

<u>Worms and Drenching Horses –</u> <u>Why, When and How</u>

Worm infestation in horses is a significant problem causing signs such as ill thrift, weight loss, diarrhoea, anemia, colic and even death. The main worms that we see are tapeworm, strongyles, cyathostomes (small strongyles) and roundworms. Bots are also commonly seen however these are not strictly worms but the larvae of flies.

There are a number of different life stages of worms, however, generally an adult worm living inside the horse will produce eggs that are passed in the manure which will than develop into larvae or mature into infective eggs which the horse then ingests. Once the larvae or the eggs are ingested the cycle repeats itself. In some species of worms, the larvae migrate through the intestinal walls and damage the blood vessels in the abdomen. Other species have stages of larvae that burrow into the intestinal walls and form cysts – just waiting for the right conditions to hatch and develop into adult worms.

To determine if your horse does have a worm problem, a sample of faeces can be analysed by your veterinarian. This is done by diluting a certain amount of faeces in a solution that will cause the eggs produced by worms to float to the surface. Under a microscope the number of eggs are counted and a result can be determined in eggs per gram. Once the count reaches a certain number (depending on the type or species of worm) it is recommended to worm or drench your horse. Generally horses require treatment every 8-12 weeks depending on their exposure to worms. Exposure is increased with larger numbers of horses on smaller size paddocks (ie the amount of land there is per horse – the less amount of land there is, the closer the horse grazes to their manure and the more likely they are to ingest worm eggs). Also worm eggs and larvae can survive on the pasture for extended periods of time. Regular worm treatments reduce the risk of your horse coming down with disease due to worms.

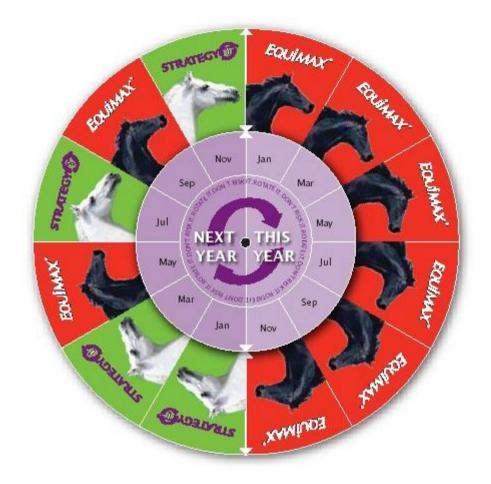
There are a number of ways to drench a horse. One of the easiest ways is to use a 'paste' product – a tube of worming paste that is squeezed into your horse's mouth. Other ways include granules that can be combined in feed, liquids that are squirted into the mouth or liquids that are passed via a tube into the stomach. It has been shown that all ways are just as effective provided that the right amount for the weight of the horse is given and that the horse swallows all of the product.

There are two classes of worm drenches that are used in horses – 'mectins' such as ivermectin, moxidectin and abamectin or 'BZs' (benzimadazoles) such as oxibendazole. The selection of which class of product to use relies upon the amount of resistance that is present in the worm population. Resistance is when a drug that has previously been used to control a type of worm is no longer effective. It is becoming of increasing concern that overuse or repeated use of the 'mectin' class of products will lead to resistance to this class of drug. There is already resistance amongst certain worm species to the BZs in horses. There are a number of ways that resistance in worms can be reduced:

- 1. Using an effective product initially (eg Equest or Equimax or a combination product such as Strategy T).
- 2. Giving the correct dose. Depending on the brand of paste there are different weights that can treated with one tube. Some tubes only treat horses weighing 450 kilograms while other tubes treat horses up to 600kg. When people are estimating horses weights they often underestimate and thus give too little worming product. Weighing a horse on scales provides the most accurate measurement however girth tapes can be used to prove a reasonably accurate estimate. It is also important to make sure that the horse receives all the dose if using granules the horse needs to eat all of them or if using paste it must

swallow the complete amount.

3. Rotation of drenches. Rotation of the drench you use on a yearly basis is one way that resistance may be avoided. If rotating drenches it is important to change to a drench of a different class ie if using a 'mectin' change to a BZ. Due to resistance in the BZ class a combination BZ such as Strategy T is a reccommended alternative to a 'mectin'. Changing from one 'mectin' to another (such as Equest to Equimax) will not reduce resistance.



Source: Virbac Animal Health

- 4. Avoid introducing new resistant worms. This can be achieved by drenching any newly arrived horse with an effective product.
- 5. Use the correct number of treatments per year. Too frequent use of worming products can lead to resistance developing, however, too infrequent use will result in larger contamination of the pasture and result in disease. The number of treatments per year depends on the environment in which the horse is kept. Generally horses need to be done every 8 weeks if the area is likely to have large numbers of worm eggs or every 12 weeks if there is fewer worm eggs in the environment.
- 6. Pasture hygiene collection of manure in yards or paddocks on which horses graze will greatly reduce the amount of contamination of the pasture. Also not overgrazing the pasture helps to reduce worm burdens in horses.

The correct use of drenching products will improve the health of your horse and ensure that these products will remain effective for years to come. If you have any questions regarding worms in horses please contact your veterinarian.