# Diabetes Management Plan (DMP) – Insulin Injections

**School:**

Click to add photo

**First name:** **Last name:** Date of birth (D/M/Y): School Year:

**Target range for glucose is 4.0 - 8.0 mmol/L**

**NEVER LEAVE ALONE IF UNWELL. TREAT ON THE SPOT.**

**Contact 1:**

**Contact 2:**

**PCH Clinic:**
6456 1111

## GLUCOSE MONITORING

In addition to the daily schedule, monitoring of glucose levels and ketones should be performed if the student is unwell or if there is a concern.

## DAILY SCHEDULE // PLEASE GIVE INSULIN: MINUTES BEFORE FOOD. DETERMINED BY:

| Time | Meal | Glucose Check | Insulin | Action | Responsible Person |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

**Low glucose levels to be confirmed by**

## LOW (HYPO) // Glucose less than 4.0 mmol/L // DO NOT DELAY TREATMENT // TREAT ON THE SPOT

**Symptoms:** ☐ Feeling sick ☐ Pale ☐ Headache ☐ Shaky ☐ Sweaty ☐ Drowsy ☐ Unusual behaviour

**Student Conscious**
(Able to eat hypo food)

→ **STEP 1**
Give fast acting carbs:

→ **STEP 2** Recheck glucose level in mins.
**IF GLUCOSE:**
- Less than 4.0 repeat step 1.
- 4.0 or more, go to step 3.

→ **STEP 3**
Give sustaining carbs:

**Student Drowsy / Unconscious**
(Unable to swallow/ choking risk).

→ **FIRST AID**
DRS ABCD
Stay with student.

→ **CALL AN AMBULANCE**
DIAL 000

→ **ADMINISTER GLUCAGON**
YES ☐ NO ☐

→ **CONTACT PARENT WHEN SAFE TO DO SO.**
When student conscious/ alert, follow above steps.

## HIGH (HYPER) // Glucose 15.0 mmol/L or above

*SEE DETAILED MANAGEMENT PLAN

**Symptoms:** ☐ Feeling sick ☐ Thirsty ☐ Increased urine production ☐ Headache ☐ Irritable ☐ Lethargic

**Student Well**
Unexplained high glucose*.

→ **CHECK GLUCOSE**
At next scheduled time.

→ Allow unrestricted water intake and access to toilets.

→ **AT NEXT GLUCOSE CHECK** If glucose remains 15.0 mmol/L or above, **CHECK KETONES.**

**Student Unwell**
Unexplained high glucose with cramps or vomiting*.

→ **CHECK BLOOD KETONES**
If less than 1.0 mmol/L, no diabetes action required.

→ If ketones 1.0 mmol/L or above, **CONTACT PARENT.**

→ If unable to contact parent, **CALL AN AMBULANCE**
DIAL 000

## PHYSICAL ACTIVITY

| 4.0 - 5.0 mmol/L | 5.1 - 8.0 mmol/L |
|---|---|
| Once above 5.0 mmol/L exercise can start. | Exercise can be started. |

| 8.1 - 14.9 mmol/L | 15.0 mmol/L or above |
|---|---|
| No action required.<br>Exercise can be started. | CHECK BLOOD KETONE LEVELS<br>**Ketones less than 1.0 mmol/L**<br>Exercise can start.<br>**Ketones 1.0 mmol/L or above**<br>CONTACT PARENT |

## AUTHORITY TO ACT // SCHOOL STAFF WHO HAVE COMPLETED DIABETES IN SCHOOLS LEVEL 3 TRAINING

| Name | Role | Contact Number | Level 3 Training Date |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

Perth Children's Hospital Trainer: Date: Digital Signature:

RESET PRINT REVIEW DATE:

This diabetes management and safety plan authorises school staff to follow this advice and that of the medical team. School staff are not expected to manage a student's diabetes as comprehensively as at home. This plan is sanctioned as being safe and reasonable. It is valid for one year or until the school is advised of a change to the student's health care requirements.

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nDSS National Diabetes Services Scheme
An Australian Government Initiative

## INSULIN ADMINISTRATION

The student requires an injection of insulin at lunchtime.

Is staff involvement required? ☐ Yes ☐ No

If yes, the responsible staff need to:

- ☐ Remind
- ☐ Observe
- ☐ Assist
- ☐ Perform injection (Dose as per action plan)

Responsible staff will need to receive training on how to administer insulin injections.

The location in the school where the injection is to be given: _____

## INSULIN CORRECTION DOSE

Occassionally a correction dose may be required for high glucose levels, this should be discussed with parent/carer.

**Note: Insulin should not be given more frequently than two to three hourly.**



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# GLUCOSE LEVEL CHECKING

Target range for glucose levels: 4.0 – 8.0 mmol/L

- Glucose levels outside of this target range are not unusual.

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



# SENSOR GLUCOSE

The student is wearing: ☐ Yes ☐ No (if "no", turn to page 4)

☐ **Continuous Glucose Monitor (CGM)**

- ☐ Dexcom G5®
- ☐ Dexcom G6®
- ☐ Guardian™ Connect
- ☐ Guardian™ Sensor 3

☐ **Flash Glucose Monitor (FGM)**

- ☐ Freestyle Libre 1
- ☐ Freestyle Libre 2

- 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.
- With CGM a transmitter sends data to either a receiver, phone app or insulin pump.
- With Freestyle Libre the device will only show a glucose reading when the sensor disc is scanned by a reader or phone app.
- A sensor glucose 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.

**Hypo treatment is based on:**

☐ Sensor glucose reading.

☐ Blood glucose finger prick result.

## ALARMS

- Alarms may be 'on' or 'off' (No alarms on Freestyle Libre 1).
- Urgent low alarms cannot be turned off.
- It is suggested that high alarms are turned off during school.

**ACTION FOR ALARMS: Check glucose level and follow front page for treatment.**

## USE AT SCHOOL

- Staff are not expected to do more than the current routine diabetes care as per the student's Diabetes Management plan.
- Staff do not need to put 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 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. In this scenario use finger prick blood glucose.
- The sensor can remain on the student during water activities.



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# FINGER PRICK

**The student should always wash and dry their hands before doing a finger prick check.**

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

☐ Yes ☐ No

If NO, the responsible staff member needs to:

☐ Remind ☐ Observe ☐ Assist ☐ Perform

Tick appropriate box below:

☐ **Dexcom G6**

A finger prick is needed when:

- TAG (trend arrow glucose) unavailable
- Symptoms don't match the sensor reading
- Sensor has fallen off

☐ **All other CGM/FGM sensors**

A finger prick is needed when:

- TAG (trend arrow glucose) unavailable
- Symptoms don't match the sensor reading
- Sensor has fallen off

**Other times to check incude** (tick all those that apply):

- **LOW** or **HIGH** glucose readings must be confirmed by a finger prick blood glucose check

☑ Anytime, anywhere ☐ Before snack ☐ Before lunch

☐ Before activity ☐ Before exams/tests ☐ When feeling unwell

☐ Anytime hypo suspected ☐ Beginning of after-school care session

☐ Other routine times – please specify:

- Further action is required if glucose level is **less than 4.0 mmol/L** or **15.0 mmo/L or above**. Refer to front page.
- If the meter reads **'LO'** this means the glucose level is too low to be measured by the meter – follow the low (Hypo) treatment on the font page.
- If the meter reads **'HI'** this means the glucose level is too high to be measured by the meter – follow high (Hyper) treatment on the front page.



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# LOW GLUCOSE LEVELS (Hypoglycaemia / Hypo)

Follow the front page **if glucose less than 4 mmol/L**.
A mild low/hypo can be treated by using supplies from the student's HYPO KIT.

**Hypo kit should be kept with student at all times**

## HYPO KIT

| 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 front page, call the student's parent/carer. Continue hypo treatment if needed while awaiting further advice.
- 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 glucose levels at school in a week, make sure that the parent/carer is aware.

## SEVERE LOW/HYPO MANAGEMENT

**Severe hypoglycaemia is not common.**

Follow the front page 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.



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HIGH GLUCOSE LEVELS

## HIGH GLUCOSE LEVELS (Hyperglycaemia / Hyper)

- Although not ideal, glucose levels may be above the target range.
- Glucose levels may be above target if food has been consumed within the last two hours.
- **If glucose levels are 15.0 mmol/L or above**, follow the front page.
- If insulin has been given allow two hours for glucose levels to return to target.
- If the student is experiencing frequent episodes of high glucose levels at school, make sure the parent/carer is aware.

KETONES

## 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.

**You will be required to check the student's ketone level if:**

- Student is unwell **or**
- Glucose levels remains at 15.0 mmol/L or above

**ACTION:** If ketones **1.0 mmol/L or above** follow action for ketones on the front page.

EATING AND DRINKING

## EATING AND DRINKING

- 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?** ☐ Yes* ☐ No

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



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PHYSICAL ACTIVITY

## PHYSICAL ACTIVITY

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

- Check glucose level before physical activity.
- The student may require an extra serve of carbohydrate food before every 30 minutes of planned physical activity or swimming as provided by the family (see front page).
- Physical activity **may alter** glucose levels.
- Physical activity should not be undertaken **if glucose levels are less than 5.0 mmol/L**. Refer to the front page.
- Vigorous activity **should not** be undertaken **if the student is unwell or ketones are 1.0 mmol/L or above**.

EXCURSIONS

## EXCURSIONS / INCURSIONS

**It is important to plan for extracurricular activities and discuss these in advance with parents/carers.**

Consider the following:

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

CAMPS

## 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 **WA Diabetes School Camp Checklist and Management Plan** is required, and should be completed by the family in partnership with the school (click here for Diabetes Management and Action Plans).
- 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 administration training will be required**.
- An application for skills based training is available online at DiabetesInSchools.com.au.
- 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.



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ASSESSMENT / EXAMS

## ASSESSMENT / EXAMS

- Glucose levels should be checked before commencing.
- Glucose levels should be 4.0 mmol/L or above before commencing.
- Blood glucose meter, monitoring strips, hypo treatments and water should be available.
- Continuous Glucose Monitoring (CGM) or Flash Glucose Monitoring (FGM) devices and receivers (smart phones) should be available if applicable.
- Extra time will be required if a hypo occurs or for toilet privileges.

### APPLICATIONS FOR SPECIAL CONSIDERATION

- The School Curriculum and Standards Authority's Guidelines for Disability Adjustments for Timed Assessments includes type 1 diabetes and is available at www.scsa.wa.edu.au
- Where required, schools should apply in advance for special provisions for all externally set assessments (e.g NAPLAN, OLNA, WACE)
- It is advisable to check and record glucose level prior to (and during, if unwell) WACE assessments as medical evidence, in the event that an Application for Sickness/Misadventure is necessary.

EXTRA SUPPLIES

## EXTRA SUPPLIES

**Provided for diabetes care at the school by parent/carer**

- ☐ Insulin pens and pen needles
- ☐ Finger prick device
- ☐ Blood glucose meter
- ☐ Blood glucose strips
- ☐ Blood ketone strips
- ☐ Sharps container
- ☐ Hypo food

AGREED ADDITIONAL ACTIONS

## ADDITIONAL AGREED ACTIONS

Parent/Carer Signature:



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# 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.

☐ I acknowledge that school staff who administer insulin and / or glucagon do so:
1) after receiving training from their clinical treating team.
2) to the best of their ability.

NAME

FIRST NAME (PLEASE NOTE) | FAMILY NAME (PLEASE NOTE)

SIGNATURE | DATE

## SCHOOL REPRESENTATIVE

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

NAME

FIRST NAME (PLEASE NOTE) | FAMILY NAME (PLEASE NOTE)

**ROLE** ☐ Principal ☐ Associate principal

☐ Other (please specify)

SIGNATURE | DATE

## DIABETES TREATING MEDICAL TEAM

NAME

FIRST NAME (PLEASE NOTE) | FAMILY NAME (PLEASE NOTE)

SIGNATURE | DATE

REVIEW DATE: SEE PAGE 2



This management plan has been adapted from original work created by these organisations.

NAME

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