

## Appendix E

# **GUIDANCE FOR SETTINGS ON THE MANAGEMENT OF DIABETES MELLITUS**

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Acknowledgement is made to the above professionals who contributed towards the development of this document during May 2010.

## **Introduction**

This guidance is specifically to address the issue of the management of Insulin Dependent Diabetic Mellitus (IDDM) in children in the non-Health settings of Early Years provision or schools. The management includes testing their blood glucose levels, recording the test results, interpreting the results and the administration of insulin injections.

Over 15,000 children of school age in the UK have diabetes with approximately 400 children of school age within Leicester, Leicestershire and Rutland.

There has been a change in the way that diabetes has been managed in the last 5 years. It is now accepted that life expectancy is improved and the risk of significant long term complications reduced when a strict routine of self care and treatment is followed. In addition the new regime allows greater flexibility and promotes the independence of the child. The regime, incorporating increased blood glucose testing, insulin dose adjustment and increased frequency of the use of insulin injections, means children will need to do these activities whilst they are attending settings.

It is important that children and young people with diabetes are properly supported in the settings they attend. This may be an awareness of their independent management of their condition, through supervision to significant assistance in these activities.

This document clarifies the law as it stands in statute and relates to published guidance from the Department of Health (DH) and the DfES (now Department for Children Schools and Families). It gives general information, and details sources of further information.

## **Background**

The Special Educational Needs and Disability Act 2001 (SENDA) (e) 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 admission, exclusion 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 (1).

The duties of SENDA are anticipatory and include planning for a pupil with medical needs. The settings managing medicines policy should show what procedures are in place to allow a pupil requiring medication during the school day, including insulin, to have access to it and for children that don't have the independence or maturity to give their own injections of insulin to be supported in this practice. This may mean your setting recruits staff with healthcare experience and/or trains volunteering staff to meet the needs of prospective pupil's medical conditions, including diabetes (2).

For information and advice about individual pupils, settings should consult with the family, the Family Health Visitor or School Nurse or the local Diabetes Support Team (3).

## **Process**

For those who can test their blood and/or can self inject their insulin it is still good practice for the setting to know this. (See Appendices E1 and E2)

**For children with diabetes who cannot perform the management activities themselves there should be the drawing up of an Individual Care Plan (ICP see appendix E4).** An ICP clarifies for health and setting staff, parents and the child or young person the responsibilities and help that will be provided.

In order for a patient to have blood glucose testing, results recording and insulin administered by a setting's volunteer, all documentation as specified, i.e. the Individual Care Plan, Blood Glucose Testing and Insulin Injection 'update forms' and the Record of Completion of Training, will have to be completed in full, signed and up to date.

An ICP will be developed during consultation **with the doctor at the diabetes clinic.** Blood glucose testing times and result reporting requirements will be stated. The type of insulin injector equipment, dose and times of insulin and injection site will be stated. **Any changes to the regime agreed between the patient and the doctor will be documented by the doctor in an updated ICP, using the signed 'update forms' and the doctor or diabetes specialist nurse (Diabetes Support Team) will inform the authorised volunteers.** The ICP will be reviewed at least yearly to see if it continues to be appropriate e.g. discontinued if self administering (use Appendices E1 and E2).

The parents are responsible for the ICP being presented to the setting along with the appropriate equipment, including the child's own 'sharps bin', supplies and medication.

Setting **staff** managing the blood testing or administration of insulin should receive appropriate **training** and support from health professionals. To support setting staff with this it is envisaged that the local Diabetes Support Team and Diabetes UK: East Midlands (5) will hold regular training and awareness sessions for setting staff working with children with diabetes (4). Once the head of the setting has identified volunteers the school should contact the Diabetes Specialist Nurse (see note 3) who will arrange the training. This would also be the process for training of new staff. Refresher sessions should be planned annually to keep staff up to date (Appendix E10).

Volunteers will be trained to the standard **to carry out the protocol** (see Appendices E8 and E9). They will keep a **copy of the appropriate protocols**

**after their training** and their training will be **confirmed by signature by the authorised trainer and the prescribing doctor** (Appendix E11).

## Notes

1) The Disability Equality Duties (Disability Discrimination Act 2005) (d) requires 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

2) To quote the Secretary of State for Health (a). The DfES and the DH have jointly recommended to schools, in 'Managing Medicines in Schools and Early Years Settings' (2005) (b), that they should, with support from their local authority and local health professionals, develop policies on managing medicines and put in place effective management systems to support individual children with medical needs, including diabetes. The guidance advises that schools should have sufficient support staff who are trained to manage medicines as part of their duties.

3) Contact telephone numbers at Leicester Royal Infirmary 9 am – 5 pm  
0116 258 6796 Diabetes Specialist Nurses Office  
0116 258 7737 Consultant Paediatric Diabetologists Office

4) As well as equipping staff to fulfil the ICP drawn up for the child with diabetes needing assistance, these sessions are aimed at teachers, teaching assistants, kitchen staff, lunchtime supervisors, first-aiders and any other staff who feel they require information and advice in order to support children with diabetes in their care.

### Sessions will cover:-

- Practical knowledge of diabetes
- Monitoring of blood glucose levels
- Administration of medications (including equipment)
- Treating emergency situations (including hypos)
- Access to healthy and appropriate food and carbohydrate portion estimation
- Participating in physical activity programmes
- Participating in extra curricula and social activities
- Positive case studies
- DED update/discrimination law
- Documentation (including ICP and supply of appropriate written protocol)

An example of previously held sessions in Nottingham can be found in appendix E

5) An assurance has already been given by Diabetes UK © for their participation.

## References

- a) Hansard June 2007
- b) 'Managing Medicines in Schools and Early Years Settings' (2005)
- c) Diabetes UK
- d) The Disability Equality Duties (Disability Discrimination Act 2005)
- e) The Special Educational Needs and Disability Act 2001

## Agreement for Self Testing of Blood Glucose in the Setting

Child or Young Person's Name \_\_\_\_\_  
DOB \_\_\_\_\_

Self-testing of blood glucose may be carried out in settings under the following conditions:

- 1) All test equipment is supplied from home.
- 2) The setting staff are aware of approximate times for testing.

Time(s).....

- 3) The child or young person carries their blood glucose testing kit or independently retrieves it from the storage location at the appropriate time.
- 4) The test is undertaken in an area of privacy.
- 5) Standard hygiene procedures are applied at all times.
- 6) \*The child or young person self tests independently

\*The child or young person self tests with minimal supervision

\*(*insert details*).....will attend the setting to do the tests

7) The child or young person will independently or with minimal supervision store all sharp objects and contaminated materials used for testing in a designated biohazard container (sharps bin) for which intermittent disposal and replacement arrangements are made in advance by the family \$.

8) The child or young person records the test results independently or with minimal supervision^.

9) The child or young person independently

\*interprets the results and acts accordingly or

\*contacts(*insert details*)..... to interpret the results and give instructions

**If none of \* or ^ applicable, use Individual Care Plan.**

\* delete as appropriate.

\$ discuss with School Nurse or local Diabetes Support Team

pto

Staff are acting voluntarily in this and staff cannot undertake to monitor equipment carried by the child or young person, and the setting is not responsible for loss or damage to any equipment.

**Staff should be aware of the emergency care for this child or young person in response to a hypoglycaemic episode (hypo).**

**IF THE CHILD'S OR YOUNG PERSON'S GENERAL CONDITION IS A CAUSE FOR CONCERN AT ANY STAGE THE SETTING WILL PHONE 999 FOR AN AMBULANCE.**

As a parent I undertake to update the school with any changes and to maintain an in-date supply of equipment.

Signed: ..... Date: .....

Name of student *(if appropriate)*: .....

Signed: ..... Date: .....

Name of Parent:.....

**Emergency**

**Contact Details: Name..... Tel Home: .....**

**Tel Work: .....**

Head of Setting; Name.....

Signed:  
.....Date:.....

Setting has original  
cc Parents

*As a minimum updated annually*

**Agreement to Self- Injection of Insulin  
for Children or Young People with Diabetes Mellitus**

Full Name of Child or Young Person .....Date of birth:.....

This person has been diagnosed as having Diabetes Mellitus. He/she requires insulin injections during school hours at the following times.....

\*He/she can carry their equipment and independently self administer the injections.

\*He/she needs to store their equipment but can independently self administer the injections.

\*He/she can carry their equipment but needs minimal supervision to self administer the injections

\*He/she needs to store their equipment and *(insert name)* .....  
.....will attend the setting to give the injections.

Staff are acting voluntarily in this and staff cannot undertake to monitor equipment carried by the child or young person and that the setting is not responsible for loss or damage to any medication or equipment.

**Staff should be aware of the emergency care for this child or young person in response to a hypoglycaemic episode (hypo).**

**IF THE CHILD’S or YOUNG PERSON’S GENERAL CONDITION IS A CAUSE FOR CONCERN AT ANY STAGE THE SETTING WILL PHONE 999 FOR AN AMBULANCE.**

As a parent I undertake to update the school with any changes in administration of medication and to maintain an in-date supply of medicine and equipment.

Signed: ..... Date: .....

Name of Student *(if appropriate)*:.....(Please print)

Signed: ..... Date: .....

Name of Parent:.....(Please print)

**Emergency Name** **Tel Home: .....**  
**Contact Details:** **Tel Work: .....**

Head of Setting; Name.....

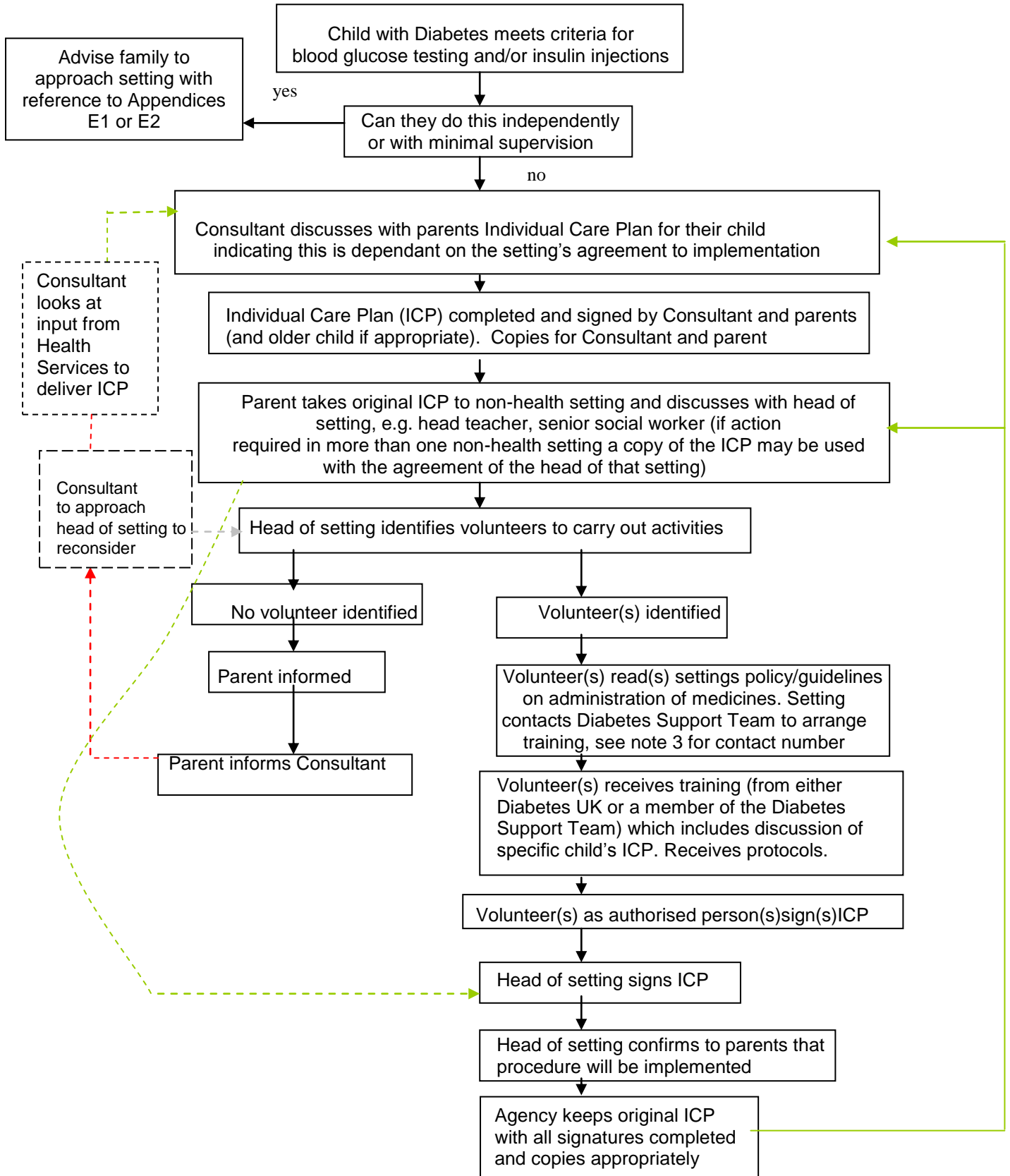
Signed: ..... Date:.....

*\*delete as appropriate or if none applicable use Individual Care Plan  
Setting has original  
cc Parent*

**As a minimum updated annually**



## Process for Establishing or Revising an Individual Care Plan for the Management of Diabetes Mellitus in Non-Health Settings



# INDIVIDUAL CARE PLAN FOR THE MANAGEMENT OF DIABETES MELLITUS BY NON-MEDICAL AND NON-NURSING STAFF

**TO BE COMPLETED BY A CONSULTANT, PARENT, THE HEAD OF THE SETTING AND THE AUTHORISED PERSON.**

NAME OF CHILD: ..... DOB: .....

This plan has been agreed by the following:

CONSULTANT (Block Capitals).....

Signature ..... Date.....

PARENT/GUARDIAN (Block Capitals).....

Signature ..... Date.....

**EMERGENCY CONTACT NUMBER:**.....

OLDER CHILD/YOUNG PERSON (*if appropriate*)  
.....

Signature..... Date.....

HEAD of SETTING (Block Capitals).....

Signature..... Date.....

**AUTHORISED PERSON(S) TO \*TEST BLOOD GLUCOSE AND/OR \*ADMINISTER PRE-PREPARED INSULIN INJECTION**

NAME (Block Capitals).....

Signature ..... Date.....

NAME (Block Capitals).....

Signature ..... Date.....

NAME (Block Capitals).....

Signature ..... Date.....

\* delete as appropriate

**COPIES OF THIS SHOULD BE HELD BY THE PARENTS, THE CONSULTANT AND THE SETTING AND UPDATED AT LEAST ANNUALLY.**

The parents will be responsible for informing anyone who needs to know regarding the management process and for maintaining an in-date supply of equipment (including a sharps bin) and supplies at the setting.

**Staff should be aware of the emergency care for this child or young person in response to a hypoglycaemic episode (hypo).**

**If the child or young person refuses testing do not progress but immediately inform the parent.**

## BLOOD GLUCOSE TESTING

*This should be carried out by an authorised person (see over) in accordance with the protocol and training endorsed by the indemnifying agency*

- Check the blood glucose level at (insert times or activities).....

.....  
Dispose of test strip and pricker into sharps bin.  
Record on the Record Sheet.

\*Report result to..... Tel.....

- Check the blood glucose level prior to insulin being given.

Dispose of test strip and pricker into sharps bin  
Record on the Record Sheet.

Within the range ..... give insulin dose recorded in the individual care plan.

**Outside the range immediately report result to.....**  
Tel.....

Give insulin dose advised by the above person on this occasion only.

Record dose on Record Sheet.

- If testing required tick one only

\* delete as appropriate

**IF THE CHILD'S GENERAL CONDITION IS A CAUSE FOR CONCERN AT ANY STAGE PHONE 999 FOR AN AMBULANCE.**

The parents will be responsible for informing anyone who needs to know regarding the management process and for maintaining an in-date supply of equipment (including a sharps bin) and medication at the setting.

Staff should be aware of the emergency care for this child or young person in response to a hypoglycaemic episode (hypo).

If the child or young person refuses injection do not progress but immediately inform the parent.

**INSULIN INJECTION**

This should be prepared and administered by an authorised person (see over) in accordance with the protocol and training endorsed by the indemnifying agency.

The type of insulin is prescribed as:

Penfill cartridge injection

Insulin bolus via pump

TYPE OF INSULIN	INJECTION SITE	The subcutaneous DOSE OF INSULIN is			
		<u>Breakfast</u>	<u>Lunch</u>	<u>Dinner</u>	<u>Other</u> <small>enter time or activity</small>

Particular things to note are:-

Action to take:-

Dispose of needle into sharps bin.

**After administration of insulin, please complete the Record Sheet.**

**IF THE CHILD'S GENERAL CONDITION IS A CAUSE FOR CONCERN AT ANY STAGE PHONE 999 FOR AN AMBULANCE.**

**BLOOD GLUCOSE TEST AND/OR INSULIN ADMINISTRATION RECORD SHEET**

NAME OF CHILD					DOB		
DATE	TIME <small>24hour clock</small>	*BLOOD GLUCOSE RESULT	*INSULIN TYPE	*INSULIN DOSE	*INJECTION SITE	SIGNED	NOTES <small>(eg carbohydrate estimation)</small>

\* delete as appropriate

Original retained at setting

cc: Parent on request  
Diabetes Support Team on request

The parents will be responsible for informing anyone who needs to know regarding the management process and for maintaining an in-date supply of equipment (including a sharps bin) and supplies at the setting.

**Staff should be aware of the emergency care for this child or young person in response to a hypoglycaemic episode (hypo).**

**If the child or young person refuses testing do not progress but immediately inform the parent.**

## BLOOD GLUCOSE TESTING

*This should be carried out by an authorised person (see over) in accordance with the protocol and training endorsed by the indemnifying agency*

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- Check the blood glucose level prior to insulin being given.

Dispose of test strip and pricker into sharps bin  
Record on the Record Sheet.

Within the range .....give insulin dose recorded in the individual care plan.

**Outside the range immediately report result to**.....

Tel.....

Give insulin dose advised by the above person on this occasion only.

Record dose on Record Sheet.

- If testing required tick one only*

\* **delete as appropriate**

**IF THE CHILD'S GENERAL CONDITION IS A CAUSE FOR CONCERN AT ANY STAGE PHONE 999 FOR AN AMBULANCE.**

UPDATED      Signed      NAME      Designation  
cc: retained by health professional, given to parents. Original to setting

The parents will be responsible for informing anyone who needs to know regarding the management process and for maintaining an in-date supply of equipment (including a sharps bin) and medication at the setting.

**Staff should be aware of the emergency care for this child or young person in response to a hypoglycaemic episode (hypo).**

**If the child or young person refuses injection do not progress but immediately inform the parent.**

**INSULIN INJECTION**

*This should be prepared and administered by an authorised person (see over) in accordance with the protocol and training endorsed by the indemnifying agency.*

The type of insulin is prescribed as:

- Penfill cartridge injection
- Insulin bolus via pump

TYPE OF INSULIN	INJECTION SITE	The subcutaneous DOSE OF INSULIN is			
		<u>Breakfast</u>	<u>Lunch</u>	<u>Dinner</u>	<u>Other</u> <small>enter time or activity</small>

Particular things to note are:-

Action to take:-

Dispose of needle into sharps bin.

**After administration of insulin, please complete the Record Sheet.**

**IF THE CHILD'S GENERAL CONDITION IS A CAUSE FOR CONCERN AT ANY STAGE PHONE 999 FOR AN AMBULANCE.**

UPDATED                      Signed                      NAME                      Designation  
*cc: retained by health professional, given to parents. Original to setting*

**BLOOD GLUCOSE TEST AND/OR INSULIN ADMINISTRATION RECORD SHEET**

NAME OF CHILD					DOB		
DATE	TIME 24hour clock	*BLOOD GLUCOSE RESULT	*INSULIN TYPE	*INSULIN DOSE	*INJECTION SITE	SIGNED	NOTES <i>(eg carbohydrate estimation)</i>

\* delete as appropriate

Original retained at setting

cc: Parent on request  
Diabetes Support Team on request



## Protocol for Blood Glucose Testing

Action	Rationale
Locate and obtain in a timely manner the child's blood glucose testing kit and sharps bin. Allow the child to do this if the child is able. Accompany the child to the area designated for testing.	Preparation in anticipation of blood glucose testing in an area of privacy.
Instruct the child to wash their fingers and dry them. Wash your hands.	Any surface contamination with glucose on the fingers will invalidate the blood glucose test. This is good hygiene.
Take a blood testing strip out of the sealed container and insert the strip in the glucose meter.	This is a pre-requisite first step in operating the glucose meter.
Check the testing strip code displayed on the meter matches that of the code on the side of the glucose testing strips.	If the codes don't match the glucose reading is inaccurate. Do not proceed but contact the parent or Diabetes Support Team.
Check on the meter the symbol is displayed that indicates that a blood sample can be applied to the testing strip.	Sometimes the meter shows an error reading in which case the testing strip should be discarded and a new strip inserted.
Take the finger pricker and place on the chosen finger tip on the outside of that finger, not on the pulp.	Close application of the finger pricker to the skin is required so that the pricker is able to penetrate the finger to the required depth. It is better to take a sample on the side of the finger as it hurts less.
Depress the firing button to prick the finger.	This draws the blood.
A drop of blood will appear that should then be applied onto the testing strip, look for the blood to be drawn up into the test strip and an icon on the meter will be displayed to demonstrate that the required blood has been drawn up. Now apply firm pressure to the prick site with a clean paper towel.	This is a pre-requisite step in operating the glucose meter.  This stops the bleeding.
Read the blood glucose level from the meter.	This is the test result.
Wash your hands. Record the blood glucose level on the record sheet.	Good hygiene. This will allow analysis of blood glucose trends for later insulin dose titration.
Remove the testing strip from the meter and dispose of used blood glucose testing strip into the child's sharps bin.	Avoidance of blood contamination.
Dispose of used blood testing pricker into the child's sharps bin.	Avoidance of pricker injury or blood contamination
Place the glucose meter and finger pricker back in the case. Child and you each wash your hands.	So that the equipment is kept in one place and not lost. Good hygiene.

**NOTE** this is an example of one of three protocols (for different delivery equipment) please **ensure after training you receive the correct protocol for the child concerned.**

### Protocol for Administration of Insulin

Action	Rationale
Locate and obtain, in a timely manner, child's insulin's administration kit. Ensure the Child is in a place of privacy. Wash your hands.	Preparation in anticipation of administration.  Good hygiene.
Invert the insulin pen, plunger at the bottom. Screw on a needle and remove the needle sheath.	To puncture the seal on the insulin cartridge to allow administration of a required dose of insulin.
Tap the inverted insulin pen.	To bring any air bubbles to the top of the cartridge.
Dial up 3 units of insulin and depress the plunger to dispense an air shot, repeat this until a squirt of liquid is seen exiting the tip of needle.	To ensure that all air is expelled from the pen.
Invert the insulin pen once again through 180 degrees so that the needle points vertically downwards and <b>dial up the agreed dose of insulin, please see ICP.</b>	To ensure the correct dose of insulin is dispensed.
<b>Select a pre-agreed site for the insulin injection, please see ICP.</b> Expose the area of skin for injection.	To seek a safe, secure and correct place for the injection.
Lightly pinch up the skin and insert the needle at 90 degrees to the skin,	To ensure a subcutaneous injection of insulin. Insulin is absorbed best in this part of the skin.
Slowly and firmly depress the plunger of the pen and count to 10.	This ensures the administration of the full dose of Insulin.
Remove the insulin pen from the skin	To avoid any inadvertent extra insulin administration.
<b>Do not re sheath needle.</b> Unscrew needle. <b>Dispose of the needle in child's sharps bin.</b> <b>Do not dispose of the insulin pen.</b> Wash your hands.	Avoidance of needle-stick.  Safe disposal of sharp objects in accordance with health and safety policy. Good hygiene.
Place the insulin pen back in the child's administration kit. Now let the child go back to normal activity	So stored safely for future use.
Complete record sheet.	To enable monitoring of administration of insulin and update child's health records.



**Diabetes Awareness Training Day for School Staff**  
– Last seminar November 2011 hosted in Leicestershire funded by

*Programme*

<b>09.00 - 09.05</b>	<b>Welcome and Introduction</b> Julie Orrey, East Midlands Regional Manager, Diabetes UK
<b>09.05 - 09.20</b>	<b>Disability Equality Duty update</b> Liz Mangle, Assistant SEN Officer, Nottinghamshire LEA
<b>09.20 - 09.40</b>	<b>Basic overview of diabetes in children</b> Josie Drew, Paediatric Consultant
<b>09.40 - 10.00</b>	<b>What support is available to schools</b> Helen Marsh, Paediatric Diabetes Specialist Nurse
10.00 - 10.20	Refreshments
<b>10.20 - 10.40</b>	<b>Hypo management</b> Vreni Verhoeven, Paediatric Diabetes Specialist Nurse
<b>10.40 - 11.00</b>	<b>Food &amp; activity</b> Anna Clark, Dietician
	<i>Split into 2 groups for practical demonstrations</i>
11.00 - 12.00	<b>Pens &amp; insulin administration</b> Helen Marsh, Paediatric Diabetes Specialist Nurse
(30 minutes each session)	<b>Meters &amp; blood testing</b> Vreni Verhoeven, Paediatric Diabetes Specialist Nurse
<b>12.00 - 12.30</b>	<b>Panel Q &amp; A session</b>
<b>12.30</b>	<b>Close</b>

It is anticipated that additional training awareness days may be held in the future

Training support from your Diabetic nursing team is available for individuals.

**RECORD OF COMPLETION OF TRAINING FOR BLOOD GLUCOSE TESTING AND /OR INSULIN ADMINISTRATION BY NON-MEDICAL AND NON-NURSING STAFF**

To: Head of Setting

RE: Name of person.....

Date of Birth:.....

Name of setting working at.....

The above named person has attended training on how to safely undertake blood glucose testing and/or administer insulin injections on date .....

They have completed the training to a standard to be able to comply with the agreed protocols for blood glucose testing and/or insulin administration.

AUTHORISED TRAINER  
(Block Capitals)..... Designation.....

Signature ..... Date.....  
Agency..... Contact Number.....

CONSULTANT  
(Block Capitals).....

Signature ..... Date.....

I confirm I have attended the training as recorded above:

AUTHORISED PERSON(S)  
NAME (Block Capitals).....

Signature.....Date.....

COPIES OF THIS FORM SHOULD BE HELD BY THE CONSULTANT THE SETTING AND THE AUTHORISED PERSON.

*TRAINING SHOULD BE UPDATED ANNUALLY*

Revised: May 2010

Date of next Review: 09/2015

Signature(s) \_\_\_\_\_

Date\_\_\_\_\_

Corporate, Health, Safety and Wellbeing  
0116 3057552 / 55515