

Gestational diabetes mellitus (GDM) is a type of diabetes that can occur during pregnancy in women who weren't diabetic prior to pregnancy.¹ GDM occurs during pregnancy due to hormonal changes that make the mother resistant to her own insulin, causing her blood sugar to rise.

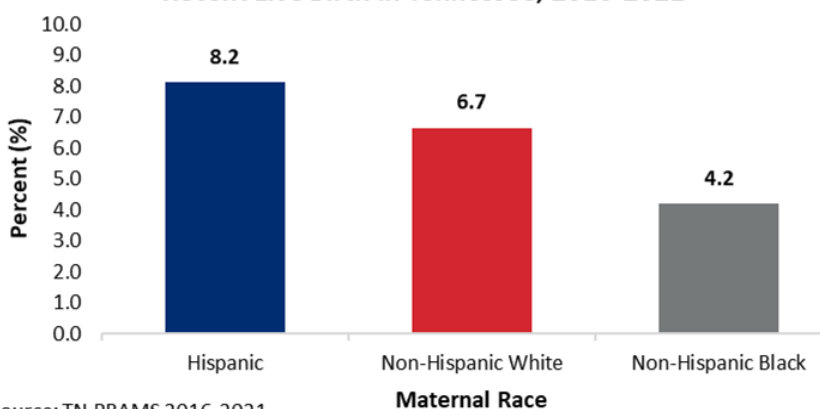
Some conditions can increase the risk of developing GDM, including having gestational diabetes in a previous pregnancy, prediabetes, polycystic ovarian syndrome (PCOS), obesity and family history of diabetes.³ GDM is tested for during pregnancy by using a blood test given between 24 and 28 weeks of pregnancy.

It is important to identify and treat GDM to lower the risk of complications such as excessively large baby (which can raise the risk of injury to the baby or mom during delivery), low blood sugar for the baby in the newborn period, high blood pressure during pregnancy, stillbirth, and future problems for mothers and babies like type 2 diabetes or obesity.³ National Vital Statistics Reports from 2022 showed an increase in GDM by 33% between 2016-2020 in Tennessee.⁴

This factsheet uses data from the Tennessee Pregnancy Risk Assessment Monitoring System (PRAMS) to explore the prevalence of GDM and how it impacts the health of Tennessee mothers. Identifying and treating GDM early can improve the health and overall quality of life of Tennessee's mothers, babies, and the population overall.

What did Gestational Diabetes look like among pregnant women in Tennessee?

Figure 1: GDM by Race/Ethnicity Among Women with a Recent Live Birth in Tennessee, 2016-2021



Source: TN PRAMS 2016-2021

From 2016-2021 in Tennessee, Hispanic women had the highest prevalence of GDM (**8.2%**), followed by Non-Hispanic White women (**6.7%**) and Non-Hispanic Black women (**4.2%**).

From 2016-2021, GDM was also linked with BMI. Almost **12%** of Tennessee mothers who were obese before pregnancy had GDM, while only **3.3%** of mothers who were of normal weight had GDM.

Figure 2: Gestational Diabetes (GDM) by Body Mass Index of Women with a Recent Live Birth in Tennessee, 2016-2021

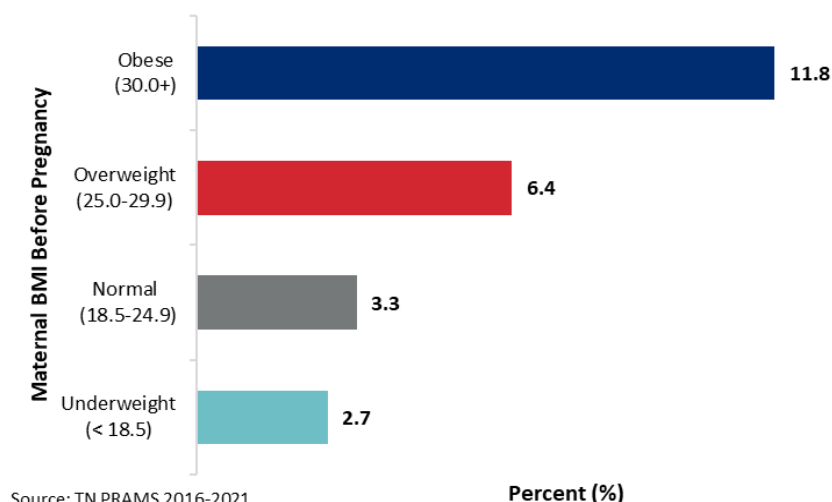
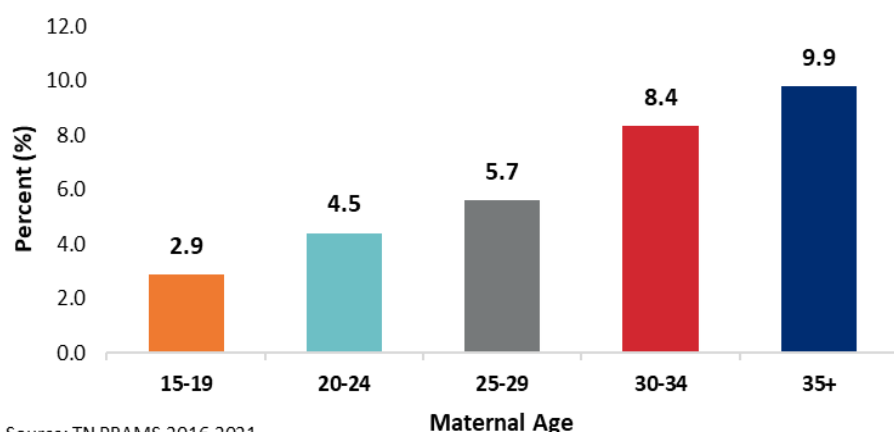


Figure 3: Gestational Diabetes (GDM) by Age Among Women with a Recent Live Birth in Tennessee, 2016-2021



Among Tennessee women with a recent live birth; between 2016 and 2021, nearly **10%** of women aged 35+ had GDM, compared to only **3%** of those aged 15-19 (*figure 3*).

What are some common prevention tips for GDM?

1. Starting pregnancy at a healthy weight.
2. Getting regular exercise throughout pregnancy.
3. Sticking to a healthy diet.
4. Regularly attend prenatal care visits to optimize the health of mom and baby

While not always avoidable, there are things women can do to help prevent developing GDM. The Centers for Disease Control and Prevention (CDC) recommends having routine testing (at 24-28 weeks), getting regular exercise (such as brisk walk), eating a balanced and nutritious diet, and going to regular prenatal care checkups to monitor baby's growth and to diagnose and manage GDM.¹

How does the Tennessee Department of Health support the prevention of GDM?

- Community Health Access and Navigation in Tennessee (**CHANT**) can assist with resources and referrals with outside entities and help navigating the system. If the mom is under the age of 21 and diabetes continues following birth, she could potentially be eligible for CSS.
 - Women diagnosed with Gestational Diabetes Mellitus can participate in a Diabetes Self-Management Education and Support (**DSMES**) Program and, once gestational diabetes is cleared, they are eligible for enrollment in a National Diabetes Prevention Program (**NDPP**) for diabetes prevention.
- National resources for gestational diabetes:**
1. [Gestational Diabetes | ACOG](#)
 2. [Gestational diabetes: MedlinePlus Medical Encyclopedia](#)
 3. [Gestational Diabetes | ADA](#)
 4. [Gestational Diabetes and Pregnancy | CDC](#)

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. Centers for Disease Control and Prevention. (2022, December 30). Gestational diabetes. Centers for Disease Control and Prevention. <https://www.cdc.gov/diabetes/basics/gestational.html>
2. Alfadhli EM. Gestational diabetes mellitus. Saudi Med J. 2015 Apr;36(4):399-406. doi: 10.15537/smj.2015.4.10307. PMID: 25828275; PMCID: PMC4404472.
3. Mayo Foundation for Medical Education and Research. (n.d.). *Gestational diabetes*. Mayo Clinic. <https://www.mayoclinic.org/diseases-conditions/gestational-diabetes/symptoms-causes/syc-20355339>
4. Gregory ECW, Ely DM. Trends and characteristics in gestational diabetes: United States, 2016–2020. National Vital Statistics Reports; vol 71 no 3. Hyattsville, MD: National Center for Health Statistics. 2022. DOI: <https://dx.doi.org/10.15620/cdc:118018>



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