醫院管理局
HOSPITAL AUTHORITY

Memorandum

From :	CE	To :	All CCEs, HCEs
Ref :	HA820/10/38 XIX	c.c.	Chairman & Members of COC(Med) COC(Paed) COC(ICU) COC(A&E) TFIC
Tel :	2300 6456		
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Date :	12 February 2003		

Surveillance on Severe Community-acquired Pneumonia

In the wake of recent reports from the Mainland on cases of severe community-acquired pneumonia, a working group under Task Force Infection Control has been convened to work out a HA-wide surveillance exercise.

2. With immediate effect, hospitals are requested to report to the secretariat of the TFIC by fax at 2881 5848 or by HA intranet e-mail "Secretariat of Infection Control Task Force" using the Report form for infectious diseases (attached) on cases of community-acquired pneumonia (CAP) **who require assisted ventilation or ICU/HDU care.**

3. On receipt of the report(s) from the hospital, the duty microbiologist will activate the surveillance and tracking system. The hospitals' Infection Control Teams will track the clinical history and other relevant epidemiological information. Also, the team would advise on the need and arrangement for special laboratory testing.

4. In this regard, I would be much grateful if you could help pass the message on and alert all your doctors in the Departments of Medicine, Paediatrics, A&E, and ICU to report on cases meeting the aforementioned criteria. In the meantime, they are encouraged to refer to the HA intranet (under clinical guidelines/ manuals - infection control page) for the Fact Sheet on Management of Severe Influenza Infections.

5. Should you have further enquiry, please feel free to contact me or Dr Dominic Tsang, the subject officer, at 2958 6849, or Mr Clement Che, Secretary of TFIC, at 2300 6932.

6. Thank you for your attention.

(Dr S H Liu)
for CE

Appendix I

Report Form for severe community acquired pneumonia

From : ____________________ Hospital

Date : ________________

To: Secretariat of TFIC, HAHO
(Fax No: 2881-5848)
(HA intranet mail: "Secretariat of Infection Control Task Force")

Name	Sex/ Age	HK_ID	Hospital No./ A&E No.	Ward/Bed	Onset Date	Admission Date	CXR	Diagnosis/ Organism	General Condition Good/ Satisfy/ Fair/Poor

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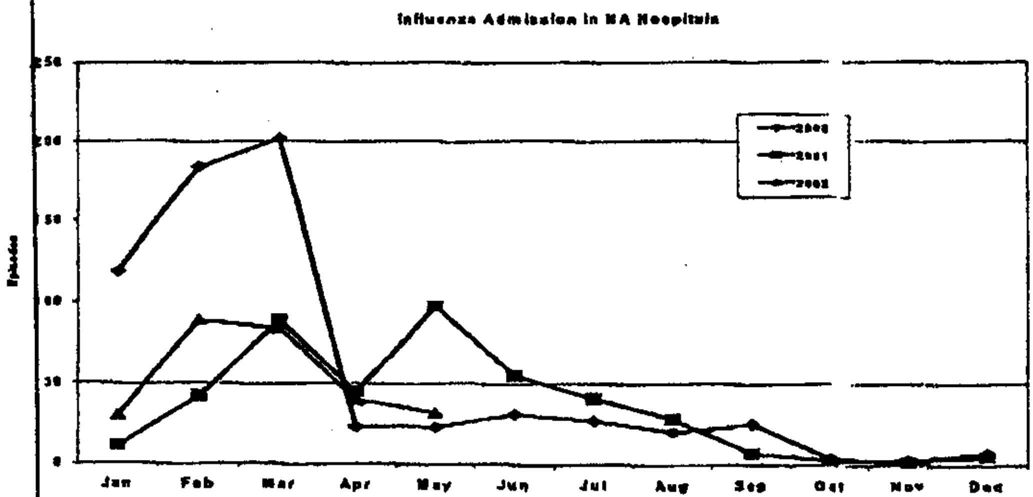
1. **Title**
Fact Sheet on Management of Severe Influenza Infections

2. **Purpose**

To provide update information on the local epidemiology and preventive measures in the management of influenza in hospital. The focus is put on appropriate rapid investigation of patients presenting with severe respiratory illness to improve the chances of identifying any virulent influenza strains. This guideline supercedes previous guidelines on the management of H5N1 and influenza.

3. **Current Situation on Influenza:**

a) In Hong Kong, influenza A activity is expected to commence in January and peak in February-March every year. (see HA surveillance data since January 2000 below)



b) For most healthy people, influenza amounts to high fever, headache, coughing and a few days off work or school, followed by complete recovery. For the elderly and chronically ill, influenza infection could lead to hospitalization and death.

4. **Avian influenza and its impact on human**

a) Ducks and other birds could be infected by avian influenza. Recent incidents of highly lethal avian strains infecting chickens in local farms killing a large number of chickens are due to the H5-subtype.

b) Avian influenza strains generally do not infect human.

c) Under exceptional situations, e.g. close contact at a high concentration with the virus, humans could also be infected by avian influenza strains. This had happened in 1997 when 18 people were infected by the avian influenza H5N1 strain as a result of exposure to infected chickens.

d) Inter-personal spread of avian influenza strains is ineffective.

5. **HA Influenza Vaccination Program**

a) Influenza vaccination is the most effective means of preventing complications in influenza infection in high-risk patients.

b) Target groups for vaccination include: Patients of infirmary units, psychogeriatric in-patients, institutionalised mental handicapped patients, paediatric in-patients in need of

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long term aspirin therapy, and paediatric patients with chronic lung or heart disease.

c) Health care workers of the above areas are also encouraged to receive vaccination.

d) The vaccine for each year is made available through the Chief Pharmacist Office and delivered to pharmacy department of each hospital based on the returns on the requirement every year.

e) The vaccine is to be given in November each year.

f) The vaccine is made from highly purified, egg-grown viruses that have been inactivated. It should not be administered to persons with a known history of anaphylactic hypersensitivity to eggs.

g) Staff members who develop symptoms and signs compatible with influenza should take droplets precautions to prevent disease transmission.

h) The recommended vaccine[3,4] content for the northern hemisphere in 2002-2003 influenza season contains;

- A/New Caledonia/20/99(H1N1)-like virus
- A/Moscow/10/99(H3N2)-like virus
- B/Hong Kong/330/2001-like virus

6. Rapid Virological Investigation in suspected severe influenza infection

a) Influenza is characterized by fever of abrupt onset (>38.5°C, persistent for 2-3 days), upper respiratory symptoms and constitutional symptoms of headache, myalgia, and malaise. Symptoms are usually self-limiting and patients usually recover in 5-7 days.

b) In a small minority of patients, primary viral pneumonia with high fever, dyspnoea and cyanosis might follow. Such patients might present with altered mental state, respiratory rate ≥ 30/min., systolic blood pressure <90mm Hg, and pulse ≥ 125/min.[1,2]

c) In severely ill patients and patients suffering from community-acquired pneumonia (CAP) who require mechanical ventilation or ICU care, rapid testing for influenza is indicated.

d) For rapid antigen testing for influenza, nasopharyngeal aspirate should be collected. The sensitivity of rapid tests is lower than that of viral culture, and therefore, clinical specimens should also be sent for viral culture. Arrangement for testing should be made with microbiologist of the hospital/cluster.

7. Infection Control Measures

The recommended method of isolation for influenza is <u>droplet precautions</u>. This is because the disease is not airborne, but by large particle droplet (larger than 5 µm) which will not be transmitted beyond 3 feet from the source.

8. Droplet Precaution includes:

a) Place patient in a room with other patient(s) having influenza (**cohorting**). Special air handling and ventilation are not necessary.

b) Staff should have barrier apparels (gloves and gowns) when coming into contact with the patient's blood, body fluids, secretions, excretions, mucous membranes and contaminated items, and should also wear surgical mask when it is one metre close to the patient.

c) <u>Wash hands</u> after removal of gloves and before nursing another patient even when contact is only with non-contaminated items.

d) Proper disinfection of the environment and equipment contaminated with blood,

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body fluids, secretions and excretions is required.

9. Use of Antivirals for Influenza:

Amantadine can reduce the severity and duration of signs and symptoms of only influenza A illness when given in the early stage of infection. Amantadine is associated with neurological and gastrointestinal side effects. Cautions must be exercised for people with renal insufficiency. Resistance emerges within 2-5 days in around 30% of cases and such resistant viruses are readily transmissible.

10. New neuraminidase inhibitors[4]

a) The two new anti-influenza drugs, Zanamivir (Relenza) and Oseltamivir (Tamiflu), are neuraminidase inhibitors and are active against both influenza A and B.

b) Zanamivir is administered by oral inhalation while Oseltamivir is administered orally.

c) Zanamivir is approved for use in patient aged 7 years or older. Oseltamivir is approved for treatment of patient aged 1 year or older.

d) Oseltamivir is also approved for influenza chemoprophylaxis among person aged 13 year or older.

e) When treatment is commenced within 36 to 48 hours of the onset of influenza, both drugs can reduce clinical symptoms of influenza by approximately 1 day.

f) In hospitalized patients with influenza, most would have been ill for longer than 48 hours and have passed the time by which these drugs need to be administered for clinical benefit.

g) Zanamivir may rarely cause bronchospasm in patients with asthma and bronchodilators must be readily available when it is used on such patients. In patients on inhaled bronchodilators, use it before the dose of zanamivir. Oseltamivir has gastrointestinal side effects including nausea (10% in adults, 14.3% in children) and vomiting (9% in adults) which might be less severe when the drug is taken with food.

h) Development of viral resistance to zanamivir and oseltamivir during treatment has been reported.

i) Antivirals are NOT a substitute for influenza vaccination.

11. Reference

a) N Engl J Med 1997;336:243-50
b) Lancet 1998;351:467-71
c) WHO Press Release WHO/08 6 February 2002
d) MMWR April 12,2002 vol. 51/No. RR-3

(Updated in Jan 2003)