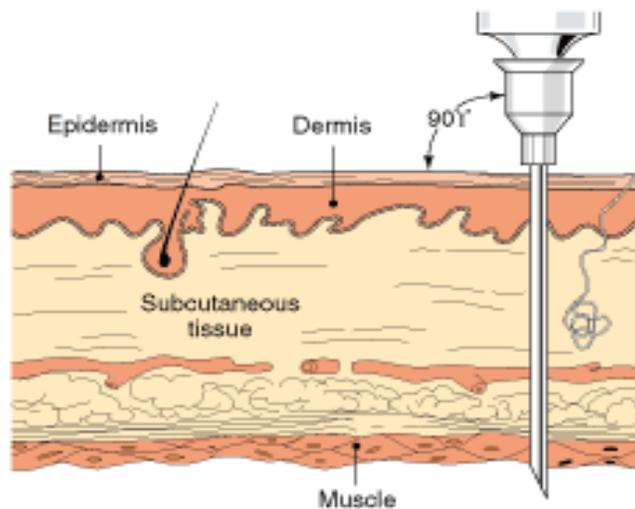


Intramuscular (IM) Self-Injection

What is an Intramuscular Injection?

An intramuscular injection, as illustrated in the figure below, delivers medication deep into the muscle tissue. This allows the medication to be quickly absorbed into the bloodstream for action.



Step 1: Setting Up for the Injection

Find a comfortable, well lit working place and inject at the same time each day.

1. Remove medication from the refrigerator and let it reach room temperature.
2. 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.
3. Clean your work area.

4. Wash your hands.

Hand washing is one of the most important things you can do to prevent infection. Wash your hands at these times:

- before and after doing any procedure,
- before and after removing gloves,
- after handling any contaminated waste or body fluid,
- after personal hygiene (such as using the bathroom or blowing your nose),
- and before eating.

You will need an antibacterial soap or you may use an antiseptic gel or hand rub that does not require water.

Supplies:

Antibacterial soap

Paper towel

Procedure:

Wet your hands and wrists under running water.

Scrub vigorously with an antibacterial soap for 15 seconds. Work lather between fingers, under nails, over palms and on backs of hands and wrists.

Rinse hands and wrists and dry with a clean paper towel.

Turn off faucet with a paper towel.

5. Assemble supplies:

- Medication
- Disposable syringe and needle
- Alcohol swabs
- Puncture proof disposal container

Step 2: Selecting and Preparing the Injection Site

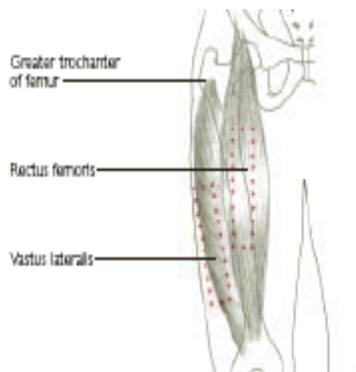
The following are sites for injections. *Alternate the injection site each time you inject to avoid soreness at any one sight.*



Deltoid

Find the lower edge of the acromial process and the point on the lateral arm in line with the axilla. Insert the needle 1" to 2" below the acromial process, usually two or three fingerbreadths.

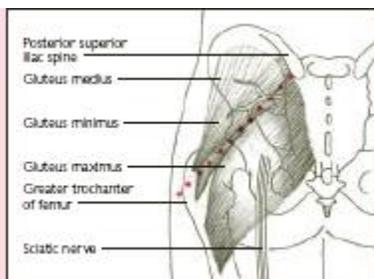
Typical injection: 0.5 ml (range: 0.5 to 2.0 ml)



Vastus Lateralis

Use the lateral muscle of the quadriceps group, from a handbreadth below the greater trochanter to a hand breadth above the knee. Insert the needle into the middle third of the muscle parallel to the surface on which the patient is lying.

Typical injection: 1-4 ml (range 1-5 ml)



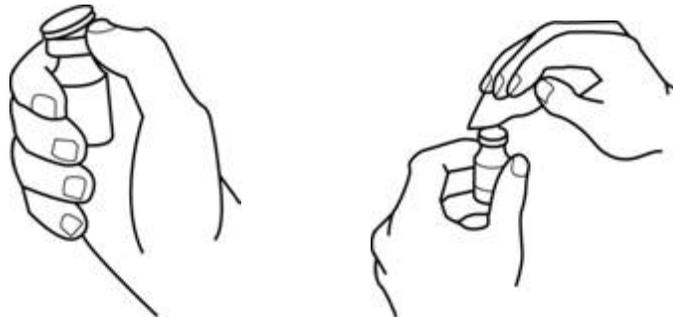
Dorsogluteal

Inject above and outside a line drawn from the posterior superior iliac spine to the greater trochanter of the femur. Or, divide the buttock into quadrants and inject in the upper outer quadrant, about 2" to 3" below the iliac crest.

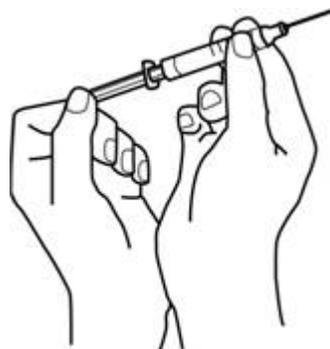
Typical injection: 1 to 4 ml (range: 1-5ml)

Step 3: Preparing the Dose

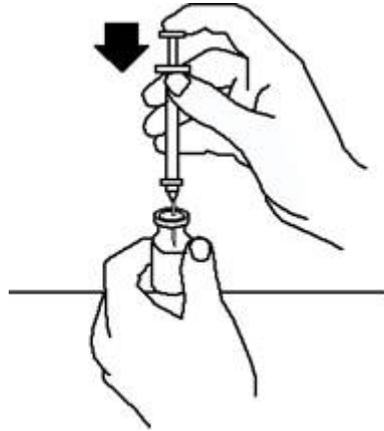
Take the cap off the vial. Clean the rubber stopper with one alcohol swab.



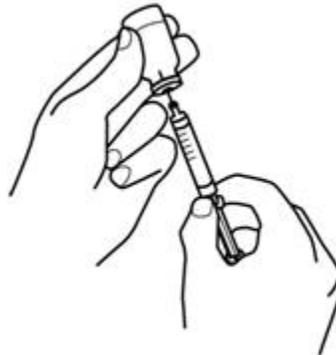
1. Check the package containing the syringe. If the package has been opened or damaged, do not use that syringe. Dispose of that syringe in the puncture-proof disposal container. If the syringe package is undamaged, open the package and remove the syringe.
2. Pull the needle cover straight off the syringe. 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.



3. 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.
4. Push the plunger of the syringe down and inject the air from the syringe into the vial.



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



6. 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.

7. 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.

8. 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. The air in the syringe will not hurt you, but too large an air bubble can reduce your dose of medicine. If there are still air bubbles, repeat the steps above to remove them.

9. 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.

Tips for Minimizing Injection Pain –

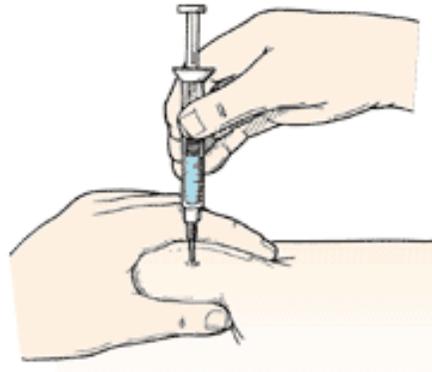
- Inject medicine that is at room temperature
- Remove all air bubbles from the syringe before injection
- Wait until the topical alcohol has evaporated before injecting
- Keep muscles in the injection area relaxed
- Break through the skin quickly
- Don't change the direction of the needle as it goes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

Step 4:

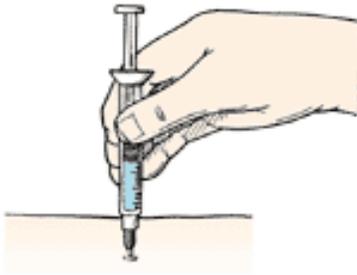
How to Give an Intramuscular Injection



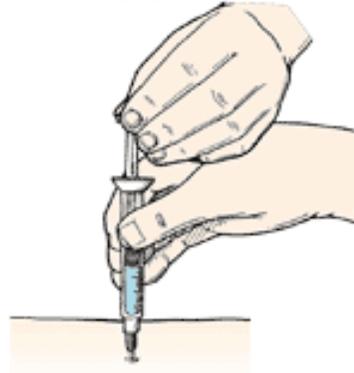
1. Use an alcohol swab to clean the skin where you will give yourself the shot.



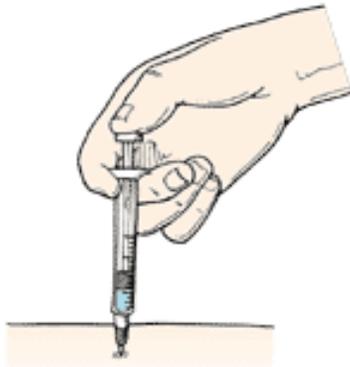
2. Hold the muscle firmly and insert the needle into the muscle at a 90° angle (straight up and down) with a quick firm motion.



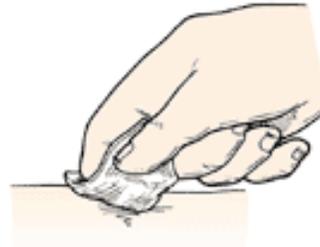
3. After you insert the needle completely, release your grasp of the muscle.



4. Gently pull back on the plunger of the syringe to check for blood. (If blood appears, withdraw the needle and gently press the alcohol swab on the injection site. Start over with a fresh needle.)



5. If no blood appears, inject all of the solution by gently and steadily pushing down on the plunger.



6. Withdraw the needle and syringe and press an alcohol swab on the spot where the shot was given.

Instructions for Disposing of “Sharps”:

Disposal of syringes and other sharp objects is monitored by the Environmental Protection Agency (EPA). It is important to dispose of them properly for your safety and for the safety of others. The 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 non breakable 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 a 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.**

**©2008 The Regents of the University of Michigan
Document # 0294/ Revised August, 2008**