

Good practice: accident prevention in HORECA

Introduction

Why should an employer think about safety at the workplace?

If you run an enterprise, you are obliged by law to maintain a safe and healthy workplace. Of course, beside the legal obligations most of the employers have a personal interest in guaranteeing the safety of their employees. Managing a hotel, restaurant or catering (HORECA) enterprise means doing a lot of tasks in little time. However, you should be pondering on the advantages of running a 'safe' enterprise. Try answering the following questions:

If an accident happens:

- how long would it take to replace the injured worker?
- how long would it take until the new worker becomes familiar with the new task?
- what will be the consequences if an injury results in permanent disability or, in extreme cases, death?

And the most important question:

- would it have been possible to avoid this accident by taking technical, administrative and personal protective measures?

Why should an employee think about safety at the workplace?

In the fast-paced environment of the HORECA sector, the attitude that accidents are an inevitable part of the job is common. But injuries do not just lose businesses money, they also cause workers and their families pain and disruption to their lives. Working safely means investing in your own future.

Safety and health in the workplace is the responsibility of both employers and employees.



Good practice: accident prevention in HORECA

What are the main risks and what can be done?

You can prevent most workplace injuries and illnesses if you identify and then eliminate, or at least minimise, workplace hazards. The main risks in the HORECA sector are:

- slips, trips and falls
- plant such as cutting equipment and knives
- burns and scalds
- manual handling
- noise
- dangerous substances
- pressurised gas
- hot work environments
- fire hazards.

Slips, trips and falls

Slips, trips and falls are the most common cause of accidents in the hospitality sector, especially in the kitchen [1] [2]. Slips are mainly caused by surfaces made slippery with water, food waste or oil. Wearing the wrong footwear compounds the danger. Walking too fast or running, distractions and a failure to use handrails on stairways also increase risk.

What can be done?

Slips, trips and falls in kitchens, restaurants and in the catering industry can be cut dramatically by adopting some simple measures [3]:

- carry out proper housekeeping in work and walking areas and keep these areas free of obstacles
- use appropriate footwear
- ensure lighting is adequate
- close oven, dishwasher and cupboard doors
- walk – do not run
- ladders should be long enough for the task, and the lower and the upper ends of the side rails should be equipped with slip-resistant pads. Never use inappropriate substitutes for a ladder such as chairs, boxes or barrels
- stairwells should be well-lit and fitted with sturdy handrails
- use non-slip mats
- provide safety signs to remind people of slip, trip and fall hazards.



Good practice: accident prevention in HORECA

When assessing the potential for slips, trips and falls, pay attention to out-of-sight areas such as freezers, cool and storage rooms, loading docks and behind bars.

Slips, trips and falls, whether on or off the job, are expensive, disruptive, painful and may be tragic.

Plant - cutting equipment and knives

In professional kitchens, many types of cutting equipment such as slicers, mincers, knives and mixers are used. In fact, most injuries in the kitchen are cuts, either from using the implements or cleaning them.

What can be done?

- Knives should be sharp and maintained in a good working condition. Wash them separately.
- Use the appropriate knife for the task.
- Use a suitable non-slip cutting board.
- Knives should be stored in a knife-block, on a suitable knife shelf or on a magnetic strip mounted on the wall.
- Train workers in the safe use of machinery.
- Ensure that all machines have guards attached and that all workers use these when operating the equipment.
- Off-buttons must be easily accessible.
- Provide guards on slicing machines. Thumb guards and last slice devices must be provided and their usage controlled.

Burns and scalds

Burns and scalds are very common in the preparation and serving of hot food and drinks.

Ways to reduce risks:

- Use a tray or trolley to serve hot liquids, plates or utensils.
- Warn service staff and customers about hot plates.
- Install windows in the kitchen door to guarantee a safe passage for service staff.
- Train workers in good techniques for handling hot items such as opening pot lids away from the body.
- Keep saucepan or pot handles pointing away from the edge of the stove.
- Pick up hot items with dry cloths.



Good practice: accident prevention in HORECA

Deep fat fryers

Hot oil is a significant hazard for workers who clean deep fryers. Workers can be badly burned if the oil or grease is not allowed to cool before handling or if they do not use the right equipment.

Ways to reduce risks:

- Use automatic food lowering devices.
- Allow hot oil and grease to cool overnight before disposing.
- Ensure that containers are large enough and can withstand high temperatures.
- Wear appropriate personal protective equipment.

Manual handling

Many activities in the hospitality industry involve manual handling: lifting and handling full pots and pans and dishwasher trays; carrying piles of plates; bending into deep fryers to clean them; and vacuuming. Injuries may happen as a result of only one serious incident, but more often they are a result of stress and strain over a long period. A major source of back pain can be lifting and carrying heavy items, while forceful or repetitive activities and poor posture are linked to upper limb injuries [4].

Ways to control hazards:

- Assess all working areas to determine if lifting and carrying can be prevented.
- When purchasing new equipment, such as plates, consider the weight.
- Use mechanical aids wherever possible such as four-wheel-trolleys or sack trucks.
- When lifting or carrying, keep the load as close to your body as possible.
- Purchase lighter loads and smaller quantities from suppliers.
- Stock shelves safely.

Noise

The hospitality industry can be a noisy work environment [5]. Noisy cooking processes, beeping signals, dishwashers, plant, ventilation, coffee grinders, housekeeping activities, laundry, music in bars and of course talking colleagues or guests are all part of the job.



Good practice: accident prevention in HORECA

Excessive noise is measured at 85 dB (A). This is an average level measured over an eight-hour period. The weekly noise exposure level may not exceed the exposure limit value of 87 dB(A) [6].

You may have a noise problem in your workplace if you have to raise your voice to talk to someone standing one metre away. Repetitive exposure over long periods may affect hearing.

How can the risk be reduced?

- Remove hazardous noise from the workplace.
- Wear appropriate ear protection.

Dangerous substances

Hazardous and dangerous substances can cause injury or illness if people come into contact with them or do not use them properly. In the hospitality industry, there are many substances that pose a risk to the employees.

The different jobs and tasks often demand the use of hazardous substances; for example, while cleaning and disinfecting. Handling food and biological waste, often combined with damp work, are risky and can lead to allergic reactions and skin diseases such as dermatitis. Another source of irritants or harmful substances is the emission of cooking fumes and second hand smoke.

Handling cleaning agents, preservatives and disinfectants

In the catering trade a variety of cleaning agents, preservatives and disinfectants are used.

The cleaning and disinfection characteristics of these agents are in contrast to the adverse health effects of many of their ingredients. Workers should follow certain rules of conduct:

- cleaning agents should be kept or stored only in containers whose form or designation makes it clear that the contents cannot be mistaken for food. Containers in which the cleaning agents are stored must be marked in such a way that the risk can be recognised by all users;
- while using hazardous cleaning agents, protective equipment must be worn. Personal protection equipment should include protective masks or safety glasses, possibly inhalation protection, protective gloves, rubber apron and safety boots;



Good practice: accident prevention in HORECA

- operating instructions must be provided that define the hazards for humans and the environment for those dangerous cleaning agents, as well as the necessary preventive measures and behaviour rules.

Pressurised gas

In the hospitality industry, pressurised gas for the purpose of dispensing drinks is used nearly everywhere.

Every year, often severe, accidents occur when handling dispense gas installations [2]. These installations include pressurised gas bottles with pipe work, as well as control and mixing equipment. In many restaurants and pubs, the gas installation and pressured gas bottles are located in poorly ventilated cellars.

Nitrogen and/or carbon dioxide and, under specific circumstances, compressed air are used as dispense gases. Carbon dioxide, which is an odourless, colourless gas that displaces oxygen, is most commonly used.

Depending on the concentration of the gas and length of the exposure, lower concentrations may cause headaches, sweating, rapid breathing, increased heart beat, shortness of breath, dizziness, mental depression, visual disturbances and shaking. In high concentration, it leads to oxygen displacement and therefore to a deficiency of oxygen. This can cause impaired judgement, unconsciousness and even death. Asphyxiation can occur rapidly without sufficient time to evacuate.

What can you do?

- Know the hazards and carry out a risk assessment. This must evaluate the hazards to all persons entering or working in the cellar, including employees, self-employed workers, contractors and visitors. The employer should make staff aware of the specific risks associated with dispense gas.
- Provide proper lighting.
- Access to confined spaces should be restricted to designated personnel only. Employees who operate the dispense gas installation should be trained to follow the suppliers' instructions.
- Place appropriate warning signs outside areas where high concentrations of the gas can accumulate.
- Deliveries should be arranged in a way that keeps the number and the size of pressurised gas bottles at a minimum.
- Inspect and maintain all piping tubing, hoses and fittings at regular intervals and maintain the system in accordance with manufacturers'



Good practice: accident prevention in HORECA

- instructions (weekly visual inspections). An annual inspection should be carried out by a professional contractor.
- If a significant leak of dispense gas occurs, either adequate ventilation should be available for refreshing the atmosphere or a gas monitoring system with a warning alarm should be installed. The gas monitoring system should work continuously and be designed to warn a person with an audible or visible alarm before entering the danger area.
 - Install new carbon dioxide receptacles at ground level in an open area. If possible, relocate existing fill stations to above-grade locations.
 - Emergency arrangements should be provided and the staff trained in these procedures.

Hot work environment

Workers in the hospitality sector are at risk of heat stress when unloading supplies, working in kitchens or during service delivery. In kitchens, cooking makes the environment hot and humid, and in the summer the situation is even worse.

Being uncomfortable is not the major problem with working in high temperatures and humidity. Workers who are suddenly exposed to working in a hot environment face more and generally avoidable hazards.

Excessive exposure to a hot work environment can cause a variety of heat-induced disorders. Heat rashes and fainting are the first symptoms, which can indicate heat strain. If heat stress is not treated in the early stages, it can have serious effects on the body, leading to heat stroke, heat exhaustion and heat cramps.

Most heat-related health problems can be prevented or the risk of developing them reduced.

The most effective protection from heat stress often involves combinations of various control methods such as engineering and administrative controls, and personal protective equipment.

- A variety of engineering controls including general ventilation, air treatment/air cooling, air conditioning or local air-cooling may be helpful. The most effective and preferred means in professional kitchens to reduce excessive heat exposure, as well as cooking fumes containing dangerous substances, is displacement ventilation.
- Use induction cooking if available.



Good practice: accident prevention in HORECA

- Reduce humidity by using air conditioning and dehumidifiers, and by diminishing the sources of moisture; for example, open water baths, drains, and leaky steam valves.
- Although the heat stress in professional kitchens is usually moderate compared to other workplaces characterised by hot and humid environments, acclimatisation can reduce heat strain in food and catering.
- The physical demands, especially in hot working environments, should be assessed accurately to avoid unnecessary manual handling; for example, fitting the length of a hosepipe to a tap so that buckets can be filled at a convenient height or use automatic bulk handling machines, provide sack trucks.
- Replace fluids.
- Wear personal protective equipment. Cool, comfortable, breathable clothing such as cotton should be provided to allow free air movement and sweat evaporation.
- The key to preventing excessive heat stress is educating the employees on the hazards of working in heat and the benefits of implementing proper controls and work practices.

Fire hazards

There is a significant risk of fire in the food industry, particularly in kitchens, due to the use of gas, naked flames, hot oils and flammable substances.

The likelihood and effects of fire can be reduced by the following measures:

- all electric equipment must be kept in good condition and checked regularly;
- deep fat fryers must be fitted with thermostats to prevent overheating;
- all grease traps, extract hoods and filters must be cleaned regularly;
- mark fire escapes and exits properly and keep them clear of obstruction;
- provide appropriate fire extinguishers and check them regularly;
- install automatic fire detection and sprinkler systems;
- employees should participate in fire safety procedures training.

Conclusions

Most accidents can be prevented by good management and supervision combined with effective training. Accident prevention is an integral part of running a successful enterprise.



Good practice: accident prevention in HORECA

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