



EUROPEAN  
COMMISSION

Community Research

## EU-FUNDED RESEARCH PROJECT

### 1<sup>st</sup> European surveillance network for influenza in pigs (ESNIP 1)

**Time of action:** ESNIP 1 started in January 2001 and ended in December 2003. It has been expanded to ESNIP 2

**EU budget (funding): €270,000**

#### **Abstract**

While birds are getting all the media attention, other animals that can contract influenza are being largely ignored. Pigs, for example, are particularly prone to infection by viruses of human or avian origin; swine influenza viruses (SIV) cause considerable losses to European pig producers. Moreover, pigs may be involved in the epidemiology of influenza as they can act as 'mixing vessels' between viruses from both humans and birds, leading to the emergence of new hybrid subtypes.

As influenza in pigs is not subject to Community legislation, until recently there has been no organised surveillance to track the disease. However, in 2000, 14 partners from a variety of veterinary and virology research institutes joined together in the ESNIP 1 project to form a coordinated surveillance system using standardised diagnostic and reporting methods. The initial partners covered ten European countries.

The available information about SIV isolates were collected in a database and selected virus samples were stored in a central virus bank. Subsequent analysis of the data showed that three SIV subtypes are circulating in Europe. H1N1 and H3N2 originated by the transmission of the whole virus from birds and humans respectively. In 1994, a third and entirely new H1N2 subtype appeared from the mixing of human and avian strains. This latter subtype should be added to the currently used SIV vaccine.

#### **Status (January 2006)**

Although ESNIP 1 has been ended the work is continued into the ESNIP 2 Coordinated Action of the Sixth Framework Programme. This Action, which includes representation from the United States and Hong Kong, will continue to assess the epidemiology and evolution of SIVs in Europe and apply this knowledge to optimise diagnostic techniques for swine influenza.

In addition, the partners will screen European pigs for avian influenza viruses and compare the influenza situation in swine with that in humans and birds. This analysis could provide important insights into the public health risks of influenza in pigs.

## **Project coordinator**

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## **List of partners (listed countrywise). Coordinator will only give out names and other contacts upon request**

BE – Laboratory of Virology, Faculty of Veterinary Medicine, University of Ghent  
UK – Veterinary Laboratories Agency, Addlestone  
IT – Istituto Zooprofilattico Sperimentale della Lombardia e dell'Emilia Romagna  
UK – Virology Division, Central Veterinary Research Laboratory, Dublin  
DK – Danish Veterinary Institute for Virus Research, Kalvehave  
CZ – Institute of Infectious Disease and Veterinary Epidemiology, Brno  
PL – National Veterinary Research Institute, Pulawy  
DE – BioScreen European Veterinary Disease Management Center GmbH, Muenster  
FR – Merial SAS Research & Development, Lyon  
FR – Agence Française de Sécurité Sanitaire des Aliments, Laboratoire d'Etudes et de Recherches Avicoles et Porcines, Ploufragan  
FR – Institut Pasteur, Dépt. de Virologie, Paris  
UK – National Institute of Medical Research, Division of Virology, London  
NL – Intervet International BV, Virological Research Dept., Boxmeer

## **Website**

[www.esnip.wur.nl](http://www.esnip.wur.nl)