

TYPE 1 DIABETES ACTION PLAN 2022 SCHOOL SETTING

Use in conjunction with Diabetes Management Plan. This plan should be reviewed every year.

Insulin pump

STUDENT'S NAME _____

DATE OF BIRTH _____ GRADE / YEAR _____

NAME OF SCHOOL _____

INSULIN The insulin pump continually delivers insulin. The pump will deliver insulin based on carbohydrate food amount and BGL entries.

- Hybrid closed loop (read and respond to pump commands)

Pump button pushing:

- independent
- with supervision
- with assistance

THIS STUDENT IS WEARING

- Continuous Glucose Monitoring (CGM)
- Flash Glucose Monitoring (FGM)

BLOOD GLUCOSE LEVEL (BGL) CHECKING TIMES

BGL check should occur where the student is at the time it is required

- Before main meal
- Anytime hypo is suspected
- Confirm low or high sensor glucose reading
- Before physical education / sport
- Before exams or tests

PHYSICAL EDUCATION (PE) / SPORT

- Some students **MAY** require a BGL check before PE/sport.
- Vigorous activity **should not** be undertaken if BGL is greater than or equal to 15.0 **and** blood ketones are greater than or equal to 0.6.

PARENT / CARER NAME _____

CONTACT NO. _____

DIABETES TREATING TEAM _____

CONTACT NO. _____

DATE PLAN CREATED _____

LOW Hypoglycaemia (Hypo)

Blood Glucose Level (BGL) less than **4.0 mmol/L**

SIGNS AND SYMPTOMS Pale, headache, shaky, sweaty, dizzy, drowsy, changes in behaviour

Note: Check BGL if hypo suspected

Symptoms may not always be obvious

**DO NOT LEAVE STUDENT ALONE
DO NOT DELAY TREATMENT**

MILD

Student conscious
(Able to eat hypo food)

Step 1: Give fast acting carbohydrate
e.g. _____

Step 2: Recheck BGL in 15 mins

- If BGL less than 4.0, repeat **Step 1**
- If BGL greater than or equal to 4.0, go to **Step 3**

Step 3:
If starting BGL between **2.0-4.0**
No follow up slow acting carbohydrate required

Step 3:
If starting BGL **less than 2.0**
Give slow acting carbohydrate
e.g. _____

Step 4: Resume normal activity when BGL 4.0 or higher

SEVERE

Student drowsy / unconscious
(Risk of choking / unable to swallow)

First Aid DRSABCD
Stay with student

**CALL AN AMBULANCE
DIAL 000**

Contact parent/carer
when safe to do so

HIGH Hyperglycaemia (Hyper)

Blood Glucose Level (BGL) greater than or equal to **15.0 mmol/L** is well above target and requires additional action

SIGNS AND SYMPTOMS Increased thirst, extra toilet visits, poor concentration, irritability, tiredness

Note: Symptoms may not always be obvious

Check blood ketones

Blood ketones greater than or equal to **0.6 mmol/L** requires immediate treatment

Blood ketones less than 0.6

- Enter BGL into pump
- Accept Correction bolus
- 1-2 glasses water per hour; extra toilet visits may be required
- Recheck BGL in 2 hours

BGL less than 15.0 and ketones less than 0.6

No further action

BGL still greater than or equal to 15.0 and ketones less than 0.6
Potential line failure

Blood ketones greater than or equal to 0.6

POTENTIAL LINE FAILURE

- Will need injected insulin and line change
- This is the parent/carer responsibility or student (if they have the required insulin pump skills)

If unable to contact parent/carer
**CALL AN AMBULANCE
DIAL 000**

IF UNWELL (E.G. VOMITING), CONTACT PARENT/CARER TO COLLECT STUDENT

Use in conjunction with Diabetes Action Plan. This plan should be reviewed every year.

STUDENT'S NAME _____

GRADE / YEAR _____

RESPONSIBLE STAFF

School staff who have voluntarily agreed to undertake training and provide support with diabetes care to the student.

STAFF MEMBER	GLUCOSE CHECKING	GLUCOSE LEVEL & CARBOHYDRATE AMOUNT ENTRY INTO PUMP

INSULIN PUMP

The student wears an insulin pump that continually delivers insulin.

Insulin pump model: _____

Hybrid Closed Loop Pump

Read and respond to pump commands. **Refer to the appropriate Appendix for further details.**

Is supervision/assistance required for pump button pushing?

Yes No Remind only

If yes, the responsible staff need training to:

Observe Enter information and button push

Carbohydrate food must always be eaten after mealtime insulin.

A Medication Authority Form is required if school staff are to administer / supervise insulin.

Medication Authority Form Yes No

NAME _____

DATE PLAN CREATED _____



STUDENT INSULIN PUMP SKILLS

- Able to independently count carbohydrate foods Yes No (Parent/carer will label all food)
- Able to enter blood glucose levels (BGL) and carbohydrate grams into pump Yes No (Adult assistance required)
- Able to do a 'Correction Bolus' Yes No (Adult assistance required)
- Able to disconnect & reconnect pump if needed Yes No (Adult assistance required)
- Restart pump manually NA Yes No (Adult assistance required)
- Able to prepare and insert a new infusion set if needed Yes No (Contact parent/carer)
- Give an insulin injection if needed Yes No (Adult assistance required)
- Able to troubleshoot pump alarms and malfunctions Yes No (Contact parent/carer)

BLOOD GLUCOSE LEVEL (BGL) CHECKING

Target range for blood glucose levels (BGLs): 4.0 – 7.0 mmol/L

- BGL results outside of this target range are common.
- **BGL check should occur where the student is at the time it is required.**
- **The student should always wash and dry their hands before doing the BGL check.**

Blood glucose levels will vary day-to-day and be dependent on several factors such as:

- Insulin Dose
- Excitement / stress
- Age
- Growth spurts
- Type/quantity of food
- Level of activity
- Illness / infection

Is the student able to do their own blood glucose check?

- Yes No

The responsible staff member needs to

- Do the check Assist Observe
 Remind No support required

TIMES TO CHECK BGLS (tick all those that apply)

- Anytime hypo suspected Before snack Before lunch
 Before activity Before exams/tests When feeling unwell
 Beginning of after- school care session
 Other times – please specify _____

- Further action is required if BGL is **less than 4.0 mmol/L** or **greater than or equal to 15.0 mmol/L**. Refer to Diabetes Action Plan.
- If the monitor reads '**LO**' this means the BGL is too low to be measured by the monitor — follow hypoglycaemia (Hypo) treatment on Diabetes Action Plan.
- If the monitor reads '**HI**' this means the BGL is too high to be measured by the monitor — follow hyperglycaemia (Hyper) treatment on Diabetes Action Plan.

SENSOR GLUCOSE (SG) MONITORING

The student is wearing

Continuous Glucose Monitor (CGM)

Model: _____

Flash Glucose Monitor (FGM)

Model: _____

- CGM and FGM consist of a small sensor that sits under the skin and measures glucose levels in the fluid surrounding the cells.
- These devices are not compulsory management tools unless the student is on a Hybrid Closed Loop pump.
- With CGM, a transmitter sends data to either a receiver, phone app or insulin pump.
- With FGM, the device will only give a glucose reading when the sensor disc is scanned with a reader or phone app.
- A sensor glucose (SG) reading can differ from a finger prick blood glucose reading during times of rapidly changing glucose levels e.g. eating, after insulin administration, during exercise.
- Therefore, a SG reading less than _____ or above _____ **must** be confirmed by a finger prick blood glucose check.

Hypo treatment is based on a finger prick blood glucose result.

ALARMS

- Alarms will be **ON** **OFF**.
- If "on" the device will alarm if sensor glucose is low or high.

ACTION: Check finger prick blood glucose level (BGL) and follow Diabetes Action Plan for treatment.

LOW GLUCOSE SUSPEND

Some insulin pumps may be programmed to **STOP** insulin delivery at a **low** sensor glucose.

The student has low glucose suspend activated: Yes No

ACTION: For any low alert a finger prick blood glucose check is required. If BGL less than 4.0 mmol/L, treat hypo as per Diabetes Action Plan.

continued...

USE AT SCHOOL

- Staff are not expected to do more than the current routine diabetes care as per the student’s Diabetes Action and Management plans.
- Staff do not need to put CGM or FGM apps on their computer, smart phone or carry receivers .
- Parents/carers are the primary contact for any questions regarding CGM/FGM use.
- Some CGM/FGM devices can be monitored remotely by family members. They should only contact the school if they foresee an emergency.
- **If the sensor/transmitter falls out, staff to do finger prick blood glucose checks.**
- The sensor can remain on the student during water activities.

NAME _____

DATE PLAN CREATED _____



LOW BLOOD GLUCOSE LEVELS (Hypoglycaemia / Hypo)

Follow the student's Diabetes Action Plan if **BGL less than 4.0 mmol/L**.

Mild hypoglycaemia is common.

Mild hypoglycaemia can be treated by using the student's hypo supplies.

HYPO SUPPLIES LOCATED: _____

HYPO TREATMENT

FAST ACTING CARBOHYDRATE FOOD	AMOUNT

SLOW ACTING CARBOHYDRATE FOOD only required if starting BGL less than 2.0 mmol/L	AMOUNT

- If the student requires more than 2 consecutive fast acting carbohydrate treatments, as per their Diabetes Action Plan, call the student's parent/carer. Continue hypo treatment if needed while awaiting further advice.
- **DO NOT give an insulin bolus for this treatment.**
- All hypo treatment foods should be provided by the parent/carer.
- Ideally, packaging should be in serve size bags or containers and labelled as **fast acting carbohydrate** food and **slow acting carbohydrate** food.

If the student is having more than 3 episodes of low BGLs at school in a week, make sure that the parent/carer is aware.

SEVERE HYPOGLYCAEMIA (HYPO) MANAGEMENT

Severe hypoglycaemia is not common.

Follow the student's Diabetes Action Plan for any episode of severe hypoglycaemia.

DO NOT attempt to give anything by mouth to the student or rub anything onto the gums as this may lead to choking.

If the school is located more than **30 minutes** from a reliable ambulance service, then staff should discuss Glucagon injection training with the student's Diabetes Treating Team.

HIGH BLOOD GLUCOSE LEVELS (Hyperglycaemia / Hyper)

- Although not ideal, BGLs above target range are common.
- **If BGL is 15.0 mmol/L or more**, follow the student's Diabetes Action Plan.
- If the student is experiencing frequent episodes of high BGLs at school, notify their parent/carer.

KETONES

- Ketones occur most commonly when there is not enough insulin in the body.
- Ketones are produced when the body breaks down fat for energy.
- Ketones can be dangerous in high levels.

Check blood ketone level if:

- Student is unwell **or**
- BGL is above 15.0 mmol/L

If ketones are **more than 0.6 mmol/L**, follow action for ketones on the student's Diabetes Action Plan.

EATING AND DRINKING

- The student will need to have an insulin bolus from the insulin pump **before** carbohydrate foods are eaten.
- The insulin dose will be determined by the pump based on the grams of carbohydrate food they will be eating and the current glucose level.
- For some students, all carbohydrate food should be clearly labelled by the parent/carer with carbohydrate amount in grams.
- It is not the responsibility of school staff to count carbohydrates, although they may need to assist the student to add up the food amounts that they wish to eat.
- Some students will require supervision to ensure all food is eaten.
- No food sharing.
- Seek parent/carer advice regarding foods for school parties/celebrations.
- Always allow access to drinking water and toilet (high glucose levels can cause increased thirst and extra toilet visits).

Does the student have coeliac disease? No Yes*

*Seek parent/carer advice regarding appropriate food and hypo treatments.

PHYSICAL ACTIVITY

A blood glucose monitor and hypo treatment should always be with the student.

- Physical activity **may cause glucose levels to go high or low.**
- Some students may require a blood glucose level check before physical activity.
- Some students MAY require slow acting carbohydrate food before every 30 minutes of planned physical activity or swimming.

■ ACTIVITY FOOD REQUIRED. LOCATED: _____

ACTIVITY FOOD

GLUCOSE LEVEL RANGE	CARBOHYDRATE FOOD	AMOUNT

- Physical activity should not be undertaken **if BGL less than 4.0 mmol/L.** Refer to the Diabetes Action Plan for hypo treatment.
- Vigorous activity should **not** be undertaken if **BGL is greater than or equal to 15.0 mmol/L and blood ketones are greater than or equal to 0.6 mmol/L.** Refer to Diabetes Action plan.
- **Do not enter the BGL into the pump within 1 hour of completing activity.**
- If lunch occurs immediately after physical activity, only enter the amount of carbohydrate food to be eaten into the pump.
- Disconnect the pump for vigorous activity/swimming.*
- **The student should not be disconnected from the pump for more than 90 minutes.**
- **Ensure the disconnected pump is safe and secure from loss or damage.**

*Extra details in Hybrid Closed Loop Insulin Pump Appendix.

EXCURSIONS / INCURSIONS

It is important to plan for extracurricular activities.

Consider the following:

- Ensure blood glucose monitor, blood glucose strips, blood ketone strips, hypo and activity food are readily accessible.
- Plan for meal and snack breaks.
- Always have hypo treatment available.
- Know location of toilets.

CAMPS

It is important to plan for school camps and consider the following:

- Parents/carers need to be informed of any school camps at the **beginning of the year**.
- Parents/carers should request a **Camp Diabetes Management Plan** from the Diabetes Treating Team who will require at least 4 weeks' notice to prepare the plan.
- Parents/carers will need a copy of the camp menu and activity schedule.
- At least 2 responsible staff attending the camp require training to be able to support the student on camp.
- School staff will need to discuss any training needs at least 4 weeks before the camp with the student's parents/carers or Diabetes Treating Team.
- If the camp location is more than **30 minutes** from a reliable ambulance service, **Glucagon injection training is recommended**.

EXAMS

- BGL should be checked before an exam.
- BGL should be greater than 4.0 mmol/L before exam is started.
- Blood glucose monitor and blood glucose strips, hypo treatments and water should be available in the exam setting.
- Continuous Glucose Monitoring (CGM) or Flash Glucose Monitoring (FGM) devices and receivers or smart phones should be available in the exam setting.
- Extra time will be required if a hypo occurs or for toilet privileges.

APPLICATIONS FOR SPECIAL CONSIDERATION

National Assessment Program Literacy and Numeracy (NAPLAN)

Applies to Grade 3, Grade 5, Year 7, Year 9. Check National Assessment Program website – Adjustment for student with a medical condition for further information.

Tasmanian Certificate of Education (TCE)

Should be lodged at the beginning of Year 11 and 12. Check the Office of Tasmanian Assessment, Standards & Certification (TASC) reasonable adjustment requirements.

EQUIPMENT CHECKLIST

EQUIPMENT THAT COMES TO SCHOOL DAILY

Supplied by the parent/carer

- Finger prick device
- Blood glucose monitor used by student at school and at home
- Blood glucose strips
- Blood ketone strips
- Hypo food
- Activity food

BACKUP EQUIPMENT TO STAY AT SCHOOL

Supplied by the parent/carer

- Finger prick device
- Blood glucose monitor
- Blood glucose strips
- Blood ketone strips
- Sharps container
- Hypo food
- Batteries (for insulin pump / blood glucose monitor)
- Charging cables for diabetes management devices

For student or parent/carer's use:

- | | | |
|---|----------------------------------|---------------------------------------|
| <input type="checkbox"/> Insulin pens and pen needles (or insulin and syringes).
Stored according to the school's Medication Policy. | <input type="checkbox"/> Student | <input type="checkbox"/> Parent/carer |
| <input type="checkbox"/> Infusion sets and lines | <input type="checkbox"/> Student | <input type="checkbox"/> Parent/carer |
| <input type="checkbox"/> Reservoirs | <input type="checkbox"/> Student | <input type="checkbox"/> Parent/carer |
| <input type="checkbox"/> Cartridges | <input type="checkbox"/> Student | <input type="checkbox"/> Parent/carer |
| <input type="checkbox"/> Inserter (if applicable) | <input type="checkbox"/> Student | <input type="checkbox"/> Parent/carer |

DISPOSAL OF MEDICAL WASTE

Dispose of any used pen needles or syringes in Sharp's container provided.
Dispose of blood glucose strips and blood ketone strips as per the school's medical waste policy.

GLOSSARY OF TERMS

COMMON INSULIN PUMP TERMINOLOGY

Basal Background insulin delivered continuously.

Bolus Insulin for food. Delivered following entry of BGL and carbohydrate food amount to be eaten.

Cannula A tiny plastic or steel tube inserted under the skin to deliver insulin. Held in place by an adhesive pad.

Correction bolus Extra insulin dose given to correct an above target BGL and/or to clear ketones.

Insulin pump also known as continuous subcutaneous insulin infusion (CSII)
Small battery operated, computerised device for delivering insulin.

Line or Tubing The plastic tubing connecting the pump reservoir/cartridge to the cannula.

Line failure Disruption of insulin delivery due usually to line kinking or blockage.

Low Glucose Suspend Pump stops delivery of insulin if glucose sensor detects a low glucose level or low glucose is about to occur.

Reservoir/Cartridge Container which holds the insulin within the pump.

AGREEMENTS

PARENT/CARER

Organise a meeting with school representatives to discuss implementation and sign off on your child's action and management plan.

- I have read, understood, and agree with this plan.
- I give consent to the school to communicate with the Diabetes Treating Team about my child's diabetes management at school.

NAME

FIRST NAME (PLEASE PRINT)

FAMILY NAME (PLEASE PRINT)

SIGNATURE

DATE

SCHOOL REPRESENTATIVE

- I have read, understood, and agree with this plan.

NAME

FIRST NAME (PLEASE PRINT)

FAMILY NAME (PLEASE PRINT)

ROLE Principal

Vice Principal

SIGNATURE

DATE

DIABETES TREATING MEDICAL TEAM

NAME

FIRST NAME (PLEASE PRINT)

FAMILY NAME (PLEASE PRINT)

SIGNATURE

DATE

HOSPITAL NAME