

Hearing Conservation at Work

Occupational Deafness is....

The sensorial hair cells of the inner ear will be damaged when exposed to noisy working environment continuously for a long period of time. The degree of detriment is proportional to the intensity of the noise. These hair cells cannot recover once damaged in this way, leading to permanent hearing impairment. Therefore, occupational deafness is incurable and prevention is the only way to protect the hearing capacity of those working in noisy occupations.

Hearing Impairment

Early symptoms

Different from sudden hearing loss due to occupational injury or other accident, the loss of hearing capacity resulting from occupational deafness will be worsened gradually. One should pay attention if the following symptoms appear:

- Continued ringing or roaring noise in the ear (known as tinnitus)
- Difficulty in communicating with others due to not hearing well
- Need to raise the volume of radio or TV
- Hard to concentrate
- Not sleeping well

Impact of Noise on Health

- Causing tinnitus, temporary hearing loss or permanent hearing loss.
 - **Temporary Hearing Loss:** Being exposed to noisy working environment for a short period of time may worsen the sensitivity of hearing, reduce the clarity of listening to external sound sources, and result in tinnitus. Hearing sensitivity will gradually recover after resting in quiet environment.
 - **Permanent Hearing Loss:** Being exposed to noisy working environment for a long period of time may damage the sensorial hair cells of the inner ear without recovery, leading to hearing deterioration and eventually hearing impairment. Occupational deafness is a type of permanent hearing loss.
- Feeling dizzy, headache, fatigue, irritation and psychological pressure.
- Causing palpitation and affecting blood pressure.
- Resulting in poor appetite or dyspepsia.

Responsibility of Employers

- Assessment of Noise Level at Workplace

The Factories and Industrial Undertakings (Noise at Work) Regulation states that where machines or tools producing high level of noise are in use in any industrial undertakings, the employer shall appoint a qualified person to carry out a noise assessment for the purpose of evaluating the impact of noise to the employees. Where appropriate, ear protection zone should be properly demarcated. For construction sites, the employer should appoint a qualified person to carry out a noise assessment and to specify that employees should wear ear protectors within a distance from the source of noise.

- Reduce Noise at the Source

To use less noisy machines and to properly maintain them on a regular basis. In addition, silencer, muffler or damping materials should be installed where necessary to reduce the high level of noise generated by the impact or vibration of the machine parts.

- Control Noise Transmission

To isolate the noise sources by putting up suitable noise absorbing or soundproofing installation around them. At the same time, a reasonable work system should be implemented to minimize the time that employees would be exposed to noise.

- Personal Ear Protectors

To provide suitable and approved ear protectors to employees in accordance with the nature of their work, and encourage proper use of such by giving employees relevant information or training, as well as by strengthening their awareness on occupational noise and hearing protection.

- Regular Hearing Test

To identify hearing damage at its earliest stage, employees should be arranged to attend regular hearing tests, so that suitable preventive or remedial measures could be taken.

Responsibility of Employees

- Proper Use of Noise Control Equipment

When working with machines installed with noise silencer or acoustic enclosure, one should ensure that these installations are working properly. One should also report immediately to the employer or supervisor if any defect of such equipment or ear protectors is detected, so that repair or replacement can be made.

- Wear Ear Protectors

To follow the employer's instruction to wear suitable and approved ear protectors.

- Maintenance of Ear Protectors

To ensure that the ear protectors are in good condition and hygiene. Damaged or contaminated equipment may cause ear infection.

- Taking Care of Your Hearing

To seek medical consultation immediately if hearing problem is suspected and take proper hearing protective measures. The Occupational Health Clinic of the Labour Department, the Hong Kong Society for the Deaf and public clinics under the Hospital Authority are offering relevant hearing and ear examinations at a reasonable fee.

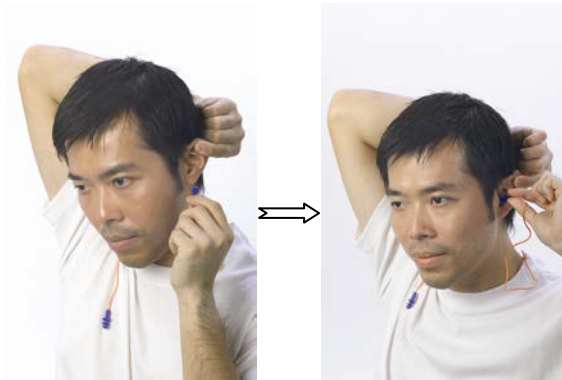
Ear Protectors and Their Use

There are two main types of ear protectors: ear plugs and ear muffs. Only ear protectors that are approved by the Commissioner of Labour should be used. For details of the approved ear protectors, please contact the Occupational Safety and Health Branch of the Labour Department.

Ear muffs are easy to use and suitable for those working most of their time in and out noisy environment. To wear them properly, both ears shall be covered completely by the muffs as below:



There are two types of ear plugs: reusable and disposable. One shall be aware of personal hygiene each time when wearing ear plugs. It is important to keep the reusable ear plugs clean. The proper method of wearing ear plugs is to pull one ear upward and backward by the hand of other side over the head, then put the plug inside the ear carefully as below:



Caution: It is important not to block the user from hearing urgent signals. Cotton balls or headphones cannot be used in place of ear muffs or ear plugs.

Related Organizations

- 1 Labour Department – Occupational Safety and Health Branch
URL: <http://www.labour.gov.hk/eng/osh/>
Tel: 2559 2297
- 2 Labour Department – Occupational Health Clinic
Tel: 2343 7133 (Kwun Tong)
Tel: 2543 5701 (Fanling)
- 3 Occupational Safety and Health Council
URL: <http://www.oshc.org.hk>
Tel: 2739 9000
- 4 Hong Kong Society for the Deaf
URL: <http://www.deaf.org.hk/>
Tel: 2527 8969
- 5 Hospital Authority
URL: <http://www.ha.org.hk>
Tel: 2300 6555

Enquiries

Please contact the Occupational Deafness Compensation Board for further information.

Address : Office A-B, 15/F, Billion Plaza II
10 Cheung Yue Street
Cheung Sha Wan
Kowloon

Tel : 2723 1288 / 2723 1928

Fax : 2581 4698

E-mail : contact@odcb.org.hk

Web-site : <http://www.odcb.org.hk>