Veterinary aspects of Avian Influenza: the submerged part of the iceberg

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H5N1 epidemic—a disease of global relevance

- H5N1 has become endemic in poultry in several parts of the world
- It is capable of infecting a variety of birds (@50 species) and 10 species of mammals
- For every human that is infected, @1 million animals are infected
Highly Pathogenic Avian Influenza

- Death and suffering of animals
- Causes food security reduction for developing countries
- Severe economic losses to poultry industry
- Risk of human pandemic
Avian influenza virus

• Modifies its genetic properties as it encounters new hosts
How can we intervene in reducing the risk of a human pandemic and improve animal health and welfare?
By reducing virus circulation in animals

To achieve this we must:

1. Know where it is (diagnosis)
2. Know what it’s doing (pathogenesis)
3. Protect animals (vaccination)
AVIFLU (2002-2006)
1.8 M euros

Partners: UK, I, NL, F, D, DK,

Objectives:
1. Develop diagnostic tools
2. Investigate pathogenesis
3. Approach vaccination
FLUAIID 2006-2009
1.2 M Euro

• Partners: IT, UK, NL, F, CH, Pakistan, Vietnam, Indonesia, Thailand, Republic of South Africa, Australia
FLUAID Objectives

• Development of EU vaccine bank
• Increase knowledge on vaccination
• Support to developing countries by improving diagnostics and outbreak management
• Study virus modifications
Highlights of FLUAID

- More practical approach – oriented towards problem solving
- Inclusion of several non-EU partners
- Will generate information and tools that can be used for supporting outbreak management and decision making processes
- Will result in transfer of knowledge between EU scientists and Asian partners
AVIFLU-FLUAID
2002-2009

- Increase and consolidate EU knowledge
- Develop control strategies
- Transfer of knowledge and support to developing countries
- Competitive EU research to support global AI crisis
AI Dedicated Call on AI - 2006
10 M Euros

- Food safety
- Ecology
- Reinforcement of EU capacities and transfer of EU technology to developing countries
- Vaccination
- Pathogenesis
- Diagnosis
EU research, experience and open-minded approach will generate crucial data to support the international community in tackling the avian influenza global crisis

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