



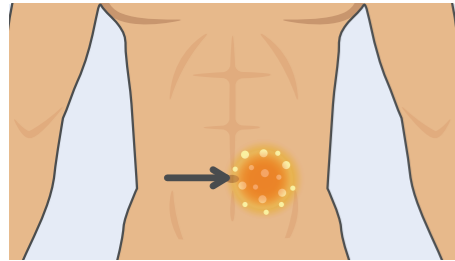
# All you need to know about Lipohypertrophy (Lipo)

## What is a lipo?

A lipo is a lump or swelling where you repeatedly inject insulin.

## What causes a lipo?

Lipos are caused by not rotating sites correctly and reusing needles.



## Should I worry about lipos?

Don't worry, lipos can be managed. Speak with your nurse or doctor for advice.

## How can I prevent lipos?

- Correct rotation of sites
- Use a new needle for each injection
- Check your injection sites regularly

## What if I suspect I have lipos?

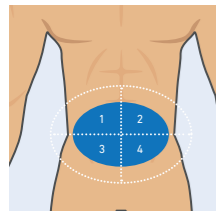
Seek advice from your nurse or doctor as your insulin or GLP-1 medication may need adjusting.

## Avoidance of Lipohypertrophy

It is important to choose the correct site for your injection but equally it is important not to overuse sites as this can cause problems such as lipohypertrophy. It is important to use a simple rotation process to ensure that no one site is overused (see below).

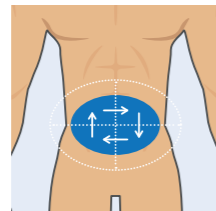
Always rotate within the site making sure each injection is given 1cm away from the last.

1



Choose site and divide into sections (4 for the abdomen and two each side for arms, buttocks and thighs)

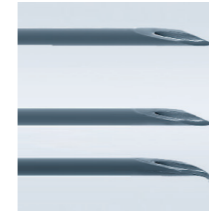
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Rotate within each section changing sections on a weekly basis

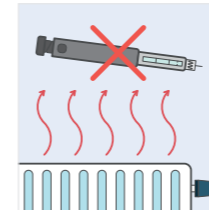
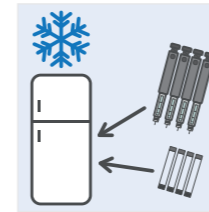
# Injection Needles

Use pen needles or syringes once only - reuse may lead to injection site complications and cause high or low blood glucose levels.



# Storage

- Always store unopened insulin or GLP-1 medications in a fridge between 2-8 degrees (preferably in the door compartment away from the ice box). Do not allow to freeze.
- In-use insulin can be stored at room temperature for up to 28 days (refer to individual manufacturer's instructions).
- It is important to maintain insulin at the correct temperature for it to be effective. Extremes of temperature may render the insulin ineffective.



# Safe Disposal

Remember you should always place all used needles into an approved sharps bin.



# Things you need to know about injections

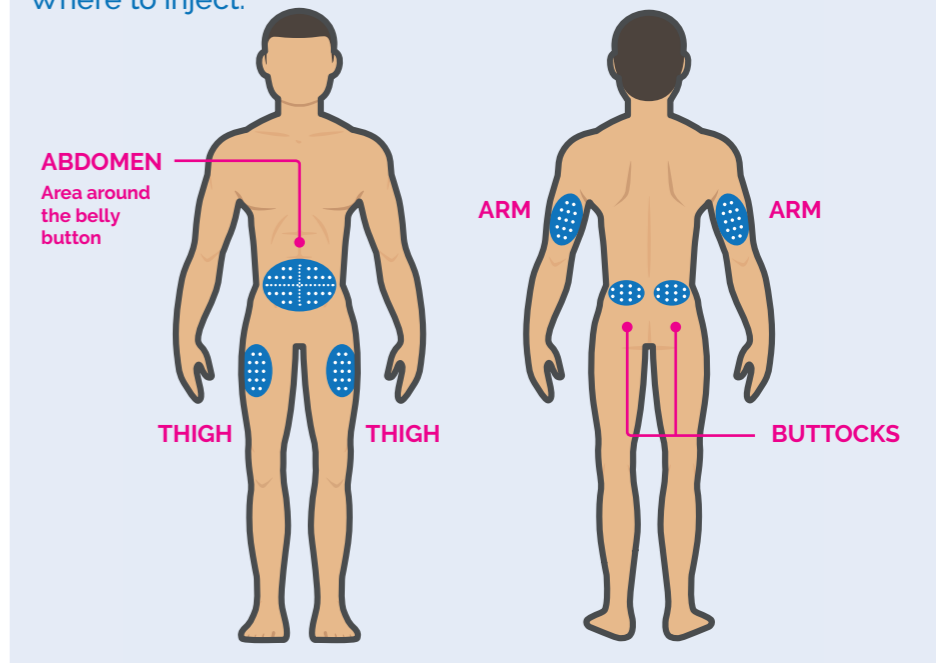
## Injection sites:

You can see from the picture below the best sites for injecting insulin or GLP-1 medications are:

- Back of the upper arms (difficult to use when self-injecting)
- Across the abdomen
- Upper outer area of the buttocks
- Upper outer area of the thighs

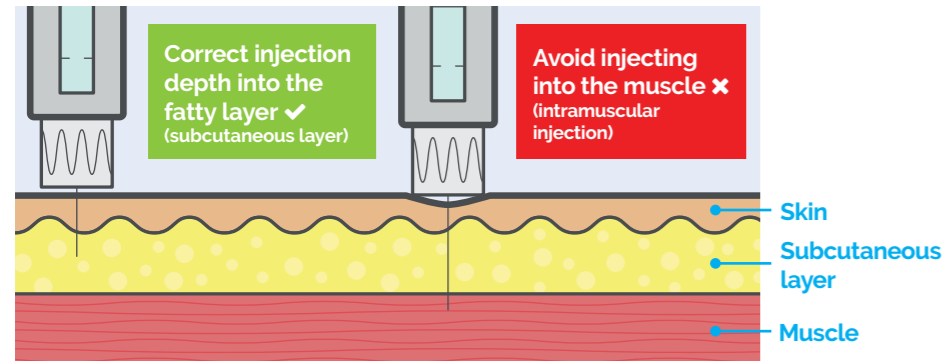
Using these sites mean that your insulin or GLP-1 medication will work correctly. Always inspect the site you have chosen to inject into for any lumpy areas or bruising before you inject. Avoid injecting into bruises or fatty lumps - see Lipohypertrophy section for more information.

## Where to inject:





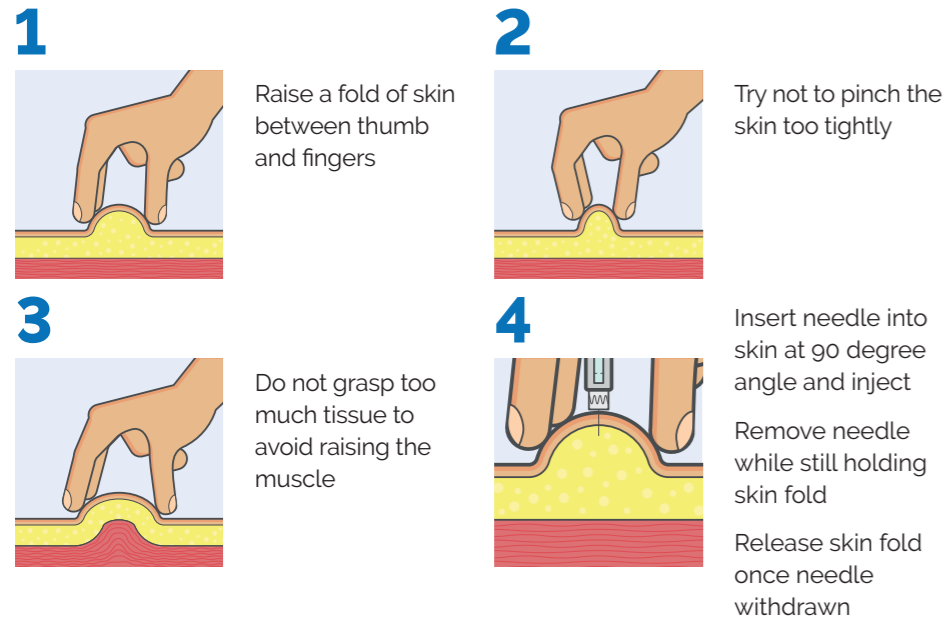
## How deep to inject:



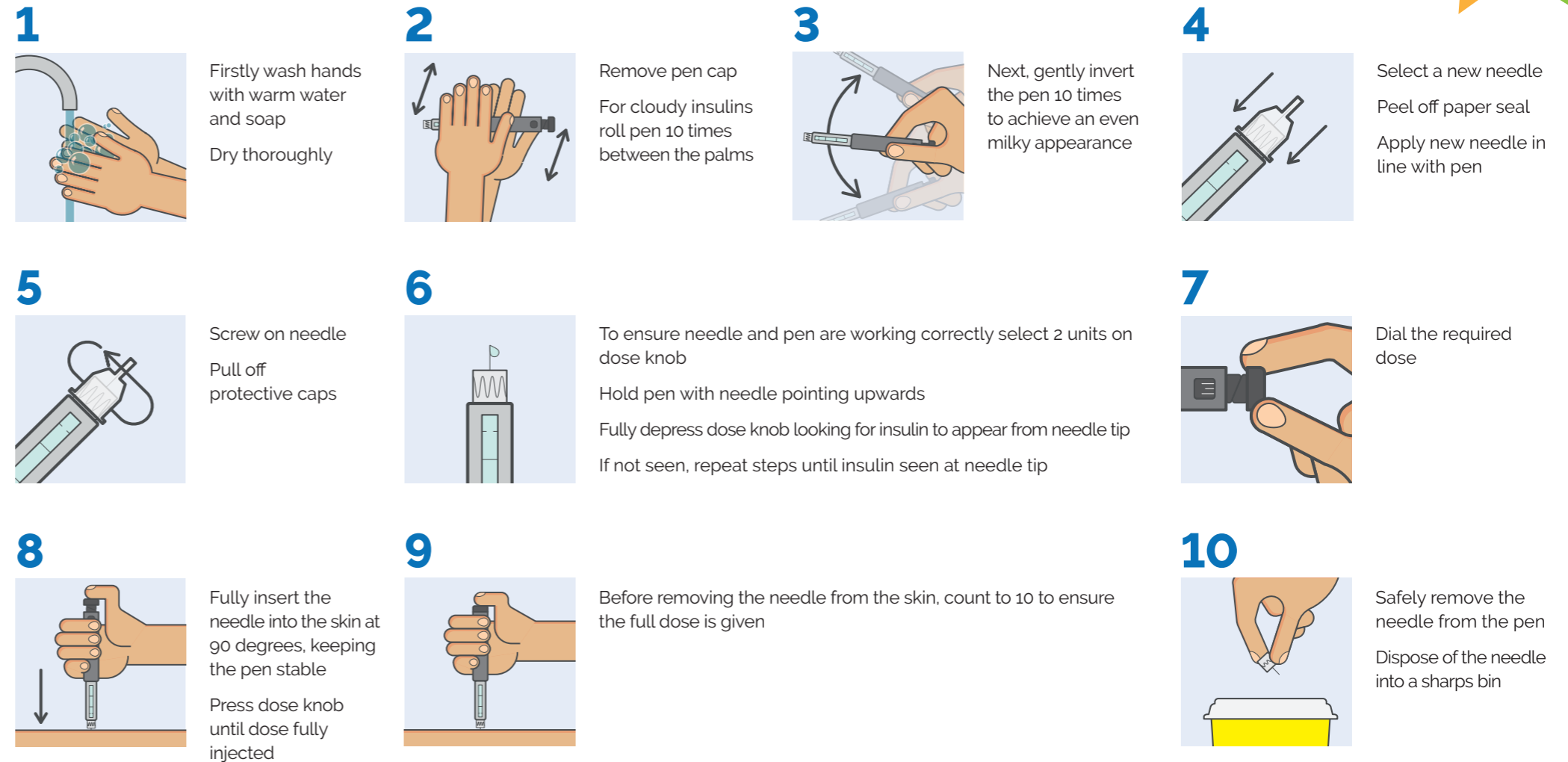
It is important to inject medication into the fatty layer (subcutaneous layer) of the skin for the medication to work correctly.

Use a 4 mm pen needle to minimise risk of injection into muscle. Children, young adults and slim adults may need to use a lifted skin fold.

### How to perform a correct lifted skin fold



## 10 Steps to giving an injection using a pen device:



✔ Try to use these steps every time you inject to ensure that you get the best effect from your insulin or GLP-1 medication