

# Cinder Hill Equine Clinic



## Vaccinations

Horses, ponies and donkeys are susceptible to a number of diseases, some of which we can vaccinate against.

### **What is a vaccination?**

A vaccination is a way of producing an immune response against a specific disease. It primes the immune system so that an appropriate immune response can be stimulated if your horse comes in to contact with the disease. Initially a primary vaccination course will be required when vaccinating against a specific disease followed by regular booster vaccines at set time intervals depending on the disease you are vaccinating against.

### **Is vaccinating compulsory?**

Vaccinating your horse is not compulsory, however, horses potential suffering can be greatly reduced with a good vaccination schedule. With diseases such as tetanus, the vaccine is extremely protective, whilst tetanus in an unvaccinated horse may prove fatal. If you wish to enter your horse into any competitions or if it is entering a racing yard, then vaccination against equine influenza (flu) is compulsory. If you are putting your horse into livery, then some yard owners will also insist on vaccination before allowing your horse onto the premises.

### **Is it dangerous to vaccinate my horse?**

All vaccines are tested extensively by the manufactures to ensure they are safe and there are minimal adverse reactions before being put on the market. Some adverse reactions have been seen but these are incredibly rare when compared against the number of horses routinely vaccinated against flu and tetanus. Of these reactions, most are either a local soft tissue reaction to some of the components of the vaccine or mild muscle stiffness. The risk of your horse contracting flu or tetanus vastly outweighs the risk of your horse developing a reaction to a vaccine.

### **Following vaccination how long before I can ride again?**

It is advisable that for the first 24-48 hours following vaccination of your horse or pony exertion is minimized, this will reduce the risk of adverse reactions developing. After this time, you can ride your horse as normal. If you vaccinate against influenza, then you are not allowed to compete until seven days after the vaccine has been given.

# Cinder Hill Equine Clinic



## Equine influenza virus

This is a highly contagious viral disease of the upper and lower respiratory tracts. There are many different strains of the flu virus, but the most common ones seen in this country are H7N7 and H3N8. Whilst equine flu is now endemic within the horse population, the virus strains continually mutate and therefore epidemics or outbreaks of disease can be seen. Vaccine companies regularly update the vaccine to protect your horse against the strains that are currently circulating in this country.

Equine influenza can be spread rapidly through a group of horses either via direct contact with an infected horse or indirectly via virus particles in the environment. It is therefore important to isolate any horse you suspect of having flu.

### *Clinical signs of flu*

Clinical signs are generally seen 1-5 days after infection and can last for 2-3 weeks or longer if complications occur. Signs to look out for are:

- Harsh dry cough that can last for 2-3 weeks
- High temperature above 38.5°C
- Clear moist nasal discharge that progresses to become thick and creamy yellowy-brown
- Depression and lethargy
- Decreased appetite

Infection with the flu virus can make the horse more susceptible to bacterial infections, and bronchitis or bacterial pneumonia can subsequently develop. This can prolong recovery time and increased treatment will be required.

### *Vaccination*

Vaccinating against flu is highly recommended and is, in fact, mandatory if your horse is going on to any racecourses. The Jockey Club, international equestrian federation (FEI), competition bodies (such as BS,BD,BE etc.) and many show societies, Riding Clubs and Pony Clubs produce vaccination protocols to follow for equine influenza. These all vary and it is therefore important that you check the requirements for your particular society/body. Different vaccination companies also have different vaccination protocols so it can get very confusing to work out when each vaccination is required.

### *The most common vaccination protocol is:*

- Initial primary vaccination course which involves two injections no less than 21 days and not more than 60 days apart.
- First booster is then required at not less than 120 days and not more than 180 days after the second injection of the primary course.
- Subsequent boosters are then required at intervals of not more than 365 days apart, although following the Equine Influenza outbreak in 2019, some regulatory bodies and competition centres require that horses have 6 monthly boosters, to reduce the risk of transmission at large

# Cinder Hill Equine Clinic



events. The BHA requires 6 monthly boosters and these must be WITHIN 6 months of the previous booster.

## *Competition rules*

- Each horse must have a valid vaccination certificate which is completed, signed and stamped by a veterinary surgeon.
- You must be able to show that your horse has had a primary vaccination course against equine influenza as stated above.
- No vaccination should be given in the seven days leading up to a competition or entry into a competition stables.
- Check with the competition organisers/society as to what the protocol is for vaccinating against flu.

# Cinder Hill Equine Clinic



## Tetanus

Tetanus is caused by the bacterium *Clostridium Tetanii* which is an anaerobic organism (does not need oxygen). It survives in the environment (soil and droppings) for long periods of time. Tetanus is not contagious, meaning it cannot be spread horse to horse.

It penetrates the body via wounds. Puncture wounds and foot penetrating wounds carry the highest risk, but tetanus could also be acquired by gastric ulcers if the horse eats droppings or highly contaminated soil. The tetanus bacterium multiplies rapidly in contaminated wounds. The bacterium produced is a toxin and it is the toxin that is responsible for the symptoms.

### ***Clinical signs***

The toxin affects the nervous system attacking the nerves that control the muscles of the body. External symptoms that you can see on your horse if it is affected by the toxin are:

- Protruding third eyelid (membrane at the inner corner of the eye).
- Extension and stiffness of the limb.
- Spasm of jaw muscles (lock jaw) getting a common expression called sardonic smile.

### ***Treatment***

Tetanus can be treated, but unfortunately in most cases, the horse dies due to the delay in the diagnosis. Horses with an early diagnosis can be treated with large doses of tetanus antitoxin either intravenously or in the cerebrospinal fluid via a lumbosacral puncture. Penicillin based antibiotics may also be given in suspected tetanus cases.

### ***Prevention***

The prevention of tetanus is easy, keeping your horses covered and vaccinated with tetanus toxoid. The protocol of vaccination consists of a primary course of two injections 4-6 weeks apart from each other. After the primary course, the horse needs a booster vaccination within one year, then every other year for full protection.

# Cinder Hill Equine Clinic



## Equine Herpes Virus (EHV)

This is a common virus in the worldwide horse population. The most common strains to infect horses are EHV-1 and EHV-4. EHV-4 is most commonly associated with respiratory disease whilst EHV-1 is more commonly associated with neurological disease and abortion.

### *Abortion*

Abortions generally occur in late gestation at about seven months and pregnant mares don't always show signs of infection prior to abortion. Following infection, abortion occurs from two weeks to several months later. Foals can become infected whilst still in the mare's uterus, which can lead to premature birth, birth of weakly foals or foals that initially appear healthy but become progressively weak and lethargic within the first week of life. Ideally pregnant mares should be kept in small groups and kept separate from any other horses that come on to the premises.

### *Respiratory disease*

Respiratory disease due to EHV is most commonly seen in weaned foals and yearlings in the autumn and winter. Following infection with the virus, they may develop a secondary bacterial infection.

### *Carriers*

Horses that have recovered can become latently infected with the virus, that is, they don't appear unwell but the virus is still within the body. When the horse becomes stressed, the virus can then be reactivated and re-infection can occur.

### *Vaccination*

Vaccinated horses can still become infected with the virus, shedding it in the environment and infecting other horses but the severity and length of disease will be reduced. Horses can be vaccinated from 6 months of age. The primary course involves two injections 4-6 weeks apart. It is advisable that all animals on a stud farm are vaccinated against EHV, whether they are pregnant or not, although pregnant mares can still abort following vaccination. It is not advisable to vaccinate in the face of an outbreak of EHV on a yard since it can exacerbate clinical disease.

### *Vaccination of pregnant mares*

Pregnant mares that have had the primary course of vaccination should then also be vaccinated in months five, seven and nine of pregnancy. Boosters are required every six months.

# Cinder Hill Equine Clinic



## Rota Virus

Rota virus causes diarrhoea in young foals and vaccination of pregnant mares during late pregnancy causes increased antibodies to be produced in the mare's colostrum (first milk). These antibodies provide increased protection to the foal providing it drinks the colostrum.

Rotavirus is a virus that damages the villi in the intestines making it difficult for the intestines to absorb nutrients from food, otherwise known as malabsorption. The damage to the intestinal lining makes the foal unable to digest lactose, a component of the mare's milk. This causes diarrhoea that pulls water from the foal's body. Left untreated the foal will become badly dehydrated, a situation that could lead to death. The virus is carried in the manure and if a horse comes into contact with the manure, the virus can easily be ingested.

### *Vaccination*

Please speak to your vet to discuss if your mare should be vaccinated against Rota Virus. Injections are due at 8,9 and 10 months of pregnancy.