



## Lung worms

The three lung worms *Metastrongylus apri*, *M. pudendotectus* and *M. salmi* have a global distribution and mixed infestations are quite common.

These worms are typically found in bronchi and bronchioles of the diaphragmatic lung lobes. Adults are 40-50mm long and masses of entwined worms are often seen in the airways.

The lifecycle is indirect. The worms are coughed up, swallowed and voided by the faeces. Then certain species of earthworms ingest the eggs, the larvae hatch and invade the earthworm's tissues. Pigs eat the earthworms and the larvae migrate to the lungs via the lymphatic system.

Clinical signs are not very pronounced, but heavy infections and those complicated with bacterial infections cause coughing.

## Lung flukes

The lung fluke *Paragonimus kellicotti* occurs in a variety of animals, including pigs, in North America, while *P. westermani* occurs in pigs in South America and southeast Asia.

These are large, brown coloured fluke that are 8-12mm long, 4-6mm wide and 3-4mm thick. They are often found in pairs.

There are minimal clinical signs although heavy infestations can induce a productive cough, especially after exercise.

The lifecycle has two intermediate hosts – a snail followed by a crayfish or crab. When the crayfish is eaten by pigs the fluke's metacercarial stage penetrates the intestine, burrows through the diaphragm and ultimately enters the lungs. They settle in a bronchus and start laying eggs 60 days later.

The lung lesions are diagnostic as in the presence of fluke eggs.

Amadeite	CID Lines	Igeba	Neogen
Ayurvet	Danbred	Innovad	Norel
Aveve Biochem	Denkavit	Impextraco	Olmix
Biomin	Hydro Systems	Invivo – NSA	Rotecna
	Hypor	Meriden	Val-Co