



## **Intramuscular Injection (Self-injection)**

### **Definition**

An intramuscular (IM) injection is a shot where the needle goes into the muscle layer under the skin in order to deliver medicine. This type of injection can be given by a health care professional or a patient can self-inject. Intramuscular injections are deeper than subcutaneous injections.

### **Parts of the Body Involved**

- Upper arm
- Top of the thighs
- Buttocks

### **Reasons for Procedure**

Some IM medications are “deposited” in the muscle and absorbed gradually over time. IM injections are also used to deliver medications that would otherwise be absorbed too slowly or made ineffective if taken by mouth. Examples of such medications include:

- Certain antibiotics
- Certain contraceptive hormones
- Most vaccines
- Epinephrine injections for people with severe allergic reactions

### **Risk Factors for Complications during the Procedure**

The only significant risk factor is having an allergy to the administered medication. Otherwise, no serious complications are expected.

### **What to Expect**

#### **Prior to Procedure**

- Make sure you have all of the items you will need easily available: syringe, medicine, cleaning materials, etc.
- Wash hands with warm, soapy water prior to giving the injection and dry with a clean towel
- Select a site and cleanse the area (about 2 inches) with a fresh alcohol pad or a cotton ball soaked in alcohol.

- Wait for the site to dry.

## **During Procedure**

- Remove the needle cap.
- Pinch a 2- or 3-inch fold of skin between your thumb and index finger.
- Holding the syringe the way you would a pencil or dart, insert the needle at a 90 degree angle to the pinched-up skin (the needle should be completely covered by skin).
- Hold the syringe with one hand. With the other, pull back the plunger to check for blood.
  - If you see blood in the solution in the syringe, do not inject.** Withdraw the needle and start again at a new site.
  - If you do not see blood,** slowly press down on the plunger until it stops.
- Remove the needle from the skin and gently hold an alcohol pad on the injection site. **Do not rub.**
- If there is bleeding at the site of injection, apply a bandage.
- Immediately put the syringe and needle into the proper disposal container. Ideally, this should be a “sharps box” (which you can purchase from a pharmacy). However, you can also use a sealed coffee can or leak-proof, closable milk jug, as long as it is a puncture-proof disposal container. You will need to find out what services are available in your area for the proper disposal of biological waste.

## **Will It Hurt**

Depending on the medication administered there is usually some minimal discomfort at the injection site. Some degree of lingering soreness in the muscle is also common.

## **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

## **Possible Complications**

- If blood is in the solution, you will need to try injecting at another site.
- You may have some bleeding, soreness, or redness at the site.
- Allergic reaction to the medication (never administer medications that you may be allergic to).

## **Outcome**

You should expect the medicine to work in the prescribed way.

## **Call Your Doctor If Any of the Following Occurs**

- You are unable to give yourself the injection
- The injection site continues to bleed
- There is a lot of pain
- You inject the medicine into the wrong area
- There is a rash or swelling around the injection site
- You develop a fever or experience signs of allergic reaction