

Adoption of a Centralised Information System for the Equine Viral Arteritis Control Programme in Italy: Results and Evaluation Relative to the 2004-2007 Breeding Seasons

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A National Control Programme for equine viral arteritis (EVA) has been implemented in Italy since 1994, which requires annual verification of the infectious status of stallions before they are officially approved for commercial breeding purposes.

The control programme consists of serological screening, followed up by a series of virological tests on semen in the case of seropositive stallions.

Due to the difficulties encountered during the first 10 years of the programme in the collection of consistent disease related information and in the monitoring of the effectiveness of the control programme, a central information system was introduced in 2004 that was based on the transfer of all data obtained by the network of ten regional institutes to CeRME.

The primary aim was to obtain consistent validated data for evaluation of the control programme as well as for decision making, allowing corrective interventions and future sanitary planning.

The system relies on a standardized information flow, fed by data, recorded on a pro forma questionnaire completed by veterinary officers on sample collection (serum and/or semen). Each questionnaire specifically requires information on horse identification, ownership and location, reason for sampling and previous EVA status.

The questionnaires, along with the laboratory sample results, are recorded on a local database supported by a software programme specially created and distributed by the CeRME. On receiving the quarterly updates from the network of institutes, the National Centre integrates the information into the Central Database, for data clean-up, data mining and data analysis at a national level.

The results of the serological screening, relative to the 2004-2007 breeding seasons, reveal an increase in the prevalence of infection (8.2% to 10% of tested stallions) while the number of cases of EVA is stable throughout the years (4.5%). On the other hand, the results of virological examination performed on the semen of the seropositive stallions highlight a

clear decrease in the prevalence of virus shedders during the period under evaluation and indicate that occurrence of cases of the disease has become sporadic. In conclusion, a summary of the main critical points encountered in the data management (missing data and unavailable information) and the resulting limitations on analysis will be discussed.