












Step by Step Guide for Insulin

	<ul style="list-style-type: none"> Wash your hands before handling insulin pen devices.
	<ul style="list-style-type: none"> Cloudy insulin (e.g. premixed insulin) must be resuspended prior to each injection to ensure the suspension has a consistently milky white appearance (Picture 4). <ol style="list-style-type: none"> Gently roll in between your palms for 10 times (for cold insulin only). Tip up and down for 10 cycles. Visually check for milky white appearance. <ul style="list-style-type: none"> Vigorous shaking should be avoided since this produces bubbles which reduce dose accuracy. Inadequate resuspension of cloudy insulin (e.g. NPH and premixed insulin) before pen injection may lead to varying concentration of medication dosage that can cause unpredictable clinical responses. Lantus & Novorapid should be inspected to ensure they are clear, not cloudy with no solids floating
	
	
	<ul style="list-style-type: none"> Place a new needle onto the pen device. Using a new needle each time may reduce the risk of needle breakage in the skin, clogging of the needle, inaccurate dosing and complications (e.g. lipohypertrophy, abscess).
	<ul style="list-style-type: none"> Remove the outer and inner cap. Discard the inner cap and keep the outer cap.
	<ul style="list-style-type: none"> Prime insulin pen device with the needle pointing upwards. Observe at least a drop of insulin at the needle tip before each injection.
	<ul style="list-style-type: none"> Dial the desired dose.
	<ul style="list-style-type: none"> Insert pen needle into the skin at 90°, push down the dose button completely.
	<ul style="list-style-type: none"> Count to 10 slowly before withdrawing the needle from the skin. Counting past 10 may be necessary for higher insulin doses. This is to ensure full dose delivery and prevent insulin leakage.
	<ul style="list-style-type: none"> Recap the used pen needle using the outer cap. Remove pen needle and dispose it safely. Used pen needle should not be left attached to the pen. This allows the entry of air and other contaminants into the cartridge, or leakage of insulin from the cartridge, which can affect subsequent dose accuracy.

Insulin Types:

Type	Onset (How quickly it starts working)	Peak (When it is most effective)	Duration (How long it works)	Timing of Injection (When it should be taken)
MEALTIME (BOLUS) INSULIN – clear appearance				
<i>Short-Acting:</i> -Novorapid	0-20 minutes	1-3 hours	3-5 hours	Given with one or meals per day. Inject 5- 15 minutes before, or immediately after meals.
BASAL INSULIN – clear appearance				
<i>Long Acting:</i> -Lantus U100	30-60 minutes	n/a	16- 24 hours	Same time daily at bedtime or first thing in the morning.
PREMIXED INSULIN – cloudy appearance				
-Novomix 30	10-20 minutes	1-4 hours	16-20 hours	Given with one or more meals per day. Inject 5-15 minutes before start of the meal.



For more information, contact us at:



+673 3372709 /
+673 3373033



+673 7295428
(WhatsApp text only)



phc@bsp-shell.bn



www.panagahealth.com



panagahealth

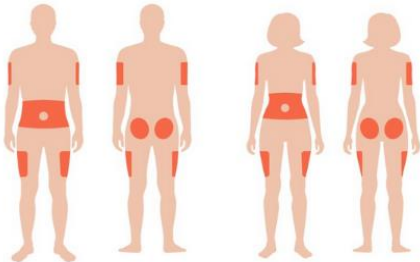
DIABETES: HOW TO USE INSULIN

GIVING AN INSULIN INJECTION

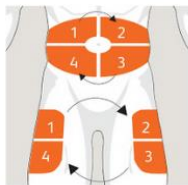
To give an insulin injection you need to use the correct insulin, decide where to give the injection, and know how to give the injection.

Read the instruction booklet that comes with your insulin.

Injection Site Options:



Injection Sites	Things to consider
Abdomen (belly) Stay 5cm away from belly button	-easy to reach -insulin absorbs fast and consistently -RECOMMENDED SITE
Buttock & Outer Thigh	-slowest absorption of insulin
Outer Upper Arm	-hard to reach so not recommended -after abdomen, fastest absorption



It is very important to change (rotate) where you give your injection. This is to prevent fatty lumps forming which affect how insulin is absorbed. Injection should be minimum 1 cm apart.



AVOID injecting into a fatty lump as pictured on the left.

Insulin Pens Storage:

- Unopened insulin should be stored in the fridge between 2 degree and 8 degree Celsius.
- Insulin being used can be stored at room temperature for up to 1 month.
- Discard insulin that has been frozen or exposed to temperatures > 30 degree Celsius.
- When travelling, always carry your insulin pen on the plane and do not pack in checked bag.

Insulin Check:

- Inspect your insulin before use:
 - Lantus and Novorapid should be clear with no solids.
 - Novomix should appear cloudy.
- Before each use, check insulin flow by priming the pen, dial up 1-2 units, with pen tip facing upwards, push the dosing button. If no stream of insulin appears, repeat.
- For Novomix, gently roll pen between palms 10 times, before use.

Giving Injection:

- Use the correct insulin type and decide your preferred site of injection.
- Load a new needle for every injection, repeated needle use increases pain.
- Dial up the desired dose (back dial if you go too far).
- Insert pen tip into skin at 90 degree angle, and do not push too hard or dose may be administered beyond the fatty tissue into the muscle and not absorb correctly.
- Push the dosing button slowly until it reaches zero and hold for 10 seconds.

Safe Sharps Disposal:

- Pen tips (needles) need to be disposed of in a puncture-proof container.
- Return full containers to the Nurses Treatment Room.

Hypoglycemia: (low blood sugar <4.0)

FEELS LIKE:

- hunger, sweating, palpitations, nausea, headache, weakness, dizziness, difficulty concentrating, vision changes, drowsiness, unconsciousness.

CAUSED BY:

- taking too much insulin.
- eating less than planned or skipped/delayed meals.
- exercising longer/harder than usual

TREATMENT:

- 15 grams fast-acting sugar: 2/3 cup fruit juice or regular soft drink (e.g. Coca Cola).
- if blood sugar is still below 4.0, repeat with another 15 g of fast acting sugar.
- when blood sugar is above 4.0 and next meal is more than 60 min, have a snack with long-acting sugar (e.g. cheese and crackers, granola bar).