

# **Section 1**

## **Maternal Oral Health**

## A. Assessment

### 1. Adult Basic Screening Survey

**ADULT ORAL HEALTH SCREENING**

Participation is voluntary, information collected on this form will be used for tracking treatment, and services provided to the patient and will be used only for this purpose. See instructions below.

<b>Date of Screening (mm/dd/yyyy)</b>		<b>Site</b>	<b>Initials - Screener</b>
<b>PARTICIPATION INFORMATION</b>			
<b>Identification Number</b>		<b>Birth Date (mm/dd/yyyy)</b>	<b>Age</b>
<b>Gender</b> 1=Male 2= Female	<b>Race and Ethnicity</b> 1= White 2= African American 3= Hispanic/Latino(a) 4= Asian	5= American Indian/Alaska Native 6= Native Hawaiian/Pacific Islander 7= Multiracial 9=Unknown	
<b>Natural Teeth</b> 0=No natural teeth 1=Natural teeth present		<b>Untreated Caries</b> 0=No untreated cavities 1=Untreated cavities	
<b>Periodontal Disease Risk Factors or Signs of Inflammation Present</b> 0=No risk factors or signs of inflammation 1=Periodontal risk factors or signs of inflammation present		<b>Treatment Urgency</b> 0=No obvious problem 1=Early dental care 2=Urgent care	
<b>Comments</b>			

**INSTRUCTIONS**

1. The **Site** is the name of the agency.
2. The **Identification Number** i.e., patient record number
3. Please refer to Basic Screening Surveys: An Approach to Monitoring Community Oral health, 1999, ASTDD, for completing the PARTICIPANT INFORMATION section of the form.

Address any questions to:

**DEPARTMENT OF HEALTH AND FAMILY SERVICES**  
 Division of Public Health  
 State Dental Hygiene Officer  
 1 West Wilson Street  
 Madison, WI 53702

## 2. Maternal Periodontal Disease Risk Assessment Checklist

## Maternal Periodontal Disease Risk Assessment Checklist

### Innate Risk Factors for Periodontal Disease

#### Inheritance/Genetic Factors

- The client's parents or siblings have experienced gum disease.
- Phagocyte dysfunction
- Downs Syndrome
- Papillon-Lefevre Syndrome (Autosomal recessive disorder)
- Ehlers-Danlos Syndrome

#### Acquired / Environmental Risk Factors

- The client does not visit a dental home for regular preventive services.
- There is an impaired ability to maintain oral hygiene (brushing and flossing daily).
- The client uses medications that:
  - Cause reduced salivary flow including: antianxiety, antidepressant, antihistamine, bronchodilators, decongestants
  - Affect gum tissue including: phenytoin, calcium channel blockers, cyclosporin and amphetamines
- The client smokes. (Tobacco smoking is a highly predictive risk factor for periodontal disease.)
- The client experiences chronic stress.
- The client has an acquired immune defect.
  - Human Immunodeficiency Virus Infection
- The client has an acquired endocrine disease.
  - Diabetes that is uncontrolled or of long duration
  - Hyperparathyroidism
- The client has an acquired inflammatory disease.
- The client has or has had a nutritional deficiency.
  - Disruption in proper digestion, transport or utilization of nutrients

Fedi, Peter F., DDS, MS, Vernino, Arthur, R., DDS, Gray, John L., DDS. 2000. *The Periodontic Syllabus*, Lippincott Williams and Wilkins, Baltimore, Maryland.

Colgate-Palmolive Company. 1999. *A Supplement to Compendium: Periodontal Aspects of Systemic Health*. Dental Learning Systems, Inc.

### 3. Maternal Caries Risk Assessment

## **Maternal Dental Caries Risk Assessment Checklist**

### Education and Socio-economic Risk Factors

- ❑ The client is of low socioeconomic status (SES).
- ❑ The client has not completed high school.
- ❑ The client has not had annual oral health care.
- ❑ The client lacks dental insurance or access to dental services.

### Individual Risk Factors\*

- ❑ The client has active untreated dental decay.
- ❑ The client has a history of dental caries.
- ❑ There is a family history of high caries (caregivers and siblings).
- ❑ The client has root surfaces exposed by gum recession.
- ❑ There is an impaired ability to maintain oral hygiene.
- ❑ The client has malformed enamel or dentin.
- ❑ The client experiences reduced saliva flow/dry mouth.
  - Medications (can include: anti-hypertensives, narcotic analgesics, some tranquilizers and sedatives, antihistamines, and antimetabolites)
  - Radiation treatment
  - Medical conditions such as Sjogren Syndrome
- ❑ The client does not have access to low dose, frequent exposure to topical fluoride.
  - community water fluoridation
  - fluoridated dentifrice
  - fluoride mouthrinse
- ❑ The client wears space maintainers, orthodontic appliances and dental prosthetics such as partial dentures.
- ❑ The client experiences or experienced gastric reflux disease or eating disorders.

### References:

United States Centers for Disease Control and Prevention. (2001). Recommendations for Using Fluoride to Prevent and Control Dental Caries in the United States. *Morbidity and Mortality Weekly Report*. P. 50. RR-14.

\*Risk can increase if any of these factors are combined with dietary practices conducive to dental caries (i.e., frequent consumption of refined carbohydrates). Risk decreases with adequate exposure to fluoride.

## B. Pre-test/Post-test

**Integrating Oral Health Care Measures into HealthCare Practice**  
**Maternal Oral Health**  
**Pre-Test/Post-Test**

1. Dental decay is transmissible and preventable.
  - A. True
  - B. False
  
2. Periodontal disease is thought to be a risk factor in the prevalence of pre-term, low birth weight infants.
  - A. True
  - B. False
  
3. Periodontitis involves the destruction of the bone that supports the teeth in the jaw.
  - A. True
  - B. False
  
4. Pregnancy gingivitis is associated with hormones, specifically estrogen.
  - A. True
  - B. False
  
5. Current research is showing an association between chewing gum or eating candies and other foods with xylitol sweetener affects the ability of bacteria to cause dental decay.
  - A. True
  - B. False
  
6. Risk factors for periodontal disease include: diabetes, menopause, HIV, cardiovascular disease, pregnancy and smoking tobacco products.
  - A. True
  - B. False
  
7. Xylitol product use, topical fluoride use, dental sealant placement, chlorhexidine rinses and root planning and scaling are all strategies used to improve maternal and infant oral health outcomes by arresting, retarding progression or preventing dental disease.
  - A. True
  - B. False

## C. Maternal Oral Health Power Point Presentation

## D. Anticipatory Guidance

**State of Wisconsin  
Department of Health and Family Services**

**Integrating Preventive Oral Health  
Care Measures into Healthcare  
Practice**

**Maternal Oral Health  
Anticipatory  
Guidance  
Handbook**

**Educational Information  
Expectant Mother Handouts**

Adapted from materials developed by the  
State of Nevada  
Department of Human Resources  
Health Division  
Bureau of Family Health Services  
Maternal and Child Health  
April 2000

## Prenatal

**Objective: Expectant mothers will learn the importance of their own oral health, their unborn child's health and how to improve it.**

Educational Information:

1. Baby's first set of teeth begins to form when the woman is about 4-6 weeks pregnant.
2. Healthy mouths are important for pregnant women not only for their own comfort and health, but also for their baby's health.
3. Studies show expectant mothers with poor oral health and periodontal disease have an increased risk of delivering preterm low birth weight babies. It is thought that infection in the mother's mouth can affect hormone levels that cause preterm low birth weight (LBW) from increased levels of prostaglandin.
4. Dental decay is a transmissible, preventable infectious disease caused primarily by the streptococci mutans bacteria and can be passed from parent/caregiver to child. This bacterium increases the incidence of dental decay and is a contributing factor in early childhood caries.
5. Signs of dental disease include:
  - Bad taste in mouth
  - Persistent bad breath
  - Red or swollen gingiva (gums)
  - Tender gingival tissues
  - Gingiva that bleeds during tooth brushing
  - Mobile (loose) or separating teeth
  - Sensitive teeth
  - Pain on percussion (chewing)
  - Exudate (pus) around teeth and gingiva
  - Calculus (tartar), the hard deposits that form on tooth surfaces
6. Pregnant women can reduce their risk of dental diseases with daily brushing and flossing, good nutrition, avoiding tobacco products and receiving regular dental care.

## Pregnancy and Oral Health

Oral health is important during pregnancy and should not be neglected. The two most common forms of dental disease are tooth decay and gum disease. Dental diseases are caused by bacterial infection. Recent studies show pregnant women with gum disease may be at risk for preterm labor with low birth weight babies. In addition, the bacteria (germs) that cause dental decay are passed from parent/caregiver's mouth to the infant's mouth by blowing on their food, putting pacifiers in your mouth or kissing them. If your mouth is healthy your baby will have a healthier start.

**Check for Warning Signs of Dental Disease.** If you experience one or more of these warning signs, visit a *dental home*\* for a thorough oral health examination as soon as possible:

- Bad taste in your mouth
- Persistent bad breath
- Red or swollen gums
- Tender gums
- Gums that bleed during tooth brushing
- Loose or separating teeth
- Sensitive teeth
- Pain when chewing
- Pus around teeth and gums
- Calculus (or tartar)-the hard deposits that form on tooth surfaces



\*A dental home for oral health examinations and preventive services is important. In addition to private dental practices, dental homes offering oral health examinations and prevention may include: dental and dental hygiene educational programs, some tribal health centers, some community health centers and some local health department.

### **How to Prevent Dental Disease:**

It is important to see your dental professional during your pregnancy to have your teeth cleaned and your gums examined to prevent dental problems. Be sure to make a dental appointment before your baby is born.

Some women have dental problems during pregnancy. Hormone changes can make gums sore and swollen and cause bleeding. In most women, brushing and flossing the teeth daily can prevent this. Brush after breakfast and before bedtime using fluoridated toothpaste. Flossing reaches in between the teeth where the bristles of the toothbrush will not reach.

Nutrition is very important during pregnancy because your baby receives nutrients from you. By eating right, you can start caring for your teeth and your baby's teeth as soon as you find out you are pregnant. Be sure to eat foods with calcium and Vitamin D every day to help your baby form strong teeth and bones. Your baby's first set of teeth begins to develop during the fourth to sixth week of pregnancy. Your doctor can give you advice on how to eat well during your pregnancy.

## **Techniques of Brushing How to Brush Your Teeth**

1. Wash your hands first.
2. Place a pea-size dab of fluoridated toothpaste on a soft bristled toothbrush.
3. Place the bristles along gum line at a 45-degree angle. Bristles should contact both the tooth and the gum line. Brush your teeth and gums.
4. Gently brush 1-2 teeth at a time using a vibrating or circular motion with the ends of the bristles in place.
5. Gently brush 1-2 teeth at a time moving in an established pattern (left to right, inside to outside, top to bottom).
6. Brush the outside of all teeth, then inside of all teeth.
7. Maintain a 45-degree angle with bristles contacting both the tooth and gum line.
8. Tilt brush vertically behind the front teeth. Make several up and down strokes using the front end of the brush.
9. Brush chewing surfaces last with a firm back and forth motion to remove cavity-causing germs.
10. Do not forget to brush your tongue. Cleanse your tongue with either your toothbrush or a commercially available tongue scraper.
11. Brush after breakfast and most importantly before bedtime. Never go to bed without brushing and flossing your teeth.
12. Replace your toothbrush every 2 - 3 months or when the bristles begin to flare.
13. Do not share your toothbrush with anyone.

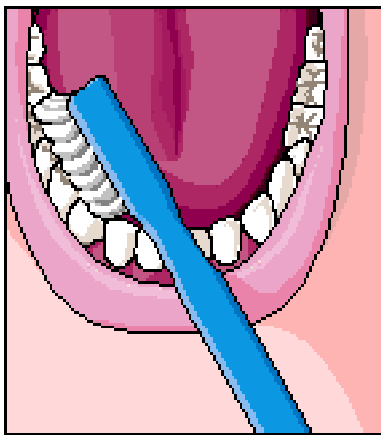
## How to Brush Your Teeth



Brush the outsides and the insides of your upper and lower teeth. Angle the soft bristles 45 degrees, along the gums and teeth.



Brush the insides of the front teeth with the front part or toe of the brush.



Brush the chewing surfaces last, with a firm back and forth movement to remove cavity-causing germs.

## How to Floss Your Teeth

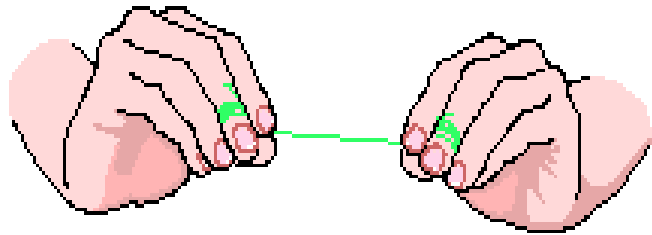
**Flossing is necessary to remove plaque from between the teeth and below the gum line. It is important to clean these areas thoroughly because periodontal (gum) disease often begins in these areas where the bristles of a toothbrush are not able to reach. You may have periodontal (gum) disease if your gums bleed when you brush or floss your teeth. Bleeding gums are not normal. Flossing is a skill that needs to be learned. There are many ways to hold dental floss. The following is one suggested method.**

1. Tear off about 18 inches of floss.
2. Wind floss around the middle fingers of each hand, wrapping most around one finger. Wind the remaining floss around the same finger of the opposite hand. This finger will "take up" the floss that has become soiled.
3. Pinch floss between thumbs and index fingers, leaving a 1-2 inch length in between. Gently pull floss tight between your hands to provide tension to prevent the floss from slipping off your fingers. Tension on the floss will help you guide the floss between the teeth, especially in tight areas.
4. Use thumbs to direct floss between upper teeth. Use index fingers to direct floss between lower teeth.
5. Gently guide floss between the teeth by using a zigzag motion. **TO PREVENT CUTTING GUMS, DO NOT SNAP FLOSS BETWEEN YOUR TEETH.**
6. Wrap floss in a "C" shape around the side of the tooth and gently slide underneath the gums.
7. Slide floss up and down, (not back and forth), against the tooth surface and under the gum line. Floss each tooth thoroughly with a clean section of floss.
8. **FLOSS** at least once a day, every day.
9. Bleeding and discomfort will stop after about one week of daily flossing.

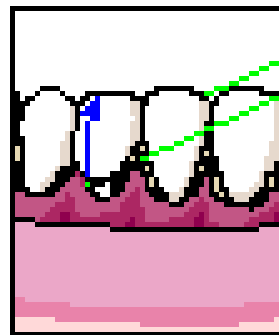
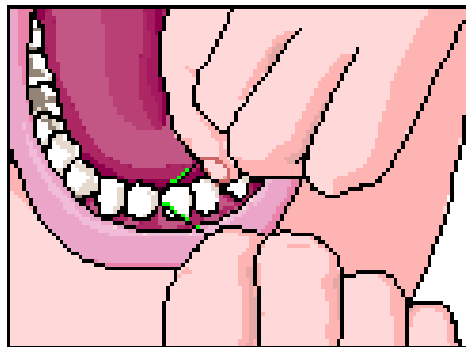
## Flossing Your Teeth

Use dental floss to clean the sides of your teeth.

Break off about 18" of dental floss. Wrap it around your middle fingers<sup>1</sup>.



Wrap the floss in a "C" shape around the side of the tooth and gently guide the floss under the gums.



## E. Resources



## Web Links to Maternal Oral Health Resources

### Section 1: Maternal Oral Health

National Guideline Clearinghouse, Agency for Health Care Quality and Research  
Recommendations for Using Fluoride to Prevent and Control Dental Caries in the  
United States

[http://www.guideline.gov/summary/summary.aspx?doc\\_id=2919&nbr=2145&string=fluoride](http://www.guideline.gov/summary/summary.aspx?doc_id=2919&nbr=2145&string=fluoride)

Periodontal Disease Association with Poor Birth Outcomes

<http://www.cdhp.org/downloads/Publications/Policy/PTLBW.pdf>

Periodontal Disease and Preterm Delivery of Low Birth Weight Infants,  
Tim McGaw, DDS, MD

<http://www.cda-adc.ca/jcda/vol-68/issue-3/165.pdf>

Periodontal Disease and Preterm Birth: Results of a Pilot Intervention Study

Marjorie K. Jeffcoat, John C. Hauth, Nico C. Geurs, Michael S. Reddy, Suzanne  
P. Cliver, Pamela M. Hodgkins, and Robert L. Goldenberg Journal of  
Periodontology, August 2003 (Vol. 74, No. 8)

<http://www.electronicpc.com/journelez/detail.cfm?code=02250010740815>

Improving women's health and perinatal outcomes: Snapshot of the impact of  
oral diseases. 2002. Baltimore, MD: Women's and Children's Health Policy  
Center, Johns Hopkins Bloomberg School of Public Health.

Document URL: <http://www.med.jhu.edu/wchpc/pub/oralfacts.pdf>

Improving women's health and perinatal outcomes: The impact of oral diseases.  
2002. Baltimore, MD: Women's and Children's Health Policy Center, Johns  
Hopkins Bloomberg School of Public Health.

Document URL : <http://www.jhsph.edu/wchpc/pub/pubs.html>

The Interface between Medicine and Dentistry in Meeting the Oral Health Needs  
of Young Children

<http://www.cdhp.org/Index.asp?PA=3&XX=115&XX=102&XX=149&XX=136>

Oral Systemic Health:

<http://www.nidcr.nih.gov/HealthInformation/OralHealthInformationIndex/OralSystemicHealthConnection.htm>

Maternal and Child Health Bureau Oral Health Resources

<http://www.mchoralhealth.org/>

Surgeon General's Report on Oral Health and Call to Action

<http://www.nidcr.nih.gov/NewsAndReports/ReportsPresentation/CallToPromoteOralHealth.htm>

Women's Oral Health Resource Guide

<http://www.mchoralhealth.org/PDFs/WomensResourceGuide.pdf>