## Contents

1. **Introduction** 03

2. **Risk Management** 04
   2.1 Risk Assessment 05

3. **Workplace Hazards and their Prevention** 08
   3.1 Ergonomics 08
   3.2 Handling of Chemicals 10
   3.3 Exposure to Noise 12
   3.4 Thermal Stress 13
   3.4.1 Hot Environment 13
   3.4.2 Cold Environment 14
   3.5 Cuts 15
   3.5.1 Handling Sharp Objects 15
   3.5.2 Handling Machinery 15
   3.6 Handling Hot Objects or Liquids 16
   3.7 Slips, Trips and Falls 18
   3.8 Struck Against or by Objects 19
   3.9 Electrical Hazards 20
   3.10 Fire Hazards 20
   3.11 Handling Pressure Vessels 22
   3.12 Working at Heights 22
   3.12.1 Ladders 22
   3.12.2 Scaffolds 23
   3.12.3 Mobile Elevated Working Platforms 24
   3.13 Falling Objects 25
   3.14 Fatigue 25
   3.15 Asphyxiation Hazard 26
   3.16 Caught In/between Objects 26
   3.17 Workplace Aggression 27

4. **Safety and Health Management** 28
   4.1 Workplace Safety and Health Policy 28
   4.1.1 Demonstration of Management Commitment 29
   4.2 Planning 29
   4.3 Implementation and Operation 30
   4.3.1 Responsibilities of Employers and Employees 30
   4.3.2 Recording and Reporting Occupational Injuries and Illnesses 31
   4.3.3 Safe Work Procedures 31
   4.3.4 Safety and Health Training 31
   4.3.5 In-house Safety and Health Rules and Regulations 32
   4.3.6 Safety and Health Promotion 32

Year of issue: 2013
1. Introduction

The hospitality and entertainment industries are important industries which form a significant part of the economy. These industries provide full-time, part-time and contract employment for a large number of people.

To provide a high standard of service to customers, the pace of work in these industries can be fast and the working hours long. Providing a safe and healthy working environment can improve the well-being, morale and productivity of employees.

The hospitality and entertainment industries employ a range of staff that may be exposed to a variety of safety and health hazards depending on their specific job scope. They may be exposed to the risk of musculoskeletal disorders and injuries, health hazards such as chemicals, noise, and thermal stress. There is also the risk of injuries from slips, trips and falls, knocks, cuts, burns and scalds, electrocution, fires and explosions.

Occupational accidents and diseases can result in suffering, sickness, absenteeism, productivity loss, disability or even death. All these can be prevented.

This set of guidelines aims to provide information and guidance on the:

- identification of common work hazards and their prevention measures; and
- establishment of safety and health programmes.

Employers should work together with employees to establish a safe and healthy working environment in the workplace.
2. Risk Management

Good risk management consists of risk assessment, communication, record-keeping, and implementation and review. These form the risk management process (see Figure 1). Risk assessment is a key component of risk management and if it is carried out correctly, it will allow a better understanding of risks at the workplace and their control measures.

Figure 1: The risk management process.

Under the Workplace Safety and Health (Risk Management) Regulations, every workplace must conduct risk assessments for all routine and non-routine work. Risk assessment is the process of:

- identifying and analysing safety and health hazards associated with work;
- assessing the risks involved; and
- prioritising measures to control hazards and reduce risks.

Before conducting risk assessment, adequate preparation must be done. A risk assessment team should be formed, preferably consisting of personnel from various levels in the work activity. For example, bellmen can be part of the risk assessment team to provide insight in the challenges they face in the course of their work. Relevant information should be collated to facilitate a better understanding of the work process.

2.1 Risk Assessment

After completing the preparation work, workplace risks can then be assessed in three simple steps:

**STEP 1: Hazard Identification**

Hazard identification refers to identifying hazards associated with the activity of each work process, and the potential accidents or ill-health that could result from these hazards. It also identifies the person(s) who may be at risk as a result of being exposed to these hazards.

**STEP 2: Risk Evaluation**

Risk evaluation is the process of estimating the risk levels of the identified hazards and their acceptability. This evaluation is used as a base for prioritising hazard control actions to minimise safety and health risks.

Risk evaluation is made up of two parts:
- estimating the severity of the hazard; and
- estimating the likelihood of the incident or ill-health occurring with the existing risk controls.

**STEP 3: Risk Control**

Based on the risk evaluation done in STEP 2, risk controls should be selected to reduce or confine the identified risk to an acceptable level.

These risk controls must be effective yet practicable. To control hazards and reduce risks, control measures below should be observed in the following order:

- elimination;
- substitution;
- engineering controls;
- administrative controls; and
- personal protective equipment (PPE).

Residual risks are the remaining risks following the implementation of risk controls. The risk assessment team should ensure that the residual risks are acceptable and manageable.

Risk assessment, when carried out appropriately, creates a better understanding of risks and their control measures at the workplace. Thus, it is a key component of risk management. Besides risk assessment, good risk management also requires other components such as communication, record keeping, implementation and review. Together, they form the risk management process captured in Figure 1.
Hierarchy of Control
The selection of control measures for hazards and reduction of risks can be accomplished by following the Hierarchy of Control (see Figure 2).

When considering each measure in the Hierarchy of Control, the following elements of what is reasonably practicable must be considered:

- the likelihood of a hazard or risk occurring (i.e., the probability of a person being exposed to harm);
- the degree of harm caused if the hazard or risk occurred (i.e., the potential seriousness of injury or harm);
- how much the person understands the hazard or risk and the possible methods of risk elimination or reduction; and
- if suitable risk elimination or reduction methods or procedures are available.

Control measures are not usually mutually exclusive. It may be necessary to use more than one risk control measure to reduce risks to the lowest possible level when no single measure is sufficient on its own. For example, engineering controls, such as using safer machinery, can be implemented together with administrative controls, such as training and Safe Work Procedures (SWPs), to reduce a workplace risk.

Elimination
Elimination of risk refers to the removal of a worker’s exposure to the hazards, effectively making all identified possible accidents and ill-health impossible. As elimination is the most effective risk control method, it should be attempted first. Also, once eliminated, the risk will not appear in subsequent risk assessment forms. For example, if heavy goods stored at higher sections of a shelf place people at risk of being struck by falling objects, this hazard can be effectively eliminated by storing heavier goods at the bottom of the shelf and lighter goods on top.

Substitution
This involves replacing a hazard with one that presents a lower risk. For example, instead of having a worker retrieve goods from a height using a conventional A-frame ladder, he/she can use a much more stable mobile step platform.

Engineering Controls
Engineering controls are physical means that limit the hazard. These include structural changes to the work environment or work processes. Some examples include erecting a barrier to interrupt the transmission path between a worker and the hazard or securing loose cargo properly prior to transportation so that they do not topple during the process.

Administrative Controls
These controls reduce or eliminate exposure to a hazard by adherence to procedures or instructions. Documentation should emphasise all steps in the work processes and all controls needed for work activities to be carried out safely. For example, the need to erect signs to warn passers-by of a slippery floor surface due to water spillage should be clearly highlighted in the documentation.

Personal Protective Equipment
Proper use of PPE can help keep workers safe at work. However, PPE should only be used in addition to other control measures (e.g., engineering control measures) or when all other measures are not feasible or practical. PPE can also be considered for short term contingencies such as emergencies, infrequent maintenance or repair work. For PPE to be effective, it must be properly worn at all times when the user is exposed to the hazards and must fit the user correctly. PPE must also be cleaned and maintained regularly and stored in an appropriate place when not in use.

For more guidance regarding risk management and risk assessment, refer to Code on Workplace Safety and Health (WSH) Risk Management.
3. Workplace Hazards and their Prevention

Work-related injuries and diseases occur as a result of unsafe acts and conditions. Unsafe acts occur when employees are unaware of hazards and proper work practices. Examples include not adopting the proper lifting methods or not using chemical resistant gloves when handling chemicals.

Unsafe conditions may arise out of ignorance or a lack of diligence in ensuring a safe and healthy working environment. Examples include the lack of a machine guard on food processing machines, or a slippery floor.

Work-related accidents and diseases can be prevented by first identifying the hazard and then taking appropriate preventive measures. Common workplace hazards in the hospitality and entertainment industries, their respective preventive measures and recommended good practices are described in this section.

3.1 Ergonomics

Many jobs have risks that can lead to sprains and strains to the back and other parts of the body. A single act, such as lifting a very heavy load or slipping and falling, could result in musculoskeletal injuries. However, more often, injuries are the result of gradual wear and tear from repetitive and prolonged manual activity. Recovery from some of these injuries may take time and further injury may occur, worsening the problem. Therefore, it is important to identify risk factors that may contribute to such injuries, and take preventive actions to minimise these risks. Most of these problems can be prevented by implementing good ergonomic principles in work design and work practices, which need not be complicated or costly.

Common workplace factors associated with musculoskeletal injuries and disorders are:

Awkward Postures

Our bodies function best in natural postures. Prolonged awkward body postures, such as bending the back during food preparation, increase stress on muscles and ligaments, leading to fatigue, discomfort and increased risk of injury.

One way to overcome the need to hold such awkward postures is to change workplace design, for example, by elevating the work table to a suitable height so that the worker need not bend to prepare food.

Manual Handling

Heavy or frequent lifting, pushing, pulling or carrying strains the back and upper limbs. Back injuries and other musculoskeletal sprains and strains may occur among workers in jobs requiring heavy lifting, such as bellmen, housekeepers, storekeepers, laundry operators, kitchen staff, production crews, stage hands and stage technicians.

Where possible, provide suitable mechanical assistance, such as trolleys, to lessen the need for manual handling. In situations where manual handling is still required, ensure that employees are trained in proper lifting and handling techniques, such as bending the knees to lift goods from the floor. If the load is too heavy for a single person to handle, they should ask for assistance from co-workers. Also, stretching before manual work helps increase flexibility and reduces risk of injury.

Prolonged Standing

Most jobs in the hospitality and entertainment industries involve standing for many hours. Such prolonged standing can contribute to aches and pains in the lower limbs. Provision of chairs or stools for temporary breaks from standing or giving rest breaks is encouraged. Another recommendation is to provide anti-fatigue mats where prolonged standing is required.

Repetitive Movements

Repetitive use of hands and upper limbs may result in pain in the wrists, elbows and shoulders. Persons most at risk include room attendants, laundry operators, kitchen and office workers. To reduce the risk of injury, ensure that there are sufficient breaks in these routine or repetitive work tasks, for instance, through work variations or rotations.

The Appendices contain some good ergonomic work practices for the following occupations:

- bellmen;
- front desk staff or receptionists;
- room attendants;
- waiters and servers;
- chefs and kitchen staff; and
- laundry operators.
### 3.2 Handling of Chemicals

Chemicals are commonly used in the hospitality and entertainment industries for cleaning purposes. Some of these chemicals are hazardous and may be corrosive, irritating, toxic, flammable or carcinogenic. Some cause burns, skin rashes, irritation and allergies upon skin contact. Others may damage the eyes when spilled or splashed, or cause injury when inhaled. As they use these chemicals for cleaning, persons at risk include housekeepers, stewards, laundry workers, cleaners (see Figure 3) and engineering or maintenance personnel.

High concentrations of vapour or gas can accumulate, particularly in poorly ventilated and confined areas. It is therefore important that employees who work with chemicals are aware of the associated hazards and adopt safe work practices to avoid exposing themselves to hazardous chemicals. See Table 1 for examples of chemicals used in the hospitality and entertainment industries and their effects.

![Figure 3: Wearing gloves helps prevent skin rashes from contact with chemicals.](image)

#### Good work practices when handling hazardous chemicals

- Substitute hazardous chemicals with less harmful chemicals.
- Provide proper ventilation through open windows or mechanical air vents when using chemicals.
- Wear suitable PPE such as chemical resistant gloves, masks, and so on.
- Ensure that chemicals are stored in a well-ventilated place.
- Inspect chemical stores regularly to check for deterioration or leakage.
- Ensure that staff who handle the chemical understand the associated hazards and emergency responses.
- Ensure that the Safety Data Sheets (SDSs) of the chemical are easily available and accessible on-site.
- Ensure that all chemical containers are properly labelled according to the Globally Harmonised System (GHS).

<table>
<thead>
<tr>
<th>Chemical group</th>
<th>Example of hazardous chemicals</th>
<th>Relevant department that uses the chemicals</th>
<th>Product or function</th>
<th>Health effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solvents</td>
<td>Perchloroethylene</td>
<td>Laundry</td>
<td>Dry cleaning agent</td>
<td>Liver damage, narcosis, dermatitis</td>
</tr>
<tr>
<td></td>
<td>Trichloroethylene</td>
<td>Laundry, engineering, housekeeping</td>
<td>Stain removers</td>
<td>Liver damage, narcosis, dermatitis</td>
</tr>
<tr>
<td></td>
<td>Xylene, Toluene</td>
<td>Engineering</td>
<td>Paints, lacquer, glue</td>
<td>Narcosis, dermatitis</td>
</tr>
<tr>
<td>Acids</td>
<td>Hydrochloric acid, hydrofluoric acid, sulphuric acid</td>
<td>Laundry, stewarding, housekeeping, engineering</td>
<td>Cleaning agents, stain and rust removers</td>
<td>Chemical burns, dermatitis</td>
</tr>
<tr>
<td>Alkalis</td>
<td>Sodium hydroxide</td>
<td>Laundry, stewarding, housekeeping, engineering</td>
<td>Detergents, cleaning agents</td>
<td>Chemical burns, dermatitis</td>
</tr>
<tr>
<td>Ammonia</td>
<td>Ammonia</td>
<td>Laundry, stewarding, housekeeping, engineering</td>
<td>Cleaning agents, silver polish</td>
<td>Eye and respiratory tract irritation, dermatitis</td>
</tr>
<tr>
<td>Chlorine</td>
<td>Chlorine, Sodium hypochlorite</td>
<td>Swimming pool, laundry</td>
<td>Disinfectant, bleach</td>
<td>Eye and respiratory tract irritation</td>
</tr>
<tr>
<td>Welding fumes</td>
<td>Metal fumes, gases</td>
<td>Engineering</td>
<td>Welding</td>
<td>Eye and respiratory tract irritation</td>
</tr>
<tr>
<td>LPG gas</td>
<td>LPG</td>
<td>Kitchen</td>
<td>Fuel gas for the stove and oven</td>
<td>Fire and explosion</td>
</tr>
</tbody>
</table>

Table 1: Examples of chemicals used in the hospitality and entertainment industries and their effects.
3.3 Exposure to Noise

Although a hotel environment is generally quiet, workers may be exposed to noise hazards in certain areas like district cooling plants, boiler and engine rooms. Entertainment outlets such as pubs expose their staff to excessively loud music. Long-term exposure to excessive noise may lead to hearing loss. Such hearing damage is permanent, irreversible and can cause deafness.

To prevent hearing loss, a person should not be exposed to noise levels exceeding 85dBA for 8 hours a day or their equivalent. Where the permissible exposure level has been exceeded, measures should be taken to reduce noise exposure. See Table 2 for the maximum exposure duration for each sound pressure level.

<table>
<thead>
<tr>
<th>Sound pressure level, dB(A)</th>
<th>Maximum duration per day</th>
</tr>
</thead>
<tbody>
<tr>
<td>85</td>
<td>8 hours</td>
</tr>
<tr>
<td>88</td>
<td>4 hours</td>
</tr>
<tr>
<td>91</td>
<td>2 hours</td>
</tr>
<tr>
<td>94</td>
<td>1 hour</td>
</tr>
<tr>
<td>97</td>
<td>30 minutes</td>
</tr>
<tr>
<td>100</td>
<td>15 minutes</td>
</tr>
<tr>
<td>103</td>
<td>7.5 minutes</td>
</tr>
<tr>
<td>106</td>
<td>4 minutes</td>
</tr>
<tr>
<td>109</td>
<td>2 minutes</td>
</tr>
<tr>
<td>111</td>
<td>1 minute</td>
</tr>
</tbody>
</table>

Table 2: Sound pressure levels and their respective maximum exposure duration.

Good work practices when working in a noisy environment
- Replace noisy machines with quieter ones.
- Locate noise sources away from hard walls or corners.
- Isolate or reduce noise sources by providing acoustic screens.
- Enclose noise sources with suitable noise enclosures or barriers.
- Provide quiet areas or regular quiet breaks for staff exposed to excessive noise.
- Put on earplugs where applicable.

3.4 Thermal Stress

It is important to identify excessively hot or cold environments in the workplace. Extreme differences in temperatures expose employees to health hazards such as heat stress and cold bites.

3.4.1 Hot Environment

Workers working in the kitchen, laundry and engine rooms may be subjected to heat stress from machinery or equipment used in these areas (see Figures 4 and 5). Staff working in outdoor events may also be subjected to heat stress. Heat stress can lead to headaches, fatigue and discomfort.
3.4.2 Cold Environment

Workers can also be exposed to cold stress and cold bites while retrieving or storing items in cold storage rooms (see Figure 6). There are other hazards associated with cold environments, such as condensate on wet and slippery floors.

Good work practices when working in a cold environment

- Provide sufficient warm clothing.
- Ensure that appropriate PPE, such as thick warm gloves and anti-slip shoes are provided when moving frozen goods.
- Ensure that new workers are acclimatised adequately before they start work in a cold environment.
- Educate workers on recognising the symptoms of cold stress such as nausea, fatigue and dizziness.
- Schedule regular rest breaks in warm areas. Whenever possible, allow for longer rest periods for workers working in cold environments.
- Practice buddy system when working in a cold environment.
- Install emergency latch-release devices, doors capable of opening from both inside and outside, alarm systems or intercom systems to prevent workers from being accidentally trapped in a cold environment.
- Practice good housekeeping, for example, organise items to minimise the time workers are required to work in cold environments.
- Provide anti-slip installations to prevent slips, trips and falls.

3.5 Cuts

Cuts may occur from the use of knives, cutting tools or machinery in kitchens, laundries, engineering and stage production workshops. Room attendants, waiters or chefs may also get cuts from handling broken glass or porcelain.

3.5.1 Handling Sharp Objects

If not handled properly, sharp objects such as knives, broken glass or other sharp hand tools can result in cuts. Preventive measures should be taken while handling sharp objects.

Some recommended preventive measures are:

- Use the appropriate equipment or tool for the job.
- Use appropriate PPE when handling sharp objects.
- Instruct workers to cut in the direction away from their bodies.
- Wash sharp objects separately from other objects or equipment.
- Ensure that cutting operations are done on flat surfaces.
- Store sharp objects like knives properly (e.g., store knives on knife racks).
- Ensure that cutting tools are well-maintained (see Figure 7).
- Do not multitask while handling sharp objects.

3.5.2 Handling Machinery

Machinery used in kitchens and laundries like mincers, food mixers, meat slicers and ironing machines should be equipped with proper machine guards (see Figures 8 and 9). A guard that is not put in position would not serve its intended purpose. Regular maintenance would also reduce accidents that may result from faulty machinery. Staff should be encouraged to maintain good housekeeping at the workplace.

Figure 6: Workers working in a cold storage room.

Figure 7: Well-maintained knives.

Figure 8: Example of a machine guard in the laundry.

Figure 9: Example of a machine guard.
Good work practices when handling machinery

- Refrain from wearing loose or frayed clothing or jewellery that could get caught in machines.
- Do not remove any safety interlocks and safety guards from machinery.
- Do not reach into moving machinery parts with one's hand.
- Do not clean moving blades unless the power has been switched off.
- Follow the operating instructions recommended by the manufacturer or supplier.
- Ensure that safety guards are in place before operating any machinery.
- Use a pusher or tool to avoid direct contact with any moving parts of the machine.
- Switch off or unplug the machine before removing the safety guards for retrieval or cleaning.
- Do not repair faulty machinery unless worker is trained.
- Workers with long hair should use hairnets or caps to ensure that their hair does not accidentally get caught in machinery.

3.6 Handling Hot Objects or Liquids

Accidental contact with hot surfaces such as boilers, hot presses in laundry rooms and kettles can cause serious injuries. SWPs for handling hot equipment must be established and followed. Companies must also ensure that first aid facilities are provided and workers are trained in first aid to handle burns and scalds.

Good work practices when working with hot objects

- Restrict unauthorised access to work areas with high heat activities.
- Ensure that workers wear appropriate PPE such as heat resistant gloves.
- Isolate heat sources through insulation or relocation.
- Display warning signs for hot surfaces.
- Ensure that machines that release hot substances are well-maintained.
- Use tools such as tongs when handling hot objects.

Using and handling ovens, deep fryers and hot liquids without due care can cause severe burns and scalds. Staff should be educated on possible hazards and good practices associated with handling such appliances or liquids. Organise the work area to prevent contact with flames and hot objects.
3.7 Slips, Trips and Falls

Many workplace injuries happen as a result of workers tripping over physical obstructions or slipping due to bad ground conditions. Other conditions such as insufficient lighting, poor housekeeping, wet and slippery floors, a lack of guardrails or handrails on platforms or staircases, and/or carelessness can contribute to slips, trips and falls.

**Good work practices to prevent slips and trips**

- Use anti-slip equipment such as anti-slip mats in areas that are often wet or oily.
- Provide and ensure the usage of appropriate PPE. For example, provide and ensure that anti-slip shoes are worn in areas that are often wet or oily.
- Repair damaged flooring immediately (e.g., broken tiles, holes).
- Practice good housekeeping.
- Keep walkways clear of obstructions (e.g., boxes, electrical cables).
- Clean spillages immediately.
- Provide handrails at staircases (see Figure 13).
- Erect signs to warn passers-by about slippery floors during and after cleaning.
- Ensure that there is adequate lighting at all work areas.
- Always keep floors and stairs dry and clean.
- Ensure that carpets and rugs are free of holes and loose edges.

![Figure 13: Providing handrails on staircases can reduce slips, trips and falls.](image)

3.8 Struck Against or by Objects

Injuries can occur when persons are hit by hard, heavy or sharp objects. Improperly stacked materials, narrow and cluttered passageways and improper handling of trolleys and carts increase the risk of materials falling or collapsing on people thus injuring them. Also, workers may bump into transparent glass doors or panels.

**Protect yourself**

- Ensure that goods and materials are stored in a safe and orderly manner (see Figure 14).
- Ensure that there is sufficient space for movement around the work area, especially in common corridors.
- Ensure that walkways are free from obstructions (e.g., if there are cabinets along the walkways, ensure that all cabinet doors are closed when not in use).
- Wear appropriate footwear, for example, safety boots (see Figure 15).
- Provide adequate lighting.
- Do not rush through swing doors, especially when pushing trolleys.
- Mark transparent glass doors or panels with translucent tape.
- Put up warning signs where appropriate (see Figure 16).
- Insert glass panels for doors which are totally opaque.

![Figure 14: Ensure that table tops are properly stacked to prevent collapse.](image)

![Figure 15: Wear safety boots or good footwear to protect feet.](image)

![Figure 16: Erect warning signs for low overhead structures such as pipes.](image)
3.9 Electrical Hazards

Electrocution occurs when the human body becomes part of an electric circuit through which electric current passes.

Electrical equipment and appliances should be regularly inspected by a qualified electrician to ensure that they remain in good working condition and do not pose a danger to unsuspecting staff. Extreme care should be taken in workplaces where workers come into contact with fluids that conduct electricity well. It is therefore important to cultivate and practice safe habits when using electricity.

**Good work practices when handling electrical appliances**

- Report any damaged plugs, wires, and/or electrical equipment.
- Keep power cords away from heat, water and oil.
- Do not clean electrical equipment with flammable or toxic solvents.
- Do not overload electrical points (see Figure 17).
- Provide a system for the inspection and maintenance of electrical appliances.
- Do not run wires around sharp edges.
- Any electrical appliance should be switched off when not in use and its electrical cord properly stored to avoid damage.
- Check the Residual Current Circuit Breaker (RCCB) at least once a month.
- Engage only licensed electrical workers to carry out electrical installation, maintenance or repair work.

3.10 Fire Hazards

For a fire to occur, three basic elements are needed (see Figure 18). They are:

- fuel (e.g., paper, town gas, LPG);
- oxygen; and
- an ignition or heat source (e.g., sparks and open flames).

Eliminating any one of these elements will greatly reduce or even eliminate the risk of fire. Fires in the hospitality and entertainment industries are usually caused by improper storage of combustible or flammable materials, electrical failures, cooking fires and arson. The two most common causes of fire are cooking fires in the kitchen and electrical failures, such as improper usage of electrical appliances or faulty electrical installations.

Kitchen fires can be prevented by observing the following tips:

- Do not leave cooking unattended;
- Always turn cooking equipment off after cooking (e.g., oven, stove);
- Be alert while cooking;
- Wear appropriate clothing while cooking (e.g., loose sleeves may catch fire);
- Do not store items on or above heat sources (e.g., stoves);
- Keep surfaces of appliances clean of spills, especially spills of flammable liquids (e.g., grease);
- Keep combustible items (e.g., plastic containers); clean of stoves; and
- Regularly clean kitchen exhaust hoods and filters to prevent the accumulation of grease.

Electrical fires are common and account for a significant amount of property damage and serious injuries. The majority of these fires are the result of poor electrical maintenance, however incorrectly installed electrical components are also potential fire hazards.

Electrical systems are designed according to the needs of the building’s occupant and thus have built-in safety margins. As needs change, electrical equipment and motors are added and when electrical components age and deteriorate with time, the possibility of electrical failure increases. Over time, regular inspection and maintenance of electrical systems become increasingly important. The following should be checked on a regular basis:

- Do not insert several power cords into one socket;
- Keep power cords away from heat, water and oil. They can damage the insulation and cause shocks and fires;
- Use cords or equipment rated for the level of amperage or wattage used;
- Always use the correct size fuse. Replacing a fuse with one of a larger size can cause excessive current in the wiring and possibly start a fire;
- Place halogen lights away from combustible materials such as cloths or curtains. Halogen lamps can become very hot and may be a fire hazard; and
- Know where the breakers and boxes are located in case of an emergency.

Employers are advised to plan and conduct regular fire drills to familiarise staff with emergency evacuation and rescue procedures. Sufficient firefighting equipment like fire extinguishers and sprinkler systems should be provided and maintained regularly. Fire exits should also be clearly marked and kept free from obstruction.
3.11 Handling Pressure Vessels
Some hotels use pressure vessels like steam boilers to supply steam and hot water to their laundries and guests. These steam boilers are usually located in specially designated boiler rooms. Air receivers are also used in tool rooms and workshops. These pressure vessels should be regularly inspected as required by law under the WSH (General Provisions) Regulations. Regular maintenance and checks should also be carried out by boiler attendants.

Staff, especially those working in the boiler rooms, laundries and kitchens, should be taught how to detect gas leakage using pilot lights or indicators.

Pressure vessels must be handled with care. The following are some legal requirements with regards to pressure vessels:
- Ensure that steam boilers are inspected at least once every 12 months by an authorised examiner;
- Ensure that air or steam receivers are inspected at least once every 24 months by an authorised boiler inspector; and
- Ensure that boiler attendants are properly trained and certified.

3.12 Working at Heights
Falls from heights is one of the major causes of death and injury in the workplace. It is therefore important to take reasonable practicable measures to protect workers against the risk of falling from heights. Ensure that the following are prepared before working at heights:
- fall prevention plans and all necessary administrative controls such as permit-to-work;
- fall protection equipment such as safety harnesses and lifelines; and
- workers are trained to work at heights.

3.12.1 Ladders
The most common work at heights activity in the hospitality and entertainment industries involves ladders. However, if workers need to access excessive heights or have to work at heights for prolonged periods, it is recommended that scaffolds or mobile elevated work platforms (MEWPs) be used instead.

Good work practices when working with ladders
- Ladders used to access another level should be tied and extended at least 1 meter above the landing point to provide a secure handhold.
- Wear proper footwear (e.g., non-slip flat shoes).
- Place the ladder on stable and level ground. Do not place it on an uneven surface.
- Prevent passersby from walking under or near ladders in use by using barriers (e.g., cones) or getting a colleague to act as a lookout.
- Maintain three points of contact at all times (see Figure 19).
- Do not work on the top rung of the ladder (see Figure 20).
- Use the right ladder for the job.
- It is recommended that the radius of the barricaded area should be approximately the same as the height of the ladder.

3.12.2 Scaffolds
Scaffolds are commonly used to support people and hold materials for repairing buildings and other structures (see Figure 21 for an example of a scaffold). Workers can use scaffolds to access areas that are difficult to reach safely. However, there are certain hazards associated with the use of scaffolds, and care should be taken when they are in use.
Before using scaffolds, ensure the following:

- All scaffolds have been inspected by a scaffold supervisor (except for trestle scaffolds or scaffolds which do not permit a person to fall more than 2 meters);
- All scaffolds are used on stable ground;
- Proper access and egress are provided for;
- Basic PPE such as safety harness, helmet and safety shoes are worn; and
- Scaffolds are not overloaded.

3.12.3 Mobile Elevated Working Platforms

MEWPs are used as temporary working platforms to gain access to work at a height (see Figure 22). They are mobile machines with a work platform that position persons, tools and materials at heights. Examples of MEWPs include scissor lifts, boom lifts and vertical personnel platforms.

Before using a MEWP, ensure that:

- Thorough planning and site assessment have been done;
- A suitable and adequate MEWP has been selected for the task to be undertaken;
- The MEWP operator is competent;
- Appropriate PPE such as travel restraint belts, helmet and safety shoes are provided for and correctly used; and
- The MEWP has been inspected and certified by an authorised examiner.

3.13 Falling Objects

Struck by falling objects (SBFO) is a common hazard across all industry sectors, causing many workplace injuries and even fatalities.

Storage of loose items on racks is a common sight in the hospitality and entertainment industries and can contribute towards SBFO.

Some good practices while storing items on racks are:

- Heavier items should be placed lower and lighter objects higher (see Figure 23);
- Shelves and racks have maximum loading capacity. This maximum loading capacity should be adhered to at all times;
- Nettings or restraining bars can be used to secure goods;
- Small and loose items can be tied together to prevent unwanted movement;
- Irregularly shaped items are stored safely; and
- Items are packed in boxes and bags to prevent unwanted movement of rounded or spherical items.

3.14 Fatigue

Fatigue is a state of tiredness leading to reduced mental and/or physical performance that can endanger workplace safety. The onset of fatigue while at work can decrease a person’s alertness and compromise his or her reflexes, judgement and/or decision-making ability. All these have obvious implications for WSH.

The best approach to prevent fatigue is to have adequate sleep or rest. However, there are methods which can slow and control the onset of fatigue. Some recommended control measures are listed below.

**Improving Work Environment**

- Provide adequate lighting;
- Provide adequate ventilation;
- Ensure that the environment is of an appropriate temperature; and
- Provide facilities, such as a pantry or rest area, for breaks.

**Work Rescheduling**

- Schedule complex tasks to be performed during the day;
- Keep night shift to a minimum;
- Limit each shift to not more than 12 hours including overtime;
- Plan shift schedules ahead of time and communicate them to employees; and
- Introduce a buddy system where appropriate.
3.15 Asphyxiation Hazard

Asphyxiation is a condition where the body is deprived of sufficient oxygen, leaving the person unable to breathe normally. A high concentration of asphyxiant gases such as nitrogen, argon, helium and carbon dioxide in the environment can lead to asphyxiation.

In the hospitality and entertainment industries, people overexposed to substances such as dry ice (solid carbon dioxide), used for visual effects, and FM-200, used as a fire extinguishing agent, may suffer from asphyxiation. Asphyxiation may occur when handling gas dispensing installations in confined spaces without sufficient ventilation. It is important to note that asphyxiation can occur rapidly, without sufficient time for evacuation.

The following are some recommended good practices to prevent asphyxiation:

• Train employees to operate the gas dispensing installation, identify gas leakage and the necessary actions to be taken in the event of a gas leakage;
• Inspect and maintain all piping tubing, hoses and fittings at regular intervals;
• Place appropriate warning signs outside areas where high concentrations of asphyxiant gases may accumulate;
• Install a gas monitoring system with warning alarms where high concentrations of asphyxiant gases may accumulate;
• Store and use asphyxiant gases in well-ventilated areas; and
• Provide suitable facilities such as breathing apparatus where appropriate.

3.16 Caught In/between Objects

Caught in/between objects accidents occur when a person is crushed, pinched, or caught between a moving object and a fixed one, or between two moving objects. Such accidents may occur when equipment is guarded inadequately.

When precautions are not taken seriously, it is easy to be caught in/between objects, leading to serious injuries or even fatalities. The following are some recommended good practices:

• Properly guard the machines and follow lock-out/ tag-out procedures;
• Turn off relevant machines during repair or maintenance work;
• Barricade areas within the swing radius of a rotating equipment (e.g., a boom lift) to identify unsafe areas;
• Choke vehicle wheels to prevent parked vehicles from moving;
• Always use equipment with all guards in place and properly secured;
• Always shut down equipment before doing repairs or inspections;
• Always be alert while operating equipment; and
• Horseplay is strictly prohibited.

3.17 Workplace Aggression

Aggression at the workplace refers to situations where workers encounter threats and/or verbal or physical abuse from agitated and/or distressed individuals who may be guests or members of the public. Workplace aggression can cause psychological and physical harm to affected workers. It diminishes workers’ professional self-esteem and decreases their job satisfaction, possibly causing emotional trauma. Aggression can also result in negative organisational outcomes, such as low staff morale, increased job stress and an unpleasant work environment.

The following are some recommendations for managing workplace aggression:

• Implement a buddy system for frontline staff;
• Ensure that there is sufficient workers at reception for crowd control;
• Provide panic alarms and closed circuit television (CCTV) for frontline staff;
• Train workers to recognise signs of aggression (e.g., raised voice voices, nervous movements or gestures, etc); and
• Train workers in conflict resolution techniques.
4. Safety and Health Management

Management of safety and health must not be different from the way other aspects of the hotel and restaurant businesses are managed. Employers are encouraged to develop and implement a comprehensive safety and health programme to prevent workplace accidents and work-related illnesses and to establish a safe and healthy working environment.

Each organisation should have a safety and health programme that covers fire safety, workplace safety, biological safety, and so on. Regardless of the size of an organisation, the WSH management system must include five essential elements for it to be effective (see Figure 24).

4.1 Workplace Safety and Health Policy

Leadership and commitment from management are essential for a WSH management system to be effective. The management should develop a clear WSH policy that communicates the organisation’s overall safety and health objectives and how it seeks to achieve its commitment.

The policy should:
- be endorsed by the organisation’s top management;
- be appropriate to the nature and scale of the organisation’s WSH risks;
- be understood by all staff;
- include a commitment to protect the safety and health of all members of the organisation by preventing work-related accidents, ill-health and incidents; continuously improving and complying with current applicable legislation (e.g., WSH Act, etc.) and other requirements that the organisation subscribes to;
- be effectively communicated to all employees and ensure that they are aware of their individual WSH obligations;
- be available to interested parties; and
- be reviewed periodically to ensure its relevance to the organisation.

4.1.1 Demonstration of Management Commitment

Management should demonstrate commitment through the following:
- Support the implementation of safety and health policies, programmes and training;
- Establish appropriate safety and health performance goals throughout the organisation;
- Management is involved in safety and health activities;
- Recognise safety and health in work performance reviews; and
- Praise employees who work in a safe and healthy manner and counsel those who do not.

4.2 Planning

A plan with clear objectives and standards is essential to maintain a consistent approach in the implementation of a WSH management system. Adequate and appropriate planning based on initial and subsequent reviews, and other relevant data should include:
- clearly defined WSH objectives;
- defined responsibilities and clear performance criteria indicating what is to be done by whom and when;
- a selection of measurement criteria for confirming that the objectives are met; and
- allocation and provision of adequate resources (time, money, manpower, etc).

Together with the WSH plan, there needs to be an understanding of all significant WSH hazards within the organisation so that the risks posed by these hazards are reduced through the implementation of effective control measures. This understanding will then form the basis of the WSH management system.

Procedures should be established in the WSH management system for the ongoing identification of hazards, assessment of risks, and implementation of necessary control measures. The procedures to conduct risk assessment should include:
- hazard identification;
- risk evaluation with risk matrices; and
- risk control with reference to the Hierarchy of Control.

All activities within the organisation should be assessed and this information should be documented and kept up-to-date. These activities should include:
- routine activities (e.g., cleaning the floors);
- non-routine activities (e.g., testing of backup generator, equipment maintenance);
- emergency conditions;
- activities of all personnel with access to the facility (including subcontractors and guests); and
- facilities, provided by the organisation or others, at the workplace.

Refer to section 2 of this publication for more information on Risk Management.
4.3 Implementation and Operation

All organisations, regardless of size, should have relevant procedures in place to address the following (non-exhaustive):

- record keeping and notifications (includes incidents, accidents and dangerous occurrences, illnesses, risk assessments, SWPs and training records);
- emergency response plans (includes fires and chemical spills, etc.);
- regular safety and health programme review;
- change management (modification or introduction of new work methods, materials, processes or machinery);
- exposure monitoring (includes chemical and noise);
- preventive maintenance programme (includes critical equipment and systems);
- WSH training for employees (includes induction, periodic training and assessment for competency);
- formation of a risk management team;
- management of contractors; and
- safety and health inspections.

4.3.1 Responsibilities of Employers and Employees

Employers have a duty to ensure the safety and health of their employees and should take the lead in promoting safety and health.

Safety personnel should be appointed to advise management on all occupational safety and health matters and assist in the implementation of safety and health programmes.

Employees should understand that WSH is not just the responsibility of their employer. They too have a role to play.

Responsibilities of the Employer

- Develop and implement an effective safety and health programme;
- Inform all staff of the workplace hazards and ensure that safety and health rules, training schedules and SWPs are followed;
- Provide proper PPE;
- Provide welfare facilities such as rest areas and first aid boxes; and
- Document the safety and health programme and keep records of all reported accidents, incidents and diseases.

Responsibilities of the Employee

- Follow safety and health work procedures;
- Attend safety and health training;
- Use the safety devices and PPE provided;
- Report accidents, incidents, diseases and any workplace hazards to the supervisor or employer; and
- Suggest ways to improve safety and health at work.

4.3.2 Recording and Reporting Occupational Injuries and Illnesses

The WSH (Incident Reporting) Regulations require employers to report accidents, dangerous occurrences and occupational diseases at workplaces. The duties of an employer include reporting and keeping records of accidents, incidents and occupational diseases.

The following information is needed for report submission through iReport:

- particulars of the incident, including what, where and how it happened;
- particulars of the injured or deceased (if applicable);
- particulars of the employer, including the employer’s name, organisation identification number [e.g., Accounting and Corporate Regulatory Authority (ACRA) number] and contact details; and, if applicable,
- particulars of the occupier of the incident premises including the occupier’s name, and organisation identification number (e.g., ACRA number if applicable).

Go to www.mom.gov.sg/iReport/ to find out more about iReport.

4.3.3 Safe Work Procedures

Employers are encouraged to establish SWPs for the different types of work carried out in the hospitality and entertainment industries. Wherever possible, these procedures should be incorporated into the standard operating procedures for workers to follow. SWPs should be effectively communicated to all workers.

Employers should establish a system to ensure that existing SWPs are reviewed whenever new equipment or processes are introduced or when there are changes to the operating procedures.

4.3.4 Safety and Health Training

Safety and health training is important because it provides workers with the knowledge and skills to work safely. A programme to identify the safety and health training needs for each level of workers is useful for making training plans.

Safety and health training for supervisors is particularly important as they have a responsibility to ensure that their workers work safely.
Safety and health training can and should be incorporated into the operational training of the workers. Such training can be carried out on the job by trained supervisors or external trainers. Training records should be kept and training materials reviewed on a regular basis.

Safety and health training should be conducted:
• during orientation period for new employees;
• when new equipment or processes are introduced;
• when workers are transferred to another department or change job function; and
• periodically for existing workers.

4.3.5 In-house Safety and Health Rules and Regulations
A set of written safety and health rules and regulations should be established for compliance by workers and contractors. This will also serve as a reminder of their safety and health obligations and responsibilities. Key legal requirements can be incorporated into these rules and regulations.

More detailed safety and health rules and regulations can be developed by each department.

4.3.6 Safety and Health Promotion
Employers should establish promotional programmes to create safety and health awareness and build a strong safety and health culture at the workplace.

Examples of promotional activities:
• safety and health talks and seminars;
• safety and health campaigns;
• safety and health exhibitions;
• newsletters; and
• posters and pamphlets.

4.3.7 Group Meetings
Group meetings should be conducted regularly to discuss safety and health issues and disseminate safety and health information to workers and contractors. Employers should provide adequate facilities for such meetings. All workers should be encouraged to participate.

Daily briefs, de-briefs and toolbox meetings are effective channels for conveying WSH messages.

Employers should encourage their employees to form safety and health improvement teams. This will provide them a channel to contribute ideas and solutions to make their workplace safer, healthier and more productive.

4.3.8 Evaluation, Selection and Control of Contractors
It is common for companies in the hospitality and entertainment industries to engage contractors. The management should establish a system to assess contractors based on their safety policy and procedures, safety performance records, safety training and competency records before any work is awarded.

4.3.9 Maintenance Programme
An effective maintenance programme should be established for all equipment, machinery and appliances used. This will help prevent accidents happening from the failure of such equipment and machinery.

The programme should include a complete list of machinery and equipment used within each premise and their inspection and maintenance schedules and records. There should also be a system for workers to report any defective or damaged tool or equipment.

4.3.10 Occupational Health Programmes
Occupational health programmes targeted at specific hazards should be established. Each programme should specify its objectives, person-in-charge, activities and their frequencies.

Examples of occupational health programmes include:
• hearing conservation programme;
• management of hazardous substances programme; and
• ergonomics programme.

4.4 Checking and Corrective Action
All organisations should establish procedures to monitor and measure WSH performance on a regular basis for continual improvement. Checks on the WSH management system should be done through periodic reviews by the organisation and by conducting regular system audits. WSH personnel should look out for unsafe acts and conditions above and beyond those reportable to the Ministry of Manpower. Corrective or even preventive actions should be taken to eliminate the causes of actual and potential accidents or incidents of ill-health.

A review of an existing WSH management system should assess the performance against key indicators such as:
• compliance to legislations, standards and WSH management systems or programmes;
• the number of WSH-related accidents, incidents of ill-health; or
• the achievement of specific WSH objectives defined in the planning stage (e.g., implementation of control measures).
Following the WSH performance assessment, proposed improvements to the system and its connecting processes should be reviewed through the risk assessment process prior to implementation. Any changes in the documented procedures resulting from corrective and preventive actions should be documented and communicated to affected employees to ensure continuity.

Procedures should be established for periodic audits of the WSH management system. This is essential to determine whether the system:

- conforms to what was specified in the procedures and documents;
- has been properly implemented and maintained; and
- is effective in meeting the organisation's policy and objectives.

Wherever possible, such audits should be conducted by personnel without direct connection with the processes or activities being examined. The audit results should be documented and communicated to management and personnel responsible for follow-up action.

### 4.4.1 Investigation of Accidents, Occupational Illnesses and Incidents

After being notified of an accident or incident, management should review the information collected and decide on the next course of action. An organisation should develop and implement effective procedures for evaluating and investigating accidents, occupational illnesses and incidents (when these are deemed to be of major concern). The purpose of these procedures is to prevent further occurrence of such situations.

The three main parts of the investigation process are:

- **Information gathering:**
  - conduct interviews; and
  - check incident area and take photographs.

- **Analysis:**
  - analyse information; and
  - find root cause.

- **Review and implement:**
  - review risk management system;
  - implement changes; and
  - communicate changes to all.

Refer to the Workplace Safety and Health (WSH) Guidelines on Investigating Workplace Incidents for SMEs for more details.

### 4.5 Management Review

The organisation's top management should review the WSH management system to ensure its continuing suitability, adequacy and effectiveness. Based on the type of organisation, the management should decide the appropriate intervals to conduct such reviews. The results of periodic audits would help the management to focus on areas of concern.

In light of audit results, changing circumstances and need for continual improvement, the review should address potential changes to:

- WSH policies;
- objectives; and/or
- elements of the WSH management system or programme.
5. Emergency Response Plan

The establishment and effective implementation of an emergency response plan is crucial in saving lives and minimising losses in emergency situations (e.g., fire).

Top management should ensure that all employees are familiar with the emergency response plan. Regular drills and exercises should be conducted. An evaluation of the drill performance should be carried out and learning points used to improve the plan.

The following list of items (non-exhaustive) may be included in the establishment of an emergency response plan:

- procedures for raising an alarm;
- procedures for evacuation and rescue of victims;
- provision of means of rescue and first aid;
- provision of means of communication with relevant government authorities and response agencies;
- establishment of an emergency response team with the duties and responsibilities of each member clearly defined; and
- emergency contacts.

This emergency response plan forms part of the overall emergency response plan for the workplace. If there is an event taking place in the organisation involving the attendance of staff and/or members of the public, an emergency preparedness announcement should be made to the audience before the event starts. The objective of this announcement is to inform everyone present at the event what to look out for during an emergency.

Items that may be included in the announcement are:

- a reminder to all to stay calm;
- the meaning of any alarms that may be raised (e.g., 2-stage alarms and what each stage signifies);
- the location of emergency exits and escape routes; and
- assembly areas.

5.1 Crowd Handling

A lack of planning, organisation and safety considerations during crowded events can lead to out-of-control crowds and other safety hazards such as stampedes.

The following are some general tips for crowd handling:

- Train employees to handle crowds;
- Gather relevant information before the event for effective preparation (e.g., crowd size);
- Establish clear procedures for effective crowd control in and out of the venue;
- Clearly identify workers that handle crowds to avoid confusion;
- Crowd handling instructions should be well-communicated to all relevant workers;
- Instructions to crowds should be well-documented and communicated; and
- Establish an emergency response plan and communicate it to all relevant workers.
6. References

WSH Council Guidance Materials:
- Code of Practice on WSH Risk Management
- Code of Practice for Working Safely at Heights
- WSH Guidelines for Management of Hazardous Chemicals Programme
- WSH Guidelines for Hearing Conversation Programme
- WSH Guidelines for Managing Heat Stress in Workplace
- WSH Guidelines for Safeguarding Against Falling Objects
- WSH Guidelines for Fatigue Management
- WSH Guidelines for Healthcare

These materials can be found at the WSH Council website – www.wshc.sg

Regulations:
Workplace Safety and Health Act and its subsidiary legislations:
- WSH (Risk Management) Regulations
- WSH (General Provisions) Regulations
- WSH (Noise) Regulations
- WSH (Scaffold) Regulations
- WSH (Incident Reporting) Regulations
- WSH (Work at Heights) Regulations

These regulations can be found at the Ministry of Manpower website – www.mom.gov.sg

Others:
- International Labour Organization (ILO): Guidelines on Occupational Safety and Health Management Systems – Copyright © 2001 ILO.

Others:
- Singapore Standard: SS506
Occupational safety and health (OSH) management system SS 506-2 explains the underlying principles of SS 506-1, and describes the intent, typical inputs and typical outputs, against each requirement of SS 506-1. The Singapore Standard on OSH management system consists of the following parts:
  - Part 1 – Specification
  - Part 2 – General guidelines on the implementation of OSH management system

Note: Subsequent parts of this series would provide specific guidance on implementation for specific industries.
7. Appendices

Good Ergonomic Practices for Front Desk Staff
Front desk employees spend many hours standing to serve customers at the reception counter. They work with visual display units, answer phone calls and handle payment. This may involve repetitive work, awkward postures and prolonged standing.

When the desk is too low, writing, typing on the keyboard or using the calculator requires excessive bending of the neck and back that can cause neck and back aches. Low or incorrectly positioned monitors also cause glare.

Prolonged standing in high-heeled shoes may contribute to aches and pains in the feet, legs, and back.

Sprains and strains can be prevented by proper workstation design, proper equipment placement, and adopting proper work postures.

Protect yourself
- Use desk counters of appropriate height to minimise back bending during writing or data entry.
- Use anti-fatigue mats or thick carpets to cushion the impact of prolonged standing.
- Place monitors at a suitable height and angle to minimise neck bending and glare.
- Wear shoes with low heels.
- Take short breaks.
- Do not cradle the telephone receiver between neck and shoulder.

Good Ergonomic Practices for Bellmen
Bellmen load, unload and carry luggage. Frequent carrying of loads, heavy loads, and using incorrect lifting methods can strain the back, shoulders and hands, eventually causing injury.

Proper equipment and training in proper lifting and carrying methods should be provided to prevent back strain and injury.

Lifting luggage from car trunk
- Plan your lift. If it is too heavy, get a colleague to help.
- Stand close to the load. Pull bags from the back of the trunk close to you.
- Face the trunk squarely with both feet firmly on the ground.
- Bend your knees, not the back.

General luggage handling
- Use ramps rather than stairs.
- Use a trolley for heavy luggage or when carrying luggage over long distances.
- Push rather than pull trolleys.
- Ensure that trolleys are properly maintained. For example, make sure that tires are fully inflated and wheels aligned.
- Wear proper shoes.
Good Ergonomic Practices for Room Attendants

Room attendants strain themselves lifting, pushing, bending, reaching and wiping when making beds, cleaning bathrooms, vacuuming, cleaning furniture and pushing carts.

Manual lifting, awkward postures and repetitive forceful movements can cause strains and injuries to the back, shoulders, arms and hands.

Working correctly can prevent strains and injuries. Room attendants should be given appropriate equipment and trained in proper work methods and postures to reduce the risk of strains and injuries.

Making beds
- Bend your knees, not your back.
- Kneel and make one side of the bed each time.
- Avoid bending the back when changing pillow or duvet covers.

Cleaning furniture
- Use a long-handled tool or stand on a step-ladder to reach high furniture or lighting.
- Kneel when cleaning low furniture.

Vacuuming carpets
- Use lightweight and easy to use vacuum cleaners.
- Avoid bending the back by kneeling when vacuuming under furniture.

Housekeeping carts
- Carts should not be overloaded.
- Carts should be stable, easy to move and not obstruct vision.
- Push rather than pull carts.
- When pushing a cart, place your hands just below shoulder level on the cart handle.
- Ensure that carts are in good working condition. Wheels should be aligned and turn smoothly.
- Report faulty carts to your supervisor.

Cleaning bathrooms
- Kneel to clean the floors to avoid excessive back bending.
- Kneel next to the bath tub to avoid excessive back bending and arm stretching when cleaning the tub.
- Use tools with long handles for hard-to-reach areas.
Good Ergonomic Practices for Waiters and Servers

Waiters and banquet servers routinely carry trays of dishes or glasses, bend and reach to clear, wipe, set tables and serve customers at tables. Banquet employees carry heavy tables, chairs and other equipment when setting up function rooms.

Heavy repetitive lifting and awkward postures can strain the back, neck, shoulders, arms and hands.

Training in proper manual lifting techniques, using suitable equipment such as trolleys and proper work practices can prevent injuries and strains.

Carrying large trays
- Balance the load and keep the tray dry and clean.
- Carry most of the load over the shoulder.
- Use both hands to support and balance the tray.
- Use carts to carry trays wherever possible.
- Carry fewer plates at a time.

Carrying small trays of drinks
- Carry a loaded tray with your shoulder, arm and hand in a neutral position.
- Carry the tray as close to your body as possible.
- Balance the tray on your arm and hand.
- Balance the load and place heavy items close to the centre.

Serving drinks or food
- When pouring, move glasses or cups as close to you as possible to avoid overstretching.
- Keep the shoulder, elbow and wrist in a neutral posture wherever possible.
- Move around the table to serve guests.

Carrying tables and chairs
- Use trolleys wherever possible.
- Ensure a good grip when carrying loads.
- Carry tables and chairs close to the body.
- Avoid bending or twisting your back.
- Restrict number of chairs stacked together.
- Have two or more people carry heavy or bulky items.
Food preparation and cooking
- Use a work surface at waist level for strenuous tasks like chopping.
- Use a work surface that is elbow height for detailed work like cake decoration.
- Stand close and use the front of the work surface to avoid over-reaching.
- Avoid twisting your back.
- Position frequently used ingredients close to your work area and at a convenient height.
- Select utensils designed to reduce awkward postures.
- Use automated equipment like food processors to reduce the stress of forceful and/or repetitive work.

Dish washing
- Stand close to the work surface.
- Avoid twisting or bending your back.
- Hold the rinse nozzle at waist level to reduce over-stretching.
- Use a platform to reduce bending your back when using a deep sink.

Good Ergonomic Practices for Chefs and Kitchen Staff
Chefs and other kitchen staff are involved in food transfer, preparation (e.g., cutting, mixing, grinding, arranging), cooking or baking.

Stewards work in the kitchens to clean utensils, plates and trays.

The work involves awkward postures, prolonged standing, manual handling and repetitive hand motions. These can lead to sprains and injuries of the hands, shoulders, back and neck.

Handling and transferring food
- Use trolleys wherever possible for heavy items.
- Provide tables, counters and trolleys of the same height so that items can be slid across.
- When lifting heavy items, call a colleague to assist.
- Store heavier and more frequently used items on mid-level shelves.

Avoid bending your back.

Store heavier and more frequently used items on mid-level shelves.

Get a helper when lifting heavy items.

Avoid awkward back posture.

Use a cake stand to reduce excessive bending.

Use automated equipment to reduce the stress of forceful and repetitive work.

Use a flexible rinse nozzle to reduce over-stretching.
Good Ergonomic Practices for Laundry Operators

Operations in a hotel laundry include sorting, washing, drying, folding, ironing linens, uniforms and guests’ laundry.

The handling of the laundry requires considerable force. Some tasks may be repetitive and involve awkward postures and prolonged standing. This can be stressful on the hands, wrists, back, shoulders and lower limbs.

Proper work design, automation of certain processes and training in proper work methods and postures can help reduce the risk of strains and injuries. Job rotation and scheduled rest breaks are also important measures.

Sorting and washing
- Reduce the amount of manual handling required for laundry through design of work flow or using automations.
- Use bins with a self-elevating base to reduce bending when retrieving laundry from the bottom of the bins.
- Use lighter bins with wheels.
- Get a colleague to help if loads are heavy.
- Maintain the bins regularly with particular attention to the wheels.

Drying and folding
- Reduce awkward body postures such as reaching above shoulder level or bending the back while loading the dryer.
- Stand as close to the dryer as possible to reduce reaching forward.
- Use a foot bar to switch the weight of the body from one foot to the other.
- Anti-fatigue mats and shoes with good insoles to reduce discomfort from prolonged standing.

Ironing and packing
- Reduce awkward body postures such as neck bending downwards and stretching to hang ironed clothes.
- Practice job rotation or vary job tasks during the shift.
- Position the hangers at shoulder level to reduce excessive reaching and overhead work.
- Take regular breaks and perform stretching exercises.
- Provide anti-fatigue mats and shoes with good insoles.
8. Acknowledgements

The Workplace Safety and Health Council and Ministry of Manpower would like to thank The International Hotel & Tourism School (Singapore), Singapore Airport Terminal Services Pte Ltd and Swissotel The Stamford Singapore for their valuable assistance with the images used in this Guidelines.

9. Amendments

This set of guidelines replaces the Workplace Safety and Health Guidelines: Hotels | Food and Beverage published by the WSH Council in January 2008.

1) The obsolete guidance in the previous edition January 2008 are:

<table>
<thead>
<tr>
<th>Page</th>
<th>Obsolete Guidance</th>
</tr>
</thead>
<tbody>
<tr>
<td>49 – 55</td>
<td>“Specific Departmental Inspection Checklists” are removed and replaced by “Activity Based Checklists”. The checklists can be found at WSH Council website (<a href="http://www.wshc.sg">www.wshc.sg</a>).</td>
</tr>
</tbody>
</table>

2) The key amendments in this second edition November 2013 are:

<table>
<thead>
<tr>
<th>Section</th>
<th>Amendments</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.12</td>
<td>Working at Heights – new section on good practices when using ladders, scaffolds and mobile elevated working platforms.</td>
</tr>
<tr>
<td>3.13</td>
<td>Falling Objects – new section on good practices for storing items on racks to prevent workers from being struck by falling objects.</td>
</tr>
<tr>
<td>3.14</td>
<td>Fatigue – new section on how fatigue affects WSH.</td>
</tr>
<tr>
<td>3.15</td>
<td>Asphyxiation – new section on how overexposure to certain substances can lead to asphyxiation.</td>
</tr>
<tr>
<td>3.16</td>
<td>Caught In/between Objects – new section on how to prevent employees from being caught in/between objects.</td>
</tr>
<tr>
<td>3.17</td>
<td>Workplace Aggression – new section on how workplace aggression can harm workers.</td>
</tr>
<tr>
<td>5</td>
<td>Emergency Response Plan – new chapter on the importance of an emergency response plan and crowd-handling.</td>
</tr>
</tbody>
</table>