Severe acute respiratory syndrome (SARS) has recently been recognised as a newly emerging infectious disease that is highly contagious with significant morbidity and mortality. The first index case in Hong Kong was admitted on Feb 22, 2003. As of April 6, 842 cases have been identified in Hong Kong, with fatal complications in 22 patients. The outbreak has prompted the Hospital Authority of Hong Kong and the Department of Health to implement a series of public-health measures and hospital policies for the diagnosis and management of patients with SARS.

The figures are summaries of the management flowchart in the accident and emergency department for patients with a history of definite contact with SARS patients within the past 10 days (figure 1) and for patients with no such definite contact (figure 2).

The Hong Kong Hospital Authority SARS Command Centre has been established to coordinate clinical activities, including identification and reporting of cases, implementation of infection-control measures, dissemination of information to the public, development of diagnostic tests, and assessment of treatment regimens in a cluster network of hospitals. Each hospital cluster has designated treatment centres. The Hospital Authority and the Department of Health are working collaboratively with the two universities (the Chinese University of Hong Kong and the University of Hong Kong) and with international agencies to identify the aetiological agent(s).

For details of management plans for patients in the guidelines, see: http://www.ha.org.hk

The Hong Kong Hospital Authority Working Group on SARS and Central Committee on Infection Control contributed to the guidelines. Members include physicians, microbiologists, and scientists from the Hospital Authority, Department of Health, the Chinese University of Hong Kong, and the University of Hong Kong.


The Central Committee on Infection Control members include: Paul Chan, Y C Chan, Patricia Ching, David Hui, Melissa Ho, S T Lai, W M Lai, Barbara Lam, Samuel Law, W K Luk, D J Lyon, Phyllis Mak, T K Ng, J S M Peiris, T L Que, W H Seto, W K To, N C Tsang, Clara Yip, and Raymond Yung.

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**Definite contact**

Patient with definite close contact within past 10 days

- Fever (>38°C) and/or
- Cough or shortness of breath or other compatible symptoms†

No Yes

**Asymptomatic**

- Health advice on droplet precaution
- Observe symptom
- Home charting of temperature (if feverish) for 10 days
- Consult Department of Health surveillance clinic if symptoms develop
- Inform Department of Health (if case has not yet been reported)

**Symptomatic**

- Medical assessment and chest radiograph

Normal chest radiograph‡

New pulmonary infiltrate¶ (pre-admission complete blood count may be considered)

Admit to ward:
- Paediatric if <18 years
- Medical if >18 years

- Health advice on droplet precaution and home charting of temperature
- Check complete blood group for lymphocyte count
  - Admit to designated ward if cell count <0.9×10⁹/L
  - Follow up daily if count 0.9–1.2×10⁹/L (repeat complete blood group, chest radiograph)
  - Follow up 2 days later if count >1.2×10⁹/L (repeat complete blood count, chest radiograph)
- Sick leave till follow up
- Treatment§
  - On follow-up, discharge if lymphocyte count >1.5×10⁹/L, chest radiograph normal and with clinical improvement.

*Close contact: means persons having cared for, having lived with, or having had direct contact with respiratory secretions and body fluids of person with severe acute respiratory syndrome. Social contact means persons who have had contact with person with SARS but do not fit definition of close contact. Therefore, close contacts are mainly household contacts and those who care for the case. All co-workers and all visitors of cases in hospitals are social contacts only. Only if these social contacts had direct contact with respiratory secretions and body fluids of case do they become close contact. All social contacts should be advised to attend designated medical centres only when they have one of the three symptoms: fever, cough, and shortness of breath.
†In addition to fever and respiratory symptoms, SARS may be associated with other symptoms including: headache, muscular stiffness, loss of appetite, malaise, confusion, rash, and diarrhoea.
‡Consider admission despite normal chest radiograph if two or more family members have already been admitted for suspected SARS.
§Standard therapy including β-lactam (co-amoxiclav or cefuroxime) and coverage for atypical pneumonia such as macrolide (clarithromycin or azithromycin) or fluoroquinolone (levofloxacin).
¶Samples of chest radiographs of SARS can be found at: http://www.droid.cuhk.edu.hk

Figure 1: Accident and emergency department management for person with definite contact* with person with severe acute respiratory syndrome (SARS) within past 10 days
No definite contact

Patient with no definite close contact within past 10 days

- Fever (>38°C), and/or
- Cough or shortness of breath or other compatible symptoms†

No

Asymptomatic

- Reassurance
- Health advice on droplet precaution

Yes

Clinical features suggestive of pneumonia

Chest radiograph

- Normal chest radiograph

- New pulmonary infiltrate‡

Clinical features compatible with SARS (pre-admission complete blood count may be considered)

Admit to medical ward

Admit to designated ward if overall clinical picture suspicious of SARS

Admit to designated medical centre if overall clinical picture highly suspicious of SARS

*Close contact: means persons having cared for, having lived with, or having had direct contact with respiratory secretions and body fluids of person with severe acute respiratory syndrome. Social contact means persons who have had contact with person with SARS but do not fit definition of close contact. Therefore, close contacts are mainly household contacts, and those who care for the case. All coworkers and all visitors of cases in hospitals are social contacts only. Only if these social contacts had direct contact with respiratory secretions and body fluids of case do they become close contact. All social contacts should be advised to attend designated medical centres only when they have one of the three symptoms: fever, cough, and shortness of breath.

†In addition to fever and respiratory symptoms, SARS may be associated with other symptoms including: headache, muscular stiffness, loss of appetite, malaise, confusion, rash, and diarrhoea.

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Figure 2: Accident and emergency department management for person with no definite contact* with person with severe acute respiratory syndrome (SARS)