

Parascaris equorum

Synonyms: Ascaris, Ascarids, large roundworm

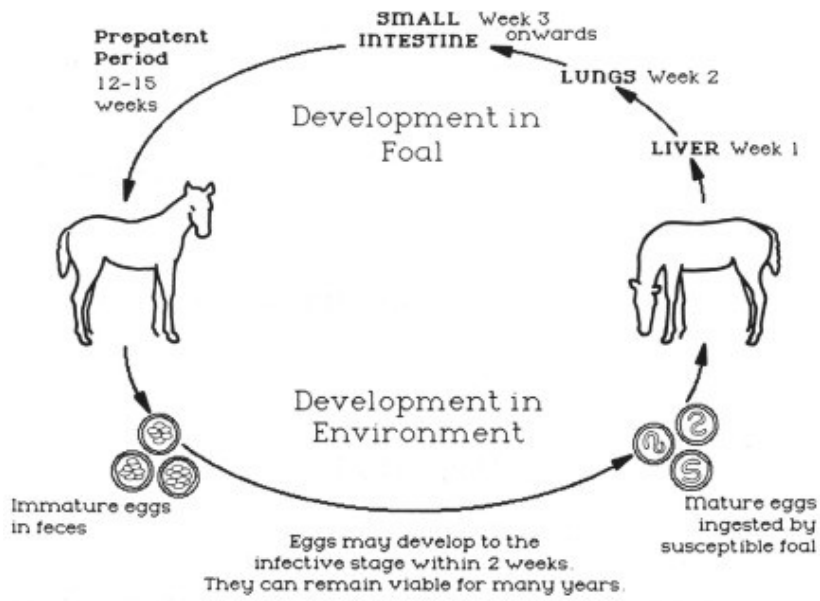
Ascarids are the largest roundworm that infects horses. Female worms can reach 40cm in length while male worms 15cm. Most horses develop immunity by the time they are 5 years old, with the majority of heavy infections confined to foals and yearlings. Therefore, these worms are mainly problematic on stud farms and other properties where there are always young animals present to allow the worms lifecycle to continue

Lifecycle: Unlike most other horse worms which reside solely somewhere in the gastrointestinal tract for their entire lifecycle, ascarids have a migratory lifecycle that includes the liver and lungs. Eggs are ingested from the environment, and hatch in the intestine. Larvae migrate through the intestinal wall and make their way to the liver. Two weeks after this, they will have migrated to the lungs, where the larvae then migrate up the trachea and are swallowed. Once swallowed, the larvae finish their maturation into adult worms before beginning to produce eggs that pass out in the manure. This entire cycle will take a minimum of 10 weeks. Once worms are adults, they can live for up to 2 years in the intestines.

Clinical Signs: While the larvae are migrating through the liver and lungs of young horses, horses may display symptoms such as coughing and nasal discharge, otherwise foals will remain in apparent good health. At these stages the infection will not be detected on a FEC. The adult intestinal stage can be well tolerated in low burdens, but moderate or heavy infections will lead to ill health. The worms themselves do not cause significant damage to the intestine – loss of condition in the horse is likely due to the worms competing for nutrients. Heavy infections can also lead to impaction colic. Adult worms can grow up to 40cm in length, and so their effects on gut movement may be significant.

Diagnosis: Infections with adult worms can easily be identified due to the unique morphology of ascarid eggs from other worm species present in horses.

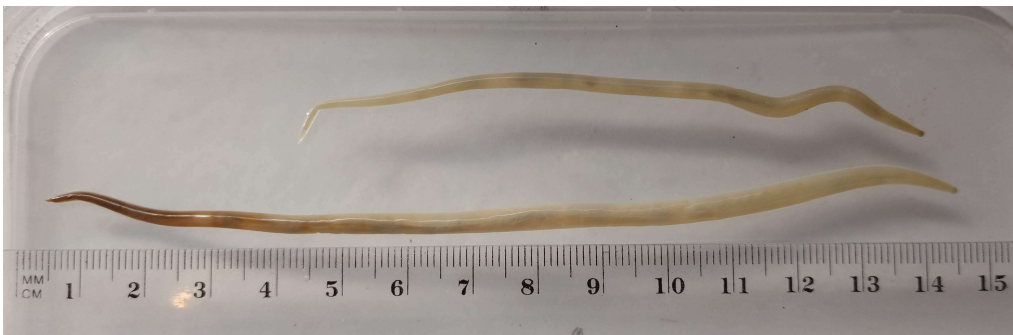
Control and Management: It is wise to keep young horses on a regular FEC regime prior to worming to check for ascarid infection and to ensure proper treatment and paddock management can occur to limit infection. Although ascarids can be treated using either BZ or avermectin dewormers, it is recommended to use a BZ (such as oxfendazole), due to mode of action. Avermectins kill worms through paralysis: paralysed worms are more likely to cause gut blockages. Unfortunately, ascarids can be very difficult to control in the environment. The eggs are resistant to external factors and can survive in the environment for several years. In addition to this, female worms lay very high numbers of eggs – one infected foal may pass millions of eggs per day. If ascarids are present on a stud farm, it is recommended to swap between foal paddocks each year, to prevent yearly transmission between young animals.



Lifecycle of *P. equorum*.



P. equorum egg at 100x magnification. ©WormCheck



Adult *P. equorum* worms isolated from manure of a foal post worming ©WormCheck