



**World Health Organisation
Regional Office for Africa**

**MODULE 6:
PREPARE FOR A(H5N1) OUTBREAK**

FACILITATOR MODULE

VERSION 0.0

PREPARE FOR A(H5N1) OUTBREAK

1. Introduction

All countries are considered at risk of infection with highly pathogenic avian influenza A/H5N1 infection. Therefore, preparedness to cope with avian influenza outbreak in animals and in humans is essential for fast situation assessment and smooth implementation of response activities as soon as needed. Preparedness for switching from pandemic alert level response measures to pandemic measures will also be crucial in case the H5N1 virus gains ability to transmit easily between humans.

2. Learning objectives

At the end of this module the participants should be able to:

- List strategic actions for preparedness and response to avian influenza
- Outline national and sub-national coordination of preparedness and response to HPAI
- Plan for testing of national multisectoral preparedness and response plans
- Monitor and evaluate implementation of national preparedness and response plans

3. Material needed

- Avian influenza A/H5N1 and Other influenza outbreaks of pandemic potential: WHO recommended strategies for rapid field investigation and response
- Rapid Response Team orientation module
- IDSR national technical guideline

- Responding to avian influenza pandemic threat: Recommended strategic actions (2005)
- WHO global influenza preparedness plan (2005)
- Preparedness and response Plan for potential avian influenza epidemic in the African Region 2006-2007
- WHO checklist for influenza pandemic preparedness planning (2005)

4. Learning conditions

- Participants are expected to individually read through the specified sections of the guidelines and others pertinent documents and do exercises in the modules
- Simulation exercise. Participants will be divided into groups to simulate preparedness for HPAI outbreak

5. Pre-Exercise-reading

It is important for participants to read the indicated relevant sections in the reference documents listed under materials needed for background before doing the exercises.

- Rapid Response Team orientation module: Section 7.1 :readiness to outbreak control
- Technical guidelines for integrated disease surveillance in the African Region: sections 4 and 5
- Responding to avian influenza pandemic threat: Recommended strategic actions (2005). Annex 1: strategies for improving national preparedness

Objective 6.1: List strategic actions for preparedness and response to avian influenza

Exercise 6.1.1

Given the many uncertainties about the evolution of the pandemic threat, a wise approach involves a mix of measures that immediately address critical problems with longer term measures that sustainably improve national, regional and global capacity to protect against the recurring pandemic threat

Question 1: what are the main strategic actions for preparedness and response to highly pathogenic avian influenza?

Answer

According to the objectives, the strategic actions recommended by WHO for responding to avian influenza pandemic threat during pre-pandemic and emergence of a pandemic virus phases, include:

1. Reduce opportunities for human infection

- Support the FAO/IOE control strategy (culling of birds, disinfection, restriction of domestic birds circulation, etc)
- Enhance collaboration between the animal and public health sectors,
- Strengthen risk communication to the public,
- Improve approaches to environmental detection of the virus.
- Improve case management

2. Strengthen the early warning system

- Improve the detection of human cases

- Combine detection of new outbreaks in animals with active searches for human cases
- Support epidemiological investigation
- Coordinate clinical research
- Strengthen risk assessment
- strengthen existing national influenza centres

3. Contain or delay spread at the source

- Establish a national stockpile of antiviral drugs and PPE
- Develop mass delivery mechanisms for antiviral drugs
- Conduct surveillance of antiviral susceptibility

Therefore, there are needs at national level to:

- a) assess current risk of AI epidemic;
- b) improve their IDSR systems by strengthening epidemiological and laboratory capacities ,
- c) strengthen inter-sectoral mechanisms for control of zoonotic diseases,
- d) raise health workers and public awareness ,
- e) elaborate and implement AI preparedness and response plan,
- f) prepare interventions to mitigate socio-economic impact of a potential AI pandemic

Objective 6.2: Outline national and sub-national coordination of preparedness and response to HPAI

Exercise 6.2.1

During the pre-pandemic phase of highly pathogenic avian influenza (A(H5N1)), the focus should be on the preparedness at national, and sub-national levels . The coordination is the key to be well prepared.

Question 1: Which activities should be put in place to ensure best coordination of the preparedness and response to Highly Pathogenic Avian Influenza?

Answer

- *Create or re-activate multi-sectoral epidemic management committee*
- *Elaborate a national multisectoral preparedness and response plan*
- *Define tasks, lines of commands and procedures*
- *Coordinate capacity building of medical and laboratory staff and ensure Refreshment/training of medical staff in districts at risk*
- *Ensure overall availability of antiviral according to national policies in case of epidemic*
- *Designate H5N1 referral hospitals and laboratories and equip them with PPE drugs, reagent and other supplies*
- *Ensure access to free of charge care to any suspected H5N1 patient*
- *Design media communication plans for population information, health promotion and social mobilization.*

Question 2: List key elements that should be included in the integrated highly pathogenic avian influenza preparedness and response plan

Answer

1. Background information

2. Objectives

3. Strategic actions

- Surveillance of human infection/disease;
- Laboratory support;
- Risk communication and community education;
- Case management;
- Prevention and bio-containment activities;
- Coordination and epidemic management;
- Data management;
- Monitoring and evaluation

4. Procedures and responsibilities.

5. Cost estimates (Budget).

Objective 6.3: Plan for testing of national multisectoral preparedness and response plan

Exercise 6.3.1

To assess the practicality and feasibility of the national multisectoral preparedness and response plan, it is important to conduct a simulation exercise. The testing could enable to revise the national plan according to the feasibility of its implementation.

Question 1: What are the key activities to be undertaken for testing of national multisectoral preparedness and response plan?

Answer

- *Convene a group of experts to develop a simulation exercise on the National Multi-sectoral Preparedness and Response Plans that is applicable in the country.*
- *Develop indicators to evaluate effectiveness and practicality of simulation exercise.*
- *Invite people who have already conducted the simulation exercise*
- *Conduct a national meeting to prepare national professionals to conduct simulation exercises at national and sub-national levels.*
- *Conduct a national simulation exercise, including actors from and beyond the health sector.*
- *use results of simulation to reajust plan accordingly.*
- *Disseminate the final National Multi-sectoral Preparedness and Response Plans.*

Objective 6.4: Monitor and evaluate implementation of national preparedness and response plans

Exercise 6.4.1

Monitoring and evaluation is based on system, approach that consists of inputs processes, outputs and outcomes. All inputs, processes, outputs and outcomes will be monitored carefully based on existing AFRO mechanisms and procedures for monitoring and evaluation, using AFRO IDSR core indicators. Countries should continuously monitor their preparedness situation

Question 1: How should the performance of the preparedness and response plan to highly pathogenic avian influenza be assessed? (The assessment should be done using preparedness monitoring indicators and response indicators).

Answer

The evaluation of performance should be done using monitoring and response indicators (At this stage, there is no response implementation yet, but it might happen):

Preparedness monitoring indicators

- By assessing surveillance, investigation and tracing procedures
 - Sensitivity/specificity of case definition
 - Adequacy of system design (staffing, procedures, logistic organization, supply, etc.)
 - Accuracy of the knowledge of epidemiological and laboratory staff involved in case screening and data reporting (supervision)

- By assessing outcome of controls and prevention activities
 - Quantifying daily availability of drugs and PPE : % of days of shortage (Target 0 %)
 - Assessing the adequacy of PPE and infection control measures: % of health care workers aware on safe dressing/undressing with PPE (Target 100 %)
 - Assessing quality and regularity of feedback procedure to staff: % of clinicians informed on influenza laboratory results for their patients (Target 100 %)

Response indicators

- By assessing surveillance, investigation and tracing procedures
 - Accuracy of screening procedures: % of patient responding to case definition identified as suspected H5 patient (Target 100 %)
 - Timeliness and performance of investigation of suspected human cases: % of suspected cases cluster investigated within 48 hours from notification (Target 100 %)

- Adequacy of specimen shipment and laboratory testing for influenza: % of specimen arriving at the laboratory within 48 hours (Target 100 %)
 - Timeliness of virus genetic and antigenic characterization: % of specimen (positive and negative) sent to WHO H5 reference laboratory within 1 week from collection (Target 100 %)
 - Timeliness, completeness and accuracy of epidemiological/laboratory Report
- By assessing outcome of controls and prevention activities
 - Assessing adequacy of case and contacts management procedure (triage, treatment, isolation, follows up): % of suspected H5 patients correctly isolated (Target 100 %)
 - Assessing impact of social mobilization activities: % of suspected H5 patients seeking treatment within 48 hours from fever onset.