



HUSBANDRY

ADMINISTRATION OF INJECTIONS

Introduction

This information is provided as a guide for the administration of injections but breeders may have similar techniques which are equally effective. As with most livestock alpacas require injections from time to time but very few medications are registered for use in alpacas. If unsure, consult your veterinarian.

These procedures must be done correctly to prevent:

- Poor absorption.
- Failure to be effective.
- Risk of infection.
- Accidental human injection.

Preparing for the injection

Preparation for giving injections should be carefully planned to minimise stress to both the animal and the handlers.

Firstly, ensure that the drug is the correct one, **read the label** and follow the instructions which will include:

- Dosage and administration technique.
- Expiry date.
- Warnings and contraindications.
- Handling and storage instructions.

Technique for preparing the medication

- Wash hands before starting and use sterile equipment.
- Use a separate needle for each injection wherever possible. If injecting numbers of alpacas, change the needle at least every 10 injections.
- Select the smallest gauge needle that can still handle the volume and viscosity of the product. A rule of thumb: the higher the size number, the finer the bore/gauge of the needle.

- Shake product regularly to ensure proper suspension in the container.
- Do not mix products.
- Only insert sterile needles into the bottle. If multiple injections are required, leave a needle in the bottle and use a separate one for the injections.
- Remove dispensing needle before storage.
- Inject air into the bottle before withdrawing the drug. This equalises the pressure.
- After withdrawing drug, hold the syringe and needle up and tap to move air bubbles up.
- Push plunger carefully to remove any air.

Routes of administration

There are four main routes of administration of drugs by injection in the alpaca. These are:

1. **Intravenous (IV)**
Should only be administered by veterinarians. Reasons for IV may include the taking of blood for laboratory examination, administration of anaesthetic agents, and blood or plasma transfusions.
2. **Intraperitoneal (IP)**
Should only be administered by veterinarians. This method is usually used for the administration of plasma to the newborn cria.
3. **Intramuscular (IM)**
A common method used by breeders for the administration of several drugs e.g. antibiotics, vitamins etc.
4. **Subcutaneous (SC)**
Also a common method used by breeders for the administration of drugs e.g. parasite control etc.



Injection techniques

The method of administering the injection will be stated on the bottle or in the accompanying literature and must be followed.

Intramuscular (IM) – *Figure 1*

- Use a needle long enough to penetrate the skin and fat into the muscle. Make sure needle is perpendicular to the body.
- Pull back slightly on the plunger before injecting to make sure you are not in a blood vessel.
- Inject slowly and gently massage the area when the needle is withdrawn.

Subcutaneous (SC) – *Figure 2*

- Use a narrow gauge needle.
- Lift the skin and inject into the 'tent' at an angle of 30 degrees to the body. (This technique can be difficult if the animal is in full fleece), or
- Hold the syringe at a 40 degree angle to the skin whilst injecting, or
- Some breeders find that cutting the end off the needle guard and allowing the needle to protrude only a few millimetres acts as a depth gauge.

On completion

Following the administration of any drugs:

- Maintain permanent records for each animal which should include:
 - Date of administration.
 - Product name.
 - Dosage.
- Dispose of needles responsibly.
- Wash hands and equipment.
- Monitor animal's response for any adverse reaction.

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Disclaimer: The management practices detailed in this overview do not constitute veterinary advice. Any alpaca appearing to have an adverse condition should be assessed by a veterinarian.

Figure 1 : Recommended sites for administration of intramuscular injections

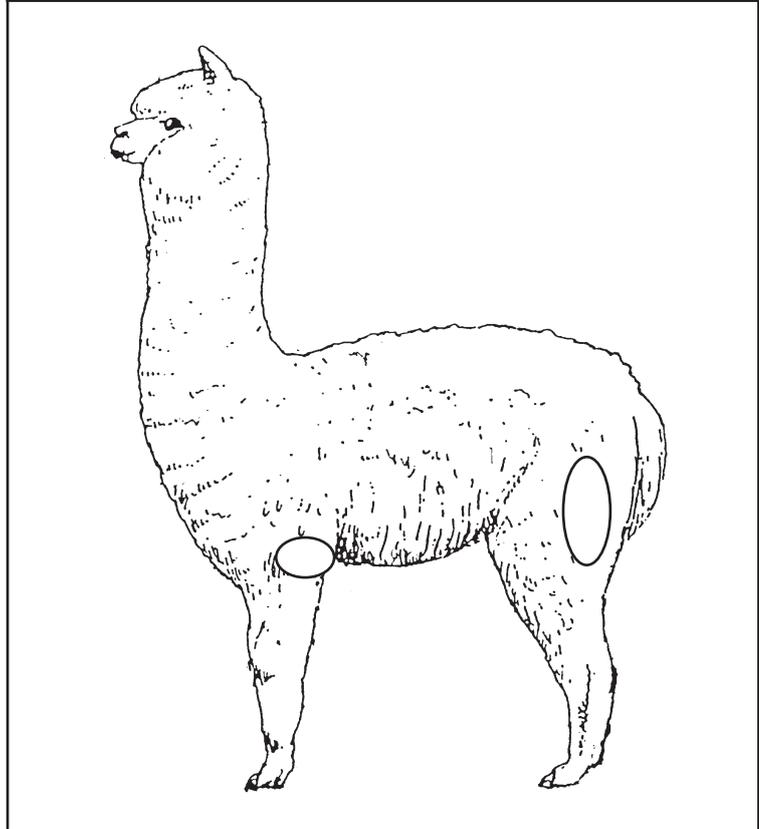


Figure 2 : Recommended sites for administration of subcutaneous injections

