A. Case Definition (18/4/2003)

**Criteria for Reporting to HA SARS Registry (18/4/2003)**
1. Radiographic evidence of infiltrates consistent with pneumonia, and
2. Fever >38°C or history of such at any time in the past 2 days, and
3. At least 2 of the following:
   (a) History of chills in the past 2 days
   (b) Cough (new or increased cough) or breathing difficulty
   (c) General malaise or myalgia
   (d) Known history of exposure

**Exclusion Criteria**
A case should be excluded if an alternative diagnosis can fully explain their illness.

**Suspected Cases**
Does not completely fulfill the above definition but still considered to be highly likely of SARS on clinical judgment.

The status of a reported case may change over time and a patient should always be managed as clinically appropriate, regardless of their case status.

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### B. Clinical Features

<table>
<thead>
<tr>
<th>Chinese University of Hong Kong¹</th>
<th>University of Hong Kong²</th>
<th>Canadian SARS Study Team³</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Patient population</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>66 males, 72 females</td>
<td>5 males, 5 females</td>
<td>6 males, 4 female</td>
</tr>
<tr>
<td>69 HCWs</td>
<td>Mean age 39.3±16.8 years</td>
<td>Age: 24-78 years</td>
</tr>
<tr>
<td><strong>Clinical presentations</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fever (100%)</td>
<td>Fever (100%)</td>
<td>Fever (100%)</td>
</tr>
<tr>
<td>Chills±rigors (73.2%)</td>
<td>Rigor (90%)</td>
<td>Nonproductive cough (100%)</td>
</tr>
<tr>
<td>Myalgia (60.9%)</td>
<td>Cough (80%)</td>
<td>Dyspnoea (80%)</td>
</tr>
<tr>
<td>Cough (57.3%)</td>
<td>Headache (70%)</td>
<td>Malaise (70%)</td>
</tr>
<tr>
<td>Headache (55.8%)</td>
<td>Dyspnoea (60%)</td>
<td>Dianhea (50%)</td>
</tr>
<tr>
<td>Dizziness (42.8%)</td>
<td>Myalgia (50%)</td>
<td>Chest pain (30%)</td>
</tr>
<tr>
<td>Sputum production (29.0%)</td>
<td>Pleurisy (30%)</td>
<td>Headache (30%)</td>
</tr>
<tr>
<td>Sore throat (23.2%)</td>
<td>Sputum production (10%)</td>
<td>Sore throat (30%)</td>
</tr>
<tr>
<td>Coryza (22.5%)</td>
<td></td>
<td>Myalgias (20%)</td>
</tr>
<tr>
<td>Nausea &amp; vomiting (19.6%)</td>
<td></td>
<td>Vomiting (10%)</td>
</tr>
<tr>
<td>Diarrhoea (19.6%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Laboratory findings</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lymphopenia (69.8%)</td>
<td>Lymphopenia (90%)</td>
<td>Oxygen saturation on room air</td>
</tr>
<tr>
<td>Thrombocytopenia (44.8%)</td>
<td>TALT</td>
<td>&lt;95% (78%)</td>
</tr>
<tr>
<td>Prolonged APTT (42.8%)</td>
<td></td>
<td>Leukopenia (22%)</td>
</tr>
<tr>
<td>↑D-dimer (45.0%)</td>
<td></td>
<td>Lymphopenia (89%)</td>
</tr>
<tr>
<td>↑ALT (23.4%)</td>
<td></td>
<td>Thrombocytopenia (33%)</td>
</tr>
<tr>
<td>↑LDH (71.0%)</td>
<td></td>
<td>↑ALT (56%)</td>
</tr>
<tr>
<td>↑TCK (32.1%)</td>
<td></td>
<td>↑AST (78%)</td>
</tr>
<tr>
<td>Hyponatremia (20.3%)</td>
<td></td>
<td>↑LDH (80%)</td>
</tr>
<tr>
<td>Hypokalemia (25.2%)</td>
<td></td>
<td>↑TCK (56%)</td>
</tr>
<tr>
<td><strong>Chest X-ray findings</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>At the onset of fever, 78.3% had abnormal CXR (air-space consolidation)</td>
<td>Progressive air-space disease</td>
<td>Infiltrate on CXR (100%)</td>
</tr>
<tr>
<td>54.6% unilateral focal involvement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>45.4% either unilateral multifocal or bilateral involvement</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Incubation period</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-16 days (median 5 days)</td>
<td>2-11 days</td>
<td>3-10 days</td>
</tr>
<tr>
<td><strong>Admission to ICU</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32 patients (23.2%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Mechanical ventilation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19 patients (13.8%)</td>
<td>2 patients (20%)</td>
<td>5 patients (50%)</td>
</tr>
<tr>
<td><strong>Mortality rate</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 patients (3.6%)</td>
<td>2 patients (20%)</td>
<td>3 patients (30%)</td>
</tr>
</tbody>
</table>

C. Radiological Diagnosis
To facilitate early radiological diagnosis and management, the various radiological/CT appearances of SARS together with a recommended imaging protocol prepared by the Department of Diagnostic Radiology and Organ Imaging, CUHK & PWH are accessible on the website: http://www.droid.cuhk.edu.hk/web/atypical_pneumonia/atypical_pneumonia.htm

Two clinical pathways (depicted by the charts below) are designed for patients with and without definite contacts with regard to when and where to admit them.

The diagnosis of SARS is still being made on clinical grounds and history of exposure. The following tests are being developed:

1. Antibody Tests
   ELISA detects antibodies in the serum of SARS patients. Rising titre to IgG can be detected between 10-21 days.

2. Molecular Tests
   RT-PCR can detect genetic material of coronavirus in various specimens (blood, stool or respiratory secretions).
   Several primers have been developed by local authorities (the Government Virus Unit and the Queen Mary Hospital).

Important Messages
1. Positive test results indicate that SARS patients are, or recently were, infected with the coronavirus.
2. A negative coronavirus test does not rule out SARS, if the clinical features and exposure history is compatible with SARS.
3. The RT-PCR test is still in the developmental phase. It should not be used to exclude SARS and it is not useful as a screening test. Its sensitivity and specificity are still unestablished.
F. Treatment (14/4/2003)

1. The most efficacious treatment regimen at present is unknown but better experience definitely considered in this guideline.

2. An empirical approach yielding encouraging results consists of an initial potent antibiotic cover for presumptively known bacterial agents of severe pneumonia, followed by simultaneous use of iv high dose methylprednisolone and iv ribavirin. As the disease progresses or when there is clinical deterioration, respiratory support from high concentration oxygen to assisted ventilation might be needed.

Special Precautions

Ventilator
3. BiPAP, CPAP, and nebulizer or nebulized medication **should not be used** for all patients.
4. If intubation and assisted mechanical ventilation is required, a closed suction system should be incorporated into the ventilator circuit and scavenging should be provided by the vacuum wall suction.

Steroid
5. Methylprednisolone must **not** be administered via central venous catheters to avoid precipitating cardiac arrest or arrhythmia.
6. Hypokalaemia, hyperglycaemia and hypertension are commonly seen after administration of high dose steroid. Concomitant anti-ulcer prophylaxis should also be given.

Ribavirin
7. Ribavirin may be accumulated in patients with impaired renal function but not in patients with decompensated liver disease.
8. Adverse events associated with the use of Ribavirin:

<table>
<thead>
<tr>
<th>Haematological</th>
<th>haemolytic anaemia, reticulocytosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiovascular</td>
<td>cardiac arrest, hypotension, bradycardia, tachycardia</td>
</tr>
<tr>
<td>Neurological</td>
<td>dizziness, asthenia, seizure</td>
</tr>
<tr>
<td>Renal</td>
<td>nephrolithiasis</td>
</tr>
<tr>
<td>Hepatic</td>
<td>elevated serum bilirubin and ammonia</td>
</tr>
<tr>
<td>Metabolic</td>
<td>increase in uric acid</td>
</tr>
<tr>
<td>Dermatological</td>
<td>pruritus, rash, skin eruptions</td>
</tr>
</tbody>
</table>

**Primary Care – Suspected SARS Cases**

9. The available evidence suggests that the mode of transmission is most consistent with droplet and direct contact with patient's secretions and subsequent inoculation into mucous membranes e.g., conjunctiva, oral mucosa, etc.. The document on "Management of Suspected Severe Respiratory Syndrome for Primary Care Physicians/Family Physicians" (available at the Hospital Authority Home Page) are suggested control measures for primary care clinics in the community setting, which emphasize on the use of barrier apparels, personal hygiene and environmental cleaning, in addition to universal precautions.

For Adult Patient

10. Community acquired pneumonia characteristic of SARS, esp. from known exposure of outbreak source and/or poor condition on presentation

   **Broad-spectrum potent antibiotics + Methylprednisolone + Ribavirin**

11. Community acquired pneumonia not fulfilling SARS definition and/or patient in good general condition on presentation

   **Broad-spectrum antibiotic + Close observation**

12. If general condition deteriorates with signs and symptoms of SARS (esp. increase fever, lethargy, lymphopenia & thrombocytopenia)

   **Treat as in 10**

* **Broad-spectrum Antibiotics**

13. Majority of the cases cannot afford to lose time, start with broad-spectrum potent antibiotics:
   
   Either
   - IV Rocephin 1g Q24H, or Tazocin 4.5g Q8H, or Maxipime 2g
   - Q8H plus Clarithromycin 500 mg BD PO
   
   Or
   
   Replace with Levofloxacin 500 mg daily plus Clarithromycin (if allergic to penicillin)

14. Milder & less aggressive form can be treated with Augmentin plus Clarithromycin/Azithromycin

* **Steroid + Ribavirin**

15. The most potent regime is to use the 2 together especially if:
   - Extensive/bilateral CXR involvement, OR
   - Persistent CXR involvement AND persistent high fever for 2 days, OR
   - Clinical/CXR/Lab parameters suggestive of deterioration (persistent/increasing lethargy is an important sign), OR
   - CXR abnormality AND SpO2 <95% on Room Air

16. For Steroid, the consensus are:
   - Use at the same time with ribavirin to avoid cytokine storm and immune activation.
• High dose IV
• Methylprednisolone (MP) is better than Hydrocortisone
• Pulse MP may improve clinical course if used early

17. For Ribavirin, the consensus are:
• IV route is preferred in severe cases
• IV 400 mg Q8H for 10 to 14 days

18. Typical regimen of steroid treatment
• Methylprednisolone 1 mg/Kg q8h iv for 5 days, then
  Methylprednisolone 1 mg/Kg q12h iv for 5 days, then
  Prednisolone 0.5 mg/kg bd po for 5 days, then
  Prednisolone 0.5 mg/kg daily po for 3 days, then
  Prednisolone 0.25 mg/kg daily po for 3 days, then
  off

19. In case of deterioration (at least 2 of clinical/CXR/SpO2 and persistent lymphopenia)
• Increase to pulse MP 500 mg bd x 2 days then
  back to 3 mg/kg/day, total treatment period
  maintained for 21 days.
• Monitor blood sugar and signs of sepsis while on
  pulse MP.

20. Use of BIPAP/CPAP
  BIPAP and CPAP may reduce the need for assisted
  ventilation if given early (e.g. first sign of lethargy). However, since there is a significant risk of spreading the infection, these procedures should not be used for all patients. If deemed medically really necessary, they should be performed under airborne precautions such as negative pressure isolation rooms (with 6-12 air changes/hour) and use of protective hoods (powered air purifying respirator system).

21. Treatment using convalescent patient serum
• Convalescent patient plasma (CPP) infusion is an exploratory treatment modality proposed for desperate cases following anecdotal reports of response in PWH. Clinician must carefully balance the risks to both the donors and the recipients. The feasibility and logistics of procuring CPP are under active review.

22. Prophylactic treatment
• Not all contacts will contract the virus or develop a severe form of the disease. The benefit of improving an individual person’s health or public health is unknown. The duration of protection is primarily limited by the duration of treatment. In view of the serious side effects of Ribavirin and possible development of drug resistance, prophylactic use is normally not recommended and widespread use of the drug may cause more harm than benefit.

23. Pre-emptive treatment
• Whether early intervention with antiviral drug and steroid can improve clinical outcome remains an attractive but unproven option. The difficulty lies in the lack of reliable rapid diagnostic test for SARS. Suspected SARS patients, not fulfilling all diagnostic criteria but with close contacts with proven SARS, should be closely observed and not empirically treated with Ribavirin.

For Paediatric Patients

24. History of contacts, progressive radiological infiltrates and lymphopenia are important in making the diagnosis.

25. 3rd generation cephalosporin (e.g. Cefotaxime) plus macrolide (e.g. Erythromycin or Clarithromycin) for coverage of usual pathogens of CAP.

26. Commence Ribavirin 40-60 mg/kg/day po div Q8H if contact history definite and with fever (oral bioavailability of ribavirin is 20-64%. It may not be effective if virus load is high).

27. In highly suspected case or rapidly progressive disease, start steroid at the same time with ribavirin.
  Methylprednisolone 3 mg/kg/day/IV or Hydrocortisone 1-2 mg/kg iv Q6h or Prednisolone 1-2 mg/kg/day po div BD depending on severity and urgency.

28. If fever persists, or clinical deterioration or progressive CXR changes, pulse Methylprednisolone 10 mg/kg/dose iv Q24H for up to 3 doses, depending on clinical response plus Ribavirin 20-60 mg/kg/day iv div Q8H (maximum dose used in some adult patients is 60 mg/kg/day or 1.2 g Q8H).

29. Continue with prednisolone 1-2 mg/kg/day or Hydrocortisone 1-2 mg/kg iv Q6H after pulse methylprednisolone. If condition improves at 1-2 weeks after commencement of steroid therapy, start tapering of steroid over 1 week. If CXR returns to normal by 2-3 weeks, may stop steroid or rapid tail off over a few days. If CXR is still abnormal by 3 weeks, try slow tapering of the steroid according to clinical and radiological improvement.

30. Ribavirin will be given for a total of 10-14 days. Antibiotics may be discontinued if afebrile for 5 days. However patients started on pulse steroid should be carefully observed for secondary infection.

31. The antibiotic regimen can be modified on clinical grounds if secondary or hospital acquired infection is suspected after prolonged stay in ICU and course of high dose steroid.

Pregnancy and SARS ("Management of Obstetric Patients and Babies Born to Mother with Probable/Confirmed Severe Acute Respiratory Syndrome" available on HA Home Page)

32. Admit all pregnant SARS patients to designated medical wards.

33. If it is less than 13 weeks of gestation and the mother has been prescribed ribavirin, termination of pregnancy (TOP) should be advised after she has recovered from the disease.
34. If medically indicated, caesarean section should be conducted in a room with negative pressure ventilation.

35. All patients on ribavirin should be advised to practice contraception for 6 months.


Essential Infection Control Advice
1. Be vigilant at all times.
2. All staff MUST receive infection control precaution training.
3. All persons inside hospital settings MUST wear a mask. For N95 mask, ensure right size and check for leakage.
4. All persons inside hospital settings MUST practise hand hygiene. Avoid touching mask and/or face. Wash hands after touching mask, patients or any suspicious surfaces.
5. Minimise traffic of personal belongings into and out of clinical areas as far as possible.

High Index of Suspicion
1. Practice infection control precautions in all healthcare settings.
2. AED, admission wards, medical wards, paediatrics wards, operation theatres, labour wards and XR departments should be treated as high-risk areas.

Note: initial presentation of SARS may be non-specific and only become more apparent after admission.

Training and Enforcement
3. All personnel working inside an inpatient setting (regardless of SARS risk) must receive training/instructions on infection control precautions against SARS. This applies to our employees as well as contractor staff. All hospitals MUST set up an infection control enforcement team to monitor compliance and identify areas of improvement.
4. Department heads/workplace supervisors should ensure:
   i. All potential users have received training
   ii. An assigned person in each workplace is responsible for maintaining reusable Personal Protection Equipment (PPE) items
      • Verify and document disinfection, cleaning and replacement of disposable parts
      • MUST clearly indicate such information on the PPE for user checking before use (e.g. store item in a sealed package with signature certifying fit for use)
      • User MUST break seal or the certified status before use
      • PPE should be stored in designated locations

Environmental Control
5. Cohort patients: separate "probable/confirmed SARS" from "suspected SARS" from "other patients without suspicion of SARS".

   Note: Patients with unexplained fever should be cohorted whenever possible.

6. Disinfect all clinical areas (at least once daily or more frequent if indicated) and facilities, equipment (regularly and after used) with household bleach 1 in 49 dilution (non-metallic items) and 70% alcohol (metallic items). Facilities contaminated with vomitus, body secretions and excreta must be cleaned and disinfected immediately.

7. Prevent cross-contamination of equipment. SARS cohorting ward and ICU: Avoid crossing over of equipment and other items between wards. If possible, assign them (e.g. bed pan, scissors, thermometers, stethoscope, sphygmomanometer) for designated patient use. If sharing is unavoidable, items must be cleaned and disinfected before using on other patients, e.g. by 1 in 49 dilution household bleach (hypochlorite).

Control Access by Visitors
8. Do not allow visit unless under very exceptional situations. In such circumstances, visit must be kept to minimal (preferably no longer than 15 minutes) and documented. Educate all visitors to take full barrier precautions (surgical mask, gown, gloves, protective eyewear) and their responsibility for adherence to them. Visitors should wash their hands when leaving the area.

Personal Practice

All Hospital Settings
9. All persons MUST wear a mask.
10. All persons MUST practice hand hygiene (frequent hand washing, avoid touching the eyes, nose and mouth).

All Inpatient Settings
11. Standard precautions: Hand hygiene (wash hand after handling individual patients and removing gloves and gowns). Avoid touching the eyes, nose and mouth. Do not eat or drink in inpatient areas or pantry adjacent to inpatient areas.

   Note: Both antiseptic use (e.g. hibiscrub) and the physical action of washing with water are crucial for effective hand hygiene. Hexol-rub or alcohol wipe CANNOT replace hand washing.

12. Droplet precautions: Surgical masks for all patient contact. Protective eyewear (goggles or face shield) for close patient contact.
13. **Contact precautions**: Wash hand before nursing another patient. Protective gowns and gloves for contact with the patient or their environment (must wear gowns in procedures likely to generate splashes or sprays of blood and body fluids).

**SARS Cohorting Ward or ICU**


*Note: N95 masks are available to staff on request. However, its perceived benefit must be balanced against user compliance to correct usage.*

15. More stringent contact precautions: use of cap, gown, gloves and protective eyewear; carry as few personal belongings as possible during work and avoid bringing items into and out of clinical areas as far as possible, e.g. patient records, pagers, stethoscopes and other personal gears including pens and notebooks, etc.

16. **Precautions on entering and leaving SARS cohorting areas**

   On **ENTERING** (in sequential order)
   i. Put on a mask  
   ii. Put on protective eyewear (especially if there is close patient contact)  
   iii. Put on a cap  
   iv. Put on a gown  
   v. Rub hands with alcoholic handrub and allow to dry  
   vi. Put on gloves  
   vii. Enter the ward / ICU

   On **LEAVING** (in sequential order)
   i. Remove gloves (dispose into waste bag)  
   ii. Remove cap (dispose into waste bag)  
   iii. Remove protective eyewear, clean with 70% alcohol and store in labeled paper bag  
   iv. Remove gown (dispose into waste bag)  
   v. Remove mask; discard if contaminated, or store in labeled paper bag for reuse.  
   vi. Rub hands with alcoholic hand rub and allow to dry (if hands soiled, must wash hands before leaving the ward)  
   vii. Put on a surgical mask whilst outside high-risk area.

17. Shower immediately after work. Continue precautionary measures at home. Consult staff clinic or AED if fever or respiratory symptoms develop.

**Waste Management of Disposable Protective Equipment**

18. Disposable masks, caps, gloves, gowns and shoe covers exposed to SARS patients should be handled as clinical waste, i.e., discard into Red Bags, properly packaged and labelled for delivery to incineration.

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**Additional Precautions in High-risk Procedures**

**Serious-risk Procedures**

19. The initial presentation of SARS could be non-specific. A number of breakthrough infections *was* caused by patients who were initially admitted for non-specific presentation but were subsequently confirmed to have SARS. Therefore, aerosolized medication treatments (by nebulizer) and BIPAP and CPAP should not be used for all patients.

20. If deemed medically essential, the above procedures should only be performed in consultation with respiratory physicians, and under high airborne precautions such as strong negative pressure isolation rooms, and use of strict protective gears by healthcare personnel.

**High-risk Procedures**

21. **Potentially aerosol-generating procedures** (diagnostic sputum induction, bronchoscopy, airway suctioning, endotracheal intubation), laboratory handling and processing of fresh specimens associated with SARS, post-mortem examination of human remains of SARS patients.
   i. Performed only if deemed medically necessary.  
   ii. Limit the extent of procedure to the minimum necessary.  
   iii. Limit the number of personnel to the minimum necessary.

**Additional Precautions**

22. **Laboratory processing** of fresh SARS specimen should be performed in a biological safety cabinet. If centrifugation is required, it should be carried out using sealed centrifuge cups or rotors that are loaded and unloaded in a biological safety cabinet.

23. Contact precautions should vary with the risk of exposure. For post-mortem examination, for example, protective garments should include surgical scrub suit, surgical cap, impervious gown or apron with full sleeve coverage, eye protection (goggles or face shield), shoe covers and double surgical gloves with an interposed layer of cut-proof synthetic mesh gloves. Make sure that the protective outer garments are removed when leaving the immediate autopsy area and discarded in appropriate laundry or waste receptacles.

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**H. Infection Control Measures at Home (18/4/2003)**

**Precautionary Measures at Home**

i. Frequent handwashing with liquid soap rather than bar soap, especially after contact with nose, mouth and respiratory secretions, e.g. after sneezing. Use disposable tissue to dry hands. Used tissues must be carefully discarded.
ii. Family members should practise handwashing frequently, and avoid touching the eyes, nose and mouth with their hands.

iii. Put on a surgical mask.

iv. Avoid close contact with family members (e.g. mucosal contact).

v. Avoid sharing food and utensils with family members.

vi. Cleanse and disinfect the facilities (including furniture and toilet facilities) regularly (at least once a day), using diluted household bleach (i.e. adding 1 part of household bleach to 99 parts of water), rinse with water and then mop dry.

vii. If the facilities are contaminated with vomitus or body secretions, wash / wipe with diluted domestic bleach (mixing 1 part of bleach with 49 parts of water) immediately.

viii. Maintain good ventilation at home.

For Staff Caring for SARS Patients
1. All staff caring for SARS patients should adopt the above precautionary measures at home for at least 10 days from the latest contact with SARS patients.

For Persons with Close Contacts of SARS Patients
2. Persons with close contacts with SARS Patients, including patients once admitted to SARS wards but subsequently diagnosed as non-SARS patient (see Section J Convalescence) should adopt the precautionary measures for at least 10 days form the latest contact with SARS patients.

I. Protective Gear and Equipment

Correct Use of N95 Masks
1. The mask provides an effective barrier to prevent healthcare workers from inhaling airborne pathogens such as Mycobacterium tuberculosis. The level of protection is determined by the efficiency of the filter material and how well the facepiece fits or seals to the health care worker's face. N95 mask should not be worn when conditions prevent a good face seal, e.g. a growth of beard, sideburns, etc.

2. Fit check: Perform fit check before each use. Put on the mask and press the metal strip to fit contour of face. Place both hands gently over the mask and exhale vigorously to check for air leakage around the nosepiece or edge. Reposition and recheck as needed.

3. Reuse: N95 masks may be reused. Since it cannot be disinfected, use must be restricted to a single person. Discard if it is physically damaged or soiled.

4. Handling and storage: The external surface may be contaminated. Do not touch with fingers. Label (or identify by other means) your mask to avoid mixing-up. For temporary storage, use a paper bag or box but not sealable plastic bag. Sealing maintain dampness and encourages microbial growth.


1. Definition of Convalescent Cases
   - Afebrile for 48 hours
   - Resolving cough
   - White cell count (lymphocyte) returning to normal
   - Platelet count returning to normal
   - Creatinine phosphokinase returning to normal
   - Liver function tests returning to normal
   - Improving chest X-ray changes

2. The potential for continued viral shedding during convalescence is under investigation. A cautious approach is to cohort convalescence cases in hospital or similar settings for at least 5 days from convalescence.

3. Upon discharge from hospitals (similar settings), advise patients to self-segregate and comply with the followings for at least 10 days from discharge:
   i. Precautionary measures at home.
   ii. Stay indoors and keep contact with others to a minimum.
   iii. Take enteric precaution at home.
   iv. Check temperature twice daily and report to AED (of the hospital from which they were discharged) if temperature ≥38°C on 2 consecutive occasions.
   v. Report to AED if condition deteriorates and any further symptoms develop.

4. Follow up weekly until the chest X-ray and patient's health return to normal.
   i. At each follow up, repeat chest X-ray and full blood count (and other blood tests that were previously abnormal).
   ii. Further confinement and longer follow up could be recommended for those who are immunosuppressed.
   iii. Obtain convalescent serology at 7 and 14 days after the acute sample taken on or soon after the date of disease onset.

Patients Admitted to SARS Wards but Subsequently Diagnosed as Non-SARS Patients
5. Patients admitted to SARS wards but subsequently diagnosed as non-SARS patients are also treated as "close contacts of SARS patients".
   i. They should be managed according to own clinical conditions.
   ii. Precautionary measures should be adopted for at least 10 days from discharge.
   iii. Non-HA staff – attending physicians should refer the discharged patients to respective Designated Medical Centres (DMCs) of DH according to their residential region. The day of discharge from SARS ward is the day of last contact (=Day 0). They should attend DMCs from Day 1 to Day 10 unless they need to stay in Non-SARS wards for further treatment.
   iv. HA staff – follow-up should be arranged by HA hospitals.
Useful Web Sites

Hospital Authority  
www.ha.org.hk

Department of Health  
www.info.gov.hk/dh

US Centers for Disease Control & Prevention  
www.cdc.gov/

World Health Organization  
www.who.int/csr/sars/en/

Ministry of Health, PRC  
www.moh.gov.cn/

Chinese Center for Disease Control and Prevention  
www.chinacdc.net.cn

Guangdong Center for Disease Control and Prevention  
www.cdcp.org.cn/

Radiological findings in SARS by the Department of Diagnostic Radiology & Organ Imaging, CUHK & PWH  
www.droid.cuhk.edu.hk

New England Journal of Medicine  
www.nejm.org

Lancet  
www.thelancet.com/

BMJ  
www.bmj.com

SARS Publications by the “Hong Kong Team”
(Up to 22 April 2003)

Ho W  
“Guidelines on management of severe acute respiratory syndrome (SARS)”  

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