Oral Health Care among Pregnant Women and Women in Alaska

Oral diseases are among the most prevalent and preventable chronic health conditions in the U.S. – impacting the oral, general, and reproductive health of women, their quality of life, and the oral health of their children.¹

Women’s oral health has improved during the last half century, yet oral diseases among women remain highly prevalent. According to the National Health and Nutrition Examination Survey (NHANES III) nearly 47% of the tooth surfaces among females ages 18 and older showed signs of tooth decay and approximately 67% exhibited clinical signs of gum disease.²

The hormonal changes that occur during puberty and pregnancy are associated with an increased incidence of gingivitis.³ Behavioral risk factors such as tobacco use and poor dietary practices may also influence oral health.² Tobacco use is the most preventable cause of oral cancer,⁴ and smoking may contribute to the early onset and severity of periodontitis. Eating disorders such as anorexia nervosa and bulimia nervosa are serious concerns in terms of women’s oral health and pose a clinical challenge to health professionals.⁵

**Seriousness**

*Healthy People 2010 Targets and National Data*

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Alaska 2002</th>
<th>Nation 2002</th>
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<tbody>
<tr>
<td>Proportion of women ages ≥18 that had a dental visit for any reason within the past year</td>
<td>66.3%</td>
<td>71.5%</td>
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<tr>
<td>Proportion of women ages ≥18 that had teeth cleaned by a dentist or dental hygienist within the past year</td>
<td>63.1%</td>
<td>71.9%</td>
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<tr>
<td>Proportion of women ages ≥18 that have lost 6 or more teeth due to decay or gum disease</td>
<td>16.4%</td>
<td>18.6%</td>
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Alaska currently doesn’t have the capacity to assess Healthy People 2010 (HP2010) objectives surrounding oral health. Information on oral health and dental access among women of childbearing age in Alaska is not readily available. The 2002 Alaska Behavioral Risk Factor Surveillance Survey (BRFSS) has an oral health component, but it is limited in it’s comparability to the HP2010 objectives. The Alaska Pregnancy Risk Assessment Monitoring System (PRAMS) began collecting data on access to dental care among pregnant women with the 2004 survey. It will be available in the Fall of 2005.

- The percentage of Alaskan women, ages 18 and older, that reported having lost 6 or more teeth due to decay or gum disease was not significantly different from the Nation.

**Severity**

Over an individual’s life, oral diseases and conditions are progressive and cumulative; resulting in severe and debilitating conditions in the absence of appropriate treatment.¹

The impact of oral disease may extend beyond a woman’s oral health to the health of her infant. Periodontal diseases among pregnant women may increase the risk of preterm birth (under 37 weeks gestation), low birth weight (less than 2,500 grams), and low weight for gestational age.⁶,⁷

Maternal oral health is an important factor in preventing early childhood caries in infants. Along with diet and feeding practices, rampant decay in the mother’s mouth is an increased risk factor for early development of dental decay in the infant as the primary teeth erupt. *Streptococcus mutans*, the bacteria primarily responsible for initiation of dental decay, is usually passed from mother or caregiver to child. Children diagnosed with early childhood caries may be highly susceptible to future caries (dental decay) development.⁸

**Urgency**

- Nationally, about 70% of the women who participated in NHANES III reported having a dental visit during the previous 12 months,⁹ yet an analysis of four states participating in the Pregnancy Risk Assessment Monitoring System (PRAMS) indicated that only 23%-35% of women reported having had a dental visit during their most recent pregnancy.¹⁰
In 2002, more than 1 in 3 Alaskan women, ages 18 and older, reported they hadn’t had their teeth cleaned by a dentist or oral hygienist within the past year; and 1 in 3 reported they hadn’t had a dental visit for any reason within the past year.†

In 2002, 17.7% of Alaskan women smoked cigarettes during the last three months of pregnancy and 5.0% used smokeless tobacco.11

Disparities
A variety of demographic, general health, behavioral, economic, and social risk factors place some women at high risk for the development of oral diseases. Social and economic influences may impact women’s utilization of oral health services and, ultimately, their oral health status. Women who lack information about available resources, and who report being unable to obtain services due to poverty or lack of insurance, may have difficulty accessing services and optimizing their oral health.10,12

A study of oral health during pregnancy using data from four states participating in PRAMS found that, among women who perceived a need for oral health care during their pregnancy, those enrolled in Medicaid were 24%-53% less likely to seek oral health care than those with private insurance.10

Analysis of Alaska PRAMS data showed that race, education, region, and Medicaid status were significantly associated with prenatal tobacco use (cigarette smoking) and prenatal smokeless tobacco use.11 Refer to the fact sheet Prenatal Tobacco Use in Alaska for more detail about the disparities and interventions associated with prenatal cigarette smoking and prenatal smokeless tobacco use in Alaska.

• Alaska Native mothers had the highest prevalence of prenatal tobacco use during the last three months of pregnancy (29.3%) – nearly 2 to 3 times that of white (14.9%) and Asian/Pacific Islander mothers (10.5%).11
• Alaska Native mothers were 20 times more likely to report using smokeless tobacco while they were pregnant than white mothers – 17.8% and 0.9%, respectively.11

A screening of Alaska Native adults (males and females), ages 35-44 years, found:
• 50.8% had untreated dental decay at the time of the screening
• 51.3% reported tobacco use
• 37.4% had moderate to severe periodontitis.13

Similar information is not available solely for adult Alaskan women or for other racial or ethnic groups.

Economic Loss
Economic loss was not evaluated.

Interventions & Recommendations
• Continue education and other efforts to reduce tobacco use among adults with a directed approach to eliminate use of tobacco products during pregnancy. Refer to the fact sheet Prenatal Tobacco Use in Alaska for more information on this intervention and its effectiveness.
• Continue work on an oral health surveillance system to collect data on oral disease and dental access in Alaska (including information related to pregnant women and infants).
• Enhance the level of dental benefits to adults enrolled in Medicaid to include preventive and restorative dental services – or incrementally expand this service for pregnant women enrolled in Medicaid.
• Support efforts to reduce the level of oral disease (dental decay and periodontal disease) in pregnant women and mothers as means to improve birth outcomes, reduce the infant’s risk for development of early childhood caries, and improve women’s health.
• Support education and intervention efforts to screen infants for dental decay and early referral for infants with early signs of early childhood caries (e.g., change Medicaid guidance for a dental referral from age 3 to age 1).

Intervention Effectiveness
Intervention effectiveness for these recommendations was not evaluated.

Capacity

Propriety
Promoting oral health among the maternal and child health population in Alaska falls within the overall mission of the Women’s, Children’s, and Family Health Section. Poor oral health among Alaskan pregnant women and mothers can affect the health of their infants. There are several national objectives (HP2010) that address oral health and one is currently monitored on a yearly basis for the Title V MCH Block Grant.

Economic Feasibility
Economic feasibility was not evaluated.

Acceptability
Although not supported with data, it is likely that promoting oral health would be acceptable among the target population, since quality of life issues and reduced general health are associated with poor oral health.
Resources
The department is working on a project to collect similar information on other racial/ethnic groups in the fall of 2005 through a federally funded contract doing dental assessments of kindergarten children and children enrolled in Head Start.

Alaska’s Medicaid program only covers emergency dental services for immediate relief of pain and acute infection. Routine dental restorative and preventive services are not covered. This limits dental access and preventive dental care for dental decay and periodontal disease for all adults.

Legality
Not an issue.

References

Data Sources

Notes
For Alaska PRAMS data note that prenatal tobacco use is cigarette smoking during the last three months of pregnancy for women that delivered a live-born infant. Prenatal smokeless tobacco is any use of smokeless tobacco during pregnancy for women that delivered a live-born infant.

Prevalence estimates for PRAMS data are among women that delivered a live-born infant.

National estimates for BRFSS are the median percent among all states that collected data on these topics in 2002.