TYPE 1 DIABETES ACTION PLAN

Early Childhood or School Settings

Use in conjunction with Diabetes Management Plan.

Automated Insulin Pump

Photo

Child 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.

Authorised by

Signature

Role

Date plan created

Plan does not expire.
Review is recommended in 12 months.

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 alone**
- Do not delay treatment
- Treatment to occur where child is at time of hypo

- Hypo supplies located:

MILD*

Child 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:
Resume usual activity when BGL 4.0 or higher.

SEVERE

Child drowsy / unconscious

(Risk of choking / unable to swallow)

First Aid DRSABCD
Stay with 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

- **If unwell (E.g. vomiting), contact parent/carer to collect child**

- **Check blood ketones.** Blood ketones greater than or equal to 0.6 mmol/L requires immediate treatment

Blood ketones less than 0.6

- Correction bolus is automatically delivered by pump
- 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

Contact parent/carer

If unable to contact parent/carer

CALL AN AMBULANCE DIAL 000

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Use in conjunction with Diabetes Action Plan.

Tick boxes that apply

Insulin pump

Insulin pump model:

(See GLOSSARY on page 7 for further insulin pump information.)

Read and respond to insulin pump instructions.

The child requires a bolus of insulin through the pump with every carbohydrate meal/snack eaten:

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

The child 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 grams of carbohydrate food into the insulin pump and button push to accept insulin bolus.
- ☐ 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. This is not a staff member's responsibility.
- ☐ Child can independently manage their own insulin pump and complete a line change if required
- ☐ Other information

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.

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Glucose Monitoring

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 the target range are common.
- A glucose check should occur where the child is at the time it is required

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.
- If the sensor/transmitter falls out, staff to do BGL (Fingerprick) checks.
- 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 child wearing CGM must have a BGL check:

- ☐ Anytime hypo suspected. Hypo treatment is based on a BGL check
- ☐ When CGM reading less than _____ mmol/L, must be confirmed. Follow Action Plan
- ☐ When CGM reading above _____ mmol/L must be confirmed. Follow Action Plan
- ☐ When feeling unwell
- ☐ Sensor reading does not align with expectation or child's symptoms
- ☐ Other times – please specify _____

Blood Glucose Level (BGL) Monitoring – Fingerprick

(Used when a child is not wearing CGM or if the sensor falls out)

- Monitoring is performed using a fingerprick device and meter.
- Before doing a blood glucose check, the child should wash and dry hands.

Is the child able to do their own blood glucose level (BGL) check?

☐ Yes ☐ No (Support is required)

The responsible staff member needs to:

☐ Do the check ☐ Assist ☐ Observe ☐ Remind

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 _____

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Low Blood glucose levels

Ketones

Eating and drinking

LOW BLOOD GLUCOSE LEVELS (Hypoglycaemia / Hypo)

FOLLOW ACTION PLAN

- If the child 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 should be provided by the parent/carer.
- 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's Diabetes Treating Team.

Ketones

FOLLOW THE 'HYPERGLYCAEMIA ACTION PLAN'

- Ketones can be dangerous and occur most commonly in response to high glucose levels or if a child is unwell.

Eating and drinking

- The insulin dose will be determined by the insulin pump based on the grams of carbohydrate food (child will be eating), and the current glucose level entered.
- For children 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 child to add up the carbohydrate amounts they wish to eat.
- Some children will need 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 have coeliac disease? ☐ No ☐ Yes

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

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Physical activity

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

- Physical activity **may cause glucose levels to go high or low.**
- Some children may require a glucose level check before, during or after physical activity.
- Children are generally not advised to have additional carbohydrate prior to physical activity when on an automated insulin pump. This is due to the insulin pump delivering added insulin in response to a potential glucose level rise from the carbohydrate.

☐ Activity food located

Activity food - only if disconnected from pump

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

- Suspend and disconnect the insulin pump for contact sports/swimming.
- The child 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.

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Excursions

Excursions / incursions

It is important to plan for extracurricular activities.

- Ensure blood glucose monitor, blood glucose strips, ketone strips, insulin pen and pen needles, hypo, and activity food are readily accessible.
- Plan for meal and snack breaks.
- Always have hypo treatment available.
- Know location of toilets.

School camps

School camps

- Is there a school camp planned for this year? ☐ Yes ☐ No
- Parents/carers need to be informed of any school camp at least 2 months prior to ensure the child's diabetes treating team can provide a Camp Diabetes Management plan and any training needs required.
- A Camp Diabetes Management Plan is different to the usual School Plan.
- 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 child on camp.
- If the camp location is more than 30 minutes from a reliable ambulance service Glucagon injection training will be required.

Exams

Exams

- Glucose level should checked and documented 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 child unwell.

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.

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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, lines, pods
- [ ] Reservoirs/Cartridges
- [ ] Batteries for insulin pump
- [ ] Charging cables for diabetes management devices
- [ ] Personal Diabetes Manager (PDM)
- [ ] Smart phone to be used as medical device

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.

POD/PDM: A small tubeless device worn directly on the body, that delivers insulin with the support of a PDM (personal diabetes manager) device. This device must be easily accessible to the child at school.

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

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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 specifiy

Signature | Date

Diabetes Treating Medical Team

Name

First name (please print) | Family name (please print)

Signature | Date

Hospital name

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