



# Unit 4 First Aid Materials

## Learning Outcomes

**By the end of this unit the learner will be able to:**

- ✓ First Aid Kit Types and Content
- ✓ Home First Aid Kits Contents
- ✓ Travel First Aid Kits Contents

## Unit 4

### First Aid Materials, Equipment and Facilities

When the employer has completed the assessment of first-aid requirements, the employer should provide the materials, equipment, and facilities needed to ensure that the level of coverage identified as necessary is available to employees at all times. This will include ensuring that properly marked and easily accessible first-aid equipment is available in all locations where working conditions necessitate it.

The information in this unit can be used as a guide to determine what type of first aid equipment, facilities, first responders, and procedures are required in different workplaces. Workers, including those working night shifts or overtime, must have access to first aid equipment, facilities, and first responders at all times.

#### First Aid Kit

A properly stocked and labelled first-aid container/kit is the bare minimum of first-aid equipment. Every employer should provide at least one first-aid kit for each work site, with a sufficient quantity of first-aid materials appropriate for the circumstances.

On large sites, more than one first-aid kit may be required, depending on the findings of the "first-aid needs assessment." First-aid kits should be easily accessible and, ideally, close to hand-washing facilities. They should only be stocked with items that can be used to provide first-aid, and they should be kept away from dust and moisture. A white cross on a green background should be used to identify all first-aid kits.

There is no set of requirements for what should be included in a first-aid container or kit.

Every employee must have access to a first-aid kit. This will necessitate the provision of at least one first-aid kit at their workplace.

#### The First Aid Kit's Contents

The first aid kit should include the following basic items for administering first aid to injuries:

- Cuts
- Scratches
- Punctures
- Splinters and grazes
- Sprains and strains of the muscles
- Minor burns
- Major bleeding wounds and/or amputations
- Bone fractures

- Injuries to the eyes
- Shock

A risk assessment should be used to determine the contents of first aid kits. In the workplace, for example, there may be a higher risk of eye injuries and a need for additional eye pads if:

- Open containers are used to handle chemical liquids or powders.
- Operations such as spraying, hosing, or abrasive blasting are carried out.
- There is a chance that flying particles will cause eye injuries.
- There is a risk of infectious materials being splashed or sprayed.
- Operations such as welding, cutting, and machining are carried out.

Serious burns and remote workplaces may necessitate additional equipment.

### **Additional First Aid Supplies**

You should also consider whether any other first aid equipment is required to treat injuries or illnesses that may occur as a result of a hazard at your workplace, in addition to first aid kits.

### **Automatic Defibrillators**

An automatic defibrillator can help reduce the risk of cardiac arrest death, and it's a good idea to have one in places where there's a risk of electrocution or where there are a lot of people.

Automatic defibrillators can be used by both trained and untrained people. They should be placed in a visible, accessible location that is not exposed to extreme temperatures. They must be clearly signed and kept in accordance with the manufacturer's instructions.

### **Eye Wash and shower Equipment**

Depending on the workplace, eye wash and shower equipment may be fixed or portable. Where there is a risk of hazardous chemicals or infectious substances causing eye injuries, eye wash equipment should be provided.

Shower equipment should be available immediately in workplaces where there is a risk of:

- Exposure to hazardous chemicals resulting in skin absorption or contamination from infectious substances
- Burns to a large area of the face or body that are severe (including chemical or electrical burns).

Shower facilities can consist of:

- a suitable deluge facility
- a hand-held shower hose that is permanently rigged

- a portable plastic or rubber shower hose that can be easily attached to a tap spout—for small, relatively low-risk workplaces where a fixed deluge facility would be impractical but serious burns are still a possibility (for example, a fish and chip shop).

Portable, self-contained eye wash or shower units come with their own flushing fluid that must be refilled or replaced after each use.

### **Travelling First Aid Kits**

There is no set of items that must be included in first-aid kits for mobile workers.

Typically, they will include:

- A general first-aid leaflet (for example, the HSE's leaflet: Basic advice on first-aid at work);
- Six sterile adhesive dressings, individually wrapped (hypoallergenic plasters can be provided if needed; dressings can be of a detectable type for food handlers);
- a pair of safety pins;
- Two bandages in the shape of a triangle;
- One large unmedicated sterile dressing;
- Moist cleansing wipes, individually wrapped;
- A pair of disposable gloves (for more information, see the HSE's free leaflet *Latex and You* ).

This is merely a suggested content list; similar but different items will suffice.

Restocking kits should be handled in a professional manner.

### **Design of Kits**

To fit your workplace, first aid kits can be any size, shape, or type, but each one should include the following:

- Be large enough to hold all of the required items
- A white cross on a green background, prominently displayed on the outside, makes you instantly identifiable.
- Include a list of the kit's contents.
- Be made of a material that will keep dust, moisture, and contamination out of the contents.

### Location

Quick access to the kit is critical in the event of a serious injury or illness. First aid kits should be kept in a visible, easily accessible location where they can be quickly retrieved. In security-controlled workplaces, access should also be guaranteed.

Near areas where there is a higher risk of injury or illness, first aid kits should be kept. A school with a science lab or a carpentry workshop, for example, should have first aid kits in these areas.

If the workplace is spread out over several floors of a multi-story building, at least one kit should be on every second floor.

First aid kits should be located on emergency floor plans displayed in the workplace.

If mobile workers' vehicles are their workplace, a portable first aid kit should be provided (for example, couriers, taxi drivers, sales representatives, bus drivers and inspectors). These kits should be kept out of harm's way so that they don't become projectiles in the event of an accident.

### Kit Restocking and Maintenance

A person in the workplace (usually a first aider) should be designated to maintain the first aid kit and should:

- Keep an eye on who has access to the first-aid kit and make sure that any items that are used are replaced as soon as possible.
- Conduct regular checks (after each use or at least once every 12 months if the kit is not used) to ensure the kit contains a complete set of the required items (an inventory list in the kit should be signed and dated after each check)
- Check that items are in good working order, have not deteriorated, and are still within their expiration dates, as well as that sterile products are sealed and not tampered with.

### First Aid Signs

It will be easier to locate first aid equipment and facilities if well-known, standardised first aid signs are displayed.

### First Aid Facilities

The type of first aid facilities required will be determined by a risk assessment. For example, in some workplaces, a clean, quiet area that provides privacy to an injured or ill person may be appropriate and practical. All first aid facilities should include access to a phone for contacting emergency services or an emergency call system.

### First Aid Rooms

If a risk assessment indicates that administering appropriate first aid without a first aid room would be difficult, a first aid room should be established at the workplace. Workers who work in environments where there is a higher risk of serious injury or illness requiring immediate first aid as well as further treatment by an emergency service, for example, may benefit from having access to a dedicated first aid room.

A first aid room is recommended for:

- Low-risk workplaces with at least 200 employees
- High risk workplaces with 100 workers or more.

The contents of a first aid room should be tailored to the specific hazards that exist in the workplace. The room's location and size should allow injured people who may need to be supported or moved by stretcher or wheelchair easy access and movement.

In the room, the following items should be available:

- An appropriate first-aid kit for the workplace
- Disposable paper towels and a hygienic hand cleanser
- A disposable examination couch with a waterproof surface.
- A magnifying lamp for examinations
- Storage in a cupboard
- A soiled waste container with a disposable lining
- A container for disposing of sharps in a safe manner
- A bucket or a bowl (minimum two litres capacity)
- Outlets for electricity
- A chair and a desk or table
- A phone and/or an emergency notification system
- The names and contact information for first responders and emergency services.

A first-aid room should include the following features:

- Be close to a sink with hot and cold running water (if one is not provided in the room) and toilet facilities.
- Provide privacy with a screen or a door.
- Be in close proximity to emergency services. (For stretcher access, a minimum door width of 1 metre is required.)
- Be well lit and ventilated
- Have an appropriate floor area (14 square metres as a guide)
- Have a clearly marked entrance with first-aid signage.

Unless the room is part of a health centre or hospital, maintaining a first aid room should be assigned to a trained occupational first aider.

### Health-Care Facilities

A health centre staffed by a registered health practitioner (a doctor or nurse) or a paramedic can provide emergency medical care and address the types of hazards that can occur in high-risk workplaces. A health centre may be established in the workplace (for example, at a large mine site), or external emergency services may be used if they are readily available.

If the workplace has a health centre, the facility should:

- Be self-contained
- If possible, be on the ground level in a quiet, clean area that is a safe distance away from potentially hazardous operations and away from any major thoroughfares
- Be convenient and accessible to workers during their working hours, and have a clearly marked entrance with health centre signage.
- Use impervious materials for walls, floors, and ceilings that are easy to clean.
- Have enough space to accommodate first aid equipment.

### First Aiders

A person conducting a business or undertaking must ensure that an adequate number of workers are trained to administer first aid at the workplace or that workers have access to an adequate number of other people who have been trained to administer first aid.

In the workplace, first aid can be given in a variety of ways:

- Teach one or more of your employees how to administer first aid.
- Arranging for a non-employee to administer first aid to your employees, provided that they have been trained to do so. These could be first responders from other businesses who work in the same building as you or other people who are qualified to administer first aid. This will entail consulting, cooperating, and coordinating access arrangements with other parties, as well as ensuring that access is available during work hours (e.g. taking into account any shift work).

### The Different Types of First Aid Training

First responders should have a nationally recognised Statement of Attainment for the nationally endorsed first aid unit/s of competency issued by a Registered Training Organisation (RTO).

**Apply First Aid** teaches the skills needed to recognise and respond to common life-threatening injuries or illnesses, including CPR (cardiopulmonary resuscitation), and to manage the casualty and incident until medical or other help arrives.

If first responders can perform CPR and treat minor illnesses and injuries in low-risk workplaces, they are sufficiently trained.

**Apply Advanced First Aid** – teaches you the skills you'll need to perform advanced first-aid procedures. This type of training is appropriate for some high-risk environments.

**Manage First Aid in the Workplace** (Occupational First Aid) – teaches you how to perform advanced first-aid procedures and run a first-aid room.

**Provide First Aid in Remote Situations** – teaches you how to administer first aid in a remote and/or isolated setting, as well as how to prepare for an aeromedical evacuation. This type of training is appropriate for high-risk workplaces where emergency services are likely to be delayed significantly.

### **Additional Training for First Aiders**

First responders should attend training on a regular basis to keep their first aid knowledge and skills up to date, as well as to confirm their ability to provide first aid. CPR certification should be renewed every three years, and first aid certification should be renewed every year.

To respond to specific situations at work, first responders may need to take additional first aid training. If this topic has not been covered in previous first aid training, first aiders should be trained to respond to anaphylaxis in cases where workers have severe allergies.

### **Number of Trained First Aiders**

The following proportions are suggested:

- Workplaces with low risk – one first aider for every 50 employees
- Workplaces with a high risk of injury – one first responder for every 25 employees.

Following the five-step guide below, you can fine-tune the number and type of trained first responders:

**STEP 1:** Determine the maximum number of employees who can be present at any given time.

**STEP 2:** Evaluate the nature of the work being done at the workplace to see if your employees are at a high risk of being exposed to hazards that may necessitate immediate first-aid treatment.

**STEP 3:** Determine whether the workplace is in a remote location or if emergency services are difficult to reach. At least one first aider should be present for every ten workers in high-risk workplaces where medical and ambulance services are not readily available.

**STEP 4:** Consider the various ways in which your employees perform their jobs, such as:

- If a worker spends the majority, if not all, of their time working alone and in transit (i.e., their workplace is their vehicle and the places they visit during their work) (for example, couriers, taxi drivers, sales representatives, door-to-door charity collectors and inspectors)
- If a worker's location changes frequently and they frequently work without supervision (for example, tradespeople, construction workers in the housing industry, farm hands and cleaners)
- If a worker works alone for short periods of time on occasion (for example, when opening or closing a business for trade or working back late to meet a deadline).

It may not be possible to have a first aider on hand at all times at work in these situations. These workers, on the other hand, must be able to obtain first-aid assistance, for example, by ensuring that they have:

- A reliable way to contact emergency services or first responders
- Instruction and training on how to respond in the event of a serious injury or illness.

**STEP 5:** Before determining the number of first responders your employees require, consider whether there are any other factors that indicate that your workplace requires more first responders, such as:

- Workplace organisation (multiple shifts or overtime)
- Seasonal work, where there may be a significant increase or decrease in the number of workers in a short period of time.
- When there are a lot of other people around on a regular basis (e.g. schools, shopping centres, hotels and function centres)
- Uniquely hazardous workplaces, such as fitness centres, amusement rides, and dive schools
- Availability when a first responder is unavailable (e.g. annual leave)

### First Aid Procedures

To ensure that workers have a clear understanding of first aid in the workplace, you should develop and implement first aid procedures. The procedure should include the following:

- The types of first-aid kits available and where they are kept
- First-aid facilities, such as first-aid rooms, are located.
- Who is in charge of the first-aid kits and facilities, and how often should they be inspected and maintained?
- How to set up and maintain appropriate communication systems (including equipment and procedures) to ensure quick communication with first responders in an emergency.
- Communication equipment and systems to be used in the event of a first-aid emergency (especially for remote and isolated workers). These procedures should

include information on where to find communication equipment, who is responsible for it, and how to keep it in good working order.

- The work areas and shifts that each first aider has been assigned. Each first aider's name and contact information should be included in these procedures.
- Plans in place to ensure that first responders receive the necessary training.
- Arrangements to ensure that workers receive appropriate first-aid information, instruction, and training.
- Obtaining information about any first-aid needs that may necessitate specific treatment in the event of a medical emergency, such as severe allergies, when a worker begins work. Information about a worker's health must be kept private and given to first responders only with the worker's permission.
- How to report work-related injuries and illnesses
- Practices to avoid contact with blood and bodily fluids (see Appendix D)
- What to do if a worker or other person is too injured or ill to continue working, such as if they require transportation to a medical facility, home, or somewhere else where they can rest and recover.
- Access to debriefing or counselling services to support first aiders and workers after a serious workplace incident.

### Record Keeping

The first aider should keep a record of any first aid treatment given and report it to managers on a regular basis to aid in the review of first aid arrangements. Health Records legislation imposes requirements on first-aid treatment records.

### Procedures and Plans for Dealing with a Crisis

A person conducting a business or undertaking must ensure that an emergency plan is prepared for the workplace that provides procedures to respond effectively in an emergency.

The emergency procedures must include:

- An effective response to an emergency situation
- Procedures for evacuating the workplace
- Notification of emergency services at the earliest opportunity
- Medical treatment and assistance, and
- Effective communication between the people authorised by the person conducting the business or undertaking to co-ordinate the emergency response and all persons at the workplace.

Your first-aid procedures can be incorporated into your emergency planning procedures. The role of first responders should be specified in emergency procedures based on their level of qualification and competence. First responders, in particular, should be told not to go beyond

their level of training and expertise in first aid. Other employees, including supervisors, should be told not to direct first responders to go beyond their level of training and experience.

### **Providing First Aid Information**

You must provide first-aid training to your employees so that they understand what to do and who to contact if they become ill or injured.

Information should be simple to comprehend, accessible, and tailored to your employees' language and literacy levels. Information can be conveyed through verbal (explanations and demonstrations, for example) or visual means (for example, videos and posters).

The information and instruction on first aid should include:

- Where to find first-aid supplies and facilities
- The names and locations of people who have been trained to provide first aid.
- The steps to take if you need to administer first aid.

When there are any changes, such as the location of first aid facilities or the names, locations, or contact details of first aiders, the information and instruction should be provided as part of the workers' induction training.

To ensure that your first-aid arrangements remain adequate and effective, you should review them on a regular basis with your workers.

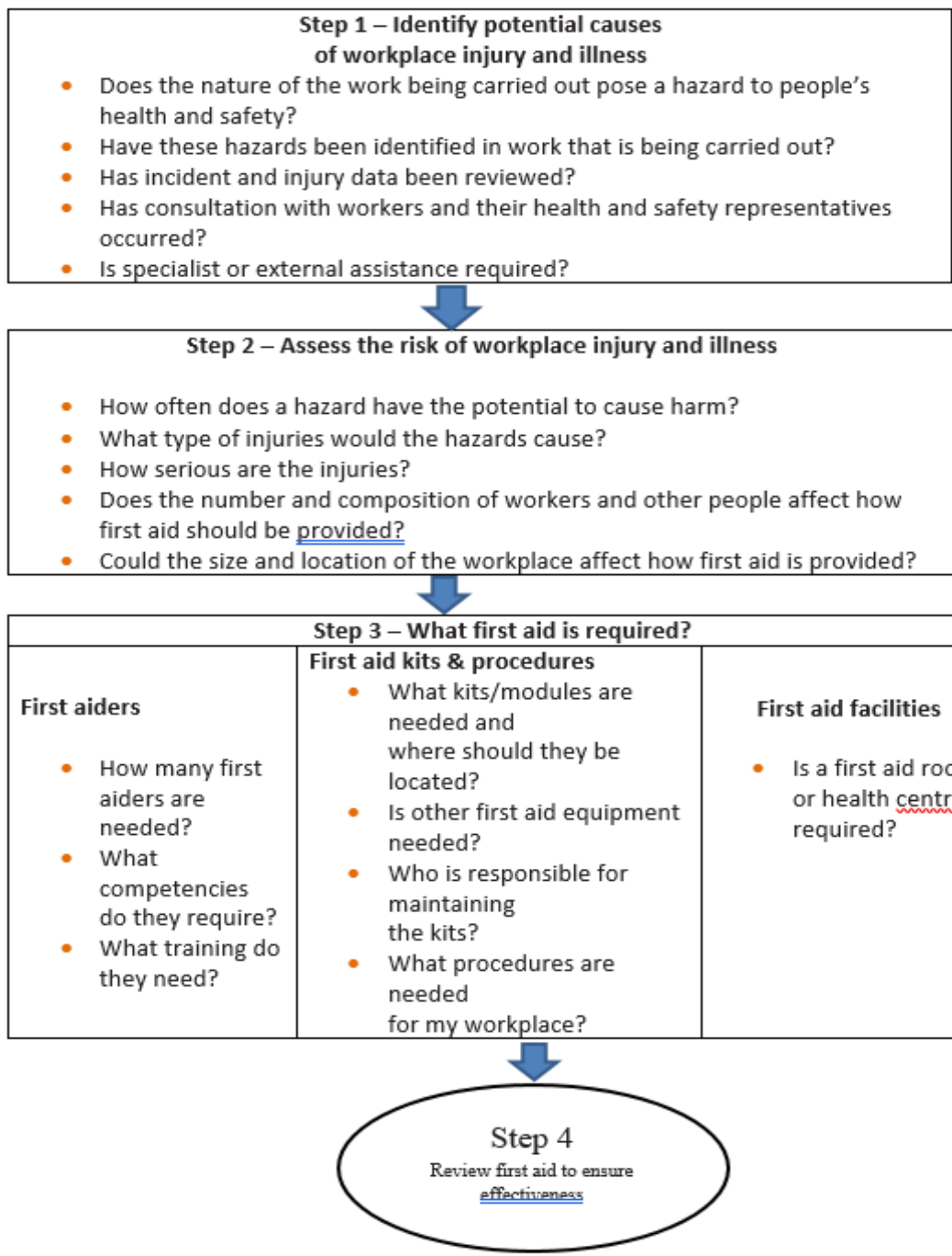
- Double-check that the people in charge of your first-aid procedures are familiar with them.
- Review first aid against a risk assessment if the way work is done changes or new work practises are introduced to ensure the arrangements are still adequate.
- Hold a simulated first-aid emergency to ensure that first-aid procedures are effective. Make sure that first-aid kits and rooms are easily accessible and that they are appropriate for the hazards that are specific to your workplace.
- If a first-aid incident occurs, assess the effectiveness of the first-aid provided and make any necessary changes.
- If new information about a previously unknown hazard becomes available, review the first-aid measures you've put in place.

The following questions can help you review first aid and determine whether it needs to be improved:

- Are the first-aid kits and modules appropriate for the hazards at your place of business?
- Do you think you'll need more first-aid kits?
- Do workers have access to first-aid kits?
- Are first-aid kits well-kept and easily identifiable by employees?

- Do you need a first-aid room or a health centre?
- Are the first-aid facilities in good working order?
- Do first responders have the necessary skills and competencies, and are they up to date?
- Do employees know how to get in touch with a first responder?
- Is there a need for more first responders?
- Do workers have constant access to first responders?
- Do employees and others know what to do in the event of an emergency?
- Is there easy access for emergency services, such as parking for an ambulance?

**Appendix A - First Aid and the Risk Management Process**



**Hazards** (take into account any parts of your workplace with different work activities/hazards that may require different levels of first-aid provision based on the findings of your general risk assessment)

<p>Are there any low-level hazards in your workplace, such as those found in offices and shops?</p>	<p>The minimum provision is:</p> <ul style="list-style-type: none"> <li>● An appointed person to take charge of first-aid arrangements;</li> <li>● A suitably stocked first-aid kit.</li> </ul>
<p>Do you have higher-level hazards in your workplace, such as chemicals or dangerous machinery? Are there any special hazards in your line of work, such as hydrofluoric acid or confined spaces?</p>	<p>You should consider:</p> <ul style="list-style-type: none"> <li>● Providing first-aiders;</li> <li>● Additional training for first-aiders to deal with injuries caused by special hazards;</li> <li>● Additional first-aid equipment;</li> <li>● Precise location of first-aid equipment;</li> <li>● providing a first-aid room;</li> <li>● Informing the emergency services in advance.</li> </ul>

**Employees**

<p>How many people work on the site?</p>	<p>The minimum provision is:</p> <ul style="list-style-type: none"> <li>● An appointed person to take charge of first-aid arrangements;</li> <li>● A suitably stocked first-aid box.</li> </ul> <p>Depending on your circumstances, you should consider providing:</p> <ul style="list-style-type: none"> <li>● First-aiders;</li> <li>● Additional first-aid equipment;</li> <li>● A first-aid room.</li> </ul>
<p>Are there any inexperienced workers on the job (including those on a 'work experience' programme), or employees with disabilities or specific health issues?</p>	<p>You should consider:</p> <ul style="list-style-type: none"> <li>● Additional training for first-aiders;</li> <li>● Additional first-aid equipment;</li> <li>● Location of first-aid equipment.</li> </ul>

<p>Is it possible for members of the public to come to your location?</p>	<p>Under the Regulations, you have no legal duty to provide first aid for non-employees, but HSE strongly recommends that you include them in your first-aid provision.</p>
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**Accidents and ill-health records**

<p>What types of injuries and illnesses have you experienced at work, and where did they occur?</p>	<p>Make sure your first-aid provision caters for the type of injuries and illness that might occur in your workplace. Monitor accidents and ill health, and review your first-aid provision as appropriate.</p>
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**Working Arrangements**

<p>Do you have employees who are frequently on the road, work from home, or work alone?</p>	<p>You should consider:</p> <ul style="list-style-type: none"> <li>● Issuing personal first-aid kits;</li> <li>● Issuing personal communicators/ mobile phones to employees.</li> </ul>
<p>Do any of your employees work nights, weekends, or shifts?</p>	<p>You should ensure there is adequate first aid provision at all times people are at work.</p>
<p>Are the premises spread out, eg are there several buildings on the site or multi-floor buildings?</p>	<p>You should consider provision in each building or on each floor.</p>
<p>Is your place of business far away from emergency medical services?</p>	<p>You should:</p> <ul style="list-style-type: none"> <li>● Inform the emergency services of your location;</li> <li>● Consider special arrangements with the emergency services;</li> <li>● Consider emergency transport requirements.</li> </ul>

Do any of your employees work at other companies' locations?	You should make arrangements with other site occupiers to ensure adequate provision of first aid. A written agreement between employers is strongly recommended.
Are you prepared to cover for your first-aiders or appointed persons if they are unable to work?	You should consider: <ul style="list-style-type: none"> <li>• What cover is needed for annual leave and other planned absences;</li> <li>• What cover is needed for unplanned and exceptional absences.</li> </ul>

**Non-employees**

Table 2 Suggested numbers of first-aid personnel to be available at all times people are at work

From your risk assessment, what degree of hazard is associated with your work activities?	How many employees do you have?	What first-aid personnel do you need?
<b>Low Hazard</b> , eg offices, shops, libraries	Fewer than 25	At least one appointed person
	25 – 50	At least one first-aider trained in EFAW
	More than 50	At least one first-aider trained in FAW for every 100 employed (or part thereof)
<b>Higher Hazard</b> , eg light engineering and assembly work, food processing, warehousing, extensive work with dangerous machinery or sharp instruments, construction, chemical manufacture	Fewer than 5	At least one appointed person
	5 – 50	At least one first-aider trained in EFAW or FAW depending on the type of injuries that might occur
	More than 50	At least one first-aider trained in FAW for every 50 employed (or part thereof)

### Further Reading:

- ✓ First Aid For the USMLE Step 1 2020, Thirtieth Edition 30th Edition  
by Tao Le (Author), Vikas Bhushan
- ✓ Emergency Medical Responder: First on Scene 11th Edition  
by Chris Le Baudour (Author), J. David Bergeron (Author), Keith  
Wesley (Author)