proceeding according to schedule

(see Tooth Eruption Chart on pages 84–85).

- Check the teeth for plaque and food debris.
- Note whether any teeth appear to have unusual color or shape.
- Note whether any teeth have untreated decay. Tooth decay may occur on any tooth surface. Tooth decay initially appears as a chalky white area on the enamel. More advanced tooth decay appears as cavities or stains. When decay is observed, refer the infant, child, or adolescent to a dentist. It may be difficult to determine whether discoloration of teeth is attributable to tooth decay. When in doubt, refer to a dentist.
- Note whether any dental trauma has occurred. If teeth are prematurely missing, refer the infant, child, or adolescent to a dentist for space management. If trauma is suspected to be the result of physical abuse, record observations and call the local social service agency.

Health professionals should document oral health history, clinical findings, and recommended follow-up in the infant's, child's, or adolescent's oral health record.

Examination

An oral examination includes a dental history, a clinical oral assessment, and diagnostic procedures such as X-rays. The examination also includes an assessment of the pregnant or postpartum woman's, infant's, child's, or adolescent's risk for developing oral diseases; establishment of

a prevention and/or treatment plan; and determination of the interval for periodic reevaluation based on that assessment. Another appointment will be scheduled if other treatment needs exist.

Preventive Procedures

Health professionals, as approved by state practice acts or regulations, can assess the pregnant or postpartum woman's, infant's, child's, or adolescent's exposure to systemic and topical fluoride, apply fluoride varnish, and prescribe systemic fluoride supplements, if indicated.

Anticipatory Guidance

Anticipatory guidance is the process of providing practical, developmentally appropriate information (e.g., about oral development, teething and tooth eruption,

oral hygiene, feeding and eating practices, exposure to fluoride, injury prevention) to the family about the pregnant or postpartum woman's, infant's, child's, or adolescent's current oral health and what to expect during the next period. The guidance should be modified based on

risk assessment responses. When providing anticipatory guidance, health professionals are encouraged to discuss risk factors. Working in partnership with the family, health professionals can be effective in promoting oral health. Creating opportunities for thoughtful dialogue between families and health professionals is one of the best ways to establish trust and build partnerships that promote oral health and prevent oral disease and injury. Older children and adolescents, as they mature, should actively participate in health partnerships and should assume increasing responsibility for their own oral health.

Measurable Outcomes

The success of oral health supervision can be measured by whether the pregnant or postpartum woman or parent(s), infant, child, or adolescent has achieved certain outcomes. Outcomes are important measurable health indicators that both health professionals and families can identify and track. Outcomes also help oral health professionals determine the periodicity for subsequent visits and help health professionals provide anticipatory guidance. Examples of outcomes are (1) parents understand and practice good oral hygiene and feeding and eating behaviors, (2) child has no oral disease or injury, (3) child practices safety behaviors, and (4) pregnant or postpartum woman and child are under the care of an oral health professional.

Referrals

Because pregnant and postpartum women, infants, children, and adolescents often do not visit oral health professionals on a

regular basis, it is critical that other health professionals who have frequent contact with pregnant and postpartum women, infants, children, and adolescents be able to help prevent or reduce their risk for oral disease, especially tooth decay, and to provide referrals to dentists for intervention or treatment.

Conversely, oral health professionals may be the “first line” in assessing the overall health and well-being of pregnant and postpartum women, infants, children, and adolescents. Oral health professionals can make referrals to other health professionals and can reinforce preventive messages about oral hygiene, nutrition, injury prevention, and other health issues such as tobacco and other substance use prevention.

ORAL HEALTH SUPERVISION

PREGNANCY AND POSTPARTUM

Health professionals should select the information in this section that is most appropriate, using clinical judgment to decide what is timely and relevant for each pregnant or postpartum woman.

Family Preparation

To prepare families for oral health supervision visits, health professionals can provide pregnant and postpartum women with a list of topics to discuss at the next visit. Topics may include the following:

- Changes in the teeth or gums
- Oral hygiene practices (frequency, problems)
- Use of fluoridated water for drinking and cooking

- Use of over-the-counter fluoride products (toothpaste, mouthrinse)
- Eating practices
- Illnesses or infections
- Use of over-the-counter and prescription medications

Interview Questions

Following are examples of questions that health professionals may ask pregnant and postpartum women. In addition to asking these or other interview questions, discuss any issues or concerns the pregnant or postpartum woman has.

- How often do you brush and floss your teeth? Do you use fluoridated toothpaste and mouthrinse?
- Have you had any problems with your gums or teeth? For example, swollen or bleeding gums, a toothache (pain), problems eating or chewing food, or other problems in your mouth?
- Do you have any questions or concerns about getting oral health care while you are pregnant or after your baby is born?
- Since becoming pregnant, have you had morning sickness (vomiting)? How often?
- After your baby is born, how can you help protect your baby's teeth from decay?

Examination

Pregnant and postpartum women should be seen according to a schedule recommended by the dentist, based on the individual's needs or susceptibility to disease.

Anticipatory Guidance

Discuss with Pregnant and Postpartum Women:

Oral Health Care

- The importance and safety of getting oral health care during pregnancy.
- Scheduling a dental appointment as soon as possible if the last dental visit took

place more than 6 months ago or if there are any oral health problems or concerns.

- Informing the dental office about pregnancy and the due date to help the dental team provide the best possible care.
- Taking care of the mouth during preg–nancy and after delivery. If gingivitis occurs, seek treatment to prevent more serious periodontal disease and tooth loss.
- Obtaining needed oral health care, including X-rays, pain medication, and local anesthesia throughout pregnancy.
- Getting oral health treatment, as recommended by an oral health professional, before delivery.

Oral Hygiene

- Brushing the teeth thoroughly twice a day (after breakfast and before bed) with fluoridated toothpaste. Spit out the toothpaste after brushing, but do not rinse with water. The small amount of fluoridated toothpaste that remains in the mouth helps prevent tooth decay. Clean between the teeth daily with floss or an interdental cleaner.
- Replacing toothbrush every 3 or 4 months, or more often if the bristles are frayed.
- Do not share toothbrushes.
- Rinsing every night with an over-the-counter fluoridated, alcohol-free mouthrinse.
- After eating, chewing xylitol-containing gum or using other xylitol-containing products, such as mints, which can help reduce bacteria that can cause tooth decay.

Nutrition

- Eating a variety of healthy foods such as fruits, vegetables, whole-grain products (cereals, bread, or crackers), and dairy

products (milk, cheese, cottage cheese, and unsweetened yogurt). Meats, fish, chicken, eggs, beans, and nuts are also good choices for meals and snacks. Limit eating (grazing) between planned meals and snacks.

- Eating fewer foods with added sugar, such as candy, cookies, and cake, and drinking fewer beverages with added sugar, such as fruit-flavored drinks and pop (soda). Frequent consumption of foods containing sugar increases the risk for tooth decay. Many foods contain one or more types of sugar, and all types of sugar can promote tooth decay. To help choose foods low in sugar, read food labels.
- For snacks, choosing foods with no added sugar, such as fruits, vegetables, cheese, and unsweetened yogurt.
- Drinking water or milk instead of juice, fruit-flavored drinks, or pop (soda).
- Drinking water throughout the day, especially between meals and snacks. Drinking fluoridated water (via a community fluoridated water source) or bottled water that contains fluoride.

- If having problems with nausea, try to eat small amounts of healthy foods throughout the day. And if vomiting, rinse the mouth with a teaspoon of baking soda in a cup of water to stop acid from attacking the teeth.
- To reduce the risk for birth defects, throughout pregnancy, getting 600 micrograms of folic acid each day by taking a dietary supplement of folic acid and eating foods high in folate and foods fortified with folic acid. Examples of these foods include
  - Asparagus, broccoli, and green leafy vegetables, such as lettuce and spinach
  - Legumes (beans, peas, lentils)
  - Papayas, oranges, strawberries, cantaloupe, and bananas
  - Grain products fortified with folic acid (breads, cereals, cornmeal, flour, pasta, white rice)

- Once the infant is born, avoiding testing the temperature of the bottle with the mouth, sharing utensils (e.g., spoons), or orally cleaning a pacifier or a bottle nipple. These practices help prevent transmission of bacteria that cause tooth decay from the parent, especially the mother, to the child via saliva.

Injury Prevention

- Wearing a seat belt while riding in or driving a vehicle. If you are driving, insist that passengers also wear seat belts.
- Wearing protective gear (e.g., mouth guard, face protector, helmet) when participating in physical activities or sports that could result in injuries to the mouth, such as biking or playing baseball or soccer.
- Not getting oral piercings, which can damage teeth and gums.

Substance Use

- Not smoking cigarettes (cigarettes or e-cigarettes) or using chewing tobacco. Avoiding secondhand smoke.
- Not using recreational drugs.
- Stopping consumption of alcoholic beverages.

Outcomes

- Pregnant and postpartum women are under the care of an oral health professional.
- Pregnant and postpartum women are informed of and understand the need for oral health care.
- Pregnant and postpartum women understand and practice good oral hygiene, eating and feeding behaviors, and other healthy behaviors.
- Pregnant and postpartum women have no oral disease or injury.

INFANCY

Health professionals should select the information in this section that is most appropriate, using clinical judgment to decide what is timely and relevant for each individual infant and family.

Family Preparation

To help prepare families for oral health supervision visits, health professionals can provide parents with a list of topics to discuss at the next visit. Topics may include the following:

- Teething and other changes in the mouth
- Oral hygiene practices (frequency, problems)
- Use of fluoridated water for drinking, cooking, or formula preparation
- Fluoride use (fluoridated toothpaste, fluoride supplements)
- Use of a bottle or cup by infant
- Feeding practices

- Nonnutritive sucking (pacifier, thumb, finger)
- Illnesses or infections
- Medications
- Injuries to the teeth or mouth
- Use of tobacco by parents

Interview Questions

Following are examples of questions that health professionals may use. In addition to asking these or other interview questions, discuss any issues or concerns the family has.

- Does Felicity have any teeth? How many?
- Do you brush Alexander's teeth? How often?
- Do you use fluoridated toothpaste? How much?
- Are you breastfeeding, bottle feeding, or both? How is feeding going?
- How well does Julia fall asleep? Do you give her a bottle in bed? What is in the bottle when you put her to bed?
- Does Thomas use a pacifier? Does he suck his thumb or finger?

- Do you put Celeste in a rear-facing car seat when she rides in a vehicle? Do you buckle her in the car seat?
- Do you have a family dentist? Did you see a dentist during your pregnancy?
- Has Carlos been to the dentist? Does he have a dental home? If not, have you made an appointment for his first dental visit?
- Has Natalie been to a health professional? If not, have you made an appointment for her first health supervision visit?

Risk Assessment

Use the risk assessment tables shown on pages 72–79 and caries risk assessment tools described on pages 80–81 to assess the infant's risk factors for oral health issues.

Screening

Visually inspect the lips, tongue, teeth, gums, inside of the cheeks, and roof of the mouth.

Examination

The first oral examination should occur within 6 months of the eruption of the first primary tooth, and no later than age 12 months.

Anticipatory Guidance

Discuss with Parents:

Oral Health Care

- Making an appointment for the infant's first oral examination within 6 months of the eruption of the first primary tooth, and no later than age 12 months, thereby establishing a dental home.

- After the initial dental visit, making the next appointment for the infant according to the schedule recommended by the dentist, based on the infant's individual needs or risk for developing tooth decay.
- For infants with special health care needs, making appointments for more frequent dental visits as directed by the dentist based on the infant's needs or susceptibility to disease.
- Discussing with a dentist or other qualified health professional the need to apply fluoride varnish. Topical fluoride may be especially effective for infants at high risk for tooth decay, particularly those who have a history of decay, do not have access to fluoridated water, snack frequently on foods or beverages containing sugar, or have a medical

problem that decreases their resistance to tooth decay.

- Giving the infant age 6 months or older at high risk for developing tooth decay dietary fluoride supplements only as prescribed by a dentist or physician (see Dietary Fluoride Supplementation Schedule for Children and Adolescents at High Risk for Developing Caries on page 86).

Oral Hygiene

- Cleaning the infant's gums with a soft clean damp cloth at least once a day. This helps the infant become comfortable with someone working in his or her mouth.
- Brushing the infant's teeth with a small smear of fluoridated toothpaste as soon as the first tooth erupts, usually around age 6 to 10 months, twice a day (after breakfast and before bed). Do not rinse the infant's mouth with water. The small amount of fluoridated toothpaste that remains in the mouth helps prevent tooth decay.

- Using a soft-bristled toothbrush with a small head, preferably one designed specifically for infants.
- Not giving the infant anything to eat or drink (except water) after brushing at night.
- For infants with special health care needs, adapting or obtaining special oral health equipment (e.g., adapting a toothbrush) to brush the teeth.
- Becoming familiar with the normal appearance of the infant's gums and teeth so that problems can be identified if they occur (see Tooth Eruption Chart on pages 84–85). Checking the infant's gums and teeth about once a month by lifting the lip to look for decay on the outside and inside surfaces of the teeth.
- If the infant has sore gums caused by tooth eruption, rubbing the infant's gums with a clean finger or a moistened gauze pad or cool damp washcloth to try to ease the discomfort. Other options include giving the infant a chilled teething ring (made of firm rubber) or cool spoon. If the infant is especially cranky, give acetaminophen or ibuprofen, following the dosage directions for infants on the container.

Nutrition

- Breastfeeding the infant exclusively for approximately the first 6 months of life, and continuing to breastfeed until age 12 months or as long as the mother and infant wish to continue.
- For mothers who cannot breastfeed or choose not to breastfeed, feeding the infant a prepared infant formula. Use fluoridated water (via a community fluoridated water source) or bottled

water that contains fluoride for preparing infant formula.

- Avoiding testing the temperature of the bottle with the mouth, sharing utensils (e.g., spoons), or orally cleaning a pacifier or a bottle nipple. This practice helps prevent transmission of bacteria that cause tooth decay from the parent, especially the mother, to the child via saliva.
- To prevent sugary fluids from pooling around the teeth, which can increase the infant's risk for tooth decay, not putting the infant to sleep with a bottle or sippy cup. Also, do not allow prolonged bottle feedings or use of sippy cups with beverages containing sugar (e.g., fruit drinks, pop (soda), fruit juice), milk, or formula during the day or at night.
- Holding the infant while feeding. Make sure to never prop a bottle (that is, use pillows or any other objects to hold a bottle in the infant's mouth).
- Never adding cereal to a bottle. This causes sugary fluids to pool around the teeth. Feed infants solid foods with a spoon or fork, or, once they are able, encourage self-feeding.

- Introducing a small cup when the infant can sit up without support.
- Weaning the infant from the bottle as the infant begins to eat more solid foods and drink from a cup. Begin to wean the infant gradually, at about age 9 to 10 months. By age 12 to 14 months, most infants can drink from a cup.
- Not introducing juice into infants' diets before age 6 months. Serve the infant juice in a cup, and limit juice to 4 to 6 oz a day. Serve 100-percent fruit juice or reconstituted juice.
- For infants ages 6 months and older, serving age-appropriate healthy foods during planned meals and snacks, and limiting eating (grazing) in between.
- Serving fewer foods with added sugar, such as candy, cookies, cake, fruit-flavored drinks, and pop (soda). Many foods contain one or more types of sugar, and all types of sugar can promote tooth decay. To help choose foods low in sugar, read food labels.

Nonnutritive Sucking

- If parents choose to have their infant suck a pacifier, advising them to take certain safety precautions. The following precautions are recommended:

- Never attaching a pacifier to a ribbon or string around the infant's neck.
- Making sure the pacifier is of sturdy, one-piece construction and that the material is flexible, firm, and not brittle.
- Keeping the pacifier clean.
- Not dipping a pacifier in sweetened foods (e.g., sugar, honey, syrup) to encourage sucking.
- Never orally cleaning a pacifier, then giving it to the infant.

Injury Prevention

- Being aware that injuries to the head, face, and mouth are common among infants.
- Learning how to prevent oral injuries and how to handle oral emergencies. Because of the danger of damaging the underlying permanent teeth, never attempt to reinsert an avulsed (lost) primary tooth. It is impossible to relocate the tooth accurately, and there is danger of pushing it too far into the soft alveolar bone and damaging the permanent tooth developing below the primary tooth.
- Always keeping one hand on an infant on high places such as changing tables, beds, sofas, or chairs.
- Using an appropriate car seat in the back seat of the vehicle at all times. Buckle the infant into a rear-facing car seat.
- Not placing an infant in a shopping cart. Instead, consider using a stroller, a wagon, or a frontpack while shopping with an infant. If an infant is placed in a shopping cart, follow these safety rules:
  - Place the infant in a safety belt or harness at all times while in the cart.

- Do not place an infant carrier on top of the shopping cart.
- Never leave the infant alone in the shopping cart.

- Using safety locks or latches on cabinets and drawers. Keep all sharp knives or other sharp utensils, poisonous substances, medicines, cleaning agents, health and beauty aids, and paints and paint solvents in a safe place.
- Keeping pet food and dishes out of reach. Do not permit the infant to approach the pet while it is eating.
- Keeping electric appliance cables and dangling telephone, electric, blind, and drapery cords out of reach of infants (e.g., wrap blind and drapery cords onto cleats so infants cannot access them).

- Locking doors and using safety gates at the tops and bottoms of stairs, and using safety locks and safety devices on windows above the ground floor.
- Supervising the infant on stairs or furniture.
- Making sure that playgrounds are carefully maintained and that equipment is in good condition. All playground equipment should be surrounded by a soft surface (e.g., fine, loose sand; wood chips; wood or rubber mulch) or by rubber mats manufactured for this use.
- Supervising the infant on playground equipment. Make sure infants play only on developmentally appropriate equipment.
- Not giving toys small enough to be placed in the mouth. Make sure that toys do not have parts that can become detached. Keep toys with small parts or sharp edges out of reach.
- Making sure that toys are soft (e.g., balls not made with leather or hard materials).

- Not using an infant walker with wheels.
- Providing the infant's caregivers with the dentist's emergency phone contacts, and ensuring that the caregivers know how to handle all emergencies.

Substance Use

- Avoiding exposing the infant to second-hand smoke.

Outcomes

- Parents and infant are under the care of an oral health professional.
- Parents are informed of oral development issues.
- Parents understand and practice good oral hygiene, feeding, and eating behaviors.
- Parents establish a safe environment and practice safety behaviors.
- Infant has no oral disease or injury.

EARLY CHILDHOOD

Health professionals should select the information in this section that is most appropriate, using clinical judgment to decide what is timely and relevant for each individual child and family.

Family Preparation

To help prepare families for oral health supervision visits, health professionals can provide parents with a list of topics to discuss at the next visit. Topics may include the following:

- Changes in the teeth and the mouth
- Oral hygiene practices (frequency, problems)
- Use of fluoridated water for drinking, cooking, or formula preparation

- Fluoride use (fluoridated toothpaste, fluoridated mouthrinse, fluoride supplements)
- Use of bottle or cup by child
- Feeding and eating practices
- Nonnutritive sucking (pacifier, thumb, finger)

- Illnesses or infections
- Medications
- Injuries to the teeth or mouth
- Parents' tobacco use

Interview Questions

Following are examples of questions that health professionals may use. In addition to asking these or other interview questions, discuss any issues or concerns the family has.

- Do you help Lynne brush her teeth? How has this been going? Are you using fluoridated toothpaste? How much toothpaste do you use to brush her teeth?
- Does Thomas drink from a cup? Does he take a bottle?
- How often does Benita snack? What does she usually eat?
- Does Kevin use a pacifier? Does he suck his thumb or finger?
- Do you and your family members wear seat belts in a car?
- What would you do if Jane knocked out one of her teeth?
- Has Carlos been to the dentist? If not, have you made an appointment for his first dental visit?
- When was Tracy's last visit to a health professional? Is it time for her next health supervision visit?

Risk Assessment

Use the risk assessment tables shown on pages 72–79 and caries risk assessment tools described on pages 80–81 to assess the child's risk factors for oral health issues.

Screening

Visually inspect the lips, tongue, teeth, gums, inside of the cheeks, and roof of the mouth.

Examination

The first oral examination should occur within 6 months of the eruption of the first primary tooth, and no later than age 12 months. Thereafter the child should be seen according to a schedule recommended by the dentist, based on the child's individual needs and risk for developing oral diseases.

Anticipatory Guidance

Discuss with Parents:

Oral Health Care

- If the child has not yet been to a dentist, making an appointment for the child's first dental visit, thereby establishing a dental home.
- After the initial dental visit, making the next appointment for the child according to the schedule recommended by the

dentist, based on the child's individual needs or risk for developing tooth decay.

- For children with special health care needs, making appointments for more frequent dental visits based on the child's individual needs or susceptibility to disease.
- Discussing with a dentist or other qualified health professional the need to apply fluoride varnish. Topical fluoride may be especially effective for children at high risk for tooth decay, particularly those who have a history of decay, do not have access to fluoridated water, snack frequently on foods or beverages containing sugar, or have a medical problem that decreases their resistance to tooth decay.
- Giving the child at high risk for developing tooth decay dietary fluoride supplements only as prescribed by a dentist or physician (see Dietary Fluoride Supplementation Schedule for Children and Adolescents at High Risk for Developing Caries on page 86).
- Discussing with a dentist or other qualified health professional the need to apply dental sealants to prevent tooth decay, shortly after the teeth erupt.

Oral Hygiene

- For children under age 3, brushing the teeth with a small smear of fluoridated toothpaste twice a day (after breakfast and before bed). Do not have the child rinse with water. The small amount of fluoridated toothpaste that remains in the mouth helps prevent tooth decay.
- For children ages 3 to 6, brushing the teeth with a pea-sized amount of

fluoridated toothpaste twice a day (after breakfast and before bed). Make sure the child spits out the toothpaste after brushing but does not rinse with water. The small amount of fluoridated toothpaste that remains in the mouth helps prevent tooth decay.

- For effective plaque removal, making sure that a parent brushes the child's teeth at least once a day. Because brushing requires good fine motor control, young children cannot clean their teeth without parental help. After children acquire fine motor skills (e.g., the ability to tie their shoelaces), typically by age 7 or 8, they can clean their teeth effectively but should be supervised by a parent.
- For children with special health care needs, adapting or obtaining special oral health equipment (e.g., adapting a toothbrush) to brush the child's teeth, if needed.

- Becoming familiar with the normal appearance of the child's gums and teeth so that problems can be identified if they occur (see Tooth Eruption Chart on pages 84–85). Checking the child's gums and teeth about once a month.
- Not allowing a child to use fluoridated mouthrinse, unless the child is able to spit the mouthrinse out.
- If the child has sore gums caused by tooth eruption, rubbing the child's gums with a clean finger or a moistened gauze pad or cool damp washcloth to try to ease the discomfort. Other options include giving the child a chilled teething ring (made of firm rubber) or cool spoon. If the child is especially cranky, give acetaminophen or ibuprofen following the dosage directions for children on the container.

Nutrition

- Serving a variety of healthy foods such as fruits, vegetables, whole-grain products (cereals, bread, or crackers), and dairy products (milk, cheese, cottage cheese, and unsweetened yogurt). Meats, fish, chicken, eggs, beans, and nuts are also good choices for meals and snacks.
- Serving healthy foods during planned meals and snacks, and limiting eating (grazing) in between.
- Serving fewer foods with added sugar, such as candy, cookies, cake, fruit-flavored drinks, and pop (soda). Frequent consumption of foods containing sugar increases the risk for tooth decay. Many foods contain one or more types of sugar, and all types of sugar can promote tooth decay. To help choose foods low in sugar, read food labels.

- Offering fruits rather than fruit juice. If juice is served, limit the child's consumption to 4 to 6 oz of 100-percent fruit juice or reconstituted juice a day.
- To prevent sugary fluids from pooling around the teeth, which can increase the child's risk for tooth decay, not putting the child to sleep with a bottle or sippy cup. Also, do not allow prolonged bottle feedings or use of sippy cups with beverages containing sugar (e.g., fruit drinks, pop (soda), fruit juice), milk, or formula during the day or at night.
- Weaning the child from a bottle to a cup by age 12 to 14 months. Serve beverages in a cup.
- If the child drinks beverages between meals, serving water or milk rather than fruit juice, fruit-flavored drinks, or pop (soda).

- Serving water throughout the day, especially between meals and snacks. Drink fluoridated water (via a community fluoridated water source) or bottled water that contains fluoride.
- Avoiding sharing utensils (e.g., spoons) or orally cleaning a pacifier or a bottle nipple. This practice helps prevent transmission of bacteria that cause tooth

decay from the parent to the child via saliva.

Nonnutritive Sucking

- If parents choose to have their child suck a pacifier, advising them to take certain safety precautions. The following precautions are recommended:
  - Never attaching a pacifier to a ribbon or string around the child's neck.
  - Making sure the pacifier is of sturdy, one-piece construction and that the material is flexible, firm, and not brittle.
  - Keeping the pacifier clean.
  - Not dipping a pacifier in sweetened foods (e.g., sugar, honey, syrup) to encourage sucking.
  - Never orally cleaning a pacifier, then giving it to a child.

Injury Prevention

- Being aware that injuries to the head, face, and mouth are common among children.
- Learning how to prevent oral injuries and how to handle oral emergencies. Because of the danger of damaging the underlying permanent teeth, never attempt to reinsert an avulsed (lost) primary tooth. It is impossible to relocate the tooth accurately, and there is danger of pushing it too far into the soft alveolar bone and damaging the permanent tooth developing below the primary tooth.
- Using an appropriate car seat in the back seat of the vehicle at all times.
  - For children ages 12 to 36 months, buckle children into rear-facing car seats until they reach the upper

weight or height limits of their seats. Once they reach the upper weight or height limit of the rear-facing car seat, buckle children into forward-facing car seats. Check the owner's manual and/or labels on the seat for weight and height limits.

- For children ages 3 to 7, when they reach the upper weight or height limit of the rear-facing car seat, buckle the child into a forward-facing car seat with a harness and tether. Check the owner's manual and/or labels on the seat for weight and height limits.

- Not placing a child in a carrier on top of a shopping cart. Instead, consider using a stroller, a wagon, or a frontpack while shopping with a child. If placing the child in a shopping cart, use a safety belt or harness at all times. If the child is placed in a shopping cart, follow these safety rules:
  - Place the child in a safety belt or harness at all times while in the cart.
  - Never leave the child alone in the shopping cart.
  - Do not let the child stand up in the shopping cart.
  - Do not let the child ride in the shopping cart basket.
  - Never let the child ride on the outside of the shopping cart.
- Using safety locks or latches on cabinets and drawers. Keep all sharp knives or other sharp utensils, poisonous substances, medicines, cleaning agents, health and beauty aids, and paints and paint solvents in a safe place.

- Keeping pet food and dishes out of reach. Do not permit the child to approach the pet while it is eating.
- Keeping electric appliance cables and dangling telephone, electric, blind, and drapery cords out of reach of children (e.g., wrap blind and drapery cords onto cleats so children cannot access them).
- Locking doors or using safety gates at the tops and bottoms of stairs, and using safety locks and safety devices on windows above the ground floor.
- Supervising the child on stairs and when climbing on and off furniture.
- Making sure that playgrounds are carefully maintained and that equipment is in good condition. All playground equipment should be surrounded by a soft surface (e.g., fine, loose sand; wood chips; wood or rubber mulch) or by rubber mats manufactured for this use.
- Supervising the child on playground equipment. Make sure children play only on developmentally appropriate equipment.

- Not giving toys small enough to be placed in the mouth. Make sure that toys do not have parts that can become detached. Keep toys with small parts or sharp edges out of reach.
- Making sure that toys are soft (e.g., balls not made with leather or hard materials).
- Ensuring that the child wears a bicycle helmet on all wheeled toys, even on a tricycle.
- Providing the child's caregivers with the dentist's emergency phone contacts, and ensuring that the caregivers know how to handle all emergencies.

Substance Use

- Avoiding exposing the child to second-hand smoke.

Outcomes

- Parents and child are under the care of an oral health professional.
- Parents are informed of oral development issues.
- Parents understand and practice good oral hygiene, feeding, and eating behaviors.
- Parents establish a safe environment and practice safety behaviors.
- Child has no oral disease or injury.

MIDDLE CHILDHOOD

Health professionals should select the information in this section that is most appropriate, using clinical judgment to decide what is timely and relevant for each individual child and family.

Family Preparation

To help prepare families for oral health supervision visits, health professionals can provide parents with a list of topics to discuss at the next visit. Topics may include the following:

- Changes in the teeth and the mouth
- Oral hygiene practices (frequency, problems)
- Use of fluoridated water for drinking or cooking

- Fluoride use (fluoridated toothpaste fluoridated mouthrinse, fluoride supplements)
- Dental sealant use
- Eating practices
- Nonnutritive sucking (pacifier, thumb, finger)

- Illnesses or infections
- Medications
- Physical activity and sports participation
- Injuries to the teeth or mouth
- Use of tobacco by parents or child

Interview Questions

Following are examples of questions that health professionals may use. In addition to asking these or other interview questions, discuss any issues or concerns the family has. As the child becomes more mature, ask the child questions directly.

To parent:

- How often does Sarah brush or floss her teeth? Does she use fluoridated toothpaste?
- Is Jee brushing and flossing his teeth without being reminded?
- Does your child with special health care needs require more assistance or special equipment when brushing her teeth?
- Has Andrea lost any teeth yet?
- Does Mark comment about his teeth and how they look?
- How often does Selena see the dentist? When was her last dental appointment?
- Is your water fluoridated? Do you have any questions about fluoride supplements, fluoride varnish, or dental sealants?
- Does Justin eat snacks at school? After school? What types of snacks are available for Justin to eat?
- Does the school have vending machines? If so, do they offer healthy beverage choices such as water or milk?
- Do you and your family members wear seat belts when riding in a vehicle?

- Do you wear a helmet when riding a bicycle, skateboard, or snowboard?
- Does Mary participate in physical activities and sports that could result in injuries to the mouth? Does she wear protective gear like a mouth guard, face protector, or helmet?
- Do you understand what to do if Jon knocks out one of his teeth?
- When was Elisa's last visit to a health professional? Is it time for her next health supervision visit?

To child:

- When do you brush your teeth? Floss? Do you use fluoridated toothpaste?
- Do you think your teeth look okay?
- Do any of your teeth hurt?
- How many teeth have you lost?
- When was the last time you went to the dentist?
- Do you snack at school? After school? What do you eat?
- Do you wear a seat belt in a car, van, truck, taxi, or other vehicle?

- What sports do you play? Do you wear protective mouth gear when you participate in contact sports? Do you wear a helmet when riding a bicycle, skateboard, or snowboard?
- What do you think about smoking? Chewing tobacco? Did you smoke any cigarettes (cigarettes or e-cigarettes) in the last month? Use chewing tobacco? How often?

Risk Assessment

Use the risk assessment tables shown on pages 72–79 and caries risk assessment tools described on pages 80–81 to assess the child's risk factors for oral health issues.

Screening

Visually inspect the lips, tongue, teeth, gums, inside of the cheeks, and roof of the mouth.

Examination

The child should be seen according to a schedule recommended by the dentist, based on the child's individual needs and susceptibility to disease.

Anticipatory Guidance

Discuss with Parents (as child becomes more mature, direct discussion toward the child):

Oral Health Care

- Making an appointment for a dental visit for the child according to the schedule recommended by the child's dentist, based on the child's individual needs or risk for developing oral disease.
- For children with special health care needs, making appointments for more frequent dental visits based on the child's individual needs or susceptibility to disease.
- Discussing with a dentist the need to schedule a visit to the orthodontist to have the child evaluated for braces.

- Discussing with a dentist or other qualified health professional the need to apply fluoride varnish. Topical fluoride may be especially effective for children at high risk for tooth decay, particularly those who have a history of decay, do not have access to fluoridated water, snack

frequently on foods or beverages containing sugar, or have a medical problem that decreases their resistance to decay.

- Giving the child at high risk for developing tooth decay dietary fluoride supplements only as prescribed by a dentist or physician (see Dietary Fluoride Supplementation Schedule for Children and Adolescents at High Risk for Developing Caries on page 86).
- Discussing with a dentist or other qualified health professional the need to apply dental sealants to prevent tooth decay, shortly after the teeth erupt.

Oral Hygiene

- Ensuring that children brush their teeth with fluoridated toothpaste twice a day (after breakfast and before bed). Make sure the child spits out the toothpaste after brushing but does not rinse with water. The small amount of fluoridated toothpaste that remains in the mouth helps prevent tooth decay.
- For effective plaque removal, making sure that a parent brushes the child's teeth at least once a day until the child acquires fine motor skills. Because brushing requires good fine motor control, young children cannot clean their teeth without parental help. After children acquire fine motor skills (e.g., the ability to tie their shoelaces), typically by age 7 or 8, they can clean their teeth effectively but should be supervised by a parent.
- For children with special health care needs, adapting or obtaining special oral health equipment (e.g., adapting a toothbrush) to brush the child's teeth, if needed.

- Becoming familiar with the normal appearance of the child's gums and teeth so that problems can be identified if they occur (see Tooth Eruption Chart on pages 84–85). Checking the child's gums and teeth about once a month.

Nutrition

- Serving a variety of healthy foods such as fruits, vegetables, whole-grain products (cereals, bread, or crackers), and dairy products (milk, cheese, cottage cheese, and unsweetened yogurt). Meats, fish, chicken, eggs, beans, and nuts are also good choices for meals and snacks.
- Serving healthy foods during planned meals and snacks, and limiting eating (grazing) in between.
- Serving fewer foods with added sugar, such as candy, cookies, cake,

fruit-flavored drinks, and pop (soda). Frequent consumption of foods containing sugar increases the risk for tooth decay. Many foods contain one or more types of sugar, and all types of sugar can promote tooth decay. To help choose foods low in sugar, read food labels.

- Encouraging the child to eat fruits rather than drink fruit juice.
- If the child drinks beverages between meals, encouraging the child to drink water or milk rather than fruit juice, fruit-flavored drinks, or pop (soda).
- If the school has vending machines, encouraging the child to choose water or milk rather than fruit juice, fruit-flavored drinks, or pop (soda).
- Drinking water throughout the day, especially between meals and snacks. Drink fluoridated water (via a community fluoridated water source) or bottled water that contains fluoride.

Nonnutritive Sucking

- If the child regularly engages in nonnutritive sucking behaviors, gently intervene to help the child stop. Intervention strategies include:
  - Talking with the child. Use basic words to tell the child why to stop sucking (e.g., sucking can change the shape of the child's mouth and teeth) and that the child can stop.
  - Using reminders. Put a bandage on the child's finger or thumb to remind the child not to suck.
  - Using rewards. The child and parent agree on a plan (e.g., if the child does not suck for a specified time period,

then the child receives a reward). The reward must be motivating to the child. Charting small successes may help (e.g., placing colored stars on a calendar for each day the child does not suck).

- Physically interrupting the habit. If none of the preceding strategies are successful, and the child wants to stop the habit, two other strategies can be tried:
  - Cover the child's hand at night (e.g., cover the hand with a mitten or sock, dress the child with a special shirt with the sleeves sewn closed).
  - A dentist can place an intra-oral appliance in the child's mouth to prevent sucking. The appliance is removed after the child no longer engages in nonnutritive sucking.

Injury Prevention

- Learning how to prevent oral injuries and handle oral emergencies, especially the loss or fracture of a tooth.
  - If a permanent tooth is knocked out, the parent or other adult should (1) find the avulsed (lost) tooth, (2) hold it by the crown (top part) only, not the root, (3) rinse it under cold water gently if the root is dirty, but do not scrub, (4) reinsert it into the socket as soon as possible, making sure that the front of the tooth is facing you, and (5) take the child to the dentist immediately. If it is not possible to replace the tooth, place the tooth in a container of cold milk or in a cold damp cloth and take the child and the tooth to a dentist immediately.

- Because of the danger of damaging the underlying permanent teeth, never attempt to reinsert an avulsed (lost) primary tooth. It is impossible to relocate the tooth accurately, and there is danger of pushing it too far into the soft alveolar bone.
- If a tooth is fractured or chipped, the parent or other adult should (1) rinse the child's mouth with water, (2) apply cold compresses to the cheek to reduce swelling, (3) if possible, find chipped or fractured piece(s) of the tooth, and (4) take the child and broken piece(s) to the dentist immediately.
- Using an appropriate car seat in the back seat of the vehicle at all times. Once children reach the upper weight or height limit of the forward-facing car seat, they should be buckled in a belt-positioning booster seat until the seat belt fits properly.

- Wearing a helmet when riding a bicycle or skateboard. Children under age 16 should not ride all-terrain vehicles or motorcycles.
- Being aware that the risk for injury is higher during periods of rapid growth.
- Ensuring that the child wears protective gear when participating in physical activities or sports that could result in injuries to the mouth, such as biking; riding a scooter; skateboarding; in-line skating; or playing football, baseball, soccer, or lacrosse.
- Ensuring that the child does not ride an all-terrain vehicle of any size.
- Teaching the child about injury prevention, including the need to wear protective gear (e.g., mouth guard, face protector, helmet).

- Providing the child's caregivers with the dentist's emergency phone contacts, and ensuring that the caregivers know how to handle oral emergencies.

Substance Use

- Teaching the child about the dangers of cigarette smoking (cigarettes or e-cigarettes) or using chewing tobacco. Avoid secondhand smoke.

Outcomes

- Parents and child are under the care of an oral health professional.
- Parents and child are informed of oral development issues.
- Parents and child understand and practice good oral hygiene and eating behaviors.
- Parents establish a safe environment, and parents and child practice safety behaviors.
- Child has no oral disease or injury.

ADOLESCENCE

Health professionals should select the information in this section that is most appropriate, using clinical judgment to decide what is timely and relevant for the adolescent and family.

Family Preparation

To help prepare families for oral health supervision visits, health professionals can provide adolescents with a list of topics to discuss at the next visit. Topics may include the following:

- Changes in the teeth or the mouth
- Oral hygiene practices (frequency, problems)
- Use of fluoridated water for drinking or cooking

- Fluoride use (fluoridated toothpaste, fluoridated mouthrinse, fluoride supplements)
- Dental sealant use
- Eating practices
- Illnesses or infections
- Medications

- Physical activity and sports participation
- Injuries to the teeth or the mouth
- Adolescent's tobacco use

Interview Questions

Following are examples of questions that health professionals may use. In addition to asking these or other interview questions, discuss any issues or concerns the family has. Ask the adolescent questions directly.

- When do you brush and floss your teeth? Do you use fluoridated toothpaste?
- Do you think your teeth look okay?
- Have your wisdom teeth erupted?
- When was the last time you went to the dentist?
- Do you snack at school? After school? What do you eat or drink?
- Does your school have vending machines? If so, do they offer healthy beverage choices such as water or milk?
- Do you wear a seat belt while driving or riding in a vehicle?
- Do you wear a helmet when riding a bicycle? Skateboard? An all-terrain vehicle? Motorcycle?
- Do you participate in physical activities and sports that could result in injuries to the mouth? Do you wear protective gear like a mouth guard, face protector, or helmet?
- What do you think about smoking? Chewing tobacco? Did you smoke any cigarettes (cigarettes or e-cigarettes) in the last month? Use chewing tobacco? How often?

- When was your last visit to a health professional? Is it time for your next health supervision visit?

Risk Assessment

Use the risk assessment tables shown on pages 72–79 and caries risk assessment tools described on pages 80–81 to assess the adolescent's risk factors for oral health issues.

Screening

Visually inspect the lips, tongue, teeth, gums, inside of the cheeks, and roof of the mouth.

Examination

The adolescent should be seen according to a schedule recommended by the dentist, based on the adolescent's individual needs and risk for developing oral disease.

Anticipatory Guidance

Discuss with Adolescent, or with Adolescent and Parents:

Oral Health Care

- Making an appointment for a dental visit according to the schedule recommended by your dentist, based on your individual needs and risk for developing oral disease.
- If you have special health care needs, making appointments for more frequent dental visits based on your individual needs and susceptibility to disease.
- Discussing with a dentist the need to establish a preventive oral health

regimen, including an evaluation of the bite and third molar development.

- Discussing with a dentist or other qualified health professional the need to rinse daily with a non-alcohol-based fluoride mouthrinse or to receive fluoride varnish applications. Topical fluoride may be especially effective for adolescents at high risk for tooth decay, particularly if they have a history of decay, do not have access to fluoridated water, snack frequently on foods or beverages containing sugar, or have a medical problem that decreases their resistance to decay.
- Giving the adolescent up to age 16 at high risk for developing tooth decay dietary fluoride supplements only as prescribed by a dentist or physician (see Dietary Fluoride Supplementation Schedule for Children and Adolescents at High Risk for Developing Caries on page 86).
- Discussing with a dentist or other qualified health professional the need to apply dental sealants to prevent tooth decay, shortly after the teeth erupt.

- Discussing with a dentist the need to schedule a visit to the orthodontist to have the adolescent evaluated for braces.

Oral Hygiene

- Brushing your teeth with fluoridated toothpaste twice a day (after breakfast and before bed). Spit out the toothpaste after brushing, but do not rinse with water. The small amount of fluoridated toothpaste that remains in your mouth helps prevent tooth decay. Floss daily.
- For adolescents with special health care needs, adapting or obtaining special oral health equipment (e.g., adapting a toothbrush) to brush your teeth, if needed.
- Becoming familiar with the normal appearance of your gums and teeth so that you can identify problems if they occur (see Tooth Eruption Chart on pages 84–85).

Nutrition

- Eating a variety of healthy foods such as fruits, vegetables, whole-grain products (cereals, bread, or crackers), and dairy products (milk, cheese, cottage cheese, and unsweetened yogurt). Meats, fish,

chicken, eggs, beans, and nuts are also good choices for meals and snacks.

- Eating healthy foods during planned meals and snacks, and limiting eating (grazing) in between.
- Eating fewer foods with added sugar, such as candy, cookies, cake, fruit-flavored drinks, and pop (soda). Frequent consumption of foods containing sugar increases the risk for tooth decay. Many foods contain one or more types of sugar, and all types of sugar can promote tooth decay. To help choose foods low in sugar, read food labels.
- Choosing fruits rather than fruit juice.
- If drinking beverages between meals, choosing water or milk rather than fruit juice, fruit-flavored drinks, flavored water, energy drinks, or pop (soda).
- If the school has vending machines, choosing water or milk rather than fruit juice, fruit-flavored drinks, flavored water, energy drinks, or pop (soda).
- Drinking water throughout the day, especially between meals and snacks. Drink fluoridated water (via a community

fluoridated water source) or bottled water that contains fluoride.

Injury Prevention

- Learning how to prevent oral injuries and handle oral emergencies, especially the loss or fracture of a tooth.
  - If a permanent tooth is knocked out, you or an adult should (1) find the avulsed (lost) tooth, (2) hold it by the crown (top part) only, not the root, (3) rinse it under cold water gently if the root is dirty, but do not scrub, (4) reinsert it into the socket as soon as possible, making sure that the front of the tooth is facing you, and (5) go to the dentist immediately. If it is not possible to replace the tooth, place the tooth in a container of cold milk or in a cold damp cloth and go to a dentist with the tooth immediately.
  - If a tooth is fractured or chipped, you or an adult should (1) rinse your mouth with water, (2) apply cold

compresses to the cheek to reduce swelling, (3) if possible, find chipped or fractured piece(s) of the tooth, and (4) go to the dentist with the broken piece(s) immediately.

- Using a seat belt while riding in or driving a vehicle. Adolescents ages 12 and under should sit in the back seat of the vehicle. If you are driving, insist that your passengers also wear seat belts.
- Wearing a helmet when riding a bicycle, skateboard, all-terrain vehicle, or motorcycle. Adolescents under age 16 should not ride all-terrain vehicles or motorcycles.
- Wearing protective gear (e.g., mouth guard, face protector, helmet) when participating in physical activities or sports that could result in injuries to the mouth, such as biking; riding a scooter; skateboarding; in-line skating; or playing football, baseball, soccer, or lacrosse.
- Not getting oral piercings, which can damage teeth and gums.

Substance Use

- Not smoking cigarettes (cigarettes or e-cigarettes) or using chewing tobacco. Avoid secondhand smoke.

Outcomes

- Parents and adolescent are under the care of an oral health professional.
- Parents and adolescent are informed of oral development issues.
- Parents and adolescent understand and practice good oral hygiene and eating behaviors.
- Parents and adolescent establish a safe environment, and parents and adolescent practice safety behaviors.
- Adolescent has no oral disease or injury.

RISK ASSESSMENT

DENTAL CARIES RISK ASSESSMENT TABLE

RISK FACTORS	INTERVENTION STRATEGIES
Physical: Examples	
Previous dental caries experience	Increased frequency of oral health supervision
High *Streptococcus mutans* count	Reduction of *Streptococcus mutans* count
History of tooth decay	Increased frequency of oral health supervision
Variations in tooth enamel; deep pits and fissures; anatomically susceptible areas	Dental sealants (if possible) or observation
Special health care needs	Preventive intervention to minimize effects
Gastric reflux	Management of condition
Behavioral: Examples	
Frequent snacking	Reduction in snacking frequency
Poor oral hygiene	Good oral hygiene
Frequent or prolonged bottle feedings during the day or night	Less-frequent and less-prolonged bottle feedings, and weaning from bottle by age 12 to 14 months
Self-induced vomiting	Referral for counseling

DENTAL CARIES RISK ASSESSMENT TABLE (continued)

RISK FACTORS	INTERVENTION STRATEGIES
Socioenvironmental: Examples	
Inadequate fluoride	Optimal systemic and/or topical fluoride
Poverty	Access to care
Poor family oral health	Access to care and good oral hygiene
High parental levels of *Streptococcus mutans*	Good parental oral health and oral hygiene
Disease or Treatment Related: Examples	
Special carbohydrate diet	Preventive intervention to minimize effects
Frequent intake of medications containing sugar	Alternate medications or preventive intervention to minimize effects
Orthodontic appliances	Good oral hygiene for appliances
Reduced saliva flow from medication or irradiation	Saliva substitute

PERIODONTAL DISEASE RISK ASSESSMENT TABLE

RISK FACTORS	INTERVENTION STRATEGIES
Physical: Examples	
Gingivitis	Treatment of disease
Puberty	Preventive measures to address oral effects
Pregnancy	Preventive measures to address oral effects
Mouthbreathing	Management of mouthbreathing
Malpositioned or crowded teeth	Orthodontic care
Genetic predisposition	Preventive intervention to minimize effects
Anatomical variations (e.g., frenum)	Surgical correction
Behavioral: Examples	
Poor oral hygiene	Good oral hygiene
Tobacco use	Tobacco-use cessation
Birth control pills	Preventive measures to minimize effects
Socioenvironmental: Examples	
Poverty	Access to care
Poor family oral health	Access to care and good oral hygiene

PERIODONTAL DISEASE RISK ASSESSMENT TABLE (continued)

RISK FACTORS	INTERVENTION STRATEGIES
Disease or Treatment Related: Examples	
Infectious disease (e.g., HIV/AIDS)	Treatment of disease and preventive intervention to minimize effects
Medications (e.g., calcium channel blockers)	Preventive intervention to minimize effects
Unrestored or poorly restored tooth decay	Properly contoured and finished restorations
Metabolic disease (e.g., diabetes)	Treatment of disease
Neoplastic disease (e.g., leukemia or its treatment)	Treatment of disease and preventive intervention to minimize effects
Injury	Use of age-appropriate safety measures and treatment of injury
Nutritional deficiencies (e.g., vitamin C)	Good eating behaviors

MALOCCLUSION RISK ASSESSMENT TABLE

RISK FACTORS	INTERVENTION STRATEGIES
Physical: Examples	
Familial tendency for malocclusion	Early intervention
Conditions associated with malocclusion (e.g., cleft lip/palate)	Early intervention
Variations in development (e.g., tooth eruption delays and malpositioned teeth)	Early intervention
Congenital absence of teeth	Early intervention
Mouthbreathing	Management of mouthbreathing
Muscular imbalances	Early therapy
Behavioral: Examples	
Nonnutritive sucking habits in children ages 4 and above	Elimination of habit

MALOCCLUSION RISK ASSESSMENT TABLE (continued)

RISK FACTORS	INTERVENTION STRATEGIES
Disease or Treatment Related: Examples	
Loss of space owing to dental caries	Early intervention for dental caries
Skeletal growth disorders (e.g., renal disease)	Dental intervention as a part of medical care
Acquired problem from systemic condition or its therapy	Dental intervention as a part of medical care
Musculoskeletal conditions (e.g., cerebral palsy)	Dental intervention as a part of medical care
Injury	Use of age-appropriate measures (e.g., car seats, booster seats, seat belts, stair gates, mouth guards) and treatment of injury

INJURY RISK ASSESSMENT TABLE

RISK FACTORS	INTERVENTION STRATEGIES
Physical: Examples	
Poor coordination (e.g., children with special health care needs)	Referral for appropriate physical therapy
Protruding front teeth	Orthodontic care
Lack of protective reflexes	Referral for appropriate therapy
Behavioral: Examples	
Failure to use age-appropriate safety measures (e.g., car seats, booster seats, seat belts, stair gates, mouth guards)	Use of age-appropriate safety measures
Participation in contact physical activities and sports	Use of protective gear

INJURY RISK ASSESSMENT TABLE (continued)

RISK FACTORS	INTERVENTION STRATEGIES
Socioenvironmental: Examples	
Multiple family problems	Referral for family counseling
Child abuse or neglect	Reporting of suspected abuse or neglect to local social service agency
Substance use by child or adolescent	Referral for substance abuse counseling
Substance abuse in family	Referral for substance abuse counseling
Disease or Treatment Related: Examples	
Hyperactivity	Management of condition
Overmedication	Adjustment of medications

CARIES RISK ASSESSMENT TOOLS

The American Academy of Pediatric Dentistry's caries risk assessment forms are designed to help oral health professionals and non-oral-health professionals assess caries risk in infants, children, and adolescents and to aid in clinical decision-making related to diagnostic, fluoride, dietary, and restorative protocols. Forms are geared toward specific age ranges (birth through age 3, birth through age 5, and ages 6 and over) and users (oral health professionals and non-oral-health professionals). Each form presents different categories of risk factors and indicates how to determine whether an infant, child, or adolescent is at low, moderate, or high risk for dental caries. The following forms are available at http://www.aapd.org/media/Policies_Guidelines/G_CariesRiskAssessment.pdf.

Caries-Risk Assessment Form for 0–3 Olds: For Physicians and Other Non-Dental Health Care Providers

Caries-Risk Assessment Form for 0–5 Year Olds: For Dental Providers

Caries-Risk Assessment Form for ≥6 Years Olds: For Dental Providers

The American Academy of Pediatrics developed the oral health risk assessment tool to aid in the implementation of oral health risk assessment during health supervision visits. The tool is intended to document risk and protective factors, clinical findings, and an assessment plan. The tool is available at http://www2.aap.org/oralhealth/docs/RiskAssessmentTool.pdf.

The American Dental Association's caries risk assessment forms are tools to help dentists evaluate infants', children's, and adolescents' risk for developing dental caries. The forms can also be used as communication tools with children, adolescents, and parents to highlight risk factors. The forms are divided by age range

(birth to age 6 and over age 6). Each form includes three categories: contributing conditions, general health conditions, and clinical conditions. The first two categories can be completed by a member of the oral health team, as determined by the dentist; the third category should be completed by a dentist. The first two categories can be completed by a member of the oral health team, as determined by the dentist; the third category should be completed by a dentist. The forms are available at the web addresses shown below.

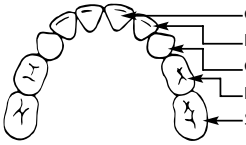
Caries Risk Assessment Form (Age 0–6)
http://www.ada.org/~/media/ADA/Member%20Center/FIles/topics_caries_educational_under6.pdf?la=en

Caries Risk Assessment Form (Age >6)
http://www.ada.org/~/media/ADA_Foundation/GKAS/Files/topics_caries_educational_over6.pdf?la=en

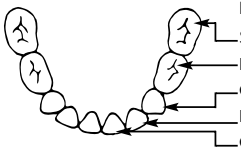
APPENDICES

TOOTH ERUPTION CHART

PRIMARY DENTITION

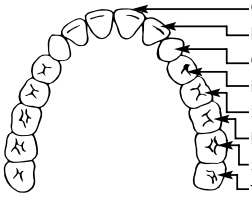


Upper Teeth	Erupt	Exfoliate
Central incisor	8-12 months	6-7 years
Lateral incisor	9-13 months	7-8 years
Canine (cuspid)	16-22 months	10-12 years
First molar	13-19 months	9-11 years
Second molar	25-33 months	10-12 years

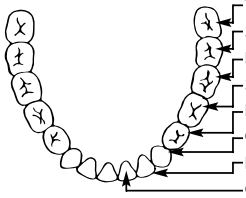


Lower Teeth	Erupt	Exfoliate
Second molar	23-31 months	10-12 years
First molar	14-18 months	9-11 years
Canine (cuspid)	17-23 months	9-12 years
Lateral incisor	10-16 months	7-8 years
Central incisor	6-10 months	6-7 years

PERMANENT DENTITION



Upper Teeth	Erupt
Central incisor	7-8 years
Lateral incisor	8-9 years
Canine (cuspid)	11-12 years
First premolar (first bicuspid)	10-11 years
Second premolar (second bicuspid)	10-12 years
First molar	6-7 years
Second molar	12-13 years
Third molar (wisdom tooth)	17-21 years



Lower Teeth	Erupt
Third molar (wisdom tooth)	17-21 years
Second molar	12-13 years
First molar	6-7 years
Second premolar (second bicuspid)	10-12 years
First premolar (first bicuspid)	10-11 years
Canine (cuspid)	11-12 years
Lateral incisor	8-9 years
Central incisor	7-8 years

Adapted with permission from the Arizona Department of Health Services, Office of Oral Health, courtesy of Don Altman, D.D.S., M.P.H. The assistance of the American Dental Hygienists' Association is gratefully acknowledged.

DIETARY FLUORIDE SUPPLEMENTATION SCHEDULE FOR CHILDREN AND ADOLESCENTS AT HIGH RISK FOR DEVELOPING CARIES

	Fluoride Ion Level in Drinking Water[a]		
Age	**< 0.3 ppm**	**0.3–0.6 ppm**	**> 0.6 ppm**
Newborn–6 months	None	None	None
6 months–3 years	0.25 mg/day[b]	None	None
3–6 years	0.50 mg/day	0.25 mg/day	None
6–16 years	1.0 mg/day	0.50 mg/day	None

[a]1.0 ppm = 1 mg/L.
[b]2.2 mg sodium fluoride contains 1 mg fluoride ion.

Reproduced with permission from the American Dental Association from *ADA Guide to Dental Therapeutics* (2nd ed.).

GLOSSARY

bacteria: microorganisms commonly referred to as "germs" capable of producing disease under the right conditions

caries (dental caries): infectious disease process leading to tooth decay

crown: the part of the tooth above the gum line; also a restorative "cap" that covers a cracked or broken tooth, unfixed by a filling

debris: soft foreign matter attached loosely to tooth

demineralization: loss of mineral from tooth enamel during early stages of caries; may appear as a small white area on tooth surface

dental home: a dentist who provides primary, preventive, and maintenance oral health services to an individual on a periodic basis

dental sealant: thin, plastic coating that is applied to the chewing surfaces of back teeth (molars and premolars) to prevent tooth decay

enamel: hard, glossy, white material that covers the outside of the tooth

eruption: when a tooth emerges from the gums

fissure: anatomic groove in the surface of a tooth

fluoridation: addition of fluoride to community water systems

fluoride: mineral that can be found in water and toothpaste that helps prevent and reduce tooth decay

fluoride varnish: lacquer containing 5 percent sodium fluoride that is painted on teeth to reduce tooth decay

fluorosis: condition that results from consuming excessive fluoride; causes teeth to become discolored and the enamel of the teeth to look spotted, pitted, or stained

malocclusion ("bad bite"): teeth that fit together poorly as a result of crowded, missing, or crooked teeth; extra teeth; or a misaligned jaw

molars: large, broad teeth at the back of the mouth used for crushing and grinding food

periodontal disease: bacterial infection of supporting structures of the teeth (gums, bones, and ligaments) which, if left untreated, can destroy the support of the teeth in their sockets, thus causing tooth loss

permanent teeth (adult teeth): second set of teeth (32 in number) that come into the mouth after the loss of the primary teeth

plaque: thin, colorless, sticky film of bacteria that forms on teeth; main cause of caries and periodontal disease when allowed to remain on teeth over a period of time

primary teeth (deciduous teeth): first set of teeth (20 in number) that come into the mouth, usually when an infant is around ages 6 to 10 months

saliva: watery secretions of glands of the mouth

Streptococcus mutans: type of bacteria commonly found in the mouth, associated with caries

tooth decay: see *caries*

RESOURCES

National Maternal and Child Oral Health Resource Center

The National Maternal and Child Oral Health Resource Center (OHRC) responds to the needs of professionals working in states and communities with the goal of improving oral health services for pregnant women, infants, children, and adolescents, including those with special health care needs, and their families. The resource center supports health professionals, program administrators, educators, policymakers, and others, particularly those working in or with state maternal and child health (MCH) programs. The resource center collaborates with government agencies, professional associations, foundations, policy and research centers, and voluntary organizations to gather, develop, and share information and materials to promote sustainable oral health services for the MCH population. OHRC also maintains the online Bright Futures Toolbox to highlight materials that advance the Bright Futures philosophy of promoting and improving the oral health of pregnant and postpartum women, infants, children, and adolescents. OHRC is funded by the Health Resources and Services Administration's Maternal and Child Health Bureau located at Georgetown University.

National Maternal and Child Oral Health
Resource Center
Georgetown University
Box 571272
Washington, DC 20057-1272
Phone: (202) 784-9771
E-mail: OHRCinfo@georgetown.edu
Website: http://www.mchoralhealth.org

Bright Futures National Education Center

The Bright Futures National Education Center's mission is to enhance the knowledge of health professionals and the public about Bright Futures and about the value of clinically based health promotion and prevention. The center carries out its mission through a variety of integrated strategies, including establishing and maintaining partnerships with health professionals and public health organizations to promote and advance the Bright Futures initiative; fostering the adoption of the Bright Futures approach by identifying promising practice models, disseminating models to health professionals and organizations and providing technical assistance; providing training, continuing education, and assistance on Bright Futures health promotion and prevention content; building Bright Futures outreach efforts; and updating and maintaining key Bright Futures guidelines and tools. The Bright Futures National Education Center is funded by the Health Resources and Services Administration's Maternal and Child Health Bureau and located at the American Academy of Pediatrics.

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National Maternal & Child
Oral Health
RESOURCE CENTER