

**TITLE:** EPIDEMIOLOGY AND FREQUENCY OF BOVINE VIRAL DIARRHEA VIRUS IN SEMI-ARID REGIONS

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**ABSTRACT:**

The cattle for meat and milk production is an activity very exploited and has great prominence in the Brazilian agribusiness. In this area, the bovine viral diarrhoea virus (VDVB) is one of the main pathogens in Brazil and in the world by unleashing high morbidity, drop in performance and consequent economic losses. Vaccination presents itself as a method of prevention, however your cost is still high. Thus, it is recommended the disposal of animals, in order to control the disease in the herd. Knowledge of regional epidemiological situation becomes essential for adoption of preventive and/or control of the disease. However, data are scarce on this disease in the northeastern region. Thus, this research aimed to determine the prevalence and epidemiological factors for VDVB in three municipalities in the region of the semi-arid Northeast. With this aim, was rated a total of 257 animals coming from four properties of each of the three municipalities. It was then the soroneutralização methodology, in order of the detection of antibodies against VDVB. For the evaluation of risk factors associated with infection, a cross-sectional study was carried out and a questionnaire comprising questions about general features of the property; type of production; management and health aspects, in order to correlate environmental factors with the prevalence of the disease. This analysis was performed in order multivariate and univariate. After evaluation of the data, 144 were identified positive animals to disease, equivalent to 56% prevalence of animals evaluated and 91.6% of the properties studied. It was observed a change in prevalence between properties, which is due to the epidemiological factors involving the transmission of the disease. The analysis of risk factors, all variables were selected for the analysis, which in your time, pointed out the kind of exploitation as the only risk factor. The exploration of the dairy type was considered to be a risk factor for bovine viral diarrhea. In multivariate samples, the knowledge factors and control were not indicative to positive serology for bovine viral diarrhea. It is concluded that the studied regions boast high prevalence for VDVB, especially in flocks focusing on dairy farm. Knowledge of the prevalence and risk factors for your time, it is indispensable, as it is directly linked to the adoption of control measures and prevention of the disease.

**KEYWORDS:** Cattle, nordeste, pestivirus

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