

# CONTROL OF ANIMAL RABIES: ANALYSIS OF OUTBREAKS AND PREVENTION STRATEGIES IN BRAZIL

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## INTRODUCTION

It is the responsibility of the Ministry of Agriculture and Livestock (MAPA) to coordinate, regulate, and supervise the actions of the National Program for the Control of Herbivore Rabies (PNCRH). The MAPA also defines strategies for the prevention and control of rabies and accredits laboratories for the diagnosis of rabies and other diseases with nervous system symptoms.

**Objective:** To present data and strategies related to the control and monitoring of animal rabies in Brazil, highlighting the prevalence of the disease among different species, the geographical distribution of outbreaks, and the normative and strategic measures adopted by the PNCRH for rabies prevention and control.

## METHODS

A search was conducted for rabies outbreaks in production and wild animals registered in MAPA's database via the link: [https://mapaindadores.agricultura.gov.br/publico/extensions/Saude\\_animal/Saude\\_animal.html](https://mapaindadores.agricultura.gov.br/publico/extensions/Saude_animal/Saude_animal.html) from 2005 to 2023.

## RESULTS

The research conducted on the MAPA website revealed 17,268 reported animal rabies outbreaks in the last 19 years, with 14,499 (84.0%) outbreaks in cattle, 1,446 (8.4%) in equines, and 1,158 (6.7%) in wildlife, including hematophagous and non-hematophagous bats, foxes, and nonhuman primates, representing 99.1% of the outbreaks. Bubalines, sheep, goats, and swine accounted for only 0.9%. The states of Mato Grosso, Goiás, Minas Gerais, Espírito Santo, São Paulo, Paraná, and Rio Grande do Sul concentrated 65.65% of the outbreaks, coinciding with the highest density of cattle and equine herds. Despite the high number of outbreaks, there was a noticeable decline over time, from 1,442 outbreaks in 2005 to 466 in 2023, indicating the effectiveness of rabies control actions. Normative Instruction N°. 50/2013, in Art. 2, requires any Brazilian citizen to immediately notify the Official Veterinary Service of the occurrence or suspicion of rabies. The PNCRH's strategies include active surveillance in high-risk areas, accessible laboratory diagnosis, epidemiological and laboratory investigation of suspected cases in domestic herbivores and bats, strategic vaccination in outbreaks, monitoring of hematophagous bat shelters, and risk communication in vulnerable areas.

## CONCLUSION

In the past 19 years, 17,268 animal rabies outbreaks have been reported to MAPA, mainly in cattle, equines, and wildlife, with a significant reduction from 1,442 outbreaks in 2005 to 466 in 2023. The effectiveness of rabies control actions highlights the importance of immediate notification and PNCRH strategies