

# FOOD SAFETY & REGULATORY MEASURES

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## Prevalence of brucellosis in slaughter animals in Gauteng province abattoirs, South Africa: Food safety implications

Francis B Kolo<sup>1</sup>, Abiodun A Adesiyun<sup>1</sup>, Charles Katsande<sup>2</sup>, Dayo Fasina<sup>1</sup> and Henriette Van Heerden<sup>1</sup><sup>1</sup>University of Pretoria, South Africa<sup>2</sup>Gauteng Department of Agriculture and Rural Development, South Africa

**Background:** Brucellosis is one of the neglected zoonotic disease, a highly infectious and contagious zoonotic disease of humans, and a wide range of domestic animals. Globally, abattoirs are used for passive and active surveillance of diseases of both economic and public health significance.

**Aim:** This research goal was to determine the prevalence of *Brucella* spp. in slaughter livestock in abattoirs in Gauteng province, and the risk posed to consumers of *Brucella*-contaminated meat.

**Methodology:** 11 livestock abattoirs were included in the study from where 266 serum samples and 798 tissue samples comprising lymph nodes, spleen and liver were collected from 266 animals. An 11.5% and 5% sero prevalence were detected from RBT and iELISA respectively from cattle. 89% of iELISA positive samples were also tissue-positive for *Brucella* spp. by PCR. The PCR positive samples originated from 54.5% of the abattoirs were visited. It was concluded that meat from slaughtered *Brucella* spp. infected livestock pose a potential food safety risk to consumers.

### Biography

Francis B Kolo completed his Doctor of Veterinary Medicine. He worked as a Veterinary Officer in Nigeria and was primarily responsible for the diagnosis and treatment of different animal diseases. He facilitated sensitization lectures sponsored by UNICEF to human healthcare practitioners in various local government councils in Niger State, Nigeria on Biosecurity. He completed his MSc in Veterinary Science at University of Pretoria in December 2015. His research was focused on "Dog population demographics, as it relates to herd immunity in the control of rabies in dog and human populations". Currently, he is pursuing his PhD at University of Pretoria and research is focused on "Brucellosis in abattoirs and in abattoir workers".

kolofrancis@hotmail.com

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