



Horse Care:

Vaccination

What horses need vaccinating?

Vaccination is one foundation of preventative health care and when we talk about **horse** vaccination, we mean all equines - horses, ponies and donkeys of all shapes and sizes...even zebras if you happen to have one!

No matter if they compete regularly or simply thrive in their role as cuddly field ornament, every equine is susceptible to disease and unfortunately, in my experience, it is often donkeys and companion equines that are most overlooked for potentially lifesaving vaccinations.

Why vaccinate?

The phrase “prevention is better than cure” hits the nail on the head. Diseases such as tetanus can be fatal and sadly this occurs in up to 80% of diagnosed cases. Herpes virus can cause death of unborn foals and there is no medical treatment to stop this once it has begun.

As well as reducing the incidence of potentially fatal disease, vaccination can:

- Minimise unexpected treatment costs
- Protect horse welfare
- Reduce disease spread
- Avoid poor performance or loss of use due to disease
- Shorten recovery times when infection does occur

- Protect businesses e.g. livery yards, riding schools, training facilities and breeding units where disease can spread very quickly
- Avoid competitions and events being cancelled due to disease outbreaks.

How vaccination works

Vaccinations use antigens - parts of disease-causing organisms e.g. viruses - to trigger the immune system into developing defenses against that particular disease. A “memory” is also created enabling rapid and effective immune responses when disease is encountered naturally.

No vaccine is 100% guaranteed to prevent illness, but outbreaks are rare in vaccinated animals, especially if the whole group/yard/competition are vaccinated. Strict hygiene and biosecurity measures must still be used particularly when new horses arrive. Your vet will be happy to advise on this.

Tetanus

Tetanus is a truly horrible and often fatal disease in horses but thankfully is also easily preventable through vaccination. Caused by a clostridial bacteria found in soil, tetanus most commonly occurs through contaminated wounds.

If your horse is unvaccinated or overdue and has a wound, call your vet immediately. Antitoxin injection can be given which is *not* the same as vaccination but can reduce the immediate risk of disease.

To protect your horse, pony or donkey, tetanus vaccination can be given alone or in combination with flu (see later). Usually, vaccination is from 4 months of age, with two dose 4-6 weeks apart followed by a third dose 12

months after that. Booster vaccination is at least every 2 years throughout life. To protect foals under 4 months old, mares are vaccinated within the last month of pregnancy.

Equine Influenza (EI) - “Flu”

Flu causes fever, coughing, inappetence, nasal discharge, swollen glands and lethargy. The virus can travel up to 2km in the air, as well as directly from horse to horse and on equipment. Equine influenza is not considered contagious to humans.

Outbreaks occur quickly in unvaccinated horses who, if mildly affected may take 2-3 weeks to recover but in some cases take over six months to regain full health and performance.

Vaccination is not guaranteed to prevent influenza as, similarly to human flu, many viral strains exist. It works best when all animals in the group are vaccinated and will minimise disease severity and shedding.

Vaccination is typically from 6months of age with two injections given 4-6 weeks apart, followed by a third injection 6months later and annual boosters thereafter.

PLEASE NOTE: Pony Club, British showjumping, eventing and dressage typically follow [Jockey Club rules](#). Competitions under [FEI rules](#) have different vaccination intervals and [racing requirements](#) vary again so please check carefully and well in advance.

General Guidelines:

- First injection from 6 months of age
- Second injection 4-6 weeks later
- Third vaccine after 6 months
- Then annual vaccination

Jockey Club Rules:

- First injection from six months of age
- Second injection 21-92 days later
- Third injection 150-215 days later
- Thereafter every year within 365 days

FEI Rules:

- First injection from 6 months of age
- Second injection 21-60 days later
- Third vaccine within 6 months and 21 days
- If competing, repeated every 6 months and 21 days.
- If not actively competing, must be within 365 days.

Equine Herpes Virus (EHV)

Vaccination is available against two types of EHV (1 and 4) which can cause flu-like illness but also abortion in pregnant mares. Horses may be silent carriers of EHV, spreading disease while appearing unaffected themselves. Silent EHV can “reactivate” in times of stress e.g. moving yard or group. Strict hygiene and biosecurity measures will help to minimise risk from EHV, alongside vaccination.

Vaccination is from 5 months of age with two doses given 4-6 weeks apart followed by 6 monthly boosters. Vaccination is most commonly given to pregnant mares during the 5th, 7th and 9th months of pregnancy to reduce the risk of abortion.

Strangles

This bacterial infection causes fever, thick discharge from the nose and swelling of glands which may form abscesses. Spread directly from horse to horse and on contaminated equipment, it can survive for 6 weeks in water, making yard outbreaks challenging to control. Most horses will recover from Strangles with time and nursing, but some may become carriers so blood testing of new arrivals onto a yard is advisable.

A new vaccination against strangles has recently become available in the UK. Like flu, Strangles can still occur in vaccinated animals but less severely and with fewer horses forming abscesses or becoming carriers. Two vaccinations are given, 4 weeks apart followed by 6 monthly boosters. More frequent boosters can be given in the face of an outbreak.

Blood tests can differentiate between vaccination and natural exposure so screening of vaccinated new arrivals is still recommended.

Other vaccines

Breeding yards should discuss specific risks with their vet and consider vaccinations for Rotavirus (causing diarrhoea in foals) and Equine Viral Arteritis. Horses travelling abroad may require vaccination against diseases not currently in the UK such as West Nile Virus.

Are there alternatives to vaccination?

Whilst good hygiene, prompt wound treatment, and avoiding mixing horses can reduce disease risks, there is no comparable alternative to vaccination when it comes to providing robust, safe protection.

Vaccines in the UK are strictly regulated for both safety and efficacy. Products without veterinary license that claim to be vaccine alternatives have not been subjected to the same testing. Please speak to your vet before using any such product, so you understand the risks and possible side effects.

Risks of vaccination

Antigens in vaccines are altered so that vaccination does not cause disease but, as with any vaccine in any species (including humans), there is always a very small risk of adverse reaction.

In horses this would typically be:

- swelling at the vaccination site, which may be painful
- high body temperature (fever), causing dullness, inappetence and lethargy.

If your horse experiences any of these symptoms, make your vet aware and discuss whether anti-inflammatory medication may be appropriate.

Whilst severe allergic-type reactions are possible, they are thankfully very rare. Contact your vet immediately if you are concerned. Suspected vaccine reactions will be reported by your vet to the vaccine manufacturer as part of ongoing safety monitoring.

If your horse has previously had a vaccine reaction, discuss options with your vet. It may be appropriate to try a different vaccine brand, separate multi-disease vaccines into individual components (e.g. flu only then tetanus only), or to give anti-inflammatory medication at vaccination time, just as we do with human babies.

What about titre testing?

Antibodies are created by the immune system in response to vaccination or natural exposure. By monitoring blood antibody level (titre), in theory, we can identify when booster vaccination is required on an individual basis.

There are some difficulties with this approach.

- **Blood antibody levels do not always reflect protection:** Defence against flu involves local tissue antibodies (i.e. within the respiratory system) and other immune system components which are not reflected in blood antibody titres.
- **Correlation between blood antibody levels and protection is not well established in most equine diseases:** So it is difficult to say at which titre protection is adequate/inadequate.
- **Antibody levels will not always fall steadily:** So frequent retesting is required which can be costly and unpleasant for some horses.

Titre testing may be most appropriate in individuals who have previously experienced vaccine reactions and where the risk of reaction may be greater than the risk of disease.

Top tips for equine vaccination

- Vaccination is recommended for all equines including donkeys and companion equines.
- Only vaccinate healthy horses – your vet will carry out an examination before vaccination, but you must let them know if you have any concerns. If vaccination must be delayed, the schedule may need to be restarted but an unwell horse will likely not respond adequately to vaccination and may even become more poorly.
- Have your horse clean and dry ahead of the vet visit to minimise the risk of vaccination site reaction or infection. Vaccines are usually given in the neck or pectoral muscles (at the front of the chest)
- Avoid strenuous exercise or significant management changes in the day or two following vaccinations. Minimising stress allows the immune system to respond fully to the vaccination.
- Report suspected vaccine reactions to your vet promptly and review vaccination options well ahead of the next dose being due to ensure suitable actions can be taken.
- Check competition rules very carefully and arrange vaccinations well in advance. Whilst many practices aim to issue vaccination reminders, this system is not infallible and the responsibility for vaccine compliance rests with you, not your vet.

In the UK we are fortunate to be able to vaccinate against several severe infectious diseases of horses. Speak to your vet to assess the specific risks of each disease to your horse, yard and business. Remember, vaccination is only one part of disease control so review yard biosecurity and hygiene measures with your vet too.