Infection Control Recommendations on Avian Influenza A (H7N9)

ICB / CHP

As of 23rd April 2013

No. of Confirmed Case: 108

No. of death: 22

Report Area	First Report Date	No. of confirmed case	No. of death case
Shanghai	31-03-2013	33	12
Anhui	31-03-2013	4	1
Jiangsu	02-04-2013	24	3
Zhejiang	03-04-2013	42	6
Beijing	13-04-2013	1	0
Henan	14-04-2013	3	0
Shandong	23-04-2013	1	0
	Total	108	22
Recover: 14			



Early case detection and notification

我們的抗疫理念,就是「<u>早通報、早隔離、早治療」</u>

Statutory Reporting

In view of the severity of illness of the confirmed cases, the Prevention and Control of Disease Ordinance (Cap. 599) ("the Ordinance") has been updated the reporting criteria for Human Influenza $A(H_7)$.

Reporting criteria: https://ceno.chp.gov.hk/casedef/casedef.pdf

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Clinical criteria		Epidemiological criteria	
 Patient with > Influenza-like-illness (fever > 38°C with cough or sore throat); OR > person with severe pneumonia; OR □ person died of unexplained acute respiratory illness. 	AND	 One or more of the following exposures in the 7 days prior to symptom onset: contact with a human case of influenza A (H7N9); OR contact with poultry or wild birds or their remains or to environments contaminated by their faeces in countries/areas with documented avian influenza A (H7N9) infection in birds and/or humans in the recent 6 months (see List of affected areas); OR consumption of raw or undercooked poultry products in countries/areas with documented avian influenza A (H7N9) infection in poultry and/or humans in the recent 6 months (see List of affected areas); OR consumption of raw or undercooked poultry products in countries/areas with documented avian influenza A (H7N9) infection in poultry and/or humans in the recent 6 months (see List of affected areas), OR close contact with a confirmed influenza A (H7N9) infected animal other than poultry or wild birds; OR worked in a laboratory that is processing samples from persons or animals that are suspected from avian influenza infection 	

The list of affected areas is regularly uploaded to the Centre for Health Protection (CHP) website (http://www.chp.gov.hk/files/pdf/global_statistics_avian_influenza_e.pdf)

Reporting channel

* An individual fulfilling both the Clinical Criteria AND

Epidemiological Criteria should be reported to the Central Notification Office (CENO) of CHP via

- * fax (2477 2770) using the reporting form,
- * phone (2477 2772) or
- * CENO On-line (http://ceno.chp.gov.hk/)

(Please also call Medical Control Officer at 71163300 a/c 9179 outside office hour for prompt investigation)

Isolation of suspected/confirmed case

- Isolate in negative pressure airborne infection isolation room (AIIR)
- * Cohort cases with same etiological diagnosis if single rooms are full









Hand Hygiene





Personal Protective Equipment (PPE)

Handling of suspected case at triage station:

 N95 respirator / surgical mask , eyes protection, gown and gloves

Care suspected / confirmed case:

- * N95 respirator, eyes protection, gown and gloves
- * Enhance alertness when performing high-risk aerosolgenerating, e.g. endotracheal intubation, CPR, open suction etc. http://www.chp.gov.hk/files/pdf/ic_matrix.pdf

Recommended PPE for routine patient care and performing aerosol-generating procedures^(a) in hospitals/clinics for suspected or confirmed H7N9 infection Apply standard precautions (SP) +/- transmission-based precautions for all patients. **Recommended personal protective equipment** Areas (PPE) N95 respirator^(c) (Surgical mask could be an alternative for High -risk patient areas ^(b) AED triage station base on nature of encounter upon risk Routine assessment), eye protection^(d), gown, gloves and cap^(e) patient care Other patient areas SP +/- Transmission based precautions N95 respirator, eye protection^(d), gown, gloves and $cap^{(e)}$; High -risk patient areas^(b) Place patient in a negative pressure airborne infection isolation room (AIIR). Performing aerosol-Surgical mask/ N95 respirator^(c), eye protection^(d), gown, generating gloves and cap^(e) Perform all aerosol generating procedures in a wellprocedures(a) Other patient areas ventilated area (e.g. mechanical ventilation with minimum of 6 air changes per hour (ACH) or use portable HEPA filter e.g. IQ Air if indicated). High-risk patient areas^(b) Surgical mask No patient Surgical mask for signs and symptoms of respiratory Other patient areas contact infection Surgical mask for signs and symptoms of respiratory Non-patient areas infection

Remarks

Aerosol-generating procedures with increased risk of respiratory infection transmission)

- Autopsy

a

- Bronchoscopy
- Cardiopulmonary resuscitation
- Endotracheal intubation
- High-frequency oscillatory ventilation
- Nebulizer therapy
- Non-invasive positive pressure ventilation (BiPAP & CPAP)
- Open suctioning of respiratory tract (including tracheostomy care)
- Sputum induction

NPA and high flow oxygen (6L/min) are theoretically at risk of dispersal of infectious respiratory droplets. In high risk areas, these procedures should be performed in conditions as required for aerosol-generating procedures

Remarks

- b) High-risk patient areas refer to triage stations of out-patient clinics, designated fever clinics, Accident & Emergency department and isolation rooms for suspected or confirmed H7N9 patients
- c) Based on transmission-based precautions and risk assessment
- d) Eye protection refers to full face shield or goggles or eye-visors
- e) Cap is optional

<u>Compare on Interim Guidance for IC Within Healthcare</u> Settings When Caring for Patients with Confirmed, Probable, or Cases Under Investigation of AI(H7N9) Virus Infection

IC recommendations	НК	CDC	WHO	Taiwan	Shanghai
Isolation precautions	Standard +droplet +contact +airborne	Standard +contact +airborne	Standard +droplet +contact	Standard +droplet +contact	Standard +droplet +contact
Hand Hygiene	V	V	V	V	V
Gloves	V	V	V	V	V
Gowns	V	V	V	V	V
Eye protection (goggles/face shield)	V	V	V	V	V
N95 respirator	V	V	√ for AGP	V	V
Surgical mask	√(triage)		V	√(triage)	
Сар	optional				V
Patient placement	AIIR	AIIR	Single room AIIR (Not routinely)	AIIR	
AGP	Postpone / medical necessary -AIIR -limit staff -N95 respirator, eye protection, gown, gloves	Postpone / medical necessary -AIIR -limit staff -N95 respirator, eye protection, gown, gloves	N95 respirator, eye protection, gown, gloves	N95 respirator, eye protection, gown, gloves	N95 respirator, eye protection, gown, gloves, cap, shoe covers

Flow for A&E Triage



PPE requirement is considered as a protective measure based on CICO/ HA, ICB/CHP joint risk assessment

Courtesy of CICO Office

Other infection control measures

Transport of patient

- Patient : Wear surgical mask if no contraindication
- Staff: Put on PPE

Environmental decontamination

- At least twice daily with hypochlorite solution (1:49 1,000ppm)
- Use 70% Alcohol for metal surface
- Terminal disinfection upon patient discharge

Decontamination of health care equipment

- Dedicate individual equipment
- Disinfect shared equipment before use on the next patient
- Use bedpan washer for disinfection of bedpans and urinals

Other infection control measures

Linen Handling

- All linen from avian influenza should be classified as infected linen
- Pack on site and avoid shaking
- Send to laundry as soon as possible

Waste Management

- All waste from suspected or confirmed AI (H7N9) patients are classified as clinical waste (red bag)
- Staff removing wastes should wear appropriate PPE

Handling of Dead Body

• Handling and disposal of dead body according to

Cat. 2 (YELLOW label)

	Danger of Infection 小心傳染				Category 類別
9	In handling dead bodies, Standard Precautions are required 麦球是蓬绊弯奏长取续束預防器统- In addition, the following precautions are also required: 此外,下列附加的預防器统容必须投新;				
	Bagging 入屍袋	Viewing in funeral parlour 殯儀館內瞻仰遺容	Embalming 防虜處理	fune	preparation in ral parlour 内教身及化验
	Must	Allowed	Not allowed	Allowed with disposable	gloves, apron and surgical mask



Other infection control measures

Administration support

- Ensure adequate resources, issue formal instructions for visitors and patients and post appropriate signage
- Monitor staff sickness
- Advise staff to report sick for respiratory symptoms or pneumonia to supervisor

The Government of the Hong Kong Special Administrative Region (HKSARG) **Preparedness Plan for Influenza Pandemic (2012)**

Three response levels: Alert Serious Emergency



Port health measures

- Temperature screening to all passengers at ports of entry
- * Port Health will follow the existing referral mechanism for AI:
- * Compulsory referral \rightarrow HAIDC
- * Advisory referral \rightarrow nearest A&E
- * Referral network:

Ports of entry	Nearest HA AEDs
香港國際機場、葵涌貨櫃碼頭	PMH IDC
上環港澳碼頭	QMH
尖沙咀中港碼頭、海運大廈碼頭、紅磡管制站、 油麻地避風塘	QEH
深圳灣管制站	ТМН
羅湖管制站、落馬洲管制站、落馬洲支線管制站、 沙頭角管制站、文錦渡管制站	NDH
啟德郵輪碼頭	UCH

* FSD's ambulance service will be called for case conveyance

Courtesy of CICO Office



Useful Links

Organization	Link
Hong Kong Training Portal on Infection Control and Infectious Disease	Internet http://icidportal.ha.org.hk/sites/en/webpag es/Novel_Coronavirus.aspx?PageView=Shar ed Intranet http://icidportal.home/sites/en/webpages/N ovel%20Coronavirus.aspx
Centre for Health Protection	http://www.chp.gov.hk/
Hospital Authority	http://www.ha.org.hk
World Health Organization	http://www.who.int/en/
Health Protection Agency	http://www.hpa.org.uk/

Thank You

Visiting Policy

- * Children under 12 are generally not permitted in patient care area unless with prior approval
- Pregnant women are strongly discouraged from visiting the hospital.
- People with signs and symptoms of influenza-like illness or other infectious diseases should not visit hospitals
- "No visiting" to isolation wards unless on compassionate ground, e.g. paediatric patients. Registration is required and the number of visitors be kept to minimum and the risk of infection explained to the visitors
- * Advise visitors to comply with infection control precautions, correct use of PPE and hand hygiene