OFFLU Avian Influenza Technical Activity

Terms of Reference (ToR) -2024

In the following years, OFFLU Avian Influenza Technical Activity (TA) aims to work on the following activities:

- Technical expertise and advice
  - Coordinating efforts to harmonize genotype nomenclature across subtypes, subclades in consideration of the entire genome [Expected output 1]
  - Survey on AIV sequencing strategies, including data pipelines, sequence curation, and quality metrics used by WOAH, FAO and other reference laboratories [Expected output 2]
  - Collaborative work with wildlife TA to align AIV surveillance and diagnostic strategies relevant in different regions [Expected output 3]
  - Act as a resource for scientific expertise and advice to WOAH, FAO, and WHO on activities related to AIV and to continue timely guidance notes and situation summaries through the OFFLU website.
  - Act as a resource for scientific advice to other OFFLU TA (AIM, VCM, Wildlife)
  - Provide frequent avian influenza situation updates (frequency TBD) to the PUBLIC via publication in scientific journals and technical documents on FAO & WOAH websites

- Updating Recommendations for Core Diagnostic Guidelines
  - Analysis of current diagnostic protocols being utilized in WOAH, FAO and other reference laboratories and effectiveness against AIV subtypes, with an initial focus on M gene, then H5, H7, and H9 subtypes to provide practical information on the contemporary used diagnostic protocols [Expected output 3]
  - Propose guidance to member countries regarding the application of current routine diagnostic methods and advice on diagnostic development techniques [Expected output 3]
  - Describe and characterize the different diagnostic workflow options based on available resources: from field sampling to HTS data analysis [Expected output 3]

- Promote and standardize environmental surveillance methodologies to complement existing surveillance strategies [Expected output 4, 5]

- Standardization of Data and Risk Assessment
  - Provide recommendations for standardizing experiments.
  - Update the inventory for AIV molecular markers of risk (host-adaptation, antiviral resistance, antigenic drivers…) and capture clear correlates ranked where possible [Expected output 6]

- Data sharing
  - Collect data on vaccinated flocks for collaboration with AIM TA purpose, including immune profiling [Expected output 5]
  - Working group report sharing through OFFLU network and communication channels (WHO & WOAH reports, TIPRA…) [Expected output 7,8]
  - Encourage members to publish commentary, opinion, and reviews on AIV in scientific journals [Expected output 7,8]
  - Survey for WOAH reference laboratories and national labs on issues and barriers to sample and data sharing [Expected output 2]
  - Develop a decision tree and triggers for the Avian TA communication on specific advice, commentary, and opinion [Expected output 8]
  - Publish opinion/advice on avian influenza-specific issues with focus on timely reaction to changes in virus or disease epidemiology/risk [Expected output 9]

Expected outputs:

1. Harmonized nomenclature systems and reference resources to the latest updated backbone datasets
2. Survey results published, shared, and used as first input in AIV HTS regional capacities and strategy
3. Accessible and easy-to-follow diagnostic/surveillance guidelines or algorithms
4. Recommendations on appropriate use, interpretation, and collection of environmental samples for environmental surveillance
5. Coordinate and drive validated surveillance approaches that can be applied in vaccinated populations
6. Develop guidance to translate risk assessment findings into actionable recommendations for policy makers
7. Identify available automated tools for marker assessments
8. Increase data sharing and OFFLU communication
9. Creation of a repository of relevant updates from trusted partners and organizations on avian influenza

10. Endpoint schedule to be defined

All tasks will be completed within the limits of available resources, following a realistic timeline and best-effort approach.