



Insulin Pump Therapy Care Plan for Children & Young People with Type 1 Diabetes

PERSONAL INFORMATION:

Name: _____ DOB: _____

School: _____ Class/Form: _____

Date Completed: ____/____/____ Review Date (As Required): ____/____/____

CONTACT INFORMATION:

Family Contact 1:

Family Contact 2:

Name: _____ Name: _____

Relationship: _____ Relationship: _____

Tel: (Home): _____ Tel: (Home): _____

(Work): _____ (Work): _____

(Mobile): _____ (Mobile): _____

Clinic / Hospital Contact:

G. P. Contact:

Name: _____

Name: _____

Title: _____

Practice: _____

Tel. No.: _____

Tel. No.: _____

OTHER MEDICAL CONDITIONS OR ALLERGIES:

ANNEX 3c

Name: _____ DOB: ____/____/____ NHS Number: _____

Description of Condition:

This child has Type 1 Diabetes which develops if the body is unable to produce the life-essential hormone insulin. This type of Diabetes is treated with insulin injections or insulin pump therapy daily, for life. Diabetes treatment is a balance of insulin injections, carbohydrate and activity.



Insulin + (Carbohydrate) + Activity
Diet

What is insulin pump therapy?

Insulin pump therapy is when small continuous amounts of insulin are delivered into the body 24 hours a day, via a small device called an insulin pump. Extra insulin must be given at meal times as a bolus through the pump. The amount of the insulin bolus is determined by the number of carbohydrates in the snack/meal. A bolus of insulin may also be used to correct high blood glucose levels.

Daily Care Requirements
(Monitoring, Diet, Insulin and Activity)

Monitoring:

The purpose of blood glucose testing at school is to provide blood glucose values to help determine the correct prescription for the child, as decided by the diabetes team and family. In young children these tests also help determine snack timing and size. Parents / Guardians should be informed daily of any blood results.

**Recommended blood glucose levels during the school day are:
Between 4.1 and 13.9 mmol/L.**

Blood glucose monitoring is done at the following times:

.....

This pupil is able to:

Self test

Needs supervision when testing

A trained member of staff to do blood glucose testing

For school staff, attention need only be paid to values below **4mmol/L** (see next page for treatment) or above **13.9mmol/L**.

Parents / Guardians should be informed daily of any ‘adverse’ events as agreed with child/young person, family and diabetes team.

ANNEX 3c

Name: _____ DOB: ____/____/____ NHS Number: _____

Low blood glucose reading (HYPO):

Low blood glucose readings are **below 4.0 mmol/L**. See Hypoglycaemia Treatment Guide page 4.

'4 IS THE FLOOR'

The main causes of a hypo are:

- Missed, delayed or inadequate snacks / meals
- More exercise / activity than planned
- Too much insulin

Symptoms the child may express / show:

- | | | |
|---------------------------------------|--|--|
| <input type="checkbox"/> Hungry | <input type="checkbox"/> Sweaty | <input type="checkbox"/> Glazed eyes |
| <input type="checkbox"/> Pale | <input type="checkbox"/> Wobbly / Shaky | <input type="checkbox"/> Headache / Tummy ache |
| <input type="checkbox"/> Mood Changes | <input type="checkbox"/> Tearful / Weepy | <input type="checkbox"/> Grumpy / Irritable |

CHILD MAY NOT SHOW ANY SIGNS

Hypo Box to be provided by parents / carer, checked and restocked regularly at least half termly.

Hypo Box is stored: _____

Hypo Box Contains: _____

Guide to Hypoglycaemia (Hypo) Treatment in Schools

MAIN CAUSES:

- Missed, delayed or inadequate snacks / meals
- More exercise / activity than planned
- Too much insulin

SYMPTOMS:

- Hungry
- Wobbly / Shaky
- Headache
- Mood changes
- Pale
- Grumpy / Irritable
- Stomach ache
- Tearful / Weepy
- Sweaty
- Glazed eyes

*****PUPILS MAY NOT SHOW ANY SIGNS*****

TREATING A HYPO

Blood glucose level below 4 mmol/L

**URGENT ACTION IS REQUIRED
DO NOT LEAVE PUPIL ALONE**

TREATMENT:

- (a) Pupil to have 15 grams of fast acting carbohydrates i.e. sugary drink, Glucotabs x 3 or dextrose tablets x 5
 - (b) Wait 15 minutes then retest blood glucose level
 - (c) If blood glucose level remains below 4, repeat (a) and (b) until blood glucose is 4.1 mmol/L or above
- If blood glucose fails to reach 4.1mmols/L after 2 treatment cycles, suspend insulin pump therapy, inform parents and repeat (a) and (b) until blood glucose above 4.1mmols/L**

Can the pupil eat and drink independently?

Yes

No

Is the pupil conscious but needs help to eat and drink?

Yes

No

Is the pupil unconscious?
(can lead to seizure)

Yes

TREATMENT:

Child will need assistance to treat – give treatment as above
If pupil uncooperative **but conscious** use Glucogel*
IF CONDITION DETERIORATES DIAL 999

Using *Glucogel:

- ✓ Twist off Lid
- ✓ Place dispenser tip in the mouth
- ✓ Direct the gel between the gums and both sides of the cheeks
- ✓ Massage cheeks (externally) to aid absorption
- ✓ Can use the whole tube of gel gradually or continue with step 1, 2 and above when pupil is cooperating

Must never be given to an unconscious child due to the risk of choking



****RECOVERY POSITION****

TREATMENT:

- Recovery position**
- Nil by mouth
- Dial 999
- Inform parent / carer



1. Kneel next to the person. Place the arm closest to you straight out from the body. Position the far arm with the back of the hand against the near cheek.



2. Grab & bend the person's far knee



3. Protecting the head with one hand, gently roll person toward you by pulling the far knee over & to the ground



4. Tilt the head slightly so that the airway is open. Make sure that the hand is under the cheek. Stay close until help arrives.

ANNEX 3c

Name: _____ DOB: ____/____/____ NHS Number: _____

High Blood Glucose Reading (Hyperglycaemia):

High blood glucose readings are over **13.9** mmol/L

Causes may include: lack of insulin, too much food, stress, anxiety, changes in the weather, feeling unwell.

If C/YP has higher blood glucose levels they may need to use the toilet more frequently. They may feel thirsty, therefore please allow them to drink water freely.

Illness:

If the pupil is unwell, check blood glucose level and contact the family as agreed. If the blood glucose reading is high, **refer to high blood glucose guidance for pump therapy on next page.**

Diet:

The C/YP will be carbohydrate counting for all drinks and food . Insulin will be taken according to the number of grams of carbohydrate eaten. It is the family’s responsibility to calculate the insulin to carbohydrate ratio and update the school with any changes.

Carbohydrates must be counted as insulin is delivered through the pump according to carbohydrate intake.

The diet should be healthy and routinely avoid high sugar foods / drinks.

Sport / Exercise / Activity:

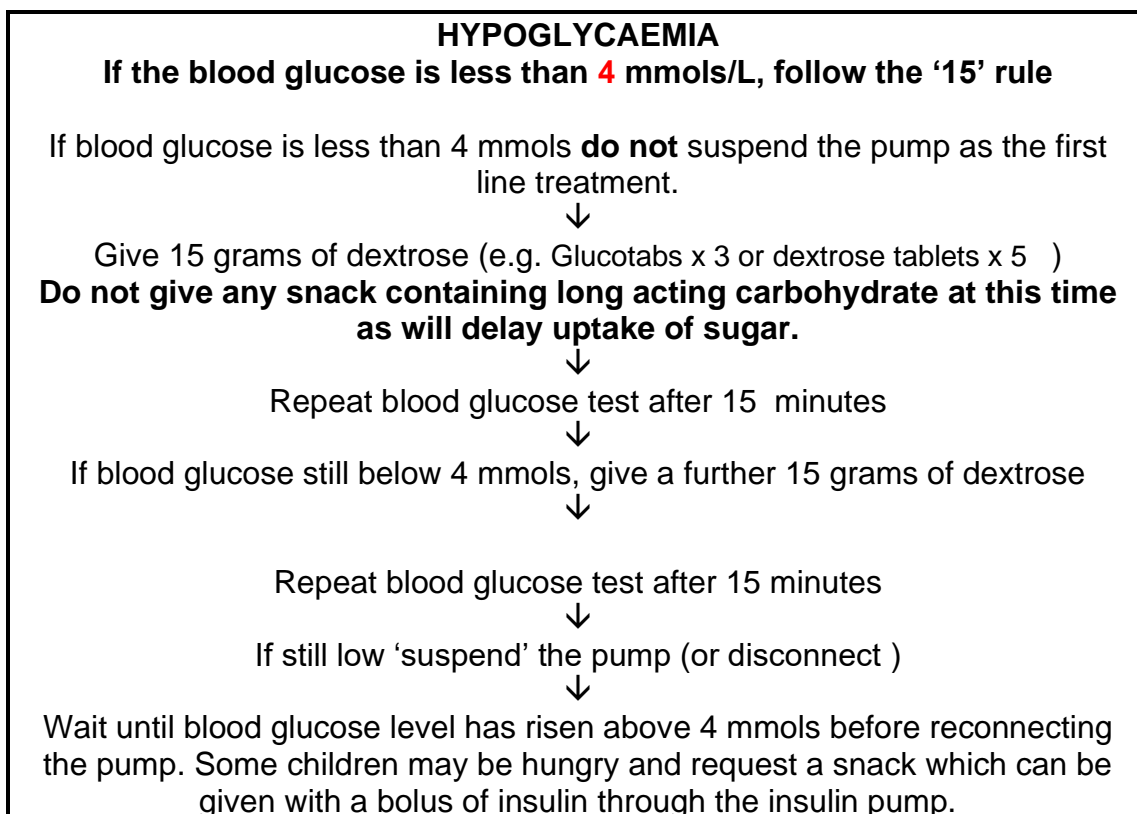
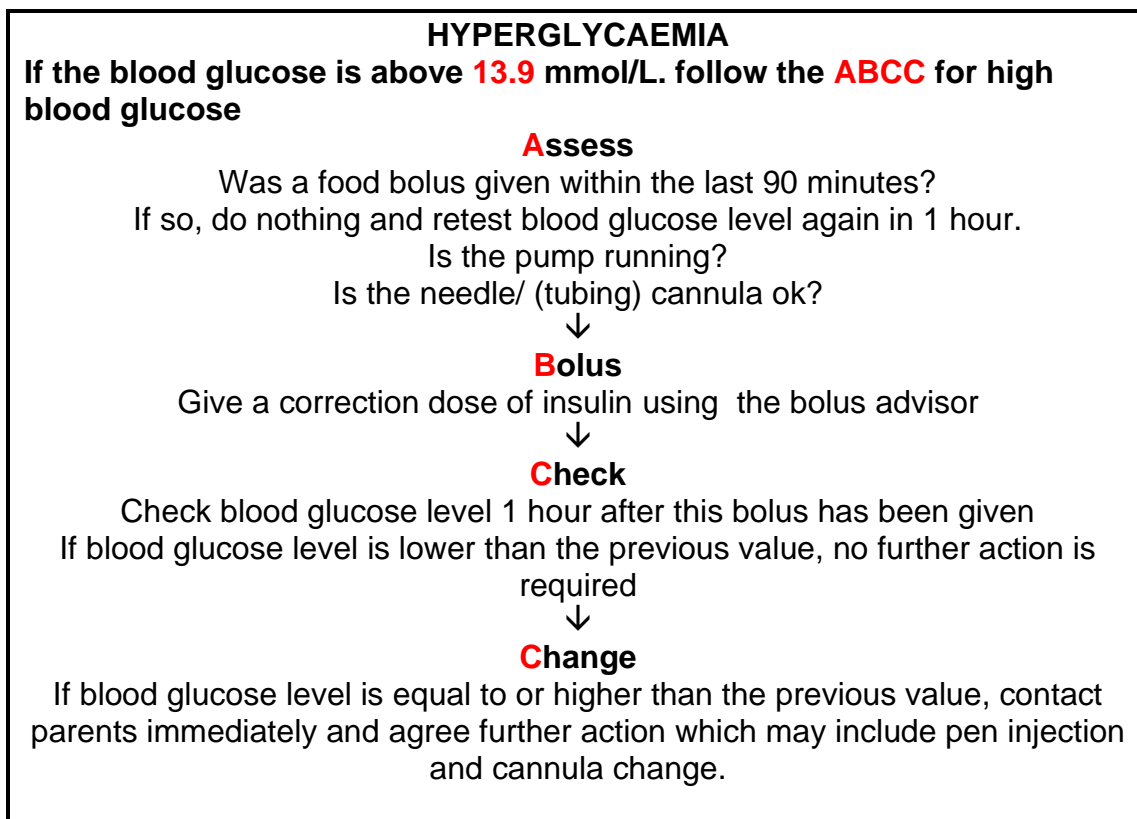
Please do NOT allow the child/young person to partake in sports or exercise if blood glucose is higher than **13.9 mmol/L. (Refer to hyperglycaemia guidelines).**

Pupil should take blood monitor and supplies for treatment of hypo’s to any activity:

INSULIN PEN SHOULD BE AVAILABLE IN SCHOOL SHOULD PUMP FAIL.

Pen and Insulin are kept

**Emergency Guidelines for Children on insulin pump therapy.
Management of high and low blood glucose levels**

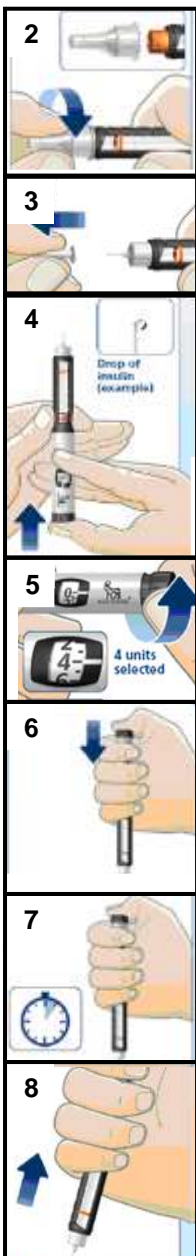


TECHNIQUE FOR TESTING BLOOD GLUCOSE

- ✓ Wash and dry hands
- ✓ Insert test strip into meter (**fig 1**) – the meter will turn on automatically and do a quick self-check prompting you to apply a drop of blood (**fig 2**)
- ✓ Apply the finger pricking device firmly against the side of the finger - press the fire / release button (**fig 3**)
- ✓ Gently squeeze the finger and obtain a droplet of blood
- ✓ Touch the tip of the test strip onto the drop of blood (blood will be 'sucked-up') (**fig 4**)
- ✓ The meter will count down and display a result on the screen (**fig 5**)
- ✓ Record the result
- ✓ Remove the used test strip – dispose of strip in sharps container - the meter will switch off automatically



*****PLEASE NOTE*****
 Child may be using a different blood glucose meter which will differ in design / shape to pictures shown – principles are same



Injection technique: Insulin can be injected into the front and sides of both thighs top of buttocks, back of the upper arms and abdomen (**fig 1**)



- ✓ Remove the protective tab from a needle. Screw the needle tightly onto the coloured cap (**fig 2**)
- ✓ Remove cap and needle cover from the insulin pen device (**fig 3**)
- ✓ Prime the insulin pen by dialling 2 units and ensuring that a drop of insulin appears at the tip of the needle **fig 4**)
- ✓ Dial the number of units of insulin that is required by turning the dial selector (the pen will click and a number will appear in the dosage window) (**fig 5**)
- ✓ Hold Insulin Pen device (**fig 6**), fully insert the needle into the skin at right angles
- ✓ Do **NOT** squeeze skin before injecting insulin
- ✓ Press the delivery button on the top of the insulin pen to inject the insulin – the dosage dial will return to zero. Hold needle in skin for 6-10 seconds (**fig 7**)
- ✓ Withdraw the needle at right angles (**fig 8**)
- ✓ Remove needle using needle remover (as previously taught)
- A droplet of blood may form on the skin after the needle is removed. If this is noted – apply a little pressure with a tissue to the injection area.

EXTRA:

(already in the Surrey County Council Medicines Management in schools handbook) – found in all Surrey schools.

This is the information in the file that is a resource / policy folder for all Surrey schools.

- What is Diabetes
- Recognition / Symptoms
- Management of an acute episode of hyperglycaemia
- Day to day management issues
- General principles
- Specific Information/resources
- Recognition / Symptoms
- Management of an acute episode of hyperglycaemia
- Day to day management issues
- General principles

All children with Type 1 Diabetes will be treated with insulin.

Signed and agreed:

Parents / Carer and Child Agreement:

I agree that the medical information contained in this plan may be shared with individuals involved with _____ care (this includes emergency services). I understand that I must notify the school of any changes in writing.

Child

Signature: _____ Date: ____/____/____

Print Name: _____

Parent / Guardian

Signature: _____ Date: ____/____/____

Print Name: _____

School Representative Agreement:

This arrangement will continue until any changes are made to the health care plan when it is reviewed annually or when informed of necessary changes by parent/carer in writing.

Signature: _____ Date: ____/____/____

Print Name: _____ Job Title _____

Healthcare Professional Agreement:

I agree that the information is accurate and up to date.

Signature: _____ Date: ____/____/____

Print Name: _____ Job Title _____

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