

## Johne's disease

*Paratuberculosis or Johne's disease affects cattle, sheep, goats and certain wild animal species. The disease is of long duration and may cause diarrhoea and loss of mass in older (from 2 years on) animals. The diarrhoea cannot be treated.*

- Young animals are more susceptible and usually become infected after taking in food or water contaminated with the faeces of infected animals.
- Repeated exposure is necessary before the organisms can establish themselves in the intestinal tract.
- Most of the infected animals continue to shed bacteria intermittently in their faeces throughout their lifetime.
- The disease usually spreads slowly in an infected herd.
- Most animals do not show symptoms and it may be years before the disease is eventually diagnosed in a herd (subclinical infection).

### Clinical symptoms

The time before the disease becomes apparent in a herd varies from less than 6 months to several years (even 15 years). A very small percentage of the animals show clinical signs. Affected animals develop a diarrhoea of long duration and lose condition (emaciation).

### Differential diagnosis

Johne's disease should not be confused with other conditions which also cause a loss of condition, including worm infestation, coccidiosis or malnutrition. In cattle the disease can be confused with chronic fascioliasis and paramphistomiasis.



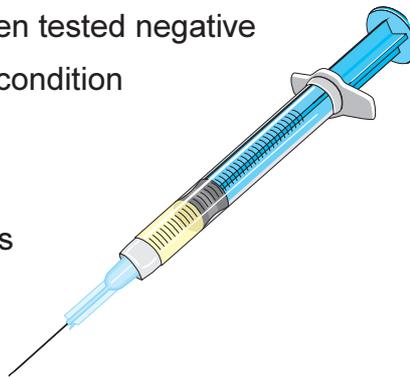
## Control

Paratuberculosis is difficult to control because:

- a long period may pass before the disease becomes apparent in a herd
- there are no clinical signs in the early stages of the disease
- it is difficult to make a diagnosis in a live animal
- affected animals cannot be treated successfully.

Control of Johne's disease in a flock is based on the following procedures:

- the elimination of infected animals (emaciated animals) by slaughtering
- strict hygiene to prevent the spread of the infection (especially feed and water troughs)
- only buy animals from farms which have been tested negative
- ensure that boundary fences are in a good condition
- stud flocks must be tested
- try to keep the flock as young as possible
- lambing should take place on clean pastures
- vaccination may in some cases be of value.



### Remember the following

- Ruminants should not be kept on the farm or premises for at least 2 years before restocking takes place.
- All cases of loss of condition (emaciation) and diarrhoea should be investigated.
- Contact your nearest state veterinarian for further information.

*Compiled by the National Department of Agriculture, the Directorate Animal Health  
and the Onderstepoort Veterinary Institute of the ARC*

*Printed and published in the Republic of South Africa by the National Department of Agriculture and obtainable from  
the Resource Centre, Directorate Communication, Private Bag X144, Pretoria 0001*