

## LESSONS FROM A EUROPEAN SURVEILLANCE NETWORK FOR INFLUENZA IN PIGS (ESNIP)

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The need for surveillance for influenza viruses in pigs is now fully recognized, but structured surveillance networks like those for humans and horses are not yet in place for swine. Since 2000, valuable epidemiological information about swine influenza viruses (SIVs) in Europe has been obtained through a "European Surveillance Network for Influenza Viruses in Pigs (ESNIP)". ESNIP1 and its continuation, ESNIP2, were so-called co-ordination actions funded by the European Commission. They grouped 9 to 14 European partners who are actively working with SIVs. Partners from the US and Hong Kong were also involved in ESNIP2. A third ESNIP action (ESNIP3) starts this year.

Some important realisations of ESNIP1 and 2 were: the standardisation of protocols for SIV isolation, serology, antigenic and genetic typing of SIV; the selection and production of a panel of reference virus strains and sera; the establishment of a central SIV bank; the antigenic and genetic characterisation of a limited number of SIV isolates from different European countries; the organisation of a serological survey to obtain preliminary data on the prevalence of different SIV subtypes in various European countries. But ESNIP was not a systematic monitoring programme and we were confronted with many difficulties and challenges. The epidemiology of SIVs worldwide has become even more complex during the last years, which further complicates serological and virological surveillance. A detailed understanding of the nature and phylogenetic origin of SIVs, of the immunobiology of the infection, and of the limitations of serological and virus detection methods are essential for effective surveillance. We must also be aware of the intrinsic limitations of surveillance. During my talk, I will discuss some experiences with ESNIP, as well as concerns and considerations for the future.