VVD-PP-28

TITLE

EVALUATION OF PORCINE EPIDEMIC DIARRHEA VIRUS (PEDV) SEROPREVALENCE IN FRANCE IN 2018

Isabelle Corrégé[1], Roxane Rossel[1], Béatrice Grasland[2], Nicolas Rose[2]

[1] *ANSP – 5 rue Lespagnol, 75020 Paris*
[2] *Anses Laboratoire de Ploufragan-Plouzané-Niort, 22440 Ploufragan*

CONTENT

Background and Objectives
In France, four cases of porcine epidemic diarrhea (PED) were detected from 2014 to 2017 caused by moderate pathogenic “S-InDel” strains. PED caused by highly pathogenic “S-non-InDel” PEDV strains is notifiable in France and no case has been reported.
A national serological survey was implemented in 2018 to assess the PEDV prevalence in order to evaluate if PEDV strains have been circulating without clinical signs in herds.

Material & Methods
Blood samples (10 samples/farm) were collected from 540 farms representative of the french pig production stratified on farm type and region. In each herd, no PED typical clinical signs were reported at the time of sampling. Each serum was analyzed with the ELISA IDScreen® PEDV spike competition (PEDV Elisa) (specificity: 99.4%, sensitivity: 90%). Sera which tested positive with Elisa were retested with the same kit (PEDV Elisa repetition) and by IPMA.

Results
0.7% of the sera analyzed with PEDV Elisa (n=5 399) tested positive. 5.9% of the farms had one or more (3 maximum for two herds) sera positive with PEDV Elisa. In all these cases, either only one serum per farm was positive or the results with other tests (PEDV Elisa repetition and IPMA) did not allow to conclude on the positivity (discordant results or close to the positive cut-off of the test).

Discussion & Conclusion
The nature of the results and the knowledge on the disease (high contagiousness) allow to conclude that the positive results are false positives inherent to the analysis methods and to the very low prevalence of PEDV in our territory. Our survey shows that the PEDV prevalence in France is less than 0.6%.
To preserve this very favorable situation with PEDV, French pig organizations must now define protective measures when importing animals and management measures in case of PED outbreaks.