

Infection Control Measures taken by the Hospital Authority In the Management and Prevention of the SARS Incident

Background

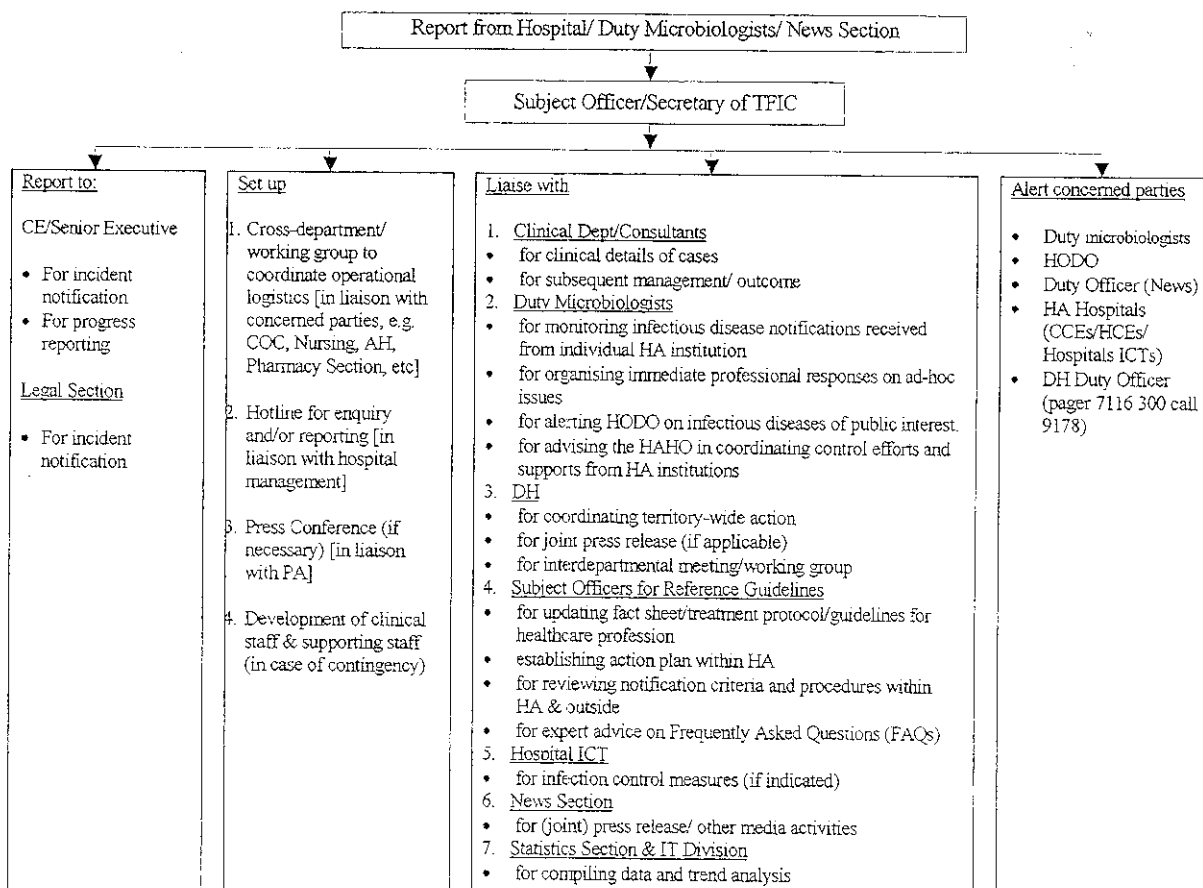
- Several press reports on outbreak of atypical pneumonia in Guangdong Province
- A Working Group on Severe Community Acquired Pneumonia (CAP) set up on 11 Feb 03 - comprising experts from clinical microbiology, internal medicine, intensive care, respiratory medicine, and executives
- Central Task Force on Infection Control (after 27 April 2003)
- Evolution of HA infection control measures reflected in the series of FAQs and guidelines which are frequently updated

Background

- HA Central Infection Control Committee
 - standing mechanism for infection control in public hospital system

Appendix 1

Flow chart for Infectious Disease of Public Concern



Strategies in Infection Control on SARS

- 1. Providing a Safe Environment**
- 2. Enforcing Infection Control Measures**
- 3. Communicating Messages Effectively**
- 4. Controlling Outbreaks and Investigating Breakthrough Infections**
- 5. Heightening Vigilance to Potential Patients and Staff's Own Health**
- 6. Protecting Staff with Appropriate Personal Protective Equipment (PPE)**

Strategies in Infection Control on SARS

Providing a Safe Environment

- Confirmed or suspected cases cohorted in designated units with barrier nursing and sufficient physical spaces provided**
- Clinical areas stratified into different risk zones**
- Precautionary measures implemented**
- Environment and equipment were frequently disinfected**
- Ventilation system of ward assessed to improve the air exchange and air quality**

Strategies in Infection Control on SARS

Enforcing Infection Control Measures

- An Infection Control Enforcement Network – at policy level and at work level (the system of wardens)
- Identify and segregate SARS patients - to prevent spread of disease in hospitals
- Mandatory training on infection control for front-line staff
- Monitor and audit – structured inspection on compliance

Strategies in Infection Control on SARS

- Communicating Messages Effectively
 - Guidelines promulgated through the email and intranet technology
 - A daily newsletter “ Battling SARS Update”
 - A 24-hour SARS Hotline
 - Regular hospital forums

Strategies in Infection Control on SARS

● Controlling Outbreaks and Investigating Breakthrough Infections

- No visiting policy – 3/4/2003
- Early identification of index patients so as to initiate actions for contact tracing and cohorting of contacts
- Studies and reviews co-ordinated on staff infections

Strategies in Infection Control on SARS

● Heightening Vigilance to Potential Patients and Staff's Own Health

- Hospitals alerted to “ cryptic cases”
- Periodic extra day-offs, work shift re-scheduled to reduce staff fatigue and augment attention span
- Daily log of staff's own body temperature as part of surveillance

Strategies in Infection Control on SARS

- **Protecting Staff with Appropriate Personal Protective Equipment (PPE)**
 - Standard provisions of PPE defined
 - Training on the appropriate use of PPE

Evolution of HA wide infection control measures (1)

- Preparatory phase (11 February – 9 March)
- FAQ 21 February 2003 (28 Feb 2003, 7 March 2003)
- Case definition for surveillance of severe community acquired pneumonia (SCAP)
- Reporting mechanism
- Laboratory test arrangement
- Infection control measures for droplet spread

Evolution of HA wide infection control measures (2)

Leading to :

- Identification of a cohort of H5N1**
- Initiatives in diagnostic approach (open lung biopsy)
leading to simultaneous identification of corona virus**
- Early delineation of linkage of clustered cases**

Evolution of HA wide infection control measures (3)

- Early phase (10 March – 23 March)**
- Strengthening of hospital infection control measures
basing on pre-existing infrastructure**
- Guidelines on management of SARS 19 March 2003
(24 March 2003, 27 March 2003)**
 - aerosol generating procedures**
 - updated case definition**
 - updated reporting mechanism**
 - seminars**

Evolution of HA wide infection control measures (4)

Peak phase (24 March – 6 April)

- **More focus on hospital environment control**
- **Restriction of visiting**
- **Infection control enforcement network**
 - **sharing and strengthening implementation**

SARS guidelines updated

- **risk stratified use of PPE**
- **post-discharge care**
- **arrangement for post-mortum exam**
- **laboratory safety**

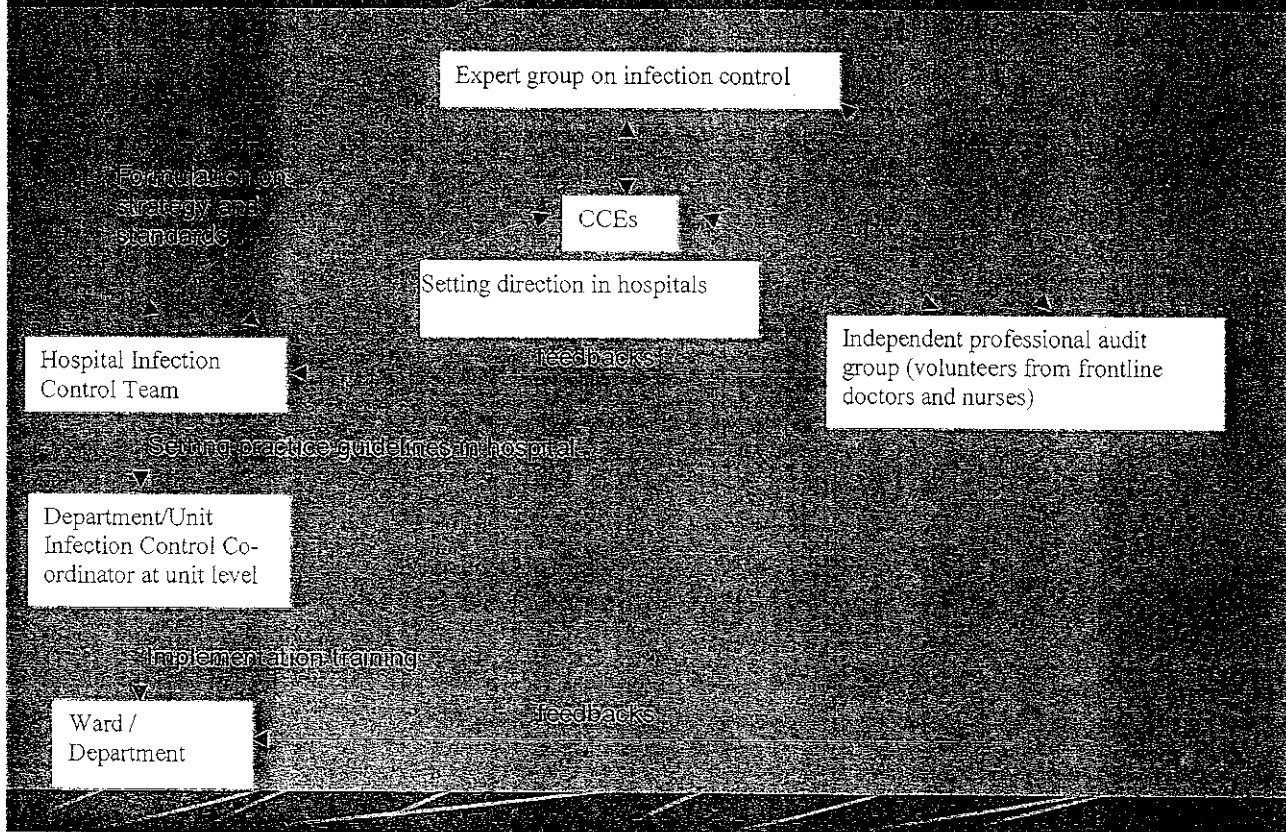
Evolution of HA wide infection control measures (5)

- **Plateau phase (7 April – 20 April)**
- **Sharing of Guangdong experience**
- **Hierarchy of hospital infection control warden**
- **Reinforcement of infection control training**

Evolution of HA wide infection control measures (6)

- Resolution phase (21 April –)
- More scientific data on effectiveness of PPE
- Staff infection review/journals
- Central Task Force on Infection Control
- Further strengthening of the infection control activities by Head Office inspection
- Strengthening of hospital outbreak management
- Auditing/inspection of infection control practices
- Improvement in communication

Organization of Central Task Force on Infection Control on SARS



The Way Ahead

- 23 June 2003, HK off WHO list of affected areas
- WHO repeated caution on possibility of re-occurrence
- Need for continued vigilance versus need to return to normal (New Normal) activities
- Planning work on hospital facilities and training need for infection control
- Need for continued initiative in research