REPORT OF THE REGIONAL CONSULTATION FOR THE STRENGTHENING OF INTERSECTORAL WORK IN THE HUMAN-ANIMAL INTERFACE OF INFLUENZA

BACKGROUND

In March 2023, professionals from Health and Agricultural Services involved in zoonotic influenza programs gathered in Rio de Janeiro, Brazil, to share their experiences and strategies for surveillance and response to zoonotic influenza emergencies. Attendees from Argentina, Brazil, Canada, Chile, Colombia, Ecuador, the United States, Guatemala, and Mexico were present, as well as technical representatives from the World Health Organization Collaborating Centers (WHO CC), regional reference laboratories, and other relevant organizations and officials of the Pan American Health Organization (PAHO) involved in technical cooperation on zoonotic influenza.

The meeting was organized by the Infectious Hazard Management Unit of the Health Emergency Department (PHE/IHM) and the PANAFTOSA Center of the Department of Communicable Diseases Prevention, Control and Elimination (CDE/PANAFTOSA) to discuss experiences and strategies in the human-animal interface for zoonotic influenza surveillance and emergency response. The main aim of the meeting was to identify and compile the key areas that Member States should focus on to strengthen their surveillance and response capabilities in managing zoonotic health influenza emergencies, with a particular focus on avian influenza (AI).

This consultation allowed to create a regional map of intersectoral work on zoonotic influenza based on the experiences of the participating countries. Recommendations for work on influenza at the human-animal interface for surveillance and emergency response were made based on examples of success.

OBJECTIVES

A. Review experiences in response and lessons learned from countries that experienced A(H5N1) avian influenza outbreaks.
B. Strengthen regional work on the human-animal interface with WHO Collaborating Centers (WHO CC) and strategic partners.
C. Update guidelines on influenza at the human-animal interface and PAHO recommendations to strengthen intersectoral work in surveillance, response, analysis and risk communication.

METHODOLOGY

The meeting took place over three days and was structured into intersectoral working groups made up of representatives from participating countries, WHO, WHO CC, World Organisation for Animal
Health (WOAH), Food and Agriculture Organization (FAO), International Regional Organization of Plant And Animal Health (OIRSA), Andean Community (CAN), Inter-American Institute for Cooperation on Agriculture (IICA). During the event, through a guiding script, different proposed topics shared in five thematic blocks were discussed:

1 – Initiatives developed for intersectoral work in surveillance, prevention and early detection of zoonotic influenza.

2 – Initiatives developed in emergency preparedness and response for intersectoral work on zoonotic influenza.

3 - Governance mechanisms and regulatory frameworks used for intersectoral work on zoonotic influenza.

4 - Joint risk analysis with an intersectoral character for zoonotic influenza.

5 - Intersectoral risk communication strategies for zoonotic influenza.

The participants formed seven working groups, where discussions were encouraged to map experiences and strategies used and to identify barriers and weaknesses to work at the human-animal interface and successful examples that other countries could replicate; with emphasis on AI, but also considering other zoonotic influenza such as swine influenza (variant).

The most relevant results of the discussion and the lessons learned are shared below.

RESULTS

Block 1. Initiatives developed for intersectoral work in surveillance, prevention and early detection of zoonotic influenza

This block sought to explore the context and opportunities for implementing zoonotic influenza surveillance strategies around the human-animal interface, particularly in the animal component, to contribute to the early detection and prevention of epidemics.

CONTEXT

In general, there was noted to be poor intersectoral collaboration in surveillance, prevention, and early detection. In most countries, intersectoral surveillance work is scarce, and when it does occur, it begins with confirming a case. In some countries, the information about cases in the interface is only shared if there is a specific request.

The priorities in the animal component were governed by economic and productive criteria, which influenced the type of surveillance carried out. Thus, passive and active AI surveillance existed mainly in poultry production units and was highly focused on the detection of H5 and H7 subtypes, particularly highly pathogenic avian influenza (HPAI). On the other hand, surveillance in wild birds was deficient: typically only based on passive detection of unusual mortality. Surveillance of backyard birds presented a challenge since these units were generally not officially registered, remaining outside the
radar of official veterinary services. In addition, since, in most cases, production was for self-consumption or on small-scale, low-tech farms, the owners of these animals had inadequate knowledge for recognizing diseases and for their notification. Added to this scenario was that in most countries, swine influenza surveillance was outside the purview of official veterinary services.

Surveillance of human cases at the interface was usually organized in strategically distributed sentinel centers, mainly at the national and state level, sometimes also at the municipal level. Sentinel surveillance was, therefore, more likely to detect unusual cases and those related to occupational risks.

Surveillance is context-specific. In countries with previous experience with AI, there was greater consolidation of work among those responsible for public health and animal health. Furthermore, in some countries, there were informal collaborative agreements between institutions.

Interaction between human and animal laboratories was rare at the laboratory diagnostic level. There were doubts about the suitability of processing samples of animal origin in human laboratories. There was also weakness on the part of the countries in sending samples of animal origin to the WHO CC since animal laboratories are typically within the Offlu circuit (footnote), and this activity was prioritized. Some countries stated that they deemed it unnecessary to send samples to other institutions due to having viral sequencing and isolation capacities in their own laboratories.

During the consultation, the participants from the different agencies made clear the existence of guidelines and frameworks prepared to support this intersectoral surveillance work.

IMPROVEMENT OPPORTUNITIES

In order to enhance intersectoral collaboration within surveillance and to bolster the early detection capabilities of zoonotic influenza, it is recommended to establish national mechanisms dedicated to intersectoral cooperation. These mechanisms would be instrumental in devising and implementing surveillance strategies at the human-animal interface and facilitating the accurate interpretation of results.

Outlined below are specific recommendations for consideration:

- Criteria for interface surveillance should be developed based on the attributes of the potentially exposed human population and the associated risk arising from the animal component. For instance, when focusing on human surveillance, it is essential to analyze the population distribution of poultry, paying special attention to backyard birds and pigs. Likewise, in the animal sector, surveillance strategies can be designed to align with public health priorities and concerns rather than solely adhering to economic considerations. This approach should encompass reinforcing surveillance in backyard units.
- Enable platforms and mechanisms to share information quickly and efficiently and share positive reports of event occurrences, as well as negative ones, differentiating between the absence of occurrence (zero reporting) and epidemiological silence. Information sharing must be accompanied by a definition of the roles and actions to be undertaken by each participant in relation to the utilization and interpretation of
this information. In other words, a collaborative workflow should be in place that enhances efficiency within the surveillance-associated interface.

- Strengthen the integration of national human and animal laboratories and guarantee their capacities for detecting zoonotic influenza subtypes of interest.
- Enhance zoonotic influenza surveillance in the animal component of animal subtypes beyond H5 and H7 strains. For instance, this could encompass including H9 and swine influenza (particularly variants). These efforts should be promoted through PAHO/WHO recommendations underscoring the significance of surveilling these zoonotic subtypes within the animal domain due to their potential impact on public health.
- The availability of specific primers and probes, and standardized protocols for neuraminidase detection should also be considered. This approach enables rapid characterization through qRT-PCR, eliminating the necessity to await sequencing results.
- Activate the animal reference laboratories; it is recommended that samples of animal origin be sent to the WHO CCs in coordination with the National Influenza Centers in each country, who can support or guide during the process.
- Consider the use of public health resources to strengthen influenza surveillance in the animal sector, especially when it comes to the interface.
- There is an opportunity to establish regional commissions focused on addressing influenza at the human-animal interface.

Examples of intersectoral work in the surveillance, prevention and early detection of zoonotic influenza

In Mexico, swine influenza has an official surveillance mechanism by veterinary services. Moreover, an integrated effort exists for routine active influenza surveillance in birds and humans. Thus, when outbreaks occur in poultry, the National Health, Safety, and Agri-food Quality Service (SENASICA) notifies the Ministry of Health, and an active search is conducted among bird handlers. With this strategy, case studies are conducted, and informed consent is obtained for collecting respiratory (and conjunctival, if conjunctivitis is present) samples and blood samples to obtain serum for identifying antibodies against H5.

Some countries have worked on specific communities’ awareness that represents a greater risk due to the type of activity they performed, such as fishing and hunting communities, that may also contribute to early detection.

Block 2: Initiatives developed in emergency preparedness and response for intersectoral work on zoonotic influenza

This block seeks to explore the context and opportunities around the human-animal interface to achieve better responses to zoonotic influenza that mitigates the risk of transmission to humans.
CONTEXT

The sectors shared information and worked together to prepare for emergencies, but their joint response actions were limited. There was a lack of established protocols and operational guides for intersectoral response. This made effective interaction difficult, especially in times of crisis.

There were sectoral contingency plans (animal health or public health) that had been evaluated and tested through emergency drills. These plans were outdated, however, in many countries.

Few countries in the region had economic compensation policies to encourage early notification of suspected HPAI cases in birds by affected producers when there were outbreaks in their flocks.

Occupational exposure, both for workers in poultry or pig production units and healthcare workers, is a constant area of concern throughout the region, necessitating the establishment of a protocol to be followed. There is no detailed definition of exposed individuals; there is only a perception of who should be sampled. While all countries recommend monitoring individuals exposed to the virus, not all of them have a formalized protocol in place.

There is a perceived weakness in veterinary laboratories’ response to emergencies. Although most have the capability to conduct certain diagnostic tests, both serological and molecular, the current emergency has overwhelmed the majority of laboratories, particularly in terms of supplies for supporting animal surveillance with polymerase chain reaction (PCR). Not all countries have the capacity to detect, sequence, and isolate AI viruses, and generally, support is provided by regional reference laboratories for avian influenza, which play a key role in diagnosis.

In general, animal samples are not analyzed in human sample processing laboratories. However, some countries are processing animal samples in human health laboratories to compensate for diagnostic limitations in veterinary laboratories during this emergency (H5N1 2022/23). When a positive case of Type A AI is confirmed in humans, the sample is sent in Category A to the WHO CC (CDC, Atlanta) with the support of PAHO and WHO. Nevertheless, this process is not yet applied to animal samples.

There is much uncertainty regarding the response and monitoring of affected wild birds and mammals, particularly given the high levels of morbidity and mortality observed during this emergency (H5N1 2022/23).

There is a need for improved capacity to properly dispose of the carcasses of affected domestic and wild animals. This issue is considered a key One Health concern, as it impacts not only animal health but also public health and the environment.

IMPROVEMENT OPPORTUNITIES

To enhance the capacity to respond to zoonotic influenza at the human-animal interface, it is essential to establish multisectoral coordination mechanisms, standardized protocols, and collaborative
emergency measures that encompass all relevant sectors, featuring clearly defined roles (functions, responsibilities, financing). The potential actions are outlined as follows:

- Share information and analysis of the emergency situation, epidemiological research, and perspectives.
- Consider a response strategy based on human and/or animal risk.
- Conduct biosafety training for the personnel involved.

Rapid response teams should be formed, and the capacity to expand personnel during emergencies should be assessed (e.g., utilizing teams prepared for other public health or zoonotic disease response). To facilitate this training, the following steps are necessary:

- Emergency drills that put the established protocols into practice.
- Joint post-emergency assessments (After Action Reviews - AARs).
- Institutionally implement joint roundtables to facilitate the exchange and analysis of information, joint risk assessments, and emergency preparedness and response.
- Develop tailored guidelines and tools that define the roles of each party in the interface; building this capacity to learn to work together is essential.
- Strengthen or establish interoperability between animal health and public health information systems.
- The diagnostic capacity of laboratories must be strengthened, enabling samples to be processed within the country and ensuring a timely response. Concurrently, national and international protocols and regulations should be reviewed or developed to allow efficient and rapid sample exchange between laboratories.

Specific opportunities for response in exposed humans and suspected cases:

- Define standards and establish concrete protocols addressing the follow-up of exposed and suspect cases, including isolation, quarantine, use of personal protective equipment (PPE), sample collection, and IPC;
- Enhance plans to improve sentinel surveillance, active case finding, and contact tracing;
- Review the containment manual for a pandemic in humans for the correct handling of cases regardless of the sector to which they belong.

More specifically, in response to an emergency in the animal component:

- Establish protocols for cases of high mortality influenza in wild birds and mammals, including case definitions, protocols for sample collection and handling of samples, and diagnosis procedures; while also implementing appropriate restrictions on these affected clusters involving moribund wild animals and their carcasses.
- Establish compensation policies for the actors affected by the HPAI.
- Strengthen the response capacity of the countries in the proper elimination of animal carcasses.
Examples of emergency preparedness and intersectoral response in zoonotic influenza

Simulations related to AI have been carried out, involving both animal health and public health focused on Rapid Response Teams. In Argentina, these simulations were crucial for bridging the human and animal health gap.

In Chile, a protocol defines suspected and exposed human cases. Once the case is confirmed, field visits are conducted to identify individuals who had contact with the infected, and high-risk groups from which samples are taken are determined. These cases are followed for a week through the Go.data tracking system. This system facilitates the exchange of outbreak investigation information and joint visits involving animal and public health.

Block 3. Governance mechanisms and regulatory frameworks for intersectoral work on zoonotic influenza

This block explores the governance mechanisms and initiatives and those policies that enable and encourage inter-sectoral work on zoonotic influenza at the human-animal interface and ensure its sustainability.

CONTEXT

Countries generally have regulatory frameworks and protocols that guide work at the human-animal interface when declaring a health emergency or disaster. In some countries, intersectoral organizational structures are activated to respond to emergencies, such as national councils, inter-ministerial groups, and risk management systems, with budget allocations assigned for action in these moments. However, there are few intersectoral governance mechanisms for zoonotic influenza at the interface during peaceful times, and no budget allocations are dedicated to integrated work. Interaction between sectors relies more on the willingness of officials than on a specific responsibility assigned structurally to this matter.

Most countries have regulatory frameworks that establish a list of immediately notifiable communicable diseases, including avian influenza. For these diseases, procedures are generally established both for registration in the National Surveillance System and for addressing suspicions, surveillance, and control.

In some countries, contingency plans for emergencies and/or protocols for dealing with avian influenza pandemics exist, established separately by the Ministries of Health and Agriculture with limited dialogue among stakeholders. These plans and protocols rarely include agencies outside the fields of agriculture and health, such as environmental agencies. Moreover, many of these plans require review and updating.
IMPROVEMENT OPPORTUNITIES

There are opportunities to improve national governance mechanisms and initiatives and those regulatory frameworks that enable and encourage inter-sectoral work. The following are proposed actions:

- Strengthen governance mechanisms for implementing work on the human-animal interface for zoonotic influenza through inter-ministerial agreements established in joint working groups that involve the environmental sector and other sectors of interest, in addition to the Ministries of Health and Agriculture.
- Strengthen the performance of intersectoral mechanisms, not only in emergencies but also in times of peace, including resource allocation.
- Establish regulatory frameworks, including updated contingency plans, that serve as legal documents to support work at the human-animal interface for zoonotic influenza.
- Maintain training for service officials on the protocols that involve intersectoral work to encourage their implementation.
- Involve the private sector, given their responsibility as the major commercial producers of a susceptible population to the disease, to become a key player in intersectoral work and financing through public-private partnerships.
- Strengthen the capacity of the State Parties’ Annual Self-Assessment Reporting Tool (SPAR) under the International Health Regulations (IHR) and its evaluation by reviewing the regulatory and legal frameworks and the involved actors contributing to the development of a common action plan.

Relevant aspects for enhancing intersectoral working mechanisms at the regional level have also been identified. The PAHO/WHO could establish international frameworks and recommendations to prepare resilient systems for emergency response management. Potential actions that could be considered at the regional level include:

- Establishing supportive mechanisms for collaboration among countries, with a subregional/regional focus.
- Forming a regional commission for addressing Avian Influenza, with representatives from different ministries and the private sector of each country, coordinated by PAHO.
- Seizing the opportunity presented by zoonotic influenza to structure knowledge and capabilities that can subsequently be transferred to strategies related to other zoonotic diseases.

Examples of governance and regulatory frameworks for intersectoral work for zoonotic influenza

Some examples in the region can be emulated to enhance intersectoral governance, such as the South American Commission for the Eradication of Foot-and-Mouth Disease (COSALFA), a successful example of a regional public-private alliance to be followed. COSALFA has experience in governance and coordinated actions among countries, without compromising national sovereignty, between the
public and private sectors collectively, and should be leveraged as an example. The same public-private strategy that exists in COSALFA for Avian Influenza could be adopted.

Block 4: Joint risk analysis with an intersectoral character for zoonotic influenza

This section is utilized to recognize experiences in interface risk analysis, pinpointing strengths (best practices and successful instances) as well as weaknesses.

CONTEXT

The analysis of information and risk assessment, when present, is mainly segregated by sector (human/animal) in most countries. There is a general lack of awareness regarding available tools for risk analysis and evaluation, and there is no consensus on the risk variables to be used, which differ across each sector: human, animal, and environmental.

There is a general lack of awareness about available tools for joint risk analysis. Countries that have conducted joint risk analysis emphasize that it depends on the epidemiological context and involves various sectors and stakeholders at the departmental and national levels.

The interface that raises the most concern for countries is related to backyard poultry. As mentioned earlier, there is no clear concept defining what constitutes backyard units; generally, both subsistence units and small-scale commercial operations are included. There is also emerging concern at the interface of wild birds and mammals due to recent reports of H5 influenza in various mammal species.

There is a weakness in the capacity for comprehensive analysis of the integrated consequences of a zoonotic influenza emergency, combining impacts on public health, socioeconomic aspects, food security, and ecological factors (wildlife).

IMPROVEMENT OPPORTUNITIES

There is a need to build capacity for joint risk analysis at the interface considering the following actions:

- Train personnel to implement supportive tools for risk analysis and assessment.
- Involve all stakeholders in the risk analysis: human, animal, and environmental parts (laboratory, epidemiology, managers, communicators, producers, academics).

Ensure the swift and timely flow of information among all involved parties. Risk analysis is necessary to guide decision-making, both for surveillance and for response and control strategies, as well as for pandemic preparedness plans. Furthermore, it is crucial to keep these analyses updated as needed, considering new evidence, changing contexts, and the epidemiological situation.
Conducting risk assessments is essential not only during emergencies but also during peacetime. It should be emphasized that risk assessment can be carried out even with limited data.

Example of Joint Risk Analysis with an intersectoral character for zoonotic influenza:

Countries have various tools at their disposal to work on joint risk analysis. One of them is the operational tool developed by the tripartite (FAO-WHO-OIE) for a Joint Risk Assessment (JRA), which has been used in more than 20 countries in Africa and Asia, and in this region in Panama. The JRA tool was designed to assist countries in implementing a harmonized One Health approach to qualitatively assess the risks posed by zoonotic diseases (e.g., avian influenza, rabies, and equine encephalitis). The results of the JRA are utilized to support policy communication, risk mitigation, and enhanced preparedness for zoonotic diseases.¹

Block 5: Intersectoral risk communication strategies for zoonotic influenza

This block serves to identify the experiences in relation to communication to surveillance in the interface, identifying strengths (good practices and successful examples) and weaknesses.

CONTEXT

During the COVID-19 pandemic, weaknesses in risk communication became evident. Specifically, many gaps were observed regarding timely communication, target audience definition, messaging, and interaction with the media.

Countries generally have unisectoral risk communication plans, and most of them also have some experience in risk communication from past emergencies. While there are qualified spokespersons in each sector (depending on the country’s hierarchy), both in the human and animal sectors, risk communication during an AI emergency like the current one (H5N1 2022/23) is led by animal health.

Efforts are made to tailor the medium to the audience in the countries by:

• Utilizing radio, telephone hotlines, and social media, among others.
• Direct communication with local Leaders. Bulletins and direct communication with veterinarians.

There is general concern regarding the risk communication of zoonotic influenza concerning backyard poultry and swine and the consumption of associated animal products. Additionally, there is a population perception of confusion between seasonal influenza and AI, and the impact of AI on both animal and human health. In terms of multisectoral communication, an actual multisectoral risk

communication strategy has not been developed, although some countries have developed joint messages.

At a more global level, the tripartite organizations have already conducted risk communication on zoonotic influenza through various means and platforms:

- News about disease outbreaks
- Joint Tripartite Statements;
- Published risk assessments;
- WHO PIP HLIP Framework;
- Epidemic Intelligence from Open Sources (EIOS);
- Webinars;
- OpenWHO with online courses.

IMPROVEMENT OPPORTUNITIES

It is deemed essential for countries to formulate a National Risk Communication Strategy/Plan for zoonotic influenza. This strategy should encompass various objectives:

- Inclusion/participation of all relevant sectors (including National Influenza Centres (NIC) and the IHR national focal points (NFPs));
- Reviewing and updating all national regulations for the implementation of this plan;
- Investing in training and awareness through communication (e.g. with producers, academic institutions, schools, and communities);
- Aligning and pre-establishing messages with joint spokespersons, including both animal health and public health;
- Establishing a multidisciplinary team including experts in social science to discuss the development of the national communication plan.

Incorporating or updating a National Communication Plan is recommended for enhanced emergency preparedness, including pandemics. This initiative requires forging partnerships with key stakeholders during “peacetime” and ensuring that messages promoted through community surveillance and early detection, prevention, and control measures are effectively communicated.

Early communication of the situation and key messages to strengthen event prevention and control are essential during emergencies. Guiding messages based on technical evidence and with the support of a multidisciplinary team can ensure clarity and coherence of these messages, with accurate and timely information flow, without causing panic.

It is necessary to tailor the message to the recipient (for example, the general public, livestock producers, stakeholders involved in wildlife, etc.). For instance, backyard units should receive combined animal and public health messages. These messages should inform owners about how to prevent and recognize the disease in their animals and what actions to take if they suspect its presence. Furthermore, guidelines on how to protect themselves and where to seek help if they experience disease symptoms should be provided.

Strengthening the use of educational materials (such as infographics, Twitter, podcasts, and community communication platforms like radio, etc.) is essential. Collaborating with community
leaders and influential individuals is also important to disseminate accurate information and address concerns.

Assessing the impact of risk communication is a process that should be regularly carried out to identify gaps in implementing such communication. In this regard, anthropological studies can also provide valuable insights into understanding communities’ perceptions of risk and its prevention.

Examples of Intersectoral Risk Communication Strategies for Zoonotic Influenza

Several countries have carried out specific risk communication campaigns. For instance, in Brazil, diverse messages are disseminated according to the target audience, such as small-scale producers, veterinarians, and large-scale producers. In Ecuador, community leaders played a crucial role in spreading information to backyard unit owners.

Next steps

1. Develop and publish regional guidelines on influenza at the human-animal interface and PAHO/WHO recommendations to enhance intersectoral work in surveillance, early detection, investigation, and response.

2. Develop and publish a regional document on technical questions and answers on zoonotic influenza (e.g., surveillance strategies, clinical management, vaccination, shipment of samples, etc.).

3. Strengthen national intersectoral technical collaboration.

4. Implement mechanisms for monitoring multisectoral collaborations (e.g., SPAR).

5. Establish a regional network/technical group within SARInet plus for intersectoral work at the human-animal interface: Intersectoral network of the Americas for the human-animal interface.
ANNEXES
The Infectious Hazard Management Unit of the Health Emergency Department (PHE/IHM) and the PANAFTOSA Center of the Department of Communicable Diseases and Environmental Health Determinants (CDE/PANAFTOSA) organize this meeting on experiences and strategies in the human-animal interface for surveillance and response to zoonotic influenza emergencies. The event will take place in the city of Rio de Janeiro, Brazil, from March 14 to 16, 2023.

The main objective of this meeting is to identify and compile the main aspects on which Member States should focus to strengthen capacities for surveillance and response to zoonotic influenza emergencies at the human-animal interface with a prominent focus on avian influenza.

**SPECIFIC OBJECTIVES**

- Update guidelines on influenza at the human-animal interface and PAHO recommendations to strengthen intersectoral work in surveillance, early detection, and research.
- Review the experiences in the response and the lessons learned from the countries with outbreaks of H5 avian influenza.
- Strengthen regional work on the human-animal interface with WHO Collaborating Centers and strategic partners.

**EXPECTED RESULTS**

- Achieving a mapping of the regional intersectoral work on zoonotic influenza based on the experiences of the participating countries.
- The development of a series of specific recommendations for work on influenza at the human-animal interface for surveillance and emergency response, particularly identifying successful examples.

**PARTICIPANTS**

- Professionals from the Health and Agriculture services of the following countries involved in zoonotic influenza programs: Argentina, Brazil, Canada, Chile, Colombia, the United States, Guatemala and Mexico.
- Technical representatives of WHO collaborating centers and regional reference laboratories.
- Representatives of other relevant organizations.
- PAHO officials involved in technical cooperation on zoonotic influenza
**WORKING METHOD**

The meeting will take place over three days and will be structured in intersectoral working groups and made up of representatives from various countries. Throughout the event, the different topics proposed will be discussed following an agenda.

Discussion will be encouraged to map experiences and strategies, identify barriers in the interface work, and highlight successful examples that can be adopted by other countries.

Finally, a document will be drafted compiling the most relevant aspects of the discussion and the lessons learned.

**AGENDA (version 24/02/2023)**

**TUESDAY | 14 March**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
</table>
| 09:00 - 09:30 | Opening of the meeting  
Welcome Remarks  
Round of introduction of the participants  
Representatives of the countries, PAHO/WHO and other organizations |
| 09:30 - 10:30 | WORKSHOPS AND DISCUSSION – Part I  
Initiatives developed for intersectoral work in surveillance and early detection of zoonotic influenza  
*Country representatives* |
| 10:30 - 10:45 | Break |
| 10:45 - 12:00 | WORKSHOPS AND DISCUSSION – Part I (continued)  
Initiatives developed for intersectoral work in surveillance and early detection of zoonotic influenza  
*Country representatives* |
| 12:00 - 13:00 | Lunch |
| 13:00 - 15:00 | WORKSHOPS AND DISCUSSION – Part II  
Initiatives developed in emergency preparedness and intersectoral response to zoonotic influenza  
*Country representatives* |
| 15:00 - 15:15 | Coffee break |
| 15:15 - 17:00 | WORKSHOPS AND DISCUSSION – Part II (continued)  
Initiatives developed in emergency preparedness and intersectoral response to zoonotic influenza |
Country representatives

19:00 - 22:00  Welcome cocktail

All participants

<table>
<thead>
<tr>
<th>WEDNESDAY</th>
<th>15 March</th>
</tr>
</thead>
</table>
| 09:00 - 10:30 | WORKSHOPS AND DISCUSSION – Part III  
Governance mechanisms and regulatory frameworks associated with intersectoral work on zoonotic influenza  
*Country representatives* |
| 10:30 - 10:45 | Coffee break |
| 10:45 - 12:00 | WORKING AND DISCUSSION TABLES – Part III (continued)  
Governance mechanisms and regulatory frameworks associated with intersectoral work on zoonotic influenza  
*Country representatives* |
| 12:00 - 13:00 | Lunch |
| 13:00 - 15:00 | WORKSHOPS AND DISCUSSION – Part IV  
Joint risk analysis using an intersectoral approach for zoonotic influenza  
*Country and PAHO/WHO representatives* |
| 15:00 - 15:15 | Coffee break |
| 15:15 - 17:00 | WORKSHOPS AND DISCUSSION – Part IV (continued)  
Joint risk analysis using an intersectoral approach, for zoonotic influenza  
*Country and PAHO/WHO representatives* |

<table>
<thead>
<tr>
<th>THURSDAY</th>
<th>16 March</th>
</tr>
</thead>
</table>
| 09:00 - 10:30 | WORKSHOPS AND DISCUSSION – Part V  
Intersectoral risk communication strategies for zoonotic influenza  
*Country and PAHO/WHO representatives.* |
| 10:30 - 10:45 | Coffee break |
| 10:45 - 12:00 | consolidation of lessons learned during the consultation: good practices, strengths, and opportunities for surveillance and emergency response to improve the joint work on zoonotic influenza at the human-animal interface  
*Country and PAHO/WHO representatives* |
| 12:00 - 13:00 | Lunch |
| 13:00 - 15:00 | consolidation of lessons learned during the consultation: good practices, strengths, and opportunities for surveillance and emergency response to improve the joint work on zoonotic influenza at the human-animal interface  
*Country and PAHO/WHO representatives* |
| 15:00 - 15:15 | Coffee break |
| 15:15 - 17:00 | Conclusions and closing of the meeting  
*Country and PAHO/WHO representatives* |
## REGIONAL CONSULTATION FOR THE STRENGTHENING OF INTERSECTORAL WORK

**AT THE HUMAN-ANIMAL INTERFACE OF INFLUENZA**

*Río de Janeiro | 14 to 16 March 2023*

### Attendance

<table>
<thead>
<tr>
<th>PARTICIPANT</th>
<th>INSTITUTION / COUNTRY</th>
<th>TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Alexander Edmund Rosewell</td>
<td>OPS/BRA</td>
<td>Coordinador</td>
</tr>
<tr>
<td>2. Alexza Pezoa Adasme</td>
<td>SAG - Chile</td>
<td>Jefa del Subdepartamento de Laboratorios Pecuarios</td>
</tr>
<tr>
<td>3. Alfredo Bruno Caicedo</td>
<td>INSPI - Ecuador</td>
<td>Experto Técnico de Laboratorio de Vigilancia Epidemiológica y Referencia Nacional</td>
</tr>
<tr>
<td>4. Ana Isabel Peralta</td>
<td>PANAFTOSA - OPS/OMS</td>
<td>Consultora de Comunicación</td>
</tr>
<tr>
<td>5. Andrea Veronica Pontoriero</td>
<td>Anlis Malbrán - Argentina</td>
<td>Servicio de Virus Respiratorios del Instituto Nacional de Enfermedades INFECCIOSAS INEI</td>
</tr>
<tr>
<td>6. Angel Rodriguez Mondragon</td>
<td>OPS/OMS</td>
<td>Influenza Surveillance Specialist</td>
</tr>
<tr>
<td>7. Angelica Maria Rico Turca</td>
<td>INS - Colombia</td>
<td>Referencia de Vigilancia en Salud Pública para IRAG</td>
</tr>
<tr>
<td>8. Antonio Abelino Paredes Samayoa</td>
<td>MSPAS - Guatemala</td>
<td>Coordinador de Vigilancia Epidemiológica - Depto. de Epidemiología del MSPAS</td>
</tr>
<tr>
<td>9. Ashley Fowlkes</td>
<td>Centers for Disease Control and Prevention (CDC)</td>
<td>European &amp; Pan American Region Team, Acting Lead Global Influenza Branch (proposed), CDC</td>
</tr>
<tr>
<td></td>
<td>Name</td>
<td>Organization/Location</td>
</tr>
<tr>
<td>---</td>
<td>-------------------------------------------</td>
<td>----------------------------------------------------</td>
</tr>
<tr>
<td>10.</td>
<td>Aspen Hammond</td>
<td>WHO</td>
</tr>
<tr>
<td>11.</td>
<td>Baldomero Molina Flores</td>
<td>PANAFTOSA - OPS/OMS</td>
</tr>
<tr>
<td>12.</td>
<td>Carla Jimena Voto</td>
<td>MINSA - Argentina</td>
</tr>
<tr>
<td>13.</td>
<td>Carmen Gloria Gonzalez Izurieta</td>
<td>SAG - Chile</td>
</tr>
<tr>
<td>15.</td>
<td>Christian Arturo Zaragoza Jiménez</td>
<td>MINSA - México</td>
</tr>
<tr>
<td>16.</td>
<td>Christine Szablewski</td>
<td>Centers for Disease Control and Prevention (CDC)</td>
</tr>
<tr>
<td>17.</td>
<td>Daniel Magalhães Lima</td>
<td>PANAFTOSA - OPS/OMS</td>
</tr>
<tr>
<td>18.</td>
<td>Daniela de Queiroz Baptista</td>
<td>MAPA - Brasil</td>
</tr>
<tr>
<td>19.</td>
<td>Dilmara Reischak</td>
<td>LFDA/SP - Brasil</td>
</tr>
<tr>
<td>20.</td>
<td>Eduardo Enrique Martínez Prado</td>
<td>MAGA - Guatemala</td>
</tr>
<tr>
<td>21.</td>
<td>Edviges Maristela Pituco</td>
<td>PANAFTOSA - OPS/OMS</td>
</tr>
<tr>
<td>22.</td>
<td>Erik Karlsson</td>
<td>Instituto Pasteur de Camboya</td>
</tr>
<tr>
<td>23.</td>
<td>Erika Ximena Ospitia Baez</td>
<td>INS - Colombia</td>
</tr>
<tr>
<td></td>
<td>Name</td>
<td>Organization/Agency</td>
</tr>
<tr>
<td>---</td>
<td>-------------------------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>24.</td>
<td>Esteban Yantén Fariña</td>
<td>MINSAL - Chile</td>
</tr>
<tr>
<td>25.</td>
<td>Euclides Jose De La Torre Medranda</td>
<td>AGROCALIDAD - Ecuador</td>
</tr>
<tr>
<td>26.</td>
<td>Felipe Rocha</td>
<td>PANAFTOSA - OPS/OMS</td>
</tr>
<tr>
<td>27.</td>
<td>Franklyn Edwin Prieto Alvarado</td>
<td>INS - Colombia</td>
</tr>
<tr>
<td>28.</td>
<td>Germán Andrés Vásquez Niño</td>
<td>PANAFTOSA - OPS/OMS</td>
</tr>
<tr>
<td>29.</td>
<td>Gisela Barrera Badillo</td>
<td>MINSA - México</td>
</tr>
<tr>
<td>30.</td>
<td>Greice Madeleine Ikeda do Carmo</td>
<td>MINSA - Brasil</td>
</tr>
<tr>
<td>31.</td>
<td>Ingrid García Velasquez</td>
<td>OPS/COL</td>
</tr>
<tr>
<td>32.</td>
<td>Jaime Ricardo Romero Prada</td>
<td>IICA</td>
</tr>
<tr>
<td>33.</td>
<td>Juan Diego Pérez de la Rosa</td>
<td>SENASICA - México</td>
</tr>
<tr>
<td>34.</td>
<td>Juliana Leite</td>
<td>OPS/OMS</td>
</tr>
<tr>
<td>35.</td>
<td>Lia Puppim Buzanovsky</td>
<td>PANAFTOSA - OPS/OMS</td>
</tr>
<tr>
<td>36.</td>
<td>Lidia Alexandra Burbano Enríquez</td>
<td>AGROCALIDAD - Ecuador</td>
</tr>
<tr>
<td>37.</td>
<td>Lucero Serrano Arroiaza de Gaitan</td>
<td>MAGA - Guatemala</td>
</tr>
<tr>
<td>38.</td>
<td>Magdi Samaan</td>
<td>WHO</td>
</tr>
<tr>
<td>Número</td>
<td>Nombre y Apellido</td>
<td>Institución</td>
</tr>
<tr>
<td>--------</td>
<td>-------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>39.</td>
<td>Manuel Jose Sánchez Vazquez</td>
<td>PANAFTOSA - OMS/OMS</td>
</tr>
<tr>
<td>40.</td>
<td>Marcela Eugenia Marchelli de Peraza</td>
<td>OIRSA</td>
</tr>
<tr>
<td>41.</td>
<td>Marco Antônio Barreto de Almeida</td>
<td>OMS/OMS</td>
</tr>
<tr>
<td>42.</td>
<td>Marco Antonio Natal Vigilato</td>
<td>PANAFTOSA - OMS/OMS</td>
</tr>
<tr>
<td>43.</td>
<td>María Fernanda Olivares</td>
<td>MINSA - Chile</td>
</tr>
<tr>
<td>44.</td>
<td>María Judith Mora</td>
<td>ISP - Chile</td>
</tr>
<tr>
<td>45.</td>
<td>Mariano Pablo Ramos</td>
<td>SENASA - Argentina</td>
</tr>
<tr>
<td>46.</td>
<td>Maribel Arias Quispe</td>
<td>MINSA - Ecuador</td>
</tr>
<tr>
<td>47.</td>
<td>Mariela Martínez Gómez</td>
<td>OMS/OMS</td>
</tr>
<tr>
<td>48.</td>
<td>Marilda Agudo Mendonça Teixeira de Siqueira</td>
<td>FIOCRUZ - Brasil</td>
</tr>
<tr>
<td>49.</td>
<td>Martin Santiago Minassian</td>
<td>OMSA</td>
</tr>
<tr>
<td>50.</td>
<td>Mauricio Alexander Cerpa Calderon</td>
<td>OMS/COL</td>
</tr>
<tr>
<td>51.</td>
<td>Mc Allister Tafur Garzón</td>
<td>Comunidad Andina</td>
</tr>
<tr>
<td>52.</td>
<td>Monica Martini</td>
<td>PANAFTOSA - OMS/OMS</td>
</tr>
<tr>
<td>53.</td>
<td>Monica Patricia Guardo Martínez</td>
<td>OMS/OMX</td>
</tr>
<tr>
<td>54.</td>
<td>Ottorino Cosivi</td>
<td>PANAFTOSA - OMS/OMS</td>
</tr>
<tr>
<td></td>
<td>Name</td>
<td>Organization</td>
</tr>
<tr>
<td>---</td>
<td>---------------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>55</td>
<td>Pablo Esteban Galindo Roman</td>
<td>OPS/GTM</td>
</tr>
<tr>
<td>56</td>
<td>Paula Veronica Couto</td>
<td>OPS/OMS</td>
</tr>
<tr>
<td>57</td>
<td>Priscila Silva Born</td>
<td>OPS/OMS</td>
</tr>
<tr>
<td>58</td>
<td>Priscila Leal Leite</td>
<td>OPS/BRA</td>
</tr>
<tr>
<td>59</td>
<td>Richard John Webby</td>
<td>WHO CC for Studies on the Ecology of Influenza in Animals and Birds</td>
</tr>
<tr>
<td>60</td>
<td>Roberto Navarro López</td>
<td>SENASICA - México</td>
</tr>
<tr>
<td>61</td>
<td>Rodrigo Emmanuel Balzano Parodi</td>
<td>SENASA - Argentina</td>
</tr>
<tr>
<td>62</td>
<td>Rodrigo Fabiano do Carmo Said</td>
<td>OPS/BRA</td>
</tr>
<tr>
<td>63</td>
<td>Rodrigo Miguel García Muñoz</td>
<td>PANAFTOSA - OPS/OMS</td>
</tr>
<tr>
<td>64</td>
<td>Vanessa Max Kraus</td>
<td>FAO</td>
</tr>
<tr>
<td>65</td>
<td>Xavier Charles Roche</td>
<td>OPS/OMS</td>
</tr>
</tbody>
</table>