

Self-Monitoring of Blood Glucose in Type 2 Diabetes

5 key messages for pharmacists



Did you know that almost **5%** of greenhouse gases are produced by the healthcare industry?¹



More than **4.1 million** Canadians have diabetes

90% have type 2 diabetes

Pharmacists can play a key role as environmental stewards in reducing unnecessary overuse of self-glucose monitoring supplies by educating patients about the environmental impact of medical supplies and promoting sustainable practices.

By 2033, this number is projected to increase to almost **5.2 million people**.²

Diabetes management involves a significant amount of waste due to single use plastics contained in insulin pens, continuous glucose monitors, test strips, and lancets.¹ With the increasing prevalence of diabetes, the amount of waste, and subsequent environmental impact, will also increase.²

1 Reducing the environmental impact of single use testing supplies helps to minimize the environmental burden on diabetes.³

Diabetes leads to an impaired heat response, as well as multiple comorbidities. Climate change can affect diabetes by increasing:

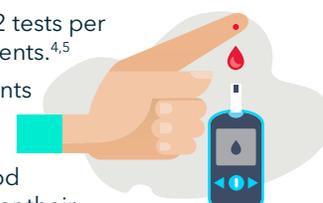
- Insulin resistance
- Blood glucose levels
- Risk of complications and cardiovascular mortality
- Risk of developing type 2 diabetes in patients without diabetes³



2 Routine self-glucose monitoring is NOT required in patients with stable T2DM who are not on hypoglycemia-inducing medications.

Maximum of 1 to 2 tests per week in these patients.^{4,5}

- Encourage patients to prioritize the **timing and purpose** of blood glucose tests over their frequency for more precise and meaningful monitoring.



3 Individualize testing recommendations based on the patient's glycemic control, intensity of antihyperglycemic treatment, and concomitant medical conditions.⁴

- Minimize the need for frequent testing by educating patients on the impact of lifestyle factors like diet and exercise on glycemic control.
- Take advantage of publicly funded medication reviews (where available) to adjust blood glucose monitoring frequency based on the individual's changing needs.
- Advocate for reassessment with any changes in lifestyle, management plan, or glycemic stability.⁴



4 Variations in blood glucose levels are most common in the settings of pregnancy, hospitalization, or acute illness, and may require an increase in frequency of testing.⁴

- Maintaining blood glucose levels within the desired range in these patients may require extra care.



5 Minimizing the inappropriate use of blood glucose testing supplies can reduce costs to the healthcare system.

- Cost of one test strip = approximately 79 cents.⁶
- With hundreds of millions of test strips dispensed each year across the country, healthcare expenditures can quickly add up.
- In Ontario, limiting test strip reimbursement based on treatment led to \$24 million savings in one year. The policy allotted 3000 test strips for those on insulin, 400 for those on AHAs causing hypoglycemia, and 200 for all other patients with diabetes.⁷



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