

# Rabies in rural areas: challenges and strategies for public health in the state of Maranhão, Brazil

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## INTRODUCTION

Foxes attacking humans and domestic animals in rural areas of Maranhão or bats flying during the day are signs of rabies virus circulation. The importance of rabies as a zoonosis and part of public health, along with its transmission behavior, needs to be emphasized in risk communication to vulnerable areas. This is crucial to change people's perceptions, concerns, and beliefs, thereby promoting rabies prevention and control through sanitary education.

**Objective:** Increase awareness among people living in areas where susceptible animals coexist, especially in regions where the rabies virus circulates.

## METHODS

Through monitoring rabies outbreaks in communities, it was observed that the communication channel among rural populations exposed to the virus needs greater integration between environmental, public health, and animal health agents. This should be done through educational actions adapted to the local reality.

## RESULTS

It is known that vampire bats (*Desmodus rotundus*) and foxes (*Cerdocyon thous*) infected with the rabies virus travel an average of 5 to 10 km in circular or straight-line paths, respectively. Climate changes, deforestation, and territorial disputes among males can influence these movements. Lack of food in certain areas and loss of original forest cover increase contact between these animals and humans. During field visits, it is noted that rural population misinformation facilitates the spread of the rabies virus. There is inadequate awareness of active surveillance in high-risk areas, epidemiological investigation, laboratory diagnosis of suspected rabies cases, or strategic vaccination of domestic herbivores. Risk communication in areas vulnerable to rabies has not been efficient, as has health education. This information is crucial for human and animal health and is a goal of the World Health Organization and the World Organization for Animal Health, but it does not reach rural communities.

## CONCLUSION

The movement of rabid animals and rural population misinformation increase the risk of disease dissemination. Therefore, it is crucial for Official Veterinary Services to improve risk communication and sanitary education through simple and assertive communication, along with strategic surveillance and vaccination, essential measures to meet public and animal health goals in these regions.