For information on 12 July 2011

Legislative Council Panel on Manpower

A Review of Occupational Diseases in Hong Kong in 2010

Purpose

This paper briefs Members on the situation of occupational diseases in Hong Kong in 2010 and the recent initiatives of the Labour Department (LD) in promoting occupational health and enforcing relevant occupational safety and health laws.

Background

2. 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.

3. In considering whether a disease should be prescribed as an occupational disease for employees’ compensation, LD has all along made reference to the criteria of the International Labour Organization (ILO). The major considerations are:

   (a) workers engaged in a certain occupation in Hong Kong have a significant and recognised risk of contracting the disease; and

   (b) the causal relationship between the occupation and the disease can be reasonably presumed or established in individual cases.

4. The clinical manifestation of diseases is generally similar irrespective of whether they are of occupational or non-occupational origin. Therefore, the existence of a causal relationship between a particular occupation and a certain disease should be substantiated by findings of relevant epidemiological studies. Only diseases that are classified as occupational diseases will be considered for prescription as occupational diseases for employees’ compensation, taking into account the actual situation in the territory such as the presence of a local case of the disease.
5. Unlike occupational diseases, work-related diseases are multifactorial in origin, resulting from the interaction of multiple factors (including factors in the work environment). These diseases, which have a complex aetiology, are common in the general population and not limited to workers engaged in a certain occupation. For example, most musculoskeletal disorders (such as low back, shoulder-neck and upper limb pain as well as osteoarthritis of the knee) are caused by a number of factors like obesity, lack of exercise, excessive force, awkward posture, repetitive movement, functional disability due to old age, and maintaining a standing or sitting posture for a prolonged period of time. The causes of lower limb varicose vein include obesity, pregnancy, family history, gender (more common in female), prolonged standing or sitting and a complication of thrombophlebitis of the lower limbs.

**Confirmed Occupational Diseases in 2010**

6. In 2010, the number of confirmed cases of occupational diseases was 229. Occupational deafness, silicosis and tenosynovitis of the hand or forearm were the most common confirmed cases. Relevant figures are set out in the Annex.

**Occupational Deafness**

7. 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 2010, there were 70 diagnosed cases with compensation paid. Most of these cases were related to rock grinding, chiselling, cutting or percussion, metal grinding, and working in close proximity to internal combustion engines, turbines, pressurised fuel burners or jet engines. Moreover, the coverage of compensation under ODCO was extended in April 2010 to employees who have developed noise-induced monaural hearing loss. As at the end of 2010, there were a total of 510 such cases of compensation.

**Silicosis**

8. Silicosis is a chronic disease with fibrosis of the lungs owing 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 number of confirmed cases was 61 in 2010.
**Tenosynovitis of the Hand or Forearm**

9. 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 2010, there were 48 confirmed cases. The disease was common among elementary workers, services and sales workers, clerical support workers and technicians and associate professionals.

**Mesothelioma**

10. Mesothelioma is a cancer of the lining of the chest wall caused by inhalation of asbestos, with latent period as long as 30 to 40 years. This type of cancer was prescribed as an occupational disease under the Pneumoconiosis and Mesothelioma (Compensation) Ordinance in April 2008. In 2010, there were 12 confirmed cases.

**Tuberculosis**

11. Tuberculosis is a prescribed occupational disease for workers having close and frequent contacts with a source of infection by reason of their employment, such as those employed in the medical treatment or nursing of persons suffering from the disease. In 2010, there were 11 confirmed cases. The disease most commonly occurred among medical practitioners, nurses and other personal care workers.

**Other Diseases**

12. The other occupational diseases confirmed in 2010 included 5 cases of occupational dermatitis, 3 cases of Streptococcus suis infection, 1 case of asbestosis and 1 case of compressed air illness.

**Initiatives of Labour Department on Promoting Improvement of Occupational Health**

**Publicity and Enforcement**

13. LD safeguards occupational safety and health of the working population by adopting the three-pronged strategy of legislation and enforcement, publicity and promotion, as well as education and training. 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, staff of LD carry out surprise inspections at different workplaces regularly and take enforcement actions against irregularities identified.

Prevention of Occupational and Work-related Diseases

14. 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 the radio, publishing feature articles in newspapers, conducting promotional visits to workplaces, and showing educational videos on mobile advertising media. In 2010, a total of 1,341 occupational health talks on various issues were organised for over 42,000 participants. Apart from organising public health talks, LD also provided outreaching health talks at the workplaces of individual organisations. More than 30 different topics were covered in these health talks. Examples include “Strategies for the Prevention of Occupational Diseases”, “Manual Handling Operations and Prevention of Back Injuries”, “Occupational Contact Dermatitis”, “Prevention of Silicosis”, “Prevention of Upper Limb Disorders”, “Occupational Health for Elderly Home Workers”, and “Noise Hazards and Prevention of Hearing Loss”. Furthermore, we continued to promote an educational kit\(^1\) among employers and employees in various trades. The kit, released in 2009, provides practical approaches to preventing different occupational diseases.

15. We also partner with relevant stakeholders including the Occupational Safety and Health Council (“OSHC”), Pneumoconiosis Compensation Fund Board, Occupational Deafness Compensation Board, 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 experience-sharing sessions, as well as workplace hygiene charter. In 2011, we will continue with these promotional efforts to enhance employers’ and employees’ awareness of the prevention of occupational and work-related diseases.

16. Work-related musculoskeletal disorders are common among clerical and service personnel and manual workers. In recent years, we have been promoting the prevention of these disorders among office personnel and catering workers through various channels. We also actively carry out publicity and promotion among air transport workers at the airport. In 2010, 12 health talks

\(^{1}\) 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.
were jointly organised with the Hong Kong Airport Authority and various
ground handling service operators, covering such topics as risk assessments for
manual handling operations, back care and simple stretching exercises at
workplaces. On law enforcement, we conducted in 2010 a total of 326
inspections at offices, catering workplaces, as well as work sites for loading and
unloading operations in the airport, in which 47 warnings and 7 improvement
notices were issued in relation to irregularities in musculoskeletal disorder
prevention.

17. In 2011, we continue with the publicity and enforcement efforts in this
area. In addition, we also plan to promote, in collaboration with OSHC,
employers’ associations and trade unions of the retail and catering industries as
well as relevant professional bodies, the preventive measures for work-related
leg disorders (such as varicose veins and plantar fasciitis) among workers of the
two industries. The activities will include showing promotional videos on
mobile advertising media, paying promotional visits to retail stores and
restaurants in busy districts by occupational safety and health ambassadors, and
distributing educational pamphlets and promotional souvenirs. Also, we will
invite the Hong Kong Podiatrists Association and the Physical Fitness
Association of Hong Kong to design a set of workplace exercises specifically for
workers of the two industries, which will be promoted through seminars and
exercise workshops.

Prevention of Heat Stroke at Work

18. On the prevention of heat stroke at work, a series of focused publicity
and educational activities targeting workplaces with a higher risk of heat stroke
(e.g. construction sites, outdoor cleansing workplaces, container yards, etc) were
launched between April and September 2010 to enhance the awareness of
employers and employees on heat stroke prevention at work. Apart from
distributing the pamphlets on “Prevention of Heat Stroke at Work in a Hot
Environment” and promoting the use of a general checklist on “Risk Assessment
for the Prevention of Heat Stroke at Work”, we developed two tailor-made risk
assessment checklists in 2010, one each for construction sites and outdoor
cleansing workplaces, to provide further guidance to the employers and
employees of the two industries. These two checklists explain practical ways
for assessing the risk of heat stroke and preventive measures such as provision
of drinking water, setting up of sunshades, arranging rest breaks, etc, so as to
assist the relevant industries in making appropriate arrangements according to
their work nature. Moreover, we had organised health talks, issued press
releases in response to weather conditions, published feature articles or
broadcast publicity videos and radio Announcements in the Public Interest
through different media channels, distributed promotional materials, etc, to
remind stakeholders to pay due regard to the prevention of heat stroke. We had
also launched promotional efforts in collaboration with OSHC, the Construction Industry Council, employers’ associations and workers’ unions such as conducting promotional visits to workplaces (e.g. construction sites and outdoor cleansing workplaces) to promote the prevention of heat stroke among workers on site.

19. From April to September 2010, LD conducted a total of 24,500 inspections to workplaces at a higher risk of heat stroke, with 57 warnings issued for reasons including failing to set up sunshades at workplaces for outdoor construction workers, poor ventilation in work areas, and failing to provide adequate drinking water, etc. With the active publicity and promotional efforts made by LD and relevant stakeholders, the construction industry has paid more attention to the prevention of heat stroke at work. Preventive measures such as setting up temporary sunshades at different locations on the site (including the top of buildings under construction), provision of drinking water and electrolytes sachets, providing proper ventilation facilities, and arranging additional rest breaks having regard to the weather conditions have been adopted.

20. In 2011, the publicity and promotional campaign as well as inspections and enforcement activities started in April. Moreover, we also collaborate with OSHC and relevant trade unions to promote occupational safety and health messages among professional drivers, including the prevention of heat stroke at work.

21. Since May 2009, LD has started to collate figures on injury cases owing to heat stroke at work as confirmed by medical practitioners. In 2009, there were a total of five such cases with four involving outdoor work and one involving indoor work. In 2010, there were two such cases which involved physical training and driving vehicles without air-conditioning respectively. We will continue to collate figures on these cases to help formulate targeted strategies for the prevention of heat stroke at work.

**Way Forward**

22. 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.

Labour and Welfare Bureau
Labour Department
July 2011
## Occupational Diseases Confirmed in Hong Kong from 2001 to 2010

<table>
<thead>
<tr>
<th>Occupational disease</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupational deafness*</td>
<td>121</td>
<td>114</td>
<td>74</td>
<td>52</td>
<td>60</td>
<td>51</td>
<td>47</td>
<td>58</td>
<td>77</td>
<td>70</td>
</tr>
<tr>
<td>Silicosis</td>
<td>122</td>
<td>110</td>
<td>74</td>
<td>69</td>
<td>68</td>
<td>109</td>
<td>67</td>
<td>65</td>
<td>86</td>
<td>61</td>
</tr>
<tr>
<td>Tenosynovitis of the hand or forearm</td>
<td>90</td>
<td>35</td>
<td>34</td>
<td>43</td>
<td>75</td>
<td>63</td>
<td>35</td>
<td>40</td>
<td>39</td>
<td>48</td>
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<tr>
<td>Gas poisoning</td>
<td>11</td>
<td>30</td>
<td>26</td>
<td>28</td>
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<td>5</td>
<td>1</td>
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<td>Mesothelioma#</td>
<td>-</td>
<td>-</td>
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<td>-</td>
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<td>-</td>
<td>-</td>
<td>1</td>
<td>15</td>
<td>12</td>
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<tr>
<td>Tuberculosis</td>
<td>41</td>
<td>29</td>
<td>30</td>
<td>42</td>
<td>30</td>
<td>18</td>
<td>16</td>
<td>25</td>
<td>18</td>
<td>11</td>
</tr>
<tr>
<td>Occupational dermatitis</td>
<td>24</td>
<td>29</td>
<td>10</td>
<td>7</td>
<td>10</td>
<td>8</td>
<td>7</td>
<td>3</td>
<td>10</td>
<td>5</td>
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<td>Streptococcus suis infection</td>
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<td>0</td>
<td>1</td>
<td>6</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>3</td>
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<tr>
<td>Asbestosis</td>
<td>9</td>
<td>9</td>
<td>6</td>
<td>4</td>
<td>2</td>
<td>7</td>
<td>2</td>
<td>5</td>
<td>5</td>
<td>1</td>
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<tr>
<td>Others</td>
<td>11</td>
<td>8</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>0</td>
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<td>1</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>430</strong></td>
<td><strong>364</strong></td>
<td><strong>258</strong></td>
<td><strong>251</strong></td>
<td><strong>256</strong></td>
<td><strong>264</strong></td>
<td><strong>177</strong></td>
<td><strong>204</strong></td>
<td><strong>268</strong></td>
<td><strong>229</strong></td>
</tr>
</tbody>
</table>

### Notes

* : The coverage of compensation under the Occupational Deafness Compensation Ordinance was extended in April 2010 to employees who have developed noise-induced monaural hearing loss. As at end of 2010, there was a total of 510 such cases.

#: Mesothelioma was prescribed as a new occupational disease under the Pneumoconiosis and Mesothelioma (Compensation) Ordinance in April 2008.