

DIABETES ACTION PLAN 2020 EARLY CHILDHOOD 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 CHILD ALONE
DO NOT DELAY TREATMENT**

MILD

Child 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

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

First Aid DRABCD
Stay with unconscious child

**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
s Enter BGL into pump
s Accept Correction bolus
s 1-2 glasses water per hour; extra toilet visits may be required
s 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
s Will need injected insulin and line change
s This is the parent/carer responsibility
s Contact parent/carer

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

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

CHILD'S NAME _____

DATE OF BIRTH _____

AGE _____

CENTRE _____

INSULIN The insulin pump continually delivers insulin. The pump will deliver insulin based on carbohydrate food and BGL entries. All BGLs must be entered into pump. [For further information see Management Plan](#)
Button pushing: ■ Full assistance required

THIS CHILD IS WEARING

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

ROUTINE BGL CHECKING TIMES

These are still required if child on CGM/FGM

- s Anytime, anywhere in the centre
- s Before main meal
- s Anytime hypo is suspected
- s Before planned activity

PHYSICAL EDUCATION / SPORT

- s Check blood glucose level before planned physical activity
- s 1 serve of sustaining carbohydrate food before every 30 mins of planned activity.
DO NOT BOLUS for the carbohydrate food serve.
- s 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.

 CHILD'S NAME AGE

RESPONSIBLE STAFF

Centre staff who have voluntarily agreed to undertake training and provide support with diabetes care.

STAFF MEMBER	GLUCOSE CHECKING	INSULIN PUMP

Responsible staff will need to receive training on how to check glucose levels and administer insulin via the insulin pump.

INSULIN PUMP

The child wears an insulin pump that continually delivers insulin.

Insulin pump model: _____

RESPONSIBLE STAFF INSULIN PUMP SKILLS

- Enter blood glucose levels (BGL) into pump
- Enter grams of carbohydrate food into pump
- Understand how to do a 'Correction Bolus'
- Restart the pump manually
- Disconnect and reconnect the pump if needed, for example swimming

Information on how to do this will be provided by the parent/carer or Diabetes Treating Team.

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.

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

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 child is, whenever needed.
- **Always wash and dry the child's 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

TIMES TO CHECK BGLS (tick all those that apply)

- Anytime, anywhere Before snack Before lunch
 Before activity 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 child 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.
- 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 child 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 THE CENTRE

- Staff are not expected to do more than the current routine diabetes care as per the child'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 centre 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 child during water activities.

NAME _____

DATE OF BIRTH _____

DATE PLAN CREATED _____

LOW BLOOD GLUCOSE LEVELS (Hypoglycaemia / Hypo)

Follow the child's Diabetes Action Plan **if BGL less than 4.0 mmol/L**.
Mild hypoglycaemia can be treated by using supplies from the child'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 child requires more than 2 consecutive fast acting carbohydrate treatments, as per their Diabetes Action Plan, call the child'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 child is having more than 3 episodes of low BGLs at the centre in a week, make sure that the parent/carer is aware.

SEVERE HYPOGLYCAEMIA (HYPO) MANAGEMENT

Severe hypoglycaemia is not common.

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

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

If the centre is located more than **30 minutes** from a reliable ambulance service, then staff should discuss Glucagon injection training with the child'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 child's Diabetes Action Plan.
- If the child is experiencing frequent episodes of high BGLs at the centre, 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:

- Child 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 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.

Meals and snacks are provided:

- By the centre
Centre to provide a copy of the menu to the parent/carer to determine carbohydrate amounts at meals/snacks.
 - By the parent/carer
All carbohydrate food should be clearly labelled by the parent/carer with carbohydrate amount in grams.
- 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.
 - The child 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.
 - Always allow access to drinking water and toilet (high glucose levels can cause increased thirst and extra toilet visits).

Does the child have coeliac disease? No Yes*

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

NAME _____

DATE OF BIRTH _____

DATE PLAN CREATED _____

EXTRA PHYSICAL ACTIVITY AND SWIMMING

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 child may require an extra serve of carbohydrate food before every 30 minutes of extra physical activity, over/above their usual activity level 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 extra physical activity, only enter the amount of carbohydrate food to be eaten.

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.

EXTRA SUPPLIES

Provided for diabetes care at the centre 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 (Parent/carer use)
- Reservoirs (Parent/carer use)
- Cartridges (Parent/carer use)
- Inserter (if applicable) (Parent/carer use)
- Insulin pen and pen needles (Parent/carer use)
- Batteries (for insulin pump)
- Charging cable (for insulin pump)

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.

NAME _____

DATE OF BIRTH _____

DATE PLAN CREATED _____

AGREEMENTS

PARENT/CARER

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

NAME

FIRST NAME (PLEASE PRINT) FAMILY NAME (PLEASE PRINT)

SIGNATURE DATE

CENTRE REPRESENTATIVE

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

NAME

FIRST NAME (PLEASE PRINT) FAMILY NAME (PLEASE PRINT)

ROLE Manager Supervisor
 Other (please specify) _____

SIGNATURE DATE

DIABETES TREATING MEDICAL TEAM

NAME

FIRST NAME (PLEASE PRINT) FAMILY NAME (PLEASE PRINT)

SIGNATURE DATE