

School Health Care Plan for a Child or Young Person with Type One Diabetes

CYP INFORMATION:

Name:

DOB:

School: _____

Class/Form: _____

Date Completed:

Review Date :

CONTACT INFORMATION:

Family Contact 1:

Family Contact 2:

Name:

Name:

Relationship:

Relationship:

Tel No. (Work)

Tel No. (Work)

(Home)

(Home)

(Mobile)

(Mobile)

Hospital Contact:

G. P. Contact:

Named PDSN:

Name:

Tel. No.

Practice:

Email:

Tel. No.

Diabetes team mobile: 07870 382 114

Diabetes team email: mhn-tr.paediatricdiabetes@nhs.net

Name of CYP: _____ Date of Birth _____

This health care plan will capture the key information and actions that are required to support this child or young person (CYP) in school/education setting. Schools should make reasonable adjustments to facilitate prescribed medical care to allow a CYP with diabetes to participate in education on the same basis as their peers.

Description of Condition:

This child or young person (CYP) 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, healthy eating, and activity.

Monitoring Blood Glucose (BG) Levels:

BG monitoring is essential to achieving optimal diabetes management and must be familiar to school staff. The CYP with diabetes can monitor BG levels by the following ways: continuous glucose monitoring (CGM), flash glucose monitoring (FGS) and using a BG meter.

CGM

CGM is a small waterproof sensor that is inserted under the skin which measures glucose in the interstitial tissue every few minutes. The sensor sends the results to a transmitter. Unlike BG checking where you get a single measurement, with CGM, a graph is seen showing glucose levels with trends. Some sensors are linked to insulin pumps, some are stand-alone CGM. The trends give insight into the speed and direction the glucose is changing. Alarms can be set to alert.

FGS

This enables the glucose levels to be monitored by holding a handheld device over the sensor. There will always be a time lag in these glucose readings. Trend arrows show whether the levels are rising, decreasing or remaining stable. FGS do not continuously send glucose measurements to the reader.

Name of CYP: _____ Date of Birth _____

Medtronic (CGMS)






Trend Arrow	What this means
↑ or ↓	Sensor Glucose has been rising or falling by about 1-2 mmol/L over the last 20 minutes
↑↑ or ↓↓	Sensor Glucose has rising or falling by about 2-3 mmol/L over the last 20 minutes
↑↑↑ or ↓↓↓	Sensor Glucose has been rising or falling by about 3 mmol/L over the last 20 minutes

Dexcom G6 (CGMS)

Trend Arrow G5 App	Trend Arrow G4/5 Receiver	What this means
		Glucose rising 0.1-0.2mmol/L each minute or up to 2.5mmol/L in 15 minutes.
		Glucose rapidly rising more than 0.2mmol/L each minute or more than 2.5mmol/L in 15 minutes.
		Glucose is slowly falling 0.06-0.1 mmol/L each minute or up to 1.7mmol/L in 15 minutes.
		Glucose is falling 0.1-0.2mmol/L each minute or up to 2.5mmol/L in 15 minutes.
		Glucose is rapidly falling more than 0.2mmol/L each minute or more than 2.5mmol/L in 15 minutes.
		Glucose slowly rising 0.06-0.1 mmol/L each minute or up to 1.7mmol/L in 15 minutes.
		Glucose is steady. Not increasing/ decreasing more than 0.06mmo/L per minute or up to 0.9mmol/L in 15 minutes.

Name of CYP: _____ Date of Birth _____

Freestyle Libre Flash Glucose Monitor (FGS)

Trend Arrows	What this means
	Glucose is rising quickly (more than 0.1mmol/L per minute)
	Glucose is rising (between 0.06 and 0.1mmol/L per minute)
	Glucose is changing slowly (less than 0.06mmol/L per minute)
	Glucose is falling (between 0.06 and 0.1mmol/L per minute)
	Glucose is falling quickly (more than 0.1mmol/L per minute)
	The Glucose trend arrow may not always appear with your reading

Monitoring BG levels are an essential part of daily management. Some monitors may have a bolus advisor incorporated in the device and some may have the ability to test blood ketone levels too.

BG testing should be carried out:

- in class or if preferred in a clean private area with hand washing facilities –
NOT IN A TOILET
- Hands to be washed prior to test
- BG testing lancets and strips to be disposed of safely

**Recommended blood glucose levels during the school day are:
Between 4.0 and 7.0 mmols/L.**

Blood glucose monitoring is done at the following times:

.....

- This CYP :
- Is independent in BG monitoring
 - Requires supervision with BG monitoring
 - Requires a trained member of staff to monitor BG
 - Uses Medtronic/Dexcom G6/Freestyle Libre
 - Uses a bolus calculator on meter/phone app

Name of CYP: _____ Date of Birth _____

Insulin Administration

Insulin can be delivered either by a pen device or insulin pump therapy.

This CYP : Uses a pen device
 Uses an insulin pump

The aim of the insulin pump is to mimic the pancreas as daily insulin requirements vary in each individual. They can either be attached to the wearer by a length of clear tubing (infusion set) or as an adhesive patch pump attached to the skin by a small cannula.

The pump is set to deliver a continuous dose of fast-acting insulin over a 24 hour period (basal rate). The basal rate aims to keep the BG stable when not eating. Extra insulin should be given via the pump or pen when the CYP is eating food and matched to the amount of carbohydrate (CHO) that is eaten (bolus insulin). This is done by pushing buttons on the pump/handset or pen (see additional information). Extra insulin can also be given as a correction dose if BG is above target range.

This CYP : Is independent in administering insulin
 Requires supervision when administering insulin
 Requires a trained member of staff to administer insulin

Name of CYP: _____ Date of Birth _____

Healthy Eating and Carbohydrate Counting

As with all children, the diet should be healthy and balanced, avoiding sugary foods/drinks. Under supervision, the CYP will be carbohydrate counting for all food and drinks. Insulin will be taken according to the number of grams of carbohydrate eaten. Their blood glucose meter/pump is set up with ratios (eg. 1:10g CHO, 1:5 mmol correction), to advise on the dose of insulin and the insulin is delivered through the pump.

The family will have received in-depth education regarding healthy eating and CHO counting from the diabetes team. The CYP with diabetes should be allowed the choice of whether to have packed lunch or school dinners. Staff should be trained in the basics of carbohydrate counting so they can give effective support. The process of CHO counting can be made easier for the CYP by allowing them to utilise technology on their 'smart' phones. If food activities are planned please give parent/carer prior notice in order to plan for this.

This CYP has **packed lunch / school dinners**.

Sporting Activity/Day Trips and Residential Trips

Diabetes does not exclude the CYP from participating in any activities or school trips.

Governing bodies should ensure that risk assessments, planning and arrangements are clear to ensure this CYP has the opportunity to participate in all sporting activities. School should ensure reasonable adjustments as required.

CYP/Staff member should take blood glucose meter and supplies for treatment of hypoglycaemia to all activities. Blood glucose levels should be checked prior to activity. Extra carbohydrate may need to be taken if the blood glucose level is **7 mmols/L or below**.

If the blood glucose is above **14 mmols and ketones** are present, strenuous activity should be avoided.

Name of CYP: _____

Date of Birth _____

Suggested Daily Routine

	<u>Time</u>	<u>Note</u>
Arrive School		
Morning Break		
Lunch		
Afternoon Break		
School Finish		
Other		

Name of CYP: _____ Date of Birth _____

Hypoglycaemia (low blood glucose)

Hypoglycaemia ('Hypo') is best defined as a fall in BG level that exposes the CYP to potential harm. Hypos are the commonest acute complication of type 1 diabetes. BG levels of **below 4.0 mmols/L** require urgent attention.

It is important that all carers can recognise warning signs of hypos and treat the low BG immediately and appropriately. A 'first aid' hypo management kit must always be available. Mild hypos should be treated with oral glucose with the aim to restore the BG level to above 5.5 mmol/L. Severe hypos may result in loss of consciousness and/or a seizure. Members of staff should be trained to administer the GLUCAGON injection in the event of a severe hypo.

The main causes of a hypo are:

- Missed meal or less CHO eaten than expected
- More exercise/activity than planned
- Too much insulin
- Hot weather

Symptoms the CYP may express/show:

<input type="checkbox"/> Change of Character	<input type="checkbox"/> Wobbly/Shaky	<input type="checkbox"/> Pale
<input type="checkbox"/> Glazed eyes/Blurred vision	<input type="checkbox"/> Tiredness	<input type="checkbox"/> Headache
<input type="checkbox"/> Hunger	<input type="checkbox"/> Sweaty	<input type="checkbox"/> Dizziness
<input type="checkbox"/> Tearful/Weepy	<input type="checkbox"/> Stomach ache	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CYP MAY NOT SHOW ANY SIGNS

Supplies to be provided by parents/carer and replenished regularly.

Supplies box should contain glucose and starchy snacks.

Supplies box is stored: _____

Name of CYP: _____

Date of Birth _____

Signs and symptoms of hypoglycaemia (low blood glucose)



Shakiness



Dizziness



Nervousness



Sweating



Hunger



Headache



Pale face



Clumsiness



Confusion



Trouble paying attention



Tingling around the mouth



Fainting

Guide to Hypoglycaemia (Hypo) Treatment in Schools

MAIN CAUSES:

- Missed/delayed meal
- More exercise/activity than planned
- Too much insulin
- Hot weather

SYMPTOMS:

- Change of Character
- Hunger
- Wobbly/Shaky
- Perspiration
- Pallor
- Dizziness
- Glazed eyes/blurred vision
- Tearful/Weepy
- Tiredness
- Stomach ache
- Headache

CYP MAY NOT SHOW ANY SIGNS

TREATING A HYPO

Blood glucose level below 4.0 mmols/L

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

TREATMENT: Check Blood Glucose Level (BGL)

1. If BGL below 4.0 mmols/L to have fast acting carbohydrates (sugar). This CYP will require _____.

Wait 15 minutes then retest BGL

2. If the BGL is still below 4.0 mmols/L repeat step 1 until blood glucose is above 5.5 mmols/L.
3. For some CYP an extra carbohydrate snack (e.g. 1 plain biscuit) may be required especially if the next meal is 1-2 hours away.

Can the CYP eat and drink independently

Yes

No

Is the CYP conscious but needs help to eat and drink

Yes

No

TREATMENT:

CYP will need assistance to treat – give treatment as above
If CYP uncooperative **but conscious** use Glucogel*

IF CONDITION DETERIORATING DIAL 999

Using *Glucogel:

- 1) Twist off Lid
- 2) Place dispenser tip in the mouth
- 3) Direct the gel between the gums and both sides of the cheeks
- 4) Massage cheeks (externally) to aid absorption
- 5) Continue as above when pupil is able to cooperate

Must never be given to unconscious pupils because of the risk of choking



TREATMENT:

- Recovery position**
- Nil by mouth
- Dial 999
- Administer glucagon injection if trained to do so. (0.5 mg [half contents of syringe] if CYP under 8 years old, 1 mg [whole contents of syringe] if over 8 years old).
- Inform parent/carer

****RECOVERY POSITION**



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 and bend the person's far knee.



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



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

Name of CYP: _____

Date of Birth _____

Hyperglycaemia (high blood glucose)

High blood glucose levels are over **14 mmols/L**. The main causes of hyperglycaemia are:

- Missed insulin dose
- Illness
- Extra CHO eaten without insulin
- Stress
- Hormones
- Cannula site issues
- Less activity than normal

If the CYP has higher blood glucose levels they may need to use the toilet more frequently and may feel thirsty, therefore will need easy access to drinking water and a toilet.

If using a pump follow the **ABCC** for high blood glucose levels (page 13).
If using pen injections, give a correction as per bolus adviser meter.

Check for ketones if two consecutive (at least 2 hours apart) blood glucose levels are **more than 14 mmol/L**. If ketones are **0.6** or more **contact parents immediately for further advice**.

If the CYP is well, there is no need for them to be sent home. Parents/carers should be informed at the end of the day that the CYP has had high BGs.

Above 1.5mmol/L	When your blood ketone reading is higher than 1.5mmol/L and your blood glucose reading is higher than 14mmol/L you may be at risk of developing DKA. Contact your healthcare professional for advice.
0.6-1.5mmol/L	When your blood ketone reading is between 0.6-1.5mmol/L and your blood glucose reading is higher than 14mmol/L this may indicate the development of a problem that may require medical assistance. Follow your healthcare professional's instructions.
Below 0.6mmol/L	Readings below 0.6mmol/L are in the normal range.

Illness:

If the pupil is unwell do a blood glucose test and blood **ketone** test. If the blood glucose level is more than **14 mmol/L** and ketones are **0.6** or more, **contact parents immediately for further advice**.

If the CYP starts to vomit and they have a high BG and ketones, urgent medical assistance will be required

Signs and symptoms of hyperglycaemia (high blood glucose)



Going to the bathroom a lot



Extreme thirst



Feeling tired



Feeling weak



Blurred vision



Hungry, even after meal

Hyperglycaemia (High Blood Glucose) management (for insulin pump users only)

If the blood glucose level is above **14 mmol/L**, follow the **ABCC**

Assess

Was a food bolus given within the last 90 minutes?

If so, do nothing and retest blood glucose level again in 1 hour.

If not:



Is the pump running?

Is there insulin in the pump?

Is the infusion line leaking or damaged?

Are there any alerts showing on screen?

Is the needle/ cannula OK?



Bolus

Give a correction dose of insulin, using the bolus wizard



Check

Check blood glucose level 1 hour after this bolus has been given

If blood glucose level is lower than the previous value, no further action is required



Change

If blood glucose level is equal to or higher than the previous value, contact parents immediately and agree further action. The cannula may need to be changed and additional insulin may need to be given via pen injection.

Name of CYP: _____ Date of Birth _____

Where appropriate, the CYP should be encouraged to take responsibility for managing their own medicines and diabetes equipment in school. They should be allowed to carry their equipment with them at all times and their equipment must not be shared.

Supplies to be kept at school:

- Fast acting source of glucose
- Glucogel
- Glucagon
- Spare insulin
- Blood glucose monitor and strips
- Blood ketone monitor and strips
- Finger prick device and lancets
- Insulin pen and needles

Also if using a pump:

- Spare cannula and reservoir
- Spare battery for pump

In accordance with local policy, the provision and disposal of a clinical sharps box will be arranged by the school.

Name of CYP: _____ Date of Birth _____

Signed and agreed:

Parent/Carer and CYP Agreement:

I give permission for trained staff members to carry out the diabetes care as outlined in this health care plan and agree that the medical information contained in this plan may be shared with individuals involved with my child's care (this includes emergency services). I understand that I must notify the school of any changes in writing.

CYP

Signature _____ Date _____

Print Name _____

Parent/Carer

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/carers 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 _____

THIS FORM SHOULD BE KEPT BY THE SCHOOL AND COPIED TO:

- Parent/Carer
- Paediatric Diabetes Team

