

## Prevalence of Q-Fever in South Africa: A Review of Diagnostic Laboratory Data at the Agricultural Research Council –Onderstepoort Veterinary Research from 2007-2009

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Campus, Trinidad and Tobago Q-fever is one of the most under estimated zoonoses in South Africa (SA) despite causing significant losses in livestock and game through reproductive disorders such as late abortions, low birth weight or infertility. The disease is caused by infection by the intracellular bacterium, *Coxiellaburnetii* (*C. burnetii*). The last published report on Q-fever prevalence in animals in SA was in 1987 and there is a need for recent data on Q-fever as well as strains currently circulating in the country. We reviewed available Q-fever diagnostic laboratory data (DLD) at the Agricultural Research Council-Onderstepoort Veterinary Research Campus (ARC-OVR) from 2007 to 2009 with the aim to establish its prevalence in the country. Diagnostic samples were obtained from serum samples submitted for Q-fever testing as part of disease surveillance by state veterinarians. A total 740 serum samples comprising 369 bovine, 226 ovine, 76 caprine and 69 from game animals were tested for Q-fever using complement fixation test (CFT). Overall, the sero prevalence of Q-fever was 0.95% (7/740) which comprised 2 bovine, 0.27% (2/740) from KZN, 3 ovine 0.41 % (2/740) from WCP, 1 ovine 0.14 % (1/740) from NCP and 1 ovine 0.14% (1/740) from the ECP. The low number of samples submitted for Q-fever testing between 2007 and 2009 together with the fact that the last published report on Q-fever in SA was more than 30 years ago shows that Q-fever is still one of the most ignored zoonoses despite causing significant losses in livestock and game.

**Abbreviations:** NCP-Northern Cape, WCP-Western Cape, ECP-Eastern Cape, KZN-Kwazulu Natal.

### Biography:

Maruping Mangena is a second year Ph.D student at the University of Pretoria, faculty of Veterinary Science in South Africa. The study he is conducting focuses on the prevalence of Q-fever and Toxoplasmosis in slaughter animals in Gauteng and Mpumalanga provinces of South Africa. The study also aims to develop cell mediated immunity assays for diagnosis of Q-fever.