

For information  
26 April 2005

## **LegCo Panel on Manpower**

### **A Review of Occupational Diseases in 2004**

#### **PURPOSE**

This paper sets out the position of occupational diseases confirmed in 2004, and the preventive measures undertaken by the Occupational Health Service (OHS) of the Labour Department.

#### **BACKGROUND**

2. In Hong Kong, there are 51 occupational diseases prescribed for compensation purpose. They come under the Employees' Compensation Ordinance (ECO), the Occupational Deafness (Compensation) Ordinance, and the Pneumoconiosis (Compensation) Ordinance. If a worker is diagnosed to have any of these diseases and has been employed in a specified occupation or exposed to specific hazards at work within a specified period as stipulated in the Ordinances, the disease is presumed to be occupational in origin and compensable under the laws.

3. The compensable occupational diseases are also specified in Schedule 2 of the Occupational Safety and Health Ordinance (OSHO) as notifiable occupational diseases. Under section 15 of the Ordinance, medical practitioners are required to report cases of these occupational diseases to the Commissioner for Labour. A list of the 51 notifiable occupational diseases is at Annex I.

#### **CONFIRMED OCCUPATIONAL DISEASES IN 2004**

4. The health status of workers in Hong Kong has shown significant improvement in recent years. The number of occupational diseases has dropped steadily from 948 cases in 1998 to 251 cases in 2004. The incidence rates also revealed a similar trend, declining from 39.7 to

10.3 cases per 100 000 employed workers from 1998 to 2004. Silicosis, occupational deafness, tenosynovitis of hand or forearm, tuberculosis and gas poisoning were the most common occupational diseases. The statistical details are at Annex II.

### **Silicosis**

5. Silicosis is a chronic disease that causes fibrosis of the lungs leading to impaired lung functions. In 2004, 69 cases were confirmed. The figure has fallen consecutively for four 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.

6. As hand-dug caisson operation is an unsafe work practice and high levels of silica dust are generated, its use has been restricted by the Buildings Department since 1995. However, as the latent period of silicosis is long, it is expected that the number of cases will only decrease slowly and gradually in the years to come.

### **Occupational Deafness**

7. Occupational deafness is a permanent hearing loss due to prolonged exposure to loud noise at work. In 2004, 52 cases were diagnosed and compensated. The figure was the lowest since occupational deafness was made compensable under the Occupational Deafness (Compensation) Ordinance in 1996. Most of the 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.

8. As a result of the intensive publicity and education efforts by the Labour Department and the Occupational Deafness Compensation Board in preventing the disease, it is expected that the number of cases will continue to fall in the coming years.

## **Tenosynovitis of Hand or Forearm**

9. 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 2004, a total of 43 cases were confirmed. The disease was most commonly reported in service personnel such as cooks, cleaners and housework assistants (40%), production related personnel and labourers (23%) as well as clerical and related office personnel such as typists and secretaries (21%).

10. The number of cases dropped significantly from 81 and 90 cases in 2000 and 2001 respectively to around 30 to 40 cases in the recent three years. This came in the wake of the intensified publicity and health education efforts of the Labour Department and other non-governmental organizations that raised the awareness of employees on the prevention of this occupational disease.

## **Tuberculosis**

11. 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 2004, 42 cases were confirmed, of which 23 cases (55%) were nurses, 9 cases (21%) were doctors, 8 cases (19%) were supporting staff such as health care assistants and workmen, and the remaining 2 cases (5%) were a physiotherapist and a pharmacist.

12. There had been year-on-year fluctuations in the number of cases per year between 1998 and 2004. Although the number of cases in 2004 was apparently higher than that of 2002 and 2003, the number was within the average of about 40 cases per year. There was no conclusive evidence that the rise was real. The statistical details were as follows.

Year:	1998	1999	2000	2001	2002	2003	2004
No. of cases:	39	57	39	41	29	30	42

(average: 40 cases per year)

13. As Hong Kong currently still has a high endemicity of tuberculosis with a total of 6 295 cases in 2004, it is expected that occupation-related cases will continue to be seen in the coming years.

### **Gas Poisoning**

14. In 2004, 10 incidents of gas poisoning involving 28 workers were confirmed. The causative agents were hydrogen sulphide in two incidents, carbon monoxide in another two incidents and chlorine gas in two other incidents. The remaining four incidents were caused by hydrochloric acid vapour, 2-chloro-6-fluorobenzaldehyde, phenyl isocyanate and organic solvent containing acetone, ethyl benzene and xylene. Depending on the scale of the incidents, the number of gas poisoning cases fluctuated over the past few years.

### **Other Diseases**

15. Besides the commonest occupational diseases above, occupational dermatitis and asbestosis were the more frequently reported diseases. The number of cases was 7 and 4 respectively in 2004, which were lower than those in 2003.

## **PREVENTION OF OCCUPATIONAL DISEASE**

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 notifications of occupational disease, investigation will be conducted with a view to confirming the diagnosis of the index cases and looking for other unreported cases. In addition, the causes of the disease will be evaluated and the relevant employers will be advised to take remedial safety and health control measures to prevent further occurrence of the occupational disease. In 2004, a total of 2 435 investigations were conducted.

## **Clinical Services**

18. The Occupational Health Clinic of the Labour Department provides clinical consultation, medical treatment, occupational health education and counselling services for workers with occupation-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 2004, the clinic provided 8 126 consultations.

19. Besides clinical consultations, the staff of the OHS also perform 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 2004, a total of 1 322 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. Altogether, 1 746 such talks were held in 2004.

21. Besides health talks, the OHS produces publications on various occupational health issues. These publications focus either on specific industries, health hazards or occupational diseases to convey concise and useful safety and health information to employers and employees from different angles. In 2004, a series of casebooks on tenosynovitis, occupational dermatitis, occupational infections and occupational asthma were produced. These casebooks provide examples on how occupational diseases are caused in actual working situations and suggest some practical preventive measures. In 2004, the OHS published nine new titles of educational booklets. Another new series of work-related diseases are being developed. At present, a pamphlet on “Plantar Fasciitis” has been published. Other pamphlets in the pipeline include “Varicose Veins of the Lower Limb”, “Shoulder Tendinitis” and “Osteoarthritis of the Knee”.

22. The OHS also participated in large-scale publicity programmes jointly held with other organizations, such as Occupational Hygiene Charter, Occupational Health Day, Safety and Health Expo, Prevention of Pneumoconiosis Carnival and open seminar on “Noise Hazard and Prevention of Hearing Loss, in collaboration with the Occupational Safety and Health Council, Pneumoconiosis Compensation Fund Board and Occupational Deafness Compensation Board. These programmes aim to raise the awareness of both the public and workers.

### **Legislation and Law Enforcement**

23. 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.

24. To ensure that occupational health requirements under the Factories and Industrial Undertakings Ordinance and the Occupational Safety and Health Ordinance are complied with and that health risks of workplaces are adequately controlled, OHS staff inspect different workplaces regularly. Enforcement actions are taken against irregularities found.

25. In 2004, OHS conducted 5 953 workplace inspections. A total of 1 067 warnings, 107 improvement notices and 9 suspension notices were issued and 17 prosecutions were taken out for breach of legislation.

**List of Notifiable Occupational Diseases**

- 1 Radiation Illness
- 2 Heat Cataract
- 3 Compressed Air Illness
- 4 Cramp of Hand or Forearm
- 5 Beat Hand
- 6 Beat Knee
- 7 Beat Elbow
- 8 Tenosynovitis of Hand or Forearm
- 9 Anthrax
- 10 Glanders
- 11 Leptospirosis
- 12 Extrinsic Allergic Alveolitis
- 13 Brucellosis
- 14 Tuberculosis in Health Care Workers
- 15 Parenterally Contracted Viral Hepatitis in Health Care Workers
- 16 Streptococcus Suis Infection
- 17 Avian Chlamydiosis
- 18 Lead Poisoning
- 19 Manganese Poisoning
- 20 Phosphorus Poisoning
- 21 Arsenic Poisoning
- 22 Mercury Poisoning

- 23 Carbon Bisulphide Poisoning
- 24 Benzene Poisoning
- 25 Poisoning by Nitro-, Amino-, or Chloro- Derivatives of Benzene
- 26 Dinitrophenol Poisoning
- 27 Poisoning by Halogen Derivatives of Hydrocarbons
- 28 Diethylene Dioxide Poisoning
- 29 Chlorinated Naphthalene Poisoning
- 30 Poisoning by Oxides of Nitrogen
- 31 Beryllium Poisoning
- 32 Cadmium Poisoning
- 33 Dystrophy of the Cornea
- 34 Skin Cancer
- 35 Chrome Ulceration
- 36 Urinary Tract Cancer
- 37 Peripheral Polyneuropathy
- 38 Localised Papillomatous or Keratotic New Skin Growth
- 39 Occupational Vitiligo
- 40 Occupational Dermatitis
- 41 Chemical Induced Upper Respiratory Tract Inflammation
- 42 Nasal or Paranasal Sinus Cancer
- 43 Byssinosis
- 44 Occupational Asthma
- 45 Silicosis
- 46 Asbestos-related Diseases
- 47 Occupational Deafness
- 48 Carpal Tunnel Syndrome

- 49 Legionnaires' Disease
- 50 Severe Acute Respiratory Syndrome
- 51 Avian Influenza A

## Annex II

### Breakdown of Occupational Disease Cases from 1998 to 2004

<b>Occupational Disease</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>
Silicosis	104	137	105	122	110	74	69
Occupational deafness	631	388	206	121	114	74	52
Tenosynovitis of hand or forearm	71	54	81	90	35	34	43
Tuberculosis	39	57	39	41	29	30	42
Gas poisoning	57	57	36	11	30	26	28
Occupational dermatitis	34	21	17	24	29	10	7
Asbestosis	5	15	11	9	9	6	4
Others	7	5	9	12	8	4	6
<b>Total:</b>	<b>948</b>	<b>734</b>	<b>504</b>	<b>430</b>	<b>364</b>	<b>258</b>	<b>251</b>
<b>Incidence rate (per 100,000 employed workers) :</b>	<b>39.7</b>	<b>30.4</b>	<b>20.1</b>	<b>17.1</b>	<b>14.8</b>	<b>10.9</b>	<b>10.3</b>