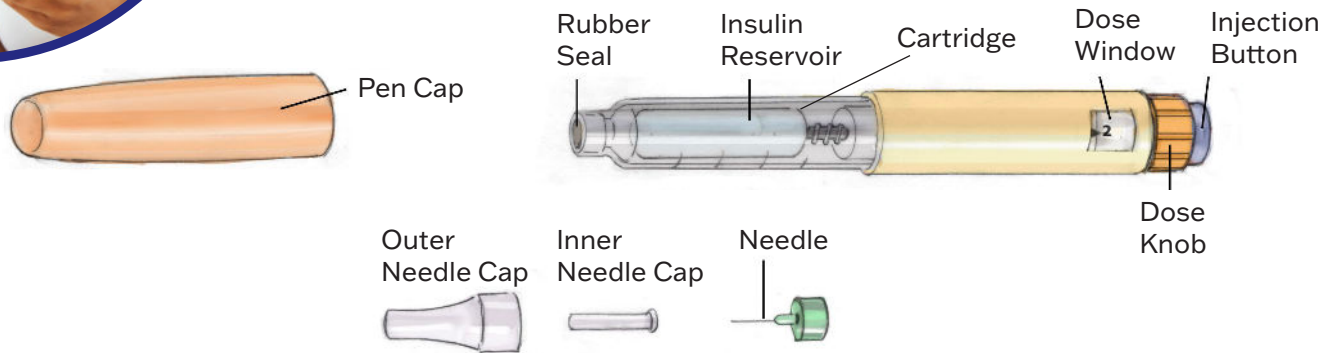




HOW TO USE AN INSULIN PEN

GET TO KNOW THE INSULIN PEN



USING YOUR PEN

Check the insulin in your pen

You can see the insulin in the pen. You will see the level going down as you use the pen. Disposable pens come in a box. The box has the expiration date for the pens. Cartridges for reusable pens also come in a box. That box has an expiration date too. That date is for unopened pens or cartridges left in the fridge.

Once you start using the disposable pen or put a cartridge in your reusable pen, the insulin will expire after one or two months. To find out how long you can keep the insulin in your pen, check the instructions on your pen, or ask your pharmacist or doctor. It is important to throw it out after that time as the insulin can become less strong. This can make it harder to manage your blood sugar levels.

If you use short or rapid-acting insulin, it should look clear. Do not use clear insulin if it has crystals or an odd color. Rapid-acting insulin brands are:

- Apidra (glulisine)
- Humalog/Admelog (lispro)
- NovoLog (aspart)

Short-acting Insulin:

- Regular (human insulin)

Ultra Fast Acting Insulin brands are:

- Lyumjev (insulin lispro-aabc)
- Fiasp (insulin aspart)

Long acting insulin should also look clear. Do not use if the insulin is discolored.

Long acting insulin brands are:

- Basaglar (U100 glargine)
- Lantus (U100 glargine)
- Toujeo (U300 glargine)
- Levemir (detemir)
- Tresiba (degludec)
- Semglee

Intermediate or mixed insulin should look cloudy and white. This type of insulin is sometimes called NPH.

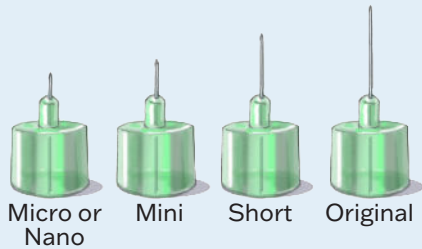
Common brands are Novolin or Humulin. If you use this insulin, gently mix it before you use it. To mix it:

1. Roll the pen between your hands until mixed well with no clumps.
2. Then slowly turn the pen up and down ten times.
3. Look at the insulin to be sure it is evenly mixed. It should look cloudy white with no clumps.



Choose Your Pen Needle

Pen needles come in many lengths:



The longer the needle, the thicker it is. How thick a needle is, is called the gauge.

A bigger gauge means a smaller needle. So, the Micro needle in the picture above is a 32 gauge. It is smaller than the 29 gauge Original needle.

All pen needles work for getting insulin into the body. Most people want the needle that hurts the least. Smaller needles may make the shot less painful.

Sometimes people like longer needles. Or sometimes their doctor will want them to use a longer needle. This is because:

- Some people feel that a longer needle is better at getting all the insulin under the skin.
- It bothers some people that shorter needles can sometimes leave a little drop of insulin at the site of the shot. This rarely means that something is wrong though.

It is important to know that all of these needles work fine. Work with your doctor to choose the one that will work best for you. Your doctor needs to write a prescription for the type of needle you want to use.

Getting the Pen Ready to Inject Insulin

You will need to get out your pen needle and attach it to the pen. These are the steps:

1. Wash your hands.
2. Wipe the end of the pen with alcohol where the needle will be attached.
3. Pull paper tab off pen needle.



4. Screw needle onto insulin end of pen.



5. Remove outer needle cover and keep it nearby.



6. Remove inner needle cover to expose the needle.



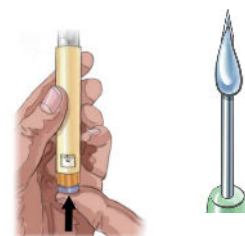
7. Throw the inner needle cover in trash.

Next you need to get the pen ready to send out the insulin. This is called “priming the pen”. Priming the pen helps you to measure the insulin dose correctly.

8. Hold the pen with needle pointing up. Turn the dose knob at end of the pen to 1 or 2 units. You should see the dose markings change when you turn the knob.



9. Press the injection button up all the way and hold for a few seconds. Watch for an insulin drop to come out of the needle. If insulin does not come out, do it again. If insulin still does not come out, change the pen needle. If the new needle does not work, do not use the pen and call the pen company.



10. Each time you press the injection button, the dial should go back to zero

HOW TO INJECT INSULIN WITH A PEN

1. Once you prime the pen, turn the dose knob to “dial in” your insulin dose. Do not worry if you dial in too much because you can dial the knob backward too. The pen will only allow you to receive the amount that you dial in.



2. Make sure the skin where you plan to give the shot is clean and dry. Clean the skin with alcohol or soap and water if needed.
3. Once the area is clean, you are ready to inject your insulin. Curl your fingers tightly around the upper end of the pen. Hold your thumb in the air just above the dose knob.



4. Quickly push in the needle at a 45 to 90-degree angle. The angle depends on the length of your needle.
 - You can insert shorter needles straight up and down.
 - Longer needles need more of an angle.



- If you are using long pen needles, you may have to pinch up your skin to avoid injecting into your muscle.



5. Use your thumb to press down on the injection button until it stops. Hold the button down for 5-10 seconds to release the full dose. After it stops, the dose window will be back at zero.



6. Pull the needle straight out of the skin. It is normal to see a small drop of blood or a bruise. You can pat the site with a tissue or cotton ball. But do not massage the area.

Get ready for next time

1. Put the outer needle cap over the needle.



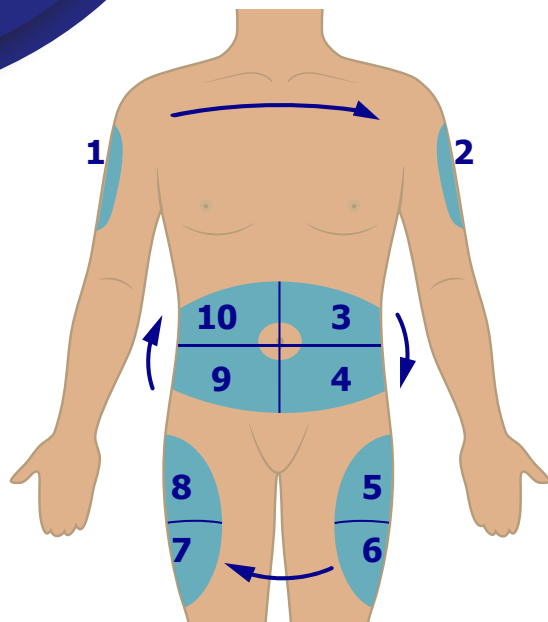
2. Twist to unscrew the needle from the pen.
3. Throw the used needle away in a hard container with a tight lid.



4. Put the pen cap back on the pen.



INJECTION SITE ROTATION



What does “site rotation” mean?

Changing the place on your body that you give your shots is called site rotation. When you rotate sites you follow a regular pattern as you move your shots from place to place.

Why should I rotate the site on my body?

It is important to rotate the injection site on your body to make sure you are giving your shot into healthy skin. If you always give shots in the same place, it can cause lumps of fat or scar tissue to grow under the skin. Any type of insulin shot can cause lumps and scarring. It does not matter if you use a pen, a vial and syringe, or an insulin pump. These lumps and scars make it harder for the body to absorb insulin and can make blood sugars harder to manage.

How often should I rotate the site on my body?

The shots can be given close to each other but each dose must rotate. It helps to have a pattern of where to give the shots so you remember to rotate. For example:

- In the mornings give insulin in the arms.
- At lunch give it in the legs.
- At dinner give it in the abdomen

Another idea for rotating is to use one area at a time. For instance:

- Use the right arm for 3-4 days
- Then use the left arm for 3-4 days
- Then the right side of the abdomen for a week
- Then use the left side of the abdomen for a week and so on.

Using a site rotation pattern like this will help make sure that each area has plenty of rest before you use it again. This will help keep your skin healthy so you can absorb insulin better.



The skin where I give my shots is starting to feel puffy and thicker than other parts of my skin.



That happens if you always give your shot in the same spot. You need to rotate the injection sites on your body.