

Training and Technology Transfer of Avian Influenza Diagnostics and Disease Management Skills (Project FLUTRAIN)



Avian influenza infections, and more recently pandemic H1N1, have become of increasing relevance both from the animal and human health perspectives. With the extension of the H5N1 epidemic from Asia to Eastern Europe and Africa and the global spread of H1N1, notwithstanding the efforts of international organisations, there is clear evidence that the scientific and operational challenges due to influenza viruses are increasing. This has highlighted the need for specific research efforts, comprehensive training and the transfer of technology to accession and INCO countries. Coordination with international organizations to maximise the outcome of research training and capacity building activities is an essential part of such an approach.

Objectives

Avian influenza infections caused by several subtypes are endemic in vast areas of the world, particularly in developing countries and countries where poverty is widespread. Under these circumstances Avian Influenza infections are very difficult to control due to the lack of funds to train staff, produce or purchase diagnostic reagents or apply modern diagnostic technology.

The objective of FLUTRAIN is to bridge the gap of knowledge between EU scientists and colleagues in Avian Influenza affected countries. This project has the objective of supporting countries affected by Avian Influenza infections through research activities, training, transfer of knowledge and technology. In addition, diagnostic capacity will be improved at a local level by investigating alternative methods for virus isolation, diagnostic reagent production and serological tests.

As a result of the global H1N1 (2009) pandemic, FLUTRAIN will also cover important aspects of swine influenza. It cannot be excluded that the pandemic H1N1 will be introduced into animal populations in the near future. One crucial question is to what extent pigs may be partially immune to infection with this virus. Many developing countries do not have the expertise or facilities to answer such questions and so, using the European situation as a model, information will be generated to determine the cross reactivity of the EU swine population to pandemic H1N1 (2009). The information generated and the tools required to achieve this goal will then be transferred to participant laboratories.

Results to date:

1. Assessment of and networking with Eastern European and African laboratories.



2. Two workshops addressing general and specific topics related to AI with participants from Eastern European and African countries.
3. Ad hoc support missions in Egypt and Senegal
4. Individual training of diagnosticians/scientists in EU labs
5. Assistance and funding for the organization of the Joint OIE/FAO/WHO Technical international meeting: Consultation on Avian influenza at the Human Animal interface, Verona, Italy, 7-9 October 2008,
6. Publications in peer-reviewed journals

Future deliverables:

1. Evaluation of classical and molecular, cost effective diagnostic tools (reagents, PCR, ELISA) that can be exported to accession and INCO countries.
2. Transfer of knowledge on validated diagnostic tests generated by EU scientists in the framework of other EU projects (AVIFLU, LAB-on-SITE, FLUAID)
3. Improve diagnostic capacity at a local level
4. Production of an on-line course on Avian influenza management and control
5. Generation of important tools and information on the immunity of pig populations to pandemic H1N1

Throughout the project there has been close contact between FLUTRAIN and several European and international organizations that are involved in similar training projects [e.g. EU Directorate General for Health and Consumer Affairs (DG-SANCO), UN Food and Agricultural Organization (FAO), International Atomic Energy Agency (IAEA), World Organisation for Animal Health (OIE), the EU training project ConFluTech]. This collaboration has resulted in mutual assistance and avoided the duplication and wasting of funds and resources.

For more information, please visit the website: <http://www.flutrain.eu>

Or contact the project coordinator:

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