

Kids in school living with diabetes

BACKGROUND

Children living with diabetes require supports in the school setting to enhance their health, safety, emotional well-being, participation, and facilitate their transition to independence in diabetes care. School-aged children with diabetes most often have type 1 diabetes (T1D), at an approximate rate of one in every 300 students¹. Additionally, there is an increased prevalence of school-aged children with type 2 diabetes (T2D). It is likely that every school across the country has one or more students with diabetes. Diabetes management is individualized and includes monitoring of blood glucose levels, healthy eating, regular exercise, and medication, including insulin. During the school day, students may require support for any of these diabetes-related tasks.

CHALLENGES

A supportive school environment is essential for the health and safety of children living with diabetes. Students spend 30 to 35 hours per week in a school setting, making it vitally important to acknowledge and clarify the essential roles and responsibilities for them, along with their parents/guardians, health-care providers, and school staff.

Maintaining target blood sugar levels is important for academic performance, participation in the classroom and other school activities, and preventing or delaying diabetes-related complications. For students taking insulin, stable blood sugar levels reduce the risk of life-threatening emergencies such as hypoglycemia. Many students can manage their diabetes independently. However, some children, especially those that are very young or newly diagnosed, may be unable to perform diabetes management tasks on their own and require someone to assist with or to administer medications (either insulin or oral medications), monitor blood sugar, or supervise food intake and physical activity. They will need help in the event of a diabetes emergency, regardless of age.

Children living with diabetes have the right to be full and equal participants in all elements of school life. However, because of their condition, they are often stigmatized, left out of a full school experience, or placed in vulnerable circumstances. Students may have to leave the classroom and go to a designated area to test their blood sugars, administer insulin or other medications, or treat hypoglycemia. Not only does this put

the student living with diabetes at risk, it also singles them out as different from other students and leads to missed classroom time. They may be denied participation on sports teams or field trips if school personnel are unable to assist with glucose monitoring, medication or insulin administration, or emergency care.

POLICY IMPLICATIONS

A lack of policy or an incomplete policy means that parents and guardians are often required to adjust their children's diabetes treatment plan or step in and provide care during school hours. To promote a safe and inclusive environment at school, Diabetes Canada has developed a [policy statement](#) and [Guidelines for the Care of Students Living with Diabetes](#). School policies aligned with Diabetes Canada's Guidelines include mandatory requirements for: a) an Individual Care Plan; b) Direct support for students unable to self-manage; c) Diabetes education for school personnel (essential daily & emergency diabetes management); d) Training for designated school personnel (recommended daily diabetes management); and e) Designated (trained) school personnel permitted to administer glucagon, if included in the student's ICP. All other policies/guidelines are considered partial, including those not listing mandatory guidelines.

Policy gaps. Some jurisdictions have policies that align closely with Diabetes Canada's Guidelines, but others fall short. There are varying levels of school-based diabetes care across the country. NS has aligned its policy with Diabetes Canada's guidelines while BC and PE have comprehensive, mandatory policies, yet they don't address students with type 2 diabetes. YK, NT, ON, NL, and NB have mandatory policies, but they do not include all recommended daily and/or emergency diabetes management. The policies in AB, SK, and MB are not mandatory and do not include all recommended daily and/or emergency diabetes management. NU has no policy.

RECOMMENDATIONS

Diabetes Canada recommends that all jurisdictions have mandatory standards of care that are aligned with Diabetes Canada's Guidelines to ensure students' diabetes management needs are adequately supported. This includes recommended daily and emergency diabetes management plans for every student with either type 1 or type 2 diabetes.

¹ Canadian Pediatric Society. [New Data Shows More Needs to be Done to keep Kids with Diabetes Safe at School](#). 2017.

Diabetes Canada recommends schools should permit a student living with diabetes to carry their cell phone as a tool to help manage their blood glucose levels and prevent emergency events. For many students with type 1 diabetes, a cell phone

Kids in School with Diabetes: Provincial & Territorial Policy Analysis

The following table identifies coverage and gaps in the provincial and territorial policies. To comply with Diabetes Canada's guidelines, schools must include mandatory requirements for recommended daily and emergency diabetes management. Many school policies only address the bare minimum requirements for both types of cares, defined as "essential" but not "recommended."

works with insulin pumps and continuous glucose monitoring systems to provide essential information to inform diabetes treatment decisions.

DAILY DIABETES MANAGEMENT

Essential: Education for school personnel; includes support for safe space for students to complete glucose monitoring; providing support as needed for physical education, sports or other extracurricular activities, and field trips.

Recommended: Additional training for school personnel; includes support for students unable to self-manage glucose monitoring and insulin dosing.

EMERGENCY DIABETES MANAGEMENT

Essential: Education for school personnel; includes support to address emergency prevention of hypoglycemia (e.g., additional carbs before exercise, supplying fast-acting carbs in an emergency; contacting 911).

Recommended: Additional training for school personnel with designated staff qualified to administer glucagon.

P/T	DAILY DIABETES MANAGEMENT	EMERGENCY DIABETES MANAGEMENT	COMPLIANCE WITH DC GUIDELINES: NOTABLE GAPS
<u>YK</u>	Recommended (medication administration) without the essential needs detailed.	Recommended (medication administration) without the essential needs detailed.	Essential daily and emergency diabetes management needs not stated explicitly. No specific requirement to support essential daily management tasks (i.e., BG testing) if student unable to self-manage. Diabetes named in "Administration of Medication to Students Policy." Glucagon not specifically named, but policy spells out requirements of school staff and admin for children living with diabetes.
<u>NT</u>	Essential	Recommended	Diabetes not named specifically, no mention of glucagon. Support Assistants provide/supervise health services and medical procedures (identified in the IEP) following training by a qualified health professional.
<u>NU</u>	N/A	N/A	No policy in place for schoolchildren with diabetes.
<u>BC</u>	Recommended	Recommended	Only addresses students living with type 1 diabetes.
<u>AB</u>	Essential	Essential	No specific requirement to support recommended (i.e., insulin administration) daily management tasks if student unable to self-manage. Does not address support for glucagon administration. Only addresses students living with type 1 diabetes.
<u>SK</u>	Essential, but lacking detail	Essential, but lacking detail	Identify which staff are responsible for handling, administering, securely storing & disposing of medications. No specific requirement to assist with daily management tasks (e.g., BG testing, insulin administration) if student unable to self-manage. Glucagon not referenced.
<u>MB</u>	Education for staff on essential, but limited support for CGM monitoring.	Essential+ (includes assessing DKA, testing for ketones)	No support for insulin administration when student unable to self-manage. School personnel not permitted to administer glucagon. Coverage for T1D & T2D requiring insulin only.
<u>ON</u>	Recommended, when coupled with a Plan of Care	Essential	Glucagon not referenced. Additional resources only focus on type 1 diabetes (sample Plan of Care). Policies at some boards more comprehensive than at others.
<u>NL</u>	Essential	Recommended	Does not include support for insulin administration when student unable to self-manage.
<u>NB</u>	Essential	Recommended	Does not include/is not clear on support for insulin administration when student unable to self-manage. Only addresses students living with type 1 diabetes.
<u>NS</u>	Recommended	Recommended	Aligns with Diabetes Canada's Guidelines.
<u>PE</u>	Recommended	Recommended	Only addresses students living with type 1 diabetes.

Abbreviations: P/T: Province/Territory; ICP: Individual Care Plan; BG: Blood Glucose

Updated: May 2024

¹ Canadian Pediatric Society. [New Data Shows More Needs to be Done to keep Kids with Diabetes Safe at School](#). 2017.