

DIABETES ACTION PLAN 2020 SCHOOL SETTING

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

Insulin pump

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: 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 sustaining carbohydrate required

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

SEVERE

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

First Aid DRABC
Stay with unconscious 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)
- Contact parent/carer for further advice

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

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

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:

independently with supervision with assistance

THIS STUDENT IS WEARING

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

ROUTINE BGL CHECKING TIMES

These are still required if student is using CGM/FGM

- Anytime, anywhere in the school
- Before main meal
- Anytime hypo is suspected
- Confirm sensor glucose hypo reading
- Before physical education / sport
- Before exams or tests

PHYSICAL EDUCATION / SPORT

- Check BGL before physical education/sport.
- 1 serve of sustaining carbohydrate food before every 30 mins of planned activity.
DO NOT BOLUS for the carbohydrate food serve.
- 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 _____

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	INSULIN PUMP

INSULIN PUMP

The student wears an insulin pump that continually delivers insulin.

Insulin pump model: _____

Hybrid Closed Loop Pump – Refer to Appendix for further details.

Is supervision/assistance required for pump button pushing? Yes No

If yes, the responsible staff need to:

Remind Observe Enter information and button push

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

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 – 7 mmol/L

- BGL results outside of this target range are common.
- BGL check should be done where the student is, whenever needed.
- **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 a number of 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 independently?

Yes No

If NO, the responsible staff member needs to

Do the check Assist Observe Remind

TIMES TO CHECK BGLS (tick all those that apply)

- Anytime, anywhere Before snack Before lunch
- Before activity Before exams/tests Beginning of after-school care session
- When feeling unwell Anytime hypo suspected
- Other routine 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 meter reads '**LO**' this means the BGL is too low to be measured by the meter – follow the hypoglycaemia (Hypo) treatment on Diabetes Action Plan.
- If the meter reads '**HI**' this means the BGL is too high to be measured by the meter – follow hyperglycaemia (Hyper) treatment on Diabetes Action Plan.

SENSOR GLUCOSE (SG) MONITORING

The student is wearing

- Continuous Glucose Monitor (CGM)
- Dexcom G4®
 - Dexcom G5®
 - Guardian™ Connect
 - Guardian™ Sensor 3
- Flash Glucose Monitor (FGM)
- Freestyle Libre

continued...

- CGM and FGM consist of a small sensor that sits under the skin and measures glucose levels in the fluid surrounding the cells (interstitial fluid).
- 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, **LOW** or **HIGH** SG readings **must** be confirmed by a finger prick blood glucose check.

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

CGM ALARMS

- CGM alarms may be 'on' or 'off'.
- If 'on' the CGM will alarm if interstitial glucose is low or high.

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

- FGM device does not have alarm settings.

LOW GLUCOSE SUSPEND

Certain insulin pumps may be programmed to **STOP** insulin delivery when the CGM glucose level is low or predicted to go low.

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.

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 apps on their computer, smart phone or carry receivers .
- Parents/carers are the primary contact for any questions regarding CGM/FGM use.
- Some CGM devices can be monitored remotely by family members. They should only contact the school if they foresee a prompt response is required.
- If the sensor/transmitter falls out, staff are required to keep it in a safe place to give to parents/carers.
- The sensor can remain on the student during water activities.

NAME _____

DATE OF BIRTH _____

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 can be treated by using supplies from the student's HYPO BOX.

HYPO BOX LOCATION/S: _____

HYPO BOX

FAST ACTING CARBOHYDRATE FOOD	AMOUNT TO BE GIVEN

SUSTAINING CARBOHYDRATE FOOD	AMOUNT TO BE GIVEN

- 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 **sustaining carbohydrate** food.

Mild hypoglycaemia is common.

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, make sure the parent/carer is aware.

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 blood glucose level.
- For younger 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.
- Younger students will require supervision to ensure all food is eaten.
- The student should not exchange food/meals with another student.
- Seek parent/carer advice regarding appropriate foods for parties/celebrations that are occurring at school.
- 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.

NAME _____

DATE OF BIRTH _____

DATE PLAN CREATED _____

PHYSICAL ACTIVITY

A blood glucose meter and hypo treatment should always be available.

- Check blood glucose level before physical activity.
- Physical activity **may lower** glucose levels.
- The student may require an extra serve of carbohydrate food before every 30 minutes of planned physical activity or swimming as provided in the Activity Food Box.

ACTIVITY FOOD BOX LOCATION: _____

ACTIVITY FOOD BOX

CARBOHYDRATE FOOD TO BE USED	AMOUNT TO BE GIVEN

- 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**.
- **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.
- Disconnect the pump for vigorous activity/swimming.*
The student can be disconnected from the pump for up to 90 minutes.
*Extra details for Hybrid Closed Loop Insulin Pump in Appendix.

EXCURSIONS / INCURSIONS

It is important to plan for extracurricular activities.

Consider the following:

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

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**.
- A separate and specific **Camp Diabetes Management Plan** is required.
- Parents/carers should request a **Camp Diabetes Management Plan** from their Diabetes Treating Team.
- The student's Diabetes Treating Team will prepare the **Camp Diabetes Management Plan** and require at least 4 weeks' notice to do so.
- Parents/carers will need a copy of the camp menu and activity schedule.
- At least 2 responsible staff attending the camp should have a general understanding of type 1 diabetes and the support that the student requires to manage their condition for the duration of the camp.
- If the camp location is more than **30 minutes** from a reliable ambulance service, **Glucagon injection training will be required**.
- 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.

EXAMS

- BGL should be checked before an exam.
- BGL should be greater than 4.0 mmol/L before exam is started.
- Blood glucose meter, monitoring strips, hypo treatments and water should be available in the exam setting.
- Continuous Glucose Monitoring (CGM) or Flash Glucose Monitoring (FGM) devices and receivers (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 disability for further information.

Victorian Certificate of Education (VCE)

Should be lodged at the beginning of Year 11 and 12. Check Victorian Curriculum and Assessment Authority (VCAA) requirements.

EXTRA SUPPLIES

Provided for diabetes care at the school by parent/carer

- Finger prick device
- Blood glucose meter
- Blood glucose strips
- Blood ketone strips
- Sharps container
- Hypo food
- Activity food
- Infusion sets and lines
- Reservoirs
- Cartridges
- Inserter (if applicable)
- Insulin pen and pen needles
- Batteries (for insulin pump)
- Charging cable (for insulin pump)
- Student use
- Student use
- Student use
- Student use
- Student use
- Student use
- Parent/carer use
- Parent/carer use
- Parent/carer use
- Parent/carer use
- Parent/carer use

GLOSSARY OF TERMS

COMMON INSULIN PUMP TERMINOLOGY

Insulin pump also known as continuous subcutaneous insulin infusion (CSII)

Small battery operated, computerised device for delivering insulin.

Cannula

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

Line or Tubing

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

Reservoir/Cartridge

Container which holds the insulin within the pump.

Basal

Background insulin delivered continuously.

Bolus

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

Correction bolus

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

Line failure

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

AGREEMENTS

PARENT/CARER

- 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

Other (please specify) _____

SIGNATURE

DATE

DIABETES TREATING MEDICAL TEAM

NAME

FIRST NAME (PLEASE PRINT)

FAMILY NAME (PLEASE PRINT)

SIGNATURE

DATE