

ADMINISTRATION OF MEDICINE

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Medicines have a different effect on the organs of the body. Medicines are given to stop the disease and prevent it. Medicines are compounded in different forms that suit the nature of the animal and its disease state, and are given in different ways.

Several methods are used to give medications to animals. Topical medications are given externally. The most common forms are lotions, creams, and ointments, which are applied to the ears, nose, eyes, or skin. Lotions are usually water based, thin, and quickly absorbed by the skin.



1-oral medicin(per-os)

1-tablet

2-capsule

3-granule

4-powder

5-paste

6-liquid

7-electuries

8-drenches



2-eye medicine

**Eye drop

**Lotion

**Ointment



4-through the nostrils

**Inhalation

5-per-vagina

**Pessaries

**Vaginal douches



6-over the skin

**Binicdide of mercury

**Fomentations

A-Hot Fomentations

It increases the speed of blood flow to the affected area .

B-Cold Fomentations

It reduces the blood flow to the affected area, helps absorb any leaks, reduces pressure on the nerve endings, and reduces pain.



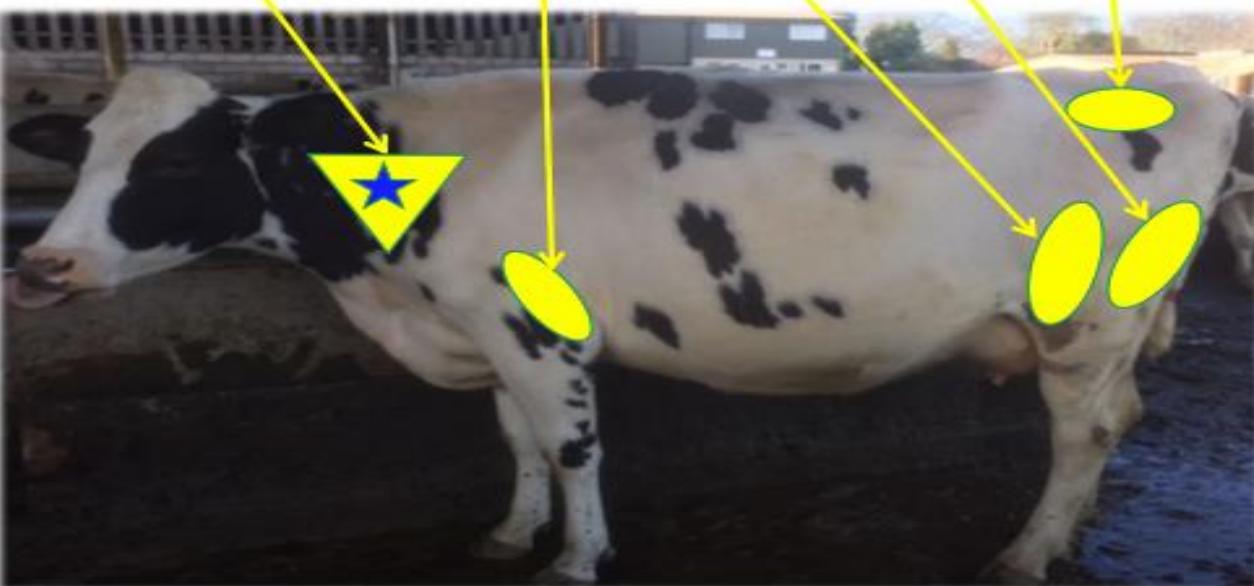
INJECTION METHODS Several injection types are used to administer vaccinations and medications to animals: intradermal, subcutaneous, intramuscular, intravenous, intraosseous infusions, and intraocular. Intradermal injections are given into the skin and are used in animals when administering an allergy test just like in humans.

1. Intravenous (IV) directly in the vascular system through a vein
2. Intraperitoneal (IP) – injected into the abdominal cavity
3. Intramuscular (IM) injected into a muscle
4. Subcutaneous (SC) injected under the skin
5. Intradermal (ID) – injected between the layers of the skin
6. intracerebral(IC)– injected into the brain
7. Epidural : injected into the epidural space of the spinal cord
8. Intranasal: sprayed into the nose for absorption across the nasal mucous
9. Inhalation: Inspiration through nose or mouth

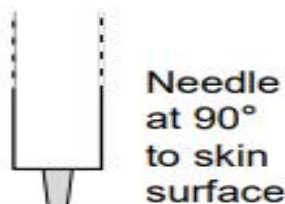
Intramuscular (IM) injection sites in cattle

Arrows point to approximate locations of the injection sites

Neck muscles
Semimembranosus/semitendinosus
Triceps
Quadriceps
Gluteals



★ NB: For all cattle, and especially beef cattle, the preferred site to give IM injections is into the neck muscles to avoid damage to higher price cuts of meat or the risk of damaging the sciatic nerve (particularly in thinner cattle).



Needle at 90° to skin surface

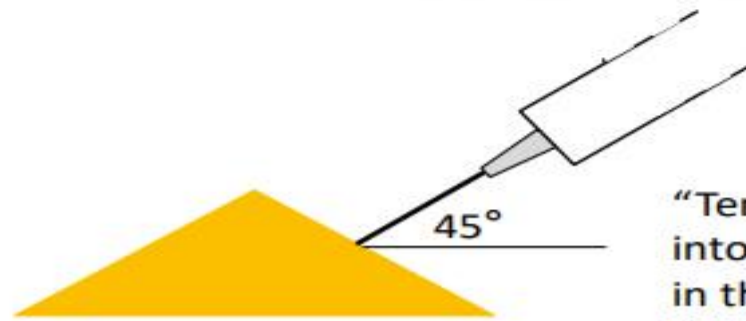
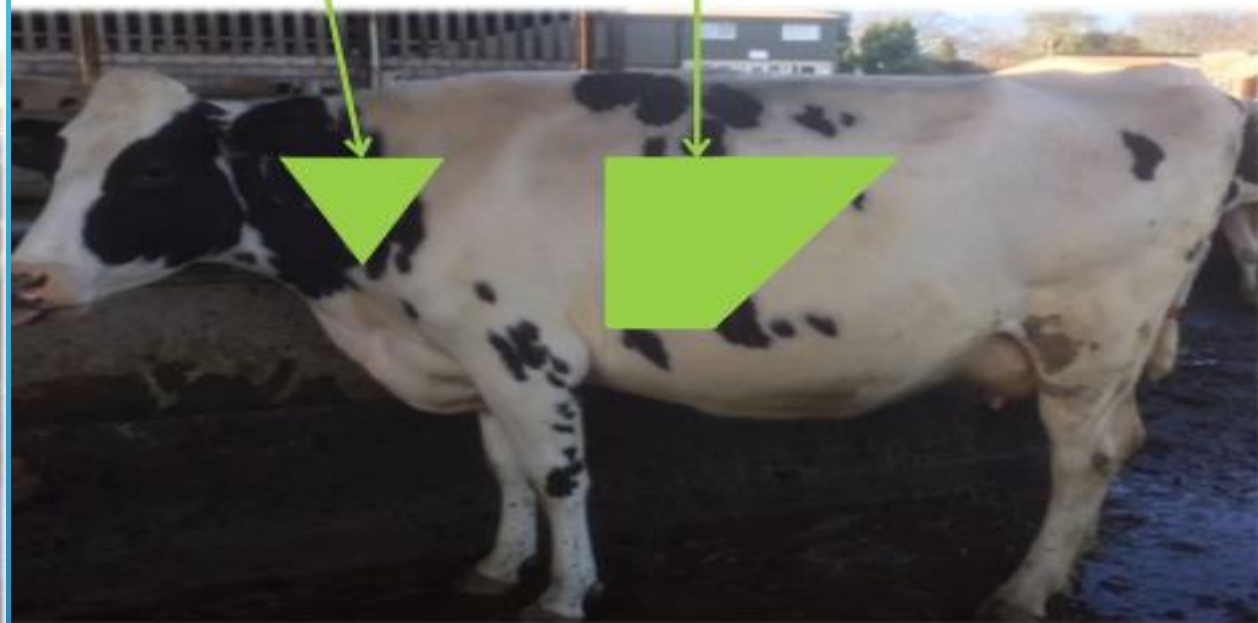
Skin →
Fatty tissue →
Muscle →



Subcutaneous (SC) injection sites in cattle

Arrows point to approximate locations of the injection sites

Neck
Ribs



“Tent” the skin and inject into the base of the “tent” in the neck or rib regions at an approximately 45° angle

Intravenous (IV) injection site in cattle

Arrow points to approximate location of groove

Jugular groove

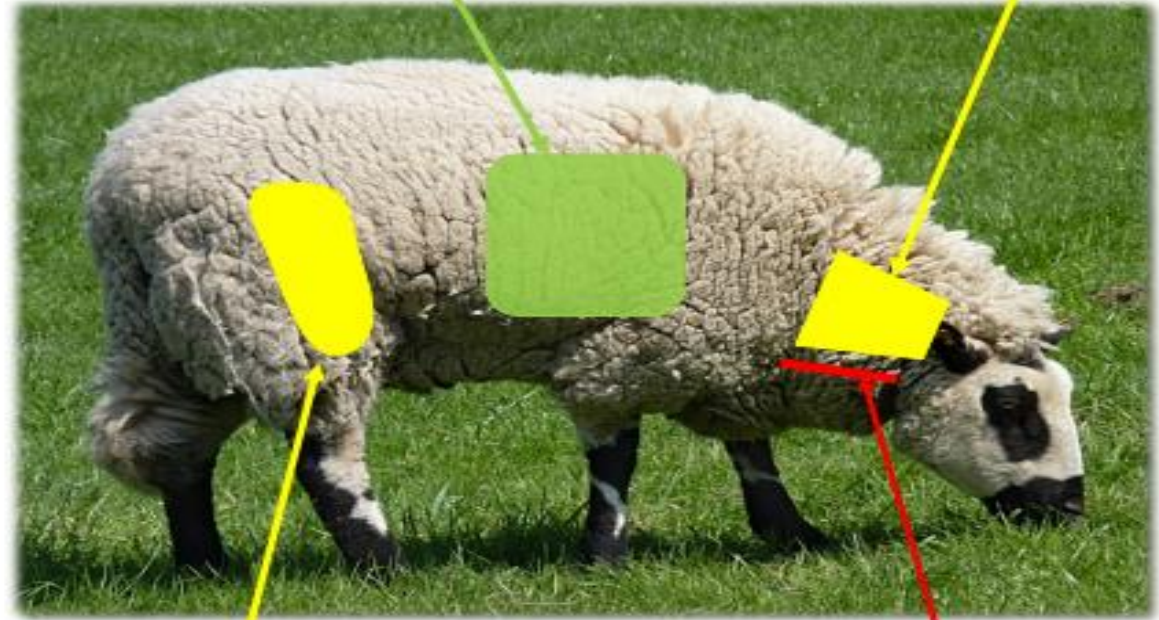


Raise the vein by pressing in the jugular groove with your thumb. Insert the needle at 30-45° to the skin and wait for drips of blood from the needle hub before attaching the syringe. This confirms the needle is in the jugular vein. If there is a fast stream of bright red blood the needle may be in the carotid artery. Remove the needle immediately and apply pressure.

Injection sites in the sheep

Subcutaneous (SC): Behind the shoulder, over ribs

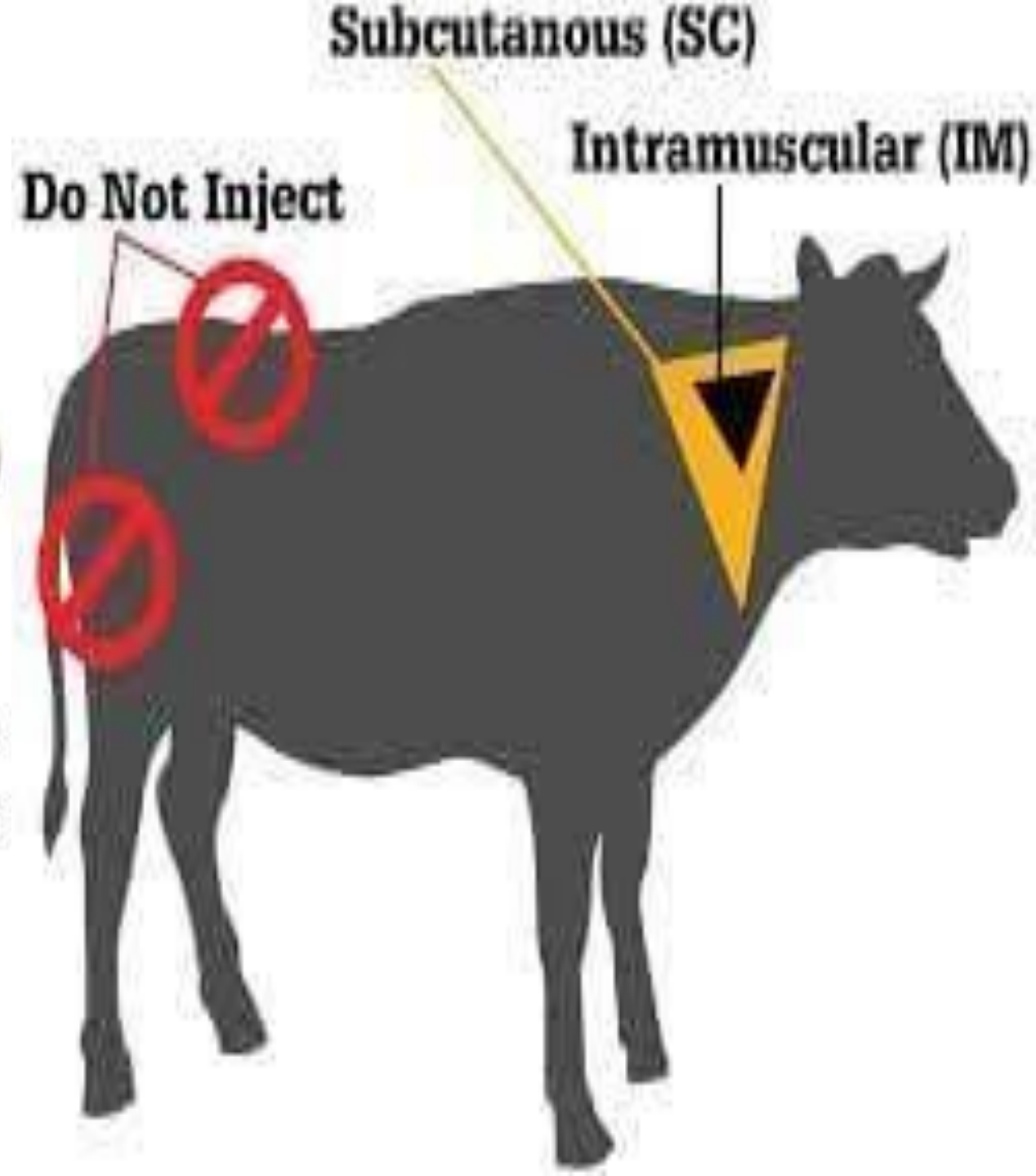
Intramuscular (IM): Neck



Intramuscular (IM):
Quadriceps, cranial to the femur to avoid sciatic nerve

Intravenous (IV):
Jugular vein

- Techniques for IM, SC and IV injections are similar to cattle - see previous pages of this booklet for details.



8–intramammary medicate

intramammary infusion of antimicrobials should be administered to cows with severe clinical mastitis

Types :-Oeintment --Injection

9–over the skin

Dying,lotion,oeintment



10–Stomach tubing cows

Stomach tubing is a simple, useful technique that is used to administer fluids to cattle..

Reasons for using stomach tube

1–If the medicine contains unpleasant or very bitter substances

2–partial or complete obstruction in the esophagus

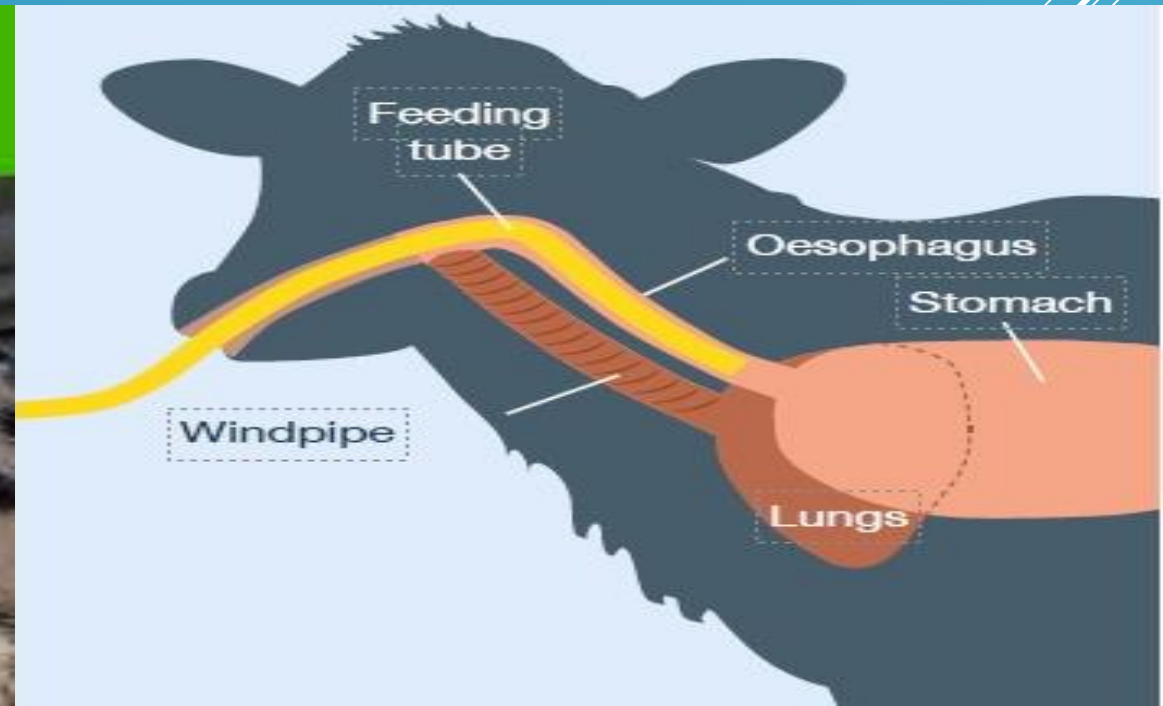
3–Ensure that the entire amount of medicine reaches the stomach

4–To prevent the medicine from reaching the lungs or causing a problem in the mouth or throat



Conditions that must be met when using a gastric tube

- 1-The tube must be clean and sterilized after placing it in boiling water after each use
- 2-It is applied with an oily substance and pushed in a circular shape to facilitate its entry
- 3-While using it, you must pay attention to the signs on it when it passes through the esophagus and stomach
- 4-The tube enters through the nostril in the equine species and from the mouth in the bovine species



1 1-per-rectum

Suppositories

rectal enema

Liquids containing medicinal substances are pushed through a pump that has a special part that is placed in the rectum. Its contents are emptied and used in the following

Types of enema

- **Automated injection
- **Therapeutic injections
- **Nutrient injection

causes:

1-burn cases

2-allivate pain in case of colic

3-intractable constipation



Foot bathing

It is used to treat sheep infected with hoof rot and to protect healthy sheep.

Dipping

Immersion is necessary for sheep to prevent external skin diseases (ticks, lice, mites, scabies, and skin infections to keep wool from falling out).





THANK YOU