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○○○ Chair: Prof. Vincenzo Caporale



INTERPRETATION OF RESULTS OF FOOT AND MOUTH DISEASE SURVEILLANCE TO DISTINGUISH BETWEEN VACCINATED AND INFECTED CATTLE

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As the combined sensitivity/specificity performance characteristic of laboratory assays is never 100%, the conclusions on the infection status of a vaccinated population or herd can only be based on a combination of clinical and serological/virological surveys. Additional epidemiological investigations such as cluster analysis, vaccination coverage, proportion of small herds and examination of the frequency distribution (profiling) of reactivity levels of foot-and-mouth disease infection-specific antibodies in livestock populations should also be performed and taken into consideration. It is important to establish the level of confidence that a given survey design can achieve and it is essential to have a decision-scheme on the follow-up before the start of the outbreak. The follow-up of herds with seroreactors by serological investigation has to be based on vaccine/DIVA assay combinations with well-defined performance characteristics. If the specificity of the serological test system were known for animals immunised with the vaccine used, only seroreactor rates above the Herd Cut Point could be considered, but this is not compatible yet with current guidelines or directives. Discussions on the ways in which serological testing with NSP ELISAs can be used and interpreted and the effect that this will have on the confidence with which freedom from infection can be demonstrated within guidelines specified by the World Animal Health Organisation should be finalised.