

Global situation on infection with rabies virus in dogs



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INTRODUCTION

Rabies is one of the most deadly zoonoses. Over 95% of human cases of rabies are caused by the bite of a rabies-infected dog. The global strategy for the elimination of dog-mediated human rabies was launched in 2017 to achieve a goal of zero human dog-mediated rabies deaths by 2030. The objective of this study is to describe the current global situation of animal rabies and to provide an overview of disease control measures implemented in dogs.

MATERIAL AND METHODS

The analysis was performed using rabies data reported through WAHIS by OIE Members for the period of 2017 and early 2018 (n=176). Percentages of Members reporting rabies present and the breakdown per species affected were calculated for the study period. In addition, the relevant control measures implemented in dogs were investigated dividing the Members in three categories depending on disease situation as illustrated in Figure 1.

RESULTS

57% of Members reported the disease present in the country for the study period. Among those countries, 75% reported rabies in dogs (Figure 2).

In Members with disease present in dogs, 18% did not report the implementation of official dog vaccination (Figure 3).

In Members with disease present in non-canine species only, 64% did not report the implementation of official dog vaccination (Figure 4).

CONCLUSIONS

- Rabies was reported by more than half of Members, and 75% of the affected countries reported the disease in dogs.
- 83% of the Members with rabies present reported application of the necessary measures including vaccination. However, a gap in the implementation of official dog vaccination in the affected countries was observed (Note that WAHIS data does not cover vaccination programmes that are not under the direct supervision of the Veterinary Authority).
- For countries where the disease was reported in non-canine species only, there could be a tendency to neglect the official vaccination in dogs, which may lead to reintroduction of the disease in the canine population and consequently increase the risk to public health.
- Countries with rabies present are encouraged to report the species affected.
- To better monitor the implementation and impact of the global strategy for the eradication of dog-mediated rabies, special attention is required for countries not providing information on their rabies situation despite the reporting obligation and their commitment to the global strategy.

Members with disease present in dogs	Members with disease present in non-canine species only	Members with disease absent
Surveillance	Surveillance	Surveillance
Selective killing of dogs	Official dog vaccination	Official dog vaccination
Official dog vaccination	Precaution at borders	Precaution at borders
Precaution at borders		

Figure 1. Categories of Members and corresponding relevant control measures in dogs

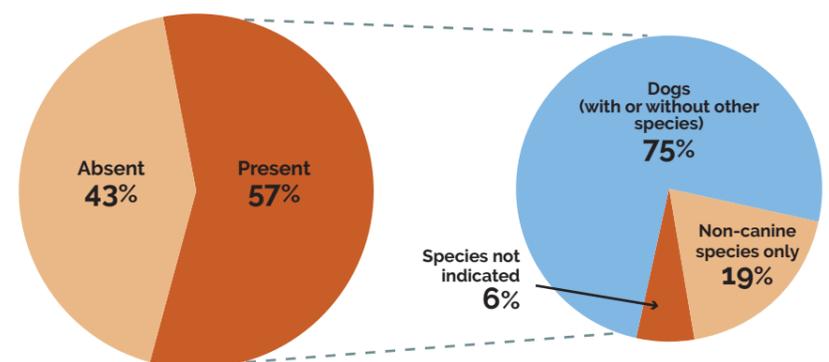


Figure 2. Percentages of Members reporting rabies present and the breakdown per species affected



Figure 3. Implementation of the relevant control measures in Members with the disease present in dogs

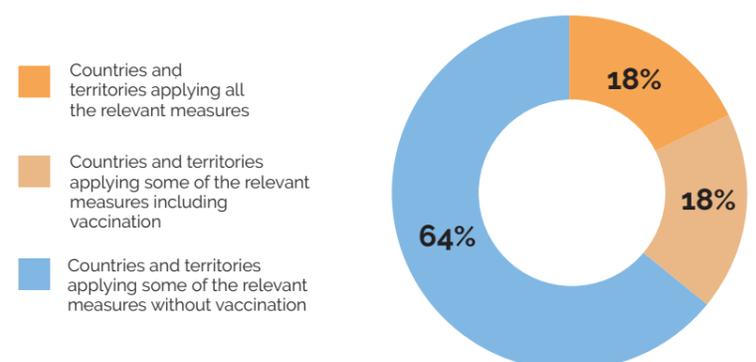


Figure 4. Implementation of the relevant control measures in Members with the disease present in non-canine species only