Decompression Illness

Decompression illness results from the presence of bubbles of gas in the body tissues. When decompression is carried out, nitrogen bubbles dissolved in the bloodstream during compression could be suddenly released and these bubbles can cause decompression illnesses. The most serious consequence of decompression illness is death.

Presentations

- **Joint**
  - dull ache
  - shoulder and knee are often affected

- **Audiovestibular**
  - dizziness
  - hearing impairment

- **Neurological**
  - numbness
  - convulsion
  - loss of consciousness

- **Others**
  - itchy skin
  - blur vision
  - shortness of breath

Barotrauma

Apart from decompression illness, working in compressed air work may also cause barotrauma, which is body tissue injury results from change of gas volume in the body related to the pressure change. Workers suffering from common cold or upper respiratory tract infection are more likely to be affected.

- Body parts that may be affected include:
  - Tooth — gas pockets due to caries or poor fillings may cause toothache
  - Sinus — pain and nose bleeding
  - Ears — earache, bleeding and perforation of eardrum
  - Lung — cough, chest pain and shortness of breath

Occupations At Risk

- Scuba divers
- Workers work in a compressed air environment

Treatment

All persons suspected of having decompression illness should consult doctor at once.

Good Work Practices

**Do**
- follow employer’s arrangement, have pre-employment and regular medical examinations
- follow the instructions of the man-lock attendant
- always enter the man-lock with an experienced compressed air worker if it is your first time
- have adequate rest in between shifts
- drink plenty of water to prevent dehydration
- always inform the lock attendant if you develop pain, discomfort or dizziness

**Do not**
- continue to work in compressed air if you have a cold, sore throat, earache or chest infection
- drink alcohol before or when working in compressed air

Enquiry Service

Occupational Safety and Health Branch of the Labour Department

Telephone: 2852 4041
E-mail: enquiry@labour.gov.hk

Labour Department’s Occupational Safety and Health Complaint Hotline: 2542 2172
(All complaints will be treated in the strictest confidence)