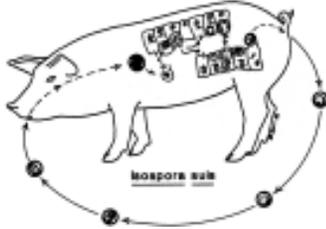


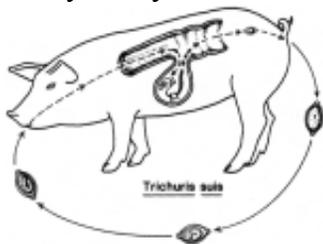
Coccidia (Isospora and Eimeria)

Pigs eat oocysts (eggs) that are shed in feces. Coccidia infect the intestinal wall and cause diarrhea, fever, decrease appetite, weight loss, and possible death. Coccidia infects baby piglets and causes a yellow to white, foul smelling diarrhea. If pigs are showing clinical signs, they should be isolated from the rest of the herd and given supportive therapy, kept clean and dry and given sulfonamides.



Whip Worms (Trichuris)

The eggs of Whipworms are passed out through the feces and are eaten in the larval stage by pigs. The eaten larvae go through the intestinal wall and cause damage. The pig is unable to absorb nutrients and develops diarrhea. Whipworm infection also increases the risk of the pig developing other diseases such as salmonellosis and swine dysentery.

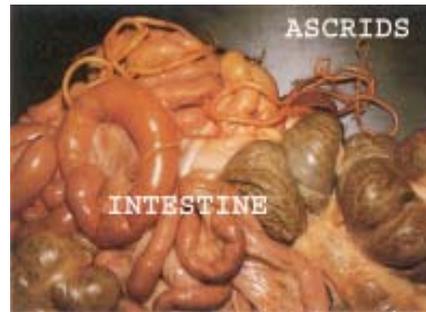


Nodular Worms (Oesophagostomum)

Eggs of the Nodular worm pass out through the feces, hatch into larvae and are eaten by pigs. The larvae burrow into the wall of the intestine where they mature to become adult worms. Nodular worms damage the intestine and cause decreased feed efficiency.

Round Worms (Ascarids)

Adult worms lay thousands of eggs that pass out through the feces. These eggs can survive in the environment for up to five years. With moisture and warm temperatures, they become infective in 3-4 weeks. When a pig eats the eggs, they hatch in the intestine and the worms will migrate through the liver, lungs and other tissue, causing coughing and pneumonia. Round worms can cause condemned livers at slaughter.



Intestinal Threadworms (Strongyloides)

The eggs are passed out through the feces and hatch within a few days and can be eaten by the pig. Infection can also be passed from the sow to the piglet before birth or through the colostrum when the piglet starts nursing. Threadworms are capable of multiplying outside of the pig and can penetrate the unbroken skin. Therefore, mature threadworms can infect baby piglets and create a yellowish diarrhea and possible death.

Lung Worms

Adult Lung worms lay eggs in the lungs of pigs where they are coughed up and swallowed. The eggs pass out through the feces and are picked up by earthworms. Pigs eat the earth worm and become infected. Significant lung damage occurs and can result in pneumonia.

Diagnosis of Internal Parasites

Diagnosis is made by clinical signs, examination of feces, and a necropsy at death. Clinical signs include unthriftiness, poor feed efficiency, poor growth rate, coughing, pneumonia, diarrhea, and death. Your veterinarian can perform an examination of the pig's feces to determine if worms and/or eggs are present. Adult worms can be seen at necropsy.

Deworming and prevention techniques

Several agents are available to treat various worms. None of the dewormers are effective against all worms. A deworming protocol needs to be developed based on which parasites are present in your herd. The chart below will help you decide which would work best for you. Create a preventive program with your veterinarian that suits your herd's needs.

Agent	Administration	Effective for	For use in
Ivermectin	Injection	Round, Nodular, Whip, Lung and Thread worms	Sows
Fenbendazole	Feed additive	Round, Nodular, Whip and Lung Worms	All
Thiabendazole	Oral paste	Threadworms	Piglets
Piperazone	Feed or water additive	Round and Nodular worms	All
Dichlorvos	Feed additive	Round, Nodular, and Whip worms	Sows before farrowing
Levamisole	Feed or water additive	Round, Nodular, and Lung worms	All
Pyrantel	Feed additive	Round and Nodular worms	All

Pigs infected with internal parasites become more susceptible to diarrhea and pneumonia. When a pig is infected, it becomes unthrifty and shows less weight gain, leading to economic loss. By recognizing common parasites, initiating parasite control, and practicing good facility management you can turn sick pigs into healthy pigs and increase your profit.



Sanitation and Management:

It is extremely important to keep the pigs environment clean and dry. Worms and eggs are shed in the feces, and they thrive in moist, warm environments. Cleaning holding facilities thoroughly between uses and use of both mechanical and chemical cleaning can help eliminate the eggs from the environment. This is easier in a concrete holding facility, than in a pasture. If pigs are housed outside, rotate lots and pastures to help decrease the parasite load in the pigs. Pigs that are covered in feces should be cleaned, especially sows before farrowing. This will decrease the load of parasites available to infect piglets. Providing pigs with clean water and feeding areas, along with adequate nutrition will help minimize the effect of parasitism. Work with your veterinarian to create a program to check your pigs feces for internal parasites.

Internal Parasites in Swine



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