

History and Epidemiology of Foot and Mouth Disease in Afghanistan: A Retrospective Study

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Abstract : Foot and Mouth Disease (FMD) is endemic in Afghanistan. A retrospective study of data collected through passive surveillance of outbreaks of FMD from 1995 to 2016 was undertaken. A total of 1471 outbreaks were reported between 1995 and 2008. Of 7776 samples originating from 34 provinces tested between 2009 and 2016 4845 (62.3%) tested positive. The prevalence varied significantly between years (2009 and 2016) ($P < 0.001$); however, the number of outbreaks did not differ significantly ($P = 0.24$) between 1995 and 2008. During this period, there was a strong correlation between the number of outbreaks reported and the number of districts with infected animals ($r = 0.74$, $P = 0.002$). Serotype O was the predominant serotype detected, although serotypes A and Asia1 were also detected. Cattle were involved in all outbreaks reported. Herat province in the north-west (bordering Iran), Nangarhar province in the east (bordering Pakistan) and Kabul province in the centre of the country had infections detected in all years of the study. The findings from this study provide valuable direction for further research to understand the epidemiology of FMD in Afghanistan.

Keywords : foot and mouth disease, retrospective, epidemiology, Afghanistan

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