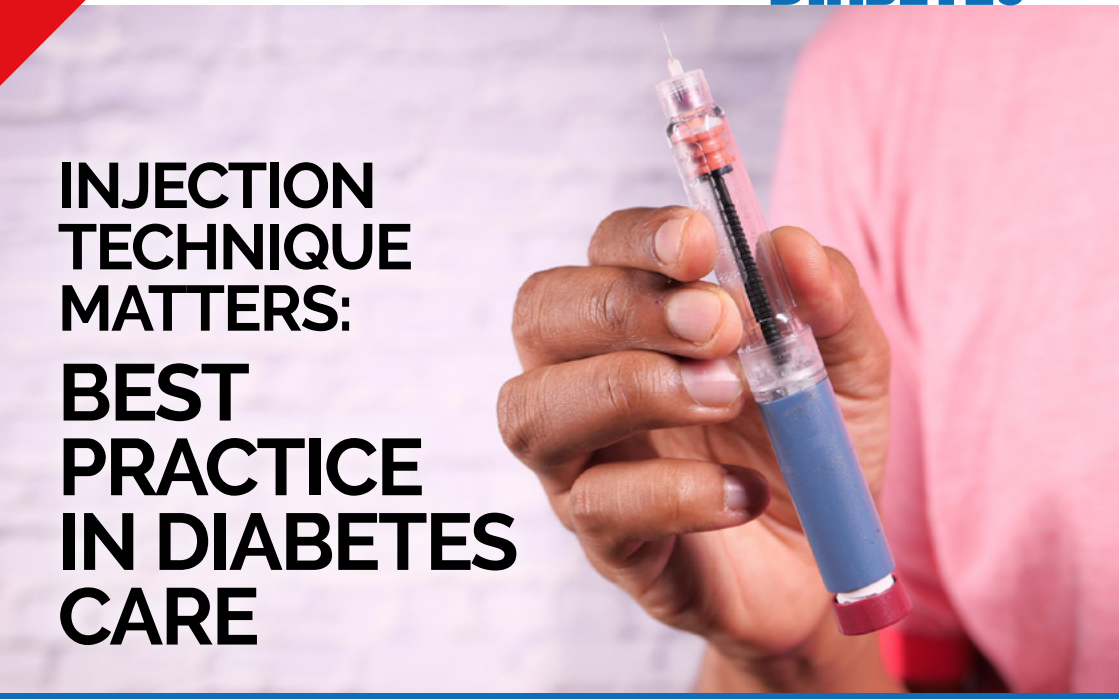
YOU AND YOUR BODY

t·r·e·n·d™ DIABETES



INJECTION TECHNIQUE MATTERS:

BEST PRACTICE IN DIABETES CARE

WHY IS THIS LEAFLET FOR YOU

If you have diabetes and use insulin or a GLP-1 injection, this leaflet is for you. This leaflet aims to give you all the information you need for correct injections.

- How to correctly inject insulin
- Where to inject to ensure insulin and GLP-1 medication enter your body correctly
- How to avoid 'Lipos'
- How to store your medication correctly
- How to dispose of your needles safely

INJECTION TECHNIQUE MATTERS

Date of preparation: September 2023

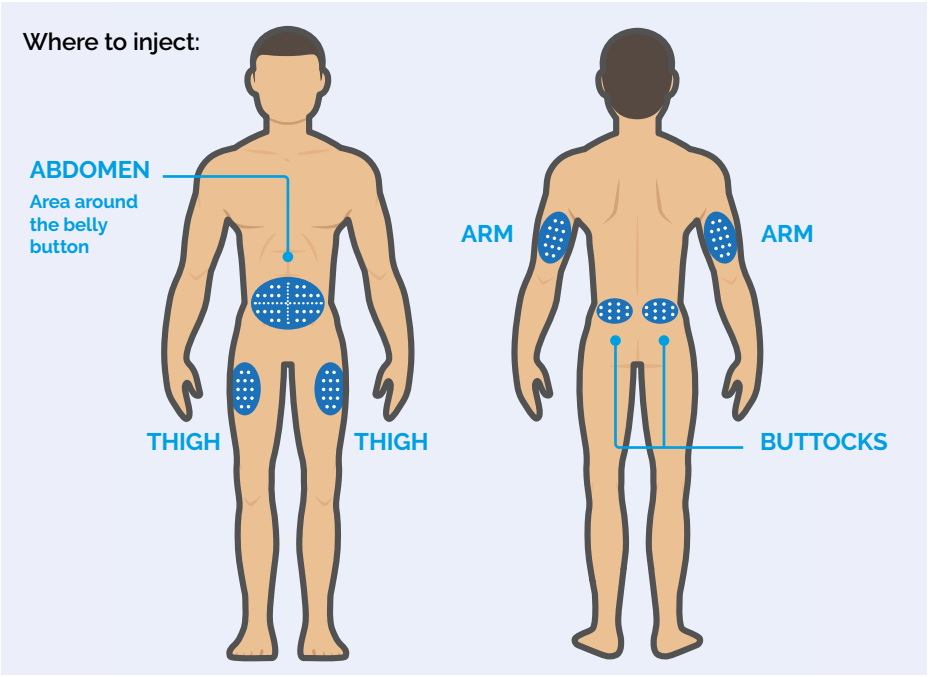
HOW TO CORRECTLY INJECT INSULIN:

The best sites for injecting insulin or GLP-1 are shown below:

- Back of upper arms – can be tricky
- Abdomen – tummy area
- Upper outer buttock areas – 'love handles'
- Upper outer part of the thighs

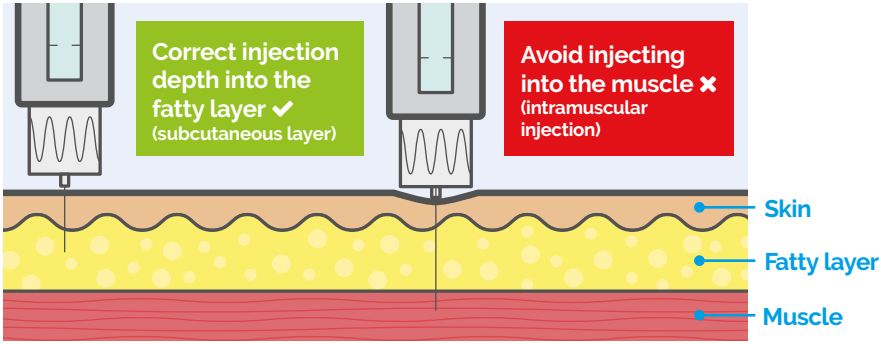
Use these areas to ensure insulin and GLP-1 medication enter the body and work correctly.

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.



Do not use other areas to inject as there is a risk of touching sensitive nerves and larger blood vessels which might lead to some pain or rapid uptake of the insulin or GLP-1 therapy.

HOW DEEP TO INJECT

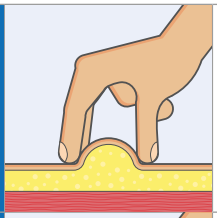
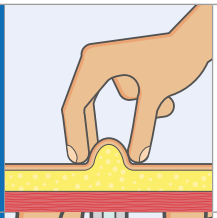
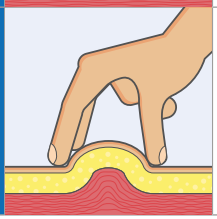
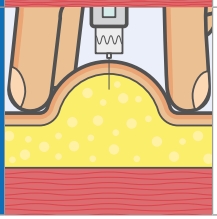


It is important to inject medication into the fatty layer (subcutaneous layer) of the skin for the medication to work correctly.

All people who inject insulin and GLP-1 medication should use 4mm pen needles

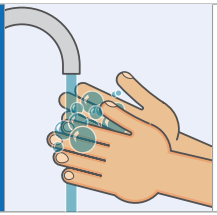
- Insulin and GLP-1 medication enter the body correctly when injected into the fat under the skin
- Accidental injections into the muscle layer below the fat can lead to rapid uptake of insulin – this can lead to severe hypos
- Use 4mm needles for all body types to minimise risk of accidental injection into muscle
- Children, young adults and lean adults even with 4mm pen needle may need to use a lifted skinfold

How to perform a correct lifted skin fold:

1		2	
Lift a fold of skin and fat between first two fingers and thumb		Don't pinch tightly – lifted fold should be at least 1 cm between fingers and thumb	
3		4	
Don't lift up muscle layer too – using only first two fingers and thumb helps		Insert needle at 90 degrees – release skinfold after needle is withdrawn	

10 STEPS TO GIVING AN INJECTION USING A PEN DEVICE:

1



- Firstly wash hands with warm water and soap
- Dry thoroughly

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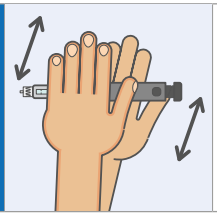

- Remove pen cap
- For cloudy insulins, roll pen 10 times between the palms

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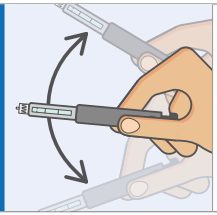
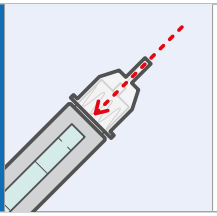


- For cloudy insulins, next gently invert the pen 10 times to achieve an even milky appearance

4



- Select a new needle
- Peel off paper seal
- Apply new needle in line with pen

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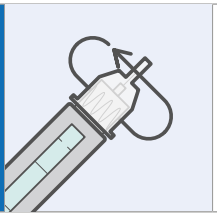
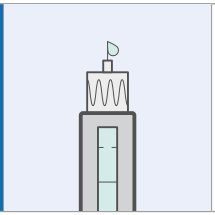


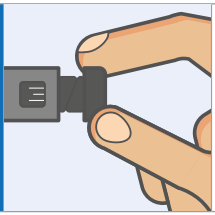
- Screw on needle
- Pull off protective caps

6



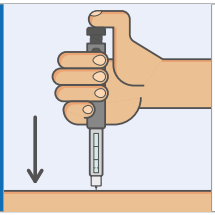
- To ensure needle and pen are working correctly, select 2 units on dose knob
- Hold pen with needle pointing upwards
- Fully depress dose knob looking for insulin to appear from needle tip
- If not seen, repeat steps until insulin seen at needle tip

7



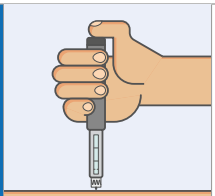
- Dial the required dose

8



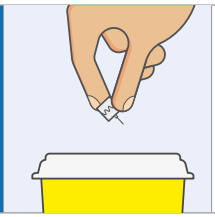
- Fully insert the needle into the skin at 90 degrees, keeping the pen stable
- Press dose knob until dose fully injected

9



- Before removing the needle from the skin, count to 10 to ensure the full dose is given

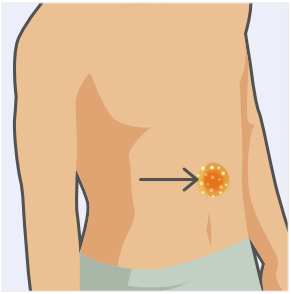
10



- Safely remove the needle from the pen
- Dispose of the needle into a sharps bin

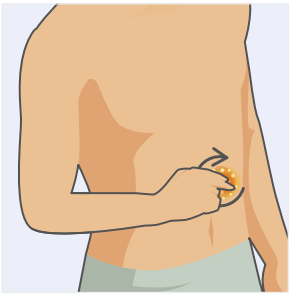
Try to use these steps every time you inject to ensure that you get the best effect from your insulin or GLP-1 medication

LIPOHYPERTROPHY OR LUMPS AT THE INJECTION SITES:



- Lipohypertrophy (or lipos for short) is a very common problem
- Insulin injected into lipos will not work as expected
- Lipos can lead to hypos and hypers (low and high blood glucose levels) and erratic blood glucose control
- Lipos are caused by injecting insulin too frequently into confined area and reusing needle
- Ask your doctor or nurse to show you how to check your sites for lipos and give you access to printed and digital support

Checking for lipos



Checking for lipos is simple and quick. Follow these tips to get it right

- Stand in front of a mirror and look at injection areas – look for lumps and bumps which can be as small as a pea or as big as a grapefruit
- Use some hand cream and with fingertips firmly press into injection areas – sweep fingers across area and feel for lumps and bumps
- Try checking when you are in the bath or shower - use soap to help feel for lumps under the skin

If you find lipos or you are unsure about something, please talk to your doctor or nurse. They will check your injection areas and ensure you are able to manage any problems

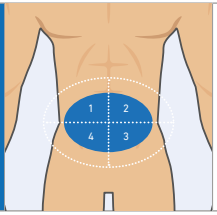
INJECTION NEEDLES

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

SITE ROTATION:

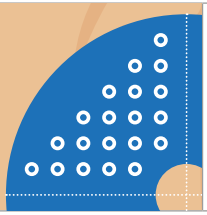
How to correctly rotate injection sites – the key principles:

1



Inject into one area no more frequently than every 4 weeks

2



Each new injection spot should be 1cm or one finger's width away from the last

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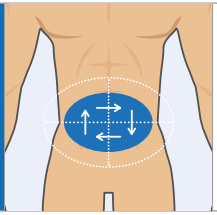

Use an injection area for approximately one week then move to the next

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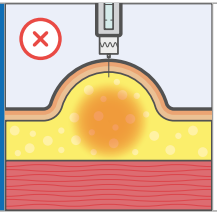
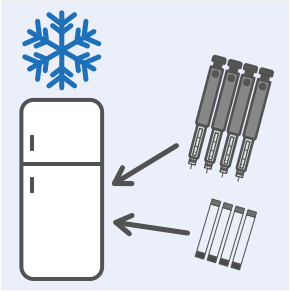


Never inject into areas affected by lipos

STORAGE:

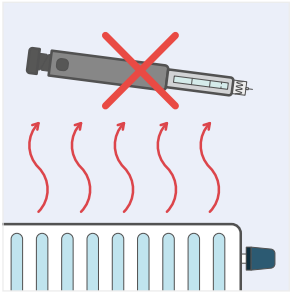
Do

- Store insulin and GLP-1 medication 'not in use' in the fridge at 2 - 8 degrees
- Store insulin & GLP-1 medication 'in use' at room temperature (8-25 degrees) for up to 30 days



Don't

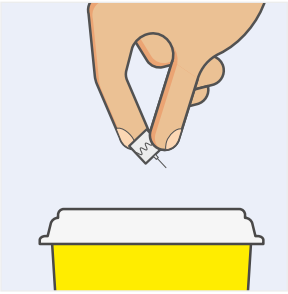
- Never allow insulin to get too hot:
  - Avoid leaving in hot cars, next to kitchen hob or on radiators
- Never allow insulin to get too cold:
  - Avoid cold places where insulin may freeze, cars overnight in winter, close to freezer box in fridge, cargo hold of aircraft



Insulin which gets too hot or freezes will not work properly and may lead to severe blood glucose problems.

SAFE DISPOSAL:

Insulin needles and other sharps must be disposed of properly and safely. Your GP should prescribe a sharps container for you. Check your local disposal regulations.



- Minimise the risk of sharps injury and infection to people who may come into contact with your needles and sharps
- Always dispose of needles and sharps correctly and safely

Let's keep everyone safe!

USEFUL RESOURCES:

TREND Diabetes: www.trenddiabetes.online
Diabetes UK: www.diabetes.org.uk

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