

Epidemiological aspects of rabies surveillance and vaccination in domestic animals in Vientiane Capital, Lao PDR from 2010-2014: History informing future opportunities for rabies control.

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Abstract

Rabies is a fatal viral disease that continues to threaten both human and animal health in endemic countries. Here we present the results of laboratory-based surveillance for rabies from 2010-2014 in Vientiane Capital, Lao PDR. Over the 5-year period from 2010-2014, a total of 293 animals were submitted for rabies diagnosis, with the majority being dogs (98.6%; 289/293) and the remaining 4 animals (1.4%) cats. The overall rabies prevalence was 65.2% (191/293 samples): 65.4% of dogs (189/289) and 50% of cats examined (2/4). Statistically significant association was observed in the overall rabies prevalence rate between dry and wet seasons although no association was noted between rural and urban localities, sex or age of the rabies-positive animals. The laboratory-based surveillance of rabies in the domestic animal population in Vientiane Capital was able to inform key performance indicators of the rabies control programme and should be expanded to other provincial centres in the country, particularly where there are active rabies control programs.

Key words: Rabies, dog, surveillance, Laos