

All About Pets

The national pet care information service



WORM CONTROL AND PASTURE MANAGEMENT



THE BLUE CROSS

Britain's pet charity

Worms can severely affect a horse's health, often being responsible for poor body condition, colic and general ill health. These internal parasites can seriously damage the horse's intestines and other internal organs, with potentially fatal consequences. An appropriate worming program, combining regular treatment/monitoring with good pasture management, is essential for all equines.



WORM CONTROL

Horses can be invaded by numerous types of worm during the course of their lives and, if left uncontrolled, they can build up to such an extent that a horse's digestion and wellbeing is compromised. Worms most commonly affecting horses are:

Large and small redworms (strongyles)

These are particularly dangerous as they can cause rapid weight loss, diarrhoea and colic. They can also cause death in the most severe cases.

Large redworms – these are potentially the most dangerous of the internal parasites which affect horses. Adults eat the lining of the gut wall, causing significant bleeding and damage. Immature worms (larvae) burrow through the gut wall into the bloodstream and migrate around the body to other organs, causing substantial damage. Blood clots and weakening of the blood vessel walls can cause arteries to burst under increased pressure, killing the horse immediately.

Small redworms – these can cause severe damage to the gut, leading to weight loss, diarrhoea and colic. These burrow into the gut wall, where they remain during the winter months before re-emerging in the spring. The emergence of large numbers can cause serious damage to the gut wall and may prove fatal.



PHOTO KINDLY SUPPLIED BY FORT DODGE ANIMAL HEALTH

Roundworms (ascarids)

Roundworms are especially dangerous to foals. Roundworm larvae can cause lung and liver damage as well as permanent harm to the digestive system. Worm numbers can build up rapidly, and may result in a blockage or rupture of the gut, leading to death.

Pinworms and threadworms

Living in the large intestine, pinworms can damage the bowel and cause severe itching around the tail. The horse can become distressed and rubbing of the tail can cause open sores which are liable to infection. Intestinal threadworms are often dormant in adult horses but transfer to a newborn foal via a mare's milk, leaving the foal weak and affecting the newborn's growth.

Tapeworms

Tapeworms cause less direct internal damage to a horse's intestine but large numbers can cause a fatal blockage, particularly as they tend to congregate at the narrow site where the small and large intestines join (illeocaecal junction). They may also cause digestive disturbances and colic.

Bots

Bots are larvae of flies (horse bot flies) that are themselves a common irritant to horses. Horse bot flies lay their eggs in the horse's coat and, as the horse grooms by licking, the eggs are ingested. On entering the horse's mouth, the eggs hatch into larvae which then migrate to the stomach. If left untreated the horse can suffer inflammation in the mouth and throat, as well as ulceration of the stomach. Heavy burdens of this parasite can cause colic or even perforation of the stomach.

Control of worms

No horse is ever completely worm-free but, by following a recommended worming program, the worm burden can be kept to a minimum. A veterinary surgeon will be able to advise you on the correct and most appropriate worming program for a specific horse, combined with effective pasture management.

Oral administration of chemical worm doses (wormers) is the most effective treatment for worm problems in horses, when administered correctly.

No single wormer is effective against all types and stages of worms. An effective worming programme is, therefore, essential. This uses a variety of different active ingredients, each being designed for use at a different stage of the worm's life cycle. As wormers have different treatment intervals, the manufacturer's instructions should be read and their recommendations followed carefully.

Wormers come in the form of pastes, gels, liquids and granules. Pastes and gels come in oral syringes for ease of administration.

The wormer dose should be administered based on a horse's body weight. Weigh tapes provide an easy means of determining weight, being reliable to within about ten per cent either way.

All horses that graze together should be wormed at the same time, with the same product. All new horses should be wormed on arrival at the yard and kept off the main grazing area for the first two or three days. Their droppings should be collected and disposed of.

Faecal egg counts (FEC)

Faecal egg counts is the examination of horse dung for the presence of worm eggs and can assist in identifying a worm problem or the effectiveness of a worming program and reduces the frequency of worming treatments when combined with other management practices. However, evidence has shown that the number of eggs in dung does not necessarily accurately reflect the level of burden in the horse's gut. Therefore, if worming according to FEC analysis alone, veterinary advice should be sought to establish an appropriate regime.

PASTURE MANAGEMENT

Effective worm control is assisted by good pasture management. Regular collection of droppings is essential to reduce the build-up of worm eggs in the pasture and to prevent the development of latrine areas. Ideally, droppings should be collected daily, however, this is not always possible. Droppings should be collected at least twice weekly during the spring and summer months and at least weekly during the autumn and winter. These are the minimum requirements.



It is vital to maintain grazing land properly to prevent it from becoming “horse sick” (over-grazed, rough, worm and weed infested). In addition to routine checks, the land may benefit from harrowing, rolling, fertilising and weed control. These are specialised tasks, usually best carried out by an experienced contractor.

Collecting droppings

Manure must not be allowed to accumulate around stables and shelters. To reduce the risk of ingesting worm eggs (whether in the stable or at grass), supplementary feed should be provided in suitable containers rather than being fed off the ground. Any hay dragged through bedding or across the floor of a shelter should not be re-fed. If a horse is prone to eating their bedding, use wood-shavings or paper rather than straw. Not only will this reduce the risk of contracting worms but will also prevent the horse over-eating.

Worm eggs are hardy and can survive for longer periods in stables and shelters than on open pasture. Cleanliness of buildings and equipment is essential to reduce the risk of worm infestation and other health problems.

Subdividing grazing

Where possible, the grazing area should be subdivided into smaller paddocks to allow the periodic rotation of horses around the available grazing area. This allows the resting of paddocks so that the grazing area can recover. Alternatively, a field can be strip-grazed (with a temporary fence line being moved regularly), to allow for fresh grazing while other sections of the pasture can recover. Worms that infest horses do not survive in either sheep or cattle. Therefore, using such animals on a pasture (in the absence of horses) helps to break the lifecycle of equine worms, thereby gradually reducing the parasite populations.



Harrowing

Where several horses share a large field, it is not always possible to remove all droppings. Harrowing the field helps to break up the dropping and speeds up the rotting process. However, this can also serve to spread worm eggs around the pasture and is far less effective than collecting and removing droppings. Harrowing in the summer, when there is a spell of warm weather, reduces this risk. While harrowing can encourage the grass to tiller, thereby increasing the ground cover, it can also pull out dead plant material and leave bare areas of soil to be readily infested by weeds. Care must be taken when harrowing light soil (for example, those that are sandy or chalky), where grass is more easily uprooted and soil erosion can occur.

Rolling

Rolling helps press down turf that may have become cut-up and poached by the action of horses' hooves. Rolling firms up the pasture, making it less susceptible to future poaching, and helps discourage weeds that prefer to germinate in loose soil. Care must be taken when rolling heavy soils, such as clay, as the ground can become too compacted and natural soil drainage is then reduced.

Fertilising

Various commercially available fertilisers can be used to encourage grass growth, however, they should always be applied with caution. Soil should be tested first, to identify any deficiencies, and professional advice sought. Incorrect or unnecessary fertilising can cause severe digestive disorders in horses. Natural fertilisers (such as well-rotted farmyard manure) are often best for use on horse pasture, and a liberal application once every couple of years should suffice. Horse manure should not be used as a fertiliser on horse pasture for the reasons given above.

Weed control

In addition to removing droppings from a pasture, the land should also be checked regularly for weeds and any poisonous plants. Weeds can spread rapidly thus reducing the quality of the grazing area. Those that are poisonous can be harmful to grazing horses. Ragwort is an extremely harmful weed and readily infests horse pastures. This weed should not be permitted to grow in fields where horses graze, nor in those used for hay production. Ragwort remains toxic when dead and is more palatable dried. Plants should be treated with herbicide in the rosette stage, and then pulled up and destroyed by burning. Older plants should also be removed (along with the roots) and destroyed. Gloves should always be worn when handling ragwort.

Related Blue Cross publications

The following leaflets from the *All About Pets* series may be useful.

- *Stabling and livery (H4)*
- *The field-kept horse (H5)*
- *Routine healthcare (H8)*
- *Vaccinations and disease control (H10)*

All About Pets

The national pet care information service

All About Pets provides expert advice, information and support for pet owners. It aims to ensure the welfare of Britain's pets by promoting responsible animal care. For further information and advice on caring for your pet or horse visit www.allaboutpets.org.uk. Alternatively, you can write to us at the address below to request a list of available leaflets.

All About Pets is a service of The Blue Cross, Britain's pet charity, which provides practical support, information and advice for pet and horse owners. Through our network of animal adoption centres we rehome thousands of animals each year. Our hospitals provide veterinary care for the pets of people who cannot afford private vets' fees.

How you can help

The Blue Cross is a registered charity and receives no government funding. We rely entirely on the generosity of pet lovers to help support All About Pets and other vital animal welfare projects. Any contribution would be most welcome. For more information on how you can help call us on 01993 822651 or visit our website at www.bluecross.org.uk.



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Registered charity no: 224392