

What is a: Subcutaneous Injection?

A method of giving a medication in the fatty layer of tissues just under the skin.

Preparing to give medication by syringe

Avoid areas where skin is burned, scarred, hardened, inflamed, swollen, or damaged by a previous injection.

1. Wash your hands thoroughly. This is the best way to prevent infection.
2. Assemble your equipment and supplies:

› Medication

Your medication may come in powder form; follow the manufacturer's instructions for mixing the powder and liquid together.

› Needle and syringe sizes

The appropriate size of the needle and syringe are important for the type of medication. In general, use a small, short needle. Your healthcare provider will discuss appropriate needle and syringe sizes with you.

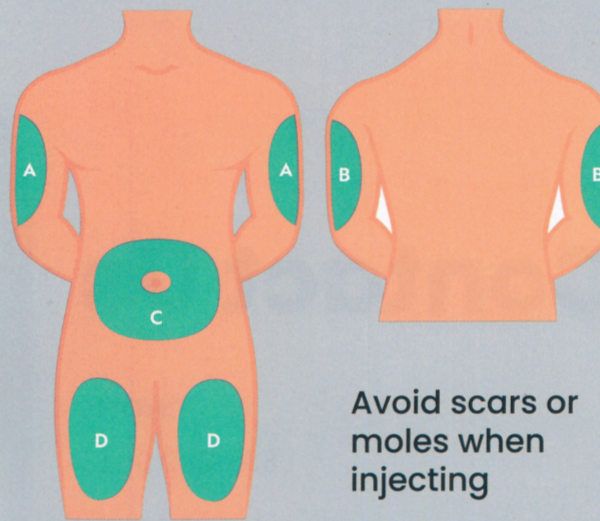
› Other supplies needed

- Medication log
- Container for syringe and needle disposal
- Sterile 2 x 2-inch gauze pad
- Alcohol wipes

Notes:

It is important to eliminate large air bubbles, because they take up space needed for medication and may cause pain or discomfort when injected.

RECOMMEND DISCARDING VIALS



Avoid scars or moles when injecting

Locating injection sites

Subcutaneous injections can be given in the arms, legs or abdomen. Your nurse or doctor will help you select the best sites to administer your medication.

ARMS: Use areas shown on A or B, from just below the shoulder and just below the elbow.

ABDOMEN: Use the area shown on C, avoiding the belly button, ribs and hip bones.

THIGHS: Use the outer areas shown on D, below the groin and above the knee.

Rotating injection sites

It is extremely important to rotate sites to keep the skin healthy. Repeated injections in the same spot can cause scarring and hardening of fatty tissue that will interfere with uptake of medication. Each injection should be about 1 inch apart.

Safe needle disposal

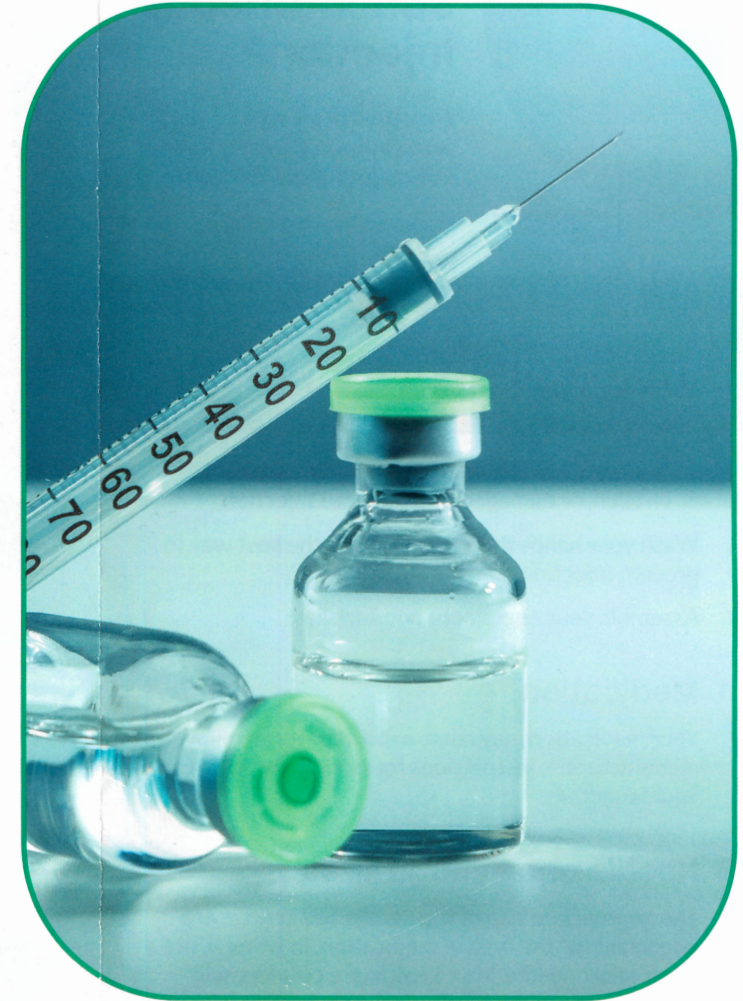
- Place the syringe in a hard plastic Sharps container with a tightly secured lid.
- Do not recap needles after use.
- Keep the container out of the reach of children or pets.
- Check with your local doctors office or hospital for disposal locations for used needles and syringes near you.

Giving the injection by pen

1. Wash your hands thoroughly.
2. Assemble equipment and supplies.
3. Record the date and time on the label the first time the pen is used. (Follow the manufacturer's directions for the expiration date.)
4. Attach the needle to the pen by cleaning the top of the pen with alcohol and screwing on the needle.
5. Dial in your prime volume (usually 0.02mL) using the manufacturers directions.
6. With the pen needle pointed up, push the injection button completely. You should see a drop or stream of liquid, if you do not, repeat priming steps 5 & 6 until this occurs.
7. Dial in prescribed dose of medication.
8. Cleanse your skin with a back-and-forth motion using an alcohol swab.
9. See the section on locating and rotating injection sites.
10. Take the cover off of the needle. Be careful not to contaminate the needle. Place the cover on its side.
11. Quickly insert the needle all of the way into the skin at a 90 degree angle. For small children and persons with little subcutaneous fat, you may be taught to use a 45 degree angle. **Do not press down on the top of the plunger while piercing the skin.**
12. After the needle is completely inserted into the skin, press down on the plunger or injection button to release medication into the subcutaneous layer in a slow, steady pace.
13. After the medication is released, count to 10 seconds before removing the needle and pen from the skin.
14. Pull the needle out of the skin, gently press a 2x2 gauze onto the insertion site. Apply a bandage if desired. Massaging or rubbing the area is not necessary unless instructed to do so.
15. Untwist the needle on the pen, and safely dispose of the needle. *See section on safe needle disposal.*
16. Replace pen cap, and store as instructed.

Drawing up medication

1. Check the label for correct medication.
2. Remove the soft metal or plastic cap protecting the top of the vial.
3. If the medication vial can be used for more than one dose, then record the date and time on the label.
4. Clean the exposed top of the vial using an alcohol swab.
5. Remove the syringe from the plastic or paper cover. If necessary, attach the needle securely. Avoid touching the needle.
6. With the needle capped, pull back the plunger, filling the syringe with air equal to the amount of medication to be administered.
7. Remove the cap covering the needle, and set it on its side to keep clean.
8. With the vial in the upright position, push the needle down through the cleansed center top of the vial, being careful not to bend the needle.
9. Inject the air in the syringe into the vial.
 - If too little or no air is injected, withdrawing the medication may be difficult.
 - If too much air is injected, the plunger may be forced out of the barrel causing the medication to spill.
10. Turn the vial upside down, with the needle remaining in the vial, making sure that the tip of the needle is completely covered by the medication.
11. Pull back the plunger to fill the syringe with the correct dose of medication, you may go over the amount needed. If you see a lot of air in the syringe, you may push all of the medication back into the vial and withdraw again slowly, making sure the needle tip stays in the solution.
12. Take the needle out of the vial.
13. Point the needle and syringe straight upwards and tap the syringe to move any air bubbles to the top.
14. Once the bubbles are at the top of the syringe, gently push on the plunger to force the bubbles out of the syringe.
15. Check to make sure that you have the correct amount of medication in the syringe. If the dose is not correct, then repeat the steps beginning at number 8.



INJECTION GUIDE:

Subcutaneous

How to Inject:

TAP SYRINGE



Gently tap the syringe with your finger to force any air bubbles to rise to the top. Press the plunger to push bubbles out.

Clean the injection site (*abdomen*) with an alcohol swab and let dry. Hold the syringe in one hand. Use your other hand to pinch a fold of skin on the cleaned injection site.



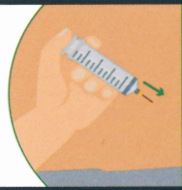
CLEAN & PINCH

INJECT NEEDLE



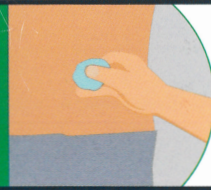
Hold the syringe at a right angle to the skin. Push the injection needle into the skin with a quick motion. Most of the needle should go beneath the skin surface.

Remove your hand from the pinched area of skin after the needle goes in. Make sure the needle stays in the skin. Slowly push the plunger all the way down until all the medicine in the syringe has been injected under the skin.



PUSH PLUNGER

REMOVE & RUB



Pull the injection needle out of your skin once the syringe is empty. Be careful to pull it out at the same angle you injected. Use a piece of sterile gauze to rub on the injection site for 30 seconds. If bleeding continues, apply a bandage to the site.

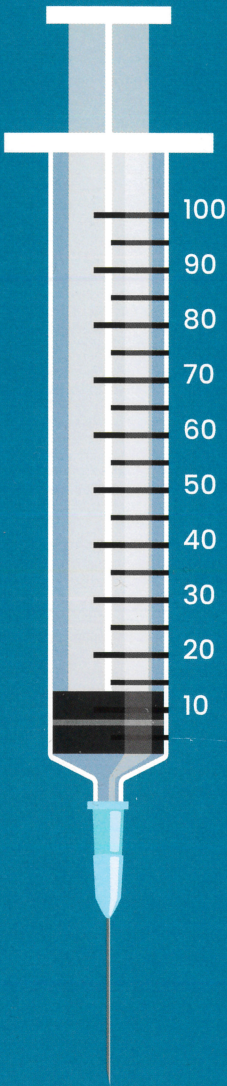
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DISCARD SYRINGE

RECOMMEND DISCARDING VIALS 28 DAYS AFTER PUNCTURE.

Syringe Guide



Conversion Chart

Units	mL	Units	mL
100	1	50	0.5
95	0.95	45	0.45
90	0.9	40	0.4
85	0.85	35	0.35
80	0.8	30	0.3
75	0.75	25	0.25
70	0.7	20	0.2
65	0.65	15	0.15
60	0.6	10	0.1
55	0.55	5	0.05

Conversion Chart for units to mL.

Example: 50 units on the syringe
is equal to 0.5 mL.

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