



Prenatal Oral Health Program Talking Points

A Message to the Primary Health Care Provider

WHY TEETH MATTER?

- ✓ Moms with healthy mouths have less heart disease, diabetes and tooth loss
- ✓ Mom's good oral health can lead to positive dental attitudes and healthy teeth in her children



Why Teeth Matter?

- An association exists between preterm birth and periodontal disease during pregnancy.¹ Even though treatment of periodontal disease during the perinatal period has not been shown to decrease the risk of preterm birth,² treatment of periodontal disease during pregnancy is safe and can improve a woman's oral health status.
- Patients seeking dental care during pregnancy can influence future habits of their children. Research suggests that mothers receiving dental anticipatory guidance during this time have children with improved oral hygiene and decreased Early Childhood Caries (ECC).³

TRUTHS ABOUT ORAL HEALTH PREGNANCY

- ✓ Pregnancy doesn't hurt your teeth or make them fall out
- ✓ Dental care during pregnancy is safe and can help you have a healthier baby



Truths About Oral Health Pregnancy

- Mothers who have untreated dental disease can nearly double the odds of their children having untreated dental disease, and significantly increase the severity of their child's caries experience.⁴ There is no evidence indicating that tooth loss is a common sequela of pregnancy. Early tooth loss most likely indicates severe periodontal disease. However, frequent vomiting from hormonal changes/morning sickness can increase acidic exposure and is a risk factor for dental caries.
- Avoiding dental care during pregnancy can be detrimental to the mother's health. Periodontal therapy during pregnancy can decrease the severity of periodontal disease.⁵
- Maternal and baby's oral health are not independent. Maternal oral health will affect her child's attitudes about his/her oral health. In addition, mothers can transmit their oral flora to their infants, increasing the infant's risk for dental disease.^{1,4,6}

COMMON ORAL CONDITIONS



Gingivitis (Gum Disease)



Tooth Erosion



Pregnancy Epulis



Periodontitis (Severe Gum Disease)

Common Oral Conditions

• Periodontal Health

- Pregnant women can experience suppression of neutrophil functions, the likely explanation for plaque-induced gingival inflammation. Discussion of prevention and establishment of a periodontal treatment plan can benefit pregnant women.⁷
- Like gingivitis, “pregnancy gingivitis” can be described as darker red, swollen, smooth gingiva that bleeds easily. It is estimated that between 60% to 75% of pregnant women will experience “pregnancy gingivitis,” making it the most common periodontal condition of pregnant women will experience.⁸ Good oral hygiene and proper dietary practices can help address this condition.

• Pregnancy Epulis

- These lesions are described as a single tumor-like growth most frequently in areas of gingivitis, recurrent irritation, or trauma. Pregnancy epulis generally regresses on its own during the postpartum period, but removal is indicated if the patient is uncomfortable, there is disruption of tooth alignment or ease of bleeding with mastication exists. Women should be informed of the probability of lesion recurrence.

• Tooth Erosion

- Repeated acid exposure resulting from frequent vomiting or gastro-esophageal reflux can cause tooth erosion. Pregnant women may sometimes suffer from erosion, appearing on the lingual (tongue-sided) surfaces and incisal edges of teeth. Erosion is characterized by a smooth surface with a yellowish tint from dentin exposure.
- Erosion can be prevented by snacking on foods high in protein, rinsing with a teaspoon of baking soda and water, and avoiding brushing directly after a vomiting episode. Use of a fluoride rinse can also help in the re-mineralization process.¹⁰

SAFE DENTAL TREATMENT DURING PREGNANCY

- ✓ Dental Cleanings
- ✓ X-rays
- ✓ Dental Fillings
- ✓ Removal of Hopeless Teeth



Safe Dental Treatment During Pregnancy

- Dentists' should not hesitate to provide treatment to a pregnant patient. It has been shown that dental treatment is safe in all trimesters with the second trimester being the most ideal time for dental care. If care is necessary in the third trimester, providers should position the woman in the left lateral position to prevent pressure in the *vena cava* and increase syncope risk.
11,12,13
- Radiation exposure: Limit radiation exposure by using lead aprons that include a thyroid collar. Use of rectangular collimator is recommended.¹⁴
- Dental procedures: Amalgam fillings do not pose a risk during pregnancy.¹⁵
- Dental cleanings: Timely routine dental prophylaxis can improve women's oral health status.

MEDICATIONS DURING PREGNANCY

| | Safe | Caution Advised |
|-------------------------|--|---|
| Pain Medication | ✓ Tylenol (Acetaminophen) | ✓ Prolonged Ibuprofen use ✓ Codeine and Morphine at high doses |
| Antibiotics (Infection) | ✓ Penicillin ✓ Amoxicillin ✓ Clindamycin ✓ Erythromycin (except estolate form) ✓ Cephalosporin | ✓ Tetracycline ✓ Fluoroquinolones |

Medications During Pregnancy

- Analgesics
 - Tylenol is the safest drug for pain management.¹⁶
 - Avoid Aspirin and NSAIDs (Ibuprofen) as they can have potential fetal effects.¹⁷ Narcotics, commonly used for short term pain relief, are Category C drugs in the 1st and 2nd trimester and Category D in the 3rd trimester. Note: Category C are drugs with positive evidence of human fetal risk based on adverse reaction data from investigational marketing experience of human studies. Potential benefits, however, may warrant use of Category D drugs in pregnant women and should be used under direct medical supervision.
 - Antibiotics
 - Antibiotic use in dentistry is generally acceptable and have not been associated with adverse effects on the fetus (e.g. Pen V, Amoxicillin, Cephalexin and Clindamycin).^{13,18} Tetracyclines, Erythromycin, and Chloramphenicol should be avoided. Tetracycline can cause permanent tooth staining in the fetus' developing permanent (adult) teeth. Erythromycin (estolate form) should be avoided as it can
- (continued on next page)*

cause hepatotoxicity in the mother. Chloramphenicol, at full-term, is associated with bone marrow suppression in the fetus (called “gray-baby syndrome”).²⁰

- Anesthetic Use

- Adequate local anesthesia is indicated for a pregnant patient, but caution should be taken on the type administered. Lidocaine with epinephrine is a safe local anesthetic for use during pregnancy.²⁰
- Bupivacaine (Marcaine) and Mepivacaine (Carbocaine) should be avoided if possible as they are a Category C Drug with human studies not completed to rule out harmful effects.
- Local anesthetics have the potential to cross the placental barrier and hence, the lowest possible dose to achieve anesthesia should be used.²⁰

- Sedatives and Anti-Anxiolytics

- First trimester benzodiazepines should be avoided as these have been associated with oral clefts.
- Nitrous oxide can be considered only for short duration procedures and if the clinician is otherwise unable to provide emergency dental care. Long-term exposure to nitrous oxide is controversial with evidence suggesting potential for folate depletion and inhibition of cell division. Nitrous use should be limited to treating acute needs in the severely anxious patient.

NUTRITION DURING PREGNACY

| Mothers BMI | Appropriate Weight Gain (lbs) |
|----------------------|-------------------------------|
| Normal 18.5 - 24.9 | 25 - 35 |
| Underweight < 18.4 | 28 - 40 |
| Overweight 25 - 29.9 | 15 - 25 |
| Obese > 30 | 11 - 20 |



Nutrition During Pregnancy

- Snacking on foods containing fermentable carbohydrates and foods high in sugar increases caries experience. Starchy and sugary food consumption between meals should be avoided between meals.¹⁵
- Sodas are acidic and can lead to tooth erosion and weaken enamel. The low pH from sodas, sports drinks, and juices can produce a caries-promoting environment.¹⁵
- Calculation of Body Mass Index (BMI) is a helpful tool to demonstrate the appropriate weight gain during pregnancy. Use the following website by the CDC to calculate BMI: <https://apps.nccd.cdc.gov/dnpabmi/>.²¹

TAKING CARE OF YOUR TEETH

- ✓ Brush at least twice daily with fluoride toothpaste
- ✓ Floss once daily
- ✓ Chew sugar free gum regularly (2-3 times daily)



YOU AND BABY

- ✓ Life gets hectic!
Take time for yourself
- ✓ Breastfeeding is good for you and your baby's health
- ✓ Continue to brush, floss and make healthy food choices
- ✓ Visit your dentist regularly



Taking Care of Your Teeth

- Oral Chemotherapeutic Agents
 - Fluoride exposure: Encourage fluoride water source. If drinking bottled water, encourage fluoridated bottles. Optimal fluoride exposure will help remineralize tooth structure and inhibit bacterial growth.²²
 - Chewing sugar-free gum can significantly reduce caries risk.²³ The evidence of the influence of xylitol on vertical transmission is inconclusive but emerging.
- General Information
 - Rinse with baking soda and water following morning sickness.
 - Frequent brushing helps ensure fluoride exposure and physical removal of plaque.
 - Consideration of cultural beliefs is critical to ascertain follow-up to provider dental recommendations.²⁵ For example, water consumption beliefs and concerns regarding quality and safety of public sources among Hispanic patients has important implications on adequate fluoride exposure.²⁶

You and Baby

- Dental caries is an infectious disease with transmissibility of bacteria from mother to child occurring as early as the first few weeks of life by colonizing in the tongue furrows.^{27,28}
- Avoid saliva-sharing behaviors that can increase transmissibility including kissing the baby on the mouth, sharing utensils and toothbrushes, cleansing the infant pacifier by licking particularly among women with active dental disease. Dipping pacifiers in honey is contraindicated given the increased risk of early childhood caries and botulism.²⁹
- Bacterial transmission can also be reduced with a comprehensive preventive program that includes oral hygiene instructions, use of fluoride mouth rinses, xylitol gum and restorations of carious lesions.

BABY'S ORAL HEALTH

- ✓ Avoid pacifier use in the first month of life
- ✓ Wipe gums after feedings and before falling asleep
- ✓ Avoid putting infant to bed with milk or sugary liquids
- ✓ Brush with a small smear of fluoride toothpaste after the first tooth emerges
- ✓ First birthday: first dental visit



Baby's Oral Health

- Encourage breastfeeding when possible; scheduled feedings once teeth emerge is preferred. Encourage daily oral hygiene practices for the infant.³⁰
- Dental caries is the single most common chronic disease of childhood and is 5 times more common than asthma.³¹ Early Childhood Caries can be clinically evident within 6-12 months after tooth emergence.
- It is important to evaluate the family's caries experience, fluoride exposure, and level of oral hygiene to help develop a proper prevention plan and recall recommendation.³²
- Recommend establishment of a dental home by age 1.^{33,34}

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Linking oral health messaging to prenatal visits

| | First Prenatal Visit (6-10 weeks) | Monthly Prenatal Visits (10-28 weeks) | Bimonthly Prenatal Visits (28-36 weeks) | Weekly visits (36 weeks +) |
|------------------------------|--|---|--|---|
| Prenatal Messaging | <ul style="list-style-type: none"> • Labs • Clinical exam • Nutrition/weight gain • Prenatal vitamins • Aneuploidy (genetic) testing • Social issues: Domestic violence, alcohol/tobacco use • Breastfeeding | <ul style="list-style-type: none"> • Ultrasound (18-20wks) • Depression screening • Nutrition/weight gain/fetal growth | <ul style="list-style-type: none"> • Mood • Fetal growth • Screening for complications | <ul style="list-style-type: none"> • Labor education • Breastfeeding • Contraception |
| Oral Health Messaging | <ul style="list-style-type: none"> • Existing dental home • Baseline oral health practices: <ul style="list-style-type: none"> - link nutrition to dental caries - link alcohol and tobacco use to risk for orofacial cleft (e.g. lip/palate) • Folic acid (prenatal vitamins) protective for clefts | <ul style="list-style-type: none"> • Ask about dental visit • Reinforce oral hygiene practices (brushing/flossing) • Link nutrition to dental caries | <ul style="list-style-type: none"> • Reinforce good oral habits • Connection between maternal and infant oral health | <ul style="list-style-type: none"> • Discuss infant oral health and wiping gums after feedings • Reinforce brushing baby's teeth with emergence of first tooth • First tooth, first birthday, first dental visit |
| Oral Development | <ul style="list-style-type: none"> • Lip closure: weeks 5-6 • Palate closure: weeks 7-11 • Cleft lip and/or cleft palate occur in 1 in 700 live births. • Clefts result from the non-fusion of these structures. | <ul style="list-style-type: none"> • Tooth development (odontogenesis) • Initial calcification of primary teeth in utero: <ul style="list-style-type: none"> - Central incisors at 14 wks - Laterals at 16 wks - Canines at 17 wks - Molars at 15-19 wks | <ul style="list-style-type: none"> • Tooth development for primary teeth ongoing | <ul style="list-style-type: none"> • Tooth development for primary teeth ongoing • First permanent molars (6 year molar) begin calcification at birth |