Oral health care during pregnancy
Introduction

Women experience multiple physiological changes during pregnancy, including changes in the oral cavity that may adversely affect their oral health. Therefore, it is paramount that prenatal and dental providers discuss oral changes with pregnant women, reinforce positive oral health practices and assure women that oral health care during pregnancy is safe and important. Physicians, nurses and other medical providers are more likely to see pregnant women and infants than are dental providers, making it essential that they address oral health with these patients and make referrals to dentists, as necessary.

Children born to women with poor oral health and high levels of caries-causing bacteria are at high risk for developing dental caries (i.e., tooth decay). According to the Centers for Disease Control and Prevention, dental caries remains one of the most prevalent chronic diseases among children in the United States, despite it being preventable. This underscores the prenatal period as an opportune time to educate pregnant women on oral health and to deliver oral health care services. These interventions may significantly change the trajectory of oral health for both the mother and her future child.

Professional oral prophylaxis (i.e., teeth cleaning) is a vital component of preventive and therapeutic oral health care; however, more than half of mothers do not have their teeth cleaned during pregnancy. Barriers for not seeking care include cost, safety concerns and difficulty finding a dentist who accepts pregnant patients or Medicaid.

It is critical that prenatal and dental providers assure women that oral health care during the entire pregnancy is safe for both mothers and their developing children. Providers should also inform women that their commercial dental benefits do not change during pregnancy and some plans may even offer additional benefits for pregnant women. South Dakota Medicaid also covers oral health care services during pregnancy.

In 2012, the American College of Obstetricians and Gynecologists, the American Dental Association and other organizations issued Oral Health Care During Pregnancy: A National Consensus Statement, which included practice guidance for both prenatal and dental providers. The Delta Dental of South Dakota Foundation is pleased to share this vital information with the release of this guidance, as the health and safety of pregnant women and children is a top priority.

Early care is key
Pregnant women should make a dental appointment early in pregnancy. Oral health care is safe during all trimesters and should not be postponed or avoided during pregnancy. Women should visit the dentist for cleanings, exams and any treatment needed to maintain or improve their oral health during pregnancy.
Pregnancy has nothing to do with oral health.

During pregnancy, physiological changes occur that may adversely affect oral health, such as dental caries, pregnancy gingivitis, periodontitis (gum disease), pregnancy tumor (pyogenic granuloma) and tooth erosion. These conditions can be prevented and treated; so women should visit the dentist during pregnancy.

Dentists and hygienists do not need to know if a woman is pregnant.

It is important for dental providers to know a woman is pregnant as she may be at risk for certain oral conditions. A woman should inform the dental team that she is pregnant and share her expected due date and if her pregnancy is considered high risk.

Maternal oral health does not affect the future child’s health.

Children born to women with poor oral health and high levels of caries-causing bacteria are at high risk of developing dental caries. Restoring active carious lesions before delivery may reduce the child’s risk of dental caries. Pregnancy is an opportune time to educate women on the importance of their own oral health and the health of their future child. Poor prenatal nutrition may also affect a child’s tooth development.

Gain a child, lose a tooth.

The developing child does not take calcium from the mother’s teeth. This myth likely originated because pregnant women may be at higher risk for dental caries.

Never get dental X-rays while pregnant.

Dental X-rays with lead shielding are considered safe during pregnancy by the American Dental Association.4 Even though radiation exposure from dental X-rays is low, once a decision to obtain X-rays is made, it is the dental provider’s responsibility to follow the ALARA Principle (As Low As Reasonably Achievable) to minimize the patient’s exposure.

Best radiologic practices include:
• Use of the fastest image receptor compatible with the diagnostic task (F-speed film or digital)
• Use of protective lead aprons and thyroid collars
• Collimation of the beam to the size of the receptor whenever feasible
• Proper processing techniques
• Limiting the number of images to the minimum necessary

Prenatal providers are often the “first line” in assessing pregnant women’s oral health. They have the opportunity to identify problems, provide referral to the dentist and reinforce good oral health habits.

Oral conditions during pregnancy

**Dental caries**
Increased acidity in the mouth from morning sickness or gastric reflux; increased intake and frequency of sugary foods and beverages; not drinking fluoridated water; and decreased attention to oral hygiene practices will result in an elevated risk of dental caries.

**Pregnancy gingivitis**
An increased inflammatory response to plaque while pregnant can result in gums that swell and bleed more easily. Thorough brushing and flossing of teeth can prevent or reduce gingivitis.

**Periodontitis (gum disease)**
Untreated gingivitis can result in periodontitis — infection of the gums and surrounding bone. This can result in loosening teeth and bone loss.

**Pyogenic granuloma (pregnancy tumor)**
Occurs in approximately 5% of pregnancies. These lesions may result from a heightened inflammatory response to oral pathogens. Lesions usually regress after pregnancy without treatment.

**Tooth erosion**
Vomiting from morning sickness and gastric reflux may lead to tooth erosion. Rinsing with one teaspoon of baking soda dissolved in a cup of water after vomiting helps neutralize acid.

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Tooth erosion image: dentalcare.com
Guidance for prenatal providers

Assess pregnant women’s oral health status
During the first prenatal visit:
• Ask about oral health history (see questions to ask below).
• On your patient-intake form, record the name and contact information of the woman’s dentist, reason for and date of last dental visit and previous dental procedures.
• Assess frequency of consuming foods, beverages and medications that contain sugar and use of tobacco, alcohol and recreational drugs.
• Check the mouth for problems such as swollen or bleeding gums, untreated dental caries, mucosal lesions, and signs of infection (e.g., abscess) or trauma.
• Document findings in woman’s medical record.

Oral health questions to ask pregnant women
• Do you have any dental problems or concerns?
• Do you have swollen or bleeding gums, a toothache (pain), problems eating or chewing food, or other problems in your mouth?
• Since becoming pregnant, have you been vomiting? If so, how often?
• Do you have any questions or concerns about getting oral health care while you are pregnant?
• When was your last dental visit? Do you need help finding a dentist?

Advise pregnant women about oral health
• Assure women that there is no need to postpone or avoid oral health care during pregnancy. Oral health care — including the use of X-rays, pain medication and local anesthesia — is safe, important and covered by most insurance.
• Advise women to schedule an appointment with a dentist as early in the pregnancy as possible. If urgent care is needed or if the woman does not have a dentist, facilitate a referral to a dentist with whom you maintain a collaborative relationship.
• Encourage good oral health behaviors during pregnancy (see tips to share below).
• Explain to women that cavity-causing bacteria can be passed from mother to child after birth. Restoring active carious lesions before delivery may reduce the child’s risk of dental caries.

Oral health tips to share with pregnant women
• See a dentist as early in your pregnancy as possible.
• Brush teeth twice a day with fluoride toothpaste.
• Floss once a day.
• Choose healthy snacks and avoid foods and drinks containing sugar.
• Drink water with fluoride. About 94% of South Dakotans served by a community water system (as opposed to a private well) receive fluoridated water from their tap.5 Most water filters do not remove fluoride.
• If you vomit, rinse your mouth with a teaspoon of baking soda in a cup of water and delay brushing your teeth for about an hour.

Collaborate with dental providers
• Establish relationships and a referral process with dentists in the community.
• Maintain a list of dentists in the community.
• Share pertinent patient information and coordinate care with dentists.

For a list of public health dental services, visit: doh.sd.gov/documents/Prevention/oralhealth/FQHC.pdf

Assess pregnant women’s oral health status

- Ask questions about pregnancy when taking medical and oral health history (see questions to ask below).
- On the patient-intake form, record the name and contact information of the woman’s prenatal provider.
- Assess frequency of consuming foods, beverages and medications that contain sugar and use of tobacco, alcohol and recreational drugs.
- Perform a comprehensive oral examination, which includes risk assessments for dental caries, periodontal disease, and oral and oropharyngeal cancer.
- Take X-rays to diagnose oral diseases, as needed.

Questions to ask pregnant women

- How many weeks pregnant are you? When is your due date?
- Do you have any questions or concerns about getting oral health care while you are pregnant?
- Have there been any changes in your diet?
- Since becoming pregnant, have you been vomiting? If so, how often?
- Have you received prenatal care?
- Do you need help finding a prenatal provider?

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Collaborate with prenatal providers

- Establish relationships and a referral process with prenatal providers in the community.
- Share pertinent patient information and coordinate care with prenatal providers.
- Provide oral health training and resources to prenatal providers.
- Consult with prenatal providers, as necessary. For example, when considering:
  - Comorbid conditions that may affect management of oral health problems (e.g., diabetes, hypertension, pulmonary or cardiac disease, bleeding disorders)
  - Use of intravenous sedation or general anesthesia
  - Use of nitrous oxide as an adjunctive analgesic to local anesthetics

Guidance for dental providers

1. Assess pregnant women’s oral health status
2. Advise pregnant women about oral health
3. Collaborate with prenatal providers

Guidance for dental providers

Positioning pregnant women in the dental chair

- Keep the woman’s head at a higher level than her feet.
- Place the woman in a semi-reclining position, as tolerated, and allow frequent position changes.
- Place a small pillow under the right hip or have the woman turn slightly to the left as needed to avoid dizziness or nausea resulting from hypotension.

Provide oral disease management and treatment to pregnant women

- Provide emergency and routine oral health care at any time during pregnancy.
- Position women appropriately in the dental chair (see positioning details above).
- Develop, discuss and provide women with a comprehensive care plan that includes prevention, treatment and maintenance throughout pregnancy.
- Use standard practice when placing restorative materials such as amalgam and composite. Although data are limited, the U.S. Food and Drug Administration concluded in 2008 that fetuses are not at risk for adverse health effects from amalgam placement or removal during pregnancy.7
- Use a rubber dam and high-speed evacuation during endodontic and restorative procedures.

Dental pharmacological considerations for pregnant women

The pharmacological agents listed below are to be used only for indicated medical conditions and with appropriate supervision.

### Pharmaceutical agent

<table>
<thead>
<tr>
<th>Pharmaceutical agent</th>
<th>Indications, contraindications and special considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Analgesics</strong></td>
<td></td>
</tr>
<tr>
<td>Acetaminophen</td>
<td>✅ May be used during pregnancy. Oral pain can often be managed with non-opioid medication. If opioids are used, prescribe the lowest dose for the shortest duration (usually less than 3 days), and avoid issuing refills to reduce risk for dependency.</td>
</tr>
<tr>
<td>Acetaminophen with codeine, hydrocodone or oxycodone</td>
<td>✅ May be used during pregnancy.</td>
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<tr>
<td>Codeine</td>
<td></td>
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<tr>
<td>Meperidine</td>
<td></td>
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<tr>
<td>Morphine</td>
<td></td>
</tr>
<tr>
<td>Aspirin</td>
<td>✅ May be used in short duration during pregnancy: 48 to 72 hours.</td>
</tr>
<tr>
<td>Ibuprofen</td>
<td></td>
</tr>
<tr>
<td>Naproxen</td>
<td>✅ May be used during pregnancy.</td>
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<tr>
<td><strong>Antibiotics</strong></td>
<td></td>
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<tr>
<td>Amoxicillin</td>
<td>✅ May be used during pregnancy.</td>
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<tr>
<td>Cephalosporins</td>
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<tr>
<td>Clindamycin</td>
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<tr>
<td>Metronidazole</td>
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<tr>
<td>Penicillin</td>
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<tr>
<td>Ciprofloxacin</td>
<td>✅ May be used during pregnancy.</td>
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<tr>
<td>Clarithromycin</td>
<td>✅ May be used during pregnancy.</td>
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<tr>
<td>Levofloxacin</td>
<td>✅ May be used during pregnancy.</td>
</tr>
<tr>
<td>Moxifloxacin</td>
<td>✅ May be used during pregnancy.</td>
</tr>
<tr>
<td>Tetracycline</td>
<td>✅ May be used during pregnancy.</td>
</tr>
<tr>
<td><strong>Anesthetics</strong></td>
<td></td>
</tr>
<tr>
<td>Local anesthetics with epinephrine (e.g., Bupivacaine, Lidocaine, Mepivacaine)</td>
<td>✅ May be used during pregnancy. Limit duration of exposure to less than 3 hours in pregnant women in the third trimester.</td>
</tr>
<tr>
<td>Nitrous oxide (30%)</td>
<td>✅ May be used during pregnancy when topical or local anesthetics are inadequate. Pregnant women require lower levels of nitrous oxide to achieve sedation; consult with prenatal health care professional.</td>
</tr>
<tr>
<td><strong>Antimicrobials</strong></td>
<td></td>
</tr>
<tr>
<td>Cetylpyridinium chloride mouth rinse</td>
<td>✅ May be used during pregnancy.</td>
</tr>
<tr>
<td>Chlorhexidine mouth rinse</td>
<td>✅ May be used during pregnancy.</td>
</tr>
<tr>
<td>Xylitol</td>
<td>✅ May be used during pregnancy.</td>
</tr>
</tbody>
</table>


From Oral Health Care During Pregnancy: A National Consensus Statement – Summary of an Expert Workgroup Meeting #1-2012 by the National Maternal and Child Oral Health Resource Center, Georgetown University. Table updated 2017. Permission is given to photocopy this publication or to forward it, in its entirety, to others.
Tips for good oral health during pregnancy

Practice good oral hygiene
- Brush teeth twice a day with fluoride toothpaste.
- Floss once a day to prevent red, puffy gums.
- If you vomit, rinse your mouth with a teaspoon of baking soda in a cup of water to stop acid from attacking your teeth. Delay brushing your teeth for about an hour.

Practice other healthy behaviors
- Attend prenatal classes.
- Stop use of all tobacco products and recreational drugs. Avoid secondhand smoke.
- Do not drink alcohol.
- Take folic acid and iron supplements as recommended by your prenatal health care provider or nurse.

Eat healthy foods
- Eat a balanced and nutritious diet.
- Avoid foods high in sugar.
- Also avoid beverages high in sugar like juice, fruit-flavored drinks and soda.
- If you have problems with nausea, eat small amounts of healthy foods throughout the day.
- Drink fluoridated water throughout the day, especially between meals. Most tap water in South Dakota contains fluoride which helps prevent cavities. Most water filters do not remove fluoride.

Get dental care
- Tell the dentist and dental hygienist you are pregnant and your due date.
- All dental treatment should be completed before delivery.
- Dental care — including the use of X-rays, most pain medications and local anesthesia — is safe during pregnancy.
- Changes to your body when you are pregnant may make your gums sore or puffy and may make them bleed. This problem is called gingivitis (inflammation of the gums). If gingivitis is not treated, it may lead to periodontal (gum) disease, which can cause tooth loss.

Tips for good oral health during infancy

• Beginning soon after birth, clean your child’s gums daily with a clean, wet washcloth.
• Do not put your child to bed with a bottle. Children should be weaned from a bottle between 12 and 14 months.
• Avoid saliva-sharing activities (e.g., sharing utensils, cleaning pacifiers in your mouth) as cavity-causing bacteria can be passed from parent to child.
• Once teeth come in, start brushing twice a day with fluoride toothpaste the size of a grain of rice for children under age 3. For children ages 3 and above, a pea-size amount should be used.
• Avoid giving your child foods and drinks containing sugar. Children should not have fruit juice during their first year.
• Lift the child’s lip once a month to look for cavities. The child should see a dentist immediately if there are signs of cavities.

Cavity detection
- Early cavities: chalky white lines at the gum line that can be healed
- Moderate cavities: looks like teeth are melting or chipping
- Severe cavities: brown or black in color; may be chipped or broken

How to keep your child cavity free

•Tell the dentist and dental hygienist you are pregnant and your due date.
• All dental treatment should be completed before delivery.
• Dental care — including the use of X-rays, most pain medications and local anesthesia — is safe during pregnancy.
• Changes to your body when you are pregnant may make your gums sore or puffy and may make them bleed. This problem is called gingivitis (inflammation of the gums). If gingivitis is not treated, it may lead to periodontal (gum) disease, which can cause tooth loss.

Recommended amount of toothpaste

<table>
<thead>
<tr>
<th>Age</th>
<th>Size of toothpaste</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-3 years</td>
<td>size of a grain of rice</td>
</tr>
<tr>
<td>3+ years</td>
<td>pea-size amount</td>
</tr>
</tbody>
</table>

• Avoid giving your child foods and drinks containing sugar. Children should not have fruit juice during their first year.

How to relieve teething pain

• Use over-the-counter pain medicine (acetaminophen, ibuprofen) and/or chilled (never frozen) teething rings.
• Do not use teething gels or tablets.
Consejos para tener una buena salud bucal durante el embarazo

Tenga buenos hábitos de higiene bucal
• Cepíllese los dientes dos veces al día con pasta dental con flúor.
• Use hilo dental una vez al día para prevenir encías rojas e inflamadas.
• Si vomita, enjuáguese la boca con una cucharadita de bicarbonato de sodio disuelta en una taza de agua para evitar que el ácido le haga daño a los dientes. Retrase el cepillado por cerca de una hora.

Tenga otros buenos hábitos saludables
• Asista a clases prenatales.
• No consuma tabaco ni drogas recreativas. Evite ser fumadora pasiva.
• No consuma alcohol.
• Tome ácido fólico y suplementos de hierro según lo recomendado por su médico o personal de enfermería prenatal.

Coma alimentos saludables
• Tenga una dieta balanceada y nutritiva.
• Evite alimentos con alto contenido de azúcares. También evite bebidas con alto contenido de azúcares, como jugos, bebidas con sabor a frutas y gaseosas.
• Si tiene náuseas, coma pequeñas cantidades de alimentos saludables durante el día.
• Beba agua con fluoruro durante el día, especialmente entre comidas. La mayoría del agua de grifo de South Dakota contiene fluoruro, lo cual previene caries.

Obtenga atención odontológica
• Digale al odontólogo y al higienista odontológico que está embarazada y la fecha del parto.
• Todos los tratamientos odontológicos se deben completar antes del parto.
• La atención odontológica, lo que incluye uso de rayos X, la mayoría de los medicamentos para el dolor y la anestesia local, son seguros durante el embarazo.
• Los cambios en su cuerpo cuando está embarazada pueden ocasionar dolor e inflamación en sus encías, lo que puede hacerlas sangrar. Este problema se llama gingivitis (inflamación de las encías). Si no se trata la gingivitis, puede provocar una enfermedad periodontal (en las encías) que puede ocasionar pérdida de dientes.

Consejos para tener una buena salud bucal durante la infancia

Cómo mantener a su hijo sin caries
• Al poco tiempo del parto, limpie las encías de su bebé a diario con un pañito mojado limpio.
• No acueste a su hijo con un biberón. Los niños deben ser destetados del biberón entre los 12 y 14 meses.
• Evite actividades en las cuales comparta saliva (compartir utensilios o limpiar el chupón con su boca), ya que las bacterias que ocasionan caries pueden ser transmitidas de madre a hijo.
• Una vez que le salgan los dientes, comience a cepillarlo dos veces al día con pasta dental con fluoruro del tamaño de un grano de arroz para niños menores de 3 años. Para niños de 3 años de edad o más, se debe usar una cantidad del tamaño de un guisante.

• Evite darle a su hijo alimentos y bebidas que contengan azúcares. Los niños no deben beber jugo de frutas durante su primer año.

• Levante los labios del niño una vez al mes para ver si tiene caries. El niño debe tener una consulta con un odontólogo inmediatamente si hay señales de caries.

Detección de caries
• Caries en la primera infancia: las líneas blanquecinas en la línea de la encía se pueden curar.
• Caries moderadas: los dientes parecen derretirse o astillarse.
• Caries graves: de color marrón o negro; pueden estar astilladas o rotas.

CÓMO ALIVIAR EL DOLOR DE LA DIENTICION
• Use analgésicos de venta libre (acetaminofén, ibuprofeno) o anillos de dentición fríos.

• No use geles para la dentición.
Additional resources

Dentist By 1 poster and brochure
available in English and Spanish
deltadentalsd.com/dentistby1

American Academy of Pediatrics toolkit
available in eight languages

American Academy of Pediatrics toolkit
The American Academy of Pediatrics released a toolkit for providers that includes free downloadable posters and brochures about the importance and safety of prenatal oral health care. The resources are available in eight languages.
services.aap.org/en/news-room/campaigns-and-toolkits/oral-health

Smiles for Life
Smiles for Life is a national oral health curriculum that was created to educate primary medical health care providers about oral health. It includes seven online modules about oral health across the lifespan. The course is endorsed by the American Dental Association, the American Dental Hygiene Association and the American Academy of Family Physicians, to name a few.
smilesforlifeoraledhealth.org/courses/pregnancy-and-women

SD QuitLine
Resources to help your patients quit using tobacco.
sdquitline.com/thinking-about-quitting/priority-populations/#pregnant-women

National Maternal and Child Oral Health Resource Center
A national center serving the maternal and child health community with high-quality oral health technical assistance, training and resources.
mchoralhealth.org