HEALTH 4 WEALTH

Australian Government
Department of Agriculture, Water and the Environment

animalhealth AUSTRALIA

AUSTRALIAN Pork

ASCARIDS

What is the condition?

Ascarids are large roundworms (*Ascaris suum*) that are found in the small intestines of pigs. The roundworm can reach lengths of 40cm and be 7mm thick at full maturity. They cause inflammation of the lungs and the appearance of 'milk spots' (with inflammation) on the liver due to the presence of migrating larva. Heavy infestation of ascarids can lead to loss of appetite, vomiting and death. Symptoms in heavy infestations can include:

- difficulty breathing
- weight loss (can be slow)
- jaundice
- ill thrift
- passing of whole worms in manure
- death, if the small intestine is ruptured.

In smaller infestations, a loss of appetite, slow growth and poor feed efficiency can occur.

How common is it on-farm?

The large roundworm is the most common and economically important internal parasite of pigs. Improved control methods have reduced its effect - now only approximately 3% of pigs slaughtered in Australia show signs of having been affected by this parasite (as indicated by the Pig Health Monitoring Scheme).

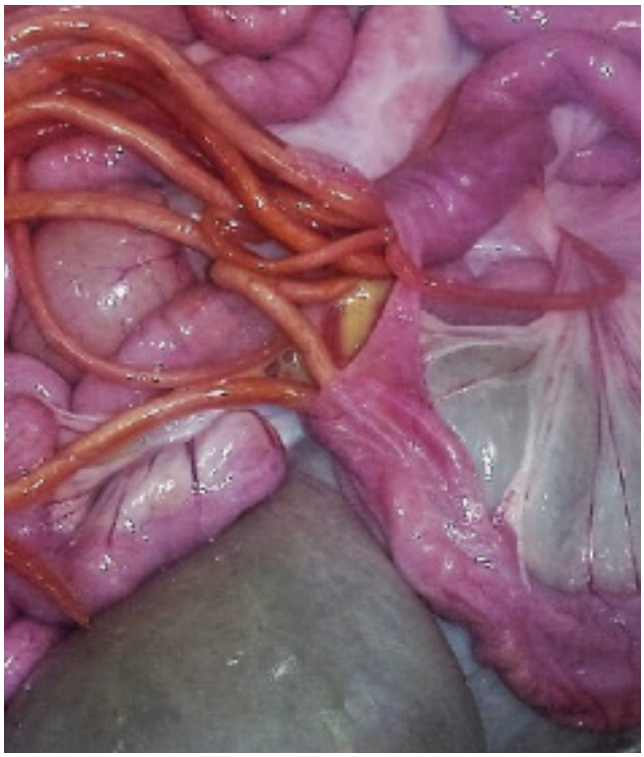
How is it spread?

The roundworm is transmitted via the oral-faecal transmission of eggs containing infected larvae. A female roundworm is estimated to produce more than 300,000 eggs per day. Roundworm eggs can survive outside the host for years and can remain viable in soil in dry and hot conditions. They can also be dispersed in the environment by wind, water and insects.

The pig ingests roundworm eggs, which quickly hatch larvae that migrate through tissues to the liver which results in 'white spots.' Following this, they invade the blood/lymph, entering the lungs where they are coughed up and then swallowed. They then mature in the small intestine before being excreted. The cycle from egg ingestion to egg production is 43 days. The lifecycle of the roundworm in the host can cause damage to the liver causing white spots and can also lead to the development of pneumonia.

Carcass impacts

The liver of effected animals is usually condemned with the rest of the carcass passing, pending the presence



Source: MINTRAC

of additional disease. Ascarids can be found in the intestines, bile ducts and gall bladders of infected pigs at slaughter. This, in addition to damage to the liver and kidneys caused during the ascarid lifecycle, can result in these parts being trimmed or condemned at slaughter.

Treatment

There are registered wormers that can be used to treat roundworm infections. Treatment along with good sanitation and nutrition are important to managing worms. Treatment plans can be developed with your veterinarian.

Prevention

Prevention is managed through implementation of a regular worming regime and good biosecurity practices. Due to the long lived and hardy nature of the roundworm egg, the disinfestation of pig housing may be required. Effective disinfection is problematic, however methods to eliminate ascarid eggs and larvae include:

- thorough cleaning of housing and all equipment with detergent and steam
- burning of surfaces with a flame gun on areas that permit. Only to be completed by a trained professional with personal protective equipment (PPE).

If pigs are housed outdoors, worm egg needs careful consideration, as they can remain infective for over 10 years in the environment. In this situation, consider regular strategic worming combined with movement of pigs to clean areas.