

**Monitoring Committee on the Implementation of the
SARS Expert Committee Report's Recommendations**

**Centre for Health Protection:
SARS Expert Committee's Recommendations in Action**

Introduction

One of the key recommendations (no. 2) of the SARS Expert Committee was for the HKSAR Government to establish a Centre for Health Protection (CHP), which would have the responsibility, authority and accountability for the prevention and control of communicable diseases. This paper reports the progress of setting up of the CHP within the Department of Health (DH) and its progress in implementing the recommendations of the Expert Committee.

SARS Expert Committee Recommendations

2. The SARS Expert Committee considered that the CHP should be set up within the Government and its existing public health infrastructure. As the Centre develops, its function should be broadened to cover environmental hazards and non-communicable diseases.

3. The Expert Committee Report highlights the following principal functions of the CHP:

- To engage in comprehensive surveillance on communicable disease (recommendations 5, 8, 9, 12, 13, 32)
- To develop an adequate communicable diseases control system (recommendations 5, 6, 8, 9, 12, 31, 32)
- To establish partnerships with healthcare professionals, community, academics, government departments, national and international authorities in communicable disease control (recommendations 9, 10, 11, 12, 13, 14, 17, 18, 37, 41)
- To develop and review contingency plans including risk communication strategies to respond effectively to outbreaks

(recommendations 5, 7, 16, 19, 23, 24, 25, 26, 30, 33)

- To develop, support, implement and evaluate programmes on the prevention and control of communicable diseases (including hospital-acquired infections) (recommendation 12)
- To develop the research agenda and support applied research on the prevention and control of communicable diseases (recommendations 15, 35, 36, 37)
- To build capacity and develop professional expertise on communicable disease control (recommendations 5, 12, 38, 39, 40, 41)

Organization of CHP

4. The Secretary for Health, Welfare and Food appointed an advisory committee in November 2003 to help shape and form the CHP. Local health professionals and academics offered advice and suggestions on the organizational framework of the CHP, including its role, functions and scope of activities. Taking into account the Expert Committee's recommendations, relevant overseas experience and the health needs and circumstances of the local population, the advisory committee endorsed in December 2003 a proposal to organize the activities of the CHP into six functional branches and a phased implementation approach.

5. The six functional branches are:

◆ Surveillance and Epidemiology Branch (SEB)

This Branch provides the framework for monitoring and contributing to the prevention and the control of diseases of relevance to the population in Hong Kong. Under the Branch, there is a Communicable Disease Division (CDD) and a Non-Communicable Disease Division (NCDD).

◆ Infection Control Branch (ICB)

The Branch comprises a branch office and Epidemiology and Infection Control Units in the five hospital clusters of the Hospital Authority (HA). The Branch will develop, promulgate, and evaluate best practices in infection control in healthcare and other settings, support epidemiological investigations of communicable disease outbreaks in hospitals and support training in infection control for all levels of health staff.

◆ Public Health Laboratory Services Branch (PHLSB)

In addition to provision of laboratory services and support for disease control by providing laboratory diagnoses and carrying out laboratory surveillance, this Branch is responsible for training laboratory personnel and development of partnership with laboratories in HA, Agriculture, Fisheries and Conservation Department, Government Laboratory, local universities and overseas agencies.

◆ Public Health Services Branch (PHSB)

It provides specialized clinical services in respect of tuberculosis, HIV and sexually transmitted infections and collaborates with hospitals and other clinical services in the control of these infections.

◆ Programme Management and Professional Development Branch (PMPDB)

It provides management support to seven scientific committees as well as health protection programmes on targeted diseases/hazards under the committees. It oversees the strategic development of applied research projects in communicable diseases and oversees training and development of health professionals, allied health staff and lay personnel engaged in health protection activities of the CHP.

◆ Emergency Response and Information Branch (ERIB)

This Branch, comprising a multi-disciplinary workforce including senior administrative and police officers, is responsible for coordinating emergency responses and facilitating emergency preparedness. In times of communicable disease outbreaks or other exigent public health circumstances, it will also act as the information coordinator to ensure the timeliness, responsiveness and consistency of information flow.

6. To enlist expertise outside DH, a scientific advisory structure was developed. Experts from various fields were invited to serve on a Board of Scientific Advisors and seven Scientific Committees, namely:

- ◆ Scientific Committee on AIDS
- ◆ Scientific Committee on Emerging and Zoonotic Diseases
- ◆ Scientific Committee on Enteric Infections and Foodborne Diseases
- ◆ Scientific Committee on Infection Control
- ◆ Scientific Committee on Vaccine Preventable Diseases
- ◆ Scientific Committee on Vector-borne Diseases

- ◆ Scientific Committee on Advanced Data Analysis and Disease Modelling

7. A Controller was appointed with effect from 1 April 2004 to lead and oversee the new agency's day-to-day operations. The CHP officially commenced operation on 1 June 2004. The following paragraphs report on the progress made by the CHP in implementing recommendations of the Expert Committee.

Public Health Surveillance

8. Surveillance on communicable diseases is mainly the work of the CDD of SEB. The CDD consists of an Epidemiology Section (ES) and a Communicable Disease Surveillance Section (CDSS). The CDSS develops a central hub for data collection relating to communicable diseases. It systematizes regular data collection and collation from surveillance systems maintained by the DH and relevant agencies, generates regular epidemiological reports, and develops studies on selected communicable diseases of important public health consequences to Hong Kong. The CDSS is responsible for epidemic intelligence, information system data management and cross-border surveillance.

9. To enhance private sector participation in disease surveillance and control, communication network has been strengthened through letters to doctors, meetings with medical associations, launching of a bi-weekly web-based communicable disease bulletin and a survey on feedbacks. A Centralized Notification Office has been set up to receive notifications of outbreaks and diseases, to provide daily summaries of communicable diseases and to conduct media monitoring. An on-line disease notification system is under active development with a target launching date in September 2004. This provides an alternative rapid channel for notification of communicable diseases especially by the private sector. To step up surveillance and reporting of H5N1 infection and Japanese encephalitis among the human population, these two conditions were made notifiable diseases on 10 January 2004 and 16 July 2004 respectively.

10. The GP and general outpatient sentinel surveillance system is being enhanced to meet the changing needs in communicable disease surveillance. Pilot schemes have been initiated in childcare centers, elderly homes, and among Chinese medicine practitioners. Major pharmacist organizations are also enlisted to participate in disease surveillance, details of which are being

worked out. The experience will be reviewed with the aim of rolling out by end 2004, enabling early detection of territory-wide increases in sickness absence, fever, diarrhoea, and other syndromes for investigation and generation of public health alerts.

11. A feasibility study on an integrated system on Communicable Disease Information System (CDIS) is being planned, which will provide real-time integration of clinical and laboratory information kept by public hospitals, DH and relevant disease surveillance systems, to facilitate early detection and control of outbreaks in institutional and community settings.

12. Surveillance programmes also cover non-communicable diseases. Within the SEB, surveillance and control of non-communicable diseases and the formulation of strategies in relation to cancer prevention, cardiovascular health and men's health, etc. are undertaken by the NCDD.

Control of Communicable Diseases

13. In establishing the CHP, consideration was given to develop an infrastructure that facilitates effective control of communicable diseases. As described above, the CDD consists of an Epidemiology Section (ES) and a Communicable Disease Surveillance Section (CDSS). The CDD detects outbreaks and unusual disease occurrence, conducts epidemiological investigations, implements and directs control measures, provides training in field epidemiology and conducts school immunization programmes. The CDD is able to discharge its disease control functions by putting in place a comprehensive surveillance system (described above), building capacity in field epidemiology, public health and collaborating with key players from diverse sectors, promoting best practices in risk prone procedures to prevent infections, and communicating risks effectively with the health sector and community, among others. Progress made in these areas will be covered in other sections of this paper.

14. With the integration of regional health teams into the ES on 1 June 2004, the organization of field epidemiology support is moving toward coterminosity with HA's hospital clusters.

15. There is strong day-to-day collaboration between ICB and SEB on infection control, clinical medicine and public health. Infection control teams are mobilized by the ICB to improve/maintain standards of infection control in healthcare and community settings. Outbreak control teams are deployed by

the SEB to conduct field investigations where outbreaks of public health importance occur. These teams operate on a cluster basis and comprise staff experienced in hospital medicine and infection control. As some of the staff are cross-posted from the HA on a rotational basis, they are provided with work-based training in public health management of communicable diseases and are better able to support public hospital cluster's needs in return. Similar staff rotation is taking place in the PHSB, namely in the public health management of HIV/AIDS, tuberculosis and sexually transmitted infections.

Partnership with Stakeholders

16. To secure a firm footing to work with our partners, the CHP has invited experts in different fields to join its scientific advisory structure, comprising the Board of Scientific Advisors and seven Scientific Committees. Each committee will advise on the public health management of a specified group of infectious diseases, or works on a specialised area to support disease control. This collaborative arrangement aims to bring together knowledge and experience from across disciplines and institutes to formulate strategies and actions for communicable disease control, and advise the controller based on consensus reached.

17. Apart from the scientific advisory structure, local scientists and experts in public health are engaged on an ongoing basis to provide support in the area of research, training and consultancy service. A large part of the core activities undertaken by the CHP involve the active participation of players across a wide spectrum of expertise through a collaborative approach. Particular attention is paid to establishing ready access to disease information, bi-directional channels of communication, and participatory approach to planning and implementation of activities, e.g. web-based disease notification, CHP website maintenance, training activities, and so on.

18. Special focus is placed on fostering regional and global collaboration in disease control. The fourth Tripartite Meeting of Guangdong-Hong Kong-Macau Expert Group on Prevention and Treatment of Infectious Diseases was held on 5-6 August 2004 in Hong Kong. The overall aim of the meeting was to establish comprehensive surveillance and effective control and response to communicable disease outbreaks occurring in the Pearl River Delta Region (PRDR). The scope of enhancement covers SARS notification, epidemiology, laboratory diagnosis, clinical management, research and training. At the fourth meeting, the three sides agreed to further strengthen their cooperation in the notification mechanism; share experience in infection control measures,

treatment of patients and the planning of joint exercises with a view to better responding to and handling outbreaks of public health concern.

19. Arising from the Tripartite Meetings, a joint working group was set up to conduct a PRDR HIV Epidemiological Research and Surveillance Project. Participating cities in the PRDR can access an electronic platform for data uploading and sharing of information.

20. Apart from organizing visits, discussions and exchange programmes for the participation of the other two parties, the CHP offers laboratory verification of SARS for specimens from the Mainland, provides support on laboratory surveillance, safety and quality assurance, shares experience on clinical management, prevention and treatment of AIDS with cities in Guangdong and Macau, and organizes attachment programmes for health professionals from the Mainland and elsewhere.

21. High-level communication is also maintained with the Ministry of Health, Health Department of the Guangdong Province and Department of Health of Macau. The next Joint Meeting of the Senior Health Officials of the Mainland, Hong Kong and Macau will be held in mid October 2004.

22. At international and regional levels, Hong Kong is fostering closer ties with overseas health authorities and agencies. Apart from the MOU signed with the England and Wales Health Protection Agency on 7 May 2004, the Centre for Health Protection has forged close partnerships with the World Health Organization and other health agencies overseas. For instance, over 10 overseas health authorities will be participating in the CHP Inauguration Ceremony and Symposium to be held on 27-28 October 2004, to share experience in health protection.

23. At the community level, CHP engages, among others, elderly homes, government departments, non-government organizations and the tourism sector in enhancing preparedness against SARS and other important infections through briefings, correspondence and training.

Contingency Plans and Emergency Response

24. Following a consultancy study in 2003, the Department has put in place a standard protocol for information flow applicable to any type and scale of communicable disease outbreak, which included a detailed contact list of stakeholders. Separately, the CHP has appointed a Risk Communication

Advisory Group (RCAG) under the leadership of an active community leader and supported by a team of experts from the fields of advertising, information and public relations. The RCAG will advise the Controller on the formulation of risk communication strategies and action plans for the CHP, establish and reinforce communication networks for timely and effective risk communication using a variety of means. It will also serve as an independent body in assessing the effectiveness of the risk communication actions of the CHP. Meanwhile, the CHP organises regular media briefings and provides sponsored media training to CHP staff.

25. As for day-to-day operation, the SEB adopts an open and proactive approach in risk communication on communicable diseases. It generates a media monitoring report every morning summing up the day's local and international intelligence on communicable diseases. Press releases on disease outbreaks and health alerts are issued from time to time to heighten public awareness of prevailing health threats and their preventive measures. In addition, the newly launched CHP website provides an electronic platform for the issue of a bi-weekly CD bulletin to improve risk communication with the medical and lay communities.

26. DH has developed contingency plans as well as investigation and control protocols for over 35 types of communicable diseases. In relation to SARS, a total of 41 agencies (including DH and HA) have already devised their outbreak control plans and contingency measures. ERIB is actively reviewing and updating the SARS contingency plan for CHP/DH. At the same time, DH's manpower deployment plan has been reviewed. Surge capacity for training up a health protection team of Auxiliary Medical Service members has also been strengthened.

27. DH and HA have organized over 50 exercises and drills to examine and review anti-SARS preparedness and response. ERIB is coordinating a major exercise (Exercise MAPLE) with target participants from multiple agencies involved in outbreak management. The exercise will take place in mid November 2004 with local and overseas experts participating as observers.

Programmes on Prevention of Communicable Diseases

28. A key feature of the CHP is the scientific advisory structure, which will provide the Controller, CHP with the latest scientific knowledge and objective professional inputs from which strategies and actions for disease prevention and control will be formulated. A number of health protection programmes will be set up and supported by the PMPDB to study important communicable diseases

and their prevention and control strategies. Through in-depth discussion and professional exchange, experts from a variety of disciplines will collectively contribute towards population-based health protection. Scientific reports and position papers of high standing, which are the products of scientific researches and deliberations, will be published and promulgated for reference of the medical and lay communities.

29. The ICB within the CHP is manned by a multidisciplinary team, consisting of staff from HA and DH. The Branch implements surveillance programmes targeting health care setting-related infections, provides training in infection control, and develops infection control guidelines for hospitals, healthcare and community institutions with high risk of infection. Surveillance systems that examine antimicrobial resistance patterns, specific groups of infections, etc. will be established to strengthen infection control.

Research Agenda

30. Taking into account the work of the Tripartite Meeting and the scientific committees, the CHP is taking stock of the research needs in the short and medium terms, with a view to developing a research agenda in consultation with the Health, Welfare and Food Bureau. Following the stock-taking exercise, applications will be made to the Secretariat of the Research Fund for Control of Infectious Diseases for funding projects to generate useful scientific evidence and fill knowledge gaps to guide policy making and public health actions. (Please also see the paper SARS MC 12/04 which covers the broad strategy for commissioning of collaborative research in communicable diseases.)

Capacity Building and Professional Development

31. An experienced epidemiologist has been recruited to set up a field epidemiology training program (FETP) to improve the capacity of the CHP in effective surveillance and outbreak management. The FETP plan will commence in the 4th quarter of 2004. The CHP's proposal for developing public health workforce is summarized in the paper SARS MC 8/04.

Concluding Remarks

32. The CHP is a dedicated professional organization that protects the

health of Hong Kong. It adopts a multi-disciplinary integrated approach and aims to bring about significant improvement in disease prevention and control through real-time surveillance, rapid intervention and responsive risk communication. The CHP will continue to collaborate with other health professionals, academics, and health care providers and establish closer collaboration with medical sectors regionally and internationally in achieving its mission and vision.

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