

240.90

Oral Health Guidelines

Overview

Introduction This policy contains guidelines for oral health assessment, education and referral for infants, children, and women. A separate section for each category of participant presents factors for the nurse or licensed dietitian to consider in assessing the participant’s oral health and making recommendations to maintain good oral health. There is also a section on fluoride guidelines.

Title V Child Health and Maternal Health referral Refer eligible participants to Child Health or Maternal Health. A dental hygienist, serving as I-Smile Oral Health Coordinator, is available in each child health agency to provide oral health assessments, education, preventive services, and care coordination for children. Medicaid, *hawk-i*, and Title V funds will pay for a dental visit for eligible children. Medicaid and *hawk-i* (up to the age of 19 years) will cover dental care for eligible pregnant women.

Note: I-Smile Coordinators can also provide training to non-dental health professionals about completing open mouth assessments.

In this policy This policy contains the following topics.

Topic	See Page
Assessment — Infants	2
Recommendations — Infants	4
Assessment — 1-5 Years	7
Recommendations — 1-5 Years	9
Assessment — Women	12
Recommendations — Women	14
Fluoride	16

Assessment — Infants

Introduction

The **nutrition interview** can provide important information to support your assessment of an infant's oral health and risk for tooth decay. This section lists key questions to consider during your assessment.

Key oral health questions

All low income infants are at greater risk for tooth decay. These questions will also help identify other risk factors.

- Are there any medical factors that may affect oral health?
 - Infants with special health needs may have physical and mental barriers that make oral home care difficult for parents.
 - Premature babies are more likely to have enamel defects which can increase decay risk.
 - Infants who have frequent or chronic illnesses may be at risk for decay due to medications that are sweetened or that cause dry mouth.
 - What is the infant's fluoride exposure?
 - What are family attitudes towards dental care?
 - What are current practices for cleaning infant's mouth?
 - What is the decay history and current oral health status of the infant's parents and siblings?
 - What are the infant's non-nutritive sucking habits?
-

Nutrition practice and oral health questions

These issues will generally be addressed in the nutrition interview.

- What besides breastmilk/formula has <baby's name> received?
 - What other questions do you have about feeding <baby's name>? Or, is there anything you would like to change?
 - What questions do you have regarding caring for <baby's name> gums and teeth?
-

Continued on next page

Assessment — Infants, Continued

Visual assessment

While an open mouth assessment is not required for all infants it should be considered if the **nutrition interview** indicates that the infant is at risk for tooth decay. Inspect the infant's mouth and note any of the following abnormalities:

Soft tissue abnormalities	<ul style="list-style-type: none"> • Gum redness or bleeding • Swelling or lumps • Trauma or injury
Hard tissue abnormalities	<ul style="list-style-type: none"> • Suspected decay (brown spots or dark pits or grooves on the chewing surfaces of the back teeth may be indications of decay) • White spots on the surface of the teeth near the gums (a sign of early decay) • Visible plaque • Enamel defects • Trauma or injury • Stained fissures

Recommendations — Infants

Introduction Provide the following information and recommendations to the parents.

Home care Follow these guidelines to keep the infant's mouth healthy:

- Clean an infant's gums or teeth at least once a day, preferably at bedtime.
- Prior to tooth eruption, clean the gums using gauze or a clean washcloth.
- As soon as first teeth appear, use an infant-sized soft brush and water.
- For children younger than 2 years, at moderate to high risk for tooth decay, recommend a smear of fluoride toothpaste.
- Demonstrate how to position the infant for best access to the gums and teeth. Have the infant lie on a bed or cradle the infant's head in the parent's arms. Retract the lips away from the teeth and brush near the gums.

Teething Teething symptoms may include:

• Irritability	• Crying
• Change in appetite	• Change in bowel habits
• Wakefulness	• Excessive drooling

Note: Fever is not a normal symptom of teething. If child has a fever, or if these symptoms persist for over 24 hours they may have another cause; consult a physician.

Comfort measures for teething Suggest the following strategies for relieving teething discomfort:

- Apply a cold washcloth to the gums or use a teething ring. Do not use a teething appliance with a liquid filling; the fluid may not be safe if the appliance should break open.
- Teething biscuits are not recommended due to their sugar and starch content and the risk of choking.
- Over-the-counter numbing solutions are not recommended. These products contain a strong anesthetic that is swallowed by the infant.

Continued on next page

Recommendations — Infants, Continued

Weaning

Breastfed infants

Encourage breastfeeding for at least the first year. For infants weaned after 6 months, encourage using a cup. For mothers who breastfeed past the first birthday, discourage using the breast as a pacifier. Breastfed infants who are eating solid food are at greater risk for decay; optimal oral hygiene is needed.

Formula-fed infants

Introduce the cup when the infant is developmentally ready. Increase the use of the cup gradually with the goal of discontinuing the bottle by 12 months.

Non-nutritive sucking

Non-nutritive sucking is natural and is not likely to be detrimental if discontinued by the time the first permanent teeth erupt (approximately age 5). If a child sucks with unusual intensity or frequency, or continues the habit beyond the age of 5, the position of the child's permanent teeth and the development of the upper and lower jaws could be affected. Weaning from the habit should begin by age 4.

Pacifiers

Pacifiers should have the following features:

• Solid, one piece construction	• Ventilation holes in the shield
• Large plastic shield to prevent choking	• Made of non-toxic material

Note: Encourage parents to periodically examine the pacifier for wear and tear, and replace when necessary.

Cautions with pacifiers

Discuss these cautions with parents.

- Do not tie a pacifier around an infant's neck, hand, or to baby's crib. This could lead to strangulation.
 - Do not dip the pacifier into sugar, honey, or sweet liquids. This contributes to tooth decay.
 - Clean pacifiers by rinsing in water. Discourage parents from cleaning a pacifier by putting it in their own mouth. This can pass decay-causing bacteria from the parent's mouth to the infant's mouth.
-

Continued on next page

Recommendations — Infants, Continued

- Dietary habits** The following practices will help prevent tooth decay and develop healthy eating patterns for childhood.
- Do not add sweeteners to formula, breastmilk or water.
 - Bedtime bottle should contain water only.
 - Do not use bottle, breast, or sippy cup as a pacifier. When the infant is finished, take the cup or bottle away or remove the infant from the breast.
 - Encourage weaning from the bottle at age 12 months.
 - Avoid beverages other than formula, breastmilk or water until infant can drink out of a cup, usually at about 6 months.
 - Use a cup for all juices. Limit the juice to 4-6 ounces per day.
 - Do not allow infant to have any food or drink except water after bedtime brushing.
 - Offer sweetened foods or beverages and starches that stick to the teeth as part of a meal, rather than a snack.
 - Recommend snacks that do not contribute to tooth decay such as fruits, vegetables, and cheese.
 - Avoid saliva-sharing behaviors, such as sharing utensils or putting child's hands, pacifier, or bottle in parent's mouth. Decay-causing bacteria can transfer from parent to child.
-

Dental injuries Provide information and print materials about injuries and emergencies.

Referrals for dental care Visits to a dentist's office should begin when the infant is 1 year old or within six months of the first tooth erupting. These visits are important for prevention and early diagnosis of tooth decay and for anticipatory guidance for parents.

Assessment — 1 to 5 Years

Introduction

The **nutrition interview** can provide important information to support your assessment of a child's oral health and risk for tooth decay. This section lists key questions to consider during your assessment.

Key oral health questions

All low income children are at greater risk for tooth decay. These questions will also help identify other risk factors.

- Are there any medical factors that may affect oral health?
 - Children with special health needs may have physical and mental barriers that make oral hygiene difficult for child and parent.
 - Premature babies are more likely to have enamel defects which can increase decay risk.
 - Children who have frequent or chronic illnesses may be at risk for decay due to medications that are sweetened or that cause dry mouth.
 - What is the child's fluoride exposure?
 - What are family attitudes towards dental care?
 - What are current practices for brushing? Flossing?
 - What is the decay history and current oral health status of the child's parents and siblings?
 - What are the child's non-nutritive sucking habits?
-

Nutrition practice and oral health questions

These issues will generally be addressed on the nutrition interview.

- Tell me about <child's name> eating and what she/he likes to drink.
 - How do you take care of your child's teeth?
 - Has <child's name> seen a dentist?
-

Continued on next page

Assessment — 1 to 5 Years, Continued

Visual assessment

While an open mouth assessment is not required for all children, it should be considered if the **nutrition interview** indicates that the infant is at risk for tooth decay. Inspect the infant's mouth and note any of the following abnormalities:

Soft tissue abnormalities	<ul style="list-style-type: none"> • Gum redness or bleeding • Swelling or lumps • Trauma or injury
Hard tissue abnormalities	<ul style="list-style-type: none"> • Suspected decay (brown spots or dark pits or grooves on the chewing surfaces of the back teeth may be indications of decay) • White spots on the surface of the teeth near the gums (a sign of early decay) • Visible plaque • Enamel defects • Trauma or injury • Stained fissures • Decay history (presence of fillings or crowns)

Recommendations — 1 to 5 Years

Introduction

Provide the following information and recommendations to the parents.

Home care

Follow these guidelines to keep the child's teeth healthy:

- Use a child-sized soft toothbrush to brush teeth at least twice a day. Brushing at bedtime is especially important.
 - Parents should brush the child's teeth until the child is 7-8 years old. If the child wants to brush his/her own teeth, let them practice but finish the job to ensure that teeth are adequately brushed.
 - Fluoridated toothpaste for children should be used as follows:
 - For children younger than 2 years, at moderate to high risk for tooth decay, recommend a smear of fluoride toothpaste.
 - For all children age 2 and older, a pea-sized amount of toothpaste is recommended.
 - At least once a day, preferably at bedtime, floss any teeth that touch. Assist with flossing until the child is 8-9 years old.
 - Show the caretaker how to position the child for best access to the teeth for cleaning. Demonstrate how to pull the lips away from the teeth and brush near the gums. Developing a daily routine is crucial for establishing a regular brushing and flossing habit. A child is more likely to object if it is an occasional activity.
 - Talk to a dental provider about the need for sealants and additional fluoride.
-

Teething

Teething symptoms may include:

- | | |
|----------------------|--------------------------|
| • Irritability | • Crying |
| • Change in appetite | • Change in bowel habits |
| • Wakefulness | • Excessive drooling |

Note: Fever is not a normal symptom of teething. If child has a fever, or if these symptoms persist for over 24 hours they may have another cause; consult a physician.

Continued on next page

Recommendations — 1 to 5 Years, Continued

**Comfort
measures for
teething**

Suggest the following strategies for relieving teething discomfort:

- Apply a cold washcloth to the gums or use a teething ring. Do not use a teething appliance with a liquid filling; the fluid may not be safe if the appliance should break open.
 - Teething biscuits are not recommended due to their sugar and starch content and the high risk of choking.
 - Over-the-counter numbing solutions are not recommended. These products contain a strong anesthetic that is swallowed by the infant.
-

Weaning

Wean the child from a bottle by 12 months, and teach the child to use a cup.

**Non-nutritive
sucking**

Non-nutritive sucking is natural and is not likely to be detrimental if discontinued by the time the first permanent teeth erupt. If a child sucks with unusual intensity or frequency, or continues the habit beyond the age of 5, the position of the child's permanent teeth and the development of the upper and lower jaws could be affected. Weaning from the habit should begin by age 4. A pacifier is preferable to thumb/finger sucking because it is easier for the child to break the habit and is less detrimental to the teeth.

See page 5 for information about safe pacifier use.

Continued on next page

Recommendations — 1 to 5 Years, Continued

Dietary habits The following practices will help prevent tooth decay and develop healthy eating patterns for childhood.

- Encourage weaning from the bottle at age 12 months.
- Bedtime bottle should contain water only.
- Do not use bottle, breast, or sippy cup as a pacifier. When the child is finished, take the cup or bottle away or remove the infant from the breast.
- Do not allow sipping or drinking ad lib from a cup or sippy cup all day.
- Offer sweetened foods or beverages and starches that stick to the teeth as part of a meal, rather than a snack.
- Encourage water as the beverage of choice between meals and snacks.
- Do not allow child to have any food or drink except water after bedtime brushing.
- Recommend healthy snacks that do not contribute to tooth decay such as fruits, vegetables, and cheese.
- Avoid saliva-sharing behaviors, such as sharing utensils or putting child's hands, pacifier, or bottle in parent's mouth. Decay-causing bacteria can transfer from parent to child.

Dental injuries Provide information and print materials about dental injuries and emergencies.

Referrals for dental care Visits to a dentist's office should begin when the child is 1 year old or within six months of the first tooth erupting. These visits are important for prevention and early diagnosis of tooth decay and for anticipatory guidance for parents. At the minimum, children should have an annual dental exam. Access to dental care can be difficult because some providers prefer to see children at the age of 3 or even older. For low-income families, finding a provider that accepts Medicaid reimbursement is a challenge. Refer children to an I-Smile Coordinator for assistance in finding a provider.

Elementary school dental screening requirement All students newly enrolling in kindergarten must provide proof of a dental screening completed between the ages of 3 years to 4 months after the enrollment date. These dental screenings may be provided by a licensed dentist, dental hygienist, nurse, advanced registered nurse practitioner, or physician assistant. Contact an I-Smile Coordinator for assistance in obtaining this dental screening. For more information, go to this Web site: www.idph.state.ia.us/OHDS/OralHealth.aspx?prog=OHC&pg=Screenings.

Assessment — Women

Introduction

The **nutrition interview** can provide important information to support your assessment of a woman's oral health. This section lists key questions to consider during your assessment.

Key oral health questions

All low income women are at greater risk for tooth decay. These questions will also help identify other risk factors.

- Are there any medical factors that may affect her oral health?
 - Medications that cause dry mouth can increase risk for tooth decay. Certain medications can also cause gum problems.
 - Certain diseases, such as diabetes, can have oral manifestations.
 - What is her fluoride exposure?
 - What are her practices for brushing? Flossing?
 - What is her attitude towards dental care? For example, does she feel anxiety about visiting a dentist?
 - Is she experiencing problems with morning sickness?
 - Does she have difficulty or pain in chewing?
 - Does she have any loose teeth?
 - Does she have any oral infections? Problems with bleeding gums?
 - Does she smoke cigarettes? (Smoking is a major contributor to periodontal disease.)
-

Nutrition practices and oral health questions

These issues will generally be addressed on the nutrition interview.

- Tell me what you like to eat and drink.
-

Continued on next page

Assessment — Women, Continued

Visual assessment

While an open mouth assessment is not required for all women, it should be considered for women who have indicated they have problems with their teeth or gums, or if the **nutrition interview** indicates that the woman is at risk for tooth decay or gum disease. Inspect the woman's mouth and note any of the following abnormalities:

Soft tissue abnormalities	<ul style="list-style-type: none"> • Gum redness or bleeding • Swelling or lumps • Trauma or injury • Recession
Hard tissue abnormalities	<ul style="list-style-type: none"> • Suspected decay • White spot lesions (demineralized areas) near the gumline • Visible plaque, calculus (tartar), or stain • Enamel defects • Trauma or injury • Loose or missing teeth • Decay history (presence of fillings or crowns)

Note: Periodontal disease during pregnancy is associated with increased risk for preterm delivery and low birth weight.

Recommendations — Women

Introduction

Provide the following information and recommendations to women.

Home care

Follow these guidelines for healthy teeth and gums:

- Brush teeth at least twice a day with fluoride toothpaste. The most important time to brush is before bedtime. Make sure bristles of brush are soft and are positioned against the gumline.
 - Floss once a day, preferably at bedtime.
-

Dietary habits

Recommend healthy snacks and food choices including the following:

- Limit between-meal snacking on sweetened foods or beverages and starches that stick to the teeth.
 - Eat sweets with a meal, which will have a neutralizing effect on the sugars.
 - Choose snacks such as cheese, fresh fruits and vegetables.
 - Drink water frequently as the beverage of choice between meals and snacks.
 - Limit soft drinks to 12 ounces per day.
 - Chew sugarless or xylitol-containing gum after eating.
 - A diet rich in calcium and vitamin D (dairy products, salmon with the bones, etc.) will protect bones, including the bone around the teeth.
 - Avoid saliva-sharing behaviors, such as sharing utensils or putting child's hands, pacifier, or bottle in parent's mouth. Decay-causing bacteria can transfer from parent to child.
-

Continued on next page

Recommendations — Women, Continued

Special tips for women with frequent vomiting

Frequent vomiting during pregnancy can cause enamel erosion, which can increase a woman's risk for tooth decay. The following tips will help decrease the decay risk:

- Do not brush immediately after vomiting.
 - Rinse mouth first to remove the gastric acid that could damage the teeth. Rinse with water or use a sodium bicarbonate rinse to neutralize the acids (mix ½ tsp. of baking soda in 1 cup of water).
 - Wait approximately 30 minutes after rinsing, and then brush with fluoride toothpaste. A child-sized toothbrush may minimize problems with gagging.
 - Use a fluoride mouthrinse daily for extra protection. Use the rinse at a time of day when nausea is not a problem. Spit out the rinse; don't rinse with water afterwards.
-

Pregnancy gingivitis

Hormonal changes may make pregnant women more susceptible to plaque bacteria that cause red, swollen or bleeding gums. The entire mouth may be affected or it may be localized, resembling a tumor. Pregnancy gingivitis can be prevented with good oral hygiene and at least one professional cleaning during pregnancy. Gum disease during pregnancy has been associated with an increased risk of pre-term/low-birth weight delivery. It is very important that women maintain healthy gums for a healthy baby.

Injury prevention

Encourage women to avoid oral piercing. It can cause mouth infections and can damage teeth and gums.

Referrals for dental care

Recommend that women visit the dentist at least once during pregnancy for cleaning and preventive dental care. Dental visits are safe during pregnancy. The best time to schedule a visit is during the second trimester. Nausea/gagging may be a problem during the first trimester, and sitting in the dental chair may be uncomfortable during the third trimester.

Note: Advise women to tell the dentist that they are pregnant. Using a lead apron for X-rays is particularly important during pregnancy.

Fluoride

Introduction

Fluoride combines with tooth enamel and makes teeth more resistant to decay. Fluoride is available in naturally and artificially fluoridated water supplies; in beverages, formulas and foods made with fluoridated water; supplements; and dental products (toothpaste and mouth rinses).

CDC fluoride recommendation

The Centers for Disease Control and Prevention (CDC) recommends that everyone receive frequent exposure to small amounts of fluoride. For those at low risk for tooth decay, this can be readily accomplished by drinking water with an optimal fluoride concentration and brushing with fluoride toothpaste daily. For those at higher risk, additional fluoride may be needed.

Fluoride in water supplies

Families should know whether the fluoride concentration in their primary source of drinking water is below optimal, optimal, or above optimal. (Optimal fluoride level is 0.7 ppm.) This is the basis for all individual and professional decisions regarding use of other fluoride modalities including supplements. The table below lists information for determining the fluoride status of public and private water supplies.

IF the water supply is ...	THEN contact ...
Municipal water supply	Iowa Department of Public Health Bureau of Oral and Health Delivery Systems website at http://idph.iowa.gov/ohds/oral-health-center/fluoride
Private water supply	University Hygienic Laboratory Iowa Laboratories Complex 2220 South Ankeny Blvd. Ankeny, IA 50023 Phone: 515/725-1600 Fax: 515/725-1642 Kits may be ordered by phone, fax or mail.

Note: Many families may be drinking from alternative water sources such as bottled water and water from filtration systems that may not have optimal fluoride. For example, reverse osmosis and distillation remove fluoride; carbon and charcoal filters do not remove fluoride. A fluoride analysis is the only way to determine the content.

Continued on next page

Fluoride, Continued

Alternative water sources

If the fluoride concentration in the household drinking water is too high, recommend an alternative water source. Alternative water sources include:

- Bottled water labeled “potable,” and
- Municipal water that meets standards for bacteria and nitrate.

Bottled water frequently does not contain fluoride. Some bottled waters may be labeled as containing fluoride, but it may be lower than the recommended concentration. See Policy 245.80 for more information on alternative water sources, and information on bacteria and nitrate standards.

Fluoridated water: Infancy

Recent studies raised the possibility that infants could receive a greater than optimal amount of fluoride through liquid concentrate or powdered infant formula mixed with water containing fluoride. This could result in enamel fluorosis, a mild discoloration of teeth.

According to the American Dental Association, it is safe to use fluoridated water to mix infant formula. If a baby is primarily fed infant formula, using fluoridated water might increase the chance for mild enamel fluorosis, but enamel fluorosis does not affect the health of the child or the health of the child’s teeth. Parents and caregivers are encouraged to talk to their dentist about what’s best for their child.

To decrease the risk of fluorosis, the ADA recommends the following:

- Breastfeed for the first year; breast milk is very low in fluoride. Nursing mothers or pregnant women who drink fluoridated water do not pass on significant amounts of fluoride to their child.
- Use ready-to feed-formula.
- Use powdered or liquid concentrate formula mixed with water that either is fluoride free or has low concentrations of fluoride.

These recommendations must be weighed carefully against the public health concerns of higher tooth decay prevalence and low dental care access experienced by low-income populations, including WIC participants. Fluoridated water may be the only significant oral health preventive strategy these families receive.

The risk of dental fluorosis is relatively small when compared to the high risk for tooth decay in WIC infants and children. *Therefore, it is appropriate for WIC participants to continue to use optimally fluoridated tap water to mix infant formula.*

Continued on next page

Fluoride, Continued

Fluoride supplements: Children

Fluoride supplements may be prescribed for children between the ages of 6 months and 16 years who do not have access to water supplies containing optimal levels of fluoride. A dentist or other healthcare provider should determine the need for fluoride supplements based on the child’s age, risk for developing too decay, and fluoride levels of the primary drinking water.

A fluoride supplement dosage schedule has been established by the ADA, AAPD and AAP.

Fluoride supplements: Pregnancy

There is no evidence that prenatal fluoride supplements are beneficial to either the fetus or the mother. While they do no harm, they are not recommended.

Toothpaste

Brushing with fluoride toothpaste is recommended as follows:

Age/Status	Fluoride Toothpaste amount	Frequency
For children younger than 2 years, at moderate to high risk for tooth decay.	A smear	Twice daily, after breakfast and before bedtime.
<u>All children</u> ages 2 and older	Pea-sized amount	Twice daily, after breakfast and before bedtime
All women	Pea-sized amount	Twice daily, after breakfast and before bedtime

Fluoride varnish

Fluoride varnish is a topical treatment that is especially useful in young children and those with special needs who may not tolerate other forms of topical fluoride. The advantages of varnish are that it can be easily and quickly applied and there is minimal ingestion because it adheres to teeth on contact with saliva.

The Iowa Department of Public Health protocol recommends three applications per year for moderate and at risk children and pregnant women.

Continued on next page

Fluoride, Continued

Fluoride mouth rinse Women who are vomiting frequently may benefit from the addition of a daily mouthrinse. Women at risk for tooth decay may also benefit. Fluoride mouthrinses are available over the counter.

Note: Children under the age of 6 should not use mouthrinse without consulting a dentist or healthcare provider due to the risk of swallowing the rinse.

Dental products Recommend that all fluoride toothpastes and rinses have the seal of the American Dental Association. The seal indicates that the product has been evaluated and that the fluoride content is safe and effective.

Tubes of toothpaste should not be left where young children can reach them. The flavors that help encourage them to brush may also encourage them to eat the paste.

This page is intentionally left blank.