

# **GUIDELINES ON INFECTION CONTROL PRACTICE**

**(To be adopted at scenario (b) of Serious Response Level or Emergency Response Level in the Government Pandemic Influenza Preparedness Plan) – updated at Dec 2004**

## **Introduction**

1. Sixteen subtypes of influenza A virus are known to infect birds, thus providing an extensive reservoir of influenza viruses. To date, outbreaks of highly contagious and rapidly fatal disease resulting in severe epizootics have been caused by the influenza A viruses of subtypes H5 and H7, and human infection have been documented with H5 and H7 subtypes. The virus disseminates largely by droplet spread. Aerosolized respiratory secretions, patients' secretion and fomites are potentially infectious. It can be contracted through close contacts with or unprotected exposure to someone infected with the virus.

2. To keep up with the developments of avian influenza situation in the region, the Government is updating its pandemic influenza preparedness plan and included three-level response system, viz alert level, serious level and emergency level:

Alert level:

Confirmation of avian influenza outbreaks in poultry population or human case outside Hong Kong;

Serious level:

- (a) Confirmation of avian influenza outbreaks among poultry population in Hong Kong due to a strain with known human health impact.
- (b) Confirmation of human case of avian influenza in Hong Kong without evidence of efficient human-to-human transmission

Emergency level:

- (a) Confirmation of novel influenza with efficient human-to-human transmission occurring overseas or in Hong Kong
- (b) Pandemic influenza as declared by the WHO

3. While clinics of the Department of Health operate a diverse range of services for a large number of clients, there is a risk of acquiring the infection in the health care setting. It is important to uphold infection control standards to reduce this risk. This Appendix introduces additional precautions and serves to highlight existing practices demanding attention.

4. As a collection of interim measures, this Appendix should be reviewed in the course of time when more becomes known about the epidemiology and clinical course of the novel influenza virus.

## **Principles**

5. The measures stipulated in this Appendix are introduced to reduce the chance and extent of unprotected exposure to novel influenza in staff as well as patients or clients, based on the following principles:

- (a) Enhancement of standard precautions in clinic setting through the incorporation of practices for preventing droplet and contact transmission.
- (b) Adoption of high index of suspicion by patient triage and self-exclusion of staff.
- (c) Appropriateness in the use of PPE
- (d) Standardization of disinfection procedures following potential exposure.
- (e) Vaccination with the current WHO recommended influenza vaccine

## **Incorporation of droplet and contact precautions in standard practice**

6. Droplet precautions should be strictly enforced in all clinics in the Department, which include the following measures:

- (a) Exclusion from duties should be arranged for health care workers who had unprotected exposure during close contacts<sup>1</sup> of patients with novel influenza.
- (b) Surgical mask must be worn in clinic areas. The following should be noted in the use of mask, that
  - (i) the mask should be discarded after procedures that might have resulted in potential droplet contamination;
  - (ii) new mask should be put on daily (if non-surgical mask, for example, N95, is used, the manufacturer's recommendation should be followed);
  - (iii) the same mask should not be worn in non-clinic boundary.
- (c) Handwashing is mandated after each patient contact, change of gloves/masks, and gown/uniform/white coat.
- (d) Protective clothing, for example, white coat, uniform or gown should be worn in clinic areas within the designated clinic boundary. Protective clothing should not be worn outside clinic area.

7. Precaution focusing on patients/clients should be enforced by

- (a) Advising all patients/clients to wear surgical mask in the public area and clinic area, and specifically requiring those with respiratory signs/symptoms or fever to wear surgical mask
- (b) Patient/client triage
  - (i) A patient/client is asked to self-identify him/herself if he/she might have contracted infection as a result of being a close contact of patient with novel influenza, or if he/she has symptoms suggesting of the infection.
  - (ii) A client at higher risk of infection [as identified in (i) above] must wear a surgical mask and the consultation should be held in a designated room with additional precaution.

<sup>1</sup> Close contacts refer to the situation of “having cared for, lived with, or had direct contact with respiratory secretions or body fluids of a suspect or probable case of novel influenza”.

(iii) N95 mask, gloves, goggles and protective clothing should be worn during high risk procedures.

8. Precautions for environment control (as stipulated in Section IX of the Guidelines) should be followed, with the adoption of the following enhancements:

- (a) A room should be designated for consultation of patients at higher risk of novel influenza. There should be good ventilation and preferably separate hand washing facility in the designated room.
- (b) Aerosol-generating procedure should be avoided unless it's essential. If required, the procedure should be carried out in negative pressure room or the designated room above. Staff should put on goggles, N95 masks, gowns and gloves on entry to the room. Such materials should be properly disposed or disinfected after procedure.
- (c) Wastes should be placed in waste bags, which are tied and put in covered containers for disposal in the normal channels.
- (d) Contaminated PPE and other items should not be brought into non-clinic areas.

### **Infection control procedures following the detection of a suspected or known case of novel influenza**

9. Following the care of a patient/client suspected with or known to have novel influenza:

- (a) The area should be closed for disinfection as soon as possible.
- (b) The area and objects that have been used during the consultation should be disinfected with 1:49 household bleach (or 70% alcohol for metallic surfaces).

10. The staff who has been in close and unprotected contact with a case of novel influenza should be alerted to the need for quarantine as required by the Department of Health. Oseltamivir phosphate for at least 7 days should be recommended as soon after the exposure as possible. Self health management including checking temperature twice daily, limiting interactions, exclusion from public areas and immediately notifying relevant health authority should be followed.

11. If a diagnosis of influenza is made in retrospect on a client/patient or staff on the second day or thereafter,

- (a) normal disinfection procedures (paragraph 8) should be followed without the need for repeat cleansing or closure if such procedure is already in place on a daily basis;
- (b) disinfection and closure (during disinfection) may be organized if the area has not been disinfected since the infected person's last presence.

**Applicable when Serious Level (Scenario (b)) or Emergency Level is activated**

**Designation of Areas in a DH Clinical Unit<sup>#</sup>**

Non-clinic area A - General administration - Office	Room 1	Room 2	Room 3	Room 4	Room 5
	Clinic Area C (Consultation Rooms) 1-				Designated Room D
Public Area B (Waiting Hall)					

Area *	Designation	Examples	Infection control precautions
A	Non-clinic area	General office	No personal protection equipment (PPE) is required
B	Public area	Waiting hall	Wearing of surgical mask is advised for all; wearing of surgical mask is required for patients with respiratory symptoms or fever
C	Clinic area	Consultation room(s) where clinical procedures are carried out regularly	<u>Client:</u> Wearing of surgical mask is advised for all; wearing of surgical mask is required for patients with respiratory symptoms or fever <u>Staff:</u> Wearing of surgical mask and gown are required; other protections as required for respective procedures
D	Designated room	Selected room for managing suspected or probable patients with novel influenza	<u>Client:</u> Wearing of surgical mask is required <u>Staff:</u> Wearing of surgical mask and gown are required; N95 mask and other appropriate protections (e.g. gown and goggles) should be put on for high risk procedures; PPE should not be worn beyond the designated area

<sup>#</sup> *This template is designed for DH units with clinical service only. The latter is defined as a place where personal health services are provided normally to patients but may include also those for healthy individuals. Adjustment is needed if the guidelines and template are adapted for non-clinical services.*

<sup>\*</sup> *Division into four areas of A, B, C and D may not be possible for all services. In some situations, A and B may be combined. D is mandatory for all clinical services.*