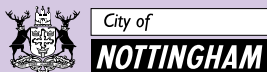




# Supporting the Administration of Insulin in Schools



Nottinghamshire  
County Council



# Pupils with diabetes in schools

## General guidelines for staff

*Our vision is to ensure the best possible provision for children and young people in Nottinghamshire, through the services we manage in our division. We will work with children and young people to keep them safe, help them reach their full potential and to have fun. We will work with schools, parents, communities and our other partners so that our services are "joined up" and add value. We will strike a balance between needs and wants, and we will listen.*

**(Nottinghamshire Children and Young People Service, Inclusion and Engagement Vision statement)**

*Our vision for Nottingham is of a City where our children and young people benefit from living in a vibrant, multi-cultural, accessible City; where they benefit from a range of amenities and equality of opportunity to enrich their lives. They will develop as equal citizens, respecting diversity of cultures and lifestyles in Nottingham. Children and Young People will be encouraged to lead healthy lifestyles, stay safe, have fun, achieve and be included, be involved in decision making, have a reasonable standard of living and will be respected.*

**(Nottingham City Children and Young People Service, Vision statement)**

It is important that children and young people with diabetes are properly supported in our schools. Over 15,000 children of school age in the UK have diabetes. Life expectancy is improved and the risk of significant long term complications reduced when a strict routine of medical treatment and self care is followed. This guidance gives general information, and details sources of further information.

The Special Educational Needs and Disability Act 2001 (SENDA) requires reasonable adjustments to be made to prevent the less favourable treatment of

disabled pupils. Diabetes is a disability within the definition of the Act and pupils cannot be discriminated against in terms of admissions, exclusions and access to education and associated services. For example a child or young person with diabetes cannot be excluded from a school visit or sports activity for a reason directly related to their diabetes.

The duties of SENDA are anticipatory and include planning for the admission of a pupil with medical needs. Your school access plan might include the intention to recruit staff with medical experience and/or train staff to meet the needs of prospective pupils with diabetes and other medical conditions.

The Disability Equality Duties (Disability Discrimination Act 2005) require schools to promote equality of opportunity between disabled persons and other persons, promote positive attitudes towards disabled persons, and take steps to take account of disabled persons' disabilities even where that involves treating disabled people more favourably than their non-disabled peers.

Your school Disability Equality Scheme could include plans to improve equality for both pupils and staff with diabetes and address specific issues around people with diabetes.

Your policy on managing medicines in school should be assessed to ensure it does not place a disabled pupil at a substantial disadvantage. The school's managing medicines policy should show what procedures are in place to ensure that a pupil requiring medication during the school day has it administered.

For information and advice about individual pupils, schools should always consult with the family, the diabetes support team or the school nurse. The child or young person's diabetes specialist nurse will be an important contact and can advise the school on specific cases.

# Treatment of Type 1 diabetes during school hours - insulin injections, blood tests and hypos

## Introduction

The following information relates to pupils in school with Type 1 diabetes. Pupils with Type 2 diabetes are much rarer and usually do not need insulin injections.

Type 1 diabetes is by far the most common type and is due to lack of insulin in the body, which normally keeps the blood sugar level stable. This is NOT related to obesity as may be the case with Type 2.

These pupils have to have their insulin replaced with injections or rarely special devices called 'insulin pumps' (insulin is not effective when swallowed), as insulin is vital for life.

They also need to regularly monitor their blood sugar level to check that it is not going too low or too high. This is normally done by a small finger prick to put a tiny spot of blood onto a small 'teststrip' in a hand held testing machine.

## Information all schools should have on diabetes treatment at school

Increasing numbers of younger children have been diagnosed with Type 1 diabetes in recent years, therefore even if there is not a pupil with diabetes in your school, there is a high chance that one will be diagnosed in the next few years. The classic pre-diagnosis symptoms to look out for are: excessive thirst, passing urine frequently and weight loss.

Recent evidence is showing that insulin is much more effective at keeping the blood glucose normal if it is given along with every meal i.e. breakfast, lunch and evening meal

These injections are given a few millimetres under the skin with very fine needles and special injection devices that look just like a thick marker pen.

If blood sugars are kept in the normal range this reduces the risk of the pupil suffering from short term problems with diabetes in school:

- **Too low blood sugars** (hypos, hypoglycaemia, measured blood sugar less than 4 mmol/L) e.g. feeling dizzy or shaky, pale and sweaty and unable to concentrate.

## How to treat a 'hypo'

Refer to **APPENDIX 1** for specific treatment guidelines

It can take up to 20-mins to treat a hypo. A pupil experiencing a hypo needs to be closely supervised as the hypo can affect their ability to think clearly. They might become un-cooperative and careful negotiation is required. Treatment must be given 'on the spot'; the pupil must not be sent off elsewhere as their sugar may drop to dangerous levels leading to unconsciousness or a fit.

- **Too high blood sugars** (measured blood sugar more than 15 mmol/L).

This rarely becomes a problem at school. Blood sugars should be checked before food. A pupil with high blood sugars may be very thirsty and pass large volumes of urine frequently. They may also be irritable, suffer from abdominal pain, headaches or feel unable to concentrate, if the pupil suffers these symptoms and particularly if they are vomiting, the parents or the diabetes nurse need to be called.

If the pupil is well with a high blood sugar there is no need to worry.

## Food

All children and young people, including those with diabetes should have a healthy balanced diet – regular carbohydrates, low in sugar but high in fibre.

It is however important that pupils with diabetes **eat carbohydrates at regular intervals** – some but not every pupil will be advised to have a **snack mid morning and mid afternoon**, in addition to their lunch to avoid episodes of hypoglycaemia.

It is important that pupils with diabetes are:

- Given priority in the queue at meal times.
- Allowed to have snacks as directed by the diabetes team. These can usually be taken at break times but in some circumstances may need to be eaten during class time.

**Primary school children** should have their snacks and meals **supervised**

## Physical activity

Pupils with diabetes should participate in all activities however, they may often need an extra snack prior to exercise to avoid episodes of hypoglycaemia.

### If there is a pupil in your school with Type 1 diabetes

Due to the concerns about long term problems and the recent evidence from research, many more young children with diabetes now need an injection at lunchtime.

This is not so difficult for older pupils as they usually are able to give it themselves and need little adult supervision. Younger children will often need an adult to help them or to administer the injection for them. They may also need help with testing their blood sugar level.

It is very important that pupils with diabetes can feel as far as possible the same as their peers and don't have to see their parent every lunchtime (this can also lead to overdependence on parents and abnormal behaviours in children and young people) Paediatricians therefore advocate that injections are given/supported by a member of staff in the school that they attend.

Many schools have identified a few adults who are available at lunchtime to take on the responsibility of the administration of the insulin injection and checking the blood sugar levels.

This will be a new skill for most people and is therefore carefully taught by the specialist diabetes nurse in the team. The pupil's care plan will give instructions regarding the number of units of insulin to be given at lunchtime and how to record their blood sugar level. This information will be updated regularly by the child or young person's parent(s) who are ultimately responsible for their child's diabetes treatment.

All children and young people with diabetes will have a Diabetes Specialist Nurse who, in conjunction with your School Nurse, can offer awareness raising sessions and training on specific points and examples of practical ways in which schools can help. If there are any questions about blood sugar testing or giving insulin in schools, please contact your School Nurse or the Diabetes Specialist Nurse.

## Staff Administering Medication

Anyone caring for children and young people, including teachers and other school staff have a common law duty of care to act like any reasonably prudent parent. Staff need to make sure that pupils are healthy and safe. In some circumstances, the duty of care could extend to administering medication and/or taking action in an emergency. This duty extends to staff leading activities taking place away from the school site such as outings, residential visits or field trips.

The Local Authority's policy on administering medicines in schools is to follow the DfES document 'Managing Medicines in Schools and Early Years Settings'.

This document provides guidance for drawing up a Health Care Plan. The main purpose of an individual health care plan is to identify the level of support that is needed. An individual health care plan clarifies for staff, parents and the child or young person the help that should be provided.

The head teacher is responsible for putting in place policy and procedures for administering medicines. Staff managing the administration of medicines and those who administer medicines should receive appropriate training and support from health professionals.

If the school has followed the Local Authority's guidance for administering medicines; staff have received appropriate training and have followed documented procedures, then they will be fully covered by the Local Authority's public liability insurance.

In some cases the Local Authority seek reimbursement from Health Authorities for children and young people that require complex medical intervention.

To apply for reimbursement the Local Authority requires schools to provide a detailed health care plan for the pupil outlining the frequency of interventions and length of time the interventions take.

To apply for funding for managing a pupil's diabetes **Nottinghamshire County Schools** should contact

Marion Allen, Business Support (Inclusion and Engagement) 0115 977 3699.

For relevant pupils in **Nottinghamshire County Schools** whose support needs are funded by the High Level Needs Panel, or by Additional Family Needs or Additional School Needs funding, any contribution received from health will be reimbursed to the relevant Family (for AFN allocations) or school (for ASN allocations and HLN allocations).

Where support needs are significant in the management of a pupil's diabetes in a **Nottingham City School**, an application for school action plus funding should be made through the appropriate process. An application to reclaim this funding through the Medical Health Panel may then be made.

Many schools are ensuring that support staff have specific duties to provide medical assistance as part of their contract. Support staff with medical experience can be a valuable addition to any school, benefiting both disabled and non-disabled pupils.

**Every pupil has the right to be healthy,  
happy and safe.**

**Planning, training and an inclusive ethos will ensure  
good practice.**

# HYPOGLYCAEMIA

**HYPOGLYCAEMIA or a 'HYPO' = a Blood Glucose of less than 4mmol/L**

This is a term used when the glucose level in the blood is too low. This may result from:

- Not enough food i.e. missed or delayed meal or snack, or meal/snack without carbohydrate
- Extra exercise or more activity than usual
- Too much insulin

**HAVING A 'HYPO' - your child may have no symptoms or may 'feel' or 'look' different e.g.**

- Hungry
- Pale
- 'Wobbly'/Shaky
- Headache or tummy ache
- Sweaty
- Grumpy/Irritable
- Tearful/Weepy
- Feeling or behaving 'not right'

**Always check the blood glucose reading if your child has any of these signs/symptoms and only treat if <4mmol/L**

## TREATING A 'HYPO'

### Step 1

Give fast acting glucose e.g.

- 50ml original Lucozade
- 3 glucose tablets
- 100ml pure fruit juice

3 years and under give  $\frac{1}{2}$  the above.  
Teenagers give double the above.

- If child unco-operative go to **Step 4**
- If child unconscious go to **Step 5**

### Step 2

- Ensure your child's hands are washed
- Wait for 10 minutes and recheck the blood glucose reading
- If above 4mmol/L go to **Step 3**
- If not, repeat **Step 1**

### Step 3

- Blood glucose above 4mmol/L
- Do not allow your child to go straight out to play again
- Give a snack or if just before a meal, allow to eat as soon as possible (Provide slow acting/starchy food i.e. biscuit or sandwich that will keep the blood glucose above 4mmol/L once the fast acting sugar has been used up)
- **Chocolate is high in fat and releases glucose more slowly. It is not recommended for hypo treatment**
- What was the cause? **Note in diabetes diary.**

**DO NOT BE  
TEMPTED TO  
OVERTREAT  
THE HYPO**

### PTO

Steps 4 & 5



#### Step 4

##### If child is unco-operative but not drowsy

- Squirt **GLUCOGEL\*** gel into the mouth (a little at a time). It takes about 5-10 minutes to reach the blood stream
- Once co-operative, go to **Step 1**
- Check blood glucose readings every 15 minutes for at least an hour afterwards.
- If no response, proceed to **Step 5**

#### Step 5

##### If child is unconscious or drowsy

##### Never attempt to give drink/food/Hypostop/ Glucogel

##### Ring 999

##### If you have GlucaGen injection kit

- Give **GLUCAGEN\*** (follow simple injection kit instructions). If child is under 25kg or 4 stone give  $\frac{1}{2}$  vial.
- Inject into thigh/bottom
- If you cannot give injection **dial 999**
- Once child awake and co-operative follow **Step 1**
- Check blood glucose every 15 minutes for at least an hour afterwards - it is not uncommon for blood glucose readings to fall again

**\*NB: GLUCOGEL - oral gel for hypos**

**GLUCAGEN - manufacturer's name for Glucagon injection kit**

#### Actions after a hypo

- Avoid physical exercise until all hypo symptoms disappear
- If the blood glucose reading is greater than 10mmol/L immediately after the hypo (a rebound high reading), do not be tempted to give a corrective (extra) dose of insulin. This will increase the risk of another hypo
- Can you explain why the hypo happened? If there is no clear reason, the total daily insulin dose may need to be decreased. REMEMBER, if your child is experiencing frequent hypos, contact the diabetes nurses to discuss!
- Remember to replace the GlucoGel and GlucaGen!
- Patients on insulin pumps do not need snacks as advised in Step 3 if basal rates are correct. Discuss your management with the diabetes team.

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