

Urgent Update – Temporary Alternative Screening Strategy for Gestational Diabetes Screening During the COVID-19 Pandemic

A Joint Consensus Statement from the Diabetes Canada Clinical Practice Guidelines Steering Committee* and the Society of Obstetricians and Gynecologists of Canada

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Changes in Practice

1. We present updated, temporary recommendations for gestational diabetes (GDM) screening options during the coronavirus disease 2019 (COVID-19) pandemic.
2. After the COVID-19 pandemic is over, screening should revert to the previous guidelines outlined in the 2018 Diabetes Canada Clinical Practice Guidelines on Diabetes and Pregnancy (1).

Key Messages

1. There are no changes to screening for overt diabetes (diabetes present before conception) in early pregnancy. This can be done in high-risk women with a hemoglobin A1c (A1c) or fasting plasma glucose if an A1c is unreliable.
2. This update suggests an option for GDM screening using an A1c and random plasma glucose. The use of this option should be based on each institution's clinical capacity and/or an individual's willingness to undergo screening during COVID-19.
3. We continue to reinforce the importance of healthy lifestyle for all women throughout pregnancy (see resources below).
4. Postpartum screening for maternal dysglycemia should be deferred until after the COVID-19 pandemic is over. We do not recommend bringing women to an in-person health-care appointment solely for an oral glucose tolerance test (OGTT) postpartum.
5. Whenever possible and using clinical judgement, clinicians should use telehealth devices (video or phone calls) to care for patients in order to reduce potential COVID-19 exposure to women and health-care providers.

Introduction

The COVID-19 pandemic has already had a profound effect on both pregnant women and our interprofessional diabetes and pregnancy teams. Given this, we present GDM screening options to try to minimize exposure to pregnant women and limit health-care resource utilization while still providing quality care. The risk of exposure to COVID-19 must be weighed against the benefit of widespread glucose screening and treatment of GDM. These guideline updates are temporary in nature and designed with the goal of preventing excess maternal and fetal morbidity rather than the current approach which is much more sensitive in detecting GDM cases. Once the COVID-19 pandemic has subsided, GDM screening should revert to recommendations in the 2018 Diabetes Canada Clinical Practice Guidelines (1).

We have developed an alternate screening option which includes a provision for disruption to the OGTT, which may occur due to decreased laboratory staffing or locations, public health recommendations, or due to patient concern about COVID-19 exposure during this test.

EARLY SCREENING

We recommend no changes to screening for overt diabetes early in pregnancy. This should be done only in women who are at risk of overt diabetes. A complete list of risk factors can be found in the 2018 Diabetes Canada Guidelines (2). The test of choice continues to be an A1c or

a fasting plasma glucose if an A1c is unreliable. All women screened in early pregnancy with negative testing should be re-screened at 24-28 weeks gestation.

REGULAR (24-28 WEEKS) SCREENING

Anticipating that the COVID-19 pandemic may substantially reduce access to, capacity for, and safety of attending for laboratory testing in different regions at different times, we recommend an **alternative screening strategy for GDM** outside the 2018 Diabetes Canada Clinical Practice Guidelines (1). We recommend that the decision to shift to using this **alternative screening strategy** be made at an institutional (or district / regional level, as applicable) rather than by individual clinicians.

Current GDM screening, as per 2018 CPG (1) may continue if there are only minimal disruptions to capacity for lab testing or treatment of GDM.

- *These recommend screening all pregnant women without pre-existing diabetes using a 50 g glucose challenge followed by a 75 g OGTT in those with a 1-hour glucose of 7.8-11.0 mmol/L (1).*

This ALTERNATIVE SCREENING STRATEGY should be used if the COVID-19 pandemic causes severe disruptions to laboratory testing and treatment, and/or patient refusal.:

- *All pregnant women without pre-existing diabetes will be SCREENED WITH AN A1c & NON-FASTING, RANDOM PLASMA GLUCOSE*
- *Women with an A1c of <5.7% and a random plasma glucose <11.1 mmol/L require no further testing or treatment.*
- *Those with an A1c \geq 5.7% or a random plasma glucose of \geq 11.1 mmol/L are identified as having GDM and should be referred to the interprofessional diabetes and pregnancy health-care team.*

Rationale:

Of all the available screening tests, we chose an A1c and a random plasma glucose as they are easy, widely accessible, do not require fasting, and require minimal laboratory resources compared to other screening tests. Non-fasting lab work provides flexibility for women to attend for testing and may reduce the burden on laboratories, while potentially increasing the sensitivity of the glucose test.

We recognize that this alternative screening option will miss many women with GDM as an A1c of \geq 5.7% has high specificity (96% [95% confidence interval 86, 99%]) but low sensitivity (25% [95% confidence interval 10, 49%]) (3). This strategy is aimed at identifying only the highest risk

women. A random plasma glucose of ≥ 11.1 mmol/l was chosen by consensus in order to avoid missing a woman with quite elevated glucose levels but in whom an A1c is unreliable (for example because of a hemoglobinopathy) (4). Testing can be repeated if previously negative at any time if there is a high clinical suspicion of diabetes.

The alternative screening strategy is displayed in Figure 1.

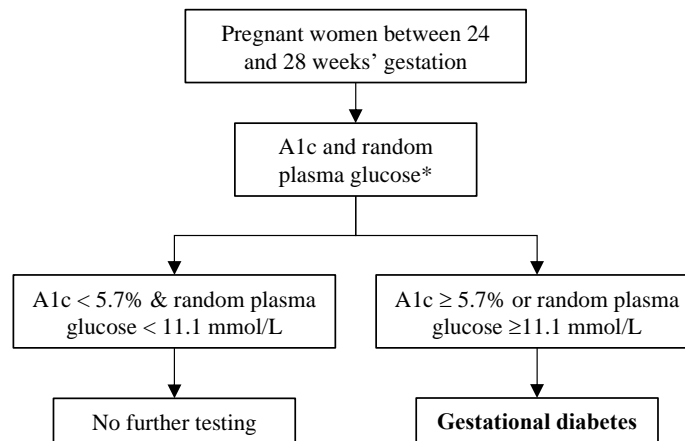


Figure 1: ALTERNATIVE SCREENING STRATEGY: Severe disruption to service, suspension of dynamic glucose testing, or patient refusal.

*This is a non-fasting random glucose.

POSTPARTUM SCREENING FOR TYPE 2 DIABETES

Postpartum screening for maternal dysglycemia should be deferred until after the COVID-19 pandemic has ended. We do not recommend bringing women back solely for an OGTT.

VIRTUAL MANAGEMENT OF WOMEN WITH GESTATIONAL DIABETES

We suggest that, whenever possible and using clinical judgement, clinicians use telehealth devices (video or phone calls) to care for individuals in order to reduce exposure to women and health-care providers. This can include initial and follow-up visits. When in-person visits are conducted as part of routine obstetric care, every effort should be made to share key clinical data (e.g. weight, blood pressure) obtained with subspecialty teams, including the interprofessional diabetes and pregnancy teams.

Clinicians may find it helpful to prepare for virtual visits by asking individuals to email blood glucose testing records prior to the visit and uploading these on their clinical platform, when available. Interprofessional diabetes and pregnancy teams can also consider the use of video conference platforms to host virtual GDM classes and teach insulin injections.

Resources

Diabetes Canada and SOGC websites have helpful online resources:

- www.diabetes.ca
- <https://sogc.org>

Information regarding healthy lifestyle can be found here:

- <https://www.pregnancyinfo.ca/your-pregnancy/healthy-pregnancy/healthy-eating/>.

Additional resources for patients and providers:

- www.diabetes-pregnancy.ca

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