



## OFFICE SAFETY

When you look around office, do you see any potential safety and health hazards? We often overlook any potential hazards in the office setting as we tend to think, how dangerous can a computer or photocopy machine and printers. In other words, we spend the majority of our working hours in the office. Therefore, it is important to create a comfortable and safe working environment so that we feel less exhausted and stressed in places where we have to spend our long working hours. A comfortable office will also enable us to put our abilities to use more effectively and productively. In this topic, you will learn about important parameters for office indoor air quality, office hazard and control of those hazards

### Office Parameters

The definition of a safe, comfortable and organised office goes beyond expensive furniture, large space and new technologies. Let us review the following parameters that need and to be incorporated to improve work environment which helps to increase productivity and profitability in the following subtopics.

#### 1.1 Ventilation

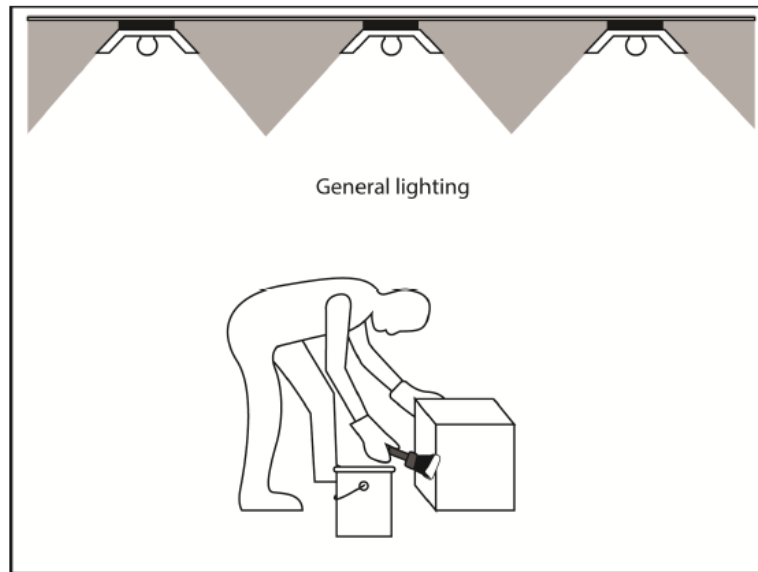
Workers come and go throughout the day and possibly bring in contaminants when they enter the office. Heat and carbon dioxide (CO<sub>2</sub>) emissions by the workers, machines and sunlight increase the indoor temperature and builds up to pollute indoor air (Berry, et al., 2008). Since we spend eight hours a day for five consecutive days in the office, the quality of the air in the office can affect our health, comfort and productivity. Therefore, having a good heating, Ventilation and Air Conditioning (HVAC) system is crucial to remove the polluted air and replace them with fresh outside air (OSA) which will control odours, temperature and moisture in the office (Prill,2013). This will be further discuss in subtopic 7.2 Indoor Air Quality.

#### 1.2 Lighting

Office work demands good lighting for maximum comfort, efficiency and productivity. Good Lighting refers to adequate illumination for people to read printed, displayed and handwritten documents clearly without being blind by excessive brightness (a cause of glare). Illumination is the amount of light striking a surface and measured in foot-candles (fc) or lux (lx). Range of illumination depends on factors such as tasks and workers' characteristics. For office work, the range of illumination recommended is 500 lux or between 30 to 50 fc. Studies found that it is preferable to combine both natural and artificial lighting to provide uniform illumination over the entire office (Occupational Safety and Health Branch of the Labour Department, 2011)

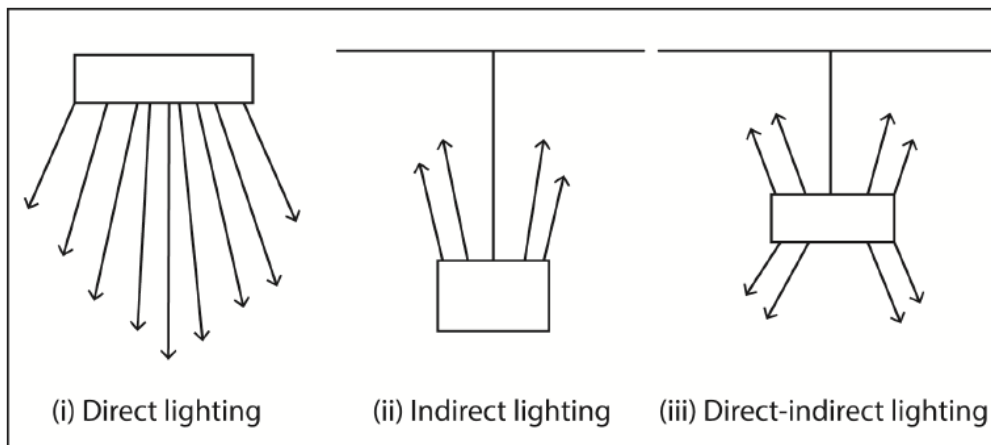
There are three basic types of artificial Lighting:

- a) **General Lighting** (see Figure 7.1) General Lighting provides fairly uniform lighting. For example, ceiling fixtures that light up large areas. There are three classifications of general lighting which are classified in accordance with the percentage of total light output emitted above below the horizontal (Canadian Centre for Occupational Safety and Health, 2013, see Figure 7.2.);
  - i. Direct Lighting;
  - ii. Indirect Lighting; and
  - iii. Direct-indirect Lighting



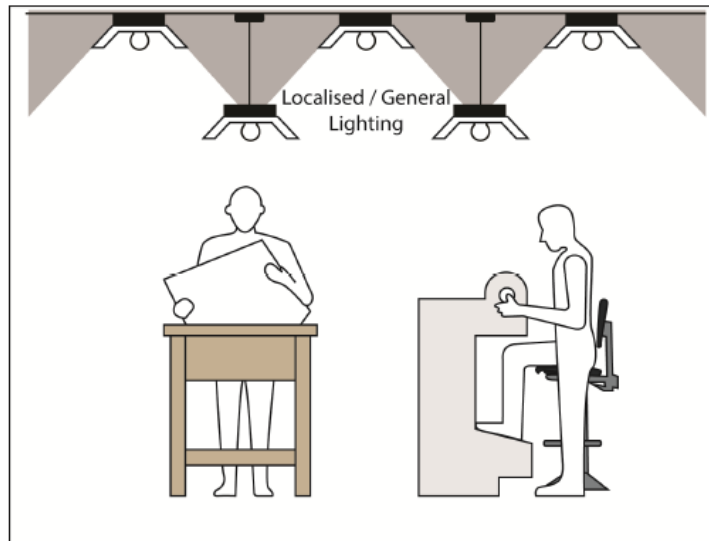
**Figure 1.1:** General Lighting

Source: Canadian centre for occupational health and safety (2013)



**Figure 1.2:** Classifications of general lighting

- b) **Localised-general Lighting** (see Figure 1.3) uses combination of overhead fixtures and ceiling fixtures to increase lighting levels for specific tasks (Canadian Centre for Occupational safety and Health, 2013).



**Figure 1.3:** Localised-general lighting

Source: Canadian centre for Occupational health and safety (2013)

- c) **Localised or task lighting** (see Figure 1.4) is recommended for specific visual tasks to reduce energy consumption and to cut cost. It offers flexibility since user is allowed to adjust and control lighting according to needs (Canadian Centre for Occupational Safety and Health, 2013).



**Figure 1.4:** Localised-task lighting

Source: Canadian centre for occupational health and safety (2013)

## OTHER COMMON HAZARDS IN THE OFFICE

Office environments are generally considered low-risk workplaces, but this does not mean you should neglect your health and safety duties. Offices still contain health and safety hazards, which need to be identified, monitored, and controlled. Just the same as any workplace, offices need to have hazards identified and risk assessments carried out in order to implement control measures to reduce the likelihood of a workplace incident occurring.

We often overlook safety and health hazards in the office because we tend to think that working in a comfortable and climate-controlled office is hazard-free. However, there are many hazards that can cause accidents in the office just as serious as in the field. Slipping due to wet floors, falling from stairs, and tripping on cables are some examples of common physical hazards that may occur in the office setting. Other common safety and health hazards found in the office are included below but not limited to:

- Poor or inadequate lighting;
- Ergonomic hazards;
- Extremes of temperature;
- Manual handling hazards;
- Slip, trip and fall hazards;
- Electrical hazards (e.g. Appliances, power sockets, etc.);
- Contagious illnesses spread by sick workers;
- Fire hazards;
- Chemical hazards (e.g. Cleaning products); and
- Stress hazards.



## CONTROL OF OFFICE HAZARDS

Similar to any other workplace, all health and safety hazards need to be identified, the risks to be assessed and controlled. As we have already known the consequences of the risks, we can implement control measures to minimise the risks. After implementing control measures, it is important to continuously monitor and review them to ensure they remain effective. In this subtopic, control of office hazards will be in accordance to types of hazards discussed in the previous.

## 9 WAYS TO REDUCE THE RISK OF SPREADING ILLNESS AND DISEASE

- For example, take the following precautions to reduce the risk of illness spreading throughout your office:
- Put clear policies in place regarding personal hygiene and cleanliness in the workplace, including properly washing hands;
- Keep all areas of the office clean;
- Ensure the fridge and kitchen cupboards are cleaned out frequently and dispose of any items that have passed their used-by date;
- Disinfect shared work items between uses;
- Send home any worker who is obviously unwell;
- Provide flu vaccinations to workers;
- Provide health checks to workers;
- If necessary, create procedures to deal with employees returning from zones in the world with high disease risks; and
- Encourage workers to take personal leave if they feel unwell, particularly if they have flu-like symptoms.

