

# Locating Injection Sites: Cattle and Sheep



## Disclaimer

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- Each booklet illustrates one way to perform a skill and it is acknowledged that there are often other approaches. Before using the booklets students should check with their university or college whether the approach illustrated is acceptable in their context or whether an alternative method should be used.
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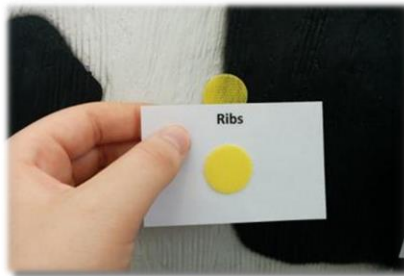
## Clinical Skills: Matching Injection Sites and Routes of Administration

**The task** is to match all the injection card labels with the velcro dots on the model i.e.

- Site location
- 'Route' of administration e.g.
  - Subcutaneous (SC)
  - Intramuscular (IM)
  - Intravenous (IV)



For each injection site, there is an injection site card (label) and a route of administration card (label).



Match the injection site label to the correct locations on the calf.



Match the correct route of administration (SC, IM, IV or nerve block).

**Resetting the station** ready for the next student:

- Remove all the labels
- Separate the injection site label from the administration route label
- Return the labels to the box/container

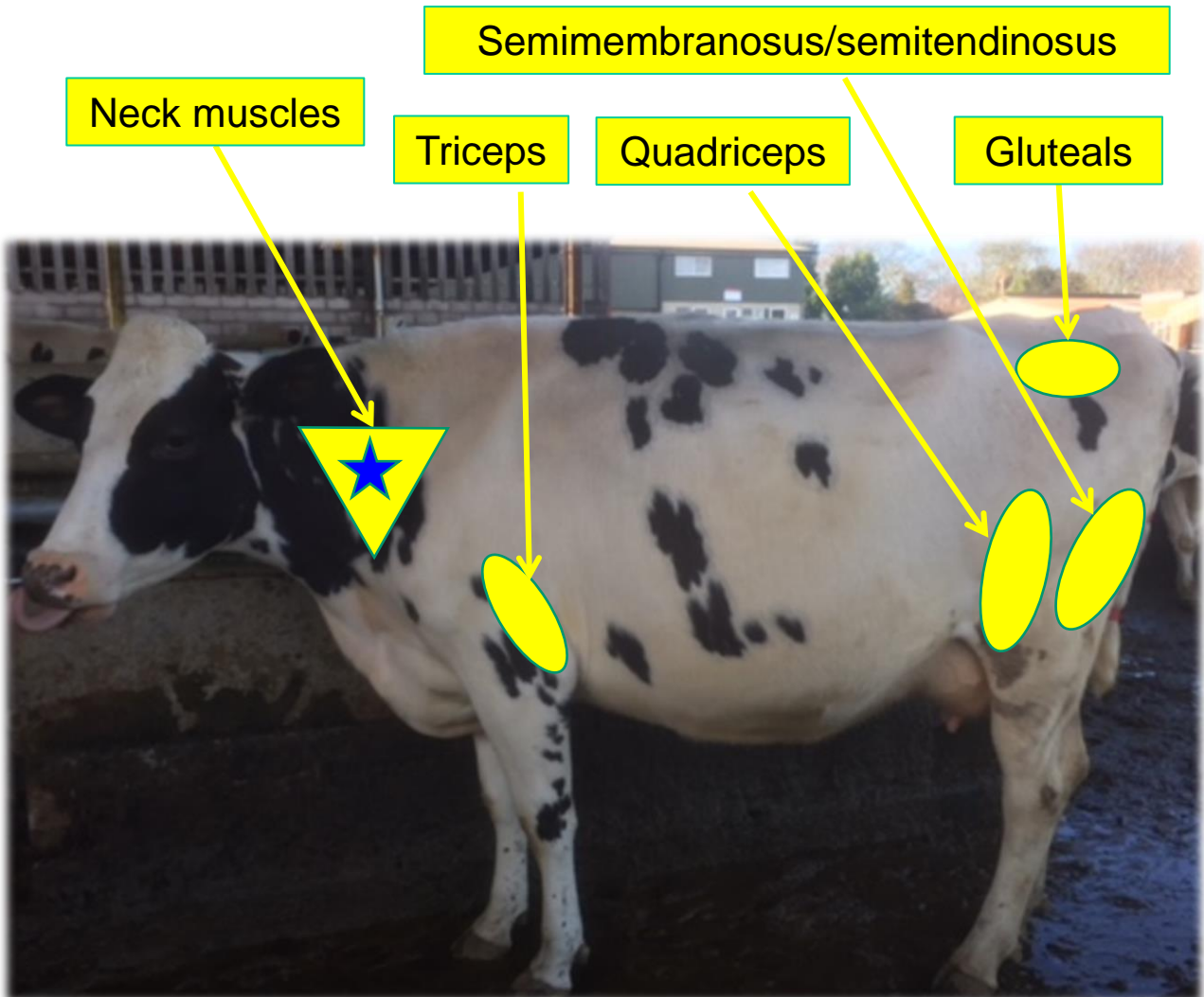
**The following pages** in the booklet provide labelled pictures of injection sites for the cow, calf and sheep. There is also information about the techniques including illustrations, descriptions and tips.

Anyone working in the Clinical Skills Lab must read the 'CSL\_I01 Induction' and agree to abide by the 'CSL\_I00 House Rules' & 'CSL\_I02 Lab Area Rules'

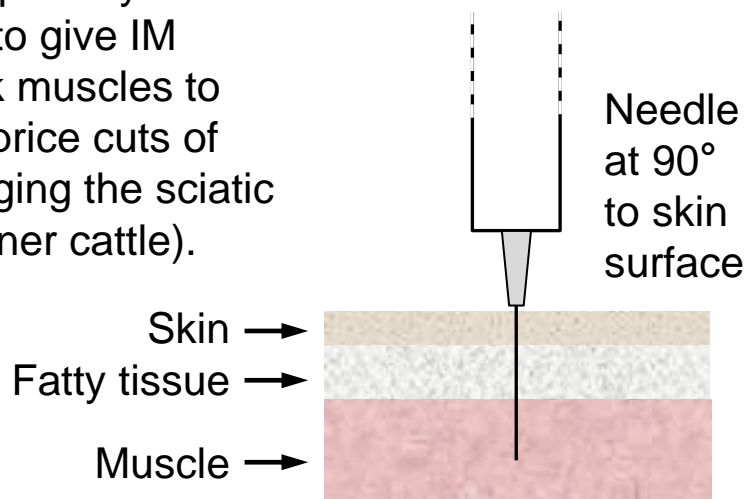
Please inform a member of staff if equipment is damaged or about to run out.

# Intramuscular (IM) injection sites in cattle

Arrows point to approximate locations of the injection sites

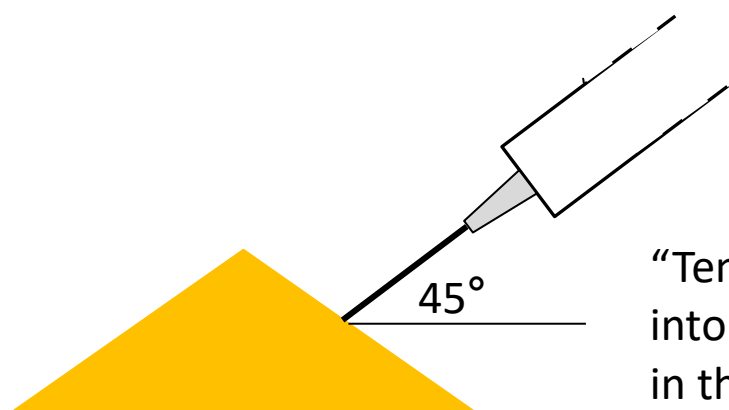
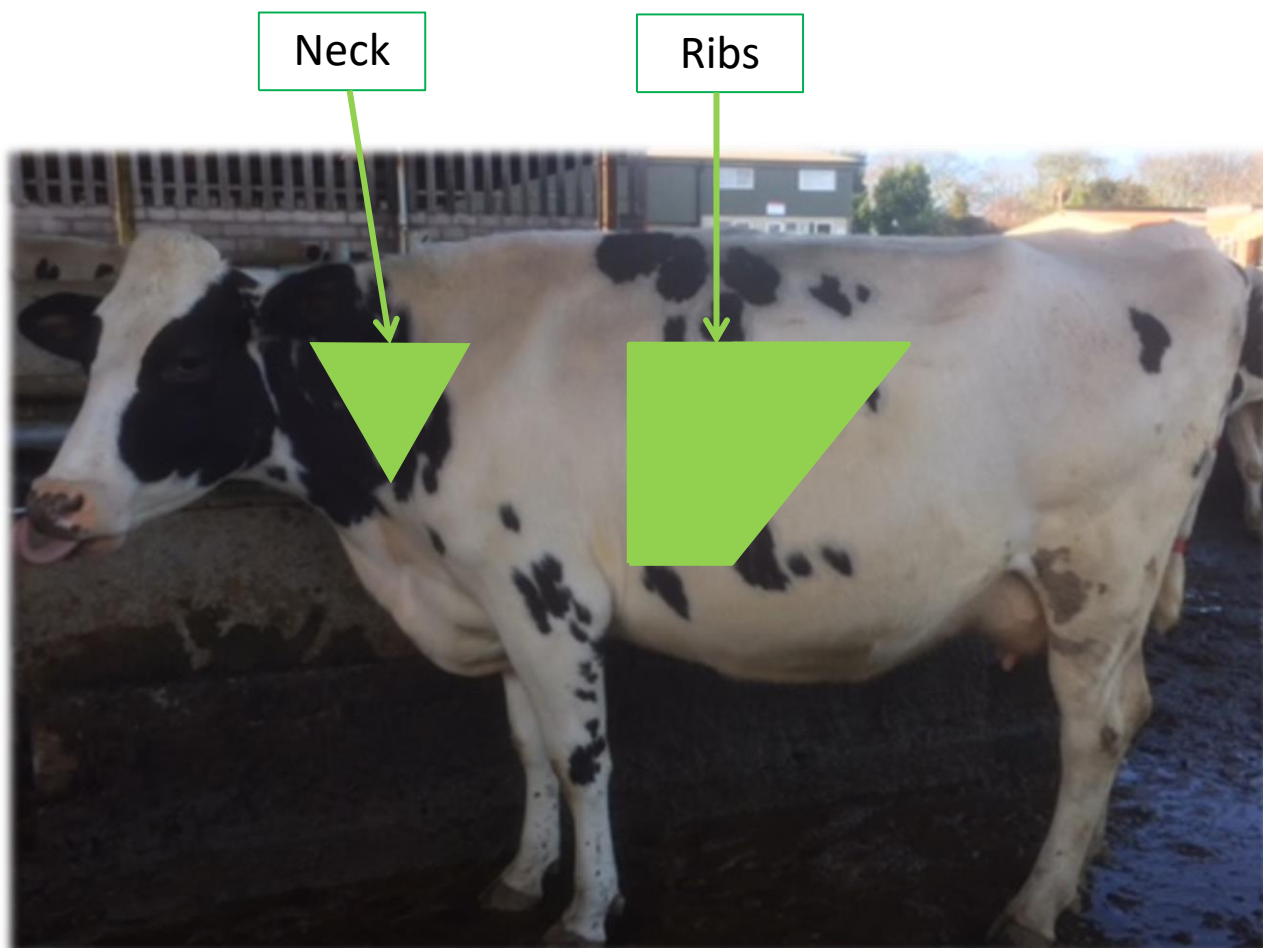


★ NB: For all cattle, and especially beef cattle, the preferred site to give IM injections is into the neck muscles to avoid damage to higher price cuts of meat or the risk of damaging the sciatic nerve (particularly in thinner cattle).



# Subcutaneous (SC) injection sites in cattle

*Arrows point to approximate locations of the injection sites*



“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

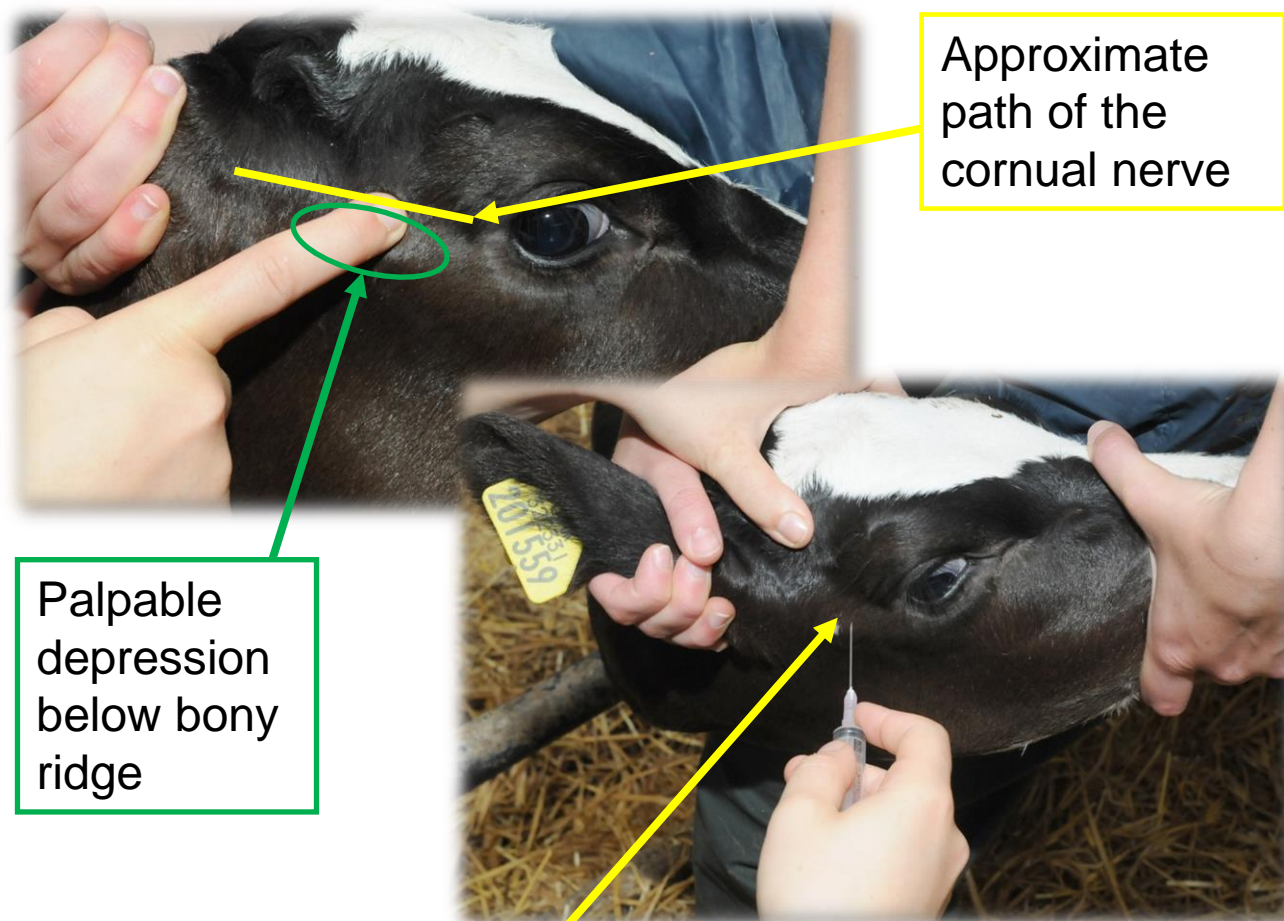
*Arrow points to approximate location of groove*

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.

# Cornual nerve block in the calf



Approximate  
path of the  
cornual nerve

Palpable  
depression  
below bony  
ridge

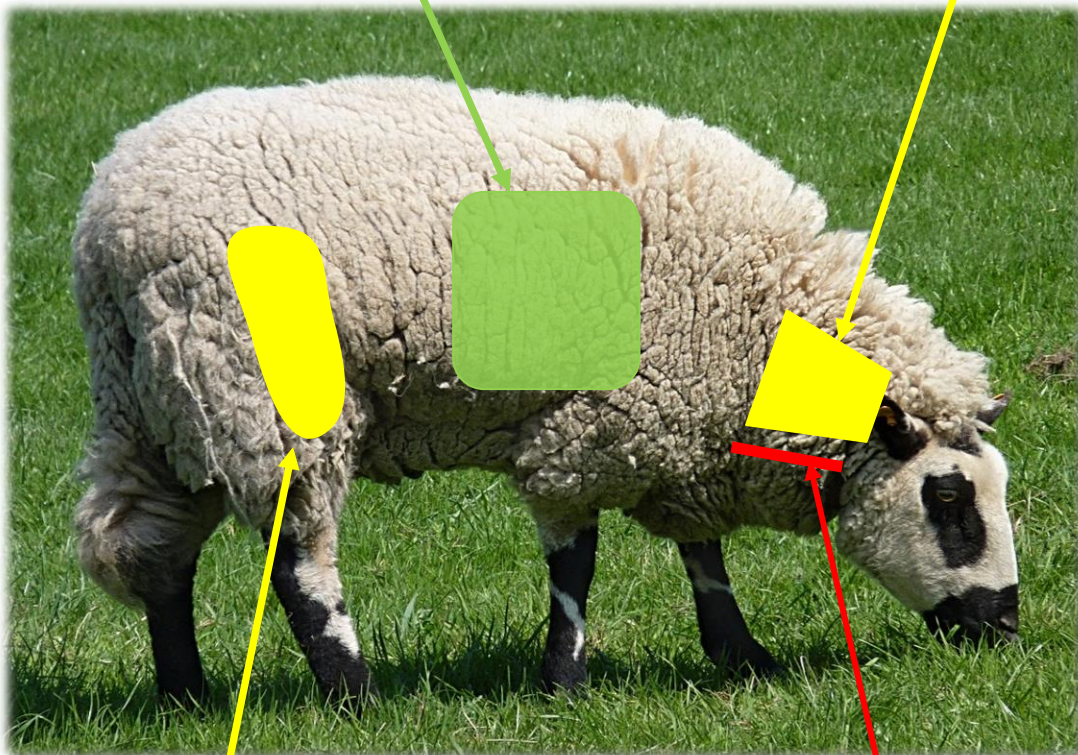
Insert needle below bony ridge  
approximately halfway between the  
base of the ear and corner of the eye

- The corneal nerve runs between the lateral canthus of the eye and the ear base, under the lateral ridge of the frontal bone. The nerve supplies the horn corium and the skin around the base of the horn.
- Draw back before injecting local anaesthetic to check the needle is not in a blood vessel.

# 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.



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