



## Wildlife rabies control and management in Tatarstan (Russian Federation)

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### Introduction

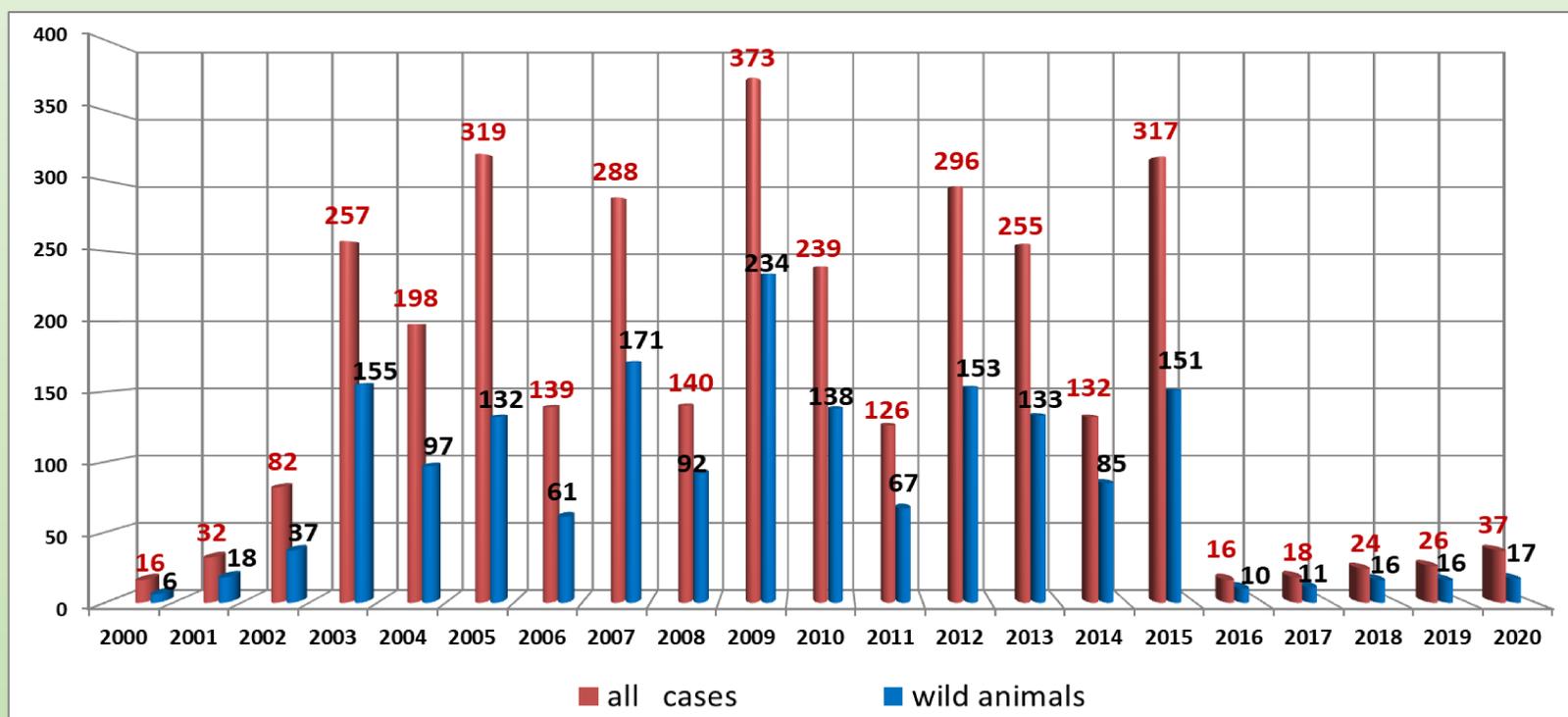
Over the years, in Tatarstan, the activation of natural focus of rabies has been periodically noted, and the risk of introducing infection from adjacent regions remains. Sporadic outbreaks of rabies in animal populations are largely unpredictable, highlighting our lack of knowledge about how the virus is transmitted and spread in the wildlife. In this regard, comprehensive analysis of the geographical distribution of rabies, study the structure of animal species involved in the epidemic process, cyclic recurrence identification, seasonality, risk factors, along with effectiveness of preventive measures assessment remain as actual challenge.

### Materials and Methods

The epizootic situation in the Republic of Tatarstan was analyzed using the statistical reporting data of the Rosselkhoznadzor and the State Veterinary Service of the Republic of Tatarstan. On the basis of a statistical analysis of the registration of primary unsuccessful points, seasonality, frequency of the incidence of rabies in animals, the peculiarities of the tendency of the dynamics of the epizootic process were established.

### Results

When analyzing and assessing the cyclical nature of animal rabies cases in the republic over a twenty-year period, there is a regularity of the increase in the incidence rate with an interval of 2 to 3 years in the winter-spring and autumn months of the year.



From 2016 to 2020, the attenuation of the activity of the natural cycles of infection is observed. The 15-fold decrease in the likelihood of wild rabies is primarily due to the large-scale oral vaccination campaigns. Two oral immunization campaigns for wild carnivores are carried out annually and are officially monitored in accordance with approved rabies eradication programs. In the last 3 years alone, 6,142,000 baits with oral vaccines "Rabivak-O/333" (JSC Pokrov Plant of Biopreparations) and "Rabistav" (FSE Stavropol Biofactory) have been deployed in the forest-steppe zone of the republic.

In the places of predominant habitat of wild carnivores, baits with vaccines were laid out in 2016 – 900,000, in 2017 – 1,800,000, in 2018 – 1,350,000, in 2019 – 2,470,000, in 2020 – 2,322,000.

### Conclusion

Thus, organizing mass vaccination campaigns for wild and stray animals, evaluating the effectiveness of oral vaccination campaigns against rabies, systematically regulating the population of stray animals by capturing and sterilizing them, establishing strict control over the observance of rules for keeping domestic animals, carrying out awareness-raising activities among the population have become an effective strategy for combating rabies and stabilizing the epizootic situation in the Republic of Tatarstan.

### References

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