

Locating Injection Sites: Horses



Disclaimer

A series of booklets has been developed by the Clinical Skills Lab team (staff, recent graduates and students) from the School of Veterinary Sciences, University of Bristol, UK. Please note:

- 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.
- The booklets are made available in good faith and may be subject to changes.
- In using these booklets, you must adopt safe working procedures and take your own risk assessments, checked by your university, college etc. The University of Bristol will not be liable for any loss or damage resulting from failure to adhere to such practices.

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Equipment list:

Locating Injection Sites in Horses

Equipment for this station:

- Model horse (with velcro dots)
- Laminated card labels:
 - Injection sites
 - Routes of administration

Considerations for this station:

- There are useful equine skills lists and 'How to' videos on Blackboard that demonstrate a range of skills. These can be found in the Animal Management 1 section → eLearning and then navigate to the relevant documents & videos.
- N.B. It is convention to initially approach a horse on its left (near) side; never walk behind a horse.

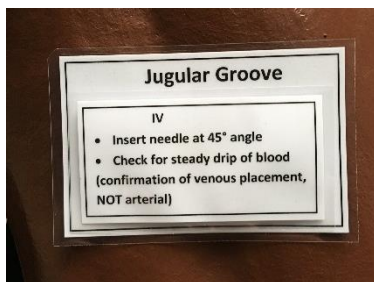
Anyone working in the Clinical Skills Lab must read the 'CSL_I01 Induction' and agree to abide by the 'CSL_I00 House Rules' & 'CSL_I02 Lab Area Rules'

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

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.

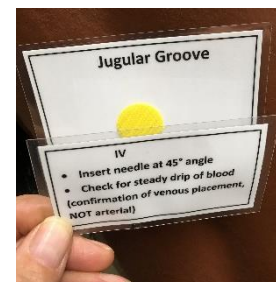
- Site location
- 'Route' of administration:
 - Intramuscular (IM)
 - Subcutaneous (SC)
 - Intravenous (IV)



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 model horse.



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

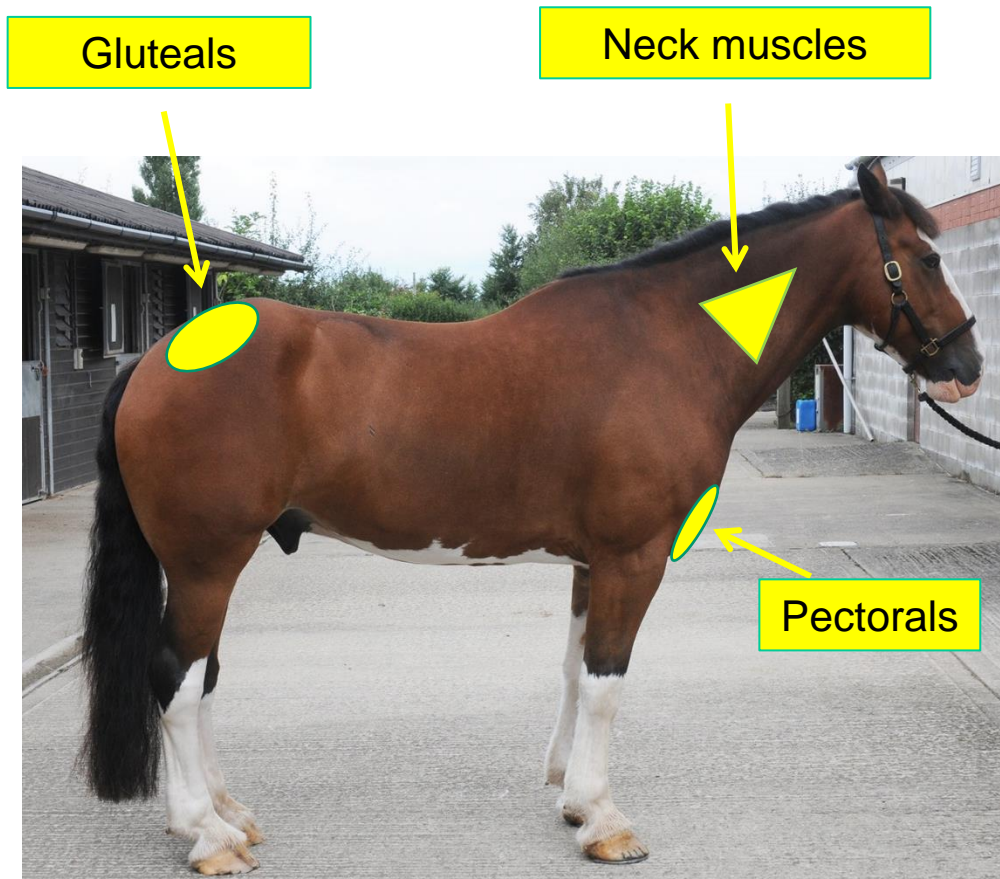
Resetting the station ready for the next student:

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

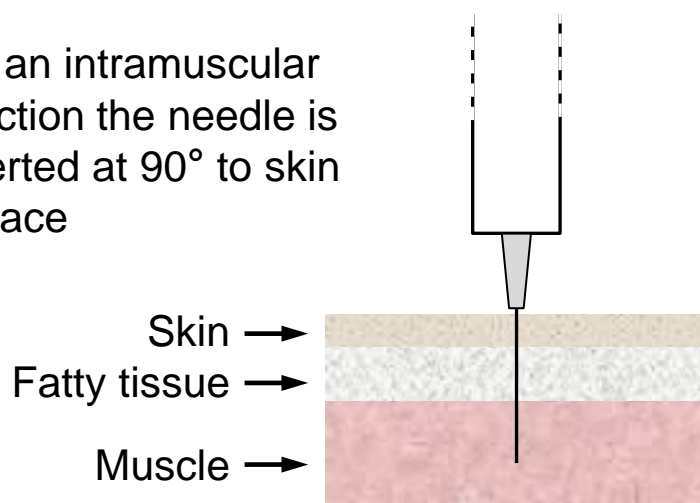
The following pages in the booklet provide labelled pictures of injection sites for the horse.

Intramuscular (IM) Injection Sites in Horses

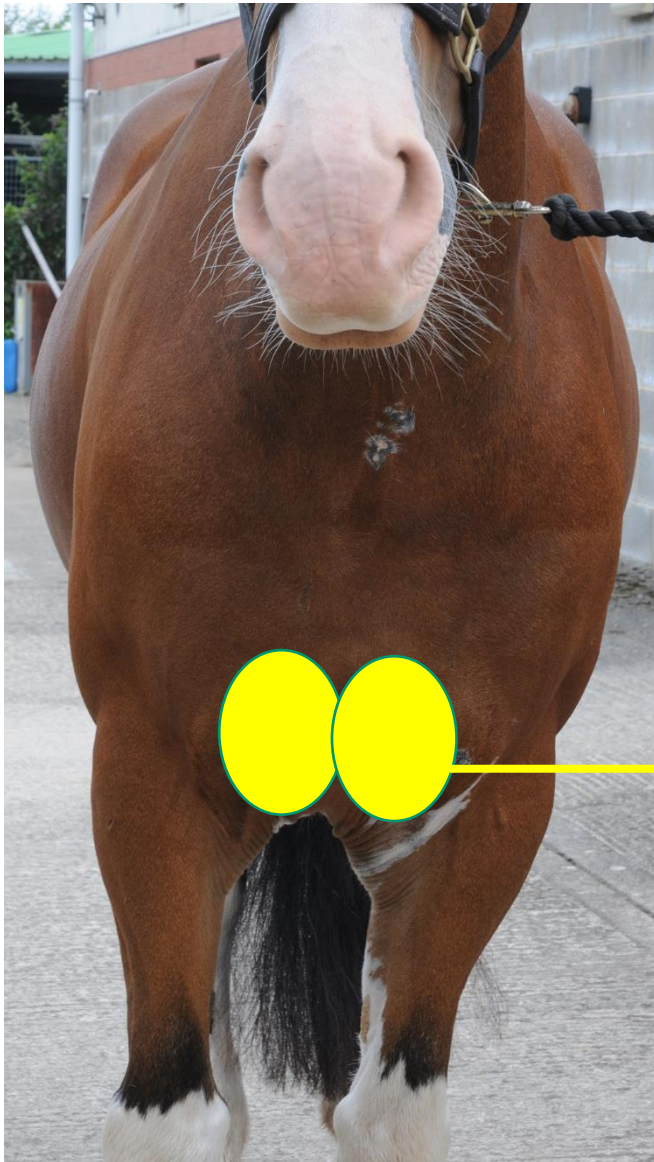
Arrows point to approximate locations of intramuscular injection sites



For an intramuscular injection the needle is inserted at 90° to skin surface



Intramuscular (IM) Injection Sites in Horses



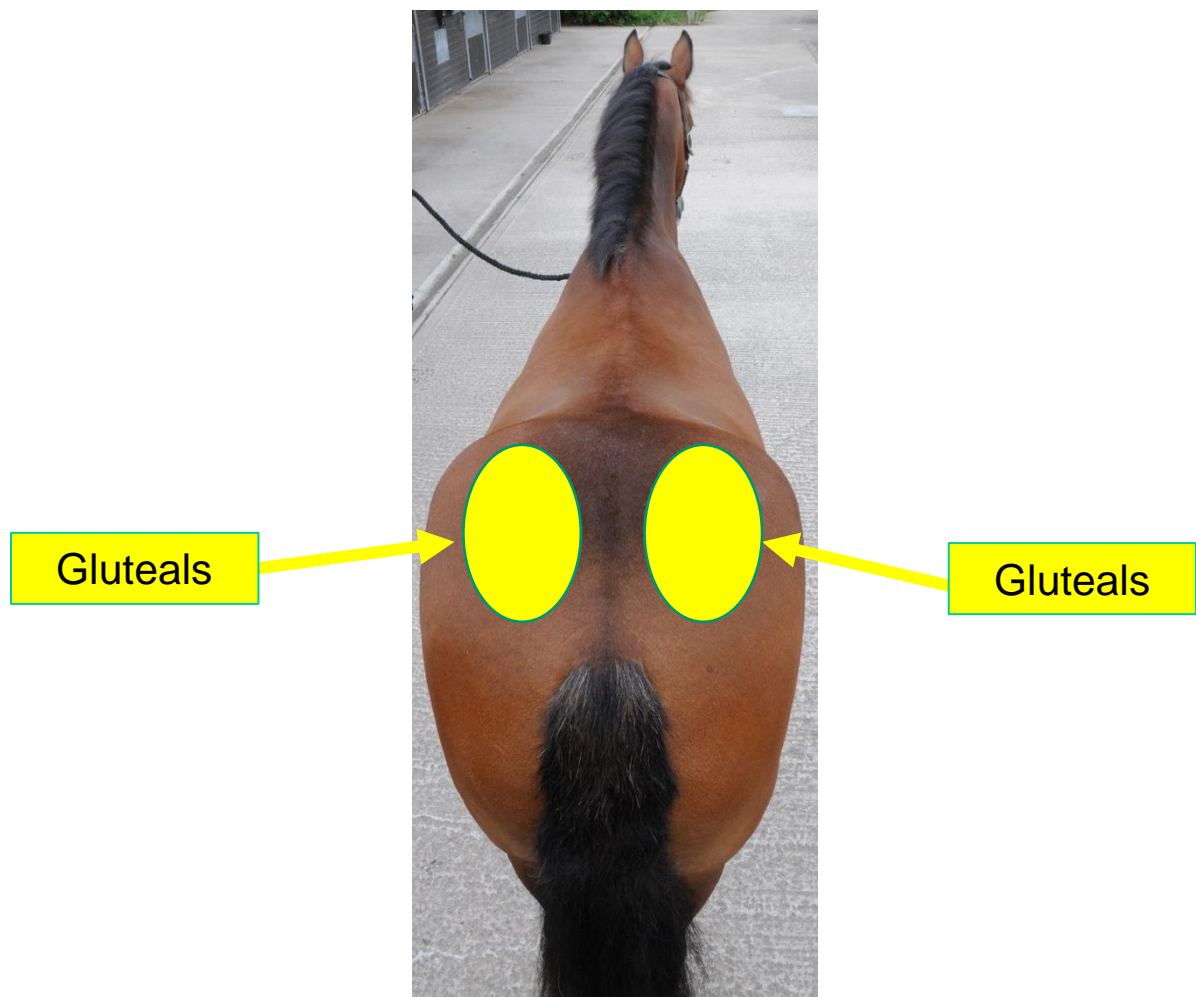
Pectorals

The needle is inserted smoothly into the neck and pectoral muscles but rapidly into the gluteals.



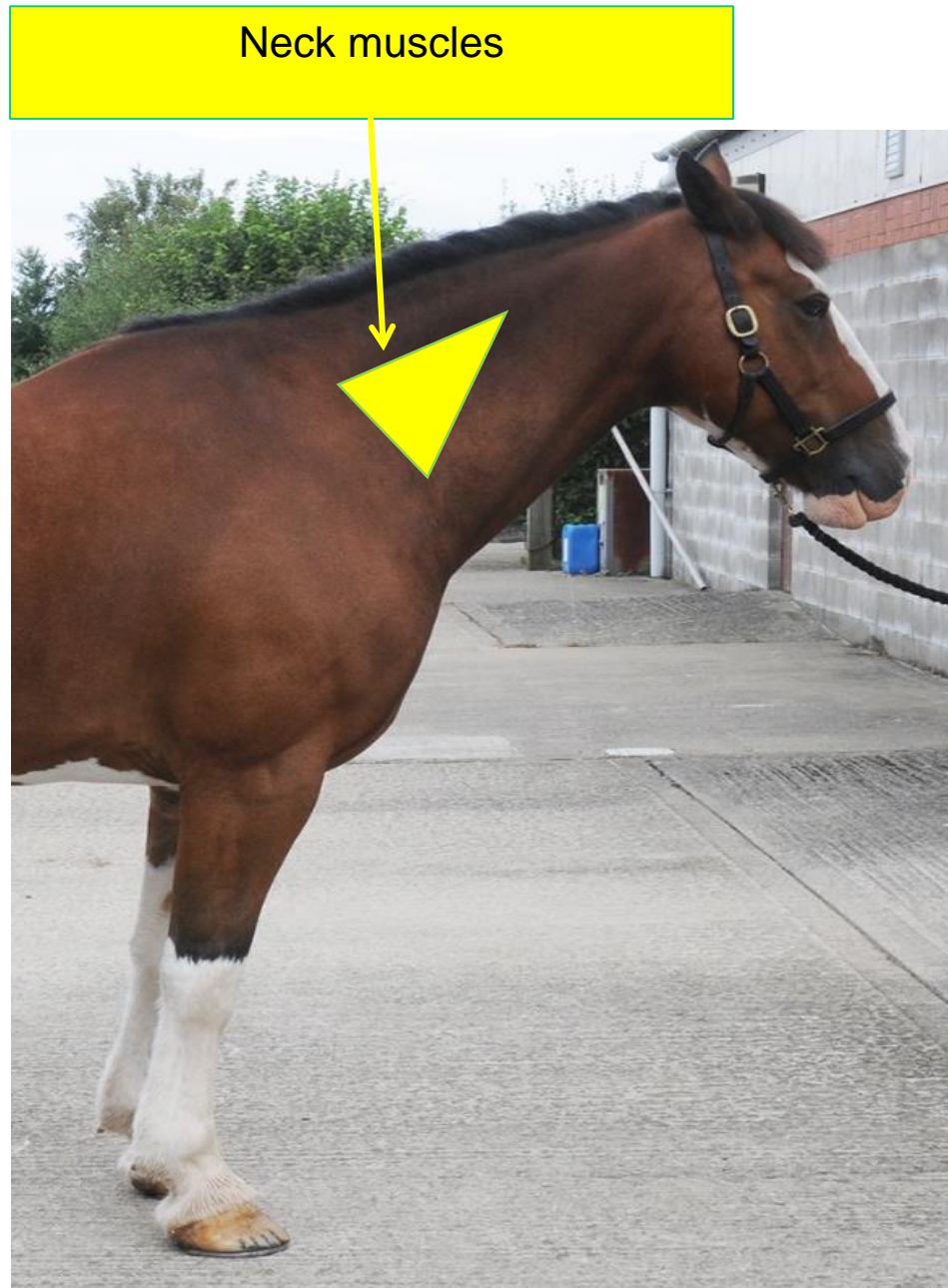
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Intramuscular (IM) Injection Sites in Horses



N.B. Never stand or walk behind a horse
The needle is inserted smoothly into the neck
and pectoral muscles but rapidly into the
gluteals.

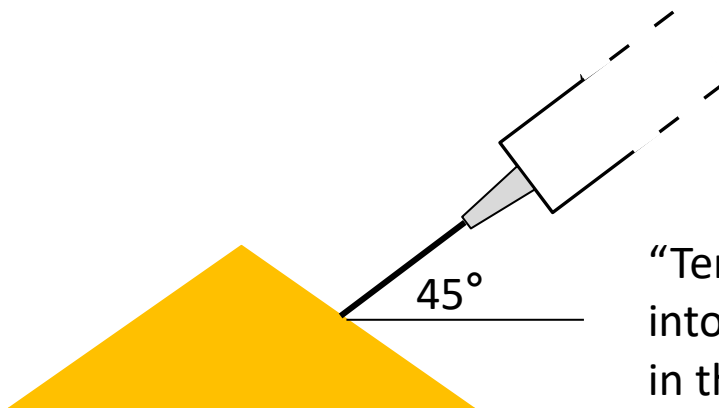
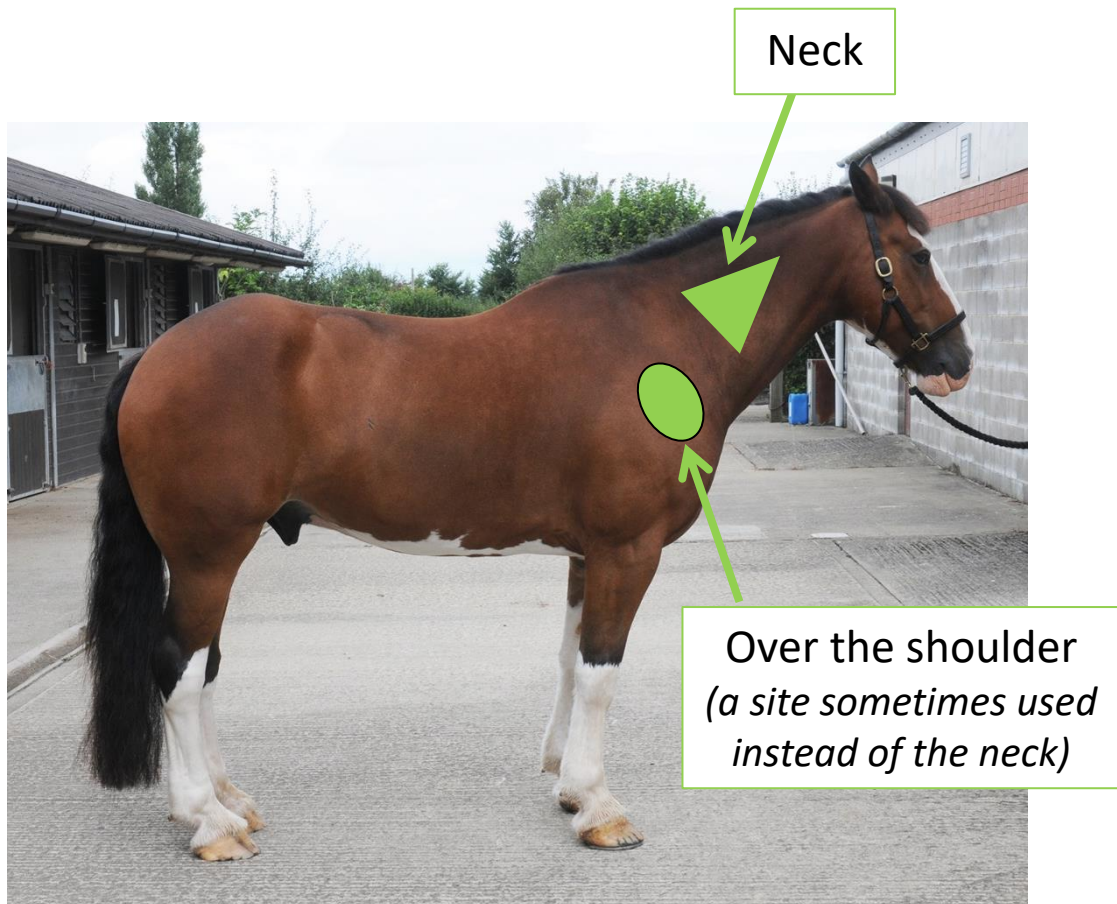
Intramuscular (IM) Injection Sites in Horses



The needle is inserted smoothly into the neck and pectoral muscles but rapidly into the gluteals.

Subcutaneous (SC) Injection Sites in Horses

Arrows point to approximate locations of the subcutaneous injection sites



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

Intravenous (IV) Injection Site in Horses

Arrow points to approximate location of jugular groove

Jugular groove



The needle is inserted smoothly through the skin in the proximal third of the jugular vein and parallel to it, before attaching the syringe.

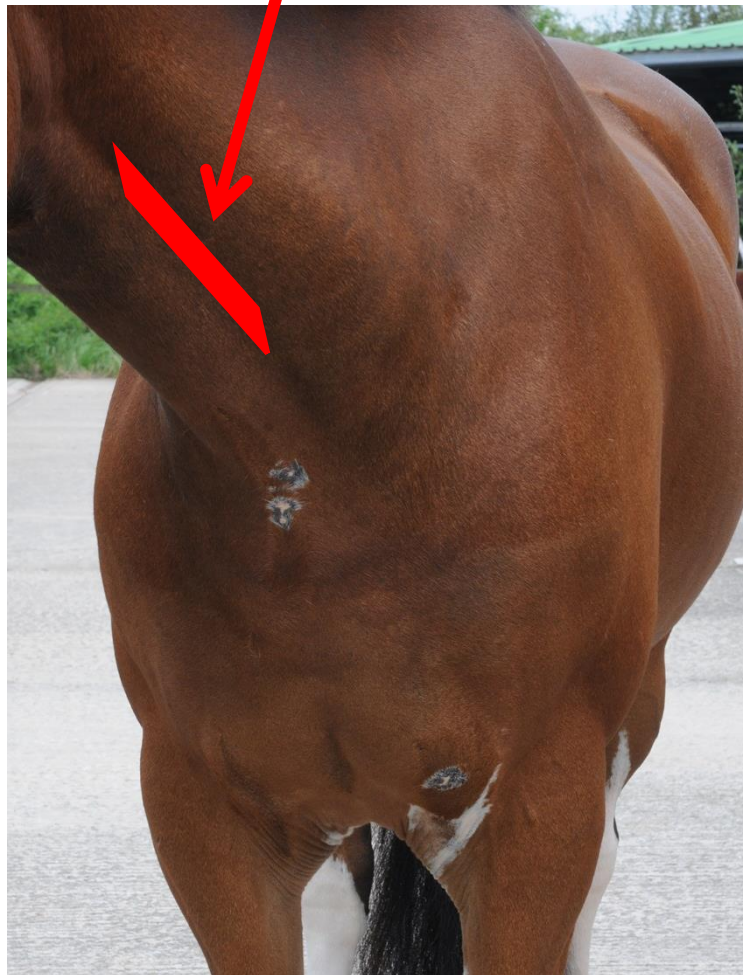


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Intravenous (IV) Injection Site in Horses

Arrow points to approximate location of jugular groove

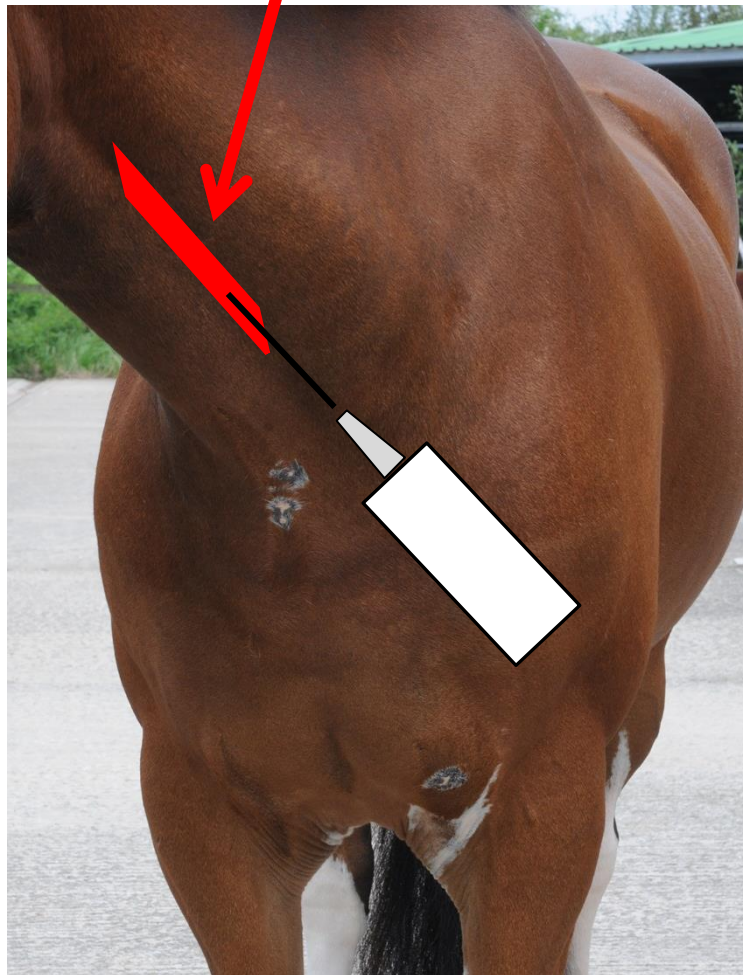
Jugular groove



Intravenous (IV) Injection Site in Horses

Arrow points to approximate location of jugular groove

Jugular groove



Once the needle is inserted up to the hub and blood is dripping freely from the end, you can attach your syringe



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I wish I'd known

Injection Sites in Horses

- Avoid giving subcutaneous injections in areas where tack (saddle, girth) will be placed.
- Always be careful as you move around horses – some may try to kick. Make sure to always stand in a safe place.
- Initially approach a horse from the near side (the horse's left); this is an equine convention and therefore horses are used to such an approach.
- The horse should be appropriately restrained when you are handling it e.g. ask an assistant to hold the lead rope.
- Wear suitable personal protective equipment (PPE) when working with horses e.g. safety boots and a hard hat.
- When moving around the horse, do not walk under the horse's neck when changing sides and never walk behind the horse – this is dangerous.
- Some horses will be fearful of vets and injections, recognising signs of stress, understanding horse behaviour and application of learning theory can allow you to give injections safely without compromising horse welfare.