

NEOSPORA CANINUM IN QUEENSLAND CATTLE AND DOGS

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Neospora caninum, a protozoan parasite, has been shown to be a major cause of bovine abortion throughout the world. Seroepidemiological studies were conducted, mainly in North Queensland, to investigate the seroprevalence, impact and transmission of *N. caninu* in cattle. Cattle and dogs were tested by the enzyme-linked immunosorbent assay.

Antibodies to *N. caninum* were detected in about 30% of north Queensland dairy cattle and in 17% of dogs. Significant differences were not seen in the seroprevalence between high (>15%) and low (<10%) abortion farms. However, analysis of individual animals on these farms consistently showed that a seropositive cow had about a 8% higher abortion chance in any one gestation than a seronegative animal.

The pedigrees of animals were examined to investigate the mode of parasite transmission within these herds. Congenital transmission was shown to be a major route of transmission, but post-natal infection was also evident. Little difference was seen in the *N. caninum* seroprevalence in town, rural or farm dogs.