



# INJECTION TECHNIQUE

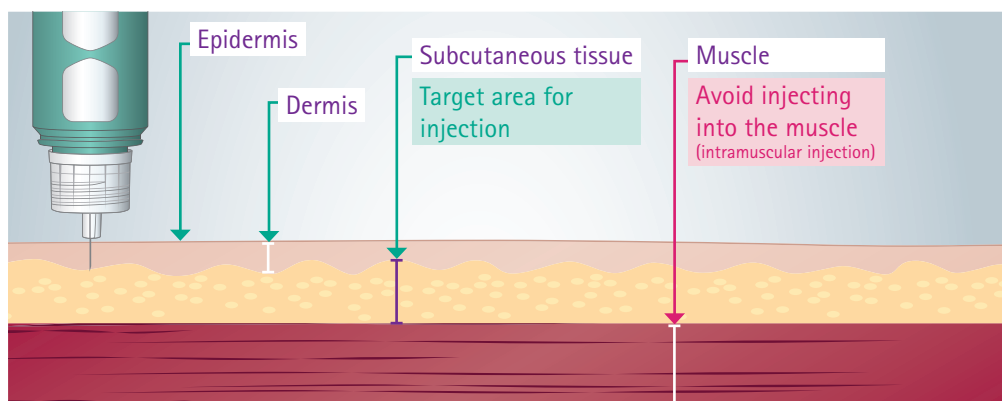


# BEST INJECTION TECHNIQUE

## NEEDLE LENGTH AND DIAMETER

### YOUR SKIN AND SUBCUTANEOUS THICKNESS

It is recommended that you use the shortest needle length and the smallest diameter. Let us explain why...



The thickness of the epidermis and dermis at different injection sites is relatively constant across ages, ethnic groups, Body Mass Index (BMI) and gender.

It is 1.9 to 2.4 mm on average and rarely more than 3 mm. The thickness of subcutaneous tissue in adults however, varies depending on gender, body site and BMI.

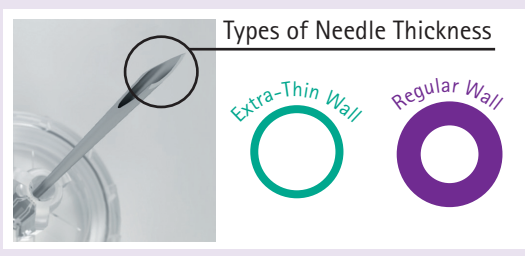
# 32 GAUGE

Using pen needles with the smallest diameter (highest gauge) minimises pain on injection.

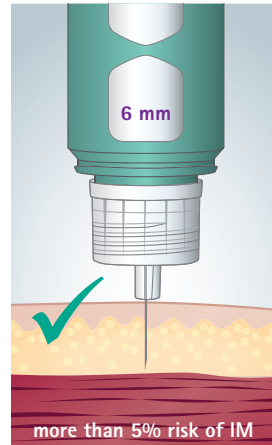
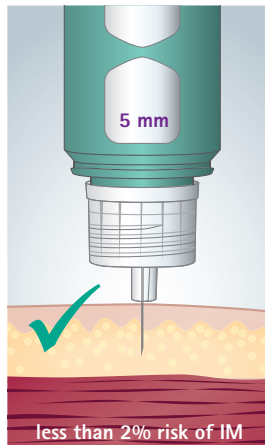
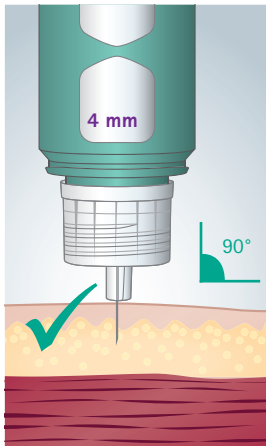
### THIN WALL TECHNOLOGY

Higher gauge needles are smaller and thinner in outer diameter, this helps make injections more comfortable.

Using pen needles with extra thin wall technology helps improve insulin flowrate and comfort.



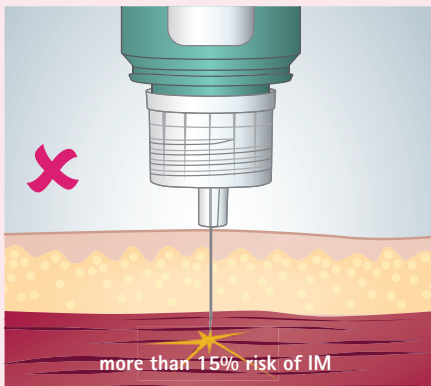
## NEEDLE LENGTH



The 4 mm pen needle is reported by patients to be less painful than longer needles<sup>1</sup>.

The 4 mm pen needle inserted at 90° is long enough to penetrate your skin and enter the subcutaneous tissue, with little risk of an intramuscular injection (IM). Therefore it should be considered the safest pen needle for adults and children regardless of age, gender and BMI<sup>1</sup>.

Intramuscular injections should be avoided. Injecting into the muscle causes unpredictable insulin absorption which could lead to hypoglycaemic episodes.



The risk of intramuscular injection increases as the needle length increases. Intramuscular injections increase the risk of hypoglycaemia.

# BEST INJECTION TECHNIQUE

## SINGLE USE

## REUSING & RECAPPING

Pen needles are sterile, highly precise disposable medical devices and should be used only once. Let us explain why...

### USING A PEN NEEDLE ONLY ONCE ENSURES



A penetration that is hygienic and virtually pain-free



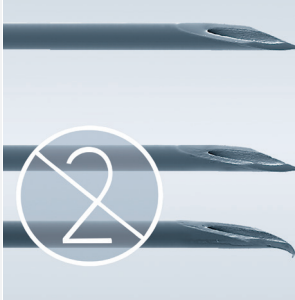
Correct insulin dosage



Reduced trauma

### REUSING PEN NEEDLES

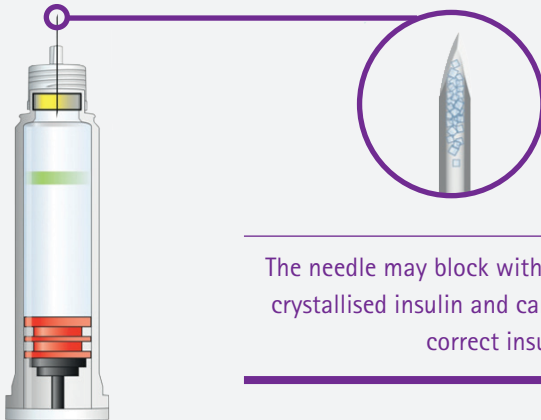
A used needle is no longer sterile and will be contaminated with bacteria.



A used needle will not have sufficient amounts of lubricant on, increasing pain on injection. Reusing will cause the needle to become blunt leading to breakages or areas of lipohypertrophy (hardened fatty lumps).



## REUSING PEN NEEDLES



The needle may block with sticky tissue residues or crystallised insulin and can no longer guarantee a correct insulin dose.

## RECAPPING PEN NEEDLES

You will notice that the B. Braun Omnicar® fine range do not have inner caps. The inner cap does not have any special functions and can encourage recapping and reuse.



Omnicar® fine  
Pen Needle



Other Pen  
Needle Brands



Recapping your needle can  
lead to needlestick injuries



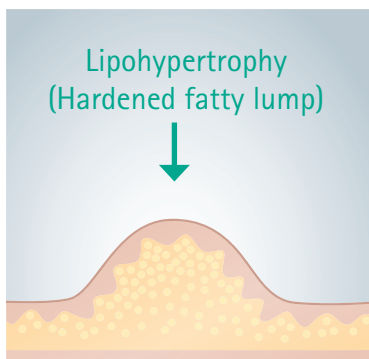
Recapping can bend and  
damage the needle

Needles are single use and therefore you should use them once and dispose of in a sharps box.

# BEST INJECTION TECHNIQUE

## LIPOHYPERTROPHY

Rotating your injection sites is key to maintaining predictable blood glucose levels. Let us explain why . . .

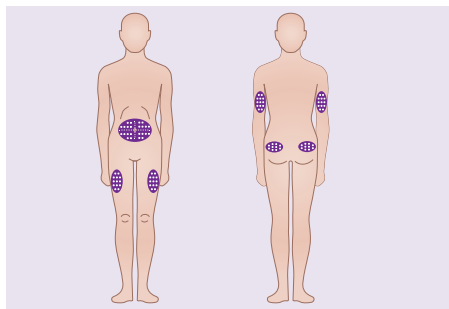


Lipohypertrophy is a hardened fatty lump under the skin surface that can develop in the subcutaneous tissue layer due to repeated injections in the same place.

You might be able to see lipohypertrophy, which can look like obvious lumps under the skin surface or a shiny skin surface on your injection sites. However, often it is invisible to the eye and is detectable by regularly feeling your injection sites.

Injecting into lipohypertrophy can cause irregular insulin absorption leading to hypoglycaemia. Therefore areas of lipohypertrophy must be avoided and revisited in around 3 months. The lipohypertrophy may then reduce in size and disappear.

Switching injections from an area of lipohypertrophy to normal tissue often requires a decrease in insulin dosage. Adjustment varies on the individual and should be guided by frequent blood glucose measurements.



The most common injection sites are the abdomen and thighs, although the buttocks can also be used. You should inspect your injection sites on a regular basis for lipohypertrophy. Using both these methods will help you identify areas of lipohypertrophy.

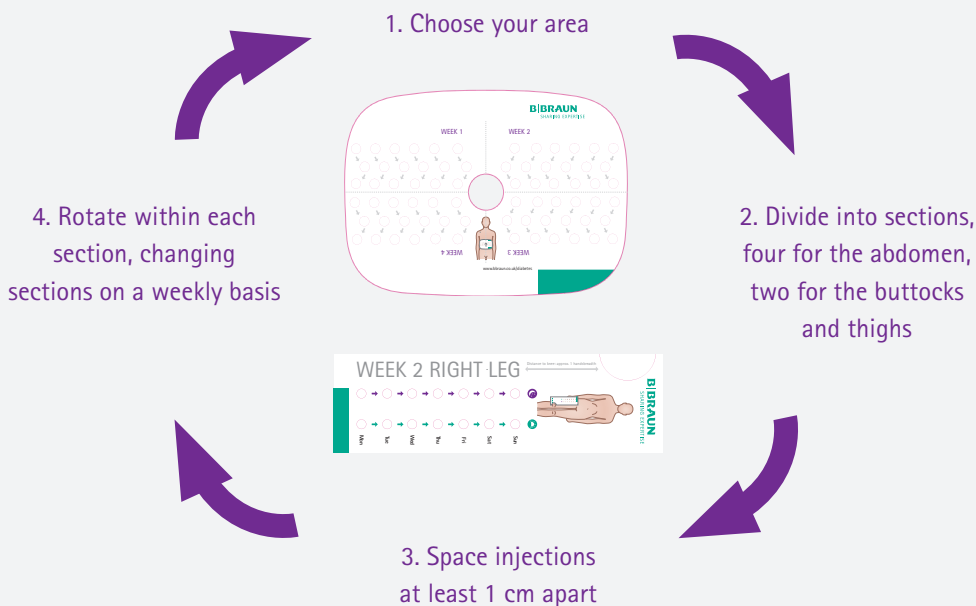
### METHOD 1:

Stand in front of a mirror, look at and feel your injection sites for lumps and bumps

### METHOD 2:

Lie down and feel your injection sites for lumps and bumps

To help prevent areas of lipohypertrophy rotate your injection sites and use a template as a guide.



Correct injection technique is very important to help control blood glucose levels.

This pack will help you manage your injection technique.

# Omnican<sup>®</sup> fine Pen Needle Range

## 32G NEEDLES

	32G   4 mm	32G   5 mm	32G   6 mm
PIP Codes	406-1362	406-1370	406-1354
Dimensions	0.23 x 4 mm	0.23 x 5 mm	0.23 x 6 mm
Pen Needle			

**For more information please contact:**

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