

TITLE

ECONOMIC IMPACT OF AN INFLUENZA OUTBREAK IN REPLACEMENT GILTS OF A 700 SOW HERD AND RESPIPORC® FLU3 RETURN ON INVESTMENT

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CONTENT

Background and Objectives Swine influenza (swIAV) is a highly contagious respiratory infection with substantial economic consequences due to medication costs, pigs' growth retardation and decrease of reproductive performance in affected sow herds. The objective of this study is to evaluate the economic impact of a swine influenza outbreak in replacement herd and to assess the clinical satisfaction after implementation of an inactivated trivalent swIAV vaccine. **Material & Methods** An influenza-like syndrome occurred twice in 2016 (April and October) in gilts in a 700 sow breeding herd in a low pig density area in France. Gilts in quarantine and in mating room presented typical clinical signs (fever, anorexia, lethargy and coughing). They received individual and collective antipyretic treatments. H1avN1 swIAV was isolated from the nose of several sick gilts on weeks N°14 and 43. After the second outbreak, a swIAV vaccine was implemented in gilts during quarantine (basic immunization). **Results** The fertility rate of gilts exposed to H1avN1 infection around mating (108 gilts from 6 batches mating weeks N°12, 15, 18, 42, 45, 48) decreased in comparison with previous batches (117 gilts from 6 batches mating weeks N°3, 6, 9, 33, 36, 39): 83.2% versus 95.1%. This led to a significant reduction of farm productivity (Chi2 test, p=0.05) and represented a shortfall of 1,285€. As antipyretic treatments have cost 475€, total economic impact of these influenza outbreaks was 16€ per affected gilt. Since the implementation of the swIAV vaccine until submission, no more influenza-like illness occurred on the replacement herd. No collective antipyretic treatment has been used. Available fertility rate (first 99 vaccinated gilts) is excellent (92.9%) with a low standard deviation between batches (3.8% - 6 batches). **Discussion & Conclusion** This study demonstrates the economic impact of an Influenza outbreak on replacement herd and the interest of Respiporc® FLU3.