

# **Subcutaneous Self-Injection**

Muscle Layer

### What is a Subcutaneous Injection?

A subcutaneous injection, as illustrated in the figure to the right, is given into the fatty layer of tissue just under the skin.

Subcutaneous injections are given with a very small needle that causes little or no discomfort.

### **Step 1: Preparing for Your Injection**

Find a comfortable, well lit working place to do the injection. Plan to do your injection at the same time each day if you will need more than one shot. Follow these steps to prepare for your shot:

- 1. Make sure it is the medication your doctor prescribed. Check the expiration date on the vial. Do not use a medication with an expired date. If the medication has particles or is discolored, do not use it and check with your pharmacy.
- 2. Clean your work area with soap and water. Dry off the work surface with a clean towel.
- 3. Assemble your supplies:
  - Your medication
  - Disposable syringe and needle
  - Alcohol swabs
  - Puncture proof disposal container (refer to page 8)



### Step 2: Wash Your Hands...The Proper Way

Although your hands may look and feel clean, it is always important to wash your hands in order to remove germs you can't see. Wash your hands before any injection and repeat handwashing if your hands come into contact with anything that might be considered dirty, such as after blowing your nose, picking something off the floor, using the telephone, touching your face, or glasses, removing a soiled dressing.

There are two ways to properly clean your hands: washing with soap and washing with hand cleaner.

## Washing Your Hands with Soap

#### Supply list:

- Warm water
- Clean paper towels or clean cloth towel
- Antibacterial Soap
- 1. Wet your hands and wrists under warm running water.
- 2. Apply soap and scrub VIGOROUSLY for 15 seconds.
- 3. Work lather between fingers, under nails, over the palms and back of your hands.
- 4. Rinse your hands well. Make sure to keep your hands up so the dirty water runs toward your elbows.
- 5. Dry your hands with a clean paper or cloth towel.
- 6. Turn off the faucet with a clean towel.

# Washing Your Hands with Hand Cleaner

#### Supply list:

Check the label on the gel or lotion. It should contain ethyl alcohol (ethanol), propyl alcohol, or isopropyl alcohol in concentrations between 60-90%.

- 1. Place a dime-size amount of gel in one hand.
- 2. Gently rub the gel into palms and backside of hands and between fingers.
- 3. Allow your hands to dry.



# Step 2: Selecting and Preparing the Injection Site

The following are sites for injections. Alternate the injection site each time you inject to avoid soreness at any one sight.



Injection Site on the abdomen



Injection Site on the side of the arm



Injection Site on the back of the arms



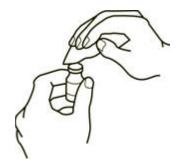
Injection Site on the thighs



### Step 3: Preparing the dose

Take the cap off the vial. Clean the rubber stopper with one alcohol swab.





- 1. Check the package containing the syringe. If the package has been opened or damaged, do not use that syringe. Dispose of that syringe in the puncture-proof disposal container. If the syringe package is undamaged, open the package and remove the syringe.
- 2. Pull the needle cover straight off the syringe.
- 3. Then, pull back the plunger and draw air into the syringe. The amount of air drawn into the syringe should be the same amount (mL or cc) as the dose that your doctor prescribed.

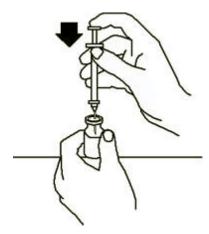




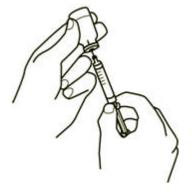
**4.** Keep the vial on your flat working surface and insert the needle straight down through the rubber stopper.

Do not put the needle through the rubber stopper more than once.

5. Push the plunger of the syringe down and inject the air from the syringe into the vial.



6. Keeping the needle in the vial, turn the vial upside down. Make sure the liquid is covering the tip of the needle.





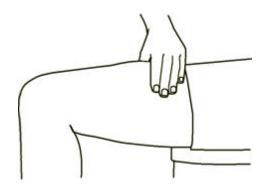
- 7. Keeping the vial upside down, slowly pull back on the plunger to fill the syringe with the medication to the number (mL or cc) that matches the dose your doctor prescribed.
- 8. Keeping the needle in the vial, check for air bubbles in the syringe. If there are air bubbles, gently tap the syringe with your fingers until the air bubbles rise to the top of the syringe. Then slowly push the plunger up to force the air bubbles out of the syringe.
- 9. Keeping the tip of the needle in the liquid, once again pull the plunger back to the number on the syringe that matches your dose. Check again for air bubbles. If there are still air bubbles, repeat the steps above to remove them. The air in the syringe will not hurt you, but air bubbles that are too large can reduce your dose of medicine.
- 10.Check again to make sure that you have the correct dose in the syringe. It is important that you use the exact dose prescribed by your doctor.

  Remove the syringe from the vial but **do not lay it down** or let the needle touch anything.

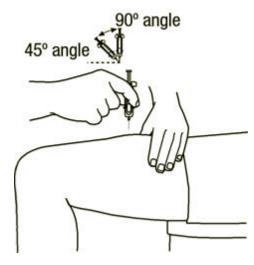


### **Step 4: Injecting the Dose**

1. Hold the syringe in the hand you will use to inject the medication. Use the other hand to pinch a fold of skin at the cleaned injection site.

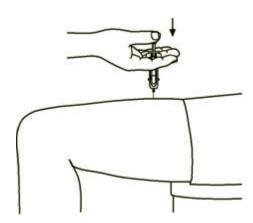


2. Holding the syringe like a pencil, use a quick "dart-like" motion to insert the needle either straight up and down (90 degree angle) or at a slight angle (45 degrees) into the skin.

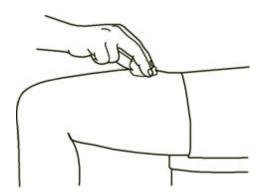




3. After the needle is inserted, let go of the skin. Pull the plunger back slightly. If no blood appears, slowly push down on the plunger all the way, until all the medication is injected. If blood comes into the syringe, do not inject medication, because the needle has entered a blood vessel. Withdraw the syringe and clean a new injection site. Remember to check again for blood before injecting medication.



4. When the syringe is empty, count to 5 then pull the needle out of the skin and place a cotton ball or gauze over the injection site and press for several seconds.





### **Tips for Minimizing Injection Pain:**

- · Inject medicine that is at room temperature
- · Remove all air bubbles from the syringe before injection
- · Wait until the alcohol on your skin has evaporated before injecting
- · Keep muscles in the injection area relaxed
- · Break through the skin quickly
- · Don't change the direction of the needle as it goes in or comes out
- · Do not reuse disposable needles

#### Instructions for Disposing of "Sharps":

Disposal of syringes and other sharp objects is monitored by the Environmental Protection Agency. It is important to dispose of them properly for your safety and for the safety of others. The Environmental Protection Agency (EPA) promotes all recycling activities, and therefore encourages you to discard medical waste sharps in sturdy, non-recyclable containers, when possible. Your state or community environmental programs may have other requirements or suggestions for disposing of your medical waste. You should contact your local EPA office for any information you may need.

#### What Container Should I Use?

Place needles, syringes, lancets and other sharp objects in a hard-plastic or metal container with a screw-on or tightly secured lid. Many containers found in the household will do, or you may purchase containers specifically designed for the disposal of medical waste sharps.

If a recyclable container is used to dispose of medical waste sharps, make sure that you don't mix the container with other materials to be recycled. Since the



sharps impair a container's recyclability, a container holding your medical waste sharps properly belongs with the regular household trash. You should label the container, "NOT FOR RECYCLING." In addition, make sure your sharps container is made of nonbreakable material and has a lid that can be securely closed (screwed on or tightly secured). Before discarding a container, be sure to reinforce the lid with heavy-duty tape.

Do not put sharp objects in any container you plan to recycle or return to a store, and do not use glass or clear plastic containers (see additional information below). Finally, make sure that you keep all containers with sharp objects out of the reach of children and pets.

Your home care provider may deliver a sharps container with your medical supplies. If so, place all needles, syringes and lancets in this container and notify the company when the container is approximately 75% full. Your home care provider will arrange for pickup of the container. For your safety, do NOT bring your container to the hospital or Rogel Cancer Center for disposal.

#### **Information and Resources:**

Further information can be found at the United States Environmental Protection Agency's website: www.epa.gov/osw

You may also contact the Coalition for Safe Community Needle Disposal at 1-800-643-1643 for information about the availability of safe disposal programs in your area.

This document is not intended to take the place of the care and attention of your personal physician or other professional medical services. Our aim is to promote active participation in your care and treatment by providing information and education. Questions about individual health concerns or specific treatment options should be discussed with your physician.

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