HUMAN HEALTH
PAN-AMERICAN HEALTH ORGANIZATION
WORLD HEALTH ORGANIZATION
U.S. CENTERS FOR DISEASE CONTROL & PREVENTION
MINISTRIES OF HEALTH

HUMAN-ANIMAL INTERFACE
STRENGTHENING INFLUENZA INTER-SECTORAL SURVEILLANCE AND RESPONSE

ANIMAL HEALTH
WORLD ORGANIZATION FOR ANIMAL HEALTH (OIE)
MINISTRIES OF AGRICULTURE

COLLABORATE TO STRENGTHEN

2-3 OCTOBER 2017
LEADERS IN HUMAN AND ANIMAL INFLUENZA SURVEILLANCE AND RESPONSE GATHERED TOGETHER TO DISCUSS HOW TO STRENGTHEN SURVEILLANCE AND RESPONSE.
In an effort to bring sectors together

this meeting was coordinated and hosted by the influenza team and PANAFTOSA PAHO/WHO to discuss the best way to collaborate together.
**AGENDA**

- Presentations
- Group discussions
- Country workplans

### DAY 1

- **Opening**
  - 9:00

- **Group Work 1**
  - 14:45

- **Block 1: Perspectives**
  - 9:15

- **Block 2: Strategies**
  - 15:45

- **Wrap up**
  - 16:30

### DAY 2

- **Block 3: Ideas > Practice**
  - 9:00

- **Group Work 2**
  - 9:15

- **Block 4: Workplan Devt**
  - 11:30

- **Block 5: Next Steps**
  - 15:15

- **Closing of meeting**
  - 16:30
BACKGROUND

Both the tripartite agreement (WHO-FAO-OIE) and One Health Initiative, provide the background and structure for how for animal and human health authorities, among others, can work together to strengthen surveillance and response and decrease disease risk. Given that influenza affects humans, animals, and survives in the environment, it can serve as the perfect pathogen on which inter-sectoral surveillance and response can be built.

Avian influenza A (H7N9), which has been circulating in China since 2013, provides the perfect case for the need to strengthen inter-sectoral surveillance and response immediately. This virus is being detected across species (domestic birds, wild birds, humans) as well as throughout the environment, and only through an interconnected strategy can we respond and protect animal and human health in these situations.

In order to establish this type of inter-sectoral strategy in the Americas, the Pan American Health Organization/World Health Organization, convened a meeting between human health and animal health authorities from several countries in the Americas, as well the references centers of the World Organization for Animal Health (OIE) and the World Health Organization (WHO). The specific objectives for this meeting were the following:

• Review current practices and gaps in the region related to inter-sectoral (human and animal) influenza surveillance and response
• Discuss strategies to improve integration of human and animal influenza surveillance and response
• Define next steps to strengthen the integration of human and animal influenza surveillance

This document presents the highlights from the presentations made by PAHO/WHO, the OIE and WHO reference centers, and the countries; captures the salient points from the group discussions about how to strengthen and implement this type of joint work; and presents a series of next steps based on the discussions during the meeting.
Global, regional and country perspectives on inter-sectoral influenza surveillance
Moderator: Dr Enrique Perez, PAHO/WHO

Importance of inter-sectoral surveillance - Dr Rakhee Palekar (PAHO/WHO)

• The interconnectedness of animal infections, human infections and environmental contamination reminds us of the urgent need to work together to strengthen influenza surveillance and response.
• The framework for this type of collaboration already exists, as part of the tripartite WHO-FAO-OIE collaboration, as well as the One Health Initiative, whose aim is to promote cross-sectoral collaboration to address the risks of zoonoses and threats at the human-animal interface and to try to reduce risks.
• While there has been a lot done to build human influenza surveillance systems, there is a need to collaborate with other sectors to further influenza surveillance at the human-animal interface and map the way forward. Specifically, we need to find ways to: share information being generated in each sector, find ways to work together to strengthen both animal and human influenza surveillance, to reduce the risk of human and animal infection, and ensure coordinated outbreak response.
• Gathering the inputs about lessons learned in the countries, our knowledge about best practices and our vision for a more integrated approach to surveillance and response, we can further the capacities of this region.

WHO perspective and gaps - Dr Aspen Hammond (WHO)

• WHO commitment to strengthening the inter-sectoral collaboration is evident through several mechanisms: 1) strategic collaborations with partners and Member States (Tripartite initiative, the International Health Regulations, Operationalizing One Health, etc.), 2) technical collaborations with partners (The OIE-FAO Flu Network [OFFLU]-WHO collaboration, the Global Influenza Surveillance and Response [GISRS] network, the Global Early Warning System [GLEWS], etc.), and 3) disease-specific cross-sectoral projects (4-way linking, Tool for Influenza Pandemic Risk Assessment [TIPRA], etc.).
• WHO assists member states in identify gaps in implementing the core capacities as required in the IHR, relating to zoonoses, and with its regional and country offices, provides assistance and guidance in implementing the national actions plans and building capacity.
• WHO emphasized their availability for guidance on assessing capacities (Joint External Evaluation Tool [JEE]), for establishing cross-sectoral collaboration (Zoonoses Guide from 2008—to be updated in March 2018), risk assessment, virus sharing, etc.
Role of OIE Reference laboratories - Dr Sabrina Swenson (OIE Reference Laboratory at AMES/USDA)

- Begin the process now of getting to know your human health/animal health colleagues. Even if that is just getting together for lunch if your colleagues are in the same town as you. It doesn’t have to be a formal meeting. The key is developing a relationship and starting early. Maintain the relationship even when a major crisis isn’t underway such as regular calls.
- Determine roles and responsibilities for human health and animal health for addressing a disease. It makes things go smoother in an event if everyone knows the roles and responsibilities. This includes developing a communication plan.
- Get to know your industries. Attend their meetings. Learn how they work. Learn what is important to them. This will be very important for relationship building and being able to respond when an emergency arises.
- Take advantage of resources already available to you. Written resources can be found on a variety of websites. Tailor them to fit your needs. Query people who have experience.
- Maintain an attitude of patience and flexibility. It takes time to develop relationships and trust and you may have to adjust your plans in order to meet your needs (ex. incorporating oral fluids for swine surveillance).

Role of OIE Reference laboratories - Dr Dilmara Reischak (OIE Reference Laboratory BRA MoAg)

- Lanagro-SP is one of six laboratories of the Official Network of Agricultural Laboratories of the Ministry of Agriculture, Livestock and Supply (MAPA) of Brazil and has been recognized as an OIE reference laboratory for avian influenza in May, 2016;
- The main activities are: to support technically and scientifically all the actions of the MAPA Animal Health Department, to provide training to official and private veterinarians and diagnostic test training for laboratory technicians in South American countries and to coordinate the South American Network of Diagnostic Laboratories of Avian Influenza and Newcastle Disease (RESUDIA);
- RESUDIA’s mission: strengthening the capacities of national reference laboratories for the diagnosis of avian influenza and Newcastle disease. Main goals: training human resources, harmonization of assays and biosecurity methods, promote proficiency testing schemes, integration between labs in the region and other regions and networks.
WHO-CC perspective - Dr Stacey Schultz-Cherry (WHO Collaborating Center for Zoonotic Influenza at St Jude's Hospital)

- Introduced participants to the CEIRS network
- Highlighted the ongoing surveillance at St. Jude.
- Summarized their results to date in South America, including recent findings on influenza strains in wild birds in Chile and Colombia.
- Discussed ways that St. Jude could assist groups interested in performing animal-human interface studies. Also emphasized the potential collaboration on the diagnosis to the countries, for example by providing the primers developed by the CC.

Regional survey of current practices - Dr Manuel Sanchez and Dr Rakhee Palekar (PAHO/WHO)

- As a need to is a need to describe the landscape in the region related to this inter-sectoral work, we piloted a survey with Ministries of Health and Ministries of Agriculture in the region (15 countries from animal sector and 17 from health sector participated). Overall, in terms of human influenza surveillance, a farmer with serious respiratory illnesses is recognized to be unusual, though there is limited surveillance of farmers/farm inhabitants or lack of exposure history among SARI and ILL cases. As for the animal sector, most countries have active avian influenza surveillance, as well as national laboratories to test for influenza with limited capacity for viral sequencing.
- There are opportunities for improving the ascertainment of high-risk exposures (e.g. live bird markets, sick poultry) and the surveillance of high-risk populations. Likewise, the strengthening of effective networks for timely information sharing and laboratory synergies between both sectors will further the inter-sectoral collaboration.
- Overall, there is good surveillance capacity in the region, though gaps exist. Inter-sectoral information sharing is critical to improving this surveillance, therefore it is important to look for synergies and ways to maximize limited resources.
ROUTINE SURVEILLANCE

1) Swine surveillance – USA

- Include wildlife/environmental agencies in joint discussions (flu, rabies, etc.)
- Develop personal relationships across agencies/ministries building trust to facilitate timely sharing of confidential, preliminary or sensitive information needed for a coordinated response across agencies. Should not rely on only one person in each agency – need to plan on continuity of collaboration.
- Because influenza in some animals (avian, swine?) may have negative economic and trade implications, maybe a better disease agent to start with building cross agency/ministry collaboration could be rabies or some other zoonotic agent? Flu is challenging! Influenza doesn’t have to be the zoonotic agent to start with – it can be another one – and then flu can be added when people are comfortable with cross agency collaboration.

2) Avian surveillance – Ecuador

- The mission at the Ministry of Agriculture and Zoonotic health consists on strategically manage the regulation, control, and certification of with the aim of improving food safety, health, and the flow of trade. Part of the strategy is to; as well as monitoring the animal health of the country, analyze risks, and implement preventive measures.
- Avian influenza is a national reportable disease; and active, passive, and emergency surveillance are conducted to track avian influenza in the country and allow a proper response. There are standard operation procedures for better assess reporting, sample collection, sero-epidemiological sampling designs, as well as active surveillance guidelines; with contingency plans for human-animal health best describes roles and information flow, in terms of inter-sectoral collaboration.
- Part of the challenges are to incorporate outbreak drills to enhance preparedness and response, integrate different information systems from human health and agriculture; as well as consolidate a national preparedness and response plan for a new pandemic influenza virus.
3) **Avian surveillance - Dominican Republic**

- Detection of low pathogenicity avian influenza H5N2 in poultry
- Led to the implementation of an animal health surveillance system in the country. Currently, the preparedness and response plans are being reviewed and updated, with an integrated approach from agriculture and health sectors.
- Updates in national avian influenza surveillance strategies allow risk assessment and spatial analysis and maintenance of a Poultry Producer Registration (RPA) program.
- Need to improve risk communication skills, effectiveness of sample collection, alert systems and the information exchange between sectors.
1) Swine influenza outbreak at a fair - USA, 2017
- Highlighted the ongoing surveillance of novel influenza virus infections in humans in the country.
- Summarized the findings from swine influenza outbreak studies in USA.
- Discussed strategies to detect novel influenza viruses in humans, and the role of enhanced communication and joint investigations by human and animal health as key stones in terms of pre-pandemic preparedness.
- Highlighted the availability of CDC reagents for countries worldwide to strengthen laboratory capacities.

2) Avian influenza outbreak on a farm - Chile, 2017
- In 2017, an avian influenza A H7N6 outbreak occurred in same farm as a previous outbreak in 2009; however, the 2009 outbreak was due to (H1N1)pdm09
- The timely report of the unusual respiratory outbreak among commercial poultry allowed the immediate activation and control actions in the country, according to the updated national protocols
- Coordination between health and agriculture facilitated a rapid evaluation and permanent monitoring of the situation
- Need to strengthen the integration of human and animal components and joint preparedness and response, update research protocols on exposed people, maintain high vaccination coverage, and sustain the capacity and experience to face these events
_TOPIC: HOW TO STRENGTHEN AND COORDINATE INTER-SECTORAL SURVEILLANCE

- Build trust and show transparency
- Integrate new actors such as the Ministry of Agriculture in the established distribution lists of human surveillance.
- Define roles and responsibilities in inter-institutional communication
- Coordinate monthly or quarterly meetings between sectors
- Define communication channels, such as via National Liaison Center
- Use computer platforms to exchange information
- Define the sort of information to be shared at the animal-human interface, and establishing protocols to interpret and analyze it in conjunction, both veterinary and health services.
Topic 2

WHAT STEPS TO TAKE TO IMPLEMENT INTER-SECTORAL SURVEILLANCE STRENGTHENING ACTIVITIES

- Review and update integrated response plan
- Share best practices and training with professionals dealing with prevention and control strategies
- Strengthen relationships between public health, animal health, and industry
- Conduct coordinated simulations
- Develop mechanisms to provide financial resources for response
- Strengthening surveillance for timely detection of novel influenza viruses
REDUCTION OF RISK OF HUMAN ZOONOTIC INFECTION AND TRANSMISSION OF ZOONOTIC DISEASES

- Develop response plans with well-defined roles
- Establish an institutional and community communication plan
- Conduct training in risk prevention and biosafety
- Continuous risk assessment
- Vaccinate workers in the animal and health sectors
- Need to provide and use PPE (personal protection equipment)
**Next Steps**

1. Each country should review the inter-sectoral work plan developed during the meeting with relevant authorities in the country and make modifications as needed.

2. PAHO/WHO will develop meeting proceedings summarizing the discussions that took place during the meeting.

3. PAHO/WHO will convene a teleconference with countries to discuss needs and answer questions about the implementation of the work plan in early 2018.

4. PAHO/WHO will develop regional guidance for integrated inter-sectoral surveillance and response and share with relevant stakeholders during 2018.

5. Selected countries will be invited to share their experiences in strengthening human-animal influenza surveillance and response during the 2018 SARI.net meeting.
HUMAN.

ANIMAL.

INTERFACE.