

## Diabetes

### 1. Notification

The parent/carer of the pupil should be advised in school handbook and enrolment form of the need to notify the school that the pupil has Type 1 diabetes (diabetes). Pupils who have diabetes are at risk of variable blood glucose and will need treatment in school with insulin.

### 2. School Healthcare Plan

**Form 9: School Healthcare Plan – Diabetes ‘Veo’ insulin pump and, if required, supplementary Continuous Glucose Monitoring for ‘Veo’ pump plan**

**OR**

**Form 9: School Healthcare Plan - Diabetes ‘640G or 670G or 780G’ Insulin Pump and, if required, supplementary Continuous Glucose Monitoring for ‘640’ pump plan, Medtronic published 670G/780G CGM supplementary**

**OR**

**Form 9: School Healthcare Plan – Diabetes insulin injection**

**OR**

**Form 9: School Healthcare Plan - Diabetes ‘Omnipod’ Insulin Pump**

**OR**

**Form 9: School Healthcare Plan - Diabetes ‘T: Slim X2’ Insulin Pump and, if required, supplementary Continuous Glucose Monitoring for ‘T: Slim X2’ pump plan**

**OR**

**Form 9: School Healthcare Plan – Diabetes DEXCOM**

Should be completed for all pupils who have diabetes by the parent/carer and the school. Support in completing the school healthcare plan can be sought through the Diabetes Nurse Specialists. The plan should be reviewed every year.

### 3. Awareness/Continuing Professional Development - Requirements for all Schools

The head teacher should ensure that all teaching and support staff are aware of these procedures pertaining to a pupil’s condition and the particulars of any needs that may arise in school. The head teacher is responsible for ensuring all school staff are aware of the arrangements to manage a medical emergency.

The head teacher should encourage staff to volunteer to undertake the administration of appropriate emergency treatments. The head teacher should enable these staff to attend the earliest available ASL: Diabetes – Managing Diabetes in Educational Establishments session available through the Continuing Professional Development Directory. For further details on CPD, see section 4.3.

The Specialist Diabetes Nurse will visit the schools of pupils newly diagnosed with diabetes and give advice and information to staff directly involved with that pupil.

### 4. The School Curriculum

Diabetes should not impede any area of the curriculum for pupils in school. Arrangements must be made to allow pupils with diabetes to carry out blood glucose testing, treat hypoglycaemia (low blood glucose), administer insulin and eat additional carbohydrate if required. A pupil with diabetes must not be delayed from receiving a meal when insulin has been given.

Pupils with diabetes should not be prevented from attending residential excursions. The Diabetes Nurse Specialist should be contacted on 0131 536 0375 prior to residential excursions.

### 5. Review of School Healthcare Plans

School Healthcare Plans will be reviewed annually and if there are any changes in treatment. If there

are no changes, the Agreement to School Healthcare Plan Review sheet should be completed and signed as indicated. If there are any significant changes a new school healthcare plan should be completed.

## 6. Checklist of General School Arrangements

The following summarises general school arrangements;

- All school staff, supply teachers, visiting teachers and support staff should be made aware of pupils with diabetes and of these procedures.
- The class register should be clearly marked to indicate pupils with diabetes so that when a supply teacher takes a class she/he is aware of any pupils with diabetes in that class.
- All staff who may have direct day-to-day responsibility for the pupil should be familiar with the School Healthcare Plan.

## Diabetes – continued

- Pupils should carry a supply of glucose. An emergency box of supplies should be kept in a central, easily accessible place.
- A list of staff who have attended an ASL: Managing Diabetes in an Educational Establishment within the last two years should be displayed clearly in the school office.
- The relevant parties as indicated on the form must sign the School Healthcare Plan
- The parent/carer has responsibility for the contents of the emergency box of supplies. As a matter of good practice, the school should check the expiry date of all medication and send home Form 6a/Notice to parent/carer that medication needs replenishing (Appendix 8) to indicate when the supplies are becoming low.
- Procedures for summoning emergency services (Appendix 20) should be clearly displayed by all telephones.
- Should a pupil require emergency treatment the instructions on the HYPOglycaemia or HYPERglycaemia (as appropriate) Care Flow Diagram must be followed.
- The Diabetes Nurse Specialists should be contacted if a pupil has frequent periods of absence with diabetes given as the reason for their absence.

<b>Pupil's name</b>	Photograph of pupil
<b>Date of birth</b>	
<b>CHI</b>	
<b>Address</b>	
<b>School</b>	

**This plan should be completed by the pupil's parent/carer and, where it involves the administration of medication, it must be approved by the hospital consultant/specialist nurse/GP.**

<b>Name of approving clinician</b>	
<b>Signature</b>	<b>Date</b>

**(A letter detailing medication/care and signed by the hospital consultant/specialist nurse or GP can replace this signature)**







<b>Signature of parent/carer</b>	<b>Date</b>
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**Once completed, the parent/carer is responsible for taking a copy of this School Healthcare Plan to all relevant hospital/GP appointments for updating.**

<b>Pupil's name</b>	<b>Date of Birth</b>
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**Parent/Carer Contact 1**

**Parent/Carer Contact 2**

<b>Name</b>	<b>Name</b>
<b>Relationship to pupil</b>	<b>Relationship to pupil</b>
<b>Address</b>	<b>Address</b>
 <b>Home</b>	 <b>Home</b>
 <b>Work</b>	 <b>Work</b>
 <b>Mobile</b>	 <b>Mobile</b>

**Hospital/Clinic Contact**

**General Practitioner**

<b>Name</b>	<b>Name</b>
<b>Address</b>	<b>Address</b>
	

<b>Signature of parent/carers</b>	<b>Date</b>
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Pupil's name	Date of Birth
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**What is Diabetes?**

Diabetes (type 1) is a condition that develops when a person does not produce enough of the hormone insulin. Insulin allows the glucose from the food we have eaten, to move from the bloodstream into the cells, where it can be used for energy.

People who develop diabetes (type 1) in childhood require insulin by injection or insulin pump therapy. A healthy, balanced diet is recommended and carbohydrate counting of all food is required to ensure that the correct amount of insulin is given.

Carbohydrates are divided into 2 groups:

1. Sugary carbohydrates e.g. sweet biscuits, chocolate, fruit and some dairy products.
2. Starchy carbohydrates e.g. bread, cereals, pasta and rice.

**What is an Insulin Pump?**

An insulin pump is a way of giving insulin. Rather than injecting insulin up to 5 times a day the pump delivers a background (Basal) rate of insulin. The child/carer will then inform the pump of BG level (dependent on glucose meter) and carbohydrate intake to allow a bolus dose of insulin to be delivered prior to food being eaten.

**What is Continuous Glucose Monitoring (CGM)?**

Some pupils will have their interstitial glucose levels measured by a continuous glucose monitor which is a device that measures interstitial glucose levels every 5 minutes and sends these readings to their insulin pump. As it is measuring interstitial glucose it can lag behind blood glucose levels. CGM does not take away the need for blood glucose testing but can be used to provide extra information about blood glucose trends.

The CGM is set with limits of acceptable glucose levels and will alert via the insulin pump if these limits are reached. If this pupil has a CGM please make sure that the supplementary CGM plan is completed.

**Details of Medication/Equipment (Delete as appropriate)**

Medication/Equipment	Dose	Comments
Glucose tablets	3 tablets	As per <b>HYPO</b> glycaemia action flowchart
Lift Glucose Shot (glucose juice)	60 mls	As per <b>HYPO</b> glycaemia action flowchart
Lucozade Original	110ml	As per <b>HYPO</b> glycaemia action flowchart
Glucogel	1 tube	As per <b>HYPO</b> glycaemia action flowchart
Other (please specify) _____		As per <b>HYPO</b> glycaemia action flowchart
Blood glucose and ketone meter	N/A	For checking blood glucose levels
Insulin (state insulin type) _____	Variable and some children may further adjust dose for activity.	Dose depends on blood glucose level and amount of carbohydrate to be eaten.

Signature of parent/carer	Date
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**What the school needs to know:**

1. How to use the insulin pump (IMPORTANT: Member of school staff who will be administering the insulin via the pump and those who are supervising the child doing their own administration)
2. How to manage and treat 'hypos'
3. How to manage and treat hyperglycaemia and how to check for ketones.
4. Where supplies are kept (Hypo Kit, Spare Sets and Insulin Pens)
5. When and where to get help (detailed in Health Care Plan)
6. How to disconnect/reconnect pump (recommended for contact sports and swimming)

**Details of Care:**

\_\_\_\_\_ has Type 1 Diabetes and has an insulin pump which administers insulin on a continuous basis. Their medical care is managed by the RHSC Paediatric Diabetes Team and parents/carers are fully trained to manage and make decisions about their child's care.

Because of \_\_\_\_\_ age he/she cannot take full responsibility for managing her/his diabetes. These are the things that they need help from school staff with: (Delete as appropriate)

- Hypoglycaemia: the child must **NOT** be left on their own until the Hypo has been resolved. Hypoglycaemia should be treated where/when ever it occurs.
- \_\_\_\_\_ can/cannot assist with the practical aspects of their blood glucose testing but needs an adult to support/supervise and make the decision whether he/she is hypoglycaemic or hyperglycaemic and the action required.
- At times of snacks and meals \_\_\_\_\_ needs direct support to administer their dose of insulin via the insulin pump.
- Awareness of the where the cannula is situated on child's body (small tube in child's body allowing the insulin to be delivered). These areas are specific to individual children i.e. Tummy, Upper Thighs, Buttocks.
- \_\_\_\_\_ does/does not require assistance after toilet visits or P.E. If clothes require changing ensure the cannula has not been dislodged OR disconnected.

**CONTACT PARENTS IMMEDIATELY IF YOU SUSPECT THE CANNULA HAS BEEN DISLODGED.**

This Health Care Plan has been devised so that those using it can navigate easily to the correct information and flowchart as required.

Signature of parent/carers	Date
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Pupil's name	Date of Birth
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**Details of Routine Care:**

Blood Glucose should be checked at the following times (complete times as appropriate):

- Mid Morning –
- Pre Lunch –
- Mid Afternoon –

READING	ACTION
4.0 – 13.9 mmol/l	<ol style="list-style-type: none"> <li>1. Record BG in diary provided by parent.</li> <li>2. Bolus for snack/lunch using Bolus Wizard (<u>see page 6</u>) Carbohydrate content will be clearly marked by parents.</li> <li>3. It is important to ensure that the child eats the meal that they have had insulin for. If any concerns contact parents.</li> </ol>
Below 4.0 mmol/l 'Hypo'	<ol style="list-style-type: none"> <li>1. Follow <b>HYPO</b>glycaemia flow chart</li> <li>2. Observe child until hypo has resolved. It can take up to 45 minutes for full concentration to return following a hypo.</li> </ol>
14.0 mmol/l or higher	<ol style="list-style-type: none"> <li>1. Follow <b>HYPER</b>glycaemia flow chart</li> </ol>

**Details of Care for P.E.**

1. Check blood glucose before activity.
2. If blood glucose is less than 4mmol/l follow the HYPOglycaemia flowchart before continuing.
3. If blood sugar is above 14mmol/l refer to the HYPERglycaemia flowchart before continuing.
4. If blood glucose is less than \_\_\_\_\_, give \_\_\_\_\_ a snack of \_\_\_\_gms. WITHOUT bolus of insulin.
5. Pump can be taken off for contact sports and swimming or where there is a risk the pump could be dropped/pulled or damaged.

**N.B: Pump should only be removed for up to ONE HOUR**

Signature of parent/carers	Date
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## Instructions for '670G' Insulin Pump:

Unlocking the pump

The pump will go into sleep mode after a couple of minutes. To unlock it press any button twice and you will see a display as pictured left. Press arrow key that corresponds to one highlighted on screen.

BLOCK/UNBLOCK

1. Press **SELECT** Key (centre circle key)
2. Scroll down list to '**OPTIONS**'
3. Press **SELECT**
4. Scroll down '**OPTIONS**' to '**UTILITIES**'
5. Press **SELECT**
6. Scroll down '**UTILITIES**' to '**BLOCK**'
7. You are now in the **BLOCK MODE** and you can now **BLOCK/UNBLOCK** the pump
8. Press **SELECT** to highlight **ON** green
9. Scroll down to **SAVE** and press **SELECT**

Signature of parent/carer	Date
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Pupil's name	Date of Birth
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**Instructions for '670G' Insulin Pump continued:**

**STEP BY STEP GUIDE FOR DELIVERY OF INSULIN BOLUS**

1. Press **SELECT** Key (centre circle key)
2. Select 'BOLUS'
3. Select 'BOLUS WIZARD'



4. Highlight "Bolus Wizard" as shown and press select then follow the below:

Here you can see the Bolus Wizard calculation screen and a short description of the steps below:

If you have tested your glucose using your compatible Bayer meter, the BG and correction dose will already be showing.



You will first test and enter your current BG.



You will then enter grams of carbohydrates to be eaten.



The pump displays estimated amount of insulin to be delivered.

5. \_\_\_\_\_

The Bolus Delivery will be confirmed on the next screen once Next is Selected. "Deliver Bolus" will be highlighted. Press Select to deliver the bolus.

6. \_\_\_\_\_

Signature of parent/carer	Date
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This Plan was completed on \_\_\_\_\_ and its contents agreed by the undersigned.

Pupil's name	Date of birth
School	

**Parent/carer**

I realise that the school is not obliged to undertake healthcare and that any healthcare provided by school will be carried out on a voluntary basis under the guidance of NHS staff. I give my consent to the information contained in this healthcare plan being shared with all staff working with my child. I give my consent for the school to contact the named health care professional(s) and for those professionals to advise the school in any relevant matters in connection with this. I accept full responsibility for keeping the school informed of anything that may be relevant in relation to the implementation of this care. I accept responsibility for ensuring that there are supplies of any relevant medication, materials or equipment for my child's needs.

I wish my child to have the care/medication detailed in this plan and I accept that the emergency services will be summoned, where appropriate, in the event that the school staff are unable to administer the plan at any time.

Name of parent/carer	
Signature	Date

**Pupil**

I agree to the care arrangements as detailed in this plan

Name of pupil	
Signature	Date

**The Head teacher/ Designated member of senior management**

I agree to the procedures detailed in this plan being administered by appropriately trained staff who have attended a Diabetes Management CPD session within the last two years.

In the event that these procedures cannot be implemented at any time, where appropriate, the school will follow advice received from the health professionals in summoning the emergency services.

Name of member of staff	
Signature	Date

Copies held by parent/carer and head teacher

This Plan was reviewed on \_\_\_\_\_ and its contents agreed by the undersigned.

Date of next review
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Pupil's name	Date of birth
School	

**Parent/carer**

I realise that the school is not obliged to undertake healthcare and that any healthcare provided by school will be carried out on a voluntary basis under the guidance of NHS staff. I give my consent to the information contained in this healthcare plan being shared with all staff working with my child. I give my consent for the school to contact the named health care professional(s) and for those professionals to advise the school in any relevant matters in connection with this. I accept full responsibility for keeping the school informed of anything that may be relevant in relation to the implementation of this care. I accept responsibility for ensuring that there are supplies of any relevant medication, materials or equipment for my child's needs.

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Name of member of staff	
Signature	Date

Copies held by parent/carer and head teacher

**Insulin Pump Therapy in Schools Flow Chart to Manage HYPERglycaemia; Blood Glucose of 14.0 mmol/l or higher**

Photograph of pupil

Name \_\_\_\_\_

Date of Birth \_\_\_\_\_

Can show one or several of the following but sometimes there are no obvious signs;

- Thirst
- Needing the toilet
- Tiredness
- Lack of concentration

Check for Blood Ketones (BK) using Ketone Meter provided

Is Ketone reading more than 1.0?

YES

Contact Parents URGENTLY (See N.B. note below)

**Please Note:**

No Exercise if blood ketone value 0.5 – 0.9

**Action:**

- Correct Blood Glucose level via pump immediately i.e enter Glucose value and 0g carbs if not meal time
- Re-check Blood Glucose and Blood Ketones 1 hour later
- Contact parent IF blood ketones rise further

**Notes:**

If the child requires additional insulin to be administered via an insulin pen device and a set change it is the parent's responsibility to manage this.

# Insulin Pump Therapy in Schools Flow Chart to Manage HYPOglycaemia; Blood Glucose of Less Than 4.0 mmol/l

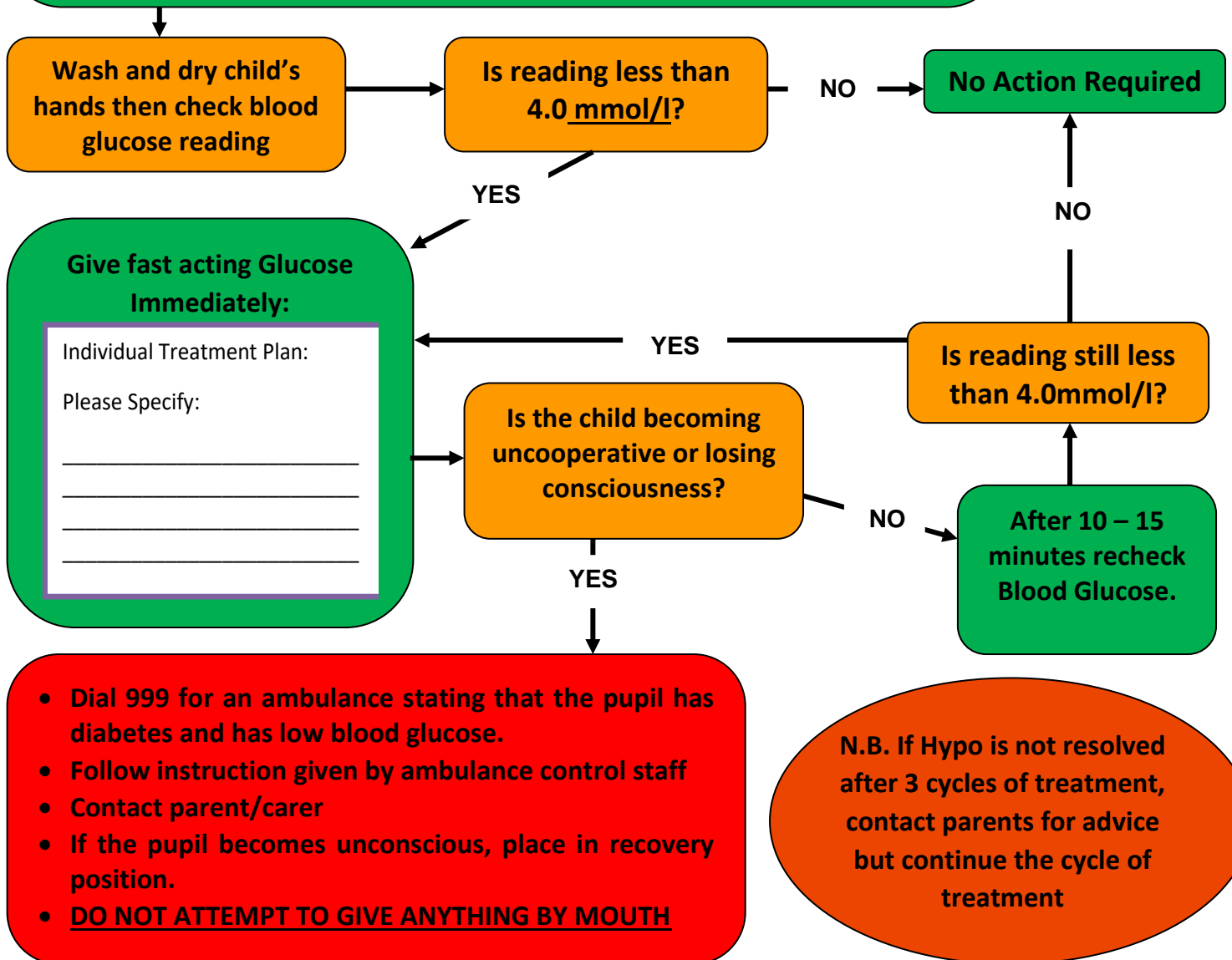
Photograph of pupil

Name \_\_\_\_\_

Date of Birth \_\_\_\_\_

Can show one or several of the following but sometimes there are no obvious signs;

- Headache
- Pale
- Sweaty
- Tearful/weepy
- Nausea/vomiting
- Blurred vision
- Wobbly/shaky/weak
- Grumpy/bad tempered
- Feeling "not right"



**Notes:**

1. When using an insulin pump, once B.G. above 4mmol/l a snack is NOT essential. If giving a snack post hypo please deliver an insulin bolus for the carbohydrate about to be eaten.
2. Within 2 hours of treating a hypo, if blood glucose is above 6mmol/l do not give correction - manually reduce B.G. to 6mmol/l in Bolus Wizard.