

Insulin pump therapy

Use in conjunction with Action Plan

DIABETES MANAGEMENT PLAN 2019

Click to place
photograph
here

Name of child _____ Date of birth _____
First name (please print) Family name (please print)

Name of centre _____ Age _____

This plan should be reviewed and updated at least once per year.

EMERGENCY MANAGEMENT

Please see the Diabetes Action Plan as to the treatment of severe hypoglycaemia (hypo).
The child should not be left alone and requires adult supervision until hypoglycaemia has
resolved.

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

**If the centre is located more than 30 minutes from reliable ambulance service, then
staff should discuss Glucagon injection training with the child's diabetes healthcare team.**

If the child has high blood glucose levels please refer to the Diabetes Action Plan.

INSULIN PUMP

Insulin pump model: _____

The child wears an insulin pump that continually delivers insulin into the body.

A nominated adult/s will be required to put information into the pump to allow it to work correctly.

Name of nominated adult/s assisting with insulin pump:

- The nominated adult/s will need to be able to:
- Enter blood glucose levels (BGL) into pump
 - Enter carbohydrate grams into pump
 - Understand how to do a 'Correction Bolus' as stated on the Diabetes Action Plan
 - Disconnect and reconnect the pump if needed

Information on how to do this will be provided by the parent/carer.

Parent/carer will determine insulin doses and any pump setting adjustments that need to be made.

The parent/carer will need to be contacted to troubleshoot any pump alarms or malfunctions as
needed.

If the cannula comes out, a new pump cannula will need to be inserted by the parent/carer.

BLOOD GLUCOSE CHECKING

Name of nominated and trained adult/s

Blood glucose levels will vary day to day and be dependent on a number of factors such as:

- Insulin dose
- Age
- Type/quantity of food
- Illness/infection
- Stress
- Growth spurts
- Level of activity

Target range for blood glucose levels (BGLs): **4–8 mmol/L**

BGL results outside of this target range are common.

Further action is required if BGL is < 4.0 mmol/L or ≥ 15.0 mmol/L. [Refer to Diabetes Action Plan]

If the meter reads '**LO**' this means the blood glucose level is too low to be recorded – follow hypoglycaemia (Hypo) treatment on Action Plan.

If the meter reads '**HI**' this means the blood glucose level is too high to be recorded – follow hyperglycaemia treatment on Action Plan.

Prior to BGL checking, wash child's hands

Times to check BGLs

(tick all those that apply)

- Anytime, anywhere
- Before snack
- Before lunch
- Anytime hypo suspected
- Before Activity:

- When feeling unwell
- Other routine times – please specify

PLEASE NOTE

Blood glucose checking should not be restricted to a designated location, but carried out wherever the child is, whenever needed.

GLUCOSE MONITORING DEVICES

Some children may be using a sensor to measure interstitial glucose.

This is **not** a substitute for finger prick **blood glucose** checking when confirming a suspected low or high BGL.

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

- Refer to Continuous Glucose Monitoring (CGM) appendix
- Refer to Flash Glucose Monitoring appendix

HYPOGLYCAEMIA (HYPO) TREATMENTS TO BE USED

- All hypo treatments should be provided by parent/carer
- Ideally, packaging should be in serve size bags or containers and labelled as fast acting carbohydrate food and sustaining carbohydrate food
- Please use one of the options listed below:

Fast acting carbohydrate	Amount	Sustaining carbohydrate	Amount

- Do not give an insulin bolus for the fast acting carbohydrate being eaten to treat a hypo
- If needing to repeat the treatment more than twice, phone the parent/carer or the child's diabetes healthcare team for further advice. These phone numbers will be found on the child's Diabetes Action Plan.

EATING AND DRINKING

- The child 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
- Younger children will require supervision to ensure all food is eaten
- The child should not exchange food/meals with another child
- Seek parent/carer advice regarding appropriate foods for parties/celebrations that are occurring at the centre
- Allow access to drinking water and toilet at all times (high blood glucose levels can cause increased thirst and urination)

Does the child have coeliac disease?

- No
- Yes (Seek parent/carer advice regarding appropriate foods and hypo treatments)
(Seek parent/carer advice regarding play mediums that may contain gluten e.g. play dough, cloud dough)

PHYSICAL ACTIVITY, ACTIVE OUTDOOR PLAY AND SWIMMING

- Physical activity **may lower** blood glucose levels. The drop in blood glucose may be immediate or delayed
- The child will require an extra serve of carbohydrate before every 30 minutes of physical activity, active outdoor play or swimming as provided in the sport/activity box. They **do not** bolus for this carbohydrate food
- Some types of 'play' may or may not need activity carbohydrate food – check with parent/carer if unsure.

Carbohydrate to be used	Amount to be given

- **Check blood ketones if BGL \geq 15.0 mmol/L and vigorous activity planned**
- Vigorous activity should **not** be undertaken if BGL \geq 15.0 mmol/L **and** blood ketones \geq 0.6 mmol/L
- A blood glucose meter and hypo treatment should always be available. If a hypo does occur (BGL $<$ 4.0 mmol/L) treat as per Action Plan
- **Do not enter BGL into pump within 1 hour of completing activity;** if lunch occurs immediately after physical activity / active play, only enter the carbohydrate food to be eaten for a food bolus, **without** entering the BGL.

EXCURSIONS

It is important to plan ahead for extracurricular activities and consider the following:

- Ensure blood glucose meter, blood glucose strips, blood ketone strips, hypo and activity food are readily accessible during the excursion day
- Diabetes care is carried out as usual during excursions
- Always have extra hypo treatment available
- Permission maybe required to eat on bus – inform bus company in advance
- Staff /parents/carers to discuss well in advance of the excursion
- Additional supervision will be required for swimming and other sporting activities either by a 'buddy' teacher or parent/carer

EXTRA SUPPLIES PROVIDED FOR DIABETES CARE AT THE CENTRE

- Finger prick device
- Blood glucose meter
- Blood glucose strips
- Blood ketone strips
- Hypo food
- Sport/activity food
- Infusion sets and lines (for parent/carer use)
- Reservoirs/cartridges (for parent/carer use)
- Inserter (for parent/carer use)
- Batteries (for parent/carer use)
- Insulin pen and pen needles (for parent/carer use)

AGREEMENTS

I have read, understood and agree with this plan. I give consent to the centre to communicate with the Diabetes healthcare team about my child's diabetes management at the centre.

Parent/Carer

Name	Signature	Date
------	-----------	------

.....
First name (please print)

.....
Family name (please print)

Diabetes Healthcare Team

Name	Signature	Date
------	-----------	------

.....
First name (please print)

.....
Family name (please print)

Centre Representative

Name

.....
First name (please print)

.....
Family name (please print)

Role

Manager Supervisor

Other (please specify)

Signature

.....
Date

COMMON INSULIN PUMP TERMINOLOGY – GLOSSARY OF TERMS

Basal – background insulin delivered in small amounts 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 out-of-target BGL and/or to clear ketones

Insulin pump (also known as continuous subcutaneous insulin infusion (CSII)) – small battery operated, computerized device for delivering insulin

Line or Tubing – the plastic tubing connecting the pump reservoir 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