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TITLE
FIRST DETECTION OF PDMH1N1(2009) IN A SWINE HERD IN BELGIUM

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CONTENT
Influenza A virus (IAV) subtypes H1N1, H1N2 and H3N2 circulate in swine herds in Belgium. Shortly after the emergence of the human pandemic H1N1 2009 IAV (pdmH1N1(2009)), variants of this strain occurred in global swine populations. Here we describe the first detection of pdmH1N1(2009) in a swine herd in Belgium.
As part of IDT Biologika's ongoing diagnostic service for vets, nasal swabs from clinical cases of presumed Swine influenza are sent to IVD GmbH, Innovative Veterinary Diagnostics, Seelze, Germany for detection and typing of IAV by Real-Time Quantitative PCRs (RT-qPCR).
In March 2018 in an IAV-non-vaccinated 1,200 sow herd, clinical signs in the piglets were light coughing and sneezing shortly after weaning, which could persist throughout the nursery period. These symptoms diminished during the fattening period. No clinical signs were observed in the gilts or sows. Nasal swabs were taken from 8-week old weaned piglets. Swabs from 17 out of 20 piglets were positive for IAV and the subtype pdmH1N1(2009) was determined in 7 swabs with sufficient virus load for typing.
To our knowledge, this was the first detection of pdmH1N1(2009) in Belgium in pigs.
According to published data and European data from our diagnostic service, sows, gilts and suckling piglets are also susceptible to infection with human pandemic IAV strains and their reassortants.
Commercial European influenza vaccines against the non-pandemic strains of IAV do not confer sufficient cross protection against the pandemic strains of IAV. However, there is a recent vaccine made by IDT Biologika called Respiporc® FLUpan H1N1, which protects swine against pandemic influenza.
Conclusions
• H1N1, H1N2 and H3N2 most commonly circulate in Belgium

• pdmH1N1(2009) was found for the first time in swine in Belgium

• pdmH1N1(2009) was associated with clinical respiratory problems in weaned piglets