

Clinical Tip



What are the screening recommendations for gestational diabetes mellitus (GDM)?

If the mother has risk factors for diabetes, she should be screened at her first prenatal visit for undiagnosed type 2 diabetes. This testing may include a hemoglobin A1c evaluation.

There are currently two screening recommendations for diagnosing GDM.

The first is from the International Association of Diabetes and Pregnancy Study Groups (IADPSG) Consensus Panel,¹⁰⁰ which is endorsed by the American Diabetes Association (ADA),⁹⁰ and the second is from the American College of Obstetricians and Gynecologists (ACOG).⁹³

Following a March 2013 National Institutes of Health Consensus Development Conference on Diagnosing Gestational Diabetes, a decision was made to continue the same two-step approach currently recommended by ACOG for glucose screening, (see ACOG recommendation to the right). Reasons cited included the following: an increased number of women would be identified as gestational diabetic using the one-step IADPSG / ADA screening criteria; there is lack of evidence that the identification and treatment of these women would result in improved maternal and neonatal outcomes; and there are potentially significant ramifications of a GDM diagnosis – increased health care costs and increased obstetric interventions as a result of a GDM diagnosis.^{93, A, B}

*Passage within “**” updated November 2013*

A. Reece EA, Moore T. The diagnostic criteria for gestational diabetes: to change or not to change? *Am J Obstet Gynecol* 2013;208:255-9.

B. Vandorsten JP, Dodson WC, Espeland MA, et al. NIH consensus development conference: diagnosing gestational diabetes mellitus. *NIH Consens State Sci Statements* 2013;29:1-31.

The IADPSG¹⁰⁰ Consensus Panel and the ADA,⁹⁰ recommends the following:

- At the first prenatal visit, screen for risk factors for undiagnosed type 2 diabetes and perform any diagnostic screening that is indicated, which may include a fasting plasma glucose, hemoglobin A1c, or random plasma glucose.^{90,100}
- For those who have not been diagnosed with diabetes, between 24 and 28 weeks gestation, screen for diabetes with a 75 gram, 2-hour oral glucose tolerance test (75-g OGTT). Perform the test in the morning after an overnight fast of 8 hours.^{90,100}
- The diagnosis of GDM is made if results are above any of the following plasma glucose values:^{90,100}
 - ✦ Fasting ≥ 92 mg/dL (5.1 mmol/L).
 - ✦ 1 hour ≥ 180 mg/dL (10 mmol/L).
 - ✦ 2 hours ≥ 153 mg/dL (8.5 mmol/L).
- The diagnosis of overt (not GDM) diabetes in pregnancy is made if any of the following are present:¹⁰⁰
 - ✦ Fasting ≥ 126 mg/dL (7 mmol/L).
 - ✦ Hemoglobin A1c is $\geq 6.5\%$.
 - ✦ If a random plasma glucose is ≥ 200 mg/dL (11.1 mmol/L), then confirmatory testing should be performed by obtaining a fasting plasma glucose or hemoglobin A1c.

The ACOG recommends the following:⁹³

- Screen all pregnant women for GDM. Screening methods include patient history, clinical risk factors, or a 50 gram, 1-hour glucose loading test (50-g OGTT) at 24 to 28 weeks gestation.
- If a 100 gram 3-hour oral glucose tolerance test is indicated, (50-g OGTT screen > 140 mg/dL [7.8 mmol/L], or other strong clinical suspicion), the diagnosis of GDM is made when two or more elevated plasma or serum glucose levels are obtained.
 - ✦ Fasting ≥ 95 mg/dL (5.3 mmol/L).
 - ✦ 1 hour ≥ 180 mg/dL (10 mmol/L).
 - ✦ 2 hours ≥ 155 mg/dL (8.6 mmol/L).
 - ✦ 3 hours ≥ 140 mg/dL (7.8 mmol/L).