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*Regional Office of the
World Health Organization*



OAS Meeting

Innovations in Avian Influenza Preparedness

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Avian and Human Pandemic Influenza: Addressing the Need for Integration between Health and Agriculture in the Preparedness Plans in Latin America

*Cristina Schneider **, *Anne Roca ***, *César Falconi ***,
*Albino Belotto **, *Andre Medici ***

*** PAHO – Veterinary Public Health Unit/ Health Surveillance and
Disease Management**

**** IADB - Rural Development Unit/ Sustainable Development
Department**

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Study link: <http://www.iadb.org/sds/doc/rur-avianandhumanpandemicinfluenza.pdf>

The link between animal and human health

- Of the 1,415 known human pathogens, 61% are zoonotic
- 75% of emerging human diseases are zoonotic
 - BSE and vCJD
 - SARS
 - Avian Influenza A/(H5N1)
 - Rabies
 - Ebola
 - Monkeypox



An infection from bite on the finger from a prairie dog - suspected as the monkeypox carrier. Photos: AFP and Reuters

The link between animal and human health

- Factors affecting increases in zoonotic disease
 - Contact with wildlife
 - Environmental changes
 - Globalization
 - Microbiological adaptation



Photo: PAHO

The link between animal and human health

- Economic impact
 - Livestock disease outbreaks around the world have cost the ~\$80 billion since 1990

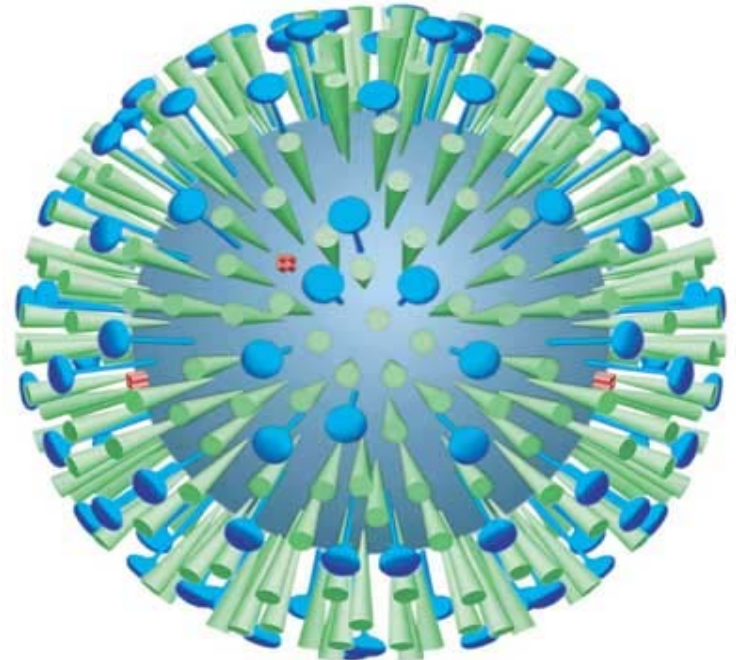


Taco Van Der Eb / AFP file

Sheep disposal in UK to control Foot and Mouth Disease outbreak

Avian Influenza - The current threat

- Avian Influenza A H5N1
 - Severe illness in domestic poultry
 - Extremely contagious
- The most at risk – poultry workers backyard farmers
- Human health



Avian Influenza - The current threat

Economic impact

- **Global**
 - Since 2003
 - >220 million poultry dead/destroyed
 - > 5, 000 outbreaks of H5N1
 - Economic losses estimated at \$10 billion



Photo: PAHO

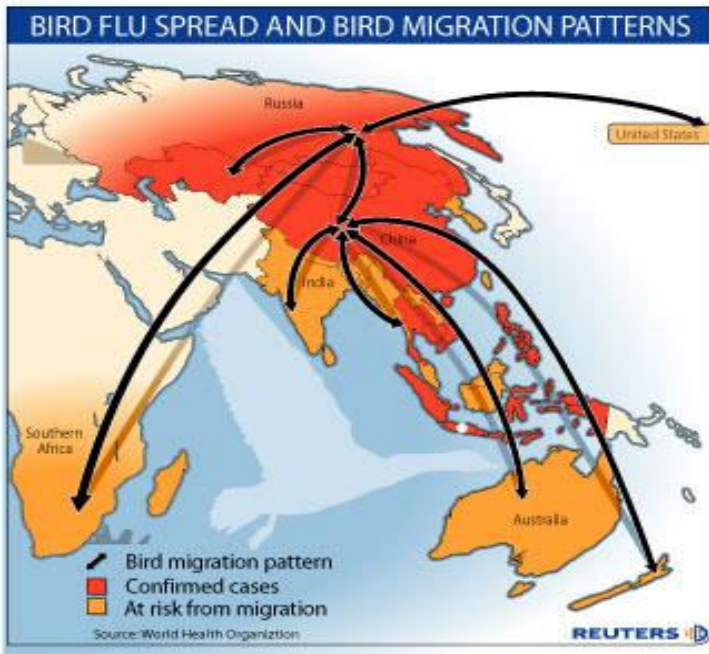
Avian Influenza - The current threat

Economic impact

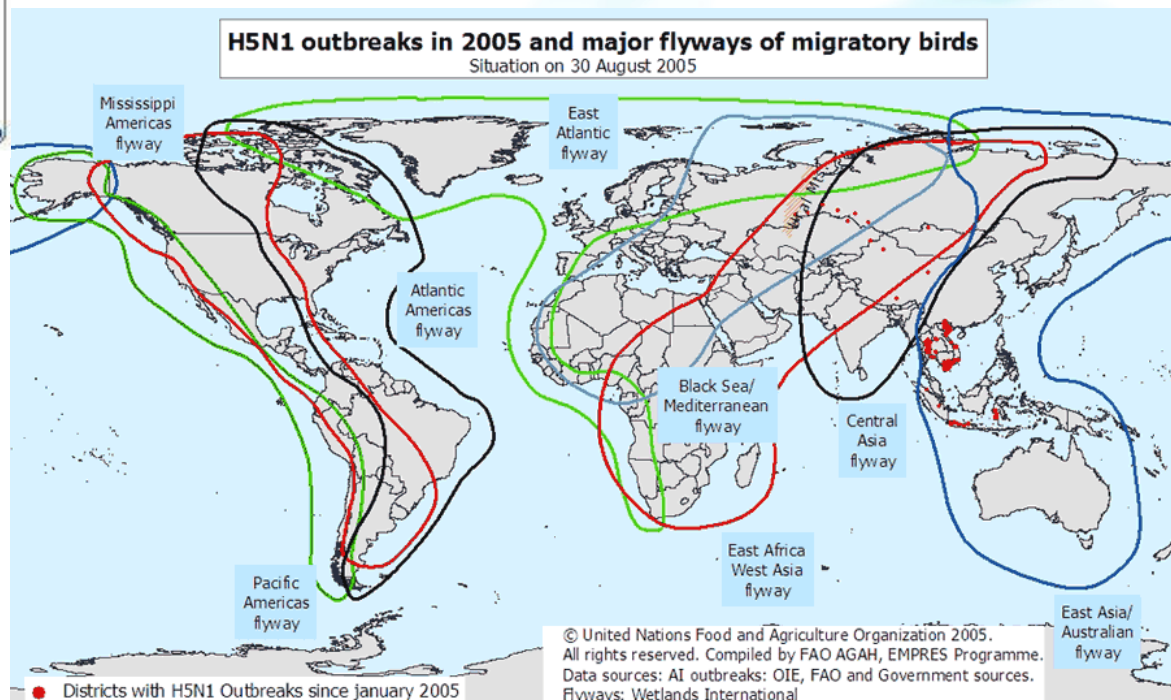
- **Region (FAO estimations for 2005)**
 - Americas were responsible for the production of 43% of the 84 billion tons of poultry produced worldwide
 - Americas largest poultry exporting region in the World (57% of 10.4 billion tons)
 - 5 countries were responsible for 99% of total exports (USA, Brazil, Canada, Argentina, and Chile)



Avian Influenza - The current threat



- Spread from migratory waterfowl to domestic poultry
- Control measures have failed to prevent economic, animal, and human losses



Actors in preparedness to a possible pandemic

– At the global level

- WHO
- FAO
- OIE
- Others UN agencies
- Global Frameworks (GF-TADs; GLEWS)



Actors in preparedness to a possible pandemic

– At the regional level

- FAO Regional Office
 - OIE Regional Office
 - PAHO (PANAFTOSA)
 - IICA
 - OIRSA
-
- The Inter-American Meeting, at the Ministerial Level, on Health and Agriculture (RIMSA)

Importance of intersectoral action

- It is clear that to protect humans from Avian Influenza, the disease must be controlled at the source of the infection: in poultry

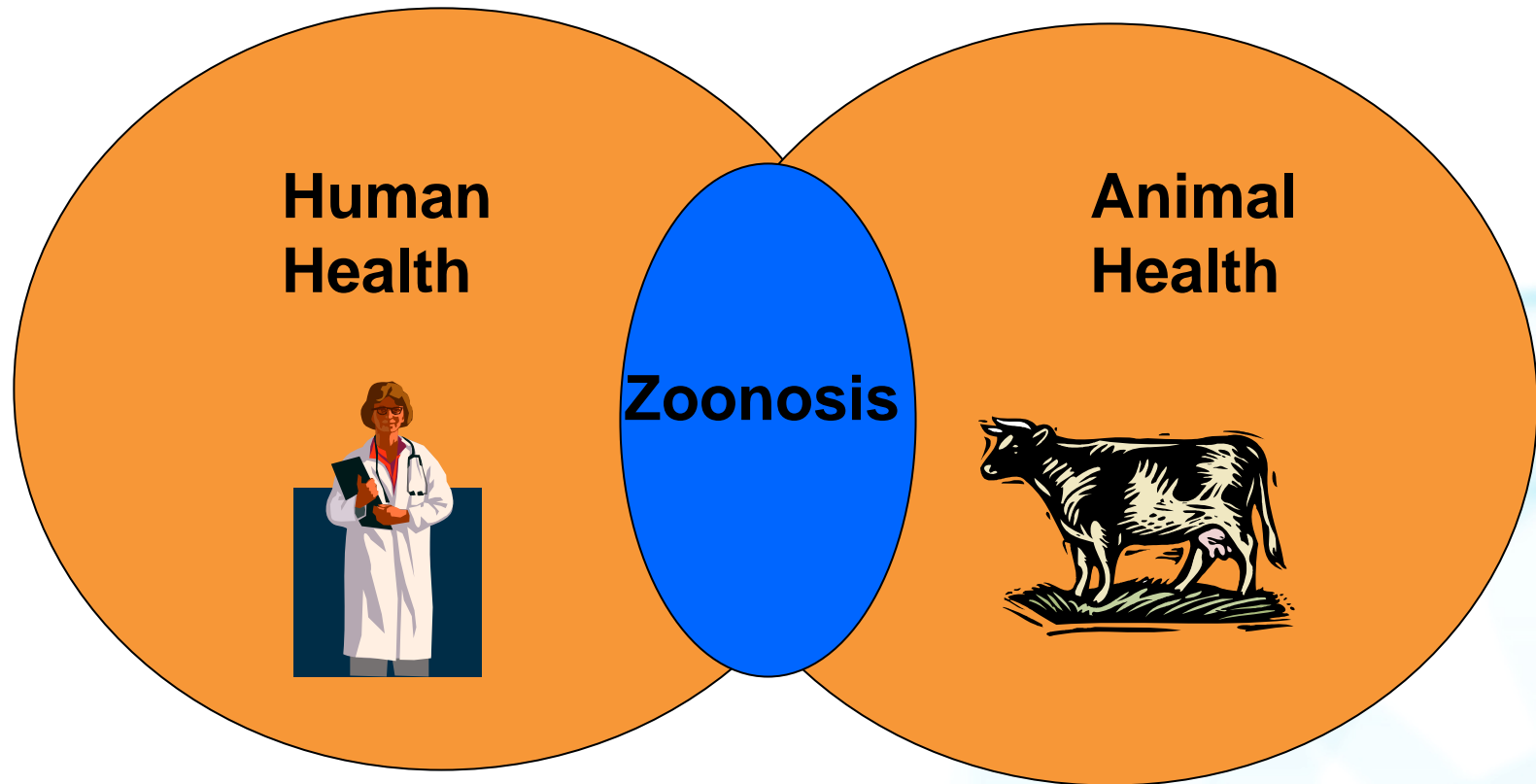


Photo: PAHO

Importance of intersectoral action

- **Strengthen the interface between human and animal health to prevent zoonosis:**
 - **Surveillance across sectors** (early detection, and notification are necessary for effective control programs)
 - **Biosecurity** (in this case, ensuring that animals and human food supplies linked to them are protected)
 - **Biosafety** (in this case, ensuring the protection of people in contact with the virus)
 - **Adequate public information** (relying on scientific facts, to communicate risks and avoid a related economic crisis)

Importance of intersectoral action



To adequately address the complex process through which a zoonosis emerges and protect the population against these diseases, health and agriculture sectors must work in an integrated way.

Objectives of this study

Highlight the importance of and evaluate the integration between the health and agriculture sectors in preparedness plans in Latin American countries

Methodology of this study

- Integration was evaluated through ten questions submitted to representatives of the sectors in the countries of the Region during a series of subregional workshops. The answers were analyzed by subregion.
- The percentage of integration was estimated and contrasted with demographic, socioeconomic and health data and by category of activity.
- Countries included in evaluation
 - All Southern Cone, Andean Area and Central America countries
 - Latin Caribbean – Cuba, Dominican Republic, Haiti

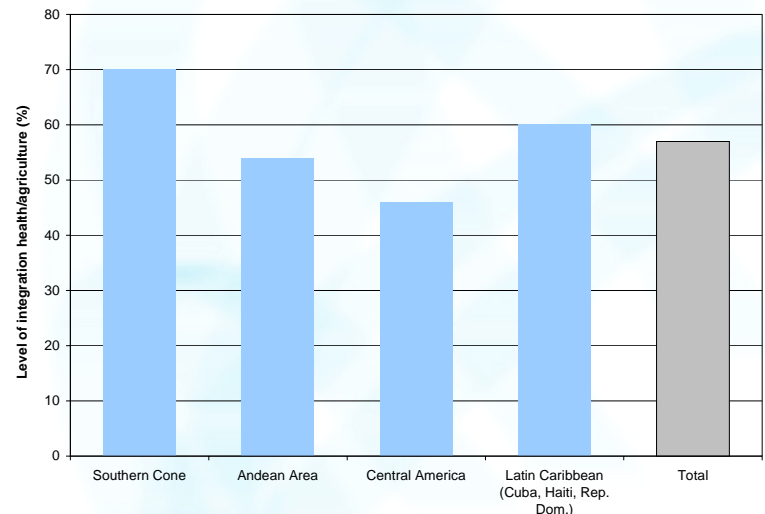
Methodology of this study

- **Example of questions used to evaluate response level**
 - Are health, agriculture and other sectors included in the preparedness plan?
 - Is there a mechanism for routine exchange of epidemiological information related to influenza among the health and agriculture sectors?
 - Would the people investigating an outbreak and carrying out the actions recommended by FAO/OIE have the personal protection equipments (PPE) recommended by WHO?

Results

- Southern Cone, with major poultry production and export, enjoys high levels of integration of the health and agriculture sectors.
- Central America shows the least integration and is the subregion with the most rural population, most population under the poverty line, and highest percentage of workers in the agricultural sector.
- This seems to indicate that the population of Central America could be strongly affected in case of an outbreak of avian influenza in poultry.

Figure 1. Level of integration of the health and agriculture sectors in preparedness plans, as reflected in the 10 questions selected



Results

All subregions presented good coordination between the health and agriculture sectors in the preparedness plans, however preparations for a joint intersectoral response to an outbreak and information exchange need to be improved.

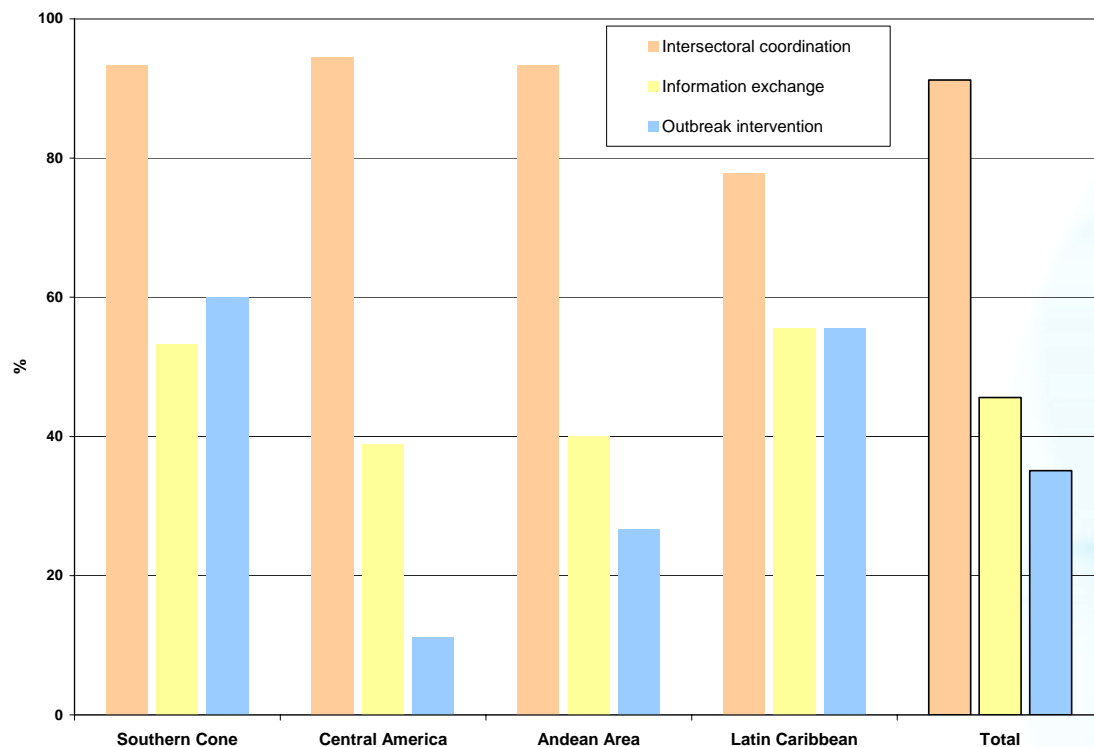


Figure 2. Positive responses by category of activity, by subregion and for the regional sample as a whole

Recommendations

- The current crisis, because of its pandemic potential and its economic impact, provides an opportunity to bring together all involved sectors and preparing to any zoonotic threat



Photos: UNICEF

Recommendations

- Could be suggested five categories of needs to address the problem of integration in the Region:
 - a) Integration policies (Ex. RIMSA)
 - b) Financial aspects (Ex. IICA/PAHO strategic fund for emergent problems)
 - c) Training (Ex. intersectoral response teams)
 - d) Access to data and information dissemination (Ex. Inter agencies portal)
 - e) Interdisciplinary studies

Thank you for your attention

