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TITLE

SEROLOGICAL SURVEY IN WILD BOAR IN THE NETHERLANDS

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CONTENT

Background and objective

Despite a zero-tolerance policy, the wild boar population in the Netherlands is increasing in numbers and extending its habitat. Growing numbers of wild boar are living in the immediate vicinity of commercial pig farms. With African Swine Fever (ASF) advancing, the wild boar population is perceived a risk for the pig industry. This project aimed to evaluate the prevalence of antibodies against five (in the Netherlands endemic) infectious diseases in serum samples of wild boar, to obtain first insight into possible spread of infectious diseases in wild boar.

Material and Methods

In total 262 serum samples were tested with commercial available ELISA's for antibodies against ApxIV (Actinobacillus pleuropneumoniae), influenza A virus (SIV), Mycoplasma hyopneumoniae (Mhyo) and PRRS virus and with an in-house ELISA for Porcine Epidemic Diarrhoea virus (PEDV).

Serum samples were collected from wild boar, shot from the first of June 2016 till June 30th 2017, in 30 different municipalities spread over the rural areas with commercial pig holdings. The age of the animals varied from 1 to 120 months (mean 14 months, standard deviation 11 months). The samples originated from 125 male and 137 female animals.

Results

Seroprevalance of antibodies against ApxIV, SIV and Mhyo was respectively 32.78%, 27.07% and 46.80%. All samples tested negative for PRRSV. One sample tested positive for PEDV. Differences in seroprevalence were seen between the different municipalities.

Discussion

The outcome of this serological survey of wild boar shows circulation of known infectious diseases in the wild boar population in the Netherlands. As the samples were mainly from animals shot in pig dense areas, these wild boar could function as a reservoir for commercial pig herds. The contribution of inter wild boar transmission and exchange of infectious diseases to and from commercially kept pigs could not be determined.