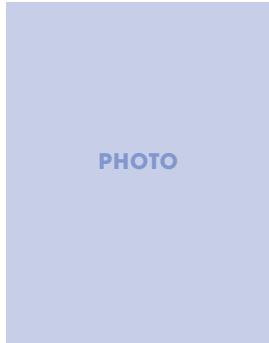


Use in conjunction with Diabetes Management Plan. This plan should be reviewed every year.

MANUAL PUMP EC/SS VIC Diabetes Victoria, RCH, MCH 2024 V1.1



PHOTO

CHILD / STUDENT NAME

DATE OF BIRTH

GRADE / YEAR

NAME OF EARLY CHILDHOOD SETTING / SCHOOL

PARENT / CARER NAME

CONTACT NO.

DIABETES TREATING TEAM

HOSPITAL UR NO.

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 CHILD/STUDENT ALONE • DO NOT DELAY TREATMENT TO OCCUR WHERE CHILD/STUDENT IS AT TIME OF HYPO HYPO SUPPLIES LOCATED _____

MILD*

Child/student conscious
(Able to eat hypo food)
* MILD IS COMMON

Step 1: Give fast acting carbohydrate

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 3a:
If starting BGL less than 2.0
Give slow acting carbohydrate

Step 4: Resume usual activity
when BGL 4.0 or higher. No BGL into pump 1 hour post hypo.

SEVERE

Child/student drowsy / unconscious
(Risk of choking / unable to swallow)

First Aid DRSABCD
Stay with child/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

IF UNWELL (e.g. VOMITING), CONTACT PARENT/CARER TO COLLECT CHILD/STUDENT

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
CONTACT PARENT/CARER

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

Use in conjunction with Diabetes Action Plan. This plan should be reviewed every year.
TICK BOXES THAT APPLY

INSULIN PUMP

Insulin pump model: _____

(SEE GLOSSARY ON PAGE 9 FOR FURTHER INSULIN PUMP INFORMATION.)

Read and respond to pump commands.

The child/student requires insulin given:

- Before breakfast at early childhood setting / before school care
- Lunchtime
- Other _____

The child/student will need insulin via the pump _____ minutes before carbohydrate foods are eaten.

Is supervision /assistance required to enter information into the insulin pump?

- Yes
- No
- Remind only

If yes, the responsible staff need training to:

- Observe
- Enter information such as glucose level and grams of carbohydrate food into the insulin pump and button push to accept insulin dose.
- Do a 'Correction Bolus'
- Restart the pump manually.
- Disconnect and reconnect the pump if needed for example at swimming.
- Give an insulin injection (if required)

ADDITIONAL INFORMATION

- The parent/carer to be contacted to troubleshoot any pump alarms or malfunctions.
- If the cannula comes out, a new pump cannula will need to be inserted by the parent/carer.
- Student can independently manage their own insulin pump and complete a line change if required.
- Other information _____

(continues page 3)

NAME _____
 HOSPITAL UR NO. _____
 DATE PLAN CREATED _____



RESPONSIBLE STAFF

Staff who have voluntarily agreed to undertake training and provide support with diabetes care to the child/student.

The responsible staff needs to be available when the child attends the early childhood setting and in the child's room.

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

■ EARLY CHILDHOOD SETTING

Centre director / manager will need to ensure that the parent / carer has completed the relevant documentation, authorising responsible staff to administer insulin to the child.

■ SCHOOL SETTING

A Medical Authority Form is required if school staff are to administer / supervise insulin. Medication Authority Form Yes No

■ BEFORE / AFTER SCHOOL CARE

Before / after school care may be provided by the school, or an outside organisation. Parent / carer to obtain and complete the relevant documentation from this setting, authorising staff to administer / supervise insulin administration to their child.

GLUCOSE LEVEL CHECKING

**Target range for glucose levels pre-meals: 4.0 - 7.0 mmol/L.
7.1 - 14.9 mmol/L are outside target range requiring no action.**

- Glucose levels outside this target range are common.
- A glucose check should occur where the child/student is at the time it is required.
- Before doing a **blood glucose check** the child/student should wash and dry their hands.

Is the child/student able to do their own glucose level check?

- Yes No (Support is required)

The responsible staff member needs to

- Do the check Assist Observe Remind

(continues page 4)

BLOOD GLUCOSE LEVELS (BGL) TO BE CHECKED (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 _____

CONTINUOUS GLUCOSE MONITORING (CGM)

- Continuous glucose monitoring consists of a small sensor that sits under the skin and measures glucose levels in the fluid surrounding the cells.
- A CGM reading can differ from a blood glucose level (BGL) reading during times of rapidly changing glucose levels e.g., eating, after insulin administration, during exercise.
- A CGM reading less than _____ mmol/L must be confirmed by a BGL check.
FOLLOW ACTION PLAN
- Hypo treatment is based on a BGL check.
- A CGM reading above _____ mmol/L must be confirmed by a BGL check.
FOLLOW ACTION PLAN
- **If the sensor/transmitter falls out, staff to do BGL checks.**

A child/student wearing CGM must do a blood glucose level (BGL) check:

- Anytime hypo suspected
- When feeling unwell
- Other times - please specify _____

USE AT EARLY CHILDHOOD SETTING AND SCHOOL

- Parents/carers are the primary contact for any questions regarding CGM.
- Staff are not expected to do more than the current routine diabetes care as per the child/student’s Diabetes Action and Management plans.
- Staff do not need to put CGM apps on their personal computers, smart phones or carry receivers.
- CGM devices can be monitored remotely by family members. They should only contact the early childhood setting/school if there is an emergency.
- The CGM sensor can remain on the child/student during water activities.

NAME _____
 HOSPITAL UR NO. _____
 DATE PLAN CREATED _____



LOW BLOOD GLUCOSE LEVELS (Hypoglycaemia / Hypo) FOLLOW ACTION PLAN

- If the child/student requires more than 2 consecutive fast acting carbohydrate treatments, as per their Diabetes Action Plan, call their parent/carer. Continue hypo treatment if needed while awaiting further advice.
- All hypo treatment foods should be provided by the parent/carer.

SEVERE HYPOGLYCAEMIA (HYPO) MANAGEMENT FOLLOW ACTION PLAN

Is NOT common.

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

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

LOW BLOOD GLUCOSE LEVELS

HIGH BLOOD GLUCOSE LEVELS (Hyperglycaemia / Hyper) MORE THAN 15 mmol/L FOLLOW THE ACTION PLAN

KETONES FOLLOW THE ACTION PLAN

- Ketones occur most commonly in response to high glucose level and child/student is unwell.
- Ketones are produced when the body breaks down fat for energy.
- Ketones can be dangerous.

If the child/student is UNWELL check ketone level if strips supplied.

HIGH BLOOD
GLUCOSE LEVELS

KETONES

EATING AND DRINKING

- The insulin dose will be determined by the insulin pump based on the grams of carbohydrate food (they will be eating), and the current glucose level entered.
- For children and some students who cannot independently count carbohydrates, the food should be clearly labelled by the parent/carer with carbohydrate amounts in grams.
- If the early childhood setting provides meals/snacks, then the menu needs to be given to parent/carer to determine grams of carbohydrate in food.
- It is not the responsibility of the early childhood/school staff to count carbohydrates. However, school staff may need to assist a student to add up the carbohydrate amounts they wish to eat.
- Children and some students will require supervision to ensure all food is eaten.
- No food sharing.
- Seek parent/carer advice regarding foods for early childhood/school parties/celebrations.
- Always allow access to water.

Does the child/student have coeliac disease? No Yes*

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

NAME _____

HOSPITAL UR NO. _____

DATE PLAN CREATED _____

PHYSICAL ACTIVITY

Hypo treatment and a glucose monitoring device should always be with the child/student.

- Physical activity may cause glucose levels to go high or low.
- Some children/students may require a glucose level check before, during or after physical activity.
- Some children/students MAY require a carbohydrate before planned physical activity.

■ ACTIVITY FOOD 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](#)
- Physical activity should not be undertaken if the BGL is greater than or equal to 15 mmol/L and blood ketones are greater than or equal to 0.6 mmol/L.
[REFER TO DIABETES ACTION PLAN](#)
- Do not enter BGL into insulin 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 insulin pump.
- Disconnect the insulin pump for contact sports/swimming.
- The child/student should not be disconnected from the insulin pump for more than 90 minutes.
- Ensure the disconnected insulin pump is safe and secure from loss or damage.

EXCURSIONS / INCURSIONS

It is important to plan for extracurricular activities.

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

SCHOOL CAMPS

- Parents/carers need to be informed of any school camp **at least 2 months prior** to ensure the student's diabetes treating team can provide a Camp Diabetes Management plan and any training needs required.
- 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.
- If the camp location is **more than 30 minutes** from a reliable ambulance service **Glucagon injection training is recommended.**

EXAMS

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

EQUIPMENT CHECKLIST

Supplied by the parent/carer. Some items are for parent/carer use only.

- Insulin pens and pen needles.
Stored according to the early childhood setting /school Medication Policy.
- Finger prick device
- Blood glucose monitor
- Blood glucose strips
- Blood ketone strips
- Hypo treatment
- Activity food
- Sharps' container
- Infusion sets and lines
- Reservoirs/Cartridges
- Batteries for insulin pump
- Charging cables for diabetes management devices

DISPOSAL OF MEDICAL WASTE

- Dispose of any used pen needles in sharps container provided.
- Dispose of blood glucose and ketone strips as per the early childhood setting/ 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 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.

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

AGREEMENTS

PARENT/CARER

Organise a meeting with the early childhood setting/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 early childhood setting/school to communicate with the Diabetes Treating Team about my child's diabetes management at early childhood setting/school.

NAME

FIRST NAME (PLEASE PRINT)

FAMILY NAME (PLEASE PRINT)

SIGNATURE

DATE

EARLY CHILDHOOD SETTING / SCHOOL REPRESENTATIVE

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

NAME

FIRST NAME (PLEASE PRINT)

FAMILY NAME (PLEASE PRINT)

- ROLE Principal Vice Principal Centre Manager
- Other (please specify _____)

SIGNATURE

DATE

DIABETES TREATING MEDICAL TEAM

NAME

FIRST NAME (PLEASE PRINT)

FAMILY NAME (PLEASE PRINT)

SIGNATURE

DATE

HOSPITAL NAME