

WHO Critical Care Training Short Course

Clinical Management of Patients with Severe Forms of Influenza Infection



Learning Units

- 1: Introduction to critical care management of severe influenza infection
- 2: Diagnose severe forms of influenza infection
- 3: Deliver oxygen therapy
- 4: Formulate differential diagnosis and collect specimen
- 5: Deliver targeted resuscitation to patient with severe sepsis or septic shock
- 6: Monitor the patient
- 7: Deliver antimicrobial therapy and modify treatment plan
- 8: Deliver lung protective mechanical ventilation to patients with ARDS
- 9: Deliver targeted sedation and prevent delirium
- 10: Formulate a treatment plan to prevent complications
- 11: Liberate patient from mechanical ventilation using spontaneous breathing trial
- 12: Deliver quality critical care services
- 13: Implement measures to prevent infection when caring for patients with influenza-like-illness
- 14: Apply ethical principles in medical decision making

Background

Severe lower respiratory infections are a major cause of illness and death worldwide, and influenza contributes an unknown amount to this burden. In low- and middle-income countries (LMICs), and particularly in rural areas, the quality of critical care provided to patients is often inadequate. This may be due to a lack of appropriate equipment, supplies, and technologies.

The shortage of qualified human resources is another issue. Critically ill patients often receive care from unsupervised health personnel with little or no relevant training. To address this challenge, the World Health Organization (WHO) developed the Critical Care Training Short Course.

Course Aim

To build health worker capacity in the critical care management of patients with severe forms of influenza infection (e.g., severe pneumonia, acute respiratory distress syndrome – ARDS, severe sepsis, septic shock).

Target Group

Non-specialist health care workers working in intensive care units (ICUs) in district and tertiary hospitals in LMICs.

Learning Outcomes

Participants will be able to: recognize patients with severe forms of influenza infection; deliver appropriate treatment; monitor critically ill patients; and prepare the ICU to manage cases in an appropriate and safe way.

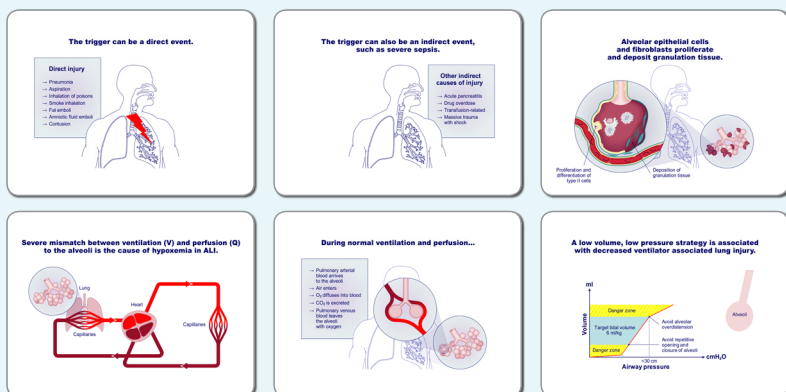
Learning Approach

Developed with 33 critical care experts and training specialists, the Critical Care course offers an innovative, **step-by-step learning approach** that simulates the working environment (from hospital admission to discharge).

Fully **interactive**, participants immediately put theory to practice through role-plays with five different patient profiles.

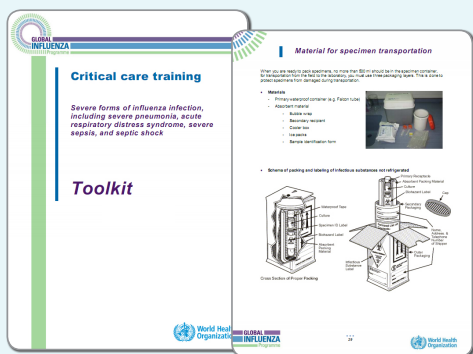
Lectures with Animated Films

For all 14 learning units, course instructors give a short presentation. Short animated films help to explain the most difficult concepts.



Toolkit

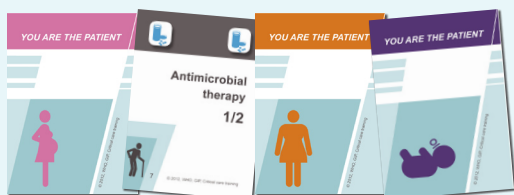
A hands-on practical guide provides participants with key tools (i.e. algorithms, checklists, information tables) conveniently organized by topic and complete with references. Instructors refer to the Toolkit during lectures, and participants use it during role-plays and take it back with them to the workplace.



Role-plays

Participants take turns playing the role of clinician and patient.

- Pregnant woman with suspected severe sepsis
- Elderly man with diabetes and chronic kidney disease with suspected severe pneumonia
- Adult man with HIV and suspected septic shock
- Obese adult woman with suspected ARDS
- Infant with suspected severe pneumonia and ARDS



Instructor Guide

A highly detailed, step-by-step guide provides instructors with information to prepare and deliver the three-day training. Features include learning objectives, voice-overs for all lectures, answers to role-play questions, sample schedule, participant satisfaction survey, and pre- and post-tests.

Additional Feature: Convenient and Up-to-Date Information

Learning materials are available electronically so that participants can refer back to them while on the job. Training content is updated regularly to account for new WHO guidelines, scientific findings, and local context.

For more information, please contact: influenzatraining@who.int

2 Pilots, Big Impact



1: Trinidad and Tobago, 5-7 April 2011

Collaboration between WHO/PAHO, 11 ministries of health, 1 anesthetist from Port of Spain General Hospital, and 2 critical care experts from the WHO network.

Results: 29 health workers trained (17 doctors, 8 nurses, 3 medical officers, 1 administrator). Average test score from pre- and post-tests showed a 22% improvement (58% to 80%). Participants rated workshop structure and teaching methods highly.



2: Indonesia, 30 April-3 May 2012

Collaboration between WHO, the Indonesian Ministry of Health, Indonesian Society of Intensive Care Medicine (PERDICI), and 3 critical care experts from WHO network.

Results: 38 participants trained (18 doctors, 20 nurses) representing 10 provinces and most working at public HPAI referral hospitals. Average test score from pre- and post-tests showed a 19% improvement (56% to 75%). Participants rated workshop structure and teaching methods highly.