

For information on
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Legislative Council Panel on Manpower

A Review of Occupational Diseases in Hong Kong in 2008 and Initiatives in Promoting Prevention of Heat Stroke at Work

PURPOSE

This paper sets out the situation of occupational diseases in Hong Kong in 2008 and recent initiatives of the Occupational Health Service (OHS) of the Labour Department (LD) in promoting occupational health, including the prevention of heat stroke at work and enforcing relevant occupational safety and health laws.

OCCUPATIONAL DISEASES

2. According to the International Labour Organization (ILO), the relationship between work and disease can be classified into three categories -

- (a) occupational diseases - diseases having specific or strong relationship with occupations, generally with only one causal agent, and recognised as such. Examples are silicosis, occupational deafness, tenosynovitis of the hand or forearm, and contact dermatitis;
- (b) work-related diseases - diseases with multiple causal agents, where factors in the work environment may play a role, together with other risk factors, in the development of such diseases, which have a complex aetiology. Examples are varicose vein, plantar fasciitis, shoulder tendinitis, and osteoarthritis of knees; and
- (c) diseases affecting the working population - diseases without causal relationship with work, but may be aggravated by occupational hazards to health. Examples are hypertension and diabetes.

3. Only diseases that are classified as occupational diseases would be considered, taking into account local disease pattern and other relevant factors, for prescription as occupational diseases for the purpose of employees' compensation.

Concept of Prescribed Occupational Diseases

4. The clinical manifestation of many occupational diseases, such as occupational contact dermatitis, is indistinguishable from similar diseases of non-occupational origin. Therefore, though the categorization of a disease as “occupational disease” is a scientific process based on long period of observation and large number of cases, concluding the existence of a causal link between a particular person’s occupation and the symptoms of a disease exhibited remains to be established. In order to relieve an incapacitated employee of the need to prove that a certain disease is due to the nature of his employment, thereby expediting the compensation process, the principle of presumption of occupational origin of disease has been applied to employees’ compensation. Thus, if a worker is diagnosed to be suffering from a prescribed occupational disease and has been employed in the specified occupation within the specified period immediately preceding the occurrence of that disease, the disease is presumed to be of occupational origin for the purpose of compensation.

Criteria for Prescribing Occupational Diseases

5. Making reference to the ILO’s criteria, LD has all along determined whether a disease should be prescribed as a new occupational disease based on the following criteria -

- (a) the disease poses a significant and recognised risk to workers engaged in a certain occupation in Hong Kong; and
- (b) the causal relationship between the disease and the occupation can be reasonably presumed or established in individual cases.

6. The second criterion is especially important in distinguishing occupational diseases from work-related diseases which are multifactorial in origin and in respect of which their causal relationship with occupations has to be considered on a case-by-case basis.

7. Most musculoskeletal disorders, such as low back pain, shoulder-neck pain and osteoarthritis of knee, are multifactorial, resulting from the interaction of multiple risk factors, e.g. obesity, lack of exercise, excessive force, awkward posture, and maintaining a standing or sitting posture for a prolonged period of time. These disorders are common in the general population and not limited to workers engaged in a certain occupation. Therefore, these disorders do not satisfy the criteria for prescribing occupational diseases.

PRESCRIBED OCCUPATIONAL DISEASES IN HONG KONG

8. In Hong Kong, the Employees' Compensation Ordinance (Cap. 282), the Occupational Deafness (Compensation) Ordinance (Cap. 469) and the Pneumoconiosis and Mesothelioma (Compensation) Ordinance (Cap. 360) prescribe altogether 52 occupational diseases. Section 36(1) of the Employees' Compensation Ordinance provides for the claim of compensation for a disease that is not prescribed in the Ordinance but can be proved in individual cases to be a personal injury by accident arising out of and in the course of employment.

9. In addition, all the 52 occupational diseases are also specified in Schedule 2 of the Occupational Safety and Health Ordinance (Cap. 509) as notifiable occupational diseases. Medical practitioners are required to notify the Commissioner for Labour cases of these occupational diseases.

10. Section 35 of the Employees' Compensation Ordinance provides that the Commissioner for Labour may from time to time amend the list of prescribed occupational diseases in the Second Schedule of that Ordinance. When first introduced in 1964, the list contained 21 prescribed occupational diseases. By making reference to the lists of occupational diseases recommended by ILO and prescribed in other countries respectively, and taking into account local disease pattern and other relevant factors, LD has since 1991 made four amendments to the list, including the addition of 13 occupational diseases and expansion of the coverage of three occupational diseases. The last amendment was made in February 2005.

11. Moreover, LD amended the then Pneumoconiosis (Compensation) Ordinance in 2008 to prescribe mesothelioma as an occupational disease for the purpose of compensation.

CONFIRMED OCCUPATIONAL DISEASES IN 2008

12. In the ten years between 1999 and 2008, the number of cases had dropped substantially from 734 to 204. Silicosis, occupational deafness, tenosynovitis of the hand or forearm and tuberculosis were the most common occupational diseases confirmed in 2008. Relevant figures are set out at **Annex**. With the concerted efforts of LD and other stakeholders, including the Occupational Safety and Health Council (OSHC), Pneumoconiosis Compensation Fund Board (PCFB), Occupational Deafness Compensation Board (ODCB), employers' associations and trade unions, the general safety and health awareness of employers and employees had increased, contributing to more effective prevention of occupational diseases at the early stage.

Silicosis

13. Silicosis is a chronic disease with fibrosis of the lungs due to inhalation of silica dust. Its latent period could be as long as 10 to 20 years. All cases are caused by exposure to silica dust many years ago. In 2008, there were 65 confirmed cases, compared with 67 in 2007. Most of these cases involved construction workers, some of whom had been engaged in hand-dug caisson work. The declining trend over the past decade in the number of confirmed cases revealed that introduction in 1995 by the Buildings Department of restrictions on the use of hand-dug caisson had contributed to the prevention of silicosis in the longer term.

Occupational Deafness

14. Occupational deafness is a permanent hearing loss arising from prolonged exposure to loud noise at work in certain specified occupations. In 2008, there were 58 diagnosed cases with compensation paid, compared with 47 in 2007. Most of these cases were related to rock grinding, chiselling, cutting or percussion, metal grinding or percussion, and working near internal combustion engines, turbines, pressurised fuel burners or jet engines.

Tenosynovitis of the Hand or Forearm

15. Tenosynovitis is a traumatic inflammatory disease of tendons and the associated tendon sheath caused by prolonged and repetitive movements or excessive exertion of the hands and forearms. In 2008, there were 40 confirmed cases, compared with 35 in 2007. The disease was common among catering workers, general labourers, clerical and other office personnel, and allied health services personnel such as laboratory technicians.

Tuberculosis

16. Tuberculosis is a prescribed occupational disease for workers having close and frequent contacts with a source of the infection by reason of their employment, such as those employed in the medical treatment or nursing of persons suffering from the disease. In 2008, there were 25 confirmed cases, compared with 16 in 2007. The disease most commonly occurred among doctors, nurses, laboratory technicians and health care supporting staff. As the endemicity of tuberculosis in Hong Kong remains high, with the number of notifications received by the Department of Health increasing from 5 545 in 2007 to 5 730 in 2008, it is expected that occupational tuberculosis will continue to occur. In this regard, health care institutions have been taking stringent infection control measures to prevent the spread of the disease in the workplace.

Other Diseases

17. The other occupational diseases confirmed in 2008 included 5 cases of asbestosis, 3 cases of occupational dermatitis, 3 cases of Streptococcus suis infection and 1 case of mesothelioma.

RECENT INITIATIVES OF OCCUPATIONAL HEALTH SERVICE

Clinical Services

18. The two Occupational Health Clinics of LD provide clinical occupational health services for workers in Hong Kong. With the opening of a second clinic in 2006 to strengthen services in the New Territories, the number of consultations had increased from 9 395 in 2005 to 12 999 in 2008. About 80% of all patients seeking consultations from the Occupational Health Clinics in 2008 suffered from work-related musculoskeletal disorders.

Comprehensive Reaching Out Strategy to Promote Occupational Health

19. LD adopts a multifarious approach to promote employers' and employees' awareness of occupational safety and health through health talks and seminars, distributing publications, broadcasting Announcements in the Public Interest on television and radio, and showing educational videos on mobile advertising media. In 2008, OHS organised a total of 1 404 health talks on various occupational health issues for over 42 800 participants.

20. We also partner with relevant stakeholders including OSHC, PCFB, ODCB, employers' associations, trade unions and community groups in promoting occupational health through a variety of activities such as health talks, carnivals, occupational health award presentations, and workplace hygiene charter.

21. Since recent years, we have been publishing new or revised publications and producing educational videos in English, traditional Chinese and simplified Chinese to cater for the needs of different people. Some of our health talks are also conducted in both Cantonese and English, as appropriate. To meet the needs of ethnic minorities working in different industries such as construction, we have translated some relevant publications to different languages. Similarly, OSHC has been producing publications and organising seminars in different languages to provide safety and health training for ethnic minorities, e.g. cleansing industry handbook in Nepali and Urdu; booklet on safe work for household workers in Indonesian, Tagalog and Thai; and safety talk for Nepali construction workers.

Prevention of Occupational and Work-related Diseases

22. OHS promotes awareness of employers and employees on common occupational health issues, including occupational and work-related diseases, through health talks and seminars, broadcasting Announcements in the Public Interest on television and radio, and showing educational videos on mobile advertising media. Apart from these, it provides guidance for them to assess the risks and take appropriate preventive measures by producing guides on specific health hazards, occupational and work-related diseases, general diseases affecting the working population, and occupational health problems in specific industries. In 2008, two guides on workplace lighting assessment and shift work arrangements were released respectively. In the same year, OHS also developed an educational kit on measures to prevent different occupational diseases. As distinct from previous publications focusing on individual diseases, industries or occupational health hazards, the educational kit introduces a comprehensive approach for preventing different occupational diseases. The objective is to promote employers' and employees' awareness of the prevention of occupational diseases generally. The kit will also provide the basis for launching publicity programmes in 2009. Apart from organising health talks and seminars to promote its use by employers and employees in working out practicable preventive measures, OHS will distribute the kit in major occupational safety and health events, develop a new educational video to be shown on mobile advertising media, and produce a new poster for display at workplaces. We will also enlist the support of relevant stakeholders such as OSHC, employers' associations and trade unions to jointly promote the kit.

23. As work-related musculoskeletal disorders are common among workers in specific occupations like service and clerical personnel and manual workers in general, OHS has since recent years organised health talks, distributed relevant publications, broadcast Announcements in the Public Interest on television, and showed educational videos on mobile advertising media to promote prevention of the diseases for office workers and workers from the catering industry. We will continue to actively promote the prevention of this common health problem in the working population, particularly clerical personnel, catering workers, personal care workers and cleansing workers.

24. In addition to our efforts, OSHC plays an active role in promoting the prevention of occupational diseases and work-related musculoskeletal disorders. For example, it has published a number of publications to promote regular exercises for a healthy back and office stretching exercises, and organised training courses on various themes such as manual lifting and

handling to raise employers' and employees' awareness of occupational safety and health. OSHC has also partnered with LD and other organisations to organise an annual Occupational Health Carnival to promote general awareness of safety and health, and to present annual Occupational Health Awards to organisations with excellent performance in promoting hearing conservation and preventing pneumoconiosis. In addition, with LD's full support, OSHC has established Safety Community in a number of districts such as Tuen Mun and Kwai Tsing to promote community awareness which can reinforce safety and health messages on workers and help inculcate such messages amongst the future workers. In 2009, OSHC will continue to actively promote occupational health through these activities.

Prevention of Heat Stroke at Work

25. Outdoor workers and workers engaged in hot working processes such as construction sites, outdoor cleansing workplaces, food manufacturing and laundry are at a higher risk of heat stroke in the hot, humid summer time. LD has published a pamphlet on "Prevention of Heat Stroke at Work in a Hot Environment" to promote employers' and employees' awareness of measures for heat stroke prevention. Moreover, we have also organised public and outreaching health talks for employers and employees, showed educational videos on mobile advertising media, and issued press releases as appropriate. In 2008, the Construction Industry Council (CIC) released the "Guidelines on Site Safety Measures for Working in Hot Weather" to promote awareness of contractors and construction workers, and recommend specific practices for reference by the industry.

26. As the risk of heat stroke is subject to a multitude of factors, including temperature, humidity, heat radiation, air movement, workload, clothing and acclimatisation to hot work environment, we have developed a checklist to provide guidance for employers to assess the risk of heat stroke at workplaces and facilitate the taking of appropriate preventive measures. In 2009, LD has planned to enhance publicity for promoting employers' and employees' awareness of heat stroke prevention at work through partnership with relevant stakeholders such as OSHC, CIC, employers' associations and trade unions. Starting from April 2009, an educational video is being broadcast on buses and railways, and public health talks are being conducted. A series of articles on heat stroke prevention from the perspectives of different industrial sectors will be published on LD's website and OSHC's publication – "Green Cross". Posters have also been put on display at various public spots. A letter together with the risk assessment checklist and other promotional materials has been sent to over 10 200 relevant organisations, including employers' associations and trade unions, to promote heat stroke prevention. CIC has recently issued a letter to remind contractors to observe the safety

measures recommended in its guidelines published last year. Apart from stepping up publicity to remind employers and employees to be alert, we are promoting the use of the checklist through health talks and seminars as well as during our inspections to relevant workplaces.

27. OSHC has also taken various measures to promote heat stroke prevention. In 2008, relevant industry-based Occupational Safety and Health Subcommittees of OSHC, such as construction, logistics and transport, and catering and hospitality services, published feature articles in their newsletters to promote the awareness of employers and employees on heat stroke prevention. Moreover, OSHC has organised training courses and seminars for employees working in workplaces at a higher risk of heat stroke, such as construction sites, and their employers.

Prevention of Human Swine Influenza A/H1N1

28. On 1 May 2009, the first case of human swine influenza A/H1N1 was confirmed in Hong Kong. As a result, the Government's response level was elevated to "Emergency Response". In the light of this, LD has immediately issued press releases to call on employers and employees to take precautionary measures at workplaces, and published the "Guidelines for Employers and Employees – Prevention of Human Swine Influenza (Influenza A H1N1)" to advise them on such precautionary measures and related employment issues. LD has also activated its departmental contingency plan and organised a health talk for field inspectors and front-line staff. In collaboration with OSHC, we have organised three open seminars to raise public awareness of prevention of human swine influenza at workplaces. We have also delivered a health talk, focusing on workplace hygiene and precautionary measures, in a large-scale workshop co-organised by the Social Welfare Department and Department of Health for supervisors and other staff of elderly homes.

29. In addition, LD has activated its mobilisation plan to step up inspections of workplaces at a higher risk of infection to ensure adequate infection control measures to safeguard the health of employees, including hospitals, clinics, elderly homes, pig farms, slaughterhouses, workplaces of cleansing contractors, and restaurants. In the course of inspecting other workplaces, we have been advising the management to maintain cleanliness and hygiene of their workplaces and remind their employees to maintain personal hygiene.

Enforcement Campaigns

30. Apart from publicity and promotion, law enforcement is an important strategy for protecting the health of workers. To ensure that occupational health requirements under the Factories and Industrial Undertakings Ordinance (Cap. 59) and the Occupational Safety and Health Ordinance (Cap. 509) are complied with, OHS inspects different workplace regularly and takes enforcement actions against irregularities identified.

31. In recent years, OHS has stepped up enforcement on work-related musculoskeletal disorders. OHS conducted special enforcement campaigns in 2005 and 2006 targeting office workplaces and catering establishments respectively to ensure that appropriate preventive measures were taken to safeguard workers from contracting the diseases, and had continued with such enforcement work over the past two years. From 2005 to 2008, a total of 1 269 inspections to office workplaces were conducted, with 378 warnings and 65 improvement notices issued, and 3 prosecutions taken out. As for inspections to catering establishments, a total of 1 055 inspections were conducted in the same period, with 150 warnings and 20 improvement notices issued.

32. In 2009, OHS continues to inspect office and catering workplaces to ensure that the risk of musculoskeletal disorders to employees is properly controlled. In addition, it has launched a special enforcement campaign between April and September 2009, focusing on the adequacy and effectiveness of preventive measures at outdoor and indoor workplaces with a higher risk of heat stroke, such as construction sites, outdoor cleansing workplaces, restaurant kitchens, food factories and laundries. The inspections cover the provision of drinking water, rest break arrangements, provision of sheltered work and rest areas, ventilation facilities, and provision of appropriate information, instruction and training for workers. Appropriate enforcement actions will be taken against any violation of safety and health laws.

WAY FORWARD

33. LD will continue to actively promote the prevention of occupational diseases and enhance the awareness of employers and employees on occupational health through law enforcement, education, and publicity and promotion.

Annex

Occupational Diseases Confirmed in Hong Kong from 1999 to 2008

Occupational disease \ Year	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Silicosis	137	105	122	110	74	69	68	109	67	65
Occupational deafness	388	206	121	114	74	52	60	51	47	58
Tenosynovitis of the hand or forearm	54	81	90	35	34	43	75	63	35	40
Tuberculosis	57	39	41	29	30	42	30	18	16	25
Asbestosis	15	11	9	9	6	4	2	7	2	5
Gas poisoning	57	36	11	30	26	28	4	5	1	4
Occupational dermatitis	21	17	24	29	10	7	10	8	7	3
Streptococcus suis infection	1	0	1	0	0	1	6	0	1	3
Others	4	9	11	8	4	5	1	3	1	1
Total :	734	504	430	364	258	251	256	264	177	204