Subcutaneous injection instructions

1. What items do I need to give a shot?

- The correct size needle and syringe
- Vial containing the medication
- Two alcohol wipes
- You may use gloves for your protection or for the person receiving the shot

2. The correct angles and ways to hold the syringe

A subcutaneous (SQ) injection is given in the fatty layer of tissue just under the skin. Syringes for subcutaneous injections will use smaller needles than those used for injections into a muscle. The typical insulin or TB syringe will have $\frac{1}{2}$ inch or less needle length because it only needs to go slightly below the skin level. Only certain types of injections can be given through this route. Subcutaneous shots can be given straight in at a 90-degree angle or at a 45-degree angle. You can give the shot at a 90-degree angle if 2 inches of skin can be grasped between your thumb and first (index) finger. If only 1 inch of skin can be grasped, give the shot at a 45-degree angle.



45-degree angle



90-degree angle

3. Where can I give a subcutaneous shot?

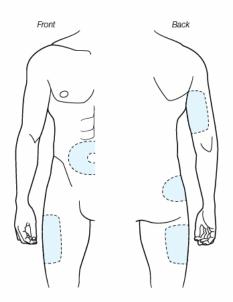
There are many sites on the body where it is safe to give subcutaneous shots.

Upper Arm (not recommended for self injection)

Uncover the arm to the shoulder to see the whole arm. Have the person receiving the shot stand with their hand on their hip. Stand next to and a little behind the person. Find the area in the middle part of the arm, halfway between the elbow and shoulder. Gently grasp the skin at the back of the arm between your thumb and first two fingers. You should have 1-2 inches of skin.

Abdomen

Uncover the abdomen to see the whole area. Find the waist area. You may give a shot bounded by these landmarks: below the waist, just above the hip bone, and from where the body curves at the side to about 2 inches from the middle of the abdomen. Use the natural line in the middle of the body as a marker. It may be hard to see, but it is there—unless it was covered by surgery. Avoid the surrounding area 2 inches from the belly button.



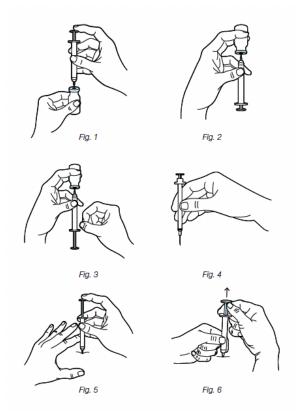
Sites on the body where subcutaneous injections can be given

Thigh

Uncover the entire leg. Find the area between the knee and hip. The middle of the thigh, from mid-front to mid-side, on the outside part of the thigh, is a safe site. Gently grasp the area to make sure you can pinch 1-2 inches of skin.

4. How do I transfer medication to the syringe?

- 1. Wash your hands thoroughly with soap and dry them completely. Put on gloves if necessary.
- 2. Remove the plastic cap from the medication vial and use an alcohol wipe to clean the rubber stopper.
- 3. With an unused syringe, remove the needle cap.
- 4. Insert the needle into the vial. (Fig. 1)
- 5. Turn the vial and syringe upside down and carefully draw the liquid medication back into the syringe to the desired amount needed for one injection (Fig. 2).
- 6. If you see any air bubbles in the syringe, use your fingers to lightly tap or flick the syringe to draw the bubbles to the top of the syringe near the needle. This action will help expel any air in the syringe. Note: It is normal for a small amount of medication to come out of the needle as well (Fig. 3).
- 7. Pull the needle out of the vial and you are now ready to inject.

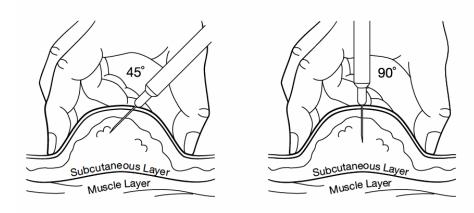


5. How do I inject medication into subcutaneous tissue?

Please read the section all the way through before giving a shot. It is important to get a general idea of what you are about to do before you begin. You may read this step-by-step procedure again as you do it.

- 1. Wash your hands thoroughly with soap and dry them completely.
- 2. Open the foil covering the alcohol wipe.
- 3. Wipe the area where you plan to give the shot using the fresh alcohol wipe. Let the area on the skin dry.
- 4. Take the cover off the needle. Hold the syringe with your writing hand and pull the cover off with your other hand, like taking a cap off of a pen.
- 5. If you give the shot at a 45-degree angle, hold the syringe with your writing hand. Place the syringe between your thumb and your index and second fingers. The bevel of the needle should be pointing upwards (away from the skin) at the 45-degree angle you plan to use.
- 6. If you give the shot at a 90-degree angle, hold the syringe with your writing hand. Hold the syringe under your thumb and first finger. Let the barrel of the syringe rest on your second finger. (Many people hold a pen this way when they write).

- 7. Grasp the skin with the hand not holding the syringe. Holding the syringe barrel tightly with your writing hand, use your wrist to insert the needle through the skin. Sometimes the needle goes in easily. Some people have tougher skin and a little more pressure or quickness will be required. If it is painful, relax the skin with your fingers, they might be too tight.
- 8. Once the needle is all the way in, push the plunger down slowly to inject the syringe's contents.
- 9. Remove the needle at the same angle you put it in.
- 10. Dispose of the syringe and needle in a Sharps Container.



5. How can I get rid of used syringes and needles?

You can purchase a Sharps Container, which is a hard-plastic container made especially for used syringes and needles, at your local pharmacy. If you did not purchase this container with your medication, you can use a hard-plastic container with a screw-on top, such as a clothing softener or hard plastic detergent bottle. Make sure you can easily put both the syringe and the needle into the container. Whatever container you choose, make sure that the needles cannot break through the sides, bottom, or top.

Call your primary care physician or your local pharmacy to find out what your state or local requirements are for disposing of used syringes and needles. More information is available at safeneedledisposal.org.

6. Video resources



How to prepare medication for a self-administered injection.

■ How to Prepare Your Medication for a Self-Administered Injection



How to give yourself a subcutaneous injection.

■ How to Give Yourself A Subcutaneous Injection