

Name:	
Date:	

# INDIVIDUAL HEALTH CARE PLAN FOR A CHILD OR YOUNG PERSON WHO HAS TYPE 1 DIABETES

# **PUMP THERAPY**

Type 1 diabetes is a lifelong condition in which the pancreas produces little or no insulin; Insulin is a hormone needed to allow sugar (glucose) to enter cells to produce energy.

Having Type 1 Diabetes will impact a chid/young person's day at school, this healthcare plan will support you to support them.

Please work with the family of the child/young person to ensure this plan is kept up to date.

## IF CHILD IS UNWELL ALWAYS CONTACT PARENTS FOR ADVICE

# **Contents**

Child/Young Person's Information and Relevant Contact Information Monitoring, Treatment and Support Hypoglycaemia Hyperglycaemia Blood Ketone Monitoring PE, Sport and Swimming Additional Information Outline Page Appendix



# CHILD/YOUNG PERSON'S INFORMATION

Name		D.O.B
Nursery/School/College		Year Group
Address		
Town		
County		
Postcode		
Date of Diagnosis		
Other Medical Conditions		
Allergies		
Date	Document to be updated	



Name:			
Date:			

# **Family Contact Information**

Name	
Relationship	
Telephone Numbers Home Work Mobile	
Name	
Relationship	
Telephone Numbers Home Work Mobile	
Name	
Relationship	
Telephone Numbers Home Work Mobile	

# **Hospital Contacts**

Contacts	Name	Contact Number	Email
Key Worker			
Diabetes Nurse			
Diabetes Dietitian			
Psychologist			
Other			

- Pupils with Diabetes must attend a minimum of 4 clinic appointments per year (occasionally this may increase). These should be recorded as authorised absence and <u>should not affect the child/young person's attendance figures</u> <u>or ability to receive attendance rewards.</u>
- Education authority staff should be released to attend the necessary diabetes training sessions, in accordance with national guidance.



Name:	
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# **MONITORING, TREATMENT AND SUPPORT**

# **MONITORING**

Glucose monitoring is an essential part of the daily management of type 1 diabetes and can be carried out using different pieces of equipment.

## **Target Glucose**

Glucose targets are 4-7 mmol/l pre meal and <8mmol/l two hours after meals.

Glucose monitoring equipment used by the	Please tick as
child/young person	appropriate
Blood Glucose Meter	
A tiny sample of blood from a finger prick is used to check blood	
glucose levels using a testing strip and meter. This procedure	
should be carried out in class or if preferred by the child/young	
person in a clean, private area. Hands must before washed before	
checking and lancets and blood glucose strips should be disposed	
of in a sharps box that will be provided by the parents.	
Continuous Glucose Monitor	
The child/young person wears a sensor which measures	
interstitial glucose (fluid that surrounds the cells just below your	
skin) every 5 minutes and displays current glucose levels, a trend	
arrow on a graph and displays it on a device. The device may	
alarm if the child/young person's glucose is falling below or rising	
above agreed levels. You may need to check the device many	
times every day. There is no need for the child/young person to	
leave the classroom. The child/young person may also need to	
use a blood glucose meter to check high and low glucose	
readings and before eating.	
The child/young person uses a (Insert name of CGM)	
Flash Glucose Sensor	
The child/young person wears a sensor which measures	
interstitial glucose (fluid that surrounds the cells just below your	
skin). When scanned with a device it will show current glucose	
levels and the trend of the last few hours. You may need to scan	
the sensor many times every day and there is no need for the	
child/young person to leave the classroom. The child/young	
person will also need to use a blood glucose meter to check high	
and low glucose readings and before eating.	

Information booklets are available for all monitoring equipment and will be provided by hospital staff upon request.

P	lease no	te tha	t equi	pment	must	not	be st	nared

'When I check my glucose levels, I prefer' ...



Name:		
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# **TREATMENT**

The child/young person has TYPE 1 DIABETES requiring treatment with (Insert name of insulin) using an insulin pump.

Name of pump used by child/young person	Please insert name
Information leaflets are available for each pump upon request.	of pump
If hyperglycaemic (high glucose levels) a correction dose may be	Please indicate ISF
required, this is also known as their insulin sensitivity factor (ISF).	
eg If BG is 15mmols and BG target is 5mmols and the ISF is 1:5	
then 2 units of insulin will be required. (15-5 = 10 divided by 5 =	
2units)	

# **SUPPORT**

The child/young person requires the following support from trained school staff. We advise that 2 members of trained staff should be available at all times and parents should be informed if this is not available on any given day.

Support Required	Please tick as appropriate
<b>Administration</b> - a trained member of staff will be required to carry out some/all of the glucose checks/pump functions/injections	
<b>Supervision</b> - a trained member of staff will be required to supervise the child/young person to carry out their glucose checks/pump functions/insulin injections	
<b>Self-Administration</b> - the child/young person requires no support to carry out their glucose checks/pump functions/insulin injections.	
<b>Hypo Unawareness</b> - the child/young person has impaired hypo awareness and will need additional support to monitor their glucose levels	

## **EQUIPMENT NEEDED FOR MONITORING AND TREATMENT**

The following items are used for monitoring and treatment and must be kept in school at all times.	Please tick relevant equipment
Finger pricking device, blood glucose meter and strips	
Insulin pen and needles	
Ketone testing monitor and strips	
Spare batteries	
Sharps box	
Up to date care plan	
Spare insulin (kept in fridge in a secure room)	
Spare sensor and applicator	



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# **SUGGESTED DAILY ROUTINE**

When considering the monitoring, treatment and support requirements highlighted on the previous pages, the following daily routine is suggested.

Please note that changes to this routine will occur and will be communicated by the child/young person's family.

	Time	Insulin	Guidance (Please indicate whether a glucose check, snack, meal, insulin dose or all are required in the boxes below)
Breakfast Club Check glucose		Please select	
Morning break		Please select	
Lunch Check glucose		Please select	
Afternoon break		Please select	
After School Club		Please select	



Name:		
Date:		

# HYPOGLYCAEMIA Hypoglycaemia is when the glucose levels drop too low <3.9

Student displays hypo symptoms	Yes Sometimes No
Common symptoms	Pale, Dark under eyes, Hungry, Wobbly, Shaky, Glazed eyes, Sweaty, Stomach ache, Dizzy. Change in character/mood, Headache, Grumpy, Irritable, Tearful, Weepy
'When I am hypo, this is how I feel'…	
'My parent/carer will want to know when	``````````````````````````````````````

<u>Do not send child/young person out of class to treat a hypo</u> A hypo box, provided by the family containing fast and slow acting carbohydrates should be kept in a designated area in school, staff and the child/young person should be aware of where it is kept and it should be taken with them if they are leaving the school premises or in the event of a school emergency.

School Hypo Box Contents	Please tick when checked
Fast acting carbohydrates	
Glucose gel	
Long acting carbohydrates	
Copy of up to date care plan	
Glucagon (if required by risk assessment)	



Name:

Date:

# **NEVER GIVE INSULIN IF CHILD/YOUNG PERSON IS HYPOGLYCAEMIC**

# Treatment of Hypoglycaemia HYPOGLYCAEMIA

('Hypo' or Low BG Level)
BG level: 3.9 mmol/l or lower



This is what I like to have to treat my hypo's ...

#### MILD/MODERATE

Child/young person can eat and drink independently and is able to swallow but made need some assistance



1. Check BG level, if 3.9 mmol/l or lower follow steps below

- Give ......grams of fast-acting carbohydrate
   Or...... mls of Lift glucose juice
   Or assist them to administer ... tube of glucose gel
   (Glucose gel is squeezed in small amounts inside the
   mouth and gently massaged into cheeks to aid absorption
   until child/young person is less confused and more alert)
- 3. Check BG level after 15 minutes
- 4. If BG level still 3.9mmol/l repeat steps 2,3
- 5. When above 4mmol/l continue as normal and consider allowing the child/young person to have some long acting carbs
- If the child/young person wants to eat a snack the grams of carbohydrate should be entered into the pump and a bolus given
- 1. Place child/young person in the recovery position
- 2. Do not put anything in their mouth
- 3. Never leave them alone
- 4. Dial 999 then contact parents

If a member of staff is trained, administer **GLUCAGON INJECTION.** 

0.5mg (half dose) 8 years old and under 1mg (full dose) if over 8 years old

- 5. When conscious/awake follow mild or moderate treatment depending on their condition and follow steps as above
- 6. Inform Diabetes Team within 24 hours

## SEVERE

Child/young person is unconscious and unable to swallow.

May lead to "fitting"

If in any doubt treat as SEVERE



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 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:			
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# **Fast Acting Carbohydrates**

# **Long Acting Carbohydrates**

Hypo treatment – approx. 5 grams
1 ½ dextrose tablets
1 lift tab
65 mls Lucozade Original Energy (8.9g carb per 100ml)*
50mls pure apple/orange juice
25mls concentrated original Ribena (can dilute)*
50mls cola *
1 jelly baby
3 jelly beans
Lift juice 1/3 bottle
Lift gel – ½ tube
1 teaspoon sugar

Hypo treatment – approx.10 grams	Long acting carbohydrate – approx. 10	
	grams	
3 dextrose tablets	2 malted milk biscuit	
2 ½ Lift tab	2 rich tea biscuit	
110 mls Lucozade Original Energy (8.9g carb per 100ml)	1 digestive biscuit	
100mls pure apple/orange juice	1 oat biscuit	
50mls concentrated original Ribena (can dilute)*	3 cheddar biscuits	
100mls cola *	1 slice of thin bread/toast	
2 jelly babies	1 small apple	
5 jelly beans	1 extra small banana	
Lift juice 2/3 of bottle	1 packet mini cheddars (multi-pack size)	
Lift gel 1 tube	1 packet crisps (multi-pack size)	
2 teaspoons sugar	2 cream cracker	

GLUTEN FREE Options – approx.10 grams	Hypo treatment – approx.15 grams
1 Free From Digestive biscuit	5 dextrose tablets
1 Mcvities Gluten Free Original Hobnobs	4 Lift tab
2-3 Free From Plain Crackers	170 mls Lucozade Original Energy (8.9g carb per 100ml)
1 small apple	150mls apple/orange juice
1 extra small banana	75mls concentrated original Ribena (can dilute)*
1 gluten free packet crisps (multi-pack size)	150mls cola *
	3 jelly babies
	8 jelly beans
	Lift juice 1 bottle
	Lift gel 1 ½ tubes
	3 teaspoons sugar

<sup>\*</sup> The formula of many sugary drinks has been changed recently to reduce the sugar content. Old formula bottles may still be available. All those using sugary drinks including Lucozade must be vigilant and check sugar content in bottle before use as a hypo treatment.



Name:		
Date:		

## **TEMPORARY BASAL RATES (TBR)**

The background insulin rate can be overridden by programming a temporary basal rate (TBR) on the pump. This is a way to temporarily adjust the background insulin by either decreasing or increasing the amount of basal insulin.

An increased TBR may be required for a period when the glucose levels are running above target, such as during illness.

A decrease TBR may be required for a period when the glucose levels are running below target, such as during hot weather.

A decrease TBR is also an effective method of managing exercise and its impact on the blood glucose levels.

A TBR should be set at least 30 minutes before (but may be required 60-90 minutes before) the change in insulin delivery is required. This will be advised by parents or the diabetes team.

Has the school agreed to set temporary basal rates	□_Yes □_No
Times to set a temporary basal rate  (Example - 60 minutes before exercise at 50% for 2 hours)	minutes before exercise at for hours  During exercise at for hours  After exercise at for hours  After discussion with parents or diabetes team at for hours  Additional space for examples



Name:		
Date:		

#### **GLUCAGON RISK ASSESSMENT**

# RISK ASSESSMENT FOR THE AVAILABLITY AND TRAINING OF GLUCAGON WITHIN NURSERY/SCHOOL/COLLEGE

Assessors Name	
Date of Risk Assessment	
Name of Educational Establishment	

#### **Severe Hypoglycaemia Definition**

Severe hypoglycaemia is defined as an event associated with severe cognitive impairment (including coma and convulsions) requiring external assistance by another person to actively administer carbohydrates, glucagon, or take other corrective actions (ISPAD 2018).

#### **GREEN** – THERE IS LOWER RISK OF A SEVERE HYPO.

SCHOOL STAFF CAN BE OFFERED TRAINING BUT NOT CONSIDERED MANDATORY

# Lower risk of prolonged severe hypoglycaemic episodes in children and young people who:

- Wear a continuous glucose sensor with low alert/alarms/low glucose suspend.
- Attend an establishment less than 20 miles from the nearest ambulance station.
- o Are over the age of 6 years and have hypo awareness.
- Have no history of severe hypo.

#### **RED** – THERE IS HIGHER RISK OF A SEVERE HYPO.

TRAINING RECOMMENDED

# Higher risk of prolonged severe hypoglycaemic episodes in children and young people who:

- Have impaired hypo awareness and do not wear a continuous glucose sensor with low alert and alarms
- Have suffered a severe hypo within the last 24 months.
- Have recurrent prolonged hypos.
- Attend an establishment further than 20 miles from the nearest ambulance station.
- Are under the age of 6 (ISPAD 2018).
- Also suffer from adrenal failure.

Risk Agreed	Green □	Red □
Review Date		



Name:		
Date:		

### **HYPERGLYCAEMIA**

Children/young people who have diabetes may experience hyperglycaemia (high glucose levels). This is when the BG level is above the normal range of 4 - 7mmol/l pre-meal or >8 two hours after meal.

If this occurs at meal times follow suggested daily routine, otherwise see

Student displays	☐Yes ☐ Sometimes ☐No
hyper symptoms	
Common symptoms	Increased thirst, passing urine more frequently, headache, tiredness, abdominal pain, bad/short tempered, lack of concentration, hyper-active, nausea, vomiting
'When I am hyper, this is how I feel'	
'My parents will want to know when'	

**BG** level 8-13.9mmol/l



- 1. Give sugar free fluids and allow access to the toilet
- 2. Check the infusion set line for air bubbles and that the cannula/pod is still attached to the body – if detached contact parents immediately
- 3. Give a correction dose as advised by the pump or by injection if pump has detached (discuss with parents before administering injection)
- Re-check BG level at next meal
- 5. If still 8 -13.9mmol/l repeat steps 2,3
- 6. If 13mmol/l or higher see box below
- 7. Inform parents at end of the school day or document in communication book (if used)

**BG** level 14mmol/l or above & well



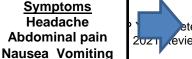
1. Give sugar free fluids and allow access to the toilet

- 2. Check the infusion set line for air bubbles and that the cannula/pod is still attached to the body - if detached contact parents
- 3. Give a correction dose as advised by the pump or by injection if pump has detached
- Re check BG level after 1 hour
- 5. If BG level 13.9mmol/l or lower see box above
- 6. If BG level has reduced but still 13.9mmol/l or higher repeat steps 3,4,5,6
- 7. If BG level has not reduced or is higher contact parents for advice, an injection may be needed

**BG** level 14mmol/l or above & unwell for example;



- **Symptoms** Headache Abdominal pain



Contact parents for

advice and if

unavailable contact

the diabetes team

- 1. Give sugar free fluids and allow access to the toilet.
- 2. If blood ketone meter available check for ketones and follow advice according to level (see ketone table on next page)
- 3. Contact the parents immediately to discuss correction dose by injection and ask to collect child
- 4. Inform Diabetes Team

If symptoms worsening such as drowsiness/vomiting/ heavy breathing/blood glucose level rising - Dial 999



Name:		
Date:		

# **Blood Ketone Monitoring**

Please be aware that a child can become unwell and have ketones even with an in-range blood glucose reading, always consider checking ketones or contact parents.

Blood Ketone	You only need to check if it has been 90		
monitoring	minutes since last insulin bolus.		
Times to test for	When student has a blood glucose level that is 14 mmols/L or above		
ketones	If vomiting and/or complaining of abdominal pain		
Can student perform own blood ketone checks?	☐ Yes ☐ Yes, with support ☐ No		

Ketone level	Guidance
LO to 0.5 mmol/l	Readings LO to 0.5 are in the normal range.
0.6 to 1.5 mmol/l	Readings between 0.6 and 1.5 indicates a developing problem. Contact parents or diabetes team for advice.
1.6 mmol/l and above	Readings 1.6 and above indicates a more acute problem. Contact parents or diabetes team for advice immediately.



Name:		
Date:		

# PE AND SPORTS

Below are details that will support a child/young person in participating in low-level exercise as part of a PE lesson. Any additional/individualised support that could be required for higher level sport/exercise can be found on the rear of the outline page within this care plan. <u>Consider activity mode on the device.</u>

#### **Before Exercise**

- Check BG or sensor glucose level prior to starting any physical activity and consider additional snack or a temporary basal (as guided by parent/carer)
- Remove pump (not if pump is an Omnipod) if participating in contact sports

Glucose	Action
If under 4 mmol/l	Follow hypoglycaemia treatment
4-7 mmol/l	Child/young person should eat chosen snack containing 10- 15 grams carbohydrate without a bolus of insulin
7.1-13.9 mmol/	No action needed
Above 14mmol/l	Check ketones. If <0.6 can exercise without an extra snack.
	If >0.6 ring parents for further advice (not advisable to participate in PE)

#### **During Exercise**

- Ensure a hypoglycaemia treatment, BG meter and chosen snack are with teacher or in safe place close by.

#### **After Exercise**

- Check glucose level and take action according to care plan if hypo or hyper.

#### **SWIMMING**

- If wearing a CGM sensor or transmitter on the skin, do not remove as they are fully waterproof and should continue to be worn in the pool.
- Inform the lifeguard which child/young person has diabetes
- Ensure hypoglycaemia treatment and BG meter are at the poolside
- Inform the child/young person to make their way to the side of the pool and/or put their hand up if they have symptoms of hypoglycaemia while in the pool
- Ensure the lifeguard is aware that the child/young person will do this



Name:		
Date:		

# **ADDITIONAL INFORMATION**

- School to be kept informed of any changes by parents and/or the diabetes team involved in this child/young person's management.
- The child/young person with diabetes should wear identification stating they have diabetes. These are in the form of a bracelet, necklace, watch or medical alert card.

Please use the box below for any additional information for this child/young person				



Name:		
Date:		

I give permission to the school staff, trained diabetes personnel and other designated staff members to perform and carry out the diabetes care tasks as outlined by this **DIABETES INDIVIDUAL HEALTH CARE PLAN**.

I also consent to the release of the information contained in this **DIABETES INDIVIDUAL HEALTH CARE PLAN** to all staff members and other adults who have custodial care of my child and who may need to know this information to maintain my child's health and safety. A copy of this plan will be kept by the parents, school and Children's diabetes team.

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riomio mioagoa ama roosiroa by.	
Young person's Parent/Guardian	Date
School staff	Date
THIS DIABETES INDIVIDUAL HEALTH (	CARE PLAN HAS BEEN APPROVED BY:
Young person's Diabetes Nurse Specialist	Date



Name:		
Date:		

# TYPE 1 DIABETES SCHOOL CARE PLAN SUMMARY PAGE

MUST BE USED ALONGSIDE
AN INDIVIDUAL HEALTH CARE PLAN FOR A CHILD OR YOUNG
PERSON WHO HAS TYPE 1 DIABETES

		_
	INSULIN REGIM	E
Insulin		
Pump/Injections		
	GLUCOSE CHE	CKING
Glucose Monitoring Device		
Timing of checks		
Expected Levels		
HYPO (3.9 and I	pelow)	HYPER (8.0 and above)
DO NOT GIVE INSUL	_	Individualised Symptoms
Individualised Action		Individualised Action
SEVERE HYPO Call 999 and then parent.		PROLONGED HYPER Contact parent if blood glucose readings do not lower after 3 hours.
<b>EMERGENCY CONT</b>	ACTS:	
Name/Relation		Contact Number



Name:		
Date:		

# **APPENDIX**

**Pastoral support** 

How to give an injection using a covered safety needle

How to give an injection using an exposed needle

Safety needle agreement

**Carbohydrate counting** 

**Residential trips** 

**Exams** 

**CGMS** - Direction arrows, alarms and alerts, trends and accuracy

Freestyle Libre - Direction arrows, trends and accuracy

**Data Sharing** 

What to do if expert meter not available

Responsibility for supplies

School staff training

Extra space for advanced exercise information

Links to relevant resources



Name:			
Date:			

# PASTORAL SUPPORT

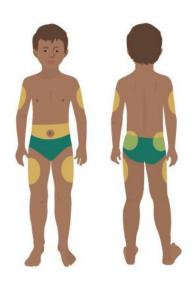
ABSENCES	Children and young people with T1D rarely have excessive absences from school. Families are required to attend outpatient hospital appointment every 3 months as authorised absences. It is unacceptable to penalise young people for their attendance record if their absences are related to their medical condition.
EXAMS	T1D affects cognitive ability and concentration; DFE guidance and JCQ Regulations recommends reasonable adjustments, such as extra time to complete examinations to ensure students are not disadvantaged due to their medical condition. Please ask your Nurse for supporting paperwork
SOCIAL DEVELOPMENT	Governing bodies should ensure that arrangements are clear and unambiguous in relation to school staff actively supporting young people with medical conditions to participate in trips, visits, sporting activities and residential holiday.
Clubs and Trips	Schools should consider what reasonable adjustments they might make to enable children with medical needs to participate fully and safely on visits. It is best practice to carry out a risk assessment so that planning arrangements take account of any steps needed to ensure that pupils with medical conditions are included. This will require consultation with parents and pupils and advice from the relevant healthcare professional to ensure that pupils can participate safely (DFE, 2014).
EMOTIONAL DEVELOPMENT	Young people with medical conditions must not only deal with the usual developmental issues of growing up but also with learning to manage a chronic disease. The care tasks young people have to do to manage their medical conditions can set them apart from their peers, may make them feel different to their peers, and may make them feel resentful of their condition.  The stress and frustration of having a long term condition, and in some cases the condition itself, can cause behaviour changes. Any behavioural issues should be discussed with the young person, their family and, if needed, their healthcare professional. Support in the educational environment should be offered to the young person to help them understand the changes in behaviour they experience;  To manage these changes & to communicate effectively in these situations.  If young people do not have the holistic support they need to manage their medical condition, their education, social and emotional development are at risk.
What I find difficult about my condition'	
'How school carers can help me'	
'Who I want to know about my condition'	
'What I want them to know about my condition'	



Name:	
Date:	

# HOW TO GIVE AN INSULIN INJECTION USING A SAFETY NEEDLE

- 1. Check you have the correct insulin and that it is intact, clear and in date.
- 2. Remove paper top from safety needle, screw onto the pen device, remove outer cap. Dial-up 2 units.
- 3. Hold the pen device with the needle uppermost and push the "plunger" to expel some insulin. This is called an "air shot". If you don't see insulin at the needle tip, repeat step 3 and 4.
- 4. Dial up the required dose of insulin check numbers in the window and audible clicks.
- 5. Ask child/young person to choose injection site, ensure he/she is comfortable. Injections MUST NOT be given through clothing.
- 6. Hold the pen device securely ensuring that your thumb can reach the plunger.
- 7. Insert the needle straight into the skin in one continuous motion until the clear outer shield retracts and the white sleeve is flush with the skin.
- 8. Push the plunger until whole dose is given i.e. there is a 0 in the window.
- 9. Count to 10 slowly.
- 10. Lift the pen away from the skin. The inner shield will automatically deploy and lock in place.
- 11. Unscrew the needle to remove; both ends of the needle are covered so there is no risk of needle injury.
- 12. Dispose of the needle into a yellow sharps box. Do not lock the box until full.
- 13. Insulin in use should be stored at room temperature and is stable for 1 month.
- 14. Any spare insulin cartridges (not in use) must be kept in a locked fridge/not accessible to children. They have an expiry date on the side of each cartridge.
- 15. Click <u>here</u> to view a video guide

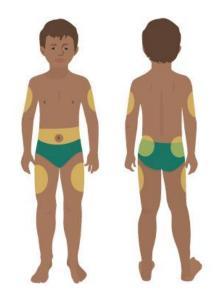


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York		ork
Shire & H	umber Dia	betes Net

Name:	
Date:	

# **HOW TO GIVE AN INSULIN INJECTION USING AN EXPOSED NEEDLE**

- 1. Check you have the correct insulin and that it is intact, clear and in date.
- 2. Remove paper top from needle, screw needle onto the pen device and remove both outer caps. Dial-up 2 units.
- 3. Hold the pen device with the needle uppermost and push the "plunger" to expel some insulin. This is called an "air shot". If you don't see insulin at the needle tip, repeat step 3 and 4.
- 4. Dial up the required dose of insulin check numbers in the window and audible clicks.
- 5. Agree an injection site, ensure he/she is comfortable. Injections MUST NOT be given through clothing.
- 6. Hold the pen device securely ensuring that your thumb can reach the plunger.
- 7. Insert the needle straight into the skin in one continuous motion ensuring the full length of the needle is inserted.
- 8. Push the plunger until whole dose is given i.e. there is a 0 in the window.
- 9. Count to 10 slowly.
- 10. Remove the needle from the child/young person skin.
- 11. Ask the child to take the needle off the pen if they are able to. If the child/young person is not able to remove the needle staff MUST use a needle remover/clipper to avoid handling the used needle.
- 12. Dispose of the needle into a yellow sharps box. Do not lock the box until full.
- 13. Insulin being used should be stored at room temperature and is stable for 1 month.
- 14. Any spare insulin cartridges (not in use) must be kept in a locked fridge/not accessible to children. Each cartridge has an expiry date on the side.





Name:		
Date:		

# **SAFETY NEEDLE PRO-FORMA**

# **Add Trust logo and address**

Add school name and address

## **Add date**

The Children and Young People's Diabetes Team follow the Health and Safety (Sharp Instruments in Healthcare) Regulations 2013 which states staff should use safety needles when administering insulin to reduce the risk of sharps injuries and the associated risks of infection from blood-borne viruses.

Links to the relevant guidance can be found at www.HSE.gov.uk/healthservices/index.htm.

We recommend you follow this advice.

Staff Member 1	
instead of safety needles when add	agree to the use of standard needles ministering insulin within school and I understand ildren and Young People's Diabetes Team.
Signature	Date
Staff Member 2	
instead of safety needles when adr	agree to the use of standard needles ministering insulin within school and I understand ildren and Young People's Diabetes Team.
Signature	Date
Staff Member 3	
instead of safety needles when adr	agree to the use of standard needles ministering insulin within school and I understand ildren and Young People's Diabetes Team.
Signature	 Date
Signature Parent/Carer of Child/Yo	oung Person



Name:		
Date:		

#### **CARBOHYDRATE COUNTING**

If a child/young person is required to carbohydrate count in order to have an injection of insulin at school they will need to know certain amounts of information from the school. It is often necessary for a member of staff to learn the basics of carbohydrate counting too, so they can support the child/young person.

#### What this means.

The diabetes dietitian will already be involved with the child/young person and be teaching them and their family how to count carbohydrates at each meal. Each time the child/young person eats more than a small carbohydrate containing snack they may need an injection of insulin. Sometimes the child/young person will be comfortable doing this themselves however, often we will ask a teacher or lunchtime supervisor to do or oversee the calculating of the carbohydrate and give the insulin.

The diabetes nurses and dietitians will work with the schools to come up with a plan to put in place around meals times at the child/young person's school.

#### What is needed?

If the child/young person has school dinners, the dietitian will need to liaise with the school teacher, cook and council/school meal provider to ascertain menus and nutritional analysis which may have already been completed.

If the child/young person has packed lunches, the parents will include a list of the carbohydrate content of the different foods in the lunch.

A meeting with a Dietitian may be arranged, for two reasons:

- 1. For the dietitian to meet and train relevant members of staff in carbohydrate counting.
- 2. To discuss menus, recipes and meal provision with the cook, only if the child/young person has school meals.

#### What else is required?

Other things that might help are

- · accurate/electronic weighing scales
- current recipes being used by the kitchen
- a 'carbs and cals' book (Carbs and Cals by Chris Cheyette and Yello Balolia, Chello Publishing Ltd, ISBN no: 978-0-9564430-0-7).

There are a lot of schools doing this now and we as a diabetes team are very experienced in working out the best systems to use, that work for the child/young person and the school, and we will be happy to discuss this at length with you.



Name:		
Date:		

There should be a meeting with the child/young person and their family before any residential trip

## **RESIDENTIAL TRIPS**

Please ensure the family have informed their diabetes team of the trip

This School Care Plan MUST be taken and followed on the trip

#### Points for discussion

#### **Equipment**

- Spares of everything
- Spare pump, cannulas/sets/pods, spare batteries for pump
- Written record of pump settings
- Blood glucose meter and strips
- Blood ketone meter and strips
- Injection pens, needles, insulin
- Sharps box, needle remover/clipper
- Finger pricking device, lancets and finger wipes
- Hypo box
- Meter charger or spare batteries
- Carbs and Cals book/app

#### **Medication**

- Different insulin types/injection timings
- Injection technique training required if not previously done for school
- Insulin storage insulin cooling wallet, fridge
- Doses consider reduction or increase depending on activity levels (as advised by parent/carer)
- Supervision
- Glucagon staff training

#### **Dietary requirements**

 Consider extra snacks, sugar free juice available, special dietary requirements e.g. coeliac/nut allergy

#### **Glucose checking**

- More checking and snacks required for high intensity or prolonged activities
- Extra checking before and after activities, pre-meal, before bed, during the night

#### **Travel**

- Flying customs letter, airport scanners, all medication in hand luggage, extra food available, alternative hypo treatment, time-zones, language barriers.
- Skiing Consider the temperature, make sure equipment doesn't get too cold, good fitting ski boots, layers of clothing to keep body warm, larger reductions to doses
- Temperature be aware that extreme cold/heat can affect BG and insulin absorption

#### **Overnight safety**

- Substantial supper containing long acting carbohydrate, hypo treatment near bed
- Sleep on bottom bunk, room-mates aware of needs, staff in room close by
- Consider nightly phone call to parents for advice
- · Overnight testing may be required

#### <u>Iliness</u>

Correction doses, contact parents, check ketones

Network CYP YH Diabetes Network Agreed Individualised School Care Plan Version 2 Agreed: April 2021 Review: April 2022



Name:		
Date:		

### **EXAMS**

# <u>Under equality laws across the UK, every school has to make reasonable adjustments to help any child who might have a disability, which includes Type 1 diabetes.</u>

Although parents and children might not consider diabetes as a disability, they are still covered under these equality laws. In the England, Scotland and Wales these laws come under the Equality Act 2010 and in Northern Ireland they come under the Disability Discrimination Act 1995.

# Who is responsible for making reasonable adjustments?

The responsibility for making reasonable adjustments depends on the type of exam that a child is taking.

Some adjustments will be the school's responsibility, and some will be the Joint Council for Qualifications, or the JCQ, responsibility.

The JCQ is the organisation most of the national awarding bodies that offer qualifications in the UK. If the reasonable adjustments are the responsibility of the JCQ, it's important that these are made ahead of time.

### What type of reasonable adjustments are there?

The two main types of help which might be available for a child with diabetes are **access** arrangements and **special considerations**.

# **Examples of access arrangements**

- Being allowed to take drinks and snacks into an exam to prevent or treat a hypo or hyper.
- Being allowed to bring in their glucose monitor and insulin treatment into an exam.
- Taking a supervised rest break to treat a hypo or hyper. Supervised rest breaks are
  where the clock is paused while a student treats themselves. The clock restarts when
  they've recovered.

#### Special considerations

Getting special considerations can be difficult because there must be evidence showing what happened, for example, a record of the child's glucose levels.

Students with Type 1 diabetes might be able to apply for special considerations if their glucose has been low or high and it has affected their performance in an exam. It is a good idea for the glucose level to be recorded on the exam sheet along with time and invigilator signature

To find out more about helping a child with Type 1 diabetes prepare for their exams, download the Diabetes UK Type 1 diabetes and exams resource.

https://www.diabetes.org.uk/guide-to-diabetes/your-child-and-diabetes/schools/school-staff/exams



Name:		
Date:		

# **DIRECTION ARROWS**

# **MEDTRONIC**

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

# **ALARMS AND ALERTS**

## **Medtronic CGM Alarms**

ANY SUSPECTED HIGH OR LOW SENSOR GLUCOSE SHOULD BE CHECKED WITH A FINGER PRICK BG BEFORE ANY ACTION IS TAKEN.

It is helpful to write the sensor glucose recording and any finger prick blood glucose level in the home/school communication book.

Medtronic CGM alarm and alert settings that have been individually agreed are -

Alarm Type	Please indicate if set
High glucose alert	
Low Glucose alert	
Low glucose alarm	



Name:		
Date:		

# **DEXCOM G6**

Trend Arrow	Trend Arrow	What this means
Арр	G6 Receiver	
$\bigcirc$	1	Glucose is steady. Not increasing/ decreasing more than 0.06mmo/L per minute or up to 0.9mmol/L in 15 minutes.
0	×	Glucose is slowly falling 0.06 - 0.1 mmol/L each minute or up to 1.7mmol/L in 15 minutes.
$\bigcirc$	<b>↓</b>	Glucose is falling 0.1 - 0.2mmol/L each minute or up to 2.5mmol/L in 15 minutes.
$\bigcirc$	11	Glucose is rapidly falling more than 0.2mmol/L each minute or more than 2.5mmol/L in 15 minutes.
	7	Glucose slowly rising 0.0 6 - 0.1 mmol/L each minute or up to 1.7mmol/L in 15 minutes.
	1	Glucose rising 0.1 - 0.2mmol/L each minute or up to 2.5mmol/L in 15 minutes.
	11	Glucose rapidly rising more than 0.2mmol/L each minute or more than 2.5mmol/L in 15 minutes.

# **ALARMS AND ALERTS**

# **Dexcom CGM Alarms**

ANY SUSPECTED HIGH OR LOW SENSOR GLUCOSE SHOULD BE CHECKED WITH A FINGER PRICK BG BEFORE ANY ACTION IS TAKEN.

It is helpful to write the sensor glucose recording and any finger prick blood glucose level in the home/school communication book.

Dexcom CGM alarm and alert settings that have been individually agreed are -

Alarm Type	Please indicate if set
High glucose alert	
Low Glucose alert	
Low glucose alarm	
Alert before low	
3.1 urgent low alarm is pre-set and cannot be turned off	



Name:		
Date:		

# FREESTYLE LIBRE FLASH GLUCOSE MONITOR

Freestyle Libre 1 (no alarms)	What this means
Trend Arrows	
1	Glucose is rising quickly - 1.0 - 1.5mmol/L in 10-15 mins
7	Glucose is rising - 0.6 - 0.9mmol/L in 10-15 mins
<b>→</b>	Glucose is changing slowly - Stable
2	Glucose is falling - 0.6 - 0.9mmol/L in 10-15 mins
1	Glucose is falling quickly - 1.0 - 1.5mmol/L in 10-15 mins
	The Glucose trend arrow may not always appear with your reading

Freestyle Libre 2 (with alarms)	What this means
Trend Arrows	
	Glucose is rising quickly (more than 0.1 mmol/L per minute or more than 3.0 mmol/L in 30 minutes)
	<b>Glucose is rising</b> (between 0.06 and 0.1 mmol/L per minute or between 2.0 mmol/L and 3.0 mmol/Lin 30 minutes)
	Glucose is changing slowly (less than 0.06 mmol/L per minute or less than 2.0 mmol/L in 30 minutes)
	<b>Glucose is falling</b> (between 0.06 and 0.1 mmol/L per minute or between 2.0 mmol/L and 3.0 mmol/L in 30 minutes)
	Glucose is falling quickly (more than 0.1 mmol/L per minute or more than 3.0 mmol/L in 30 minutes)

Alert settings that have been individually agreed are:

Alarm Type	Please indicate if set
High glucose alert	
Low Glucose alert	
Low glucose alarm	



Name:	
Date:	

## **FAILED PUMP ALARMS**

## DO NOT DO ANYTHING WITH THE INSULIN PUMP THAT IS NOT WRITTEN IN THIS PLAN.

In the case of a pump failure, the interruption of insulin delivery or no insulin delivery the pump will alarm, follow these instruction -

- 1. e.g. low battery, empty reservoir, no insulin delivery
- 2. Check glucose and ketones, and identify when the child last had food and insulin.
- 3. Contact parents immediately for advice, with the above information.
- 4. If unable to contact parents, contact the diabetes team stating your call is urgent.



Name:		
Date:		

# **CamAPS FX**

# **Sensor Glucose Trend and Range**

The sensor glucose trend and range indicator is represented by a large coloured circle at the top right corner of the main section of the home screen.

The background colour of the circle indicates sensor glucose status: Above high glucose alert level (yellow)
Below low glucose alert level (red)
Within target range (grey)

The white arrow inside the circle shows the speed and direction of the glucose trend based on recent readings. A double arrow head indicates a rapid glucose rise or fall. Please see here for the full care plan.





Name:		
Date:		

# **Data Sharing**

Students who use any of the above devices have the option to pair their smart device with the medical device. This allows the student to receive glucose data on their device via Bluetooth. In addition to this convenience, this gives the student the ability to share their glucose data with up to 5 followers (different on each individual medical device), this might include the school nurse, parent, sibling, friend or guardian.

The student's data is shared via the app on a smartphone or tablet using a wireless network or cellular data. Students using the data sharing feature on their medical device may request access to the school's wireless network to enable this feature while avoiding smart device data charges.

The utility and need for remote monitoring should be individualised for each student based upon age and unique needs. Remote monitoring of medical device data in the school setting by staff is usually not required as the child is supervised by trained staff and device alarms are used in cases to identify glucose levels requiring action. However, in certain cases (preschool age, non-verbal, impaired cognition) closer monitoring, including remote monitoring (by the parent/carer) may be appropriate. The school staff, family and children's diabetes team should discuss each students needs and to determine whether remote monitoring is necessary.

# Parent/guardian considerations:

 Please discuss data sharing with your designated school team members prior to the start of school. Information from your child's school care plan will serve as a guide during this discussion as it includes a guide for your child's diabetes management at school.

(American Diabetes Association, Safe at School, Guidelines for the use of Continuous Glucose Monitors (CGM) and Other Sensors in the School Setting)



Name:			
Date:			

## WHAT TO DO IF EXPERT METER IS NOT AVAILABLE

If child/young person is using an expert meter, the handset is programmed with the child/young person's personalised settings; when required, these will be changed at home or in clinic. There will be a bolus calculator available within the pump.

Below is a guide to the settings which may be needed to calculate insulin doses if the expert meter is not available or has broken.

# <u>Insulin to carbohydrate ratio (ICR):</u>

06:00 - 09:00	1 unit of insulin pergrams of
	carbohydrate.
09:00 - 11:00	1 unit of insulin pergrams of
	carbohydrate.
11:00 - 14:00	1 unit of insulin pergrams of
	carbohydrate.
14:00 - 16:00	1 unit of insulin pergrams of
	carbohydrate.
16:00 - 20:00	1 unit of insulin pergrams of
	carbohydrate.

# When to give insulin for carbohydrate and to correct a raised BG level:

	- 10 giro mount for carbony and all to correct a rance a 20 for on
	Lunch: Carbohydrate Counted lunch plus correction dose when blood glucose
	level is >mmol/L and it is 2 hours since last dose.
	Snack: Carbohydrate Counting plus correction dose when blood glucose level
	is >mmol/L and it is 2 hours since last dose.
•	Correction dose only: For blood glucose >mmol/L and 2 hours since
	last dose.



Name:		
Date:		

# **CARBOHYDRATE RATIO AND CORRECTION TABLE**

## **Carbohydrate Ratio Table**

's packed lunch will have the insulin doses calculated each day. This is an example of insulin doses required.	Current lunch ratio() Current date:
g CHO in lunch	units
g CHO	units
g CHO	units
g CHO	units

# NB: Do not give a correction dose more than 2 hourly

Remember to check for ketones if BG is over 14.0mmols and if ketones >0.6mmol/L call parent/carer or the diabetes team for further advice as a higher correction dose may be needed.

## **Correction Table**

Current Glucose Value	Insulin dose for food 1 unit perg of Carbs	Correction dose (1 unit to reduce glucose by)	Correction dose (Use if required)	Correction dose(Use if required)
4.0 - 7.0mmols	Insulin for food only			
7.1 - 13.0mmols	Insulin for food +	unit correction		
13.1 - 17.0mmols	Insulin for food +	unit correction		
17.1 - 21.0mmols	Insulin for food +	unit correction		
21.1mmols or higher	Insulin for food +	units correction		

# If you use the above table please check with the family to ensure that it is up to date.

<u>Date</u>	<u>Profession</u>	Signed	



Name:			
Date:			

# **RESPONSIBILITY FOR SUPPLIES**

Responsibilities List						
Item	Parents	School	Child/young person (when deemed competent)	Paediatric diabetes specialist nurse		
Individualised care plan	and the Paediatric Diabetes Specialist Nurse (PDSN) to complete a medical management plan.  Where volunteers are being trained to supervise or perform any diabetes tasks the parent or carer will sign the plan to show that they have agreed to this arrangement.  The extent of a child or	being able to obtain the child's individual plan in the school setting and know how to assist them when necessary.  The extent of a child or young person's ability to participate in their own diabetes care should be risk assessed and agreed upon by senior school staff.	Children and young people should be allowed, as much as possible, to manage their own diabetes at school, to the extent that is appropriate for their developmental stage and his or her experience with diabetes.  The child's capabilities and willingness to provide self-care should be acknowledged in their plan.	The extent of a child or young person's ability to participate in their own diabetes care should be risk assessed and agreed upon by the Paediatric Diabetes Specialist Nurse (PDSN).		
Emergency supply box		To make accessible to child/young person/staff To make parents aware when supplies are low  Safe storage of diabetes containers (containing, if necessary, insulin injection devices as well as hypoglycaemic treatment) is established, together with the safe disposal of used needles / "sharps"	when supplies are low	To provide training as to the appropriate use of emergency supplies.		
Insulin injection and pump supplies		Provision of fridge space for spare supplies of insulin	To make parents aware when supplies are low			



Name:	
Date:	

Blood glucose	strips and quality control (QC) solutions	Provide correct storage of supplies where necessary and request for extra supplies or training when required	To make parents aware when supplies are low	To provide training in order to initiate blood glucose testing as per local guidelines
Sharps disposal	ICIAIAL IO IOCAL DOUCVI	To make parents aware when sharps bin is two-thirds full	To make parents aware when sharps bin is two-thirds full	To provide parents with information about local policy
Extra food	snacks and exercise as	To make parents aware if running out of food for snacks and exercise. To give permission for CYP to eat whenever required.	To make parents aware when more food supplies are required	To provide parents / CYP with recommendations regarding when to have additional carbohydrate
assessment		To initiate and complete risk assessment documentation	To participate in risk assessment where possible	To provide specialist information as required



Name:	
Date:	

# **SCHOOL STAFF TRAINING**

The parents/carers have received training in managing their child's diabetes and are competent and able to teach others to care for their child in the parents/carers absence. Ongoing training can be provided by parents. The staff that are named below have been trained in the following areas and are competent to manage the NAMED child's diabetes care. Staff from the educational settings are expected to attend relevant training sessions and refreshers provided by the CYP diabetes team and/or parents

CYP Name: <u>Training</u>	Example Joe Bloggs 02.04.17					
What is Diabetes	х					
Blood Glucose Monitoring	Х					
Ketone Monitoring	х					
Hypoglycaemia	х					
Hyperglycaemia	х					
Insulin Administration (Injections)						
nsulin Administration (Pumps)						
CGM/Flash						
Pump Alarms						
Bolus Advice (Expert Meter)						
P.E	Х					
Glucagon	N/A					
Awareness of carbohydrate counting						

I confirm the above named CYP has been prescribed INSULIN for the treatment of DIABETES (insulin dependant) to be administered/supervised by trained volunteers. The volunteers will be trained by the CDNS.

CYP Diabetes	Team: Name (Print)	Designation:	
Signed		Date	



Name:	
Date:	

# TYPE 1 DIABETES SCHOOL CARE PLAN ADVANCED EXERCISE INFORMATION

MUST BE USED ALONGSIDE
THE INDIVIDUAL HEALTH CARE PLAN FOR A CHILD OR YOUNG
PERSON WHO HAS TYPE 1 DIABETES

Please use this page to describe any advanced requirements for sports and exercise for any child or young person who is competing in high level sports within a school setting.



Name:		
Date:		

### **LINKS TO RELEVANT RESOURCES**

Glucagen Hypokit Training Video https://www.digibete.org/essentials/

DigiBete - a place to help children, young people, their families and carers manage type 1 diabetes

www.digibete.org

School Specific Videos on DigiBete can be found here

KS1&2: <a href="https://www.digibete.org/schools-teachers/key-stage-1-2/">https://www.digibete.org/schools-teachers/key-stage-1-2/</a> <a href="https://www.digibete.org/schools-teachers/key-stage-3-4/">https://www.digibete.org/schools-teachers/key-stage-1-2/</a>

### **JDRF**

E-learning module - basic and advanced level

https://jdrf.org.uk/for-professionals/school-pack/schools-e-learning-module/

Recommend all staff complete basic level.

Staff who are performing BG tests and giving insulin, via pump or injections, need to complete advanced level.

#### **JDRF**

Information Packs and Leaflets

https://jdrf.org.uk/living-with-type-1/information-packs-and-leaflets/

Diabetes UK

Diabetes in Schools Resources

https://www.diabetes.org.uk/Guide-to-diabetes/Schools/Diabetes-in-schools-resources/

Diabetes UK

Diabetes and Exams

https://www.diabetes.org.uk/guide-to-diabetes/teens/me-and-my-diabetes/school-and-college/exams

Department of Education

Supporting Pupils at School with Medical Conditions

https://www.gov.uk/government/publications/supporting-pupils-at-school-with-medical-conditions--3

With Thanks to The Children and Young People's Diabetes Networks in the NE and N Cumbria and the South West for providing the template for this plan. University College London Hospitals and to members of The Children and Young People's Y&H Diabetes Network Schools Working Group and local families and patients for their input.





