# OFFLU Technical Activity at the Human Animal Interface

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### **History of GIP-OFFLU collaboration**

- Informal collaboration since establishment of OFFLU
- Increasing joint activity since 2006
  - GIP observer in OFFLU admin. and technical meetings
  - OFFLU participation in GIP meetings (NIC, strain selection, PCR working group)
  - HAI technical consultation ("Verona") Oct 2008
  - WHO participation in many OFFLU technical activities
  - Informal technical assistance/facilitation (both directions)
- Promotion of OIE-FAO-WHO activities: CIDA funding
  - Coordination/liaison staff position in GIP



# Human Animal Interface Technical Activity (1): background

- 2008: Need identified/Planning initiated
  - to build on and optimize existing collaboration on influenza issues at the HAI
- 2009: Overall scope/plan agreed & approved by OFFLU & WHO
- Jointly developed/coordinated by OFFLU (I. Capua) & WHO GIP (L. Mumford)
- To lead to a formalised mechanism for ongoing exchange of virological and other (e.g. epi) information between PH and AH networks.
- Will function on an ongoing basis & in coordination with existing activities or groups.
- Most proposed activities are already funded under the trilateral CIDA grant



# Human Animal Interface Technical Activity (2): objective and scope

#### Objective

- To develop both general and specific mechanisms for improving AH/PH coordination and technical communication about zoonotic/potentially pandemic animal influenza viruses
- To take steps to bridge cultural gaps between the sectors

#### Scope

 Aspects of potentially zoonotic or pandemic influenza that exist at the human-animal interface



### Human Animal Interface Technical Activity (3): examples

- 1. Coordinated risk assessment & bridging cultural gaps
  - Integrated analysis of information
    - virological/epidemiological/molecular and human/animal
  - Real-time information flow in emergency situations
  - Timely sharing of epidemiological information.
  - Current global references necessary for influenza risk assessment (unified nomenclature)
  - Intersectoral participation in relevant technical and policy related meetings and discussions.
  - Areas in need of further collaboration



## Human Animal Interface Technical Activity (4): examples

- 2. Research at the human animal interface
  - Identify knowledge gaps and prioritize research
  - Promote filling of knowledge gaps
    - e.g. promoting specific research or field activities, holding technical meetings on relevant issues of mutual interest
      - technical consultation
  - Identify and promote funding of these activities wherever possible



## Human Animal Interface Technical Activity (5): examples

- 3. Improve linkages among laboratory networks
  - Collection and timely sharing of genetic sequence data
  - Mechanism for regular sharing of information on PHrelevant virus mutations
    - e.g. information on mutations of interest is supplied by the PH sector, and information on these mutations in circulating avian viruses is supplied by the AH sector
  - Ensuring PH sector participation in OFFLU technical activities relating to virological and laboratory network issues



## Human Animal Interface Technical Activity (6)

Other activities initiated as necessary under this umbrella

Cross over with other TAs, projects and initiatives



### **Activities initiated early 2009**

- Planning for next joint technical consultation on emerging zoonotic diseases at the interface
  - "Verona 2" April 2010
- Assessing political support for emergency information sharing mechanism
- 3. Evaluation of human/animal virus cross reactivity
- Mechanism for joint participation in relevant internal technical meetings
  - 1. Ongoing participation in each others meetings
    - NIC meeting (Dec 08 Barcelona, K. Hamilton), AFRO mtg...
    - This meeting (ongoing participation of WHO in OFFLU activities)
    - So Hemisphere strain selection meeting, Melbourne, Sept 09 (P. Daniels)



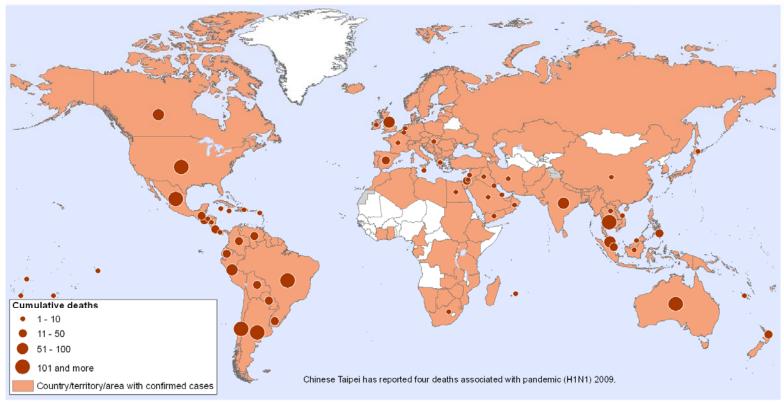
#### **Additional HAI-related activities**

- Development of the WHO public health research agenda for influenza
  - Stream 1 : Emergence of zoonotic/pandemic influenzas
    - Lead: Ilaria
    - Deputy: Richard Webby (St Judes)
    - WHO contact: Liz
    - Rapporteur: Kate



#### Then....

#### Pandemic (H1N1) 2009 Status as of 30 August 2009 Countries, territories and areas with lab confirmed cases and number of deaths as reported to WHO



The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement. Data Source: World Health Organization Map Production: Public Health Information and Geographic Information Systems (GIS) World Health Organization



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Map produced: 03 September 2009 07:20 GMT



# Interface activities related to Pandemic (H1N1) 2009 (1)

- Internal OFFLU discussions to broaden scope to include other relevant animal influenzas, and change of name
- First joint international TC to discuss virus (4 May)
  - Outcome summary posted on WHO and OFFLU websites
  - Development of list of interested experts
- Emergency WHO TC with experts to discuss origin issue (11 May)
  - Joint Q & A developed and internal WHO TPs
- OFFLU TC on diagnostics for the new virus in animals (14 May)
- OFFLU surveillance TC (19 May)
  - WHO internal discussion on AH surveillance for PH needs
  - WHO document "Public Health Goals for A/H1N1 Surveillance in Animals" submitted to OFFLU, OIE, and FAO



# Interface activities related to Pandemic (H1N1) 2009 (2)

- WHO TC to standardise name of virus and disease (15 June)
- GISN TC : update on virologic aspects (15 July)
  - Second TC planned for 7 October 13.00 Geneva time
    - request for 2 OFFLU participants to present OFFLU data on latest virological findings, others can call in.
- Planned: Joint WHO/OFFLLU TC to discuss current research results & needs
  - Transmission/pathogenicity in animals, reassortant viability
  - gaps
- Ongoing formal and informal communication between GIP and the AH sector on an international and technical level to discuss and evaluate the evolving situation virologically and epidemiologically and develop activities to fill knowledge gaps



### Topic of major PH concern

- Virological surveillance for the pandemic virus
  - Reassortment
    - Coinfections in animals 

       receptor distribution and susceptibility?
  - Antiviral resistance
  - Other mutations of PH interest
  - Systems for representative or targeted surveillance in animals
  - Systems for sharing information





## Thank you

Sylvie Briand
Ilaria Capua
Gwen Dauphin
Ruben Donis
Keiji Fukuda
Kate Glynn
Keith Hamilton
Alex Thiermann
David Swayne

Mike Perdue

**OFFLU** 

Members of the joint H5 evolution working group

And other motivated partners too numerous to mention...