

Original article

Prevalence of antibodies against *Chlamydophila abortus* and *Coxiella burnetii* in goat herds in Poland

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Abstract

An epidemiological study was carried out to determine the herd prevalence of *Chlamydophila abortus* and *Coxiella burnetii* antibodies in goats covered by a milk recording program in Poland. The survey took place in 2007 and 48 herds located in different parts of the country were involved. A representative sample from each herd was taken by a simple random sampling allowing to detect seropositivity of a herd on a 95% level of confidence. In total 918 goats were tested for specific antibodies against both germs with the use of enzyme-linked immunosorbent assays. In addition, history of reproductive failures was recorded in these herds. The survey revealed that the herd prevalence of *C. abortus* was 4.2% (2 herds) while no *C. burnetii* antibodies were found. Abortions were reported to be a problem in 80% of herds while repeating estrus was encountered in 46% of herds. Reproductive failure concerned two seropositive herds as well. Since the germ is present in the population, it has to be taken into consideration in diagnostic process. Nevertheless, the results of the present study indicate that *C. abortus* infection occurs infrequently in Polish goats. As no antibodies against *C. burnetii* were detected in the screened sample the risk of goat-to-human transmission of both bacteria in Poland seems to be very low.

Key words: *Coxiella*, *Chlamydophila*, enzootic abortion, Q fever, goat, abortion