



In keeping with the Mission, Vision and Values of the Niagara Catholic District School Board, the following are Administrative Operational Procedures for Diabetes.

## DEFINITION

Diabetes is a disease of the pancreas where a person is unable to create insulin or is unable to use the insulin that is produced. Insulin is a hormone produced by the pancreas that helps control the level of glucose or sugar in blood. Without insulin, carbohydrates (starch and sugars) food cannot be converted into stored energy (called blood glucose or blood sugar) required to sustain life. Instead, unused glucose is accumulated in the blood and spills out into the urine. See Appendix L Glossary of Terms.

### **Type 1 Diabetes (insulin-dependent)**

Type 1 Diabetes can occur at any age. Children with Type 1 Diabetes must inject/receive insulin several times every day. Type 1 Diabetes cannot be prevented or cured.

### **Type 2 (non-insulin-dependent)**

Type 2 Diabetes typically develops in adulthood, but can appear earlier. It has been appearing with more frequency in pubertal children and adolescents. Individuals who are inactive, overweight, with or without a family history of Type 2 diabetes are at greatest risk. Management includes lifestyle modification emphasizing healthy eating, increased physical activity and regular medical follow-up. Students with Type 2 Diabetes need to self-monitor their blood glucose and in some cases take oral medication or injected insulin.

## PURPOSE

The procedures outlined will promote the safety and well-being of students with diabetes. The Ministry of Education expects all school boards to establish and maintain appropriate management procedures for students who have prevalent medical conditions.

## PROCEDURES

*In accordance with PPM 161 – SUPPORTING CHILDREN AND STUDENTS WITH PREVALENT MEDICAL CONDITIONS (ANAPHYLAXIS, ASTHMA, DIABETES AND/OR EPILEPSY) IN SCHOOLS (Appendix H) and PPM 81- PROVISION OF HEALTH SUPPORT SERVICES IN SCHOOL SETTINGS (Appendix I)*

### **1. Creating a Positive Environment for Students with Diabetes**

School personnel will foster a culture of collaborative professionalism to support students with diabetes by having frequent, open communication with parents, students, and school staff which will support a positive attitude toward students' full inclusion in all activities.

## 2. Considerations for Students Working Towards Self-Management

Support for daily management will be required for students working towards independently managing their diabetes. Development of the Student Diabetes Management Plan of Care (Appendix B) will take into consideration each individual's needs and level of self-management.

## 3. Facilitating and Supporting Daily Diabetes Management in Schools

### Blood Glucose Monitoring/Insulin Injection

Students need a safe and hygienic location in the school where they are comfortable to perform self-blood glucose monitoring and insulin injections throughout the school day. In some instances, they may require support or supervision of these activities.

Some students may not be able to perform self-blood glucose monitoring and or insulin administration throughout the school day. As necessary, school staff will seek support from the parent/guardian/caregiver and/or the Local Health Integration Network (LHIN) or any other agency involved with the student. This will be discussed as part of the Student Diabetes Management Plan of Care and arrangements made where students are not able to self care.

### Management of Diet Requirements

Proper timing of meals and snacks is important for a student with diabetes to maintain proper blood sugar levels. Students need the flexibility, and in some cases supervision, to eat all meals and snacks fully and on time. Food provided by the family should never be withheld from the student.

In addition, emergency food supplies or low blood sugar kit to respond to hypoglycaemia are to be available in the classroom and/or other locations in the school. The location of emergency supplies will be recorded on the Diabetes Management Plan. Staff should be aware of the location of emergency supplies.

Parent/guardian/caregiver is responsible for the provision of all food and low blood sugar kit for the student. Additional supplies should be provided for special events such as excursions or days with high levels of physical activity. The parent/guardian/caregiver should also inform LHIN of any upcoming field trips as the LHIN nurses are able to visit the child within the region.

## 4. Triggers

Low blood sugar is also called ***hypoglycemia***. Low blood sugar occurs when the amount of blood glucose (sugar) falls below 4 mmol/L. Blood sugars can change within minutes and must be treated right away. It can be caused by:

- Too much insulin, and not enough food;
- Delaying or missing a meal or a snack;
- Not enough food before an activity;
- Unplanned activity, without adjusting food or insulin.

High blood sugar is also called ***hyperglycemia***. Occurs when a student's blood sugar is higher than 15mmol/L. It is usually caused by:

- extra food, without extra insulin;
  - not enough insulin;
  - decreased activity;
  - illness, stress, excitement or other factors;
  - insulin pump malfunction;
- Usually, it is caused by a combination of factors.

## 5. Signs and Symptoms

Hypoglycemia (Low Blood Glucose less than 4mmol/L) Symptoms:

- Cold, clammy or sweaty skin;
- Paleness;
- Shakiness, tremor, lack of coordination;
- Dizziness;
- Hunger;
- Irritability, hostility, poor behaviour, tearfulness;
- A staggering gait;
- Confusion;
- Headache;
- Blurred vision;
- Weakness/fatigue;
- Loss of consciousness and possible seizure if not treated early.

Mild to moderate hypoglycemia (low blood sugar) is common in the school setting, so it is important for staff to know its signs/symptoms, treatment, and prevention.

Hyperglycemia (high blood sugar greater than 15 mmol/L) Symptoms:

- Extreme thirst;
- Frequent urination;
- Headache;
- Hunger;
- Abdominal pain;
- Blurry vision;
- Warm, flushed skin;
- Irritability.

## 6. Emergency Response

In the event that rescue medication is prescribed, it is essential that the *Individual Plan of Care* include the emergency response protocol, and that all staff are aware of how it is to be implemented. The *Individual Plan of Care* will clearly identify individual roles and be respectful of all applicable legislation, policies and collective agreements.

Emergency Responses: Severe hypoglycemia is an emergency.

If mild to moderate hypoglycemia is not treated right away, it can become life threatening. This is an emergency and immediate action is needed.

Symptoms:

- Uncooperative;
- Unresponsive;
- Loss of consciousness;
- Seizure.

Severe low blood sugar is an emergency situation and the following emergency protocol is to be followed:

- Roll student on left side (recovery position);

- Call 911 immediately;
- Notify parent/guardian;
- Do not put anything in the student's mouth, such as food or drink (choking hazard).

## 7. Field Trips

Field trips are an extension of the learning in the classroom and therefore, it is imperative that they are planned to include all students, including students with diabetes. The Principal must ensure that all appropriate documentation in the Student's Plan of Care is received in advance of the field trip and that plans are in place for any accommodations. Teachers will ensure that this information is available during field trips and that the *Individual Plan of Care* accompanies the student on the field trip.

## Student Diabetes Management Plan of Care

The Principal or Designate in conjunction with the team (may include parent/guardian, the student if appropriate, school staff and other relevant professionals) will develop a Student Diabetes Management Plan of Care for each individual student who is identified with diabetes in accordance with their specific medical requirements (see Student Diabetes Management Plan of Care, Appendix B). All stakeholders will be invited to attend the Student Diabetes Management Plan of Care Case Conference, including Diabetes Education Centre or other relevant medical professionals.

## Emergency Procedures

In emergency, life-threatening situations, where a student is unresponsive, unconscious or unable to self-administer the appropriate treatment, the school response shall be a 911 phone call to Emergency Medical Services, in accordance to the Student Diabetes Management Action Plan (Appendix C).

## APPENDICES

- [Appendix A: Roles and Responsibilities](#)
- [Appendix B: Student Diabetes Management Plan of Care](#)
- [Appendix C: Student Diabetes Emergency Action Plan](#)
- [Appendix D: Student Diabetes Management Plan of Care Annual Review](#)
- [Appendix E: Administration of Prescribed and Non-Prescribed Medication During School Hours](#)
- [Appendix F: Parental Consent for Interscholastic Athletics](#)
- [Appendix G: Consent to Use, Share, and Disclose Personal Information](#)
- [Appendix H: Policy/Program Memorandum No. 161](#)
- [Appendix I: Policy/Program Memorandum No. 81](#)
- [Appendix J: Policy/Program Memorandum No. 149](#)
- [Appendix K: Diabetes Resource Guide](#)
- [Appendix L: Glossary of Terms](#)

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Niagara Catholic District School Board also acknowledges the Canadian Paediatric Society's Diabetes At School resource for providing the template from which the Student Diabetes Management Plan of Care (Appendix B), Student Diabetes Management Action Plan (Appendix C), and Student Diabetes Management Plan of Care Annual Review (Appendix D) were adapted.

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