

# Pandemic Preparedness Plan Exercise Program

## Module 3: Case Investigation and Treatment

### Introduction

The purpose of this tabletop exercise is to test through a facilitated discussion the awareness and operability of plans and procedures related to the planned response to pandemic influenza with the involvement of the agencies involved in that response.

These tabletop exercise materials are part of a series based on the WHO checklist for influenza pandemic preparedness planning<sup>1</sup>. The materials in this module are designed to test elements of preparedness outlined in section 3 of the Checklist- Case investigation and treatment.

These materials include a definition of the scope of the exercise, objectives the scenarios to be acted upon, questions for the controller/facilitator to pose and a general description of the actions expected as a result of those questions. The players in the exercise should only be given the scenario on the day of the exercise.

A tabletop exercise, while simulating an emergency situation, is a discussion guided by the exercise controller. There are no "real" actions carried out during the exercise. Players explain and discuss among the group how they would react to the scenario, but do not actually execute those actions.

There are no right or wrong responses during the exercise. There are no consequences for exploring alternative solutions as part of the discussion. The success of a tabletop exercise is determined by the full and honest participation of the players and the impact the lessons learnt during the exercise have on the revision and enhancement of plans, policies and procedures.

It is not unusual during the course of a tabletop exercise discussion to learn that important policies or procedures are not clearly defined, not familiar to all those involved, or simply less efficient than a procedure used by a different group. Events such as this should not be seen as a failure of any particular agency or group, but an opportunity for all involved to learn from the strengths of others.

The virus in the exercise is (A) HxNy.

### Scope

As it is impossible to test all elements of any plan under all circumstances in a single exercise, the scope of these exercise materials is to facilitate an exercise based on the following:

Type of emergency: Pandemic Influenza

Location: Within the exercising Member State's borders.

Functions: Strategies for case and case contact's management during the pandemic alert and pandemic period.

Participants: Focal points or decision makers from all entities involved in aspects relating to case and contacts assessment and treatment within the influenza pandemic preparedness plan. These individuals may include but is not limited to persons from the Ministry of Health, District Health Care managers, Rapid Response Team Members, clinicians, health care workers, social/community workers, labour organizations, laboratory managers, non-governmental organizations, private and traditional-practitioners, and community representatives.

Exercise Type: Tabletop exercise

<sup>1</sup> [http://www.who.int/csr/resources/publications/influenza/WHO\\_CDS\\_CSR\\_GIP\\_2005\\_4/en/](http://www.who.int/csr/resources/publications/influenza/WHO_CDS_CSR_GIP_2005_4/en/)

## Objectives

The main objectives of this exercise are:

1. To assess capacity and effectiveness of procedures for recognition, triage and management of patients.
2. To ensure that procedures for management of healthy and ill contacts of cases are established and understood.
3. To evaluate treatment and infection control capacity and procedures for health care settings as indicated in the national plan.
4. To evaluate laboratory capacity in the following areas:
  - a. Sample collection, storage, transportation/shipment, information flow .
  - b. Biosafety issues, directly related to the safety level of labs to carry out certain tests
  - c. Monitoring evolution of sensitivity of used anti-viral on circulating pandemic influenza virus strain(s).

## Scenario A

While there is evidence of increased efficiency in human-to-human transmissibility of influenza A(HxNy) as compared to what was seen in phase 3, the transmission in humans is still not sustained and most human cases are reported after exposure to infected animals. The WHO pandemic alert level is 4. A large die off of wild birds is reported in an area near the capital and another in a remote region. One worker who was working on the cleanup of the dead birds without wearing personal protective equipment (PPE) was hospitalized with severe coughing and fever and died. The worker's wife is a primary school teacher. She is reported to fall ill 4 days after her husband with the same symptoms.

The seasonal influenza period is beginning. With fears of possible infection from influenza A(HxNY), many more patients with Influenza like illness than usual are reporting to health care facilities, worried that they may be infected.

## Scenario B

The pandemic alert level is 5. There is a cluster of (A) HxNy infection in an area 2 hours by road from the capital. Antivirals from an international stockpile are used in a containment effort by the WHO and Ministry of Health with support from the international community. Mass geographical antiviral prophylaxis, quarantine and social distancing are implemented in the affected area. However, approximately 5% of those who receive the antivirals fall ill and spread of the virus continues as other clusters are discovered in the region. The WHO Pandemic Influenza Task Force recommends that the alert level be raised to 6.

Within four weeks approximately 18% of the population is diseased (6% CFR), with nearly 30% of cases requiring hospitalization.

## For facilitators and evaluators

The following questions can be used to guide the discussions. Questions are divided by scenario, as different strategies may be in place for different Pandemic Alert levels. The expected result is given to assist evaluators in assessing the response.

### Scenario A

#### To assess capacity and effectiveness of procedures for recognition, triage and management of patients.

- How will patients reporting to healthcare facilities with influenza like illnesses be triaged in order to minimize the risk of infection to other patients?  
*As a part of the risk communication strategy, indications of infection should be communicated to the public, as should instructions of where to seek medical attention. At healthcare facilities, patients reporting influenza like illnesses should be isolated until confirmed. Those well enough to return home should be given information about how to care for themselves and limit the amount of virus they spread.*

#### To ensure that procedures for management of healthy and ill contacts of cases are established and understood.

- How are contacts of cases managed?  
*A system for managing contacts of cases should be in place. The use of existing reporting and tracking systems is encouraged in order to make use of skills already existing in the healthcare workforce. Management of both healthy and ill contacts must be examined within the context of the resources available. If home or hotel quarantine is called for in the national plan, those under quarantine must have food, water and access to medical care. How to enforce such a quarantine should also be considered, as should other effects such as the economic impact of lost wages, public confidence, and the overall cost vs. effectiveness of the measure.*

#### To evaluate treatment and infection control capacity and procedures for health care settings as indicated in the national plan.

- How will suspected influenza patients be managed to ensure the safety of both health care staff and non-influenza patients?  
*Clinical management guidelines for patients suspected and confirmed of pandemic strain influenza should be in place and regularly tested, reviewed and revised. Infection control guidelines including PPE – where to access and how to use. There should be ongoing training and drills in the use of PPE.*
- Is there an adequate supply of personal protective equipment required to implement infection control and biosafety measures?  
*The country should give consideration to how to best ensure availability of protective equipment in line with available resources and in accordance with recommended WHO standard for choice of the products.*

To evaluate laboratory capacity in the following areas:

**Sample collection, storage, transportation/shipment, information flow .**  
**Biosafety issues, directly related to the safety level of labs to carry out certain tests**  
**Monitoring evolution of sensitivity of used anti-viral on circulating pandemic influenza virus strain(s).**

- When a novel influenza virus with pandemic potential affects a country/area, there can be an increase in the demand for testing. How will it be dealt with ?  
*There should be national capacity to test for novel influenza viruses of pandemic potential, and if not, an agreement with another country or an international laboratory should be in place for support in testing. The testing plan, either national or through international collaboration, should include means for fast scaling up of activities to cope with a sudden increase in demand.*
- If antiviral use is part of the national plan, is there a protocol for monitoring evolution of sensitivity to antivirals in use?  
*If antivirals will be available for prophylactic use, there should be a protocol for use on identified target groups (asymptomatic close contacts to cases, post-exposure prophylaxis for healthcare workers, etc.) There should also be a protocol either for in-country sensitivity testing if technology allows or for selection and expedition of virus strain to WHO collaborating centres which will carry out sensitivity testing (Biosafety level 3 minimum needed)*
- Is antiviral treatment part of the national plan? If so, how will antiviral resistance be monitored?  
*If the current local laboratory system is not capable of monitoring antiviral resistance, an agreement should be made with a facility that does have the capacity.*
- How will specimens be packed and transported to the lab?  
*All healthcare workers involved in the sampling process should be aware of how to safely take, pack and ship specimens to the required laboratories in accordance with transit safety regulations in force.*

## Scenario B

### To assess capacity and effectiveness of procedures for recognition, triage and management of patients infected with the virus.

- How will healthcare facilities deal with suspected influenza patients in order to minimize risk to staff and other patients who are not infected?  
*The plan should include procedures for triaging suspect influenza cases which can include isolation and use of designated fever hospitals or clinics. With a large patient load, consideration should be given to the designation of alternative sites for influenza patient treatment.*
- How will patients who refuse to be admitted to hospital be dealt with?  
*Guidelines for home care of patients should be available and reviewed frequently.*
- What kind of surge capacity exists in the mortuary and cemetery sector?  
*There must be an awareness of capacity to handle bodies in a manner that is respectful of accepted customs and norms. Additional facilities may be needed for storage and processing of corpses. A communications strategy to deal with the public should also be in place.*

### To ensure that procedures for management of healthy and ill contacts of cases are established and understood.

- How will contacts of cases be managed?  
*During a pandemic, tracking contacts will not likely be of any benefit. A policy should be in place to indicate at what point contact tracing would cease.*

### To evaluate treatment and infection control capacity and procedures for health care settings as indicated in the national plan.

- Are there sufficient stocks of personal protective equipment to implement the infection control procedures called for in the plan?  
*Each country should encourage planning at the local level for stockpiling of material that will be required to ensure the continuity of healthcare services.*
- Are healthcare workers familiar with the infection control protocols indicated in the national plan?  
*Staff at all levels of healthcare need to be informed and trained on the actions expected of them during a pandemic, including patient triage procedures, cohorting policy, PPE usage and other infection control procedures.*

### To evaluate laboratory capacity in the following areas:

**Sample collection, storage, transportation/shipment, information flow .**  
**Biosafety issues, directly related to the safety level of labs to carry out certain tests**  
**Monitoring evolution of sensitivity of used anti-viral on circulating pandemic influenza virus strain(s).**

- What kind of testing will be conducted on patients with influenza like illness?  
*At pandemic stage 6, it will not be reasonable to test all patients with influenza symptoms. The country should have a plan on when and how to limit testing in order to not overstress the laboratory system, but to still obtain valid information on virus structure and drug resistance.*