

Occupational Health Guide —

Good Health is Good Fortune

Health
Health

Health



Labour Department
Occupational Safety and Health Branch



OCCUPATIONAL SAFETY & HEALTH COUNCIL

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Occupational Safety and Health Branch
Labour Department

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Information on the services offered by the Occupational Safety & Health Council can be obtained through their hotline 2739 9000.

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Introduction

The prospect of Hong Kong's economy and the development of different industries depend on the efforts and co-operation of all parties. A healthy workforce is the key to our success. Employers, occupiers, employees, the Government and the relevant organizations should co-operate with each other to maintain a good working environment so as to protect our health.

In order to raise the occupational hygiene standards of the working environment and enhance the health of employees, the Labour Department has prepared this Guide with a view to assisting people from all walks of life to promote occupational health in their own sectors.^{Note 1} Through this Guide the readers can grasp the fundamentals of occupational health management, i.e. maintaining good occupational hygiene practice, preventing diseases and keeping good physical and mental health. By adhering to these basic principles, you can raise productivity and create wealth.



Roles of Employers and Occupiers

The responsibility for promoting occupational health rests with the management. Employers or/and occupiers (e.g. landlords and property management agents) must properly manage the workplaces and prevent the occurrence of diseases arising from work activities. This does not only protect the health of employees but also contributes to the development of their business.

Note 1 This Guide sets out briefly common occupational health hazards and their control measures. If you want to know the details and requirements of the relevant legislation, or the relationship between the legislation and your workplace or nature of work, please refer to the original text of the legislation and other publications issued by the Occupational Safety and Health Branch of the Labour Department.

The management should make the following arrangements:

- ☞ Risk assessment - conduct assessments on all activities or work processes that may be hazardous to health in the workplace.
- ☞ Hazard prevention - take appropriate measures to eliminate hazards or reduce risks.
- ☞ Precautionary measures - implement effective protective measures properly.
- ☞ Staff training - provide information, instruction, training and supervision to safeguard the health of employees.

Roles of Employees

Employees should fully cooperate with their employers, comply with proper work practices and take care of their own and others' safety and health. For example, they should:

- ☞ comply with work regulations and instructions, and carefully read and understand relevant information such as instructions and warning labels.
- ☞ carefully and properly use any material, tool, device and personal protective equipment provided.
- ☞ avoid eating, drinking or smoking in any places where there are hazardous materials to prevent poisoning caused by toxic substances entering the body through contaminated food or cigarettes.
- ☞ pay attention to personal hygiene and wash hands before eating or drinking.

Roles of Government

The Government takes a proactive approach to safeguard employees by enacting the Occupational Safety and Health Ordinance (OSHO) and the Factories and Industrial Undertakings Ordinance (FIUO). These ordinances apply to nearly all workplaces in different industries. The Government implements its occupational health policy through the following measures:

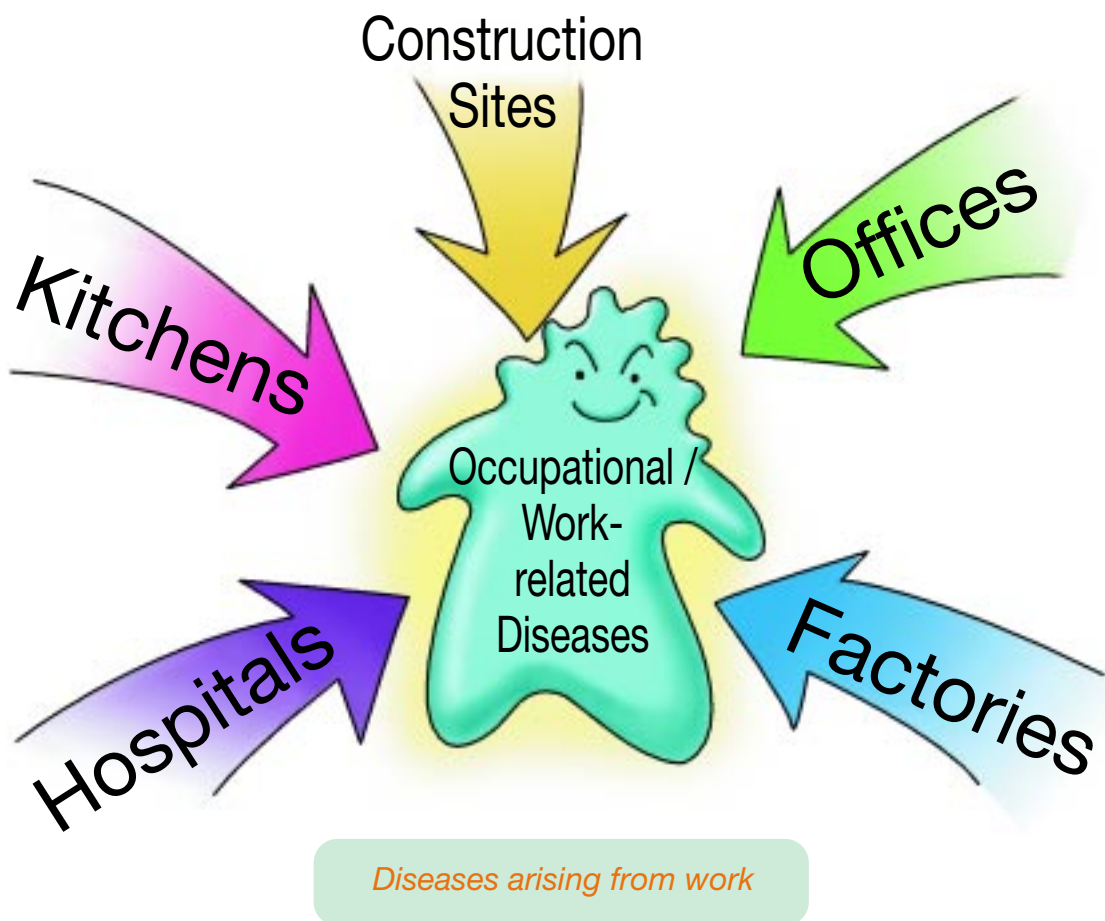
- ☞ Workplace Inspection - Conducting inspections to workplaces to urge employers, occupiers and employees to comply with the legislation and codes of practice.
- ☞ Health Advisory Services - Assisting enterprises in understanding the requirements of the legislation and advising on measures to protect the health of employees, and improve & maintain good occupational hygiene practice.
- ☞ Issuing of guidelines and codes of practice - Preparing guidebooks on the relevant legislation as well as guidelines and codes of practice on the control of health risks in workplaces.

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What are Occupational / Work-related Diseases?

In a broad sense, diseases caused by exposure to or contact with hazards because of work are generally called “occupational / work-related diseases”. It is the duty of employers or/and occupiers (including landlords, property management agents, etc.) to prevent employees from contracting occupational / work-related diseases.

There are various common occupational health hazards, some of which are not easy to detect. Table (1) below lists some possible occupational health hazards in daily work. These examples show that occupational health hazards may exist in different working environments such as offices, laboratories, printing workshops and barber shops.



Table(1) - Examples of Health Hazards Commonly Found in Workplaces

	Health Hazards	Symptoms or Diseases
Lifting of heavy objects or repetitive movements	Handling heavy and bulky loads, improper working postures, repetitive movements.	Musculoskeletal disorders such as back pain, muscular pain, strain, sprain and upper limb discomfort.
Noise	Excessive noise, such as noise generated by machinery while in operation.	Deafness, tinnitus.
Dangerous substances	Inhalation of or exposure to dangerous substances such as asbestos, solvents, isocyanates, wood dust, grain dust, silica dust, animal faeces and other chemicals.	Dermatitis, asthma, bronchitis, fibrosis of the lung, poisoning by chemicals, burn or even cancer.
Biological hazards	Biological infection including viral agents, bacteria, fungi and parasites. The people affected are usually those engaged in health care, agriculture and laboratory work.	Microbial infection such as hepatitis B, pulmonary tuberculosis.
Radiation	Exposure to radiation, e.g. X-ray work, exposure to ultra-violet light during outdoor work, work procedures requiring the use of infra-red radiation and laser.	Burn, dermatitis, eye injuries, skin cancer.
Occupational stress	Causative factors include excessive workload, uncoordinated work priorities, disorganized work procedures.	Headache, neck and shoulder pain, insomnia, depression, etc.

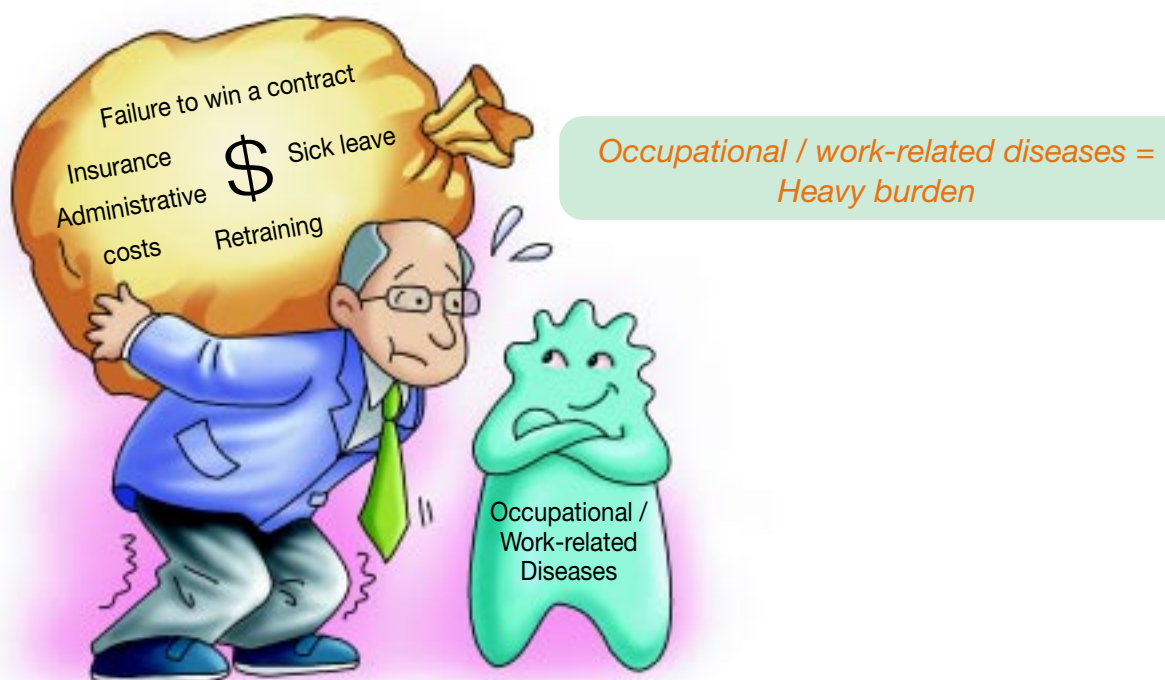
3

Advice to Employers and Occupiers

on the Management of Occupational Health

3.1 Management of Health Risks - Prevention of Occupational / Work-related Diseases

There are many cases of occupational / work-related diseases in Hong Kong every year. They result in unpredictable social economic losses including sick leave, lapses or delays in production, staff retraining, additional administrative costs, increase of insurance premiums, etc. An employee of a small company who contracts an occupational / work-related disease will cause overall a greater manpower impact. Hence, protection of workers' health is important to all enterprises.



Various kinds of health hazards may lead to occupational / work-related diseases. At an early stage, these problems may be easily overlooked. But if the problems are left unattended to, they may get worse over time, and may even lead to permanent disability or death. In fact, the physical and psychological suffering of employees and the financial loss of their employers can be avoided. The key to solve these problems is to formulate and implement an effective policy on occupational health management to reduce and control hazards in workplaces.

In a nutshell, occupational health management is not as difficult and costly as one imagines. With the coordinated efforts of all parties, the following recommended occupational health management programme can be carried out and occupational health hazards kept under control.

3.2 How to Implement Occupational Health Management Programme?

No matter what health hazard it is, it can be prevented or controlled by means of good management. When implementing health risk management, one should first recognize and control the hazards. Losses can be avoided by rectifying the irregularities before the occurrence of any mishap.

Occupational health management includes the following necessary steps:

(1) Identify the Problems

- ☞ Observe carefully and thoroughly every activity and work process in the workplace with a view to identifying any health hazards which the workers may encounter. Observe closely how they conduct their work to acquire a better understanding of work practices.
- ☞ Talk with workers about their work to identify any factors affecting their health. Do remember that even a minor incident, if neglected, may develop into a serious mishap.
- ☞ Check and analyze the sick leave record of workers with a view to identifying any potential problems.
- ☞ Obtain detailed information on the materials and equipment from the suppliers, and identify any potential health hazards in the material safety data sheets and instructions for use. It should be noted that not all health hazards are obvious.



Observe every activity carefully

(2) Plan Solutions to the Problems

- ☞ Assess who will be affected by the potential hazards and in what circumstances problems will arise.
- ☞ Decide whether the existing measures are sufficient and whether any additional measures should be taken.
- ☞ Plan necessary actions and steps to eliminate or control the hazards.
- ☞ Prioritize the tasks of dealing with the hazards.



Prepare an action plan

(3) Take Actions

- ☞ Implement the necessary improvement measures.

Take actions to improve the working environment



Review the effectiveness

(4) Review the Effectiveness

- ☞ Review whether the targets of eliminating or controlling health hazards have been achieved.
- ☞ Ensure that the control measures devised have been implemented and effectively enforced. For example, ensure the ventilation system and automatic machinery are functioning properly and regularly maintained.
- ☞ Compile and analyze the statistics of workers' sick leave records, and discuss with the units concerned to assess the effectiveness of the health policy.
- ☞ Ensure the proper use and maintenance of personal protective equipment and the equipment is in good condition.

A good management system should be implemented continuously. If there is any change to the workplace, such as installation of new equipment and machines or change of work processes, the steps listed above should be repeated. Successful health management allows us to detect various kinds of health problems at an early stage and take precautionary measures subsequently to prevent the workers from contracting occupational / work-related diseases, instead of taking remedial actions after a serious mishap.

4

Prevention of Occupational / Work-related Diseases-Advice to Employees

4.1 Health and You

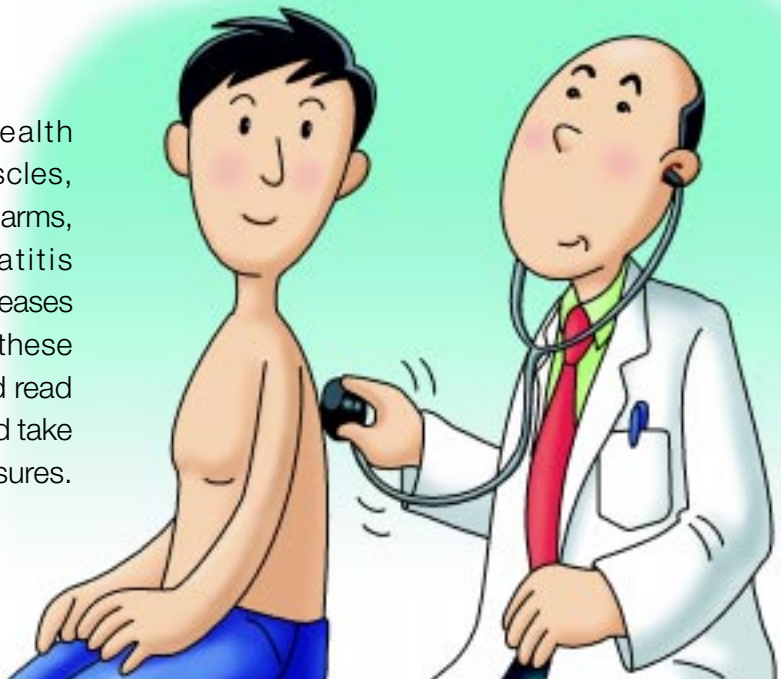
If you suspect a health hazard exists in the workplace, you should take note of the following:

- ☞ Check the relevant information to assess and determine whether there is any potential health hazard related to your work.
- ☞ Report your findings to your supervisors, as well as the occupational safety and health representative in your company.
- ☞ When you consult a doctor, fully describe your work and the symptoms possibly arising out of your work.

The Labour Department operates an occupational health clinic in Kwun Tong to provide clinical consultation services. Appointments can be made by phone.

Kwun Tong Occupational Health Clinic: 2343 7133

The common occupational health problems include strain on muscles, tendons and joints, pain in the back, arms, hands and shoulders, dermatitis (especially hand dermatitis), lung diseases and hearing loss, etc. To avoid these problems and diseases, you should read the ensuing paragraphs carefully and take the appropriate precautionary measures.



*Seek professional advice and assistance to
solve your problems*

4.2 How to Prevent Strain on Muscles, Tendons and Joints?

While we are at work, a host of factors can affect our tendons, muscles and joints, causing some discomfort. If we overwork ourselves, the condition may deteriorate. Pain in the waist and the back or strain in hand or arm muscles is usually caused by improper postures in lifting heavy objects, unsatisfactory setting of the workstation and frequent and repetitive tasks, etc. Actually, these problems can be easily avoided in daily operation.

A major factor causing pain in the back is manual handling operations like lifting or transporting a load. Many people think that such a pain is unavoidable. However, in most cases, injuries can be avoided if we can think it over and ensure that we are clear about the following before transporting a heavy load:

- ☞ the possible danger of the manual handling operations;
- ☞ the preventive and protective measures specific to such operations;
- ☞ the proper procedures for conducting such operations;
- ☞ the weight of the load and its centre of gravity;
- ☞ the auxiliary aids (e.g. trolleys or lifting equipment) available for use;
- ☞ whether team lifting is required and how teamwork is to be coordinated;
- ☞ the setting of the working environment;
- ☞ the proper manual handling skills.

Use of mechanical aids



4.3 How to Protect Your Hands and Arms?

The muscles of the hand and the arm are injured



We may overstrain ourselves at work because of various factors, such as making repetitive motions, working in incorrect postures or working at a quick speed. These factors may cause injuries, swelling and pain to the hands or the arms, thus reducing the mobility of the upperlimb. Workers in different occupations could overstrain their hands or arms, such as manual workers working in construction sites and IT and other professionals. If the work you are engaged in has such risks, you should know the causes and the early symptoms of the diseases, such as numbness and a pricking pain, and find out the preventive methods. You should take note of the following:

- ☞ Place the things you often use at an appropriate location as far as practicable so that you can access it easily without having to stretch out your arms or bend down.
- ☞ When you are sitting, the height of the desk should suit your body size so that you can sit in a natural and comfortable posture and maintain your mobility.
- ☞ The pace of work should be kept at a steady level. Where appropriate, change the work nature or the posture or take a break to avoid making the same motion or maintaining the same posture for prolonged periods, which may overstrain the muscles and cause injuries.
- ☞ Acquire and develop good working habits.
- ☞ Use suitable tools or equipment to carry out daily work. In the course of operation, there should be coordination between the body, the tools and the work. Don't apply excessive force or work in awkward postures.
- ☞ In case of any pain or numbness in the hands or the forearms, you should inform your supervisors. You should also seek medical consultation at an early stage to avoid deterioration.

4.4 How to Protect Your Skin?

While you are at work, the skin of your hands, forearms and legs are prone to develop dermatitis. The common symptoms of dermatitis include redness, itching and scaling of the exposed skin.

Beware of hazardous chemicals



Where practicable, use less harmful substances and reduce skin contact with chemicals. The following points can help you protect your skin:

- Keep the workplace and tools clean to avoid skin contamination while at work.
- Adopt appropriate methods in handling harmful substances to avoid skin contact with the chemicals. For example, use a brush with handle to apply chemicals to the work piece, instead of directly applying chemicals with your hands.
- Find out the characteristics of the substances you use and the required protective devices, such as suitable gloves and aprons.
- In case your skin gets contaminated during work, cleanse your skin immediately.
- Use appropriate skin cleaners to remove the grease and dirt on the skin. Avoid using turpentine, white petroleum or bleach to clean the skin because these solvents would make the skin dry. Excess absorption can cause poisoning.
- Apply moisturizing cream after work every day to protect the skin.

People working outdoors are often exposed to intense sunlight. Prolonged periods of exposure would have an adverse effect on the body. Overexposure to the sun may lead to premature aging, wrinkling, roughening and hardening of the skin or even skin cancer.

To protect your skin from sunburn, please take note of the following:



Avoid overexposure to sun by suitable clothing

- ☞ Avoid direct exposure to the sun, particularly around midday. Put on clothing such as a shirt.
- ☞ Wear a broad-rimmed hat to prevent the face and the head from being directly exposed to the sun.
- ☞ Avoid exposure to the sun for prolonged periods as this would cause sunburn. Reddening of the skin indicates the early stage of sunburn.

4.5 How to Protect Your Lungs?

The short-term effects of inhaling harmful substances may include coughing, wheezing and shortness of breath. Prolonged exposure to low concentrations of harmful substances or burst exposure to high concentrations of them may lead to chronic diseases such as occupational asthma and pneumoconiosis.



Avoid contact with or inhalation of excessive amount of dust

Airborne harmful substances exist in the form of gases, vapours or dust. Asbestos dust, a kind of harmful substance, may cause diseases such as lung cancer and mesothelioma through inhalation. Construction or building maintenance workers may be exposed to asbestos dust at work. If you suspect that some construction materials or dust may contain asbestos, you should stop working and seek assistance. In case you are carrying out asbestos work, you should follow the necessary control measures as far as practicable to protect your health.

To protect your lungs and avoid inhaling harmful substances, you should use less hazardous materials or take effective control measures such as segregation or ventilation. Personal protective equipment such as respirators should be used only when no other means can reduce the hazards effectively. In general, you should take note of the following:

- ☞ Take proper control measures. For example, the local exhaust ventilation system should be placed near the source of contaminants and maintained in good condition. If it is damaged or malfunctioning, you should report it to the management as soon as possible for repairs.
- ☞ Keep and use your personal protective equipment properly. For example, do not place contaminated gloves in the respirators or helmets. Check the effectiveness of your equipment before use and maintain it properly.
- ☞ Cooperate with the management and other personnel in conducting environmental and health monitoring.
- ☞ Keep the workplace clean and tidy to prevent accumulation of dust.

4.6 How to Protect Your Ears?

Loud noise is a health hazard for workers in different industries. The degree of hearing loss depends on the noise level and the duration of exposure. Generally, wherever people have to shout to be heard about 2 metres away, it indicates that the environmental noise level is too high.



Noises are emitted from various sources, such as those from hammering, sawing, metal works and woodworking machines. Poorly maintained equipment is another major source of noise. For example, noises come from the emission of compressed air through small holes, leakage of steam and cracked (defective) noise insulation equipment. To protect your ears from such noises, you should take note of the following:

- ☞ Use noise control devices and equipment properly and do not remove them without permission.
- ☞ Inform the management of any particular area that requires repairing.
- ☞ Wear the proper ear protectors provided by the employer to reduce the impact of noise on your ears.
- ☞ Take good care of your ear protectors. It should be correctly used, kept clean, regularly checked and properly maintained. If any defect is found in the equipment, you should report it to the management immediately.

4.7 How to Protect Your Eyes?

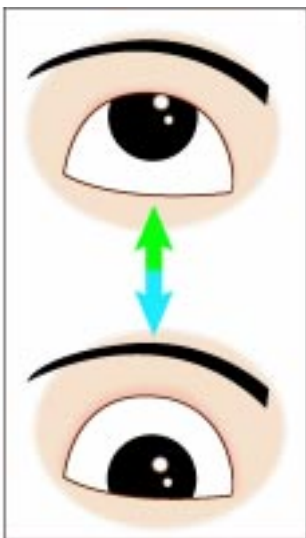
Tiny objects like metal fragments or dust can scratch the cornea when they enter the eye. If foreign particles hit the eye at a high speed, it can even cause a rupture of the eyeball and blindness. The eye will also sustain an injury if it is exposed to chemical substances or radiation heat, ultra-violet light, intense light and laser, etc.

Moreover, prolonged work in precision operations (e.g. manufacturing, assembling or inspection of tiny articles, drawing and use of microscopes and computers, etc.) can cause eye discomfort and fatigue. Therefore, proper eye exercises (e.g. viewing distant objects, blinking continuously for a dozen times and practicing eye relaxation exercises (see pictures)) after working for a period of time may relieve the eye discomfort and alleviate eyestrain.

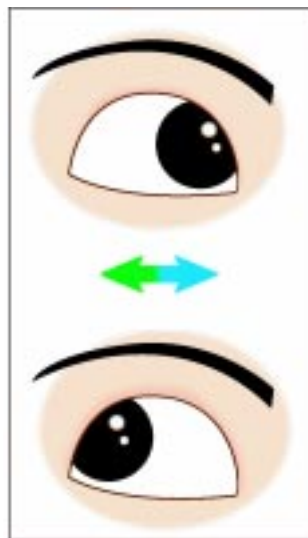
To protect your eyes from injuries, you should take note of the following:

- ✎ Find out whether the lighting of the working environment is adequate.
- ✎ Do eye exercises during breaks to alleviate the discomfort and fatigue of your eyes caused by prolonged work.
- ✎ Take proper measures to reduce fragments and prevent them from being thrown off.
- ✎ Wear suitable eye protectors provided by the employer to reduce the harm to your eyes due to exposure to various hazardous substances.
- ✎ Take good care of your personal eye protection equipment and use it with care. Check it thoroughly before use.
- ✎ When foreign particles enter the eye, do not rub it. If the particles cannot be removed by tears, seek medical treatment immediately.

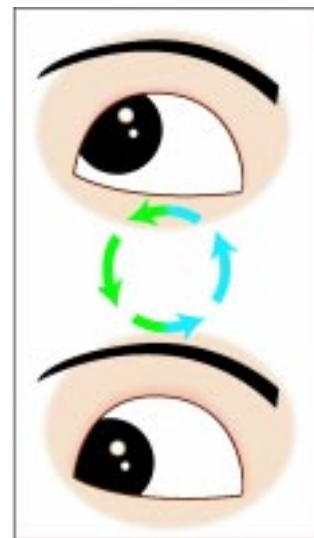
Eye Exercises



- (1) Keep the body and the head upright. Turn your eyes up to look at the ceiling, then turn down to look at the floor.



- (2) Turn your eyes left and right slowly to look at objects on both sides.



- (3) Turn your eyes to look at the objects in the upper right direction and then at those in the lower right direction. Repeat the same by turning your eyes to look at the objects in the upper left and lower left directions. Repeat the above in the opposite direction.

5

Stress and work

In our daily work, there are many factors which may exert great stress on us, such as heavy workload or mundane job, poor working environment, long working hours, no clear working instructions, no job security, inharmonious relationships with colleagues and supervisor, etc.



If the stress or grievances accumulate and they are beyond our ability to cope, the excessive stress may adversely affect our health, causing headache, insomnia, excessive drinking, fatigue, tension, bad temper, impatience, slackness, depression, etc. Besides, it can result in inharmonious relationships with colleagues and supervisor, leading to low morale. Hence, we must identify the causes of work stress and seek appropriate ways to relieve it.

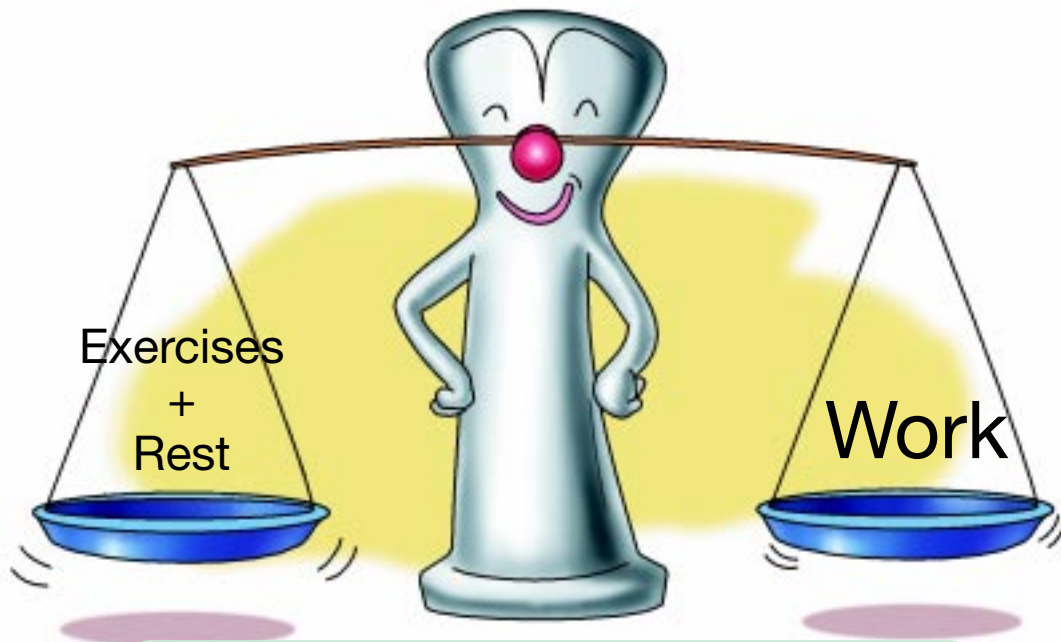
Ways to relieve work stress include:

- ☞ Actively seek ways to improve the working environment and facilities by discussing with your supervisor and giving him suggestions.
- ☞ Ask your supervisor to give clear instructions and set targets with a view to increasing work efficiency.
- ☞ When you are assigned a new task, work at it in a proactive manner. Map out an action plan first and make the best possible use of the time and resources available.
- ☞ Keep good terms with your supervisor and colleagues as far as possible with a view to reducing tension from human relationships.
- ☞ Engage in healthy activities to reduce stress and relax to relieve the fatigue arising from work.

6

Physical Fitness and Work

Our physical conditions change with age. For example, our eyesight becomes weaker as we grow old. Our health may also be poorer in the aftermath of an accident or a serious illness because of the after-effects. In such a case, you need to make adjustments to your work practices.



Maintain a good balance between work and rest

- ☞ Make temporary or permanent adjustments. For example, if you have just recovered from a serious illness, suitable and flexible working hours can help you recover your normal working capacity. If your injury causes permanent disability, then you may need to modify the facilities at your workplace or employ auxiliary equipment.
- ☞ Discuss with your employer to work out a suitable arrangement.

7

Pregnancy and Work

Pregnancy is a normal physiological phenomenon. It is different from an illness. However, during pregnancy, particularly in the first three months, the fetus can easily be affected. Therefore, expectant mothers should note the following:

- ✎ Find out proper precautions to avoid infections. Employees who have greater exposure to sources of infectious diseases, in particular nursing staff or employees dealing with sick animals, should take strict infection control measures.
- ✎ In daily work, pregnant women should avoid moving or lifting heavy objects and prolonged standing. They should minimize climbing and bending motions and arrange appropriate rest periods.
- ✎ When sitting at work, they should change their sitting positions from time to time for a better blood circulation.
- ✎ As pregnant women are more easily affected by heat, be careful if you are required to work in a hot environment.



Take care of your health and that of your unborn child

Nursing mothers should watch out for potential hazards at the workplace that may affect their own or the infant's health.

Copies of this pamphlet are available for collection at the Labour Department's Occupational Safety and Health Branch offices. It can also be downloaded from the department's website at <http://www.labour.gov.hk>.

The Occupational Safety and Health Branch has printed various leaflets and pamphlets detailing the importance of occupational health. For further information or assistance, please contact the Occupational Health Service of the Labour Department.

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Telephone	: 2852 4041
Facsimile	: 2581 2049
Home Page Address	: http://www.labour.gov.hk
E-mail Address	: enquiry@labour.gov.hk

Any worker suspected to have occupational disease may go to the Labour Department's occupational health clinics for treatment.

Kwun Tong Occupational Health Clinic

Address : 2/F, Kwun Tong Jockey Club Health Centre
457 Kwun Tong Road, Kowloon
(Next to Kwun Tong MTR)

Telephone : 2343 7133

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.

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