# Protect ME



# Safeguarding antibiotics now and for the future

Antibiotic drugs are essential for the treatment of BACTERIAL diseases in humans and animals. To ensure they remain effective all healthcare professionals are working together to limit the further spread of antibiotic resistance. This occurs when bacteria mutate their genetic code so antibiotics can no longer kill them. Some bacteria can then pass this acquired resistance to other bacteria either in the same animal, in other animals or even in you!

- Every time an antibiotic is used there is the potential for bacteria to become resistant to that drug.
- Every time an antibiotic is used that is **NOT ESSENTIAL** the risk of resistance outweighs any potential benefit of the drugs.
- It is vital that antibiotics are used very carefully to ensure they are available to help our horses for as long as possible.

## Why is resistance such a problem?

Once bacteria develop resistance they will no longer be controlled by that drug and all drugs in the same category will be ineffective. There have been no new types of antibiotic in decades, just a slow improvement of the existing ones. Similarly there are no new options in the pipeline to replace the existing drugs.

## What are we doing about it?

Your veterinary practice supports the British Equine Veterinary Association's responsible antibiotic use guidelines; Protect ME. This means they have identified antibiotics categorised as critically important and pledged to PROTECT them. As such they are playing an important role in the prevention of further antibiotic resistance. By targeting the use of antibiotics carefully, and particularly by NOT using them wherever possible, we can all help to make sure they continue to work and are effective when they are really needed.

#### What can I do to help?

Horses rarely carry diseases that affect humans and similarly humans rarely infect horses. However there are some important exceptions, including MRSA and Salmonella. Not only can be transferred from your horse to you, but also from you to your horse, or from one horse, via you, to another horse. Thorough handwashing is important to reduce contamination and prevent the development of diseases in your horse or yourself that will reduce the need to use antibiotics.

#### When can we avoid antibiotics completely?

Antibiotics do not work for the treatment of viral infections so should not be used. In many bacterial infections, otherwise healthy horses are able to mount an effective immune response and cure themselves, without the need for antibiotics. If your horse has an infection your veterinary surgeon will decide whether antibiotics are likely to be beneficial. If they are not required you should not expect your veterinary surgeon to dispense them. They are acting in the best interests of your horse to ensure that these drugs work when they are needed.

The following examples explain why antibiotics may not be needed in the treatment of some common diseases.

Strangles: Although this is a highly emotive condition, antibiotics are rarely needed in the treatment of strangles. The abscesses represent your horse's natural effective response to the bacteria. Antibiotics will not improve the recovery from this infection.

Foot abscess: Again, the abscess represents your horse's effective response to the infection. Once these are drained, and provided you follow your vet's advice, your horse will improve without the need for antibiotics.

Wounds: Every cut triggers a response from your horse which removes damaged tissue and infection, allowing the wound to heal. The majority of wounds heal without the need for antibiotics, although those that involve deeper structures, especially the joints, are more serious and may need intensive treatment with antibiotics.

Diarrhoea: Most cases of diarrhoea in horses are not caused by bacteria; indeed your horse's intestines are full of 'friendly bacteria' that can be killed by antibiotics, and this itself can in fact cause diarrhoea. In the majority of cases your horse will recover without antibiotics, but they may require replacement of fluids, either as drinking water, or in some cases directly into the vein.

Foaling: Although foals are born with no natural immunity, they can acquire antibodies from the mare's first milk (colostrum). If they are healthy there is no benefit from treating them with antibiotics.

Viral diseases: Viral diseases, causing a temperature, coughing, and sometimes a nasal discharge, cannot be treated with antibiotics. Like the common cold, these usually improve in 1 to 2 days, and antibiotics will not speed up that recovery.

