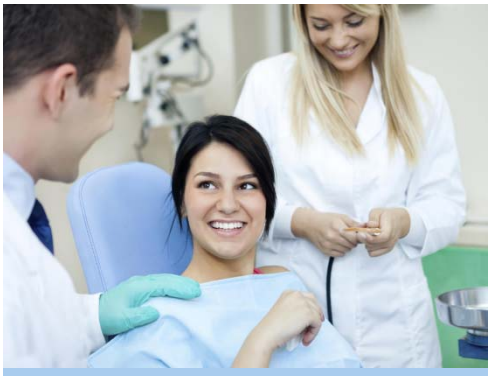
Massachusetts Oral Health Issue Brief

Why is maternal oral health important?

Although women are susceptible to oral health conditions throughout their lifespan, maintaining oral health during pregnancy is especially important.[1] In 2001, the Surgeon General identified oral diseases as a "silent epidemic" impairing the health of millions of women and children in the US.[1-2] Pregnant women are at increased risk of oral diseases due to physiological changes that occur during pregnancy.[1-3] Periodontal infection, dental caries, and gingivitis are among the most preventable communicable diseases.[4-5] If left untreated, however, these conditions can adversely affect overall health and well-being.[6] Among Massachusetts women who gave birth during 2012-2017, only 60% reported having a dental cleaning during their pregnancy. Although oral health is an integral component of overall health, oral health disparities persist among pregnant women in Massachusetts.



Common Oral Conditions During Pregnancy:[1-6]

- Dental caries
- Tooth erosion
- Tooth mobility
- Periodontal disease
- Oral gingival lesions

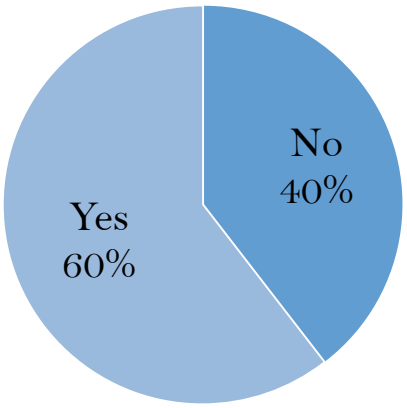


Figure 1: Dental Cleaning During Pregnancy in MA PRAMS, 2012-2017 (N=7,295)

Oral Health Recommendations for Pregnant Women

According to the American Dental Association (ADA) and the American College of Obstetricians and Gynecologists (ACOG), women should continue to visit their dentist twice a year during pregnancy.[7-8] Dental cleaning, examination, and periodontal intervention are safe during pregnancy.[8] In order to maintain perinatal oral health, the ADA recommends consistent tooth brushing, flossing once daily, and the use of fluoridated mouth rinses.[7]

Maternal Oral Health Status in Massachusetts

Massachusetts collects information on maternal oral health using the CDC's Pregnancy Risk Assessment Monitoring System (PRAMS).[9] PRAMS is a population-based surveillance system designed to assess health attitudes and behaviors before, during, and after pregnancy.[9] In 2007, Massachusetts first began collecting data on oral health during pregnancy using PRAMS.[9]

According to 2012-2017 Massachusetts PRAMS data:

- Among White women, 65% reported having a dental cleaning during pregnancy while among Black women, only 48% reported dental cleaning.
- Of women who reported having dental insurance during pregnancy, 67% had their teeth cleaned during pregnancy. Of women without dental insurance, only 29% had their teeth cleaned during pregnancy.
- Of women who reported having their teeth cleaned during the 12 months before pregnancy, 80% had their teeth cleaned during pregnancy.
- Of women who reported being aware of the importance of oral health during pregnancy, 65% had a dental cleaning during pregnancy.

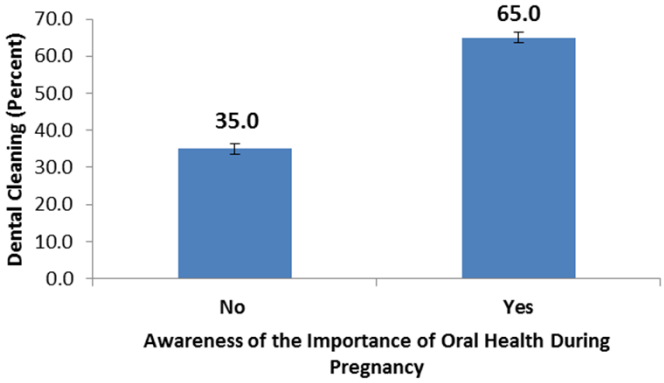


Figure 3: Prevalence of Dental Cleaning by Oral Health Awareness -- MA PRAMS, 2012-2017 (N=7,295)

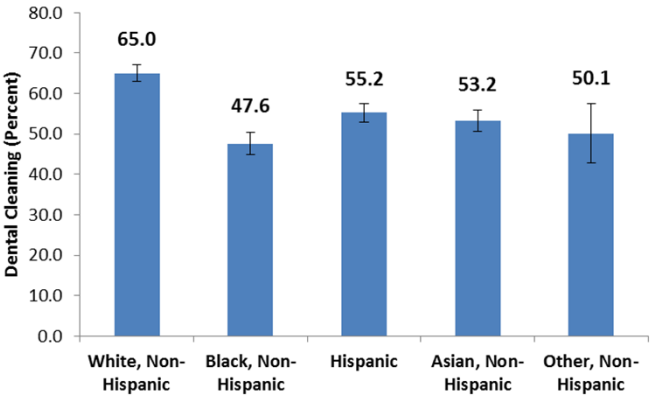


Figure 2: Prevalence of Dental Cleaning During Pregnancy by Race and Hispanic Ethnicity -- MA PRAMS, 2012-2017 (N=7,295)

After adjusting for socio-demographic characteristics, dental insurance, pre-pregnancy dental cleaning, and being counseled on oral health, women who were aware of the importance of oral health during pregnancy were 15% more likely to obtain a dental cleaning during pregnancy compared to women who lacked awareness.

Some Barriers to the Utilization of Dental Care Services During Pregnancy Include:[1-6]

- Low health literacy
- Insufficient or no dental insurance coverage
- Fear of treatment
- Belief that treatment is unsafe during pregnancy
- Low self-efficacy in caring for one's teeth and gums
- Inconsistent knowledge of perinatal oral health across providers
- Low rate of referrals to oral healthcare professionals from primary care physicians and obstetricians/gynecologists

Maternal and Infant Oral Health

Poor maternal oral health renders the infant susceptible to adverse oral health conditions in early childhood.[1-4] For example, a mother's salivary cariogenic flora is easily transmitted to her infant, heightening the risk of developing caries.[1-6] Infants born to mothers with dental caries are more likely to develop caries in early childhood as well.[1] In the United States, dental caries is the most prevalent chronic condition among children and oral health is the most common unmet health need.[1]

In Massachusetts, only 58% of women reported being counseled on oral health by a health care professional during pregnancy

"To potentiate general health and well-being, women should routinely be counseled about the maintenance of good oral health habits throughout their lives as well as the safety and importance of oral health care during pregnancy." – The American College of Obstetricians and Gynecologists[8]

Massachusetts Initiatives

- From 2010-2015, "coordinating preventive oral health measures and promoting universal access to affordable dental care" was a Title V Maternal Child Health Services Block Grant Program priority in Massachusetts.[1] MDPH then selected "promoting equitable access to dental care and preventive measures for pregnant women and children" as a 2015-2020 Title V priority.[10]
- In 2016, MDPH published the Massachusetts Oral Health Practice Guidelines for Pregnancy and Early Childhood to inform healthcare professionals caring for pregnant women and children.
- In 2016, Massachusetts launched the Perinatal Expansion Program (PEP) to integrate and improve the delivery of oral health and primary care to pregnant women and infants.

Recommendations for Prenatal Providers

Analysis of 2012-2017 Massachusetts PRAMS data suggests that being counseled on oral health is an important predictor of whether a woman obtains a dental cleaning during pregnancy. Pregnancy presents a unique opportunity to motivate women to adopt healthy behaviors.[1-4] Among PRAMS respondents, 91% of mothers reported commencing prenatal care in the first trimester. Advice, education, and referrals by prenatal care providers can improve oral health status among pregnant women.[11]

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PRAMS Massachusetts

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