



RESPONSIBLE
HORSE OWNER BOOKLET

INFECTIOUS DISEASE & VACCINATION



MSD
Animal Health

INTRODUCTION



Equine infectious disease is an important factor when considering your horse's routine management and healthcare to ensure your horse stays healthy and can continue your normal activities.

Prevention is always better than a cure; vaccination and biosecurity are key elements in helping horses in the fight against infectious disease. Good day-to-day biosecurity practices are vital to reduce the chance of disease entering and spreading on your yard. Vaccination not only helps horses fight infection, it can indirectly protect others within a community (herd immunity) and can decrease the severity of signs if they get ill.


Infectious diseases are circulating within the UK. In 2019 we saw equine influenza cases increase just over 100 fold from 2018. And the start of 2020 saw the neurological form of Equine Herpes in some areas of the country. Strangles is found widely throughout the UK, with over 600 estimated cases per year, and many more not recorded. This guide will help you identify the steps you can take to keep your horse healthy.

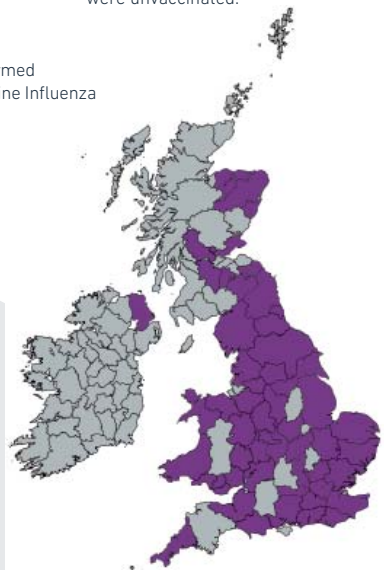
For more information and to gain access to the rest of the series, please visit our website: www.healthyhorses.co.uk or find Keeping Britain's Horses Healthy on Facebook and Instagram.



UK INFECTIOUS DISEASES

Within the UK there are several infectious diseases which affect horses and one non-infectious disease which can affect horse health and are potentially fatal.

 Laboratory confirmed outbreaks of Equine Influenza during 2019.



Equine Influenza

Equine influenza ('flu') is highly contagious, spreading rapidly through an unvaccinated population of horses. It does not usually cause long term or fatal illness, but can lead to horses having large amounts of time off work.

In 2019 the UK saw a large equine 'flu' outbreak throughout the country, with over 230 premises reporting outbreaks (Equine Quarterly Disease Surveillance Report (2019), Vol 15; No 1-4). Many horses were affected and there was significant disruption to the equine industry. It illustrated the importance of biosecurity and herd immunity in keeping our horses healthy as the majority of sick horses were unvaccinated.

Strangles

Strangles, caused by a bacteria, *Streptococcus equi*, is one of the most common infectious disease of horses. Exact infection numbers are hard to gather as many cases go unreported, however, it can be a devastating disease if control measures are not put in place to prevent and control outbreaks.

Equine Herpes Virus

EHV-1 and EHV-4 are the important herpes virus causing disease in the UK. Most horses are infected early in life around weaning. However, the virus tends to not cause disease, remaining hidden (latent) in adult horses until periods of stress such as transportation or rehousing, allowing it to spread to others. There are several clinical syndromes which can be seen – respiratory, neurological and abortion/death of newborns.

Tetanus

Although caused by a bacteria, *Clostridium tetani*, which is found in the soil, this is not a contiguous disease which can pass from horse to horse. The bacteria enters horses through wounds, commonly, foot penetrations. The bacteria then produce toxins which affect the nervous system.

Horses are more susceptible to tetanus than other species and it is unfortunately fatal in most cases.

UK INFECTIOUS DISEASE SUMMARY

	'FLU'	STRANGLES	HERPES	TETANUS
Incubation (days)	1 – 3	7 – 14	Variable	7 – 21
Transmission (direct - horse to horse contact) (indirect - e.g. via equipment and people)	Direct & indirect (airborne)	Direct & indirect	Direct & indirect	Enters via wounds
Respiratory signs (cough, nasal discharge)	✓	✓	✓	✗
Raised temperature	✓	✓	✓	✓ (variable)
Muscle soreness	✓	✗	✓	✓
Reduced appetite	✓	✓	✓	✓ (unable to eat - 'lock jaw')
Weakness/unable to stand	✗	✗	✓	✗
Abortion	✗	✗	✓	✗
Rocking horse stance, seizures	✗	✗	✗	✓
Carrier (can a horse be a carrier)	✗	✓	✓ (latency)	✗
Extended recovery	✓	✓	✓	✓ (mild cases only)
Death	Unlikely	Possible	Possible	Highly likely
Specific treatment	✗	✗	✗	✗
Supportive treatment	✓	✓	✓	✓
Prevention	Vaccination	Vaccination	Vaccination	Vaccination
Biosecurity	✓	✓	✓	✗

EXOTIC DISEASES

Exotic diseases are potentially serious diseases that are not currently found in the UK.

These diseases can enter the country in a variety of forms such as in live animals, in a vehicle, in animal products, by the wind or by insects such as midges and mosquitoes. In part, entry and establishment of these diseases is related to climate change providing a suitable environment for these insects to survive.

There are 3 main disease concerns:

- West Nile Virus
- African Horse Sickness
- Equine Infectious Anaemia (swamp fever)

These diseases are classified as 'notifiable'. Notifiable diseases are animal diseases that you're legally obliged to report to the Animal and Plant Health Agency (APHA), even if you only suspect that an animal may be affected.

For more information regarding these diseases and other potential threats see:

www.gov.uk
(search: notifiable diseases of animals in the UK)

www.beva.org.uk
(search: equine exotic disease information)



BIOSECURITY

The principles of disease control focus on good yard management to keep the disease out and improving the immunity of individuals and the herd through vaccination.

Follow good hygiene procedures:

- Use dedicated stable and grooming equipment, tack and rugs for each horse
- Avoid horse-to-horse contact with unknown horses, such as at shows or events, whilst out hacking etc.
- Do not share water at shows or events
- Clean and disinfect stables and equipment between horse usage with disinfectants which will kill viruses and bacteria

Isolation:

- Isolate new arrivals for at least 14-21 days
- Isolation areas can be as simple as an isolated paddock or stable but should ideally be at least 10 metres from other horses

Establish a yard protocol:

- What to do in the event of a horse displaying signs of an infectious disease
- For dealing with new arrivals to the yard including isolation and vaccination requirements
- This should apply to all horses on the yard

Limit the number of horses on a yard:

- Don't overcrowd, it encourages disease

Be vigilant for signs:

- Early identification of potential disease enables swift treatment and reduces the chance of infection spreading
- Monitoring for a rise in rectal temperature is a good way of picking up early cases of respiratory disease

Be aware of horses at risk:

- Young horses, those kept in large groups and those which travel a lot are more susceptible

Segregate youngsters:

- Diseases such as 'flu' and strangles are most common in youngsters

Ventilation:

- Ensuring stables are well ventilated will improve respiratory health and help reduce the spread of disease

Maintain buildings, fencing and yard areas:

- Minimise the risk of injury by keeping areas tidy and by removing all potentially harmful items and materials

For more information on biosecurity and disease prevention see:

www.worldhorsewelfare.org/Disease-prevention

www.healthyhorses.co.uk

VACCINATION

Vaccines contain a weakened version of a disease. They are essentially a practice run for a horse's immune system, teaching them how to respond to a certain disease and most importantly creating a memory so when a horse meets that disease in real life it can quickly know the best response.



Why should I vaccinate my horse?

- To prevent unnecessary suffering and potential death
- To prevent additional unplanned expenses – costs of treatment can far outweigh costs of vaccination
- To prevent loss of use – a sick horse should not be ridden or exercised until it has completely recovered
- To prevent yard closures and sporting cancellations – horse movements on a yard may have to be restricted or cancelled if a horse is diagnosed with an infectious disease
- To prevent the spread of disease

What does vaccination achieve?

- Vaccination is the best way to protect your horse and others around it from infectious and contagious diseases
- Your horse is part of a herd whether this is their field companion, the other horses on the yard or even the other horses in your local area
- Vaccinating enough horses promotes the concept of herd immunity. If enough horses are vaccinated the disease is unable to spread because there are too few susceptible horses left to propagate the outbreak



WHAT IS HERD IMMUNITY?



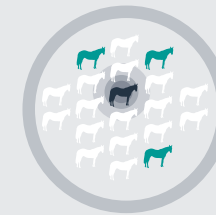
Herd immunity is a form of immunity that occurs when the vaccination of a significant portion of a herd or community provides a measure of protection for individuals who have not been vaccinated or not developed immunity through natural exposure.

When a high percentage of the population is protected through vaccination it is difficult for the disease to spread as there are too few susceptible animals to propagate the outbreak.

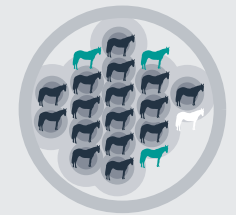
Even after the 2019 'flu' outbreak, it is estimated in Britain that less than 50% of horses are vaccinated against 'flu'.* It is widely agreed that to achieve an effective level of herd immunity against equine 'flu', vaccination rates need to be considerably higher and we have set an aspirational target of 70%.

SAFETY IN NUMBERS

 Healthy horse, non-vaccinated
 Healthy horse, vaccinated
 Non-vaccinated, sick, contagious



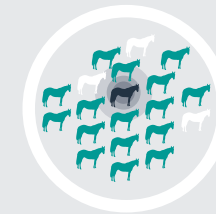
SOME horses are vaccinated...



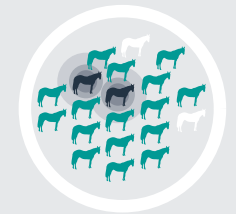
virus spreads



By protecting your horse you are also helping to protect all horses by reducing the spread of disease



MOST horses are vaccinated...



virus contained

*Vaccination rates are based on the assumption of 850,000 horses in GB. Vaccine doses based on GFK 2019 MAT

WHAT SHOULD I DO NOW?

Check your horse's vaccination status

Ask yourself:

- Which diseases pose a risk to my horse?
- Is my horse putting other horses at risk of disease?

Discuss a suitable vaccination protocol with your vet.

Discuss yard protocols for new arrivals and what to do in the event of a possible disease outbreak with the yard manager.

Where can I go for further information?

- Your vet
- To find a vet in your area findavet.rcvs.org.uk/find-a-vet
- www.healthyhorses.co.uk
- www.worldhorsecelfare.org
- www.gov.uk (search: notifiable diseases in animals)
- www.beva.org.uk (search: equine exotic disease information)



NOTES

A series of horizontal dotted lines for taking notes, spanning the width of the page.



Further information
is available from:

MSD Animal Health UK Ltd
Walton Manor, Walton
Milton Keynes MK7 7AJ

Tel. 01908 685 685

www.msd-animal-health.co.uk
www.healthyhorses.co.uk

Registered in England & Wales no. 946942.

UK-EQU-200900011

Keeping Britain's Horses Healthy™ is the property
of MSD Animal Health UK Ltd. Copyright © 2020
MSD Animal Health UK Ltd. All rights reserved.