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# Preventing the Transmission of Avian or Pandemic Influenza in Health Care Facilities with Limited Resources: Learning Resource Package

## Course Handbook for Participants

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In the development of this learning resource package, the editors referred to the latest World Health Organization and U.S. Centers for Disease Control and Prevention recommendations for service providers on preventing the transmission of avian or pandemic influenza in health care facilities.

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*February 2008*

**PREVENTING THE TRANSMISSION OF AVIAN OR PANDEMIC INFLUENZA IN HEALTH CARE FACILITIES WITH LIMITED RESOURCES: LEARNING RESOURCE PACKAGE**

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# TRAINING APPROACH OVERVIEW

## BEFORE STARTING THIS WORKSHOP

This workshop will be conducted in a way that is different from traditional training courses. First of all, it is based on the assumption that people participate in the workshop because they:

- Are interested in the topic
- Wish to improve their knowledge or skills, and thus their job performance
- Desire to be actively **involved** in course activities

**WHAT I HEAR, I FORGET;  
WHAT I SEE, I REMEMBER;  
WHAT I DO, I UNDERSTAND.**

*Confucius*

To be effective, clinical trainers must use appropriate training strategies, particularly “hands-on” training techniques, which are best reflected in this ancient Chinese proverb.

The training approach used in this workshop stresses the importance of the cost-effective use of resources and application of relevant educational technologies including humane training techniques. The latter encompass the use of anatomical models and equipment used for infection prevention, or simulation in a model isolation room, to minimize risk to the participants and patients, and also to facilitate learning.

## MASTERY LEARNING

**The mastery learning approach** assumes that all participants can master (learn) the required knowledge, attitudes or skills provided **sufficient time is allowed and appropriate learning methods are used**. The goal of mastery learning is that 100 percent of the participants will “master” the knowledge and skills on which the learning is based.

Mastery learning is used extensively in in-service training where the number of participants, who may be practicing clinicians, is often small. Although the principles of mastery learning can be applied in pre-service education, the larger number of participants presents some challenges.

Although some participants are able to acquire new knowledge or new skills immediately, others may require additional time or alternative learning methods before they are able to demonstrate mastery. Not only do people vary in their abilities to absorb new material, but individuals

also learn best in different ways—through written, spoken or visual means. Effective learning strategies, such as mastery learning, take these differences into account and use a variety of teaching methods.

The mastery learning approach also enables the participant to have a **self-directed learning experience**. This is achieved by having the trainer serve as facilitator and by changing the concept of testing and how test results are used. Moreover, the philosophy underlying the mastery learning approach is one of **continual assessment of learning**, in which the trainer regularly informs participants of their progress in learning new information and skills.

With the mastery learning approach, assessment of learning is:

- Competency-based, which means assessment is keyed to the learning objectives and emphasizes acquiring the essential skills and attitudinal concepts needed to perform a job, not just to acquiring new knowledge.
- Dynamic, because it enables participants to receive continual feedback on how successful they are in meeting the course objectives.
- Less stressful, because from the outset participants, both individually and as a group, know what they are expected to learn, know where to find the information and have ample opportunity for discussion with the trainer.

## KEY FEATURES OF EFFECTIVE CLINICAL TRAINING

Mastery learning is based on principles of adult learning. This means that learning is participatory, relevant and practical. It builds on what the participant already knows or has experienced, and provides opportunities for practicing skills. Key features of mastery learning are that it:

- Uses behavior modeling,
- Is competency-based, and
- Incorporates humanistic learning techniques.

### Behavior Modeling

Social learning theory states that when conditions are ideal, a person learns most rapidly and effectively from watching someone else perform (model) a skill or activity. For modeling to be successful, however, the trainer must clearly demonstrate the skill or activity so that participants have a clear picture of the performance expected of them.

Behavior modeling, or observational learning, takes place in three stages. In the first stage, **skill acquisition**, the participant sees others perform the procedure and acquires a mental picture of the required steps. Once

the mental image is acquired, the participant attempts to perform the procedure, usually with supervision. Next, the participant practices until **skill competency** is achieved, and s/he feels confident performing the procedure. The final stage, **skill proficiency**, occurs with repeated practice over time.

<i>Skill Acquisition</i>	Knows the steps and their sequence (if necessary) to perform the required skill or activity but <b>needs assistance</b>
<i>Skill Competency</i>	Knows the steps and their sequence (if necessary) and <b>can perform</b> the required skill
<i>Skill Proficiency</i>	Knows the steps and their sequence (if necessary) and <b>effectively performs</b> the required skill or activity

## COMPETENCY-BASED TRAINING

Competency-based training (CBT) is learning by doing. It focuses on the specific knowledge, attitudes and skills needed to carry out the procedure or activity. **How the participant performs** (i.e., a combination of knowledge, attitudes and, most important, skills) is emphasized rather than just the information learned. Competency in the new skill or activity is assessed objectively by evaluating overall performance.

To successfully accomplish CBT, **the clinical skill** or activity to be taught must be broken down into its **essential steps**. Each step is then analyzed to determine the **most efficient and safe way to perform and learn it**. The process is called **standardization**. Once a procedure, such as wearing protective suits, has been standardized, competency-based learning guides and evaluation checklists can be developed to make learning the necessary steps or tasks easier and evaluating the participant's performance more objective.

An essential component of CBT is **coaching**, in which the classroom or clinical trainer first explains a skill or activity and then demonstrates it using a simulation model or other training aid, such as a video. Once the procedure has been demonstrated and discussed, the trainer then observes and interacts with participants to guide them in learning the skill or activity, monitoring their progress and helping them overcome problems.

The coaching process ensures that the participant receives feedback regarding performance:

- **Before practice**—The trainer and participants meet briefly before each practice session to review the skill/activity, including the steps/tasks that will be emphasized during the session.
- **During practice**—The trainer observes, coaches and provides feedback to the participant as s/he performs the steps/tasks outlined in the learning guide.
- **After practice**—Immediately after practice, the trainer uses the learning guide to discuss the strengths of the participant’s performance and also offer specific suggestions for improvement.

## HUMANISTIC TRAINING TECHNIQUE

The use of more humane (humanistic) techniques allows the participant to learn and practice new skills in a simulation rather than during an actual situation or with a patient, which then contributes to better clinical learning. This reduces stress for the participant as well as risk of injury and discomfort to the patient or the participant. Thus, effective use of models (humanistic approach) is an important factor in improving the quality of clinical training and, ultimately, service provision.

Before a participant performs a clinical procedure at the actual clinical setting, two learning activities should occur:

- The **clinical trainer** should **demonstrate** the required skills and patient interactions several times using an anatomic model, role plays or simulations.
- Under the guidance of the trainer, the **participant should practice** the required skills and patient interactions using the model, role plays or simulations and actual instruments in a setting that is as similar as possible to the real situation.

Only when **skill competency** has been demonstrated should participants have their first contact with a patient.

This often presents challenges in a setting where there are large numbers of participants. Before any participant provides services to a patient, however, it is important that the participant demonstrate skill competency using models, role plays or simulations, especially for core skills.

When mastery learning, which is based on adult learning principles and behavior modeling, is integrated with CBT, the result is a powerful and extremely effective method for providing clinical training. And when humanistic training techniques, such as using anatomic models and other learning aids, are incorporated, training time and costs can be significantly reduced.

## COMPONENTS OF THE AVIAN OR PANDEMIC INFLUENZA WORKSHOP PACKAGE

This clinical workshop is based on the following components:

- A **reference manual** and additional reference materials containing the need-to-know information. The reference manual recommended for this course is *Preventing the Transmission of Avian or Pandemic Influenza in Health Care Facilities with Limited Resources*. For the most current information on avian influenza, the participant and trainer are also referred to the following Web sites of the Centers for Disease Control and Prevention (CDC) and the World Health Organization (WHO):  
  
(<http://www.cdc.gov/flu/avian/>)  
([http://www.who.int/csr/disease/avian\\_influenza/en/](http://www.who.int/csr/disease/avian_influenza/en/)).
- A **participant's handbook** containing the course schedule and description, learning guides and skills checklists.
- A **trainer's notebook**, which includes all participant handbook contents plus the answer key for the questionnaire.

## USING THE LEARNING RESOURCE PACKAGE

In designing the training materials for this course, particular attention has been paid to making them “user-friendly” and to permitting the course participants and clinical trainer the widest possible latitude in adapting the training to the participants’ (group and individual) learning needs. For example, at the beginning of each course an assessment is made of each participant’s knowledge. The results of this pre-course assessment are then used jointly by the participants and the advanced or master trainer to adapt the course content as needed so that the training focuses on acquisition of **new** information and skills.

A second feature relates to the use of the reference manual and participant’s handbook. The **reference manual** and the additional reference materials are designed to provide all of the essential information needed to conduct the course in a logical manner. Because they serve as the “text” for the participants and the “reference source” for the trainer, special handouts or supplemental materials are not needed. In addition, because the manual and additional reference materials contain **only** information that is consistent with the course goals and objectives, they become an integral part of all classroom activities, such as giving an illustrated lecture or leading a discussion.

The **participant’s handbook**, on the other hand, serves a dual function. First, and foremost, it is the road map that guides the participant through each phase of the course. It contains the course syllabus and course

schedule, checklists and learning guides as well as picture job aids needed during the course.

The **trainer's notebook** contains the same material as the participant's handbook as well as material for the trainer. In addition, it contains the answer key to the questionnaire.

In keeping with the training philosophy on which this course is based, all training activities will be conducted in an interactive, participatory manner. To accomplish this requires that the role of the trainer continually change throughout the course. For example, the trainer is an **instructor** when presenting a classroom demonstration; a **facilitator** when conducting small group discussions or using role plays; and shifts to the role of **coach** when helping participants practice a procedure. Finally, when objectively assessing performance, the trainer serves as an **evaluator**.

**In summary**, the CBT approach used in this course incorporates a number of key features. **First**, it is based on adult learning principles, which means that it is interactive, relevant and practical. Moreover, it requires that the trainer facilitate the learning experience rather than serve in the more traditional role of an instructor or lecturer. **Second**, it involves use of behavior modeling to facilitate learning a standardized way of performing a skill or activity. **Third**, it is competency-based. This means that evaluation is based on **how well** the participant performs the procedure or activity, not just on **how much** has been learned. **Fourth**, where possible, it relies heavily on the use of anatomic models and other training aids (i.e., it is humanistic) to enable participants to practice repeatedly the standardized way of performing a skill or activity **before** working with clients. Thus by the time the trainer evaluates each participant's performance, using a checklist, **every** participant should be able to perform **every** skill or activity competently. **This is the ultimate measure of training.**

# WORKSHOP DESCRIPTION

## WORKSHOP DESIGN

This workshop was developed to guide clinicians (doctors, nurses or midwives) and other health workers who are or will be caring for patients with avian or pandemic influenza to implement effective infection prevention and control practices at their health care facility. The design of this workshop is based on the assumption that the participants are qualified service providers who have basic infection prevention skills and are familiar with infection prevention principles.

This workshop has three components:

- Review of infection prevention and control practices for avian or pandemic influenza. Clinician participants will participate in sessions on Standard Precautions and Transmission-Based Precautions, combined precautions for avian influenza, caring for patients with avian influenza, etc., including such procedures as handwashing, gloving and the use of personal protective equipment.
- Clinical skill practice. Opportunity is provided during the workshop for practice of clinical skills in a simulated environment. Individual skills relevant to caring for a patient with avian influenza or pandemic will be demonstrated and then practiced under supervision in order for the participant to gain competence in the necessary skills.
- Small group work. Participants will work in groups (by department or by facility) to identify gaps and develop implementation and follow-up plans to prevent the spread of avian or pandemic influenza in the health care facility.

The three components of the workshop may be modified or expanded depending on the composition of the group and needs of the participants.

The workshop builds on each participant's past knowledge and takes advantage of her/his high motivation to accomplish the learning tasks in the minimum time. Training emphasizes **doing**, not just knowing, and uses **competency-based evaluation** of performance.

Specific characteristics of this workshop are as follows:

- During the morning of the first day, participants demonstrate their knowledge of infection prevention and control by completing a written initial knowledge assessment. In addition, the clinical trainer continually carries out clinical assessment in the simulated environment.

- Classroom and clinical sessions focus on key aspects of infection prevention and control, particularly on Standard Precautions and Transmission-Based Precautions.
- Progress in learning new skills is documented using the clinical skills learning guides.
- A clinical trainer uses competency-based skills checklists to evaluate each participant's performance.

Participants' successful completion of the workshop is based on their mastery of the knowledge and skills components.

## WORKSHOP SYLLABUS

**Workshop Description.** This 2-day workshop is designed to prepare participants to apply updated knowledge and skills in infection prevention and control focusing on Standard and Transmission-Based Precautions against the transmission of avian or pandemic influenza at their institution, through a humanistic and participative approach to learning.

**Workshop Goals.** To prepare competent health care workers who can provide effective care in preventing the spread of avian or pandemic influenza in the health care facility.

### Participant Learning Objectives

By the end of the training workshop, the participant will:

- Understand the fundamentals of infection prevention and control for health care providers related to preventing transmission of avian influenza.
- Understand what the precautions are for infection prevention and control in avian influenza and understand how to use them to prevent secondary transmission of avian influenza in health care facilities.
- Know when to use avian influenza precautions in the health care setting.
- Be able to prepare for implementing effective infection prevention and control practices to prevent the transmission of avian influenza in the health care facility.

### Training/Learning Methods

- Illustrated lectures and group discussion
- Individual and group exercise
- Simulated practice with models

- Case studies
- Role plays

### **Training Materials**

- Reference manual: *Preventing the Transmission of Avian or Pandemic Influenza in Health Care Facilities with Limited Resources*
- Participant's Handbook
- Trainer's Notebook
- Infection prevention equipment and materials
- PowerPoint presentations
- For reference on general infection prevention practices, it is suggested that copies of the following Jhpiego manual be available during the workshop: Tietjen L, Bossemeyer D and McIntosh N. 2003. *Infection Prevention Guidelines for Healthcare Facilities with Limited Resources*. Jhpiego: Baltimore, MD.

### **Participant Selection Criteria**

Participants for this workshop may be practicing clinicians (doctors, midwives and/or nurses with midwifery skills) and other staff (administrators, department heads, lab staff) who are capable of providing consistent institutional support for implementation of infection prevention practices (e.g., supplies, equipment, supervision, linkages with referral facilities, etc.).

- Participants should have the support of their supervisors or managers in order to achieve improved job performance after completing the workshop. In particular, participants should be prepared to communicate with supervisors or managers about the workshop and seek endorsement for training, encouragement for attendance and participation, and involvement in the transfer of new knowledge and skills to their jobs. Participants should also be prepared to discuss with their supervisors and managers the level of support (both administrative and material) they might need to incorporate preventive measures against avian influenza into the health care facility practices.

### **Methods of Evaluation**

- Initial Knowledge Assessment and Workshop Knowledge Questionnaire
- Learning Guides and Checklists

### **Workshop Duration**

- Two 8-hour days, with 1-hour lunch each day

### **Suggested Workshop Composition**

- One facilitator for each five participants

**MODEL WORKSHOP SCHEDULE FOR  
PREVENTING THE TRANSMISSION OF AVIAN OR PANDEMIC INFLUENZA**

<b>DAY 1</b>	<b>DAY 2</b>
<b>08:00–12:30</b>	<b>08:00–12:30</b>
<p><b>Opening:</b></p> <ul style="list-style-type: none"> <li>• Welcome</li> <li>• Participant expectations</li> </ul> <p><b>Overview of the Workshop:</b></p> <ul style="list-style-type: none"> <li>• Goals and objectives</li> <li>• Review of workshop material</li> </ul> <p><b>Initial Knowledge Assessment</b></p> <p><b>Presentation/Discussion:</b></p> <ul style="list-style-type: none"> <li>• Avian/pandemic influenza update information</li> <li>• Transmission of avian or pandemic flu (API)</li> <li>• Recognition of possible avian flu in humans</li> <li>• Standard Precautions (overview)</li> </ul> <p><b>Presentation/Discussion:</b></p> <ul style="list-style-type: none"> <li>• Hand hygiene: Behavior change</li> <li>• Personal protective equipment (PPE): <ul style="list-style-type: none"> <li>– Fit testing: Particulate respirators</li> <li>– APPR: Air-powered particulate respirators</li> </ul> </li> </ul>	<p><b>Agenda and Warm-Up</b></p> <p><b>Presentations and Discussion</b> of Case Studies</p> <p><b>Workshop Knowledge Questionnaire</b></p> <p><b>Small Group Activity</b> (brainstorming): Gap identification: Preparedness of <b>your</b> health care facility for management of API cases:</p> <ul style="list-style-type: none"> <li>• Standard Precautions</li> <li>• Transmission-Based Precautions</li> <li>• Facility: <ul style="list-style-type: none"> <li>– Triage/Outpatient Department/ Emergency care</li> <li>– Private rooms/wards: Options for isolation of API patients</li> <li>– Consumable and durable resources</li> </ul> </li> <li>• Patient/family education</li> <li>• Pandemic – Worst case scenario plans</li> </ul>
<b>12:30–13:30 LUNCH</b>	
<b>13:30–17:00</b>	<b>13:30–17:00</b>
<p><b>Demonstration/Exercise:</b> Set up room/ward so that health care workers are able to comply with Standard Precautions, including hand hygiene and use of PPE (demonstrate all infection prevention skills):</p> <ul style="list-style-type: none"> <li>• Health care workers entering/exiting</li> <li>• Linens</li> <li>• Dietary</li> <li>• Waste disposal</li> <li>• Family entering/exiting</li> </ul> <p><b>Presentation/Discussion:</b></p> <ul style="list-style-type: none"> <li>• Transmission-Based Precautions: <ul style="list-style-type: none"> <li>– Contact Precautions</li> <li>– Airborne Precautions</li> <li>– Droplet Precautions</li> </ul> </li> </ul> <p><b>Exercise: Infectious Disease Transmission Cycle</b></p> <p><b>Presentation/Discussion:</b></p> <ul style="list-style-type: none"> <li>• Respiratory hygiene/cough etiquette</li> <li>• Additional infection prevention measures for patients with API (isolation rooms including negative pressure rooms, etc.)</li> </ul> <p><b>Small Group Work:</b> Case studies</p> <p><b>Summary of Day</b></p>	<p><b>Review Knowledge Questionnaire</b></p> <p><b>Small Group Activity:</b> Gap identification (continued)</p> <p><b>Small Group Activity:</b> Development of individual/team implementation and follow-up plans</p> <p><b>Presentations:</b> Implementation and follow-up plans</p> <p><b>Follow-Up Plan Summary and Discussions</b></p> <p><b>Closing</b></p>

# INITIAL KNOWLEDGE ASSESSEMENT

## HOW THE RESULTS WILL BE USED

The main objective of the **Initial Knowledge Assessment** is to assist both the **trainer** and the **participant** as they begin their work together in the workshop by finding out what the participants, individually and as a group, know about the workshop topics. This allows the trainer to identify topics that may need to be stressed during the workshop. Providing the results of the initial assessment to the participants helps them to focus on their individual learning needs. In addition, the questions show the participants the content that will be presented in the workshop.

The questions are given in the true/false format. A special form, the **Individual and Group Assessment Matrix**, is provided to record the scores of all workshop participants. Using this form, the trainer and participants can quickly chart the number of correct answers for each of the questions. By examining the data in the matrix, the group members can easily determine their collective strengths and weaknesses and jointly plan with the trainer how to best use the workshop time to achieve the desired learning objectives.

**For the trainer**, the results of the assessment will show which topics may need more emphasis during the learning sessions. Conversely, for the categories where 85% or more of participants answer the questions correctly, the trainer may choose to spend some of the allotted time on other content.

# INITIAL KNOWLEDGE ASSESSMENT AND ANSWER SHEET

**Instructions:** In the space provided, print a capital **T** if the statement is **true** or a capital **F** if the statement is **false**.

## AVIAN OR PANDEMIC INFLUENZA

1. Avian influenza is caused by bacteria that can affect birds and humans. \_\_\_\_\_
2. Human-to-human transmission of avian influenza occurs frequently. \_\_\_\_\_
3. All patients with a history of travel within 10 days to an area with avian influenza and are hospitalized with severe respiratory febrile illness should be managed with Transmission-Based (expanded) Precautions. \_\_\_\_\_
4. Avian influenza is especially dangerous to the very young and very old. \_\_\_\_\_
5. Avian influenza occurs naturally in all wild birds. \_\_\_\_\_

## INFECTION PREVENTION AND CONTROL FOR AVIAN OR PANDEMIC INFLUENZA

6. Standard Precautions are designed for patients who are known or suspected to be infected with highly transmissible pathogens. \_\_\_\_\_
7. Patients with avian influenza symptoms should be isolated for 10 days from the onset of the symptoms. \_\_\_\_\_
8. A surgical mask should be worn by all personnel when caring for avian influenza patients. \_\_\_\_\_
9. The three types of Transmission-Based Precautions that are recommended to prevent transmission of avian or pandemic influenza to humans are contact precautions, droplet precautions and airborne precautions. \_\_\_\_\_
10. Each disease has only one route of transmission. \_\_\_\_\_
11. The single most important practice for reducing the transmission of pathological organisms within a health care facility is handwashing. \_\_\_\_\_

## PATIENT CARE DURING AN OUTBREAK OF AVIAN OR PANDEMIC INFLUENZA

12. A patient with avian or pandemic influenza should never be placed alone in a single room. \_\_\_\_\_
13. All health care workers and visitors entering the isolation areas must sign in with their names and contact information, \_\_\_\_\_
14. It is not necessary to clean the avian/pandemic influenza patient's room every day. \_\_\_\_\_
15. Health care workers should follow Standard Precautions when caring for a deceased patient. \_\_\_\_\_
16. Air from the air conditioning in the health care facility should flow from the room to the outside adjacent space (e.g., the corridor). This is known as "negative pressure." \_\_\_\_\_

## **PROTECTING THE HEALTH OF STAFF AND VISITORS**

17. Health care workers who are expected to have contact with the API virus should be vaccinated against seasonal influenza as soon as possible. \_\_\_\_\_
18. If a health care worker develops fever or respiratory symptoms within 10 days of unprotected exposure to an API patient, he or she should be excluded from duty. \_\_\_\_\_
19. Adults who have had a fever should not visit patients in the health care facility until 3 days after resolution of their fever. \_\_\_\_\_
20. If a family or friend will visit the health care facility and have direct contact with a patient with suspected or confirmed API, he/she must wear personal protective equipment (PPE). \_\_\_\_\_

## **PLANNING AND PREPAREDNESS FOR AVIAN OR PANDEMIC INFLUENZA**

21. In the case of a severe pandemic, the clinical disease attack rate in the overall population would likely be approximately 10%. \_\_\_\_\_
22. Medical facilities and health administration should plan and prepare for a possible pandemic now, even if there is no evidence of human-to-human transmission. \_\_\_\_\_
23. Because widespread human-to-human transmission has not yet occurred, the health care facility administration does not have to discuss with the staff their roles and responsibilities during a pandemic; people will understand what they should do when the time comes. \_\_\_\_\_
24. Once an outbreak of avian or pandemic influenza is confirmed, the need for facility-level surveillance will diminish. \_\_\_\_\_
25. There is no need to develop a communication plan prior to a pandemic because it is impossible to predict which messages will be needed for specific populations. \_\_\_\_\_

## INDIVIDUAL AND GROUP ASSESSMENT MATRIX

WORKSHOP: \_\_\_\_\_ DATES: \_\_\_\_\_ TRAINER(S): \_\_\_\_\_

Question Number	CORRECT ANSWERS (Participants)																								CATEGORIES	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1																										<b>Avian or Pandemic Influenza</b>
2																										
3																										
4																										
5																										
6																										<b>Infection Prevention and Control Practices for Preventing Avian or Pandemic Influenza</b>
7																										
8																										
9																										
10																										
11																										

Question Number	CORRECT ANSWERS (Participants)																								CATEGORIES	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
12																										<b>Patient Care during an Outbreak of Avian or Pandemic Influenza</b>
13																										
14																										
15																										
16																										
17																										<b>Protecting the Health of Staff and Visitors</b>
18																										
19																										
20																										
21																										<b>Planning and Preparedness for Avian or Pandemic Influenza</b>
22																										
23																										
24																										
25																										

# LEARNING GUIDES AND CHECKLISTS FOR INFECTION PREVENTION AND CONTROL SKILLS

## USING THE LEARNING GUIDES AND CHECKLISTS

The learning guides for infection prevention and control skills contain the tasks or activities performed by the health care provider in caring for patients with avian or pandemic influenza. The checklists contain the key tasks, skills and activities performed by the health care provider.

The participant is not expected to perform all of the steps or tasks correctly the first time s/he practices them. Instead, the learning guides and checklists are intended to:

- Help the participant in learning the correct steps and the order in which they should be performed (skill acquisition); and
- Measure progressive learning in small steps as the participant gains confidence and skill (skill competency).

Used consistently, the learning guides and checklists help participants measure their progress and stay focused on the key steps or tasks. Furthermore, the learning guide is designed to make communication (coaching and feedback) between the participant and clinical trainer easier and more helpful.

Because the learning guide is used to help in developing skills, it is important that the rating (scoring) be done as carefully and objectively as possible. The participant's performance of each step is rated on a three-point scale as follows:

- 1 Needs Improvement:** Step or task not performed correctly and/or out of order (if necessary) or is omitted
- 2 Competently Performed:** Step or task performed correctly in correct order (if necessary), but participant does not progress from step to step efficiently
- 3 Proficiently Performed:** Step or task efficiently and precisely performed in the correct order (if necessary)

The checklist focuses only on the key tasks performed and skills and activities used. The checklist can be used during role play simulations by an observer, by the participant as a self-assessment form, or by the clinical trainer to evaluate the participant's performance at the end of the workshop. The rating scale used is described below:

**Satisfactory:** Performs the step or task according to the standard procedure or guidelines

**Unsatisfactory:** Unable to perform the step or task according to the standard procedure or guidelines

**Not Observed:** Step, task or skill not performed by participant during evaluation by trainer

# LEARNING GUIDE FOR INFECTION PREVENTION AND CONTROL: HANDWASHING

(To be used by Participants)

Rate the performance of each step or task observed using the following rating scale:

- 1 Needs Improvement:** Step or task not performed correctly or out of sequence (if necessary) or is omitted
- 2 Competently Performed:** Step or task performed correctly in proper sequence (if necessary) but participant does not progress from step to step efficiently
- 3 Proficiently Performed:** Step or task efficiently and precisely performed in the proper sequence (if necessary)

LEARNING GUIDE FOR HANDWASHING					
STEP/TASK	CASES				
<b>PREPARATION</b>					
1. Identify source of clean water (tap or other source).					
2. Check flow of the water (tap, shower) and waste water container if no drains.					
3. Use personal towel or paper towel (if available).					
4. Prepare waste basket for used paper towel.					
5. Locate hand soap. Antiseptic is not required.					
<b>WASHING HANDS</b>					
1. Turn on tap and maintain straight stream of water.					
2. Avoid splashing clothes or other parts of the body.					
3. Thoroughly rinse both hands.					
4. Vigorously rub all areas of hands and fingers together for at least 10–15 seconds, paying close attention to areas under fingernails and between fingers.					
5. Rinse hands thoroughly with clean water.					
6. Dry hands with a paper towel and use the towel to turn off the faucet, or air dry hands.					
7. Throw paper towel into the basket (if using personal towel, hang and allow it to air dry).					

**Notes:**

- If bar soap is used, provide small bars and soap racks that drain. Cut a large bar of soap into small, matchbox-size pieces.
- Avoid dipping hands into basins containing standing water. Even with the addition of an antiseptic agent, such as Dettol® or Savlon®, microorganisms can survive and multiply in these solutions.
- Do not add soap to a partially empty liquid soap dispenser. This practice of “topping off” dispensers may lead to bacterial contamination of the soap.
- When no running water is available, use a bucket with a tap that can be turned off to lather hands and turned on again for rinsing, or use a bucket and pitcher.

<p><b>Note:</b> Used water should be collected in a basin and discarded in a latrine if a drain is not available.</p>
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# LEARNING GUIDES FOR INFECTION PREVENTION AND CONTROL: DONNING AND REMOVING PPE

(To be used by Participants)

Rate the performance of each step or task observed using the following rating scale:

- 1 Needs Improvement:** Step or task not performed correctly or out of sequence (if necessary) or is omitted
- 2 Competently Performed:** Step or task performed correctly in proper sequence (if necessary) but participant does not progress from step to step efficiently
- 3 Proficiently Performed:** Step or task efficiently and precisely performed in the proper sequence (if necessary)

LEARNING GUIDE FOR <i>DONNING</i> PPE					
STEP/TASK	CASES				
<b>PREPARATION</b>					
1. Don PPE before contact with the patient, generally before entering the room.					
2. Check that you have all the PPE you need (gloves, gown, goggles or face shield, and mask or respirator).					
3. Wash hands with soap or use alcohol-based handrub.					
<b>DONNING PPE</b>					
<b>Gown</b>					
1. Fully cover torso from neck to knees, arms to end of wrists, and wrap it around the back.					
2. Fasten at the back of the neck and waist.					
<b>Mask or Respirator</b>					
3. Secure ties or elastic bands at middle of head and neck.					
4. Fit flexible band to nose bridge.					
5. Fit snugly to face and below chin.					
6. Check fit of respirator.					
7. Rinse hands thoroughly with clean water.					
8. Dry hands with a paper towel and use the towel to turn off the faucet, or air dry hands.					
9. Throw the paper towel into the basket (if using personal towel, hang and allow it to air dry).					

LEARNING GUIDE FOR <i>DONNING</i> PPE					
STEP/TASK	CASES				
<b>Goggles or Face Shield</b>					
10. Place over face and eyes and adjust to fit.					
<b>Gloves</b>					
11. Extend them to cover wrists of isolation gown.					

LEARNING GUIDE FOR <i>REMOVING</i> PPE					
STEP/TASK	CASES				
<b>PREPARATION</b>					
1. Stand at patient's room doorway or in anteroom.					
<b>REMOVING PPE</b>					
<b>Gloves</b> (Remember that the outside of the gloves is contaminated!)					
1. Grasp the outside of glove with opposite gloved hand; peel off.					
2. Hold removed glove in gloved hand.					
3. Slide fingers of ungloved hand under remaining glove at wrist.					
4. Peel glove off over first glove.					
5. Discard gloves in waste container.					
<b>Goggles or Face Shield</b> (Remember that the outside of the goggles or face shield is contaminated!)					
6. To remove, handle by headband or ear pieces.					
7. Place in designated receptacle for reprocessing or in waste container.					
<b>Gown</b> (Remember that the gown front and sleeves are contaminated!)					
8. Unfasten tie.					
9. Pull away from neck and shoulders, touching inside of gown only.					
10. Turn gown inside out.					
11. Fold or roll into a bundle and discard.					
<b>Mask or Respirator</b> (Remember, the front of the mask or respirator is contaminated— <b>DO NOT TOUCH!</b> )					
12. Leave the patient's room and close the door.					

LEARNING GUIDE FOR <i>REMOVING</i> PPE				
STEP/TASK	CASES			
13. Grasp the bottom, then the top ties or elastics and remove.				
14. Discard in waste container.				
15. Wash hands with soap or use alcohol-based handrub.				

**Note:** Combination of PPE will affect sequence—be practical!

# CHECKLIST FOR INFECTION PREVENTION AND CONTROL: HANDWASHING

Rate the performance of each step or task observed using the following rating scale:

- 1 Satisfactory:** Performs the step or task according to the standard procedure or guidelines
- 2 Unsatisfactory:** Unable to perform the step or task according to the standard procedure or guidelines
- 3 Not Observed:** Step, task or skill not performed by participant during evaluation by trainer

CHECKLIST FOR HANDWASHING					
STEP/TASK	CASES				
<b>PREPARATION</b>					
1. Check flow of clean water (tap, shower) and waste water container if no drains.					
2. Ready personal towel or paper towel.					
3. Locate soap.					
<b>SKILL/ACTIVITY PERFORMED SATISFACTORILY</b>					
<b>WASHING HANDS</b>					
1. Moisten hands thoroughly with soap and running water.					
2. Thoroughly rub all areas of hands and fingers together for at least 10–15 seconds.					
3. Rinse hands thoroughly with clean water.					
4. Dry hands with a paper towel or personal towel and use the towel to turn off the faucet, or air dry hands.					
5. Throw paper towel into the basket (if using personal towel, hang and allow to air dry).					
<b>SKILL/ACTIVITY PERFORMED SATISFACTORILY</b>					

**Note:** Used water should be collected in a basin and discarded in a latrine if a drain is not available.

# CHECKLIST FOR INFECTION PREVENTION AND CONTROL: DONNING AND REMOVING PPE

Rate the performance of each step or task observed using the following rating scale:

- 1 Satisfactory:** Performs the step or task according to the standard procedure or guidelines
- 2 Unsatisfactory:** Unable to perform the step or task according to the standard procedure or guidelines
- 3 Not Observed:** Step, task or skill not performed by participant during evaluation by trainer

CHECKLIST FOR DONNING AND REMOVING PPE					
STEP/TASK	CASES				
<b>DONNING PPE</b>					
1. Don before contact with the patient.					
2. Check that all PPE is available.					
3. Wash hands with soap or use alcohol-based handrub.					
4. Don PPE in the following sequence: <ul style="list-style-type: none"> <li>a. Gown first</li> <li>b. Mask or respirator</li> <li>c. Goggles or face shield</li> <li>d. Gloves</li> </ul>					
<b>SKILL/ACTIVITY PERFORMED SATISFACTORILY</b>					
<b>REMOVING PPE</b>					
1. Stand at patient's room doorway or in anteroom.					
2. Remove PPE in the following sequence (not touching contaminated parts) and discard them in waste container: <ul style="list-style-type: none"> <li>a. Gloves</li> <li>b. Goggles or face shield</li> <li>c. Gown</li> </ul>					
3. Leave the patient's room and close the door.					
4. Remove mask or respirator and discard in waste container.					
5. Wash hands with soap or use alcohol-based handrub.					
<b>SKILL/ACTIVITY PERFORMED SATISFACTORILY</b>					

**Note:** Combination of PPE will affect sequence—be practical!



# WORKSHOP EVALUATION

(To be completed by **Participants**)

Please indicate on a 1–5 scale your opinion of the following workshop components:

5-Strongly Agree    4-Agree    3-No Opinion    2-Disagree    1-Strongly Disagree

WORKSHOP COMPONENT	RATING
1. The initial workshop evaluation helped me to study more effectively.	
2. The case studies were helpful in learning infection prevention and control practices for avian or pandemic influenza.	
3. I am now confident in applying infection prevention and control practices for avian or pandemic influenza	
4. There was sufficient time scheduled for development of a plan for prevention of transmission of avian or pandemic influenza in my health care facility.	
5. The training approach used in this workshop made it easier for me to learn infection prevention and control practices for avian or pandemic influenza.	
6. The trainers clearly stated the learning objectives.	
7. The trainers communicated clearly and effectively.	
8. The information presented in the workshop was new to me.	
9. The trainers were interested in the subjects they taught.	
10. The workshop content (or the content of the sessions) had sufficient theoretical knowledge.	
11. The sessions were well organized.	
12. The trainers asked questions and involved me in the sessions.	
13. The content of the workshop was useful to my work.	
14. The workshop made me feel more competent or skillful in my work.	
15. I feel prepared for working with avian or pandemic influenza patients and know what needs to be done to prevent transmission of avian or pandemic influenza in my facility.	

**ADDITIONAL COMMENTS** (use additional pages if needed)

1. What topics, if any, should be added to improve the workshop? Why?

2. What topics, if any, should be deleted to improve the workshop? Why?

3. The length of the workshop (2 days) was: (*circle one*)

1) Too long

2) Too short

3) Just right



