

**For discussion  
on 27 September/4 October 2004**

**SARS MC 11/04**

**Review and Continuous Improvement  
of Occupational Health Services in Hospital Authority**

**Purpose**

This paper is to inform members of the Monitoring Committee on the progress of the review and immediate improvements on occupational safety and health (OS&H) in the Hospital Authority (HA) and the overall strategy for achieving sustainable improvements.

**Background**

2. The SARS Expert Committee Report Recommendation No. 43 states that “HA should review its occupational health services and put in place a comprehensive package of occupational health services, led by professionally trained occupational health staff, which will support physical and psychological health and promote safety at work for healthcare staff.”

**OS&H Diagnostic Review**

3. A corporate wide review conducted by a consultancy team from the Hong Kong University of Science and Technology has commenced on 10 June 2004. The review has completed all of its intended areas of study and the final report is expected to be delivered by early September 2004. The review criteria comprise local legal requirements, benchmarking with JCAHO – Environment of Care Standards, and current local and international best practice. Key areas of review include the existing safety management systems and specific OS&H matters. Details of the scope of review are shown at Annex I. Direct communication with the frontline healthcare workers and immediate rectification are incorporated as far as practicable in the review process.

Salient Findings

4. In general, hospitals surveyed have all demonstrated a strong commitment on OS&H where there are also many exemplary efforts in establishing and maintaining safe work procedures such as laser safety and Repetitive Strain Injury Assessment. However, uneven level or emphasis of specific development in improving workplace safety and implementation of OS&H management systems, effectiveness of control procedures and implementation of preventive measures including that for infectious diseases are observed among clusters / hospitals.

5. The available findings of the diagnostic review point towards the following major areas for OS&H improvement in terms of evaluation, control and management:

OS&H IMPROVEMENT AREAS		MANAGEMENT RESPONSE
(i)	Enhance the existing system in HA to provide a comprehensive structure addressing the OS&H risks of HA and to provide the framework for standardization and consistency across HA.	Initial phase with core teams by 2005
(ii)	<p>Enhance the OS&amp;H technical support to the clusters by HA Head Office in hazard identification, risk assessment and risk control process covering areas such as:</p> <p>(a) Worker exposure assessment (chemical, biological and physical agents) and occupational health programmes (e.g. hearing conservation programme, employee health monitoring programme for staff working with radiation and cytotoxic drugs agents);</p> <p>(b) Work process risk assessments starting with the higher risk operations such as radiation, chemical and laboratory safety; and</p> <p>(c) Facility and environment safety risk assessment in collaboration with the interested parties (designers, users and</p>	Immediate action and for completion by end of 4Q 04

	maintenance staff).	
(iii)	Evaluate the need of high calibre OS&H officers for higher risk staff groups (e.g. medical, nurse, technical and support staff) at cluster / hospital level. The OS&H officers with assigned responsibility and authority will assist the necessary co-ordination in implementing OS&H policies and monitoring performance. At the present time, both the Princess Margaret Hospital and the NT West Cluster have assigned a full-time qualified OS&H officer for enhancing the management support.	Implementable and in action.
(iv)	Enhance the overall staff's OS&H training and awareness at all levels of HA including the management, OS&H related personnel, medical staff and the frontline workers.	Plan submitted already and action from 4Q 04.
(v)	Devise and implement alternative strategies to reduce the top three IOD causes (viz manual handling, needle stick injury, patient violence) and also the incidence of hospital acquired infection.	2004/05 Annual Plan target. Regular review item by HAHO and clusters.

### Immediate Improvement Actions Completed

6. Since SARS in 2003, HA has already implemented a range of immediate improvement measures on infection control facilities, protective equipment provision, healthcare worker training and administrative control. The completed actions are summarized below:

- (i) Facilities and equipment:
  - (a) The conversion works in nine acute hospitals to provide isolation wards with some 1300 beds for handling probable and suspected SARS patients is completed;
  - (b) 1027 nos. of portable air filtration units equipped with HEPA filters have been installed in the respiratory wards to reduce the risk of staff infection;

- (c) 23 sets of respirator fit-testing units have been installed in hospitals to assure staff safety;
  - (d) Alcohol hand rub dispensing stations for hand disinfection are provided at strategic locations throughout the hospitals and clinics to enhance infection control of staff and the public;
  - (e) A three-month stock of personal protective equipment and drugs is maintained to ensure adequate and steady supply in the event of a resurgence of SARS or infection outbreak; and
  - (f) Addition of new facilities under the “OASIS”, a centre for supporting personal growth and psychological crisis, to serve and assist all healthcare workers has been completed and commenced service.
- (ii) Healthcare worker training:
- (a) On-going infection control training and refresher training programmes are established for direct staff and contractors such as EMSD. Some 47,000 HA staff received basic infection control training organized by the clusters. The Infection Disease Control Training Centre has also organized training sessions for some 1,770 participants (See Annex II for details).
- (iii) Administrative controls:
- (a) An OS&H core team is being established at HA Head Office to provide leadership and essential professional support on improving physical, biological, chemical and environmental hygiene safety in hospitals. The newly appointed Executive Manager (Occupational Safety and Health) has commenced duty on 10 June 2004 which coincided with the start of the OS&H Diagnostic Review. The core team in HAHO will initially consist of the appointed Executive Manager and two additional OS&H Officers with the relevant experience and certified qualifications;

- (b) All acute hospitals have established an on-going N95 respirator fit testing programme and approximately 70% of the staff requiring N95 protection are already fit tested up to the present moment. Retesting for staff will also be maintained on an annual basis in accordance with international practice;
- (c) The psychological health support programmes for healthcare workers have been established and these include Critical Incident Support Teams, Care for the Carers Programme and Psychological Services Plan of the Return to Work Programme; and
- (d) In addition to the Risk Management Committee, an enhanced OS&H Committee structure has been established to strengthen the overall OS&H management in HA. These committee structures will provide a streamlined reporting channel between hospitals, clusters and HAHO (See Annex III for details).

## **Improvement Strategy**

### New Management Initiatives

7. The available findings derived from the diagnostic review conducted in hospitals have been communicated to the cluster management at the exit conferences/meetings held on a cluster basis, involving some direct communication with the frontline healthcare workers. Immediate rectification of work-related hazards in different locations has been recommended and some examples of these concern areas include cytotoxic drug handling, incompatible chemical storage and electrical safety hazards.

8. In order to fast track the implementation of immediate improvement actions requiring professional OS&H technical support, HA has reached a service agreement of rotating qualified OS&H professionals from the University of Science and Technology to work in HA for an initial period of six to twelve months. This interim arrangement will diminish the time gap of providing timely professional OS&H support whilst recruitment of the right specialists for the core team in HA Head Office is set in motion.

9. HA will define and implement corporate OS&H improvement programmes targeting on reduction of the frequency and severity rates of staff's Injury On Duty (IOD) and hospital acquired infections. New strategies will be considered in the introduction of OS&H improvement programmes such as introducing OS&H orientation and training workshops for doctors and nurses, strengthening and standardizing infection control practices amongst hospitals and introducing local exhaust ventilation / filtration system during transportation of infected patients.

#### Enhanced Training Plan

10. Funding has been secured to improve the OS&H competence of healthcare workers. The OS&H Steering Committee has endorsed a HA-wide OS&H Five-Year Training Plan (copy at Annex IV). The objectives of the Training Plan are:

- (a) To equip the HA staff assigned with specific OS&H responsibilities with professional knowledge and skills applicable to the hospital environment;
- (b) To develop necessary OS&H resources to support OS&H training and communication and continuous development of standard safety documents and procedures; and
- (c) To facilitate the continuous improvement of the HA-wide safety culture for inducing long-term OS&H behaviour modification and also the related responsibility acceptance.

11. The training needs of management staff, OS&H personnel, medical and front line staff in HA will be addressed as follows:

- (a) Specialist training in occupational medicine, occupational safety & health, and industrial hygiene for physicians of the HA's Staff Clinics and as appropriate for the OS&H co-ordinators in hospitals/clusters;
- (b) Safety management training in system requirements and implementation process for managers with responsibilities for OS&H;
- (c) OS&H technical training comprising chemical, biological and physical hazard control for cluster subject officers and

relevant frontline staff (mainly medical, nursing and allied health); and

- (d) Safety management skills training including risk assessment, incident investigation, inspection and safety audit for line managers, supervisors and department safety officers.

12. In addition, OS&H resource centres will be established at HA Head Office and clusters. OS&H e-training modules and an enhanced OS&H web site will be provided as on-going support to the staff and to supplement the training initiatives. Annual funding will also be made available for OS&H promotion campaigns to raise safety awareness and enhance safety behaviour.

13. Within the next few years, HA will build up a group of in-house qualified OS&H and occupational health professionals to support the management and frontline staff in managing OS&H risks in an appropriate and consistent manner. The OS&H competency of healthcare workers in identifying hazards, assessing the risks and applying control measures will be elevated, hence contributing to the future reduction of accidents and incidents.

#### Improving Management System

14. The HA will embark on comprehensive improvements to establish a solid and proactive infrastructure to achieve the highest OS&H standards and to drive continuous improvement. An OS&H implementation work plan will be developed for the advice and endorsement by the HA governance, and the framework will comprise of:

- (a) Reviewing the current HA OS&H Policy Statement (copy at Annex V), with the view to strengthening the OS&H commitment of HA and to clearly defining the enhanced OS&H responsibility, standards and objectives and provision of guidelines;
- (b) Upgrading the HA OS&H management structure and documentation architecture from the current minimum statutory and regulatory requirements of the HKSAR Labour Department to an internationally recognized standard such as OHSAS 18001;

- (c) Establishing and maintaining effective OS&H communication process and networking all levels of management and concerned external parties (visitors, business partners, contractors and regulators), including a hazard communication mechanism for ensuring consistency and effectiveness of communication across the HA;
- (d) Strengthening the OS&H performance measurement and monitoring mechanism through improving the inspection, survey, incident investigation and specific audit programmes;
- (e) Strengthening of HA Staff Clinics with trained physicians in occupational medicine to perform identification and manage treatment of occupational diseases and work-related diseases acquired by HA's healthcare workers. The Staff Clinics will form the core point of establishing medical surveillance of healthcare workers exposed to specific health hazards, such as cytotoxic drugs, radiation, and noise; and
- (f) Establishing occupational rehabilitation support for healthcare workers as part of the return to work programmes.

### Public Health Considerations

15. Public health perspectives have also been taken into consideration in the review. Integrated improvement of OS&H and public health protection in a number of common areas such as environmental hygiene, clinical waste management, food hygiene, pest control, public health education and patient communication programmes will be initiated to create and sustain a positive impact on the general public and environmental health.

16. Further collaboration with the Department of Health, the Centre of Health Protection, Labour Department and Occupational Safety Health Council will be introduced to strengthen the linkage between public health and OS&H in the public and private health care institutions, and will be aimed towards establishing a seamless provision of occupational health services in the Hong Kong SAR.

### Performance Monitoring and Continuous Improvement

17. The HA OS&H Steering Committee will maintain the momentum and improvement drive to continuously assess the HA-wide



annual performance with respect to the priority OS&H targets, and to formulate new targets and improvement programmes. This annual review process will consist of the reporting and monitoring of relevant key performance indicators for individual cluster / hospital, such as:

- (a) IOD frequency and severity rates;
- (b) Hospital acquired infections;
- (c) Employee compensation claims;
- (d) Training and communication;
- (e) Emergency drills; and
- (f) Inspection and audit programmes.

### **Advice Sought**

18. Members are requested to note the progress of the review in HA and the various immediate and long-term improvements on enhancing occupational safety and health.

Hospital Authority  
September 2004

### **Annexure**

I – OS&H Diagnostic Review Schedule

II – Infection Control Training Record

III – Risk Management Committee and OS&H Committee Structures

IV – OS&H Five-Year Training Plan (Proposed)

V – HA OS&H Policy Statement dated 11 November 1997