SC2 Paper No.: A86

For information

SARS Expert Committee

Initial Stage of Outbreak of Atypical Pneumonia

Purpose

This paper sets out efforts made by the Department of Health (DH) in managing cases and suspected cases of atypical pneumonia (AP) in February and early March 2003, up to and including the cluster of cases in the Prince of Wales Hospital (PWH). The disease was identified as Severe Acute Respiratory Syndrome (SARS) by WHO on 15 March 2003.

2. The purpose is to examine if DH had been sufficiently alert to the developing situation and if DH had approached the matter in a professional manner given the little knowledge of the disease at the time and the Guangdong outbreak situation provided by Mainland authorities.

Outbreak in Guangzhou and Liaison with Mainland

- 3. On 10 February (Monday), there was local media coverage about an outbreak of pneumonia in Guangzhou. The Director of Health (Director) immediately tried but in vain to contact Mainland health officials on the phone, namely the Municipal Health and Anti-epidemic Station of Guangzhou and the Director General of Department of Health, Guangdong. DH followed up with a letter faxed to health officials in Guangzhou and Guangdong to enquire about the reported outbreak. As subsequent phone calls were also unanswered, the Director approached the Director General of the Department of International Cooperation, Ministry of Health for assistance.
- 4. On the following day, the Guangzhou Bureau of Health held a press conference informing the public that the situation in Guangzhou

was under control. Details were uploaded onto the Internet (Annex 1). DH also made telephone enquiries with the Hospital Authority (HA), private hospitals and sentinel doctors and they reported that no unusual pattern of influenza-like illness or pneumonia in Hong Kong was detected. The Director conducted a stand-up briefing and issued a press release (Annex 2) in late afternoon on the reported outbreak in Guangzhou and provided health advice that should be observed in the usual peak season of influenza in Hong Kong (January - March).

5. Since then, DH had maintained contacts with Mainland officials. On 7 March, the Ministry of Health verbally advised that no definite cause had been identified to account for the AP outbreak in Guangdong. While H5N1 was ruled out, the usual causative agents like influenza A, influenza B, adenovirus or chlamydia were isolated.

Stepped up Surveillance

- 6. Both HA and DH had been fully on the alert for severe community acquired pneumonia (SCAP) cases. On 11 February, HA set up a Working Group on SCAP with involvement of experts in microbiology, internal medicine and intensive care. DH subsequently also joined the Working Group. Major recommendations and actions taken by HA were -
 - (a) Hospitals to set up a reporting system for cases of CAP which required assisted ventilation or Intensive Care Unit (ICU)/High Dependency Unit care (memo issued on 12 February).
 - (b) Hospitals to activate surveillance of cases and gathering of epidemiological information (memo issued on 12 February).
 - (c) HA to reinforce infection control guidelines.
 - (d) HA to closely liaise with DH.
- 7. Immediately thereafter, HA hospitals started to refer SCAP cases to DH for epidemiological and laboratory investigations. Private

hospitals were also asked by DH to report SCAP cases.

Two citizens with a history of travel to Fujian

- 8. On 13 February, DH received notification of a suspected AP case of a 33-year old (admitted to Princess Margaret Hospital (PMH) on 11 February), who had a history of travel to Fujian with his family, and whose 9-year old son had also been admitted (12 February) to the same hospital. DH conducted extensive epidemiological and laboratory investigations promptly.
- 9. The Government Virus Unit (GVU) of DH confirmed on 19 February H5N1 infection for the 9-year old boy. DH immediately alerted WHO as well as the Ministry of Health, following which WHO issued a global alert on the same day on the confirmed "bird flu" case in Hong Kong. H5N1 infection was also confirmed on the 33-year old father on 20 February and the WHO and Ministry of Health were again duly informed.
- 10. Locally, DH initiated comprehensive public health measures including prompt communication of information and health advice to the public by frequent media briefings and press releases, health alert to all doctors, and strengthened health education, all aiming to prevent a resurgence of a vian flu in Hong Kong. A list of actions taken in this regard up to early March is at Annex 3.

Kwong Wah Hospital Cluster (a visitor from Guangzhou)

11. On 24 February, DH received notification that a tourist from Guangzhou admitted to the ICU of Kwong Wah Hospital (KWH) at around noon time on 22 February was suspected to suffer from SCAP. He was fully sedated and intubated for supported ventilation on 23 February. The fever did not subside and his condition continued to deteriorate. He subsequently suffered from multi-organ failure and finally succumbed on 4 March.

- investigation in the afternoon upon receipt of notification. According to his wife and daughter, was a doctor in the out-patient clinic of a hospital in Guangzhou. In the week preceding his onset of symptoms, he contacted two patients presenting with high-grade fever and chest symptoms. Chest X-ray (CXR) of both patients showed haziness and referred both patients to attend Accident and Emergency Department (AED). Was not exposed to any poultry two weeks prior to the onset of symptoms. He did not keep chickens, ducks or birds, nor go to any market where live poultry was kept.
- had good past health. In the evening of 15 February, he had a sudden onset of fever (39°C), chills and rigor. He had taken self-administered antibiotics. As he had to attend the wedding banquet of his nephew (sister's son), he came to Hong Kong with his wife on 21 February at 12.30 hours and resided in the had increased cough, shortness of breath, fever and peripheral cyanosis.
- 14. Contact tracing further revealed that (38.4°C) in the afternoon on 24 February. She returned to Guangzhou where she was hospitalized that evening. A 's daughter, who separately arrived in Hong Kong on 22 February, accompanied her mother on the return trip on 24 February. She was also admitted to a hospital in Guangzhou on 27 February for fever. In Hong Kong, A 's sister was hospitalized on 1 March and her husband (i.e. 's brother-in-law) on 28 February, both for fever, cough and sputum.
 - 15. Results of extensive laboratory investigations carried out in the University of Hong Kong (HKU) and the GVU were all negative, except a 4-fold rise in adenovirus antibody titre.
 - 16. A full report on the detailed action taken by DH's Kowloon Regional Office is in Paper Was an intra familial spread due to close contact, the situation was a cause for concern. The Director had many discussions with one of the attending physicians and the Consultant of the GVU to explore what further actions were required to identify the

causative agent. The case was eventually identified as the index case of the cluster on 19 March (paragraph 28).

- According to Paper prepared by HA, there were two infected Health Care Workers (HCWs) whose infection might be related to the three patients in some 's family. The first case concerned a Registered Nurse who was hospitalized on 28 February. She did not have direct contact history with the stayed. She wore surgical mask at the time because she was having flu symptoms herself. She recovered well and was discharged on 18 March. DH was not notified of this case.
- In the second case, the infected Health Care Assistant had history of contact with the brother-in-law of she was working in the isolation room where he stayed. She attended KWH's AED on 6 March and was discharged with two days' sick leave. She re-attended KWH's AED on 7 March and was admitted into an isolation room. She was intubated and transferred to ICU on 12 March. DH was notified on 13 March when action on case investigation and contact tracing was immediately initiated. She was eventually discharged on 27 March.

A patient from Hanoi

- 19. On 5 March, WHO notified DH that a highly infectious patient with severe pneumonia () was being transferred from the French Hospital in Hanoi to Hong Kong for treatment. PMH and HA Head Office were informed.
- arrived Hong Kong on 6 March and was directly transferred to the ICU in PMH. He was too ill to be interviewed. A Nursing Officer tried to interview his wife on 7 March but in vain. She was not cooperative. Attaching great importance to this case, DH sent a health team of a Senior Medical & Health Officer (SMO) and a MO to approach again on 8 March. Although she agreed to be interviewed, difficulties were encountered. She did not have full details of her husband's travel history and she was reluctant to give information.

- Based on clinical history and information provided by the wife, it was learnt that traveled from the US to Shanghai in mid-January alone and visited Hong Kong by himself in mid to late February to apply for a visa. He stayed in Hong Kong for a few days and continued his journey to Hanoi. He was admitted to the Hanoi French Hospital in Vietnam on 26 February. CXR taken upon admission was clear but lymphocyte count was low. His condition deteriorated rapidly after admission and he required intubation and artificial ventilation support on 2 March. Investigation by French Hospital suggested that the patient was suffering from influenza B complicated with Adult Respiratory Distress Syndrome. Later CXR showed bilateral interstitial infiltrations, the white cell count was raised but the lymphocyte count and platelet count were decreased.
- 22. During the interview with two relatives from Shanghai were also present. They advised that the did not have any contact with relatives in Shanghai. The wife and the relatives exposed to the prevention of respiratory infections and personal hygiene was given to them and they remained asymtomatic at the end of the surveillance period.
- 23. On 8 March, the DH health team discussed with the attending physicians on the condition of and understood that PMH was also aware that more than 10 HCWs who had taken care of French Hospital were hospitalized. We note that PMH had implemented strict infection control measures during stay and no HCW was infected.

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- 24. Despite active treatment in Hong Kong, condition further deteriorated with congested lung and renal failure requiring haemodialysis. He finally succumbed on 13 March.
- 25. Results of extensive laboratory investigations conducted by HKU and GVU were negative. Autopsy specimens were sent to the Centres for Disease Control and Prevention, US on 17 March and the case was subsequently diagnosed on 22 March, as reported during

inter-laboratories teleconference, as a SARS case.

Prince of Wales Hospital Cluster

- On 11 March, there was media coverage that more than 10 HCWs in Prince of Wales Hospital (PWH) Ward 8A reported respiratory infection symptoms in the previous three to four days. DH immediately contacted PWH for case investigation and contact tracing. Up to 31 March, about 480 reported cases and close to 2,000 contacts related to the PWH cluster had been followed up by DH by adopting a very sensitive case definition agreed with PWH in order not to miss any case. Among these reported cases and contacts, 205 persons were subsequently confirmed to have SARS. Of these, 95 were HCWs or medical students while 110 were in-patients, family members or visitors.
- 27. This exercise was a massive operation and is detailed in Paper
 We would like to highlight the following -
 - (a) On learning the upsurge of suspected cases on 11 March, DH immediately assessed the situation and notified WHO the following day. This had enabled WHO to issue a global alert on 12 March, raising awareness all over the world. As a result, we had received reports from Singapore and Canada which had led to the discovery of the cluster and the source of the disease in Hong Kong (see paragraph 28).
 - (b) Apart from notification, DH involved WHO early to assist in investigation work. <u>First</u>, under WHO, a network of scientists from 11 laboratories in nine countries / territories, including HKU, the Chinese University of Hong Kong (CUHK) and GVU was set up. This had led to early identification of the causative agent and transfer of specimens to facilitate diagnostic development. <u>Second</u>, the WHO epidemiological team started work in DH on 17 March. Hong Kong was able to make use of the expertise of WHO.
 - (c) A Taskforce with representatives from the Health, Welfare and

Food Bureau, DH, HA, PWH, HKU, CUHK and PMH was formed on 14 March to speed up information exchange and coordinate preventive and investigation efforts for the SARS exercise extending beyond the PWH cluster. The Secretary for Health, Welfare and Food (SHWF) was the chairman. This was the forum where major issues were discussed and decided. Where appropriate, SHWF would bring up important matters to the Chief Executive of the HKSAR for guidance/endorsement.

- (d) The investigation was under the charge of Community Physician (NT East Region) [CP(NTE)] Dr Au, a directorate officer. Dr Choi, CP (NTW) covered for him when the latter fell sick during the period 18-21 March.
- (e) Dr Au's counterparts were the PWH's senior hospital management team, Dr Fung Hong and Dr Philip Li, not the CUHK medical faculty.
- (f) Because of the complexity of the outbreak, the non-specific nature of the symptoms and the lack of a quick diagnostic test for the syndrome and the speed with which caseload and cases were increasing, there was much confusion in the flow of information of cases from PWH to DH at the working level in the initial days. To facilitate communication and investigation, including collection of first-hand clinical and exposure information on cases and suspected cases for source and contact tracing, and advice on control procedures, DH stationed in PWH control room a team of staff from 13 March. The DH Team comprised one experienced MO and two to three Nursing Officers. One more MO from DH joined the Team on 15 March.
- (g) The DH team in PWH control room was strengthened on 21 March with the addition of one Principal MO to streamline data collection and dissemination from PWH staff in order to speed up case investigation and contact tracing by DH staff.
- (h) For efficient conduct of contact tracing, the agreement with the PWH management was that DH would be responsible for

discharged patients and hospital visitors exposed to cases and contacts of patients that fit the case definition, while PWH would be responsible for its staff, in-patients and medical students exposed to cases.

(i) In a letter of 19 March to the Director, Professor Sydney Chung raised concerns on infection of contacts that had never been to PWH and urged her to urgently consider all possible measures including quarantine of patients and contacts. An example cited was that of

had symptoms but stayed at home from 11 to 19 March. Both his mother and brother were admitted with pneumonia on 19 March. Was admitted on 19 March as well and was transferred to ICU straight away.

- (j) Notwithstanding the agreement summarized in (h) above, the case of who showed symptoms suggestive of the disease was not reported to DH and he continued to stay at home and spread the disease to his family.
- (k) We understand that PWH had provided quarters accommodation for staff who wished to stay away from home as a measure to help prevent the spread of the disease to their families.
- (1) According to the HA chronology, PWH Ward 8A was closed to admission and discharge, visiting restricted and documented on 10 March. This authority to close part of a hospital to the public is indeed provided for under By-law 6(3) of the Hospital Authority Ordinance (Cap 113).
- (m) In a press briefing with the HA Chief Executive on 18 March together with panels of experts, namely Prof John Tam, Prof Yuen Kwok-yung and Dr Dominic Tsang, SHWF said the operation of PWH will be based on two principles -

one is on the safety to patients, and my expert advisers agree that there is currently no evidence at all that it is unsafe for

patients to be seen in that hospital. As you know, WHO has reaffirmed yesterday that this is infection spread mainly by droplets and the precautions we are taking are adequate and there's no evidence to suggest that the infection is spreading into other parts of the hospital other than those who have been in contact. So we are of the view that it continues to be safe to see patients in hospital.

(extracted from press release)

(n) The other principle was availability of manpower. In the same press briefing, HA Chief Executive said -

The night before last, I talked to Professor Chung and others about staffing. There is a need to adjust downwards the number of staff in service. As a result, we have to cut down on some activities of the various clinics and departments.

We would like to suspend the operation of AED for some days starting from midnight tonight.

(extracted from press release)

M (thtu" Cluster

28. Following WHO's global alert on 12 March on atypical pneumonia, we received reports from Singapore and Canada. With the two reports indicating a possible cluster, DH immediately ran through its records and discovered that both the Guangzhou visitor and the PWH cluster index patient as well as the St Paul's Hospital cluster index patient all had either stayed or visited during the same period. Further investigation into hotel records and immigration records eventually led to the discovery of the Metropole Hotel cluster and the source of infection for Hong Kong. Details are set out in Paper ... The Director held a press conference on 19 March to announce the discovery.

SC2 Paper No.: A5(c)

Conclusion

DH had followed up on the large number of cases and suspected cases with due diligence and professionalism, given the little medical knowledge of the emerging disease at the time. We have also given due advice to various stakeholders, including schools and childcare centers, elderly homes, as well as occupational sectors. A list of our action in this regard in March is at Annex 4. The transparency approach has facilitated us in the eventual discovery of the little cluster and the source of infection for Hong Kong.

Department of Health July 2003

Annex 1

(Translation) Guangzhou City Government News Conference Two people died in Guangzhou till now (11 February 2003)

Director of Health Bureau in Guangzhou, Huang Jionglie, explaining the situation of atypical pneumonia in Guangzhou.

News Conference in progress

Deputy Secretary General of Guangzhou Government, Zhang Huoying, Speaking at the conference.

Deputy Mayor of Guangzhou, Chen Chuanyu, Speaking at the conference.

Guangzhou City Government held a news conference at 10:30 this morning. Huang Jionglie, Director of Health Bureau in Guangzhou, reported on the situation of atypical pneumonia in Guangzhou.

At the end of last year, atypical pneumonia cases were reported in certain parts of Guangdong Province. Since 12 January 2003, some of the seriously ill patients have been transferred to some major hospitals in Guangzhou for treatment. During the period around Lunar New Year, local cases were detected in Guangzhou region. To date, more than a hundred of cases have been reported in Guangzhou.

Pneumonia is an infectious disease commonly detected in winter and spring seasons. But unlike those in the past years, most pneumonia cases reported this year are atypical with a quick onset and fever as the first symptom. Patients may also develop apparent respiratory symptoms of dry and unproductive coughs. Despite its quick onset, there is a low risk of fatality. The conditions of most patients are not serious with fever as the major symptom. All existing cases have been properly treated and the conditions of the great majority of patients are under control. Some patients have already been discharged after recovery. As at February 9, two people died among all cases detected in Guangzhou City.

Current situation shows that the disease is infectious and is mainly transmitted through close contact with the respiratory droplets or secretions of the patients. The risk of contracting the disease is generally low unless there is close contact with infected patients suffering from fever.

There are over a hundred cases in Guangzhou City, many of whom are healthcare workers who worked in a few local hospitals where there was neither enough awareness of the disease nor adequate supply of protective gear. They were infected while in close contact with seriously ill patients who came for treatment from places outside Guangzhou. So far, no healthcare workers have been infected in hospitals with adequate and active precautionary measures in place and full awareness of the disease. There is clinical proof that healthcare workers can avoid being infected by strictly complying with the relevant procedures.

The City of Guangzhou has been affected by the disease for more than a month now. The patients are all under effective treatment and their condition under control. There is no need to panic. People generally would not be infected if they follow the guidelines issued by relevant departments of the Guangzhou Province and Guangzhou City by avoiding close contact with patients suffering from fever, maintaining good ventilation of household and working environment, and avoiding excessive fatigue. People are advised to seek early medical treatment at nearby hospitals if they develop such symptoms.

Recently, all sorts of rumors about the disease have been spreading around in the community. It has been described as a biological attack, an inexplicable virus attack, and the spread of plague. All these have been found to be nothing but rumors. The public are urged not to believe in such rumors so as to avoid unnecessary worry and inconvenience.

Press Release



DH monitors situation closely

The Department of Health is closely monitoring the situation in Hong Kong in relation to the high incidence of pneumonia cases in Guangzhou, the Director of Health, Dr Margaret Chan said today (February 11).

The Department has already contacted Mainland health officials to get more information. As it is the high season for respiratory diseases in the Mainland, consultation and hospital admission rates have risen significantly recently.

Initial reports showed that the cases were not anthrax or plague. When further laboratory results are available, DH would be informed, Dr Chan said.

In Hong Kong, the Department of Health operates an effective surveillance system. No unusual patterns of influenza-like illness and respiratory tract infection including pneumonia have been identified through the surveillance network of hospitals, clinics and laboratories in the public and private sectors.

She reminded members of the public to take steps to prevent influenza as we have entered the usual peak season for influenza in Hong Kong between January and March.

To prevent influenza, it is important to:

- * maintain good ventilation;
- * avoid crowded places;
- * observe good personal hygiene and wash hands after sneezing, coughing or cleaning the nose;
- * build up good body immunity by having a balanced diet, adequate exercise and rest; and
- * avoid smoking.

Travellers are also advised to observe these preventive measures.

Persons who fall sick are advised to seek medical advice early.

End/Tuesday, February 11, 2003

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Summary of key public health actions taken by DH in February to early March 2003 with regard to influenza/pneumonia:

Date

Measure

- 11.2.2003 Immediately checked with HA hospitals, private hospitals and sentinel doctors for surveillance for pneumonia and influenza-like illness.
 - Stepped up surveillance for pneumonia through which severe community acquired pneumonia (SCAP) cases in HA hospitals would be referred to DH for epidemiological and laboratory investigations.
 - Director of Health attended radio phone-in programme concerning the reported pneumonia outbreak in Guangdong. Later the day, briefed the media and issued a press release on the Guangdong situation and highlight health advice for the usual peak season of influenza in Hong Kong between January and March.
 - Maintained close liaison with the Mainland health officials and the WHO throughout the period.
- 13.2.2003 Required all private hospitals to immediately report new SCAP cases which involved ICU/High Dependency Unit/assisted ventilation and submit weekly surveillance reports on pneumonia cases admitted.
- 19.2.2003 Briefed the media and informed the public via press release on the first H5N1 infection in 2003 and provided health advice.
 - Strengthened health education on influenza and avian flu, including prevention and treatment information on the DH Central Health Education Unit website and the 24-hour health information hotline, in addition to the series of roving health exhibitions on influenza scheduled for January to March.
- 20.2.2003 Further briefed the media and informed the public via press release on the two H5N1 cases and reinforced the health advice.
 - Issued health alert to all doctors on the H5N1 infection, providing clinical information, treatment information and related health advice, as well as reminding the doctors on surveillance for atypical pneumonia.
 - Conducted health talks for 778 students and 35 teachers of the school attended by the 9-year old boy confirmed with H5N1 infection.
- 24.2.2003 Conducted further health talk in the community.

Note: This Annex focuses on public health measures. Actions related to individual reports of cases, such as case investigations, are not included.

Summary of key public health actions taken by DH in March 2003 following cluster of atypical pneumonia (AP) cases noted in Prince of Wales Hospital (PWH) on 11 March:

Date

Measure

- 12.3.03 Conducted media briefing to express concern and alert the public on the PWH cluster.
 - Reminded doctors and private hospitals on infection control and surveillance among health care workers.
 - Alerted the Education and Manpower Bureau (EMB) and the Social Welfare Department (SWD) and provided detailed health advice on preventive measures against respiratory tract infections in schools and child care centres. Thereafter continued to closely liaise with EMB and SWD, including advising on the issuing/updating of relevant guidelines to schools and social service centres.
- 13.3.03 Launched AP-related information on the DH website. Issued health advice to all travel agencies via the Travel Industry Council of Hong Kong (TIC).
 - Requested SWD to assist in reminding all elderly homes to take note of the preventive measures on the current guidelines on prevention of communicable diseases in residential care homes.
 - DH Elderly Health Centres (EHC) and Visiting Health Teams enhanced health education to elders and carers for prevention of respiratory infections.
- Continued to disseminate health advice on prevention of respiratory tract infections to the general population, health care professionals, travellers, public transport operators etc. through the DH website and the 24-hour health information telephone system. Titles of the health education materials included "advice for caring for sick family members with respiratory illness", "advice for health care workers in clinic settings", "notification of infections", "health guidelines for public transport operators", "protect yourself against respiratory tract infections", "guidelines for crowded places".
 - Advised the Immigration Department on the handling of airborne infectious

disease at border points.

- 15.3.03 Issued health advice on prevention of respiratory tract infections to doctors.

 Further reminded private hospitals and nursing homes on respiratory tract infections among health care workers.
 - Updated the travel industry on the SARS situation via the TIC.
- Issued letters to all airlines via the Airport Authority alerting them on WHO's emergency travel advisory and advising on ways to deal with suspected SARS cases on board aircrafts.
- 17.3.03 Alerted private hospitals on the WHO guidelines on Hospital Infection Control Guidance and Management of SARS. Issued health advice on respiratory tract infection to doctors, travel industry and related organizations. Similar health advice also issued to Chinese medicine professionals.
 - 18.3.03 Further communication with the private hospitals on surveillance of SARS cases.
 - Hotline for public enquiry set up.
 - Commenced various modalities of public health education including posters, pamphlets, exhibition boards, APIs, media interviews, write-ups, advertisements, TV exposures, roving exhibitions, FAQs etc.
- 19.3.03 Strengthened communication with EMB and SWD and provided daily reports to them on confirmed or suspected cases involving students or school staff.
 - A press conference held at 10:30 pm to inform the public about the finding of cases related to the Metropole Hotel.
- 20.3.03 Further advised doctors and private hospitals on the outbreak with information extracted from HA's Guidelines on the Management of SARS.
- 21.3.03 Commenced various series of community health talks organized in collaboration with different parties.
 - Delivered health talks at briefing sessions on AP organized by the EMB for supervisors/heads of secondary and primary schools.
- 22.3.03 More proactive measures and guidelines for schools requiring students and

staff who were contacts or relatives of SARS patients to suspend school for one week.

- Advised nursing homes on "Infection Control Measures for Health Care Facilities". Advised doctors on "Infection control measures for medical clinics in the community" and began to issue similar advice to other health care personnel on statutory registration via separate letters (e.g. nurses, radiographers, medical laboratory technologists and Chinese medicine practitioners), professional associations, and exempted clinics. Developed sector-specific guidelines for deployment by other government departments.
 - Promulgated health advice on SARS to all elderly service units through the Hong Kong Council for Social Services.
- 25.3.03 Continued to update guidelines and advice to doctors, travel industry, schools, social welfare institutions and elderly homes etc.
- 25, 27 & Conducted health talks on "Common Infectious Diseases and Oral Health of School Children" to school representatives for helping the schools to step up preventive measures against respiratory tract infections.
- Further communication with the private hospitals regarding surveillance of SARS cases.
- 27.3.03 Enacted legislative amendment to include SARS on the list of infectious diseases on the above-mentioned Schedule. Alerted doctors and private hospitals in this regard.
 - DH EHC allowed clients to obtain repeat prescription without attending follow up consultation.
- 29.3.03 Required arriving passengers to fill out Health Declaration forms at all immigration border control points at air, sea and land. Departing air passengers to answer questions relating to SARS.
 - Added another hotline (20 lines) for public enquiry.
- 31.3.03 Set up Designated Medical Centres for daily surveillance of contacts of SARS patients.

End March - Produced and widely used sector-specific health guidelines, including "guidelines for workplaces", "health advice for social contacts" and "guidelines for close contacts".

Note: This Annex focuses on public health measures. Actions related to individual reports of cases, such as case investigations and health education/advice for specific cases, are not included.