

# Sources of Noise at Work

Noise mainly comes from the operation of machines and use of tools within workplaces. Noisy work procedures are performed in industries like construction, quarry, metalwork, plastic, textile, carpentry, printing, entertainment, pig slaughtering, etc.

### **Occupational Deafness**

Noise can damage the auditory nerve cells of the inner ear. These cells cannot be recovered once damaged and will lead to permanent hearing impairment and even hearing loss. The longer the duration of noise exposure, the greater the hearing damage. Occupational deafness is incurable and therefore prevention is the most essential.

Risk of hearing damage is determined by the daily personal dose of noise exposure. Scientific researches showed that exposure in

an environment with sound level up to 85 dB(A) for eight consecutive hours would very likely cause hearing damage.

Under the Factories and Industrial Undertakings (Noise at Work) Regulation, employers have duty to carry out hearing conservation measures according to the noise level at workplaces. Employees should co-operate with their employers and carry out their own safety duty in order to prevent hearing damage.

# Symptoms of Hearing Loss

- continuous or intermittent tinnitus
- difficult to communicate with people in conversation or over the phone
- need to increase the volume of radio or television
- difficult to concentrate
- insomnia





# Health Impact of Noise

#### Physiological

- tinnitus
- hearing loss
- dizziness, headache, insomnia, fatigue
- increase of heart rate, raised blood pressure
- loss of appetite, dyspepsia

# Psychological

- irritability
- psychological stress
- emotional disturbance

# **Daily Life**

- affect interest in life
- affect family and social life
- endanger personal safety
- endanger work safety









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# Hearing Conservation Programme

To have noise controlled effectively, government, employers and employees must work together. The existing legislations on noise control aims at reducing the source and the dissemination of noise.



### 1) Reduce source of noise

- use machine with less noise
  reduce impact or cushion with anti-vibration material
- install muffler or silencer
- regular maintenance and repair of machines

## 2) Control noise dissemination -

 isolate source of noise
 apply suitable sound absorbing material or sound barrier

# 3) Take administrative measures

To avoid working in a noisy environment for prolonged period of time, consider to arrange employees to have:

- regular rest break
- intermittent job rotation

## 4) Wear personal ear protectors -

Under the Factories and Industrial Undertakings (Noise at Work) Regulation, employers are responsible to provide suitable approved ear protectors to their employees.

### Ear protectors are mainly ear muff and ear plug:

### Ear muff

 easy to wear and stronger noise reducing effect
 Proper wearing instruction: both ears should be fully covered by ear muffs.



# Ear plug

• two types: multiple-use and disposable Proper wearing instruction: pull the top of your ear up and back with your opposite hand through the back of your head, then insert the ear plug carefully with the other hand.



Remember: It is important that the wearing of ear muff and ear plug should not interfere the reception of emergency messages. Do not use cotton or ordinary earphone to replace ear muff or ear plug.

# 5) Arrange regular hearing test

 can detect hearing loss early and take appropriate preventive and remedial measures



## Enquiry Service

For enquiries on this leaflet or advice on occupational health matters, please contact the Occupational Safety and Health Branch of the Labour Department through:

- Tel : 2852 4041
- Fax : 2581 2049
- E-mail : enquiry@labour.gov.hk

Information on the services offered by the Labour Department and on major labour legislation can also be found on our website http://www.labour.gov.hk.

## Complaints

If you have any complaints about unsafe workplaces and practices, please call the Labour Department's Occupational Safety and Health Complaint Hotline at 2542 2172. All complaints will be treated in the strictest confidence.



**NOISE** 



