Individual Care Plan for Students with Type 1 Diabetes

DAILY AND EMERGENCY PROCEDURES

IDENTIFICATION

Name: _____ Date of birth: _____ School year: 20___ to 20___

School: _____ Grade: _____ Homeroom teacher: _____

Home address: _____

Medical contact: _____ Phone: _____

If student has another care plan, note here: _____

Designated staff to provide support with diabetes care (minimum 2):

1. _____

2. _____

3. _____

STUDENT PHOTO

Before-school care: No ☐ Yes ☐ _____ After-school care: No ☐ Yes ☐ _____

School bus #: a.m. _____ p.m. _____

CONTACTS

	Name	Relationship	Preferred phone #	Alternate phone #
1st				
2nd				
3rd				

EMERGENCY KITS / SUPPLIES

SCHOOL must ensure a kit is accessible at all times (class, gym, field trips, lockdowns, fire drills, etc). Advise parents when running low on supplies. **PARENT** must maintain/refresh supplies.

CONTENTS (check all that apply)	With student	Classroom	Office	Other location(s)
Blood glucose meter, test strips, lancets				
Fast-acting sugar (juice, glucose tabs, candy) for low blood sugar				
Carbohydrate snack(s)				
Glucagon (expiry date: _____)				
Sharps disposal container				
Ketone strips/meter				
Insulin pen, pen needles, insulin (in case of pump failure)				
Extra batteries for meter				
Parents' names and contact numbers				
Other: _____				

Once this care plan is complete, parents should fill in the quick-reference sheet shown below, which outlines the major routine tasks to be done each day. Indicate which, if any, tasks the student needs help with. Keep a copy in each classroom and all locations (e.g., gym) where the student spends part of the school day. Download the file at **www.diabetesatschool.ca**

Daily schedule of diabetes tasks for _____ CLASS: _____ SCHOOL YEAR: 20___ to 20 ___

DAILY SCHEDULE OF ROUTINE DIABETES-RELATED TASKS

TIME	Meal/snack	BG check	Insulin	Comments

LEGEND: A – assistance required; S - with supervision; I – independent. BG=Blood glucose/sugar

EMERGENCY KIT LOCATION(S): _____

MILD HYPOGLYCEMIA (Low blood sugar): Test, Treat, Repeat

If BG is under 4 mmol/L: Treat, then repeat BG check after 10-15 minutes
Treat again if still under 4 mmol/L
Treat and repeat this cycle until the BG is 4 or more

Usual symptoms of low blood sugar for student are

☐ shaky ☐ irritable/grouchy ☐ dizzy
☐ sweating ☐ blurred vision ☐ headache
☐ hungry ☐ weak/fatigue ☐ pale
☐ confused ☐ other _____

Treat with:

☐ ____ glucose tablets
☐ ____ cup juice/regular pop
☐ ____ Skittles
☐ Other _____

HYPERGLYCEMIA (High blood sugar)

Call parent/guardian if BG is above ____ mmol/L, or if student is unwell.

For students on a pump, correction and/or ketones check if BG is above____

☐ Call parent
☐ See care plan

Specific instructions:_____

This worksheet is intended as a brief overview of DAILY diabetes-related tasks for the student. Consult the complete care plan for more details, particularly for non-standard situations. It is helpful to keep this sheet in the student's class(es), even if the student manages most of their care.

EMERGENCY PROCEDURE FOR LOW BLOOD SUGAR (HYPOGLYCEMIA)

MILD-TO-MODERATE LOW BLOOD SUGAR

SYMPTOMS

When blood sugar (BG) is low, the student may have these symptoms (check all that apply):

- ☐ Shakiness
- ☐ Sweating
- ☐ Hunger
- ☐ Confusion
- ☐ Irritable/grouchy
- ☐ Blurred vision
- ☐ Weakness/fatigue
- ☐ Other(s)_____
- ☐ Dizziness
- ☐ Headache
- ☐ Paleness

The student may also use these words to describe feeling low:

_____

ACTION

<u>Never</u> leave a student with a low blood sugar alone.
Treat the low blood sugar ON THE SPOT.
Do not send the student somewhere else.

First, check BG. Even students who do their own checks may need help when their blood sugar is low. Then follow these steps:

Test
- If BG is under 4 mmol/L OR
- If BG is under 5 mmol/L with symptoms

Treat
- Immediately give ___ grams of fast-acting sugar (See below for student preferences and amounts)

Repeat
- After 15 minutes, test BG again:
  - If still under 4 mmol/L, treat again as above.
  - Repeat cycle every 10 to 15 minutes until BG is above 4 mmol/L

When BG is over 4 mmol/L:

- If meal or snack is more than 1 hour away, give snack now.
- If meals or snack less than 1 hour away, no action needed. Student can eat at regular time.

How much fast-acting sugar to give			
√		10 g	15 g
	Glucose tablets (4 g each)	2 tabs (8 g)	4 tabs (16 g)
	Juice or regular soft drink	½ cup	¾ cup
	Skittles	10 pieces	15 pieces
	Rockets (roll candy)	1 roll (7 g)	2 rolls (14 g)
	Table sugar	2 tsp / 2 pkgs	1 Tbsp / 3 pkgs

SEVERE LOW BLOOD SUGAR

Symptoms

- Unresponsive or unconscious
- Having a seizure
- So uncooperative that you can't give juice or sugar by mouth

What to do

1. Place the student in recovery position.
2. Have someone call 911. Then call parents.
3. Stay with the student until ambulance arrives. Do not give food or drink (choking hazard).
4. If there is a signed consent and **mutual agreement** (see p. 8) to give glucagon, give it now.
   - ☐ **Yes, give glucagon**
   - ☐ **No, do not give glucagon**

_____

HOW TO USE GLUCAGON

Dose

- ☐ Students **5 years old** and younger: 0.5 mg = 0.5 mL
- ☐ Students **6 years and older**: 1.0 mg = 1.0 mL

Directions

1. Remove cap
2. Inject liquid from syringe into dry powder bottle
3. Roll bottle gently to dissolve powder
4. Draw fluid dose back into the syringe
5. Inject into outer mid-thigh (may go through clothing)
6. Once student is alert, give juice or fast-acting sugar

When BG is under _____ mmol/L, call parent

PROCEDURE FOR HIGH BLOOD SUGAR (HYPERGLYCEMIA)

DEFINITION

Hyperglycemia = high blood glucose/sugar (BG). Levels may vary by individual.

High blood sugar is usually the result of extra food or inadequate insulin, but not always. BG also rises during illness or stress, and can be due to technical problems (pump failure, missed meal bolus, etc).

SYMPTOMS

The student may use these words to describe a high blood sugar: _____

Usual symptoms of high blood sugar for this student are:

- ☐ Extreme thirst
- ☐ Hunger
- ☐ Warm, flushed skin
- ☐ Frequent urination
- ☐ Abdominal pain
- ☐ Irritability
- ☐ Headache
- ☐ Blurred vision
- ☐ Other: _____

Usual symptoms of SEVERE high blood sugar:

- ☐ Rapid, shallow breathing
- ☐ Vomiting
- ☐ Fruity-smelling breath

ACTION

Check BG. Even students who do their own checks may need help if they are unwell.

- **If student has symptoms of illness:** Call parent **immediately** if student is unwell, has severe abdominal pain, nausea, vomiting or symptoms of severe high blood sugar. A parent should pick up the student from school if blood sugar is high and they feel unwell, regardless of how old or independent they are.
- **No symptoms of illness:** If the student feels well and the BG is under _____ , no immediate treatment is needed. Note the blood sugar reading using the typical home-school communication method. In the meantime:
  - Allow free access to the washroom and encourage them to drink water/sugar-free fluids.
  - Allow student to eat usual meal or snack (they may choose carbohydrate-free snacks).
  - Allow student to resume activity as normal.
- **Insulin corrections by pump:** If the student is on an insulin pump, a correction may be given (see **insulin** section of this plan). If BG has not decreased 2 hours **after** the correction, call parent.

When BG is above _____ mmol/L, call parent

KETONES

☐ This student does not check for ketones at school.

If BG is above _____, check ketones using urine sticks ☐ OR ketone blood meter ☐ .

	Urine stick	Blood meter	Action
If ketones are:	Negative to small	Less than 0.6	Proceed as for hyperglycemia above.
	Moderate to large	At or above 0.6	May indicate pump failure or extra insulin needed. Call parents for instructions.

	ROUTINE	MANAGEMENT
BLOOD GLUCOSE/SUGAR (BG) MONITORING	**Student's target blood sugar (BG) range:** _____to _____mmol/L ☐ Student requires trained staff to do a blood sugar (BG) check and read the meter ☐ Student needs supervision to do a BG test and read the meter ☐ Student can do a BG check and read the meter on their own Location of glucose meter(s) ☐ With student ☐ Homeroom class ☐ Other(s) _____ _____ **Allow student to check their blood sugar anytime, any place, respecting their wish for privacy or company.**	**Always check blood sugar when student shows symptoms of hypoglycemia. If you are not able to check, treat as if blood sugar is low.** Student's blood sugar should be checked at these times each day: ☐ Before a.m. break Time _____ ☐ Before lunch _____ ☐ Before p.m. break _____ ☐ Before leaving school _____ ☐ At before-school program Time _____ ☐ Before breakfast program _____ ☐ At after-school program _____ ☐ Before sport or exercise _____ Other times: _____ **Home-school communication method:** Daily blood sugar readings should be communicated to parents via: ☐ Agenda ☐ BG readings form ☐ Text messages ☐ Other _____ Call parent if blood sugar is: ☐ Below _____ ☐ Above _____ Does student wear a continuous glucose monitor (CGM)? ☐ No ☐ Yes ☐ Yes, sometimes. ☐ If yes, see **Appendix B.**
NUTRITION BREAKS	☐ Student needs supervision during meal/snack times to ensure all food is eaten ☐ Student can manage their food intake independently **Allow enough time to eat meals/snacks.** **Ensure student eats meals/snacks on time.** **No food sharing.**	☐ Student can eat snack and lunch at regular school times. If not, specify when the student should eat: _____ _____ Student requires a snack before: ☐ End of day/getting on bus ☐ Physical activity (see next section, page 6) When treats or classroom food is provided: ☐ Student/school should contact parent in advance for instructions ☐ Student can manage independently Food restrictions: ☐ Celiac disease: no gluten-containing products ☐ Allergies/intolerances: _____

	ROUTINE	MANAGEMENT
PHYSICAL ACTIVITY	**BG meter and fast-acting sugar should ALWAYS be accessible during physical activities.** **Risk of low blood sugar increases during/after physical activity**. **The student may need extra BG check(s) and/or extra food.** ☐ Student can make decisions about physical activities independently ☐ Student needs supervision/guidance around physical activity	**Notify parents whenever special activities are planned (for example, Terry Fox run, track and field day, field trip or other active event)** ☐ No action needed before activity ☐ Check blood sugar before regular physical activity classes ☐ Check blood sugar before unplanned activity Comments: _____ _____ If blood sugar is: • Under 4 mmol/L, treat for low blood sugar • Between 4 mmol/L and ____ , give a snack before activity • Above _____, no snack is needed before activity For students on a pump: ☐ No specific pump adjustments needed ☐ Suspend/disconnect pump for activity. Store _____ ☐ Other_____
INSULIN	☐ Student does not take insulin at school ☐ Student takes insulin at school by: ☐ pen injection ☐ pump ☐ syringe* Insulin is given by: ☐ Student, independently ☐ Student, with supervision ☐ Designated staff ☐ Parent ☐ Other _____ Location in school where insulin will be given: _____ _____ * Consider using pens at school because dosing is easier	Complete this section **only** if student takes insulin at school. Insulin by injection/ pump is done at the following times: Time ☐ Before breakfast program _____ ☐ Before morning snack _____ ☐ Before lunch _____ ☐ Before afternoon snack _____ ☐ Other _____ **If BG is above _____ mmol/L, call parent** **For students using insulin pen/syringe:** ☐ Insulin can only be given at breakfast and/or lunchtime **For students using an insulin pump:** ☐ Insulin can be given anytime the student is eating ☐ There must be 2 hours between correction doses

	ROUTINE	MANAGEMENT
INSULIN VIA PUMP	A bolus calculator (which parents will provide) must be used in school settings. The pump is always programmed at home. Designated staff are responsible for ensuring that: • the BG reading and number of carbohydrates are entered at each meal/snack time • that the bolus is delivered	**Training is required.** The basic steps are: 1. Check BG before the student eats. The reading will: ☐ Be sent to the pump by the meter. ☐ Need to be manually entered into the pump. 2. Enter the total number of carbohydrates to be eaten (provided by parent or the student) 3. The pump will calculate the amount of insulin to be given. Press the appropriate button to accept and deliver the bolus. **If BG is above _____ mmol/L:** ☐ Check ketones ☐ Call parent ☐ Other _____
INSULIN VIA PENS OR SYRINGE	Type of insulin used: _____ **Always double-check the insulin dose before injecting to make sure the appropriate dose has been selected and is dialed correctly into the pen.** ☐ The student is able to select the appropriate dose. Designated staff should double-check the dose. ☐ Insulin is given by designated staff. A second adult must check the dose. (This task requires some training, but the adult doing it does not need to be a designated staff member listed in this care plan). ☐ Parents agree the student can give their own insulin, without an adult double-checking the dose.	**Training is required**. Here is how the dose is calculated: ☐ Parents label the student's food with number of carbohydrates and provide a **Bolus Calculator Sheet*** that allows designated staff to select an appropriate insulin dose. This dose is based on the BG reading and the number of carbohydrates the student will eat. **OR** ☐ Same steps as above, but with the dose calculated by the student's glucose meter (only certain meters can do this). ☐ Parents will send a **set number of carbohydrates** for snack/lunch each day. They will provide an appropriate tool (such as **variable dose insulin scale** in Appendix A) to help designated staff select appropriate dose based on the student's BG. ☐ Parents may send a **different number of carbohydrates** for snack/lunch each day (clearly labeled) and will provide an appropriate tool (such as **variable dose insulin scale** in Appendix A) that allows designated staff to select a dose of insulin based on BG. **Parents have the right to adjust insulin dose for bolus calculator sheet or sliding scale throughout the school year as needed** * See www.bcchildrens.ca/health-info/coping-support/diabetes, Click on Basal-Bolus Insulin with MDI, then Bolus Calculators for School Lunches

CONSENT

Pre-Authorizations: Parents/guardians

Consent to release information: I authorize and provide consent to the school staff to use and/or share information in this plan for purposes related to the education, health and safety of me/my child. This may include:

1. Displaying my child's photograph on paper notices or electronic format(s) so that staff, volunteers and school visitors will be aware of my child's medical condition.
2. Communicating with bus operators.
3. Sharing information in special circumstances to protect the health and safety of the student.

Yes ☐ No ☐

Consent to transfer to hospital: I consent in advance to my child's being transported to a hospital if required, based on the judgment of school staff. I also permit a staff member to accompany my child during transport. Please note: the school principal or designate shall decide if an ambulance is to be called.

Yes ☐ No ☐

Consent to treatment: I am aware that school staff are not medical professionals and perform all aspects of the plan to the best of their abilities and in good faith. I approve of the management steps and responses outlined in this care plan, including administering glucagon if indicated.

Yes ☐ No ☐

Agreement to provide glucagon: School staff, parents and my child (if age-appropriate) agree that glucagon can be given in the event of severe hypoglycemia. Note: School personnel must sign below to indicate pre-agreement to provide this emergency injection.

Yes, glucagon can be given ☐ No, glucagon cannot be given ☐

AUTHORIZATION

Parent/guardian signature: _____ Date: _____

Parent/guardian name (print): _____ Relationship: _____

Student signature: _____

Heath care professional (HCP) signature: _____ Date: _____

HCP name (print): _____ Role: _____

Principal signature: _____

Principal name: _____

Designated and trained staff (minimum 2):

1. _____

2. _____

3. _____

Staff trained and designated to administer glucagon: _____

ANNUAL RENEWAL
When requirements change significantly, complete a new Individual Care Plan and share with all involved. If there are no changes between school years, use this sign-off sheet to confirm the plan has been reviewed by the school, the parent(s) and, when age-appropriate, the student.
This plan remains in effect for the _____ to _____ school year without change. Parent/guardian:_____ Date: _____ Principal: _____ Date:_____
This plan remains in effect for the _____ to _____ school year without change. Parent/ guardian:_____ Date: _____ Principal: _____ Date:_____
This plan remains in effect for the _____ to _____ school year without change. Parent/ guardian: _____ Date: _____ Principal: _____ Date: _____
This plan remains in effect for the _____ to _____ school year without change. Parent/guardian: _____ Date: _____ Principal: _____ Date: _____
This plan remains in effect for the _____ to _____ school year without change. Parent/guardian: _____ Date: _____ Principal: _____ Date: _____

APPENDIX A (page 1 of 2)

How to calculate lunchtime insulin using variable dose insulin scale

For a student using insulin pens or syringes, calculate a lunchtime insulin dose in one of two ways:

- **FIXED** dose: A set amount of insulin to match a set number of carbohydrates for each meal.
- **RATIO**: 1 unit of insulin for a specific number of carbohydrate grams (Number of carbs / Ratio = dose)

Before eating, always check blood sugar. If BG is:

- Within target range: Give the usual FIXED dose or calculate using RATIO and number of carbs in the meal.
- Too low: Treat the low blood sugar. When calculating the lunchtime insulin dose, **do not** include the carbohydrates used to treat the low.
- Too high: Add extra insulin (a correction) to the dose.

How to calculate a correction dose

- **Adjustment scale**: An amount of insulin is added (or subtracted, if BG is low) from the dose, depending on the BG level.
- **Correction factor (CF; Also called insulin sensitivity factor, ISF):** An estimate of how much 1 unit of rapid-acting insulin will lower BG for a specific person. To calculate the amount of insulin needed to correct a high blood sugar using this method, the formula is: [BG−6] **divided by** CF (correction factor)

- The student's fixed dose of insulin for lunch is _____ units for _____ carbohydrates
- The student's **ratio** is 1 unit of insulin for every _____ of carbohydrates
- The student's **correction factor** is _____

Start with the dose for lunch	**____ units (fixed dose)**							
	1 unit of insulin per ____ grams of carbohydrates = ____							
Check BG. What range is it in?	**Below 4 mmol/L**	**TARGET** - mmol/L	-	-	-	-	-	-
Then (*add to OR subtract from)* dose								

APPENDIX A (page 2 of 2)

How to calculate lunchtime insulin using variable dose insulin scale

Examples

1. Susan has a ratio. This is her adjustment scale:

Lunch dose	**1 unit per 10 grams of carbohydrates**					
Lunchtime BG	**Below 4 mmol/L**	**TARGET 4 – 7 mmol/L**	**7 – 10 mmol/L**	**10.1 – 14 mmol/L**	**14.1 – 17 mmol/L**	**Above 17**
Adjustment (– or +)	– 1 unit		+1 units	+2 units	+3 units	+4 units

On Monday, her BG is 11.5 mmol/L. She plans to eat 50 grams of carbs for lunch.

Insulin for food = 50/10 = 5 units
Correction for BG + 2 units

Total insulin 7 units

On Tuesday, her BG is in her target range at 6.4 mmol/L. She plans to eat 45 grams of carbs for lunch.

Insulin for food = 45/10 = 4.5 units
Correction for BG + 0 units

Total insulin 4.5 units

2. Max uses a correction factor rather than a scale:

- His ratio is 9.
- Correction factor is 2

The formula is [BG−6] / CF. Max's BG is 13.2 mmol/L and he plans to eat 50 grams of carbs for lunch.

Correction = 13.2 – 6 = 7.2/2 = 3.7

Round to the nearest ½ unit = 3.5 units

Insulin for food = 50/9 = 5.5 units
Correction for BG + 3.5 units

Total insulin 9 units

APPENDIX B

Using Continuous Glucose Monitors in School

- A Continuous Glucose Monitor (CGM) is a monitoring device that is inserted every 6 to 7 days and automatically provides readings every 5 minutes, day and night. A sensor, inserted underneath the skin, measures "interstitial glucose," or the glucose found in the fluid between cells. The sensor sends this information wirelessly to a monitor.
- A CGM provides a constant picture—a pattern as opposed to a "moment-in-time" snapshot that comes from intermittent fingerprick readings.
- A CGM does not replace traditional BG testing. Fingerpricks are still needed at least twice a day to calibrate the CGM, and are recommended before meals to guide insulin dosing, and to confirm any alerts that require treatment.
- If the CGM and meter results differ, the meter BG is considered the most reliable. Parents may choose to use the CGM reading before snacks and activity. That is an individual decision and depends on how accurate they consider the CGM to be. See the table below for guidance.
- BG readings are sent to an insulin pump or to a remote device where they can be tracked. Some families are able to access their child's CGM readings remotely on their smart phone. The results are available in real time and can also be uploaded and reviewed by parents at the end of the day.
- Some pumps have a feature called "Low Glucose Suspend" (LGS), where the pump will automatically stop delivering insulin for 2 hours if the BG is low and the user hasn't responded.
- While most students with a CGM will also be using an insulin pump, a CGM can also be used by those taking insulin by injection.

	ROUTINE	MANAGEMENT
CGM – CONTINUOUS GLUCOSE MONITOR	Student wears a CGM: ☐ Always ☐ Sometimes ☐ Never ☐ The student is independent in their response to CGM results and alarms (excluding severe hypoglycemia) ☐ Student needs help to respond to the CGM results and alarms Results are sent to: ☐ Insulin pump ☐ Remote device ☐ Parent smartphone ☐ Low glucose suspend (LGS) is active on pump. ☐ If yes, the threshold is set at _____ mmol/L.	• Low BG alarm is set at: _____ mmol/L **Low BG alarm should be confirmed with a BG check. Respond as per hypoglycemia section of this plan.** • High BG alarm is set at: _____ mmol/L OR ☐ No alarm set for highs **High BG alarm should be confirmed with a BG check. Respond as per hyperglycemia section of this plan.** • Also, BG checks are to be routinely done at the following times (check all that apply). ☐ Before lunch ☐ Before all snacks ☐ Before gym/activity ☐ Other _____ • If Low Glucose Suspend comes on, check BG by meter and follow care plan for action: ☐ If BG is below _____ mmol/L, treat and re-check in 15 minutes. ☐ If BG is above _____ mmol/L, cancel LGS. No treatment required.