



Diabetes Management and Emergency Plan of Care for Students with Type 1 Diabetes

STUDENT: _____

SCHOOL: _____

This document as well as the associated AVRSB procedure were prepared by: Karen Bartlett Noiles, RN, BScN, MN (AVH/AVRSB Student Health Partnership Program) Janice Knapp, RN, BN, CDE (AVH Diabetes Center); Bev Harris, PDt, CDE (AVH Diabetes Center), and Printhie Sanford, RN, BScN, following the 2008 Canadian Diabetes Association Guidelines for the Care of Student's with Type 1 Diabetes in Schools.

The group acknowledges the input from:

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Barbie Lake, Educational Assistant and parent of a student with diabetes
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Definitions of Terminology

Basal insulin or rate	A continuous 24-hour delivery of insulin that matches background insulin needs. When the basal rate is correctly set, the blood glucose does not rise or fall during periods in which the pump user is not eating. Basal rates are given as units/hour.
Carb bolus	A spurt of insulin delivered quickly to match carbohydrates in an upcoming meal or snack.
Correction bolus	A spurt of insulin delivered quickly to bring a high blood glucose back within a person's target range for before a meal, after a meal, or at bedtime.
Glucose	The fuel that the body needs to produce energy. Glucose comes from carbohydrate foods such as breads, cereal, fruit and milk.
Type 1 Diabetes	A disease that occurs when the pancreas is unable to produce insulin and is usually diagnosed in childhood or adolescence.
Insulin	A hormone produced by the pancreas which functions like a key allowing glucose to enter the cell where it can be used as energy.
Insulin Pump	A small, computerized, programmable device about the size of a beeper that can be programmed to deliver basal insulin and give a bolus of insulin for a meal or high blood sugar. It replaces insulin injections. A pump delivers fast-acting insulin via a plastic catheter to either a Teflon infusion set or a small metal needle inserted through the skin for gradual absorption into the bloodstream. Doses as small as 0.025 unit can be delivered with accuracy.
Ketoacidosis	An excessive build up of ketones in the blood as the body uses fat cells for energy. For students with diabetes, this would occur when they; do not get enough insulin, have missed a dose of insulin, not enough insulin prescribed for their needs, a malfunctioning pump site or illness.
Hypoglycemia	(low blood glucose) An emergency situation when the amount of blood glucose has dropped below the student's target range. Hypoglycemia can be mild, moderate or severe. Symptoms may vary with each incident of low blood glucose. The condition could result when a person has taken too much insulin, eaten too little or exercised without extra carbohydrates.
Hyperglycemia	(high blood glucose) A situation when the amount of blood glucose is higher than an individual's target range. This is not usually life threatening and not an emergency situation.

Glucagon	A synthetically prepared hormone that is given by injection for severe hypoglycemia which allows the liver to release stored glucose. The body also makes this hormone naturally.
Target range	Acceptable range of blood glucose values to promote good health as determined by the parent, student and diabetes care team.
Fast acting glucose	<p>A type of carbohydrate that the body can use quickly to raise the level of glucose in the blood stream. Examples are:</p> <ul style="list-style-type: none">▪ glucose tablets (preferred source) – total 15g (as directed by family).▪ 3 teaspoons or 3 packets of sugar dissolved in water▪ 175ml of juice or regular pop (juice packs are convenient for school)▪ 6 Life Savers®

Annapolis Valley Regional School Board

Diabetes Management Plan of Care

Student:	DOB:	School:	Teacher:
Parent(s)/Guardian(s):		Phone #: (H) _____ (C) _____ (W) _____	
Student's Address:			
Health card #		Family Doctor:	
Medic Alert #			
Specialist:		Other Health Care Professionals involved:	
Designated School Staff (staff with enhanced diabetes training):		Other conditions that may affect the student's treatment:	

My child is able to manage his/her diabetes care independently and does not require any special care from the school. Yes No

If "Yes" proceed to Section 3

If "No" proceed to section 2 & 3

The remaining information should be completed with parent, student and school staff to ensure clarity of responsibilities.

SECTION 2: DIABETES MANAGEMENT PLAN OF CARE

Student's Name: _____

_____ requires assistance in the management of diabetes in the **indicated** areas:
(student's name)

Please check all areas that apply**Blood Glucose Monitoring**

1. Target range is _____.

- Glucose readings higher than target are not cause for alarm. **Lower than target range requires treatment.**
- Some individuals do not feel well when blood glucose is above target and may not want to exercise in gym class. Call parents if blood glucose is above target and student not feeling well. (Ketones may need to be checked).

2. Usual testing times:

- before recess
- before lunch
- before gym class .
- after gym class
- before afternoon bus dismissal
- other _____

3. Parent/Guardian Responsibility:

(E.g. to supply meter and glucose strips to school; to supply glucose tablets or supplies for hypoglycemia.)

4. Student Responsibility:

(E.g. wash hands, prepare equipment, prick finger, read meter etc.)

5. School Responsibility:

(E.g. remind student to test glucose, supervise and/or perform glucose testing, prepare equipment, report results outside of target range, send home records of glucose readings at school etc.)

6. Other information or direction:

Diet Management

1. Snack and meal times can be at the regular school time Yes No
 - If **"NO"**, families are encouraged to discuss meal/snack times with the health care team to adjust insulin schedule to match school schedule.
2. Is snack needed before bus dismissal? Yes No
3. Students that use an insulin pump: My child can count carbohydrates Yes No
 - If **"NO"**, I will send food to school labeled with the insulin requirements and/or carbohydrate content.

4. Parent/Guardian Responsibility:

(E.g. supply all food marked with insulin requirement when a student requires supervision with insulin administration)

5. Student Responsibility:



(E.g. to ensure they eat snacks and lunch)

6. School Responsibility:

(E.g. Ensure snacks/lunch is eaten and not traded, notify parent if child vomits, notify parent of changes in class routine, parties, trips)

7. Direction if class is provided with food:

(E.g. If Birthday cake or other treats sent to the class)

8. Other information:

Insulin

- 1. My child requires *supervision* in the administration of insulin Yes No
 Insulin is administered by injection pump

- 2. Insulin Pump: My child requires *assistance* to enter a correction or carb bolus
 Yes No

3. Parent/Guardian Responsibility:

(E.g. for insulin pump, provide guidelines when additional or less insulin may be required i.e. for blood glucose values greater than 14mmol/l or less than 4mmol/l), ensure someone available to administer insulin bolus (if by pump) or administer lunch time injection, emergency availability for equipment malfunction etc.)

4. Student Responsibility:

(E.g. Notify school staff if assistance required for equipment malfunction, if need to call home, uncertainty of amount of insulin to administer etc.)

5. School Responsibility:

(E.g. ensure insulin units being used on pump are accurate and are as instructed by parent, call parent with equipment malfunction)

6. Additional comments:

SECTION 3: DIABETES EMERGENCY PLAN OF CARE

Student's Name: _____

Mild or Moderate Hypoglycemia – Student is conscious and able to swallow

Symptoms (please circle)	Treatment
Sweating	• Give fast acting glucose in the form of _____
Trembling	• Stay with student
Dizziness	• Recheck blood glucose in 10-15 minutes. Repeat fast acting glucose if blood glucose below 4mmol/L
Mood changes	• Call parent
Hunger	• Stay with student until blood glucose is > 4mmol/l
Headaches	• Once glucose is > 4 mmol/l , give the student the usual recess snack or lunch unless recess or lunch is greater than 30 minutes away. In this situation, give child a snack of carbohydrate (15g) and a protein now , E.g. 6 crackers and cheese
Difficulty speaking or concentrating	
Pale	
Confused	
Tired	
Blurred vision	
Other _____	

Severe Hypoglycemia – Student is unable to swallow juice, is unconscious or is having a seizure. This is a medical emergency in which the student requires the administration of glucagon and Emergency Health Services – 911.

Emergency Plan Of Care – Student is unable to swallow or is unconscious

- Call for help
- Call 911
- Position on their side.
- Administer glucagon if indicated by parents (glucagon can not hurt the student)

In case of an emergency, _____ is to receive a glucagon injection. Yes No

If yes, weight is _____ and administer _____ ½ syringe (if under 20kg)
_____ full syringe

- Check blood glucose.
- Call family
- Monitor for recovery
- Transport to hospital
- Document

Other measures specific for student:

1. _____
2. _____
3. _____

SECTION 4: CONSENT

Student's Name: _____

I, _____, have provided the information in the *Diabetes Management and*
(Parent/Guardian)

Emergency Plan of Care for _____.
Student's Name

I realize that school staff are not medical professionals and perform all aspects of the plan to the best of their ability and in good faith. I agree with the emergency responses outlined in this plan, including the administration of glucagon if indicated. As well, I give the school consent to place a copy of this form, in appropriate locations in the school. This form and its information may be shared with Emergency Health Services, the staff of the school and other health care providers.

Signature of Parent/Guardian_____
Date_____
Signature of Student (if age appropriate)_____
Date_____
Signature of School Principal_____
Date

SECTION 5 ANNUAL REVIEW

Student's Name: _____

DIABETES MANAGEMENT AND EMERGENCY PLAN OF CARE

If there are **no changes** to the student's **Diabetes Management and Emergency Plan of Care**, please sign off below and continue to follow the plan for the school year.

If there are changes to any part of the management plan, please complete these sections again with the parent or student.

This plan remains in effect without changes for the school year _____ - _____.		
_____	_____	_____
Date	Parent/Guardian	Student (if age appropriate)
_____	_____	
Date	School Principal	

This plan remains in effect without changes for the school year _____ - _____.		
_____	_____	_____
Date	Parent/Guardian	Student (if age appropriate)
_____	_____	
Date	School Principal	

This plan remains in effect without changes for the school year _____ - _____.		
_____	_____	_____
Date	Parent/Guardian	Student (if age appropriate)
_____	_____	
Date	School Principal	

This plan remains in effect without changes for the school year _____ - _____.		
_____	_____	_____
Date	Parent/Guardian	Student (if age appropriate)
_____	_____	
Date	School Principal	

References

Canadian Diabetes Association. (2008). Clinical Practice Guidelines for the Prevention and Management of Diabetes in Canada. *Canadian Journal of Diabetes* 32, no.1 (2008): 1-215.

Canadian Diabetes Association. (2008). *Kids with Diabetes in Your Care*, Toronto, ON: Canadian Diabetes Association.

Canadian Diabetes Association. (2008). *Lows and highs: blood glucose levels*, Toronto, ON: Canadian Diabetes Association.

Canadian Diabetes Association. (2008). *Standards of care for Students with Type 1 Diabetes in School*, Toronto, ON: Canadian Diabetes Association.

New Brunswick Department of Education. (2008). *A Handbook for Type 1 Diabetes Management in Schools*, Fredericton, NB: Province of New Brunswick.

Nova Scotia Department of Education. *Special Education Policy*, Halifax, NS: Province of Nova Scotia.

Walsh, J., & Roberts, R. (2006). *Pumping Insulin: Everything you need for success on a smart insulin pump (4th Ed.)*. San Diego: Torrey Pines.