

# **Agents infectieux associés à la pneumonie et à la pleurésie : une enquête transversale dans 125 élevages naisseurs-engraisers du Grand Ouest de la France**

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## **Infectious agents associated with pneumonia and pleuritis: a cross-sectional study in 125 farrow-to-finish pig herds in western France**

A study was carried out in 125 farrow-to-finish pig herds to assess the relationships between five pathogens involved in respiratory disorders and clinical signs at the farm and macroscopic lung lesions at slaughter. Clinical examination and sampling were performed on four different batches in each herd (pigs aged 4, 10, 16 and  $\geq 22$  weeks). *Mycoplasma hyopneumoniae*, *Actinobacillus pleuropneumoniae*, swine influenza viruses (SIV), porcine reproductive and respiratory syndrome virus (PRRSV) and porcine circovirus type 2 (PCV-2) were detected by serological or PCR assays specific to each pathogen. Pneumonia-like gross lesions and pleuritis were scored at the slaughterhouse. The relationships between the frequency of pigs positive to each pathogen and clinical signs and macroscopic lung lesions were determined by hierarchical clustering. The effects of the infectious agents on pneumonia-like gross lesions and pleuritis were quantified by performing two logistic-regression analyses at the herd level: one with pneumonia-like gross lesions as the dependent variable and one with the pleuritis status of the herd as the outcome. The results indicate that the major pathogens involved in pneumonia-like gross lesions in western France are *M. hyopneumoniae*, PRRSV and SIV H1N1 even though PCV-2 may play a role. The findings also indicate that *A. pleuropneumoniae* serotype 2, in association with PRRSV, is significantly associated with extensive pleuritis.