6 Organisation of Health and Healthcare System for the Control of an Outbreak of Communicable Disease

What have we heard?

- ❑ It was not clear who was in overall charge of the outbreak
- ❑ The lines of authority between HWFB, DH and HA are unclear during the outbreak
- ❑ The relationships between HA Board, HA head office, advisory committees, hospital clusters, and hospital executives are unclear during the outbreak
- ❑ DH does not have the management structure or resources to deal with a major outbreak
- ❑ The healthcare system is not sufficiently flexible to respond to a major outbreak
- ❑ The relationship between the public/private hospitals and DH's regional offices could be improved

INTRODUCTION

6.1 In any outbreak of communicable diseases, and particularly in major incidents, it is important that one person is in overall charge. This leadership role becomes critical if the outbreak is serious and has a high political and media profile, or crosses geographical or organisational boundaries and requires a coordinated response. If an outbreak is managed by various organisations without proper coordination, both public health and public confidence are undermined.

ROLES AND RESPONSIBILITIES WITHIN HWFB AND DH

6.2 The SARS epidemic has highlighted several deficiencies and ambiguities that exist in the relationships between HWFB (a policy bureau) and DH (a department), and between DH and the rest of the healthcare community. It has also amplified tensions between the political structure and the professional and administrative structure.

6.3 Within the Hong Kong system, it is not clear who performs the function of "surgeon general" or "chief medical officer". In other words, who is the person responsible for giving professional advice to SHWF and Government, and providing professional leadership, on public

health and healthcare policy matters? There is also an imbalance between responsibility, authority and accountability in the health system. For example, SHWF has accountability for the health system as a whole, both public and private, but statutory public health powers are vested in the Director of Health. As a consequence of these factors, and because of his professional background, SHWF became directly involved in the operation of both the hospital and public health services at the height of the SARS epidemic. Since SHWF is a political appointee, there is no guarantee that any future policy secretary will have the appropriate professional expertise to respond in this way.

6.4 The current organisational separation between HWFB and DH may lead to a lack of coherence in policy development, decision making, funding and resource allocation, systems for monitoring, audit and accountability. There is also insufficient professional expertise in HWFB to support aspects of policy formulation. Organisational design needs to be functional, both to ensure the efficient day-to-day management of a range of services, and to be able to adopt a strong command and control mode to effectively respond to an epidemic. There needs to be a clear conductor of the "health orchestra".

- The Government should review the organisational structure and the relationship between HWFB and the constituent Government departments under the Bureau in the areas of health, social welfare and food. Consideration should be given to merging the functions of separate departments within HWFB, headed by SHWF, in order to improve the capacity for coordination across the departments, and to facilitate policy-making and commissioning for health protection matters.
- The Bureau under the leadership of SHWF should consider what changes are necessary to ensure that the necessary systems to coordinate the activities and responsibilities of DH and HA and the private sector are all in place.

LEADERSHIP IN OUTBREAK MANAGEMENT AND CONTROL

6.5 Many individuals and organisations are involved in the management of any serious outbreaks of communicable disease. The range of organisations will vary depending on the nature of the incident and the type of infection involved. However, it is important, both to ensure effective coordination and to maintain public confidence, that one individual is seen to lead the response.

6.6 In practice, this will often involve coordinating the activities of various individuals, departments and organisations, usually in the context of an outbreak control team. It follows that the person will have professional expertise in communicable disease control, will be drawn from an appropriate level within the

Leadership in outbreak management and control

The person who will lead the response will usually fulfill most or all of the following roles –

- Demonstrating clear leadership and accountability
- Making key decisions on outbreak control measures
- Deploying and redistributing manpower and resources
- Providing advice to Principal Officials
- Ensuring collaboration between organisations and agencies
- Coordinating information flow to media and public.

organisation, and will have the respect of professional colleagues. The person concerned will normally chair the outbreak control team, will lead and guide decisions that are made by the team, and will delegate to other team members many of the functions outlined above.

6.7 DH, as the public health authority and from a population perspective, should take the lead in outbreak control, regardless of whether the outbreak occurs in hospitals or the community. Most communicable disease outbreaks (eg food poisoning) are likely to be handled at the regional office level of DH as a matter of routine, and should be led by the senior communicable disease epidemiologist/ public health physician for that area.

6.8 In a major outbreak, responsibilities and accountabilities may change. A more senior person in DH may take the leadership role, and other responsibilities may be delegated. For example, it may be more appropriate for another member of the outbreak control team to become the main media spokesperson, in order to allow the leader to focus on outbreak investigation and control. The constitution of the outbreak control team may also change. In a public health emergency, such as the SARS epidemic, it may require the direct involvement of the highest level of Government in order to ensure that appropriate resources are made available. A clear distinction should continue to be made between professional and political decisions, and the roles of the public health service and the civil service.

- The command and control structure to manage an outbreak or epidemic needs to be clear. Consideration should be given to the establishment of a small command group, chaired by SHWF, with a limited number of personnel, such as the Permanent Secretary of the Bureau, the Director of Health and the Chief Executive of HA. This body should be responsible for taking all major decisions, such as invoking public health legislation, closure of hospitals, and quarantine of residential areas. There should be clarity established beforehand, as to what decisions are taken at what level and by whom during an epidemic, in a

major incident plan. The authority and responsibilities of DH in all aspects of epidemiological management, including surveillance and contact tracing, need to be clearly understood and adhered to by all parties.

ROLES AND RESPONSIBILITIES WITHIN HA

6.9 HA appears to have responded promptly both to the perceived threat of community-acquired pneumonia in February 2003 and the outbreak of SARS at Prince of Wales Hospital (PWH). A Working Group on Severe Community-Acquired Pneumonia was established by HA head office, and advice on reporting cases and infection control measures to be taken were subsequently followed by hospitals in HA. In response to the PWH outbreak, a 'cluster meeting on atypical pneumonia' was established on 13 March, with membership comprising senior management staff from the cluster, chiefs of service, and various clinical heads. This made a number of decisions on infection control measures, including restrictions on visiting that were speedily implemented. A representative from the DH regional office attended some of the hospital meetings, but coordination between HA and DH in response to the outbreak appears to have been poor. There seems to have been a failure in the system to enable full appreciation of the public health implications of the hospital outbreak for the wider community.

6.10 As the epidemic developed, several tensions became evident within HA, many of which were connected to failures of communication or lack of clarity about roles and responsibilities. Frontline staff felt isolated from the decision-making process, instructions issued by HA head office were not properly executed in hospitals, HA Board members felt they were not adequately involved in decisions being made by the senior executives, and academic staff made statements to the media on their own. At the height of the epidemic, the Chief Executive of HA contracted SARS, and this had a significant impact on the efficiency of the HA response, suggesting that the contingency arrangements that were put in place had not been well planned.

6.11 Since July 2003, HA has taken over responsibility for general out-patient clinics formerly run by DH. With this change comes greater responsibility for the health of the population, not just for patients in hospitals. It might be appropriate if consideration be given to change the name of HA, eg to the Health Services Authority, to clearly reflect its scope of responsibility to cover both hospital and community health services. It also means that primary care generally will need to have greater emphasis within HA and, within the context of a community outbreak, this will require effective coordination of activities with DH and with family doctors in the private sector.

RELATIONSHIP BETWEEN PUBLIC/PRIVATE HOSPITALS AND DH'S REGIONAL OFFICES

6.12 The epidemic also revealed more general weaknesses in the working relationship between public/private hospitals and DH's regional offices. The roles of the regional offices appeared not fully recognised by decision makers in the hospital system. The flow of information between hospitals and regional offices had also not been smooth during the epidemic.

6.13 There should be regular exchange of information and meetings of infection control staff, so that the hospital staff are aware of the pattern and prevalence of communicable diseases in the community, and the regional offices are kept informed of the state of infection control in the hospitals. Such liaison meetings facilitate greater awareness amongst staff of any unusual occurence of communicable diseases, locally and beyond. The fast movement of population in this region has underlined the need for key staff to maintain a high level of vigilance on all communicable diseases.

- HA should review its contingency planning arrangements to ensure that –
  - Hospitals and clusters recognise the primacy of DH in managing hospital outbreaks that threaten the health of the population
  - There is free flow of information between hospitals and the regional offices of DH and systems to support this are developed
  - There are clear chains of command to ensure communication and implementation of HA decisions and advice in response to an emergency
  - HA management arrangements are sufficiently resilient to cope with the absence of key staff and sufficiently streamlined to respond rapidly to a crisis
  - There is coordination of activities with the private sector in primary care.
- HA needs to develop clarity over the role of its own Board during the management of an outbreak, and the role of the Board of individual hospitals. Consideration should be given to the value of utilising the experience and skills of Board members in communicating with staff, patients and local populations.
- Consideration should be given to changing the name of HA, for example to the Health Services Authority, in order to reflect its wider responsibilities.