

# Colibacillosis in cattle, sheep and pigs

by Dr JH du Preez

**The bacteria *Escherichia coli* occur commonly in the intestinal tract of many animals. While most do not cause sickness, some do. Where this bacteria causes sickness, it is mostly intestinal tract inflammation (enteritis) and septicaemia in young calves, lambs and pigs.**

*E. coli* infections occur all over the world and can sometimes cause mastitis, abortion and urinary tract infections in cattle, sheep, goats and pigs. Colibacillosis in the form of white diarrhoea (enteritic colibacillosis) is found a lot in newborn livestock within intensive farming systems.

In calves younger than ten days, lambs under two weeks old and newborn or just-weaned piglets, the disease causes acute diarrhoea. In some severe cases the septicaemic condition may cause meningitis without any sign of diarrhoea. The young animal will usually die.

## Where do bacteria grow?

Conditions inside the intestinal tract need to be favourable for the disease-causing *E. coli* bacteria to attach to the intestinal walls. There they multiply and produce poisonous substances. These conditions are often caused by substandard feeding practises. When young animals are fed cold milk irregularly, or sudden changes are made to their formula, they cannot digest their food properly. Extra proteins and carbohydrates then build up in the intestinal tract. This forms the ideal breeding ground for the bacteria.

## How do animals get sick?

These conditions may also occur if the young animal is weakened by other infections, or if it does not receive enough colostrum directly after birth. When the body temperature of piglets drop, they become stressed and also more prone to contracting colibacillosis. Other factors may be stress caused by transport, bad hygiene, over-population, weaning, sudden changes in temperature or feeding, and exposure to new disease-causing bacteria.

## Preventing colibacillosis

- Avoid all the factors discussed above
- Make sure that newborn animals receive at least 10% of their body weight in colostrum within the first 24 hours after birth
- Inoculate pregnant cows, ewes and sows. The first injection of the vaccine should be given 8-10 weeks before birth and the second six weeks later. After that, a single booster dose can be given about four weeks before every next birth. This should provide enough protection
- Ask the veterinarian about the treatment of animals infected by colibacillosis. *UM*

