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Legislative Council Panel on Manpower

A Review of Occupational Diseases in Hong Kong in 2005

PURPOSE

This paper sets out the position of confirmed occupational diseases in Hong Kong in 2005, and the preventive measures undertaken by the Occupational Health Service (OHS) of the Labour Department (LD).

OCCUPATIONAL DISEASES

- 2. According to the International Labour Organisation (ILO), the relationship between work and disease can be classified into three categories:-
 - (a) Occupational diseases diseases having a specific or strong relation to occupation, generally with only one causal agent, and recognized as such.
 - (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.
 - (c) Diseases affecting working populations diseases without causal relationship with work but which may be aggravated by occupational hazards to health.

PRESCRIBED OCCUPATIONAL DISEASES IN HONG KONG

3. In Hong Kong, altogether 51 occupational diseases have been prescribed under the Employees' Compensation Ordinance (ECO), the Occupational Deafness (Compensation) Ordinance and the Pneumoconiosis (Compensation) Ordinance. Where a disease is not prescribed in these Ordinances but can be proved in individual cases to be a personal injury by accident arising out of and in the course of employment, compensation may be claimed under section 36(1) of the ECO.

4. All the 51 compensable occupational diseases are also specified in Schedule 2 of the Occupational Safety and Health Ordinance as notifiable occupational diseases. Medical practitioners are required to notify cases of these occupational diseases to the Commissioner for Labour.

AMENDMENT TO THE LIST OF PRESCRIBED OCCUPATIONAL DISEASES

- 5. Section 35 of the ECO 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. Since 1991, LD has made four amendments to the list, which include the addition of 13 occupational diseases and expansion of the coverage of three occupational diseases. The last amendment was made in February 2005.
- 6. Information on the concept of prescribed occupational diseases and the criteria LD adopts in determining whether a disease should be prescribed as a new occupational disease is at Annex I.

CONFIRMED OCCUPATIONAL DISEASES IN 2005

7. In 2005, 256 occupational disease cases were confirmed in Hong Kong, representing a 2% rise from 251 cases in 2004 but a cumulative fall of 73% from the peak of 948 cases in 1998. The incidence rate in 2005 stood at 10.3 cases per 100,000 employed workers, as in 2004. The most common occupational diseases were tenosynovitis of hand or forearm, silicosis and occupational deafness. The statistical details are at Annex II.

Tenosynovitis of Hand or Forearm

- 8. Tenosynovitis is a traumatic inflammatory disease of tendons and the associated tendon sheath as a result of prolonged and repetitive movements or excessive exertion of the hands and forearms. In 2005, 75 cases were confirmed, as compared with 43 cases in 2004. The disease was most commonly reported in clerical and related office personnel (21%); catering personnel (16%); labourers (12%); production-related personnel (11%); and cleaners and housework assistants (8%).
- 9. The number of cases in 2005 had increased probably because of LD's intensified publicity and health education efforts in the year to promote the prevention of musculoskeletal disorders for office workers. As their awareness was raised, employees would generally seek medical consultations earlier when they suffered from such disorders.

10. In view of the growing public concern over musculoskeletal disorders, we have set out at Annex III a comparison of musculoskeletal disorders prescribed in Hong Kong and those prescribed in the UK, Canada, Australia and the ILO list. Altogether six specific musculoskeletal disorders have been prescribed as occupational diseases in Hong Kong, comparable to the situation in the countries mentioned above.

Silicosis

11. Silicosis is a chronic disease that causes fibrosis of the lungs leading to impaired lung functions. In 2005, 68 cases were confirmed. The figure had fallen consecutively over the past five years. More than 90% of the reported cases were from the quarry and construction sectors and of these 50% had history of employment in hand-dug caisson operations where workers had been exposed to extremely high level of silica dust. As the use of hand-dug caisson has already been restricted by the Buildings Department since 1995, it is expected that the number of cases will continue to decrease gradually in the years to come.

Occupational Deafness

12. Occupational deafness is a permanent hearing loss due to prolonged exposure to loud noise at work. In 2005, 60 cases were diagnosed and compensated, as compared with 52 cases in 2004. The slight rise was possibly due to year-on-year fluctuation in the figure. Most of these cases were related to rock grinding, chiselling, cutting or percussion, metal grinding and percussion as well as working near internal combustion engines, turbines, pressurised fuel burners or jet engines.

Tuberculosis

13. Tuberculosis is a prescribed occupational disease for those who have close and frequent contacts with a source of the infection by reason of employment, such as those employed in the medical treatment or nursing of persons suffering from tuberculosis. In 2005, 30 cases were confirmed, as compared with 42 cases in 2004. Of the 30 cases, 14 (47%) were nurses, 4 (13%) doctors, 8 (27%) allied health professionals, and the remaining 4 (13%) supporting staff. As Hong Kong currently still has a high endemicity of tuberculosis, it is expected that occupation-related cases will continue to occur in the coming years.

Streptococcus suis Infection

14. In 2005, six cases of occupation-related *Streptococcus suis* infection were reported, as compared with one case in 2004. As these infected workers were chefs, butchers or meat preparers, their infection was presumed to be contracted during their employment. All these cases had been investigated, and the workers concerned given relevant counselling on preventive measures.

Other Diseases

15. The other more frequently reported occupational disease was occupational dermatitis, with 10 cases in 2005, which was comparable to that in 2004.

PREVENTION OF OCCUPATIONAL DISEASES

16. The OHS has been providing a range of services in the prevention of occupational diseases, including investigation of notified cases, provision of clinical services and occupational health promotion. It is also responsible for drawing up legislation and law enforcement.

Investigation of Notified Cases

17. When the OHS receives notification of a case of occupational disease, an investigation is conducted with a view to confirming the diagnosis of the index case and looking for other unreported cases. In addition, the causes of the disease are evaluated and the relevant employers advised to take remedial safety and health control measures to prevent further occurrence of the occupational disease. In 2005, 2,410 investigations were conducted.

Clinical Services

18. LD's Kwun Tong Occupational Health Clinic provides clinical consultation, medical treatment, occupational health education and counselling services for workers with occupational or work-related illnesses. The workplaces of the workers are also inspected when necessary in order to assess the health hazards in the workplaces and to advise on necessary preventive measures to protect the health of workers. In 2005, the clinic provided 9,395 consultations. With a view to strengthening the clinical services in the New Territories, LD is setting up a new occupational health clinic in Fanling, which will go into operation later this year.

19. Besides clinical consultations, the OHS also performs medical examinations for radiation workers and government workers exposed to specific hazards with a view to identifying early abnormalities or ill-health arising from work and providing timely treatment to prevent development into full-blown occupational diseases. In 2005, 1,053 workers were examined in the clinic.

Occupational Health Promotion

- 20. The OHS regularly organizes occupational health talks to raise the awareness and enhance the occupational health knowledge of employers and employees. In 2005, 1,701 health talks were held. The OHS also produces publications on various occupational health issues. These publications focus either on specific industries, health hazards or occupational and work-related diseases to convey concise and useful safety and health information to employers and employees from different angles. So far, 112 titles have been produced.
- 21. In 2005, the OHS strengthened its publicity efforts to promote the prevention of musculoskeletal disorders for office workers. In addition to publication distribution, Announcements of Public Interest were broadcast on TV and radio, educational videos shown on mobile advertising media, large-scale health talks organized, and roving exhibitions mounted. These publicity programmes are not only continued in 2006, but extended to cover both office workers and workers in the catering industry.

Law Enforcement

- 22. Occupational safety and health legislation is an important means to protect the health of workers by prescribing the responsibilities of employers and employees. The Factories and Industrial Undertakings Ordinance and the Occupational Safety and Health Ordinance provide protection for almost all employees across the board. To ensure that occupational health requirements under the Ordinances are complied with and that health risks of workplaces are adequately controlled, the OHS inspects different workplaces regularly. Enforcement actions are taken against irregularities found.
- 23. In 2005, the OHS conducted 6,333 workplace inspections. Altogether 1,105 warnings and 136 improvement notices / suspension notices were issued, and 4 prosecutions taken out for breach of legislation. In the year, the OHS enhanced its inspections to offices to tie in with the strengthened publicity for office workers, with 409 such inspections conducted and 144 warnings and 24 improvement notices issued. In 2006, the OHS not only continues to enhance its inspections to offices but also extends such

inspections to catering establishments to ensure that the risk of musculoskeletal disorders to these employees is reduced to the lowest practicable extent.

Labour Department June 2006

Concept of Prescribed Occupational Diseases

The clinical manifestation of many occupational diseases, such as occupational contact dermatitis, is indistinguishable from similar diseases of non-occupational origin. 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

- 2. By drawing on the ILO's and the UK's criteria, LD has all along adopted the following criteria for determining whether a disease should be prescribed as a new occupational disease:-
 - (a) the disease would impose significant risk to workers of Hong Kong in a certain occupation; and
 - (b) the link between the disease and the occupation can be reasonably presumed or established in individual cases.
- 3. The second criterion is especially important in distinguishing occupational diseases from work-related diseases which are multifactorial in origin and, hence, their causal relationship with occupations has to be considered on a case-by-case basis.

Occupational Diseases Confirmed in Hong Kong in 2001 to 2005

Annex II

Occupational Disease	2001	2002	2003	2004	2005
Tenosynovitis of hand or forearm	90	35	34	43	75
Silicosis	122	110	74	69	68
Occupational deafness	121	114	74	52	60
Tuberculosis	41	29	30	42	30
Occupational dermatitis	24	29	10	7	10
Streptococcus suis infection	1	0	0	1	6
Asbestosis	9	9	6	4	2
Compressed air illness	11	4	2	0	1
Gas poisoning	11	30	26	28	4
Others	0	4	2	5	0
Total:	430	364	258	251	256
Incidence rate (per 100,000 employed workers) :	17.1	14.8	10.9	10.3	10.3

Prescription of Musculoskeletal Disorders

Most musculoskeletal disorders are of multifactorial origin, resulting from the interaction of multiple risk factors, e.g. low back pain and shoulder-neck pain. However, for certain musculoskeletal disorders, specific workplace risk factors play a predominant role in their causation and epidemiological evidence is in support of a significant association between such disorders and specific occupations. These specific musculoskeletal disorders, altogether six, have already been prescribed as occupational diseases under the ECO in Hong Kong.

2. Taking into account local disease pattern and other relevant factors, countries with a prescribed list of occupational diseases for the purpose of compensation have included different musculoskeletal disorders in their list. A comparison of musculoskeletal disorders prescribed in Hong Kong with those in UK, Canada, Australia, and the ILO list is given in the table below. It is worth noting that the ILO list annexed to the List of Occupational Diseases Recommendation, 2002 is established mainly for the purposes of prevention, recording and notification.

A comparison of musculoskeletal disorders prescribed in selected countries and regions and in the ILO list

Musculoskeletal Disorder	ILO#	UK	Canada	Australia	нк
Cramp of hand or forearm	-	+	-	-	+
Subcutaneous cellulitis of the hand (Beat hand)	-	+	+ (1 state)	-	+
Bursitis or subcutaneous cellulitis arising at or about the elbow (Beat elbow)	Included in OMD*	+	+ (4 states)	+ (1 state)	+

Musculoskeletal Disorder	ILO#	UK	Canada	Australia	нк
Bursitis or subcutaneous cellulitis arising at or about the knee (Beat knee)	Included in OMD	+	+ (5 states)	+ (1 state)	+
Traumatic inflammation of the tendons of the hand or forearm (including elbow)	Included in OMD	+ (elbow excluded)	+ (4 states)	+ (2 states)	+
Shoulder bursitis or tendinitis	Tendinitis included in OMD	-	+ (1 state)	-	•
Carpal tunnel syndrome (due to vibration)	Included in OMD	+	+ (1 state)	-	+
Occupational musculoskeletal disorders (OMD)	+	-	-	-	-

Remarks:

- + included
- not included

ILO# - List of Occupational Diseases Recommendation, 2002

^{*}Occupational musculoskeletal disorders – according to the ILO list, means musculoskeletal diseases caused by specific work activities or work environment where particular risk factors are present, e.g. rapid or repetitive motion, forceful exertion, vibration.