DIABETES CARE PROTOCOLS FOR SCHOOLS

Cape Breton-Victoria Regional School Board Pilot Description

A protocol was developed to be shared with the Cape Breton District Health Authority with the expectation of developing an agreement regarding Diabetes Care in our schools.

The protocol involved the following components:

**Training**

1. General awareness and education for schools regarding Type 1 Diabetes
   - Requested by school principal for all staff at the beginning of the school year.
   - Conducted by nurses from the local diabetes clinic.

2. Student-specific training regarding support for Individual Care Plan for Type 1 Diabetes
   - Requested by student’s Program Planning Team.
   - Local diabetes clinic nurses attend.
   - Depending on age/ability, the student may conduct this training, under the supervision of the Diabetes Education Nurse.
   - The parent(s)/guardian(s) may conduct this training, under the supervision of a local Diabetes Education Nurse.

**Program Planning Process**

- The student’s Individual Program Planning Team develops an Individual Diabetes Care/Emergency Plan.

- In the Cape Breton-Victoria Regional School Board, all students with diagnosis of Type 1 Diabetes (if disclosed) are required to have a school Emergency/Medical Plan, signed by a health care professional. A copy of the Emergency/Medical Plan for the student is posted in the staff room for ready reference and the original is placed in the cumulative file.

- Students requiring specialized health care services (management of pumps, frequent monitoring, intervention) are required to have an Individual Care Plan for Type 1 Diabetes.
Supports Provided by School Personnel

- Supervised monitoring of blood glucose levels and food intake at school and on the school bus (as needed).
- Support for use of Insulin Pumps.
- Daily logging of blood glucose levels are part of ongoing home-school communication, depending on the child’s age and the Individual Diabetes Care/Emergency Plan for this responsibility.
- Snacks readily available, as provided by parent(s)/caregiver(s), for routine snacks and in the event of mild-to-moderate hypoglycemia.
- Arrangements with local EHS staff and hospital personnel to respond in the event of a 911 call from the school (per the student’s Emergency/Medical Plan); training for glucagon injections.
- Contact parents immediately, should students require an insulin injection at school.
- Arrangements made with parent(s)/caregiver(s) or Continuing Care Services (as needed) for administration of injections during the school day.
- Emergency supplies on the school bus for use if the student has hypoglycemia, as provided by parent(s)/guardian(s).
- Supports provided on the school bus, as needed (e.g. supervision, cell phone).
- Internal communication plan for all staff and substitute staff, to identify students with diabetes in the school. Post signs and symptoms of hypoglycemia in key locations in the school.

Supports Provided by Parents/Guardians

- Notifying the school of the student with diabetes
- Meeting with designated school staff to develop a diabetes management plan and an emergency plan. These plans would include the interventions that school staff may be required to perform in the daily management of a student with diabetes such as blood glucose monitoring, supervision of diet, supervision of insulin administration and the emergency response for an incidence of mild, moderate and severe hypoglycemia. (In subsequent years, the diabetes emergency plan may be resigned at the beginning of each school year. Students 16 years or older, may sign the form on their own behalf).
- Encouraging their child to report signs/symptoms of hypoglycemia or for independent student, always reporting hypoglycemia to school staff.
- Supplying fast-acting glucose.
- Administering insulin if student is not capable.
- Informing the school of any changes in the student’s treatment plan i.e. initiation of a pump.
- Making decisions regarding medical care.
- Striving for independence in their diabetes care while at school (usually by grade 5).
- Labeling foods that the student is to eat with the specific amount of insulin if the student requires assistance in taking insulin via pump.
Diabetes Care – Protocol for Schools

- Calibrating and maintaining equipment – insulin pump, insulin pen, blood glucose testing equipment.
- Providing all supplies such as blood testing supplies, fast-acting glucose, activity snacks and any medication (glucagon).
- Wearing a Medic Alert bracelet (or other emergency identification).
- Assisting in diabetes education to ensure the student’s individual needs are understood.

Supports Provided by Health Care Professionals

- Local Diabetes Education Nurse provides general awareness and education regarding Type 1 Diabetes for school staff at the beginning of each school year.
- Local Diabetes Education Nurse provides specific training/support for Type 1 Diabetes for Individual Care Plan for Type 1 Diabetes.
- Health Care professional signs the completed Emergency/Medical Plan.
- Parent(s)/Guardian(s), continuing care nurse, or other health care professional administers insulin injections at school (as needed).
- EHS/Hospital response in the event of a 911 call from the school (per the student’s Emergency/Medical Plan).

Monitoring

Parent(s)/Guardian(s) or student, are responsible to notify the school of any changes in condition that may require modification of the Emergency/Medical Plan or the Individual Care Plan for Type 1 Diabetes. Upon notification, the principal will call a Program Planning Team meeting to make any necessary changes to the school health care support plan.

Procedures

1. Meeting in early September, or at time of new diagnosis (parents, student (as appropriate), principal/designate, teacher, and health care personnel); Student Services Staff (optional).

2. Develop or update the Emergency/Health Care Plan
   - Identify Emergency Procedures for hypoglycemia, know symptoms, and know when to call 911.

3. Individual Care Plan for Diabetes requires:
   - *Kids with Diabetes in Your Care* Information Card or other documentation of the specific details of Individual Care Plan for Type 1 Diabetes routine care.
   - Cape Breton-Victoria Regional School Board Emergency/Medical Plan.
   - Intervention Checklist or tracking forms consistent with Cape Breton District Health Authority checklist.
   - Visible indicators of hypoglycemia and hyperglycemia.
   - Release of Information Consent Form.
   - Flowchart of Type 1 Diabetes Care (if appropriate).
4. School Staff are retrained when condition/plan changes and parent(s)/guardian(s) are also informed when changes in school staff occur.

Appendices

A. Cape Breton-Victoria Regional School Board/Medical Plan Form
B. Cape Breton-Victoria Diabetes Plan of Care
APPENDIX A

Cape Breton-Victoria Regional School Board – Emergency/Medical Plan Form

TO BE COMPLETED ANNUALLY BY THE PRINCIPAL AND PARENT/GUARDIAN

SCHOOL YEAR: 2_____ - 2_____

School: _________________________________________
Student: ________________________________________
Date of Birth: ___________________________________
Grade & Teacher: _________________________________

1) Medical Condition(s): __________________________________________________

2) Symptoms: __________________________________________________________

3) Emergency Plan: First Contact: ________________________ at ____________
   Alternate Contact: __________________________ at ____________

Steps to Follow:
   a) Dial 911, contact Emergency Health Services (EHS) and request assistance
   b) Notify the student’s parents/guardians
   c) Notify the School Administrator
   d) Remain with the student until such time as emergency medical personnel arrive on
      the scene.
   e) Accompany the student in the ambulance when parents/guardians are not available.
   f) Communicate with school administrators and parents/guardians any updates on the
      student’s condition.

4) Evacuation Procedure: _____________________________________________

   Safe Refuge * in the event of fire is located in _____________________________
   *The local fire department must be notified of the school’s designated safe refuge
   area.

5) Medication(s): This student must have the following prescription medication
      administered during the school day and/or in the event of an emergency:

      Medication: _____________________________ Dosage: __________________
      Prescribed by: _______________________________________________________
      Method of administration (oral, inhaled, etc): ____________________________
      Administered by: _____________________________________________________
6) **Training and Orientation to Medical Procedures:**
   This Emergency/Medical Plan, including the steps to follow, was reviewed with designated school staff on ______________________________ by _____________

7) **Approval of Plan and Associated Training Arrangements:**
   This Emergency/Medical Plan and the related training are approved by the following parties:

   Parent: ________________________________ Date ____________
   Principal: ______________________________ Date ____________
   Family Physician: _________________________ Date ____________
   Other (specify): __________________________ Date ____________

**NOTE:** This form is to be copied and posted in the staff room and a copy is to be placed in the cumulative record.
Appendix B

PLAN OF CARE

Student Name: ________________________________________________
School: ______________________________________________________
Parents/Guardians: _____________________________________________
Diagnosis: ____________________________________________________
Date: _________________________________________________________

Emergency Contacts:

Contact #1: __________________________________________________
Home #: _______________________ Cell #: _______________________

Contact #2: __________________________________________________
Home #: _______________________ Cell #: _______________________

Glucose Monitoring

__________________________ will check her glucose under the supervision of a trained
adult/administrator/teacher.

When Glucose Needs to be Monitored

1. Recess – snack to be eaten
2. Noon – Lunch to be eaten
3. Afternoon – tested before bus/dismissal
4. Before/After Physical Education
5. Before/After other physical activities, such as Terry Fox Walk, dependent of time of day
6. Field trips, special events involving extra snacks – communicate with parents/guardians if
   known ahead of time. Contact parents/guardians if unplanned.
7. If child exhibits signs of low blood sugars, high blood sugar or whenever there is a doubt
   (unusual behavior)

Hypoglycemia or Low Blood Sugar

Hypoglycemia happens when the amount of blood glucose in the body has dropped below
4mmol/L. Hypoglycemia is an emergency situation. It happens within minutes of the child
appearing healthy and normal, so it is important to take care of it right away. If the blood
glucose levels drop very low, the child may become confused and disoriented, lose
consciousness or have a seizure.
*Never leave youth unsupervised until recovery is complete.

**Signs of Hypoglycemia**

- Cold, clammy or sweaty skin
- Pallor
- Difficulty concentrating
- Shakiness, lack of coordination (i.e. Deterioration in writing or printing skills)
- Irritability, hostility and poor behavior
- A staggering gait
- Fatigue
- Nervousness
- Excessive hunger
- Headache
- Blurred vision and dizziness
- Abdominal pain or nausea
- Fainting and unconsciousness

**TREATMENT**

**Mild Hypoglycemia (Blood sugar is less than 4mmol/L)**

**Emergency Response**

1. Check blood sugar. If level is **less than 6 mmol/L but over 4 mmol/L**, take 10g of carbs.
2. If the level is **less than 4 mmol/L**, treat with juice.
3. Wait 15 minutes and retest blood sugar.
4. If the level is still **less than 4 mmol/L**, treat with juice and test within 10-15 minutes.
5. If glucose is still **less than 4 mmol/L**, treat again as above.
6. Continue to treat until is tests **6 mmol/L**
7. Once recovered, if the next scheduled eating time is more than ½ hour away, give 10g and eat again at the usual time. If meal or snack is within ½ hour, have it early (don’t wait the ½ hour).
8. Contact parent/guardians after treatment has been completed and child has recovered.

**TREATMENT**

**Moderate Hypoglycemia (Low Blood Sugar)**

**Symptoms and Emergency Response**
Symptoms

- the child may be awake, but is confused
- sleepy
- unable to self-treat
- writing uncoordinated
- difficulty swallowing

EMERGENCY RESPONSE

1. When determining when hypoglycemia is moderate, it may be based on the symptoms vs. blood sugar level. Check blood sugar if possible.
2. Treat with 20g of sugar if able to swallow. If the child is confused or uncooperative, but still able to swallow, treat with Insta-glucose (Gel).
3. If the child does not become more alert or refuses to take anything by mouth, call 911 and then the parents/guardians.
4. If using a pump, disconnect it at the infusion site. Put the cap on the infusion set.
5. If the child is responsive to the gel, check blood sugar. If less than 4 mmol/L, then give another snack.
6. Test again after 15 minutes. Treat if under 4 mmol/L with juice.
7. If the next scheduled eating time is more than ½ away, eat 10g carb and eat at the usual time. If the next scheduled eating time is within a ½ hour, have it early (don’t wait ½ hour).

Severe Hypoglycemia – Symptoms and Emergency Response

Symptoms

- Unresponsive
- Unconscious
- Having a seizure

Emergency Response

1. Call 911 immediately, then call parents/guardians
2. Do not give food or drink if the student is unconscious, having a seizure or unable to swallow.
3. Roll the student on their side.
4. Disconnect at the infusion site.
5. Put cape on the infusion site.
Hyperglycemia – High Blood Sugar

This happens when blood glucose levels are higher than the child’s target range. The child will be thirsty, urinate more frequently and be tired.

This condition can get serious but does not require immediate treatment unless greater than 15 mmol/L.

If blood sugar is over 15 mmol/L, contact parents/guardians immediately.

Other Symptoms to Respond To

*If there is nausea, vomiting and abdominal pain at any time, contact parents/guardians.

Administration of Bolus

1. The administration of bolus at lunch time will be the responsibility of Principal/Teacher who have received adequate training. Parents/Guardians and Teachers will mutually agree when the parent/guardians can transfer this function.

2. The Principal or Teacher will contact parents/guardians and communicate their blood sugar levels and the amount eaten for lunch. Based on the parents/guardians calculations, they will communicate the number to be entered into the pump. It will be communicated using three digits (i.e. 3.20). The Principal/Teacher will repeat this number back to ensure accuracy. This number will also be confirmed with another staff person.

3. The bolus will be administered in the specified area.

4. If the bolus is accidentally discontinued during administration, the Principal/Teacher will contact the parents/guardians.

Consideration for the Bus

1. ___________________________ has snacks reserved in their lunch bag for the bus ride home.

2. ___________________________ and school administration has spoken with the bus driver ___________________________.

3. The Principal/Teacher should ensure there is adequate treatment (i.e. snacks or juice) reserved in their lunch bag before they get on the bus.
Provision of Snack Boxes

1. __________________________ parents/guardians will provide boxes containing appropriate snacks in the event that the student experiences low blood sugar. These boxes should be available in the student’s classroom, gym, music room, office, etc.

2. Additional boxes should be made available to be administered prior to activities. Food in both boxes should be labeled as to their function and when to administer (including glucose levels).

3. The boxes in the specific rooms should be made aware to all personnel in those areas so that access to treatment is easily obtained.

4. The Principal/Teacher can communicate with parents/guardians if supplies of these activity and low blood sugar treatments are depleting. Then it is the parents/guardians responsibility to replenish these snack boxes.

5. The Teacher Assistant will carry juice packs with them at all times.

Educational Materials Available

1. Multiple copies of *Kids with Diabetes in Your Care* should be provided for all school personnel who will be in contact with these students.

Cross Reference

Education Act (1995)
Special Education Policy (2008)
Teacher Assistant Guidelines (2009)
Transition Planning in Nova Scotia: The Early Years through Adult Life (2005)
Handbook For the Transportation of Students with Special Needs (1999)
Racial Equity Policy (2002)
Guidelines for Supporting Students with Type 1 Diabetes (2010)

Forms

Until TIENET implementation (2012) all necessary forms and resources for Diabetic care can be located in the Diabetic Handbook (2011) distributed to all schools.