

Dairy Farmers' Knowledge of Zoonotic Milk-Borne Pathogens in The Eastern Cape Province, South Africa

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Abstract

Food-borne zoonosis is a longstanding global issue that limits and continues to threaten the food production industry and public health in several countries. The study's objective was to evaluate the dairy farmers' knowledge, attitudes, and practices about milk-borne pathogens in the Eastern Cape Province, South Africa. A total of 139 dairy farmers were interviewed using a semi-structured online questionnaire. The pathogens of interest were *Brucella* spp., *Escherichia coli* (*E. coli*), *Listeria monocytogenes*, *Salmonella* spp., *Staphylococcus aureus*, and *cryptosporidium*. Only 20.9% of dairy farmers reported knowledge of *Brucella* spp as a milk-borne pathogen. The most known pathogen was *Escherichia coli* (54.7%), followed by *Listeria* spp (41.0%), *Staphylococcus* spp (38.8%), and *Salmonella* spp (35.3%). In this study, the knowledge of milk-borne pathogens was statistically associated ($P < 0.05$) with workplace position. Only a few participants (37.2%) showed knowledge of abortion as an important clinical sign of food-borne pathogens. Also, 84.1% of dairy farmers indicated that they consume unpasteurised and sour milk (77%). Some respondents (18.0%) do not believe assisting a cow during calving difficulty without wearing gloves is a risk factor for zoonosis. There is an urgent need to educate dairy farmers about milk-borne zoonosis to minimise the threat to food security and public health.