

PHHWV Equi Info Note

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EQUINE WORMING

The purpose of this educational material on worming is to provide owners with an understanding on how important it is to have an effective worming program for their horse.

Introduction

A regular program to control worms is necessary to maintain your horses' health. The frequency of this treatment is determined by the chances of re-infection (whether the horse is stabled, in a small yard or paddock or running with a number of horses) and their age (younger horses require very regular treatment to keep the large white round worm (Ascarids) under control).

In order to ensure your horses long term health it is also very important to understand not only the types of worms that horses are susceptible to, but also the adverse affect an untreated or mismanaged worm burden can have on your horse's health. The damage that a parasitic worm burden can do should not be underestimated. Damage to the gut and internal organs can contribute to poor body condition, colic and sometime even death.

Understanding the main types of worms and the types of preventative treatments that are available may also help with your day to day horse husbandry practices.

Types of Worms

Large Redworm (Large Strongyles)

The Large Redworm, also known as the Large Strongyles, are one of the most dangerous and commonly occurring intestinal worms, with the majority of horses in Australia infected. Adult Strongyles suck blood and damage the lining of the intestines. Immature worms make their way through the blood vessels to the intestines. This migration not only causes damage to the walls of the blood vessels but can lead to a blockage within the blood vessel. This disruption of the blood supply can cause fever, anaemia, colic and in sever cases, rupture that can lead to sudden death.

Small Redworms (Cyathostomes or Small Strongyles)

The Small Redworm, also known as Cyathostomes or Small Strongyles, are as common as the Large Redworms and account for many of the worm related problems in horses. Small Redworms are smart and over the colder winter months go into hibernation by burying themselves deep into a horses intestine. They happily live in a cyst within the intestines, emerging in the spring to cause damage to the intestine wall. This can lead to loss of condition, severe diarrhoea, colic and in severe cases death. Most horses that have had a good worming regime in place cope well by developing a natural immunity to this worm and get by with no ill effects during the spring and summer months. However young and older horses seem to be more susceptible to the effects of the migration and may require an additional treatment in autumn before hibernation.

Large Roundworms (Ascarids)

The largest sized worms that affect horses growing to 60cm in length,

the Roundworms primarily affect foals, weanlings and yearlings. Adult horses that have benefited from a good worming regime early on usually develop immunity to them. The eggs of this worm can live on the grass or in the stable for many years, and foals become infected relative easily with routine grazing. An infestation can result in tissue damage and blockage of the bile duct causing abdominal pain (colic) and they can also cause coughing as the larvae migrate through the lungs.

Threadworms

Foals are open to the effects of Threadworms during the initial weeks of their life. It is a very small worm that is transmitted via the mare's milk. The effects of this worm can cause sever diarrhoea. It is vital that mares are wormed around the time of foaling and foals are wormed at four weeks of age.

Pinworms

Probably the most obvious worm infection due to the female Pinworm laying her eggs beside the horses rectum resulting in itchiness and the horse commonly rubbing the hair off its tail base. Although these symptoms are the least dangerous for a horse, untreated scratching can lead to open wounds and sores appearing.

Lungworms

These types of worms are seen more in donkeys, but they can affect horses too. Symptoms of Lungworm infestation are generally respiratory, where a persistent cough is present. Eggs are ingested off the pasture and migrate through the blood stream to the lungs where they develop into adults that lay eggs. These eggs are coughed up and then swallowed and passed out in the manure.

Bots

Evidence suggests Bots are the second most common worm, affecting Australian horses. The bot fly lays its yellow coloured eggs seasonally from late spring to autumn mainly on a horse's legs and belly. The eggs are then ingested by the horse when they groom themselves. The larvae migrate from the skin and end up in the lining of the stomach causing ulcers or even perforations. It is recommended to worm against bots in early and late winter.

Tapeworms

Tapeworms can occur in horses of all ages. They are found in the large intestine and like to reside where the small and large intestine meet, known as the ileo-caecal valve. Most Tapeworm burdens show very little signs of a problem. They cause intestinal damage and weight loss or thriftlessness and can increase the risk of colic. Once again the young horse and aged horse seem to suffer more.
regarding the appropriate worming program for your horse.

Worm Control

To reduce the risk of problems arising out of a worm burden there are two areas that need to be covered. The first one is preventative treatments using a wormer and the second is day to day husbandry practiced.

Husbandry

There are several things owners can do as part of their day to day routine to reduce the risk of worms becoming a problem

Feeding

Feed your horse out of a feed bowl rather than throwing feed on the ground. Make sure all your feed bowls, buckets and water containers are cleaned. Try not to share buckets and feed bowls with horses.

Pasture/Stable Management

Effective pasture management is the key to having an effective worm control program. Do not allow paddocks to become overgrazed. A good rule to stick to is 1.5 or 2 acres per horse. Make sure you can rotate paddocks and give the paddocks a rest from grazing.

During paddock rotation worm horses a day or two prior to moving them to a new paddock.

Where horses are kept in small paddocks and yards make sure manure is picked up at least twice a week and put on a manure heap. By picking up manure you are preventing the build up of larvae on the ground. Harrowing manure is fine if you can rest the paddock for several weeks at a time after harrowing.

Stables should be mucked out daily and manure should not be stock piled around horses. Don't use the manure or stable waste to fertilise your paddocks. Muck stables out completely (remove all bedding) at least every four to six weeks. Hose out and scrub walls and floors with disinfectant and allow drying completely before replacing bedding. This is especially important if you have a new horse going into a stable.

New Arrivals

All new arrivals should be immediately wormed and kept isolated for at least 48 hours before being turned out with other horses.

Preventative Treatment

As the adage goes, "Prevention is better than cure". This could not be more so when it comes to an effective worming program for your horse. Commercially prepared wormers are essential to ensuring worms are kept at bay. There are a large selection of wormers on the market that are available from feed stores or local saddlery.

So what one is right for your horse?

Types of Wormers

A different brand of wormer dose not necessarily mean a different chemical compound. There are active chemical components that kill worms in all brands of worm pastes and they fall into four different categories:

1. Macrocyclic lactones (ML)
2. Benzimidazole
3. Pyrimidines
4. Praziquantel

Some wormers on the market may have a combination of two active chemical ingredients. This means that several types of worms can be treated with one single dose. Some wormers control different stages of the worms lifecycle i.e. some control the adult worms and other control both the mature worms as well as the larval stages.

Wormers can come in four main forms: paste, gel, liquid and granules and some have differing treatment intervals; but most are required to be used at least every 8 weeks.

Specific Treatment

At different times of the year a particular types of worm may need to be controlled more than others.

First Year

Use "mectin" wormer (listed on chart as **Green** or **Red**).

Second Year

Use "BZ" wormer (listed on chart as **orange**).

Keep in mind BZ are not effective on bots or tapeworms.

Use an all wormer (listed on chart as **Red**) in May and August.

Foals, ill, neglected or under weight and aged horses may need to have specific treatments tailored to their situation, your veterinarian can assist you with this.

Administering Treatment

It is important to read the manufactures instructions on the label before administering any wormer. Check any warnings and ensure you use the correct amount for the weight of your horse.

A useful formula to ensure you use the proper dosage based on body weight is:

Weight (kg) = girth (cm) x girth x length divided by 1200

Also make sure you horse has access to water and feed after worming and if you are keeping horses together have them all on the same worming program.

Resistance

There is some evidence that over time worms can build up a resistance to a treatment. Therefore it is important to rotate the type of active chemical ingredient rather than the brand. See the attached Horse Wormer Comparisons chart for detailed information.

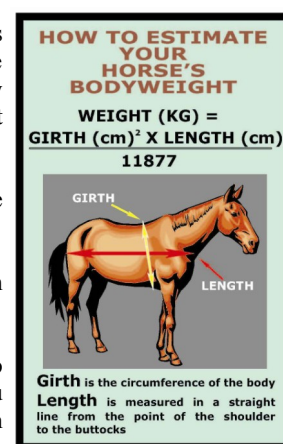
Summary

It is very important that owners understand the different types of worms as well as the different types of chemical compounds present in worming pastes. Remember a different brand does not necessarily mean a different active compound. If you are unsure please talk to your veterinarian. Both over worming and under worming can have harmful effects on your horses health. A faecal egg count reduction test can be performed under the advice of a veterinarian if you are unsure that your horse is responding to your worming program or if you are concerned about a horse being under weight. This test is inexpensive and will tell you if your horse is suffering from a worm burden.

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**The information provided is not intended to replace the professional advice you may receive from your veterinarian.
Please seek veterinary advice if your horse requires specific attention.**

HORSE WORMER COMPARISONS

Chart supplied by



HORSE WORMING PASTES

	ACTIVE INGREDIENTS	TAPEWORMS	SMALL STRONGYLES (Redworms)	LARGE STRONGYLES (Bloodworms)	PINWORMS	BOTS	LUNGWORMS	ASCARIDS (Roundworms)	NECK THREADWORMS	INTESTINAL THREADWORMS	HAIRWORMS	LARGE MOUTHED STOMACH WORMS	SUMMER SORES	TREATS BODYWEIGHT (KG)
ValuMAX® - Red Tube ¹	Abamectin & Praziquantel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	600KG
Equimax® ²	Abamectin & Praziquantel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	600KG
Equest® Plus Tape ³	Moxidectin & Praziquantel	✓	✓	✓	✓	✓	■	✓	✓	✓	✓	✓	✓	575KG
Equimax® LV ²	Ivermectin & Praziquantel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	600KG
Genesis™ Equine ⁴	Ivermectin & Praziquantel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	600KG
Eqvalan® Gold ⁶	Ivermectin & Praziquantel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	600KG
Ammo® ⁸	Abamectin & Morantel Tartrate	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	600KG

ALL WORMERS

Valumec™ - Green Tube ¹	Abamectin	■	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	600KG
Farnam MecWorma® & Bot ⁵	Abamectin	■	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	600KG
Equiminth® Paste ²	Abamectin	■	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	600KG
Equimec® Paste ⁶	Ivermectin	■	✓	✓	✓	✓	✓	✓	✓	✓	■	✓	✓	600KG
Eraquell® Pellets ²	Ivermectin	■	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	600KG
Noromectin® Paste ⁷	Ivermectin	■	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	600KG
Oximinth Plus® ²	Oxibendazole & Dichlorvos	■	✓	✓	✓	✓	■	✓	■	■	■	■	■	500KG

WORM & BOT

Equinox® - Orange Tube ¹	Oxfendazole	■	✓	✓	✓	■	■	✓	■	■	✓	✓	■	600KG
Farnam® Worma Paste ⁵	Oxfendazole & Piperazine	■	✓	✓	✓	■	■	✓	■	■	✓	✓	■	450KG
Oximinth® Paste ²	Oxibendazole	■	✓	✓	✓	■	■	✓	■	■	■	■	■	500KG
Equiban® Granules ⁹	Morantel Tartrate	✓	✓	✓	✓	■	■	✓	■	■	■	■	■	276KG
Equiban® Paste ⁹	Morantel Tartrate	✓	✓	✓	✓	■	■	✓	■	■	■	■	■	560KG
Strategy T® ¹⁰	Oxfendazole & Pyrantel Embonate	✓	✓	✓	✓	■	■	✓	■	■	■	■	■	600KG

ROTATIONAL WORMERS (NON-MECTIN)

1 Value Plus Animal Health Care Products Pty Ltd 2 Virbac (Australia) Pty Ltd 3 Fort Dodge Australia Pty Ltd 4 Ancare Australia Pty Ltd 5 International Animal Health Products Pty Ltd 6 Merial Australia Pty Ltd
7 Norbrook Laboratories Australia Pty Ltd 8 Nature Vet Pty Ltd 9 Pfizer Animal Health 10 Vetsearch International Pty Ltd



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