

# **Intramuscular Injections**

#### **Patient Instructions**

### How to transfer contents from vial to syringe

First, remove the plastic cap from the medication vial and use an alcohol wipe to cleanse the rubber stopper. With a fresh, unused syringe, pull back on the plunger to the amount you are injecting, bringing air into the syringe. Now, remove the plastic cap from the needle. Insert the needle into the vial and slowly push (inject) the air from the syringe into the vial. This will displace the liquid in the vial when you withdraw the medication. Turn the vial and syringe upside down and carefully draw the fluid back into the syringe to the line designating the desired amount of medication. If you see any air bubbles, lightly tap or flick the syringe to draw the bubbles to the top (the end with the needle) and expel the air. Note that a small amount of medication may release as well. This is normal. You are now ready to inject.

#### Where can I give an intramuscular shot?

The skin and the muscles under the skin cover nerves, blood vessels and bones. It is important to give a shot where you will not hurt any of these body parts. There are 6 possible areas, 3 on each side of the body, where an Intramuscular (IM) shot can be given. It is important to choose the correct area. If caregivers showed you what areas are safe, follow their directions. Constantly change the area where you give shots. If you give a shot in the same place every day or even every week, scar tissue can build up. The scar tissue can negatively affect how the medication will work. Following this information will help you choose the safest areas to give an intramuscular injection.

#### Vastus Lateralis (VAS-tuss lat-er-AL-iss) Muscle - Thigh:



The thigh is used often for children, especially children under 3. It is also a good place for an adult. The thigh area is especially useful if you need to give yourself a shot because it is easy to see.

- In your mind, divide the thigh (the area between the knee and hip) into three equal parts.
- •This muscle is called the vastus lateralis. It runs along the top of the thigh (the front) and a little to the outside. Put your thumb in the middle of the top of the thigh, and your fingers along the side. The muscle you feel between them is the vastus lateralis.
- Deltoid (DEL-toyd) Muscle Shoulder:



The person receiving the shot can be sitting, standing or lying down. Start with a completely exposed upper arm. You will give the shot in the center of an upside down triangle. Feel for the bone that goes across the top of the upper arm. This bone is called the acromion process. The bottom of it will form the base of a triangle. The point of the triangle is directly below the middle of the base at about the level of the armpit. The correct area to give a shot is in the center of the triangle, 1 to 2 inches (2.5 to 5 cm) below the bottom of the acromion process.

Ventrogluteal (ven-trow-GLUE-tee-ull) Muscle - Hip:



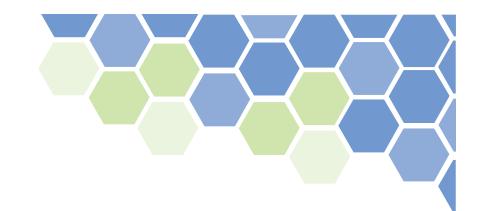
The hip is an area with good bone landmarks and very little danger of hitting blood vessel or nerves. It is a good place for a shot for adults.

To find the correct place to give a shot in the hip: Place your thumb on the base of your tail-bone and bring it across midway to your hip in a straight line and place your index finger about 2 inches (5cm) below the ridge of your hip bone. The V-shape area between your thumb and index finger is the ventrogluteal muscle.

#### How do I choose the best muscle for the shot?

If your caregivers have told you which muscle to use, follow their directions. Many change with age. For example, the rear-end area is never used for infants or children under 3-years old because it is not developed well enough. The deltoid may work well for a person with developed muscles in the upper body. The deltoid cannot be used if that area is very thin or underused. The muscle must be easy to reach.





### What items do I need to give a shot?

- One alcohol wipe.
- Vial containing the medication.
- The correct size needle and syringe (included in your package)
- You may want to use gloves for your protection or the protection of the person getting the shot.

#### How do I inject nutrients into a muscle?

- Wash your hands thoroughly with soap and dry them completely.
- Put on gloves if necessary. Take the cover off the needle by holding the syringe with your writing hand and pulling on the cover with your other hand. It is like taking a cap off a pen.
- Hold the syringe in the hand you use to write. Place 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.)
- Wipe the area where the needle will go with an alcohol wipe. Let the area dry.
- Depress and pull the skin taut with your free hand. Keep holding the skin a little to the side of where you plan to insert the needle.
- Use your wrist to inject the needle at a 90-degree angle (straight in). The action is like shooting a dart. Do not slowly push the needle in. Do not thrust the needle in, either. Thrusting the needle can cause bruising. The needle is sharp and will go through
- needle in. Do not thrust the needle in, either. Thrusting the needle can cause bruising. The needle is sharp and will go through the skin easily when your wrist action is correct.

  Let go of the skin. As you let go of the skin, hold the syringe so it stays pointed straight in. Pull back on the plunger just a
- little to make sure you aren't in a blood vessel. Note: If blood comes back you are likely in a blood vessel. Remove the needle and dispose of both the syringe and the medicine. Repeat the above steps to draw more medicine in a new syringe. When you give the second shot give it on the opposite side.
- Push down on the plunger to inject the medication. Do not force the medication by pushing hard on the plunger. Some medications may sting slightly. They will hurt more if the medication is injected too rapidly.
- Once all the medication is injected, pull the needle out quickly at the same angle it went in.
- Dispose of the syringe and needle in a sharps container.

## How do I dispose of used syringes and needles?

You can purchase a Sharps Container, a hard-plastic container made 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. Be sure you can put both the syringe and the needle into the container easily. Whatever container you choose, be sure 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.

