

Storage and disposal

- Store unopened supplies of insulin in the fridge - it must not freeze
- Insulin in use can be kept at room temperature. Avoid direct sunlight and heat e.g. near radiators, on window sills
- Always dispose of needles in a sharps bin
- Make sure you have enough supplies of insulin - especially when going on holiday
- Read the leaflet in the insulin box for more information.

Hypoglycaemia (hypos)

Hypoglycaemia is the main side effect of insulin treatment. This will happen as your blood glucose levels drop below 4 mmol/l. Some symptoms of hypos are:

Sweating heavily	Hunger
Anxiety	Going pale
Trembling/shaking	Palpitations
Tingling of the lips	Dizziness

How to avoid hypos

- Don't miss meals
- Take your insulin at recommended doses and times
- Keep to recommended alcohol limits and do not drink on an empty stomach
- Test before driving and do not drive if your blood glucose is less than 5 mmol/l
- Always carry glucose, snacks and your meter
- You may need to reduce insulin doses before and after exercise.

If you have a lot of hypos ask to see the specialist diabetes team.

Further information

Patient Advice and Liaison Service (PALS)

– To make comments or raise concerns about the Trust's services, please contact PALS.

t: 020 7188 8801 at St Thomas'

t: 020 7188 8803 at Guy's e: pals@gstt.nhs.uk

Knowledge & Information Centre (KIC) – For more information about health conditions and local services, please visit the KIC on the Ground Floor, North Wing, St Thomas' Hospital.

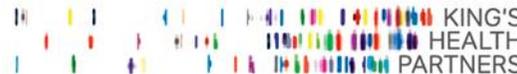
t: 020 7188 3416

Language support services

t: 020 7188 8815 fax: 020 7188 5953

NHS Direct – Offers health information and advice over the phone 24 hours a day.

t: 0845 4647 w: www.nhsdirect.nhs.uk



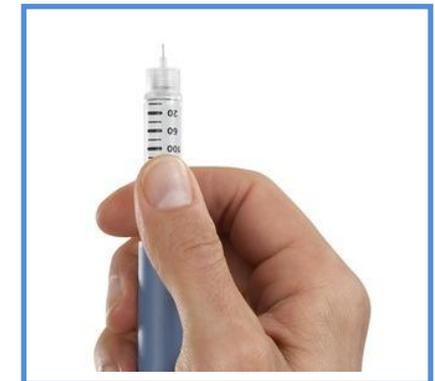

Southwark


Lambeth

Reference: National Patient Safety Agency
NPSA/2011/PSA003

The adult patient's passport to safer use of insulin

The safe use of insulin and you



The right insulin
The right dose
The right way
The right time
Hypoglycaemia

Insulin treatment improves the quality of life for many people and saves the lives of others. It is used to lower blood glucose levels.

However, errors are very common and can lead to patient harm. These are often as a result of not having:

- The right insulin
- The right dose
- The right way
- At the right time

To keep safe you need to think about:

The right insulin

There are over 20 different types of insulin. Your healthcare professional will have discussed with you which insulin may best suit your needs. The packaging of insulin is often very similar and so are insulin names.

This table shows some insulin names that are often confused:

Humalog	with	Humalog Mix 25 or Humalog Mix 50
Humulin S	with	Humulin I or Humulin M3
Humalog	with	Humulin I or Humulin S or Humulin M3
NovoRapid	with	NovoMix 30
Levemir	with	Lantus
Hypurin Porcine Neutral	with	Hypurin Porcine 30/70 Mix

Order your insulin at least two days in advance as the community pharmacist may not always stock your insulin.

Check the name of the insulin and the device or cartridge is correct with your pharmacist before you leave the pharmacy.

Make sure you carry an insulin ID card (passport) showing the correct name of your insulin.

When your insulin or the type of insulin device (pen) changes, update your insulin ID card and show it to all the health professionals supporting you in your care.

The right dose

Insulin comes in vials for use with insulin syringes and pumps, in cartridges for insulin pens or as pre-filled pens. Each should be clearly labelled with the name of the insulin. You should keep a record of the amount of units of insulin you are taking.

There are two different designs of insulin cartridge, so not all cartridges can be used in all insulin pens. If you use cartridges you need to know which pen is right and safe for you to use.

Insulin is prescribed in Units. If the letter 'U' is written after the dose, instead of writing the word 'units' in full, the 'U' can be mistaken for an '0'. This can lead to a risk of you having an overdose of insulin, for example 40 units instead of 4.

If someone else gives you your insulin, always ask to check the dose with them.

The right way

- Insulin should be injected at a 90° degree angle
- You can use the upper outer thighs, buttocks and abdomen (tummy) as injection sites
- Vary the places you inject into to avoid fatty lumps developing (lipohypertrophy). If insulin is injected into these fatty lumps its absorption will be delayed
- Change your insulin pen needle every time you inject.



Gently lift the skin to ensure insulin is injected into fat.

The right time

People take insulin at different times, before, with or just after food; others at bedtime.

Please ask a healthcare professional to explain when you should take your insulin.

If you are admitted to hospital and are well enough, ask to keep your insulin with you so you can self manage your diabetes.

If you can't give or keep your own insulin, don't be afraid to ask staff when you need it.