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Epidemiological dynamics of nephropathia epidemica in the Republic of Tatarstan, Russia, during the period of 1997-2013

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Abstract

Copyright © Cambridge University Press 2015. This report summarizes epidemiological data on nephropathia epidemica (NE) in the Republic of Tatarstan, Russia. NE cases identified in the period 1997-2013 were investigated in parallel with the hantavirus antigen prevalence in small rodents in the study area. A total of 13 930 NE cases were documented in all but one district of Tatarstan, with most cases located in the central and southeastern districts. The NE annual incidence rate exhibited a cyclical pattern, with the highest numbers of cases being registered once in every 3-5 years. The numbers of NE cases rose gradually from July to November, with the highest morbidity in adult males. The highest annual disease incidence rate, 64.4 cases/100 000 population, was observed in 1997, with a total of 2431 NE cases registered. NE cases were mostly associated with visiting forests and agricultural activities. The analysis revealed that the bank vole *Myodes glareolus* not only comprises the majority of the small rodent communities in the region, but also consistently displays the highest hantavirus prevalence compared to other small rodent species.

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Keywords

Epidemiology, haemorrhagic fever, hantavirus, infectious disease epidemiology, zoonoses