

# **Pandemic influenza preparedness and mitigation in refugee and displaced populations**

WHO training modules for humanitarian agencies

Programme on Disease Control in Humanitarian Emergencies  
Communicable Diseases Cluster



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# 1. Introduction

These training modules are a complementary tool to the publication *Pandemic influenza preparedness and mitigation in refugee and displaced populations: WHO guidelines for humanitarian agencies*.<sup>1</sup>

They are not meant to replace the guidelines and only highlight key public health and clinical measures to reduce morbidity and mortality from pandemic influenza.

The training modules should be field tested and will be improved accordingly and updated as new information becomes available.

The training targets first-line health workers as well as staff in charge of essential functions.

Emphasis is made on simple and effective measures that can and should be applied immediately to improve the capacity of health systems in resource-poor settings to detect and limit transmission of many epidemic-prone diseases, including pandemic influenza, and potentially other unknown communicable disease threats.

# 2. Target audience

## **End user:**

- First-line health staff working in refugee and displaced settings;
- Staff who perform essential functions in such settings, such as water and food deliverers, security staff and those assuring communications.

## **Intermediate user:**

- Health coordinators of humanitarian agencies who will facilitate or deliver this training.

The training content concerns only first-line staff and basic competencies. For managerial (i.e. agency coordinators or health coordinators) and second-line staff, in-depth reading of the above-mentioned guideline is advised, ensuring that the checklist for preparedness that is provided is followed.

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<sup>1</sup> Available at [http://whqlibdoc.who.int/hq/2006/WHO\\_CDS\\_NTD\\_DCE\\_2006.2\\_eng.pdf](http://whqlibdoc.who.int/hq/2006/WHO_CDS_NTD_DCE_2006.2_eng.pdf)  
[http://www.who.int/diseasecontrol\\_emergencies/guidelines/en/](http://www.who.int/diseasecontrol_emergencies/guidelines/en/); accessed August 2006.

### 3. Structure of training

There are five modules in the training:

1. **Influenza - what it is and how it is transmitted**
2. **Surveillance/early warning**
3. **Informing and mobilizing the community**
4. **Infection prevention and control**
5. **Case management at home and health care facilities**

The first four modules are targeted at both health care and other essential staff. The case management module is targeted at health care staff only, with slides 7–10 of this module specifically giving guidance on home-based care for caregivers.

The training material also contains additional resources for facilitators:

1. *A Pandemic influenza **fact sheet***– this sensitizes the facilitator to the importance of preparedness for pandemic influenza; gives background information on past pandemics; and outlines (i) the four main areas of action and their relative emphasis before and during a pandemic, (ii) priority preparedness activities to undertake now and as the risk of a pandemic increases, (iii) the main transmission modes of influenza and (iv) key measures for limiting morbidity and mortality.
2. *Training principles for facilitators* – this sensitizes the facilitator to the importance of building first-line worker and community resilience and preparedness through training and social mobilization; and outlines the key steps in social mobilization, what is required to develop appropriate message and key communication factors.
3. *How to run the training* – this summarizes information given in this contents document.

All material is accompanied by suggestions on delivery; the final delivery will depend on previous knowledge, needs and cultural imperatives of the public and on the choices and personalities of the deliverer.

## 4. Training objectives

At the end of the training, participants should be able to:

- understand what influenza is, its importance and the consequences of a pandemic;
- understand how the knowledge of the mechanisms of influenza transmission allows us to inform and mobilize the community and improve infection prevention and control;
- detect the initial cases or clusters of influenza;
- monitor whether the epidemic wave is increasing or decreasing;
- recommend behaviours that decrease the risk of influenza transmission and contribute to reducing morbidity and mortality;
- put forward feasible infection prevention and control measures in the home and health care facility useful for the prevention and control of other epidemics, including a possible influenza pandemic;
- organize triage at the clinic and the separation of patients at the health care facility health facility patient separation;
- use, remove and dispose of personal protective equipment (PPE) correctly;
- demonstrate recommended infection control practices;
- manage suspected influenza patients and their close contacts;
- inform the community about the risk of a pandemic, what they need to do to protect themselves, how to care for the sick and how they can seek more information;
- convey trust, credibility and empathy.

## 5. Outline and objectives of modules

### **Module 1: Transmission**

- Understand the difference between avian, pandemic, and seasonal influenza
- Understand how pandemic influenza arises
- Understand the magnitude and consequences of pandemic influenza
- Know the symptoms and signs of influenza
- Understand how influenza is spread (bird-to-bird, bird-to-human and from human-to-human)
- Understand how to reduce the spread of influenza from birds to humans now, and how to reduce its spread between humans during a pandemic

### **Module 2: Surveillance/early warning**

- To understand why we do influenza surveillance
- To understand the difference between animal and human surveillance
- To understand how we do animal and human surveillance
- To know what should be done when animal cases are detected
- To know when to suspect human cases of bird or pandemic influenza
- To know what actions to take when cases of avian or pandemic influenza are detected in humans
- To know what to monitor during the pandemic.

### **Module 3: Informing and mobilizing the community**

- Understand what communities need to do to protect themselves from getting influenza from birds/animals and from other human beings.
- Understand what communities need to do to take care of their sick at home
- Understand the way to give these messages to the community

### **Module 4: Infection prevention and control**

- Measures to prevent infection in health care facilities and at home.
- Specific measures to take for patients, caregivers, health and other essential staff.
- Risk assessment must be performed to determine PPE usage.
- Practise the use and disposal of gloves and masks.
- Management of waste and handling of deceased

### **Module 5: Case management**

- How to manage patients at home.
- How to manage patients in health care facilities.
- What to stockpile.
- How to prioritize resources such as antibiotics and antivirals.

## 6. Duration of training

Module 1 = 1 hour 15 minutes

Module 2 = 45 minutes

Module 3 = 1 hour

Module 4 = 2 hours

Module 5 = 1 hour 30 minutes

Pre-test and post test = 15 minutes each = 30 minutes

Evaluation = 15 minutes

All five modules can be given in one day.

The timings are quite generous and include time for questions

### **Sample agenda**

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08:30–08:40 Opening and objectives of training

08:40–08:50 Introduction of participants and facilitators

08:50–09:00 Participant expectations from training

09:00–09:15 Pre-training test

09:15–10:30 Module 1: Transmission

10:30–10:45 Refreshments

10:45–11:30 Module 2: Surveillance/early warning

11:30–12:30 Module 3: Informing and mobilizing the community

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12:30–13:30 Lunch

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13:30–15:30 Module 4: Infection prevention and control

15:30–15:45 Refreshments

15:45–17:15 Module 5: Case management

17:15–17:30 Post-training test

17:30–17:45 Training evaluation

17:45–18:00 Closure, final remarks, announcements

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## 7. Teaching methods

PowerPoint presentations that can be printed in A3 format, laminated and presented manually, be collated on a CD-ROM, or downloaded from the Internet.

Although the presentations have been created using PowerPoint, other methods could be used by the facilitators to deliver the material, including:

- reading assignments, particularly the WHO guidelines
- case studies, exercises, or role plays
- group discussions
- practical sessions or demonstrations
- film clips.

Each module aims to provide the simple and essential messages useful in practice. They should allow understanding of the rationale behind the measures by an unskilled worker. It must be assumed that sometimes the worker may not know how to read. Module 5 does not need to be given to non-health staff.

## 8. Training evaluation

Facilitators can prepare and evaluate their own sessions using the checklist provided in Annex 1.

Participants can evaluate the training using the form provided in Annex 2.

Questions for the pre and post-training test are provided in Annex 3.

Answers to the test are provided in Annex 4.

An open exchange with participants at the end of each module will add qualitative information to the data collected from the forms.

## ANNEX 1

### Facilitator preparation and evaluation checklist

**Facilitators may use this checklist to prepare for the delivery of the training and as well as for self evaluation.**

<b>Structure</b>
1. Topic was introduced
2. Objectives outlined
3. All important points were addressed
4. Details were not skipped
5. Information was logically presented
6. Additional supporting material was adapted to the contents
7. Summary made
<b>Clarity</b>
8. Objectives were clearly defined
9. Material was adapted to the level of understanding of the target audience
10. Delivery was clear
11. Wording was easy to understand
12. The full session was clear and well organized
<b>Comprehension</b>
13. Objectives were adapted to the needs of the audience
14. The trainer explored the knowledge already available on the issue
15. Information was linked to participants' future tasks
16. Concrete examples were provided
17. Basic technical principles were explained
<b>Activities</b>
18. The participants were implicated actively in discussions or activities
19. The trainer's questions stimulated reflection

<b>The trainer</b>
20. Was interested by his or her topic
21. Showed interested in the participants
22. Adapted to the participants' level <u>of understanding</u>
23. Had an agreeable way of presenting and expressing him or herself
24. Had a flexible (non authoritarian) relationship with participants.
<b>Pedagogical material</b>
25. Transparencies were readable
26. Visual materials were easy to understand
27. Designs and graphics were explained
28. Supporting material was adapted
<b>Other</b>
29. The duration of the training was adapted
30. The venue (auditorium, learning room) (auditorium, learning room) was adapted
31. The environment (ambiance) was conducive to learning
<b>For case studies or group dynamics</b>
32. The exercises fostered exchange of experiences
33. The relationship between this exercise and the course was coherent
34. Participants participated actively

## Annex 2

### Participant evaluation form

Participants have the opportunity to provide written comments on the **content, approach and structure of the modules** in the boxes provided below

<b>Module</b>	<b>Comments on the content and the approach of the training (material appropriate, presentations, practicals etc)</b>	<b>Comments on the structure (timing, participation, clarity of presenter etc.)</b>
<b>1. Transmission</b>		
<b>2. Surveillance/early warning</b>		
<b>3. Informing and mobilizing the community</b>		
<b>4. Infection prevention and control</b>		
<b>5. Case management</b>		

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## Annex 3

PRE or POST training tests for participants (please circle pre or post)

	Questions	Answers
1.	Will an influenza pandemic occur?	
2.	Apart from the health issues, what other major issues should be considered during an influenza pandemic?	
3.	What is the principle mechanism of influenza transmission ?	
4.	What are the three most practical ways to decrease transmission of influenza?	
5.	Should one wait for laboratory results before responding to the initial cases of a possible influenza pandemic?	
6.	What are the main things to monitor about influenza cases once a pandemic has started?	

	Questions	Answers
7.	In practice, in health care facilities, how can influenza patients be separated from each other to decrease transmission?	
8.	During a pandemic, how can the nose and mouth be covered?	
9.	How should you treat or care for a patient with influenza during a pandemic?	
10.	In what circumstances should the patient be referred to a health care facility unit?	

## Annex 4

### Tests answers

	Questions	Answers
1.	Will an influenza pandemic occur?	<ul style="list-style-type: none"><li>• Yes</li></ul>
2.	Apart from the health issues, what other major issues should be considered during an influenza pandemic?	<ul style="list-style-type: none"><li>• Fear, panic, social disruption</li></ul>
3.	What is the principle mechanism of influenza transmission ?	<ul style="list-style-type: none"><li>• Large respiratory droplets (transmitted through coughing and sneezing)</li></ul>
4.	What are the three most practical ways to decrease transmission of influenza?	<ul style="list-style-type: none"><li>• Keep your distance – at least 1 metre away from people with respiratory symptoms</li><li>• Cover your mouth and nose when coughing or sneezing</li><li>• Wash your hands</li></ul>
5.	Should one wait for laboratory results before responding to the initial cases of a possible influenza pandemic?	<ul style="list-style-type: none"><li>• No</li></ul>
6.	What are the main things to monitor about influenza cases once a pandemic has started?	<ul style="list-style-type: none"><li>• When cases of influenza were first reported</li><li>• Are the numbers of cases increasing?</li><li>• Are the numbers of cases decreasing?</li></ul>

	Questions	Answers
7.	In practice, in health care facilities, how can influenza patients be separated from each other to decrease transmission?	<ul style="list-style-type: none"> <li>• Triage</li> <li>• Separate waiting areas for patients with respiratory symptoms and those with non-respiratory symptoms.</li> <li>• Separate inpatient facility for influenza patients</li> <li>• A distance of at least 1 metre between beds and patients</li> <li>• Head-to-toe positioning of beds if space is limited.</li> </ul>
8.	During a pandemic, how can the nose and mouth be covered?	<ul style="list-style-type: none"> <li>• Well-fitting masks</li> <li>• Scarf or piece of cloth tied at the back of the head, if there are no masks</li> </ul>
9.	How should you treat or care for a patient with influenza during a pandemic?	<ul style="list-style-type: none"> <li>• Encourage bed rest</li> <li>• Provide liquids</li> <li>• Offer food as tolerated</li> <li>• Administer medicine against fever</li> <li>• Separate the patient from those who are not sick</li> <li>• The patient should cover their mouth and nose if there is close contact anticipated with others</li> <li>• Assign one caregiver, if possible, to the patient</li> <li>• The caregiver should also wear a mask when in close contact with the patient.</li> <li>• Ensure hand hygiene is practised by everyone in the household</li> <li>• When possible, give early antiviral therapy</li> <li>• Give antibiotics for secondary bacterial infection(s)</li> </ul>
10.	In what circumstances should the patient be referred to a health care facility unit?	<ul style="list-style-type: none"> <li>• When there is shortness of breath or when breathing is difficult</li> </ul>