For information on 23 February 2010

# **Legislative Council Panel on Manpower**

## A Review of Occupational Diseases in Hong Kong in 2009

#### **PURPOSE**

This paper sets out the situation of occupational diseases in Hong Kong in 2009 and recent initiatives of the Occupational Health Service (OHS) of the Labour Department (LD) in promoting occupational health 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.

# Prescribing Occupational Diseases for Employees' Compensation

3. The clinical manifestation of diseases is generally similar irrespective of whether they are of occupational or non-occupational origin. Therefore, though the categorisation of a disease as "occupational disease" is a

scientific process based on high-quality corroborative studies on large numbers of cases in different populations, concluding the existence of a causal link between a particular 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 process of employees' compensation, the occupational origin of the disease is presumed if the employee 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.

## Criteria for Prescribing Occupational Diseases

- 4. 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) paragraph 2(a) above, such that the causal relationship between the disease and the occupation can be reasonably presumed or established in individual cases.
- 5. The second criterion is especially important in differentiating 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. For example, 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 are classified as work-related diseases instead of occupational diseases.
- 6. Only diseases that are classified as occupational diseases would be considered, taking into account factors like local disease pattern, for prescription as occupational diseases for the purpose of employees' compensation.

## PRESCRIBED OCCUPATIONAL DISEASES IN HONG KONG

- 7. In Hong Kong, the Employees' Compensation Ordinance (Cap. 282) (ECO), the Occupational Deafness (Compensation) Ordinance (Cap. 469) (ODCO) and the Pneumoconiosis and Mesothelioma (Compensation) Ordinance (Cap. 360) (PMCO) prescribe altogether 52 occupational diseases. Section 36(1) of the ECO 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.
- 8. 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 of cases of these occupational diseases.
- 9. Since 1991, there have been four amendments to the list of prescribed occupational diseases in the Second Schedule to the ECO adding a total of 13 new occupational diseases and expanding the coverage of three occupational diseases. The last amendment was made in February 2005 whereby Severe Acute Respiratory Syndrome and Avian Influenza A were added to the list. As for the PMCO, the last amendment was made in 2008 to prescribe mesothelioma as an occupational disease. With respect to the ODCO, an Amendment Bill to introduce noise-induced monaural hearing loss as a new occupational disease has just been passed into law by the Legislative Council.

#### **CONFIRMED OCCUPATIONAL DISEASES IN 2009**

In the ten years between 2000 and 2009, the number of confirmed 10. cases had dropped substantially from 504 to 268. In 2009, silicosis, occupational deafness, tenosynovitis of the hand or forearm and tuberculosis were the most common confirmed occupational diseases. Relevant figures are set out at the Annex. With concerted efforts of LD and other stakeholders, the Occupational Safety and Health Council Pneumoconiosis Compensation Fund Board (PCFB), Occupational Deafness Compensation Board (ODCB), employers' associations and trade unions, Hong Kong has witnessed an increase in the general safety and health awareness of employers and employees. This has contributed to more effective and early prevention of occupational diseases.

#### **Silicosis**

11. 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. Most sufferers were construction workers, some of whom had been engaged in high-risk hand-dug caisson work. The general declining trend over the past decade in the number of confirmed cases, from 105 confirmed cases in 2000 to 86 confirmed cases in 2009 revealed that restrictions on the use of hand-dug caisson, introduced in 1995 by the Buildings Department, had contributed to the prevention of silicosis in the longer term.

## **Occupational Deafness**

Occupational deafness is a permanent hearing loss arising from at least 5 to 10 years of exposure to loud noise at work in certain specified occupations. In 2009, there were 77 diagnosed cases with compensation paid, down from 206 in 2000. Most of these cases were related to rock grinding, chiselling, cutting or percussion, metal grinding, and working near internal combustion engines, turbines, pressurised fuel burners or jet engines. Nevertheless, it is expected that the number of diagnosed cases will increase in the next few years following the prescription of noise-induced monaural hearing loss as a new occupational disease in February 2010.

# Tenosynovitis of the Hand or Forearm

13. 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 2009, there were 39 confirmed cases, compared with 40 in 2008. The disease was common among catering workers, clerical and other office personnel, health services personnel, and general labourers.

#### **Tuberculosis**

14. 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 2009, there were 18 confirmed cases, compared with 25 in 2008. The disease most commonly occurred among nurses and other allied health services personnel such as laboratory technician and health care supporting staff. In this connection, health care institutions

have stepped up infection control with a view to better preventing the spread of the disease in the workplace.

#### Other Diseases

15. The other occupational diseases confirmed in 2009 included 15 cases of mesothelioma, 10 cases of occupational dermatitis, 5 cases of asbestosis and 1 case of compressed air illness.

#### RECENT INITIATIVES OF OCCUPATIONAL HEALTH SERVICE

## **Publicity and Enforcement**

16. LD adopts a three-pronged approach to safeguarding occupational safety and health of the working population. In addition to education, 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, we inspect different workplaces regularly and take enforcement actions against irregularities identified.

# Prevention of Occupational and Work-related Diseases

- 17. LD promotes employers' and employees' awareness of the prevention of occupational and work-related diseases by organising 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 2009, a total of 1 394 health talks on various occupational health issues was organised for over 47 500 participants. from organising public health talks, LD had also provided outreaching health talks at the workplaces of individual organisations. More than 30 different topics were covered in these health talks. Examples include "Manual Handling Operation and Prevention of Back Injuries", "Health Hazards of Asbestos", "Health Hazards of Hot Environment at Work", "Prevention of Silicosis", "Prevention of Upper Limb Disorders", "Occupational Health for Catering Workers", and "Prevention of Musculoskeletal Disorders for Office Workers".
- 18. 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. In 2009, LD, in collaboration with these stakeholders, promoted an educational kit<sup>1</sup> which set out a comprehensive approach to preventing different occupational diseases with complementary publicity. In 2010, we will continue with these promotional efforts to sustain employers' and employees' general awareness of the prevention of occupational diseases.

19. Our promotion and public education work goes well beyond occupational diseases. With a view to safeguarding the health of our workers, we also extend our preventive work to common work-related diseases. Musculoskeletal disorders, common among workers in specific occupations like service and clerical personnel and manual workers in general, constitute an example. In 2009, we conducted a total of 492 surprise inspections to office and catering workplaces, in which 135 warnings and 18 improvement notices were issued and 2 prosecutions taken out in relation to irregularities in musculoskeletal disorder prevention. In 2010, we will continue with our publicity and enforcement efforts to actively promote the prevention of work-related musculoskeletal disorders in the working population, particularly clerical personnel and catering workers.

## Prevention of Heat Stroke at Work

20. Long hours of work in outdoor workplaces, such as construction sites, outdoor cleansing workplaces and container yards, in the hot summer months without appropriate preventive measures subject workers to a higher risk of heat stroke. In 2009, LD published a checklist on "Risk Assessment for the Prevention of Heat Stroke at Work" to provide guidance to employers and employees for assessing the risk of heat stroke at workplaces by taking into account a multitude of factors including temperature, humidity, heat radiation, and air movement and to facilitate them to take appropriate preventive measures. Moreover, we had also organised public and outreaching health talks for employers and employees, showed educational videos on mobile advertising media, and issued press releases to remind employers and employees of the need for due care when working in the hot To further facilitate employers and workers in the construction industry and those providing outdoor cleansing services, in 2010, we will develop and promote the use of two specific checklists, one for construction sites and the other for cleansing workplaces. We will continue to collaborate with relevant stakeholders such as the Construction Industry Council, OSHC,

The educational kit contains a health guide, two educational video discs, and various promotional materials carrying slogans on occupational disease prevention, such as pens, torches, and mouse-pads.

employers' associations and workers' unions, to promote the awareness of employers and employees, particularly those engaged in outdoor work, on heat stroke prevention.

21. In April to September 2009, we stepped up inspections of workplaces at a higher risk of heat stroke, such as construction sites, outdoor cleansing and security workplaces, kitchens, food factories, bakeries, and laundries. A total of 9 416 surprise inspections were conducted, with 207 warnings and 8 improvement notices issued and 3 prosecutions taken out. In 2010, we will conduct a special enforcement campaign between April and September, focusing on the adequacy and effectiveness of preventive measures taken at outdoor workplaces with a higher risk of heat stroke, in particular construction sites, outdoor cleansing workplaces, and container yards. 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 the safety and health laws.

#### Prevention of Human Swine Influenza A/H1N1

- 22. Since the confirmation of the first case of human swine influenza (HSI) A/H1N1 in Hong Kong on 1 May 2009, LD has been providing advice to employers and employees on precautionary measures and related employment issues, and organising health talks with relevant partners such as OSHC, Social Welfare Department and Department of Health to raise public awareness on the prevention of the spread of the disease at workplaces.
- 23. In addition, we have stepped up inspections of workplaces at a higher risk of infection to ensure adequate infection control measures to safeguard the health of employees. As at 31 December 2009, all 53 public and private hospitals, two slaughterhouses and 11 border control boundaries, as well as 83 General Outpatient Clinics under the Hospital Authority, and Tuberculosis and Chest Clinics under the Department of Health had been inspected. Moreover, we also inspected 289 elderly homes, 13 pig farms, 88 workplaces of cleansing contractors, 94 schools with classes suspended due to the outbreak of HSI, and 3900 restaurants. In the course of inspecting other workplaces, we also advised the management to maintain cleanliness and hygiene of their workplaces and remind their employees to maintain personal hygiene. In the same period, a total of 293 warnings and 9 improvement notices were issued. The irregularities identified were of minor nature, such as failure to provide appropriate personal protective equipment like gloves and masks, improper labelling of chemical containers, and inadequate exhaust

ventilation for isolation room, etc. In 2010, we will continue to inspect workplaces at a higher risk of infection, such as elderly homes and workplaces of cleansing contractors, to ensure their preparedness for a possible second wave of HSI.

#### **WAY FORWARD**

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

Labour and Welfare Bureau Labour Department February 2010

# Occupational Diseases Confirmed in Hong Kong from 2000 to 2009

Occupational disease	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Silicosis	105	122	110	74	69	68	109	67	65	86
Occupational deafness	206	121	114	74	52	60	51	47	58	77
Tenosynovitis of the hand or forearm	81	90	35	34	43	75	63	35	40	39
Tuberculosis	39	41	29	30	42	30	18	16	25	18
Gas poisoning	36	11	30	26	28	4	5	1	4	17
Mesothelioma <sup>#</sup>	-	-	-	-	-	-	-	-	1	15
Occupational dermatitis	17	24	29	10	7	10	8	7	3	10
Asbestosis	11	9	9	6	4	2	7	2	5	5
Streptococcus suis infection	0	1	0	0	1	6	0	1	3	0
Others	9	11	8	4	5	1	3	1	1	1
Total:	504	430	364	258	251	256	264	177	204	268

<sup>&</sup>lt;sup>#</sup> Mesothelioma was prescribed as a new occupational disease under the Pneumoconiosis and Mesothelioma (Compensation) Ordinance in 2008.