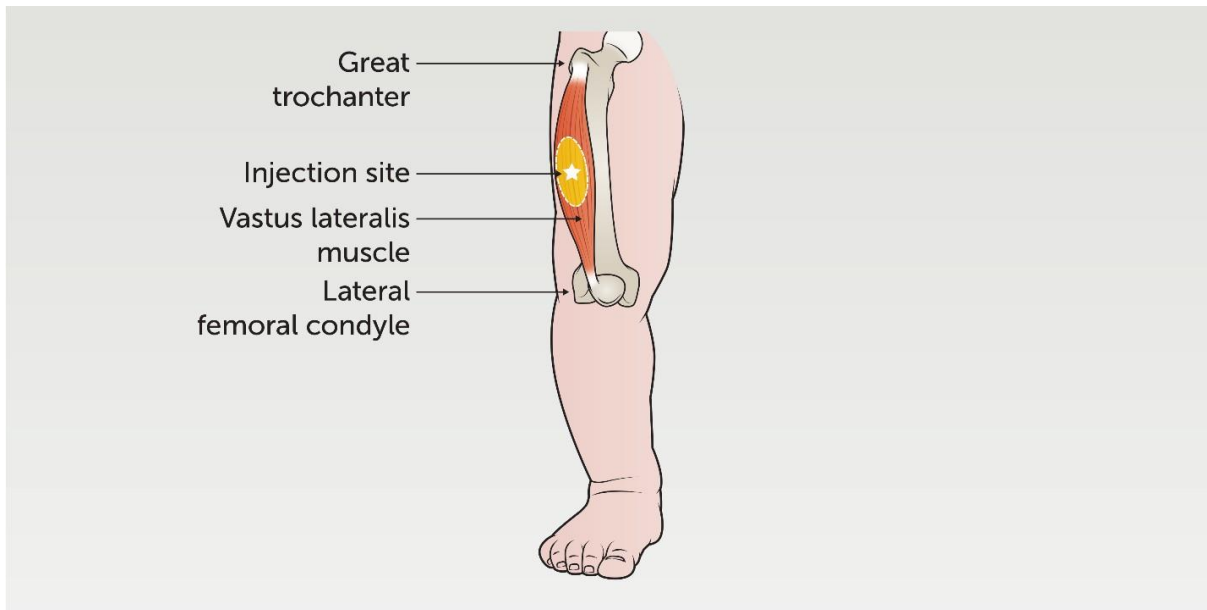


## Site selection and land marking

### Vastus Lateralis

The anterolateral aspect of the thigh, or vastus lateralis muscle, is the preferred IM site for neonates and infants. Up to 1ml can be injected into this site in neonates, up to 3mls in children and up to 5mls in adults. This is the preferred site for anaphylaxis management in all ages.



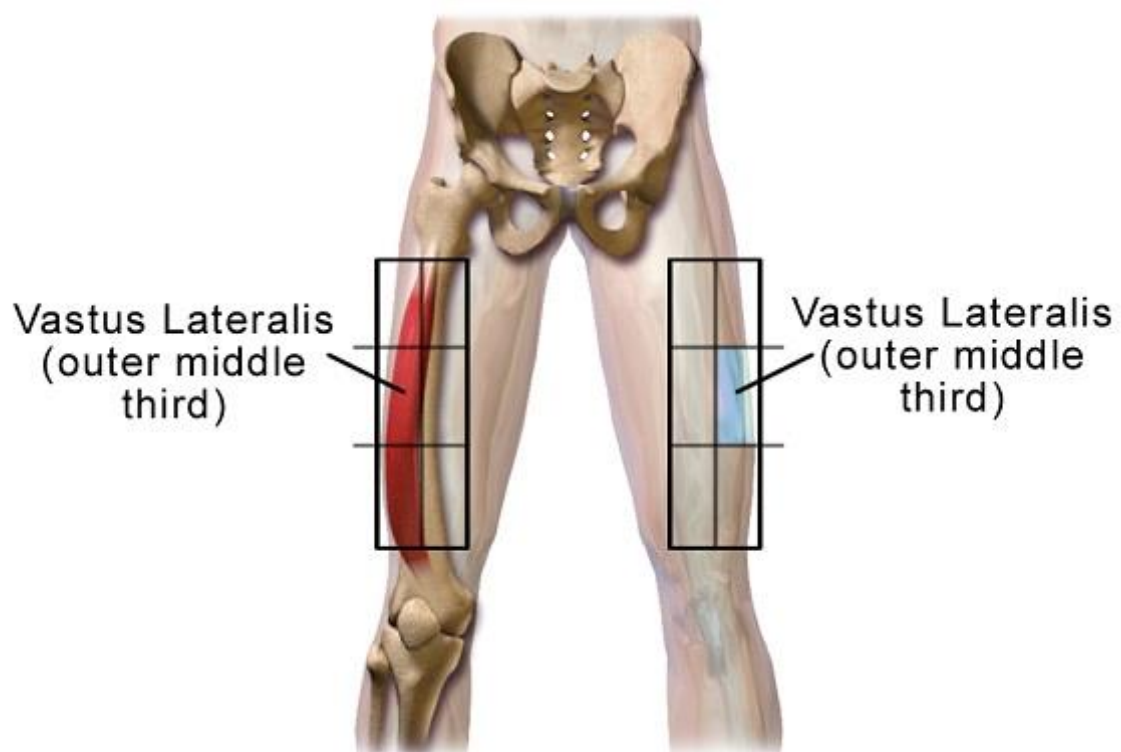
**Intramuscular (IM) Injection:** A single shot, typically 0.5-1 mg, given within 6 hours of birth, is the "gold standard".



The correct injection site for deltoid IM is 2.5 cm below this landmark, as seen above.

## How do you give a deltoid IM injection?

1. Locate the deltoid injection site, as described above.
2. Use a needle long enough to reach the deep muscle. For vaccinations in adults, this is usually a 22–25-gauge needle which is 1 inch (25mm) long for those weighing less than 70kg (154lbs), 1 to 1.5 inches (25-38mm) long for those 70-90kg (154-198lbs), and 1.5 inches (38mm) long in those more than 90kg (198lbs).
3. Use your thumb and index finger to stretch the skin around the injection site.
4. Insert the needle with a deep thrust at a 90-degree angle to the skin (straight up and down). Aspiration is not necessary or recommended. Push down on the plunger of the syringe slowly, then withdraw the needle once all the contents have been administered.
5. Apply a plaster or wound pad to the area if there is any bleeding.
6. If you are giving two deltoid IM injections into the same arm, separate them by a minimum of one inch.



**Correct Place to Give Shot in the Thigh Muscle**

## Locating the Vastus Lateralis Site

To find the correct site for injection, follow these steps:

1. **Position** the person sitting or lying down.
2. **Divide** the thigh into three equal horizontal sections (thirds) from the hip to the knee.
3. **Identify** the middle third along the side (lateral aspect) of the thigh.

The injection should be administered into the middle of this area to ensure it goes deep into the muscle tissue and avoids major nerves and blood vessels.

**Note:** The ventrogluteal muscle (hip area) is often the preferred site for IM injections in adults due to its safety profile, but the vastus lateralis is a good alternative, especially for self-administration.



## Dorsogluteal Injection

For an adult buttock intramuscular (IM) injection, the recommended and safest location is the **ventrogluteal site (hip)**, which uses the gluteus medius muscle. This site is free from major nerves and blood vessels, especially the sciatic nerve, significantly reducing the risk of injury.

## Locating the Ventrogluteal Site

To locate the ventrogluteal site, have the patient lie on their side with bent knees to relax the muscle. Place the heel of your non-dominant hand on the patient's greater trochanter. Point your index finger towards the anterior superior iliac spine and extend your middle finger along the iliac crest, forming a "V". The injection goes into the center of this "V".

## Alternative: Dorsogluteal Site

The dorsogluteal site (**upper-outer buttock**) is another option, though it has a higher risk of sciatic nerve injury. To find it, imagine dividing the buttock into four equal sections. The injection is given in the center of the upper, outer section, about 5 to 8 cm below the top of the hip bone.

