Maternal Oral Health in Tennessee: Insights from Women with a Recent Live Birth (2016–2022)

Good dental health is important for everyone, particularly during pregnancy. Poor oral hygiene can lead to complications such as gum inflammation, cavities, and gum disease, which may increase risks such as preterm birth, low birth weight, and high blood pressure.[1,2,3] Pregnancy-related factors, such as hormonal changes and morning sickness, can make maintaining oral health more difficult.[2] Addressing barriers like myths about safety, limited access to care, and affordability is key to improving outcomes for mothers and babies.

This study analyzes data from the Tennessee Pregnancy Risk Assessment Monitoring System (PRAMS), a state-wide surveillance system collecting information through surveys from women 2-6 months after a live birth. The data is weighted to reflect the entire maternal population of Tennessee. This information can help healthcare providers develop targeted interventions and education for pregnant women who receive routine dental care less often or report dental issues more frequently, supporting healthier pregnancies and reducing the risk of adverse pregnancy outcomes in Tennessee's maternal population.

Trends in Dental Hygiene among Tennessee Mothers

Figure 1: Preconception Dental Cleaning Among Women with a Recent Live Birth in Tennessee, 2016-2022

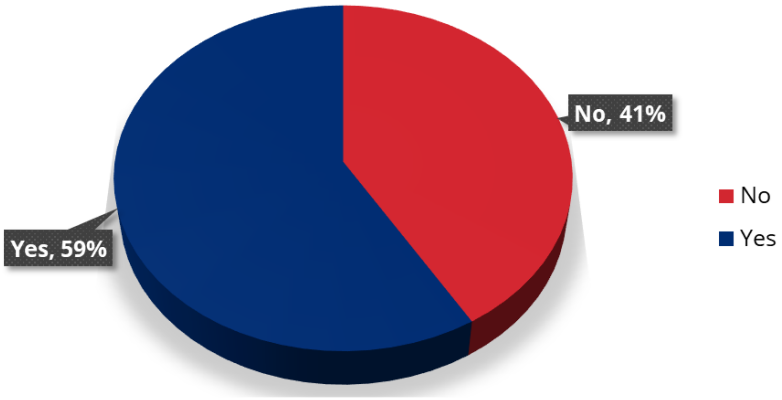
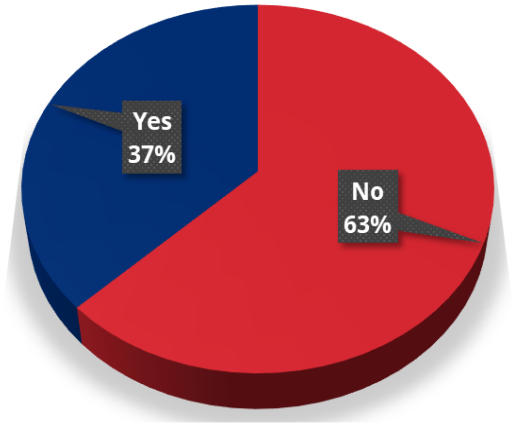


Figure 2: Prenatal Dental Cleaning Among Women with a Recent Live Birth in Tennessee, 2016-2022

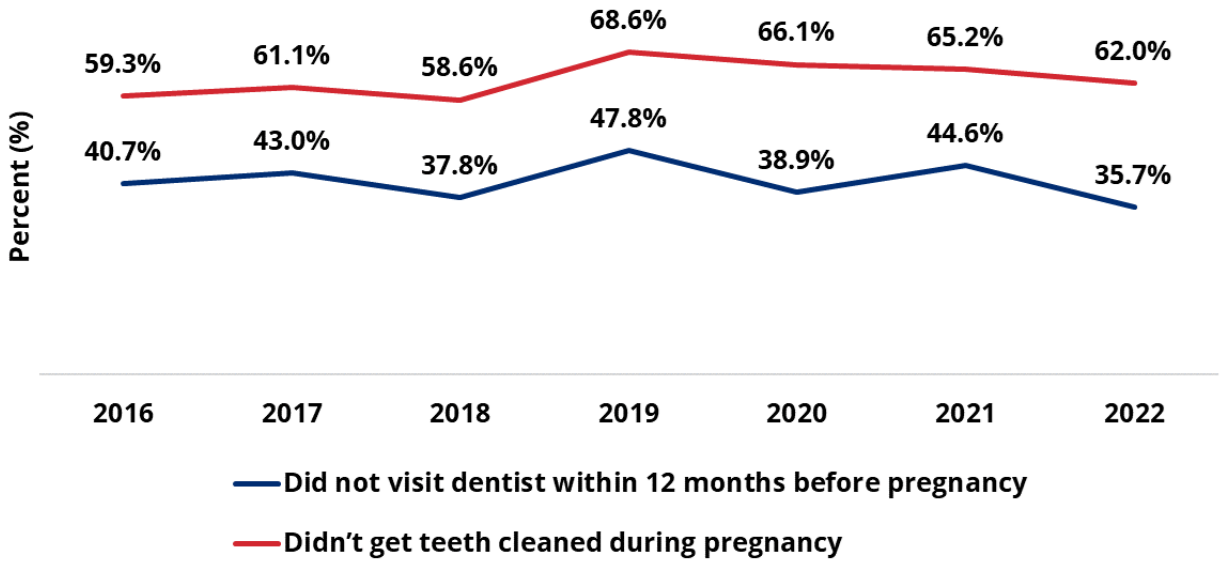


Source: TN PRAMS 2016-2022

The American Dental Association (ADA) emphasizes the importance of maintaining oral health by recommending semiannual dental checkups and cleanings, along with daily brushing and flossing.[4] Despite this guidance, **63%** of women in Tennessee did not have their teeth cleaned during their most recent pregnancy while **59%** reported having their teeth cleaned during the year before their pregnancy.

The number of women who reported having dental cleanings before or during pregnancy didn't change between 2016-2022, indicating a need for increased education and awareness of the importance of maintaining oral health before and during pregnancy (figure 3).

Figure 3: Annual Trends in Prenatal Dental Care with a Recent Live Birth in Tennessee, 2016-2022

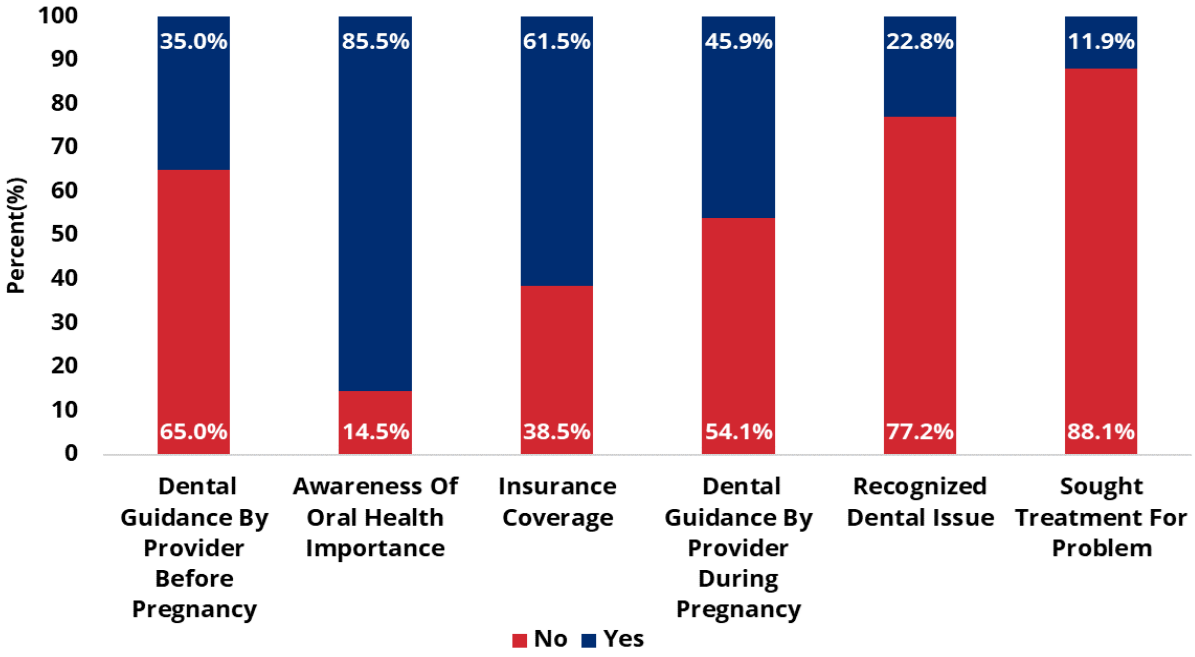


Source: TN PRAMS 2016-2022

The percentage of women not receiving dental cleanings during pregnancy could be due to barriers such as lack of awareness, low income, limited access to dentists, and myths about the safety of dental procedures during pregnancy.[3,4,5] In Tennessee, 88 of the state's 95 counties have a dental health professionals shortage.[6] Pregnant women should include oral healthcare as part of their prenatal care.

Key Factors Impacting Prenatal Oral Health

Figure 4: Prenatal Oral Health Experiences Among Women with a Recent Live Birth in Tennessee , 2016 -2022



Source: TN PRAMS 2016-2022

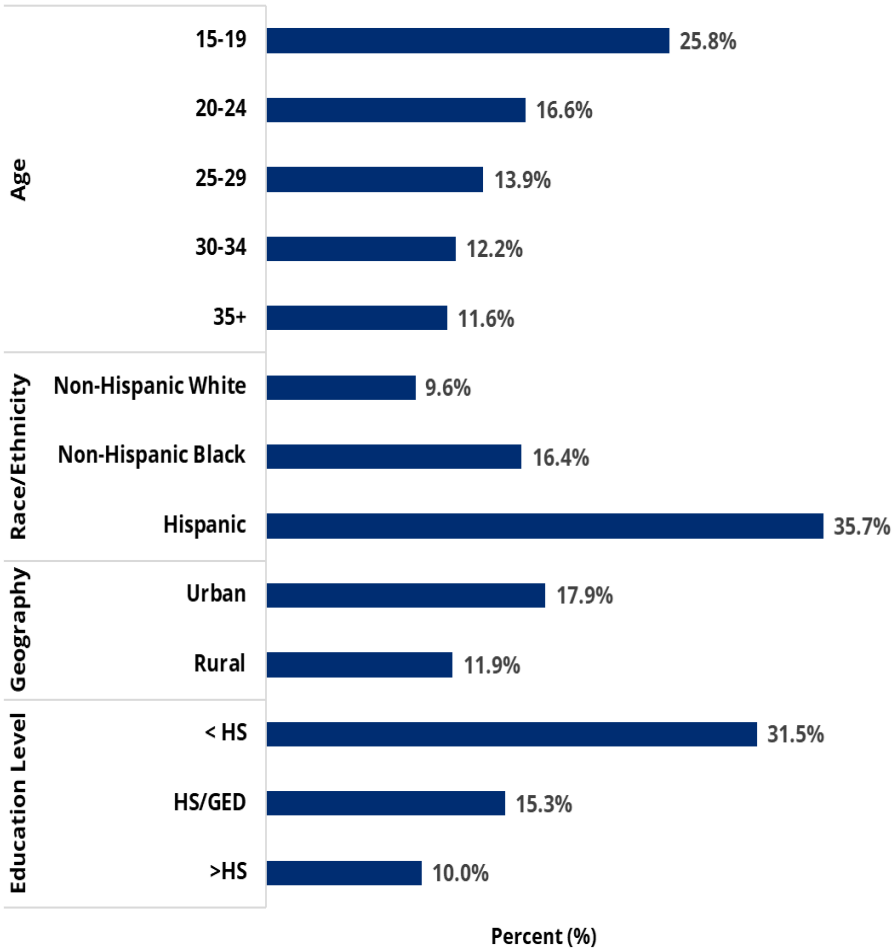
Overall, **85%** of all women in Tennessee knew it was important to care for teeth/gums during pregnancy. Nearly **62%** of all women reported having insurance to cover dental care during pregnancy while **22.8%** needed to see the dentist for a problem. However, among those with a problem, only **11.9%** women went to get the treatment for it.

Among women who visited a dentist for a problem, **57.4%** were uninsured, while **42.6%** had insurance. For mothers without insurance, **72.9%** did not seek treatment for the problem, whereas **27.1%** did.

Additionally, among mothers who skipped dental visits prior to pregnancy, **33.9%** did not receive teeth cleanings during pregnancy, while **66.1%** did in Tennessee.

Awareness of the Importance of Dental Care During Pregnancy in Tennessee Mothers

Figure 5 : Lack of Awareness of Oral Health Importance During Pregnancy by Maternal Demographics Among Women with a Recent Live Birth in Tennessee, 2016-2022



Source: TN PRAMS 2016-2022

Awareness of the importance of oral hygiene increased with age; **25.8%** of mothers aged 15-19 reported not being aware, compared to only **11.6%** of mothers aged 35+.

Hispanic women in Tennessee(**35.7%**) more commonly reported not knowing it was important to care for teeth and gums during pregnancy, followed by (**16.4%**) Non-Hispanic Black women and (**9.6%**) Non-Hispanic White women (Figure 5).

More Tennessee women who lived in a urban setting (**17.9%**) reported unawareness of oral hygiene during pregnancy than those who lived in rural settings (**11.9%**, Figure 5).

More women with less than a high school diploma (**31.5%**) reported unawareness of oral hygiene during pregnancy compared to those with a high school education (**10%**) (Figure 5).

What is the Tennessee Pregnancy Risk Assessment Monitoring System?

The Pregnancy Risk Assessment Monitoring System (PRAMS) is a state-run program that collects information on the experiences, feelings, and health of women with a recent (within 2-6 months at the time of survey) live birth. For questions related to Tennessee PRAMS, contact the TN PRAMS Coordinator at tnprams.health@tn.gov.

References

1. American Dental Association Council on Access, Prevention, and Interprofessional Relations, 2006. Accessed November 7, 2024.

2. Yenen Z, Ataçağ T. Oral care in pregnancy. J Turk Ger Gynecol Assoc. 2019 Nov 28;20(4):264-268. doi: 10.4274/jtgga.galenos.2018.2018.0139. Epub 2018 Dec 17. PMID: 30556662; PMCID: PMC6883753.

3. Silk, H., Douglass, A. B., Douglass, J. M., & Silk, L. (2008, April 15). Oral Health during pregnancy. American Family Physician. https://www.aafp.org/pubs/afp/issues/2008/0415/p1139.html

4. https://www.acog.org/clinical/clinical-guidance/committee-opinion/articles/2013/08/oral-health-care-during-pregnancy-and-through-the-lifespan

5. Oral health care during pregnancy and through the lifespan. ACOG. (n.d.). https://www.acog.org/clinical/clinical-guidance/committee-opinion/articles/2013/08/oral-health-care-during-pregnancy-and-through-the-lifespan

6. Tennessee - 2023 - III.B. overview of the State. (n.d.). https://mchb.tvisdata.hrsa.gov/Narratives/Overview/2efb36dc-4229-4128-a310-b5d54b1702bb

Dept. of Health, Authorization # MY5DE4-1, electronic only, July 21,2025. This public document was promulgated at a cost of $Elec per copy.