

How to Give your Horse an Intramuscular Injection

<http://www.aces.edu/pubs/docs/A/ANR-1018/>

Make sure to ask your veterinarian about any safety precautions you should take when handling a drug or giving an injection. Consult your veterinarian about the type of drug needed, route of administration, dosage, drug handling precautions, and adverse drug reactions.

- Before giving any injection, read the drug label on the bottle.
- Follow the recommended method of drug storage, drug handling procedures, expiration date, and precautions.
- Make sure you use a sterile needle and syringe.
- Never reuse a needle because a contaminated needle can easily introduce an infection into a horse.

Injection Sites

The site of the IM injection is important for the safety of the horse and the handler. Choose a large muscle mass that is actively used by the horse. This promotes drug absorption and decreases the chance of swelling and pain at the injection site. The site should allow the needle to be placed deep in the muscle without danger of hitting bone, ligaments, nerves, or blood vessels. Also, the injection site should allow the handler to be in a relatively safe position if the horse objects to the injection.

If the horse needs a little distraction there are several methods of easing the needle stick. One good method is to pinch up the horse's skin next to the injection site for a few seconds prior to inserting the needle. While holding the pinched skin, insert the needle next to the pinched area.

Base of the Neck



The base of the horse's neck as an injection site allows the handler to remain in a relatively safe area by the horse's shoulder.

This site is a triangle defined by the nuchal ligaments along the crest (top) of the horse's neck, the cervical vertebrae which form a backward S-shaped curve from the horse's poll (between its ears) toward the point of the shoulder, and the scapula (shoulder blade) (refer to picture).

To locate the appropriate injection area, put the heel of your hand on the base of the horse's neck where it joins the shoulder, about midway between the crest and the bottom of the neck. The area covered by your palm is the injection site. Make sure you stay near the base of the neck rather than injecting higher up the neck toward the ears. This again avoids ligaments, bone, and blood vessels and gives a larger muscle mass for the injection.

Buttocks Region



Below the point of the horse's buttocks is another large muscle mass (semitendinosus) which is a good injection site (refer to picture). Because this muscle is used every time the horse takes a step, it is a good site for drugs which might cause swelling and pain at the injection site.

The major drawback to this injection site is that it puts the handler within kicking range of the horse and should be used with caution.

To find this injection site simply locate the bony protrusion which makes up the point of the buttocks (tuber ischii). Drop about 1 inch below the tuber ischii and inject anywhere in the large muscle mass along the back of the leg.

Injection Techniques

Insert the needle perpendicular to the skin (do not slant the needle upward or downward) and sink the needle into the muscle all the way to the hub (the place where it attaches to the syringe).

*****Always aspirate** (pull back on the plunger) before injecting the drug to ensure that you are not in a blood vessel. (Some commonly used drugs can kill a horse if accidentally injected into the blood stream.)

If blood collects at the hub of the needle when you place it into the horse or you draw blood when you aspirate the syringe, then you must pull the needle out and redirect it before giving the injection. Remember to **aspirate again** when using a clean needle or redirecting a needle to make sure you are not in a blood vessel.

** Be prepared for an adverse drug reaction. Discuss signs and proper treatment of anaphylactic shock with your veterinarian.

Observe the horse for any signs of allergic reaction for about 30 minutes after giving the injection. Usual signs of allergic reactions such as swelling around the injection site, hives, increased respiratory rate, depression, or agitation indicate that the horse may be allergic to the medication. Discontinue its use and consult your veterinarian immediately. If you are giving large, repeated doses of a medication, rotate injection sites (such as left neck, right neck, left buttock, right buttock) to reduce soreness in any one area of the horse's body. Extremely large doses (more than 15 to 20 cc) of a thick or irritating substance such as penicillin should be split into more than one injection to reduce soreness.