



RHODES UNIVERSITY

Grahamstown • 6140 • South Africa

Health and Safety Guide



RU Safety, Health & Environmental Office

Developed by Nikki Köhly, Rhodes University SHE Officer (2009-2018)

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1. INTRODUCTION to HEALTH and SAFETY

We have a basic instinct to survive. People develop “common sense” strategies that help them avoid harm. Safety is one of these strategies.

Workplace health and safety is important for a number of reasons. Let’s start by considering the negative impacts of accidents, and laws that are in place to protect employees.

1.1 The impact of accidents

1.1.1 Accident statistics

More than 200,000 workplace accidents in South Africa, involving mainly unskilled or semi-skilled workers, are reported to the Compensation Commissioner every year. Not all incidents and accidents are reported, so we cannot be sure of numbers. Various studies have shown that major and serious incidents are the ‘tip of the iceberg’.

Over ten times as many reported incidents are **near miss** cases, which reflect poor management control. Every near miss had the potential to be a *serious* accident – it is an early warning.



Accidents do not just happen – they are caused.

Accidents usually have multiple causes and contributing factors.

The costs of incidents and accidents also look like an iceberg: some costs can be recovered (the small tip), but many other costs are hidden below the surface, and have far-reaching consequences. This is why we want to prevent accidents and incidents. Refer to Part 1.1.3 below.



Also refer to Part 4.1 (hazards) and Part 5 (incidents and accidents).



1.1.2 Prevention is better than cure

Good safety management is based on the *prevention* of accidents, according to a research report in the *Journal of Safety Research*. Preventing accidents means that we prevent injury and suffering, prevent damage to infrastructure and equipment, and avoid unnecessary costs to ourselves and our employer.



Safety doesn’t hurt... accidents hurt!

1.1.3 Reasons for preventing accidents

There are moral, social, financial, and legal reasons for preventing accidents.

- i. Moral: It is morally right to protect employees and other persons in the workplace from any form of harm or suffering. The employer has a moral duty to show concern for employees, and make genuine efforts to promote their wellbeing. (This moral responsibility also informs a ‘*duty of care*’ in common law.)
- ii. Social: It is important to prevent injuries and disease because of the negative impact these have on society. Consider the potential social impacts, for example:
 - Health and wellbeing;
 - Productivity;
 - Standard of living;
 - Support for families and loved ones;
 - Contributions to NGOs and worthy causes.
- iii. Financial: Injuries, diseases and damage to property have financial impacts, many of which are ‘hidden’, and not covered by insurance. Also note that as the number of accidents increase, so insurance premiums increase. Consider the costs, for example:
 - Dealing with injury – first aid, phone calls, transport, admin reports, etc;
 - Time lost while injured employee is off work;
 - Disruptions to work schedule;
 - Repairing or replacing damaged equipment;
 - Employing, and training, temporary or replacement staff;
 - Time spent conducting investigations;
 - Legal costs;
 - Reputational damage.

- iv. Legal: The employer has a duty to comply with the Occupational Health and Safety Act, and do everything *reasonably practicable* to prevent harm to employees and other persons. A '*duty of care*' is a legally enforced moral duty that requires the employer to anticipate possible causes of injury and illness, and do everything reasonably practicable to remove or minimise these possible causes of harm. Refer to Part 1.2 below.



Safety is as simple as A B C – Always Be Careful – Don't learn safety by accident!

1.2 The Occupational Health and Safety Act

Health and safety in the workplace is guided primarily by the Occupational Health and Safety Act (85 of 1993). We call it the OHS Act.

1.2.1 Purpose of the OHS Act

“To provide for the health and safety of persons at work and for the health and safety of persons in connection with the use of plant and machinery; the protection of persons other than persons at work against hazards to health and safety arising out of or in connection with the activities of persons at work; to establish an advisory council for occupational health and safety; and to provide for matters connected therewith.”

1.2.2 Structure of the OHS Act

The OHS Act consists of 50 sections – which apply to all workplaces – and 20 regulations. The OHS Act is available online, and a copy (of sections 1 to 50) is printed and distributed to all health and safety reps at Rhodes University.

▪ Sections

- | | | |
|---|--|---|
| 1. Definitions | 15. <u>Duty not to interfere with, damage or misuse things</u> | 33. Joint enquiries |
| 2. Establishment of Advisory Council for Occupational Health and Safety | 16. <u>Chief Executive Officer charged with certain duties</u> | 34. Obstruction of investigation or inquiry or presiding Inspector or failure to render ass |
| 3. Functions of Council | 17. <u>Health and Safety Representatives</u> | 35. Appeal against decision of Inspector |
| 4. Constitution of Council | 18. <u>Functions of Health and Safety Representatives</u> | 36. Disclosure of information |
| 5. Period of Office and remuneration of members of Council | 19. <u>Health and Safety Committees</u> | 37. <u>Acts or omissions by employees or mandataries</u> |
| 6. Establishment of Technical Committees of Council | 20. <u>Functions of Health and Safety Committees</u> | 38. Offences, penalties and special orders of court |
| 7. <u>Health and Safety Policy</u> | 21. General Prohibitions | 39. Proof of certain facts |
| 8. <u>General duties of employers to their employees</u> | 22. Sale of certain articles prohibited | 40. Exemptions |
| 9. General duties of employers and self-employed persons to persons other than their employ | 23. Certain deductions prohibited | 41. This Act not affected by agreements |
| 10. General duties of manufacturers and others regarding articles and substances for use at | 24. <u>Report to inspectors regarding certain incidents</u> | 42. Delegation and assignment of functions |
| 11. Listed work | 25. Report to Chief Inspector regarding occupational disease | 43. Regulations |
| 12. General duties of employers regarding listed work | 26. <u>Victimization forbidden</u> | 44. Incorporation of health and safety standards in regulations |
| 13. <u>Duty to inform</u> | 27. Designation and functions of Chief Inspector | 45. Serving of notices |
| 14. <u>General duties of employees at work</u> | 28. Designation of Inspectors by Minister | 46. Jurisdiction of Magistrate's Courts |
| | 29. Functions of Inspectors | 47. State bound |
| | 30. Special powers of Inspectors | 48. Conflict of Provisions |
| | 31. <u>Investigations</u> | 49. Repeal of Laws |
| | 32. Formal enquiries | 50. Short title & commencement |



About RU Health and Safety + link to OHS Act: www.ru.ac.za/safety/about

1. Introduction to Health and Safety

▪ Regulations

The regulations in the OHS Act are identified by their titles (*not* by numbers). Most of these regulations apply to Rhodes University (marked with an asterisk * below). All the regulations are available online.

- * Asbestos Regulations, 2001
- * Certificate of Competency Regulations, 1990 [e.g. *engineering workshop*]
- * Construction Regulations, 2003 [e.g. *if there is any construction work on campus*]
- * Diving Regulations, 2009 [e.g. *deep water research in DIFS*]
- * Driven Machinery Regulations, 1988 [e.g. *in workshops, laboratories, laundries*]
- * Electrical Installation Regulations, 2009 [e.g. *RU Electrical section*]
- * Electrical Machinery Regulations, 1988 [most people use portable electrical tools]
- * Environmental Regulations for Workplaces, 1987 [re *lighting, ventilation, noise protection, fire safety & precautions, etc, in our work environment*]
- Explosives Regulations, 2003
- * Facilities Regulations, 1990 [employees require *seating, drinking water, sanitary facilities, etc*]
- * General Administration Regulations, 2003 [management's administrative procedures with regard to health and safety in the workplace]
- * General Machinery Regulations, 1988 [ensuring safety with regard to driven machinery]
- * General Safety Regulations [refers to *PPE, first aid facilities, use of ladders, limited access to high risk areas, welding equipment, stacking and storage, eviction of intoxicated persons, etc*]
- * Hazardous Biological Agents Regulations, 2001 [e.g. *in Microbiology and Zoology*]
- * Hazardous Chemical Substances Regulations, 1995 [e.g. *in science laboratories*]
- * Health and Safety of Children at Work Regulations [e.g. *students under 18 doing hazardous work – involving power tools, heavy weights, heat, cold, noise, etc*]
- * Incorporation of Safety Standards into Electrical Installation Regulations, 2009 [e.g. *RU Electrical section*]
- * Lead Regulations, 2001 [e.g. *in welding or use of lead-based paint is used*]
- * Lift, Escalator and Passenger Conveyor Regulations, 1994 [buildings with lifts]
- * Major Hazard Installation Regulations [e.g. *hazardous chemical stores*]
- * National Code of Practice: Evaluation of Training Providers for Lifting Machine Operators [e.g. *maintenance workshops*]
- * Noise-induced Hearing Loss Regulations, 2003 [e.g. *noise zones such as workshops and building sites*]
- * Pressure Equipment Regulations, 2009 [e.g. *fire extinguishers, diving and gas cylinders, compressors*]
- * Regulations for the Integration of the Occupational Health and Safety Act, 1995 [refers to *integration of Labour Laws*]



Occupational Health & Safety Act 85 of 1993: www.acts.co.za/occupational-health-and-safety-act-1993

1.2.3 The Inspector

The Department of Labour (DoL) Inspector may visit the workplace at any time to check if management is complying with the requirements of the OHS Act.



The Inspector has a 'watchdog': the health and safety rep.



Also refer to Part 2 (health and safety reps).

1.3 Responsibilities of the employer

As an employer, Rhodes University is obliged to “provide and maintain, *as far as is reasonably practicable*, a working environment that is safe and without risk to the health of his/her employees”.



*Reasonably practicable refers to what a **reasonable person** would do – a person with sound judgement and whose behaviour is moderate and fair.*



Also refer to Part 8.2.2 (risk management) and Part 9.1 (terms and definitions).

1.3.1 Health and Safety Policy

The employer is obliged to have a health and safety policy when directed by the Chief Inspector. By proactively formulating and implementing a health and safety policy, Rhodes University has demonstrated its commitment to promoting health and safety. RU's health and safety policy has the following principles:

- Provide and maintain an environment that is safe and without risk to the health and safety of members of the University community;
- Provide facilities and adequate resources to support the University's efforts to comply with the OHS Act and related regulations;
- Carry out risk management activities to ensure that risks relating to working procedures and practices, and conditions in the work environment, are identified and adequately controlled;
- Develop safety protocols for maintaining systems in connection with the use, handling, storage, transport and disposal of hazardous articles and substances;
- Ensure that all members of the University community are provided with safe working procedures and adhere to appropriate health and safety standards;
- Encourage all University staff to serve as appropriate role models for students and promote health and safety standards in teaching, learning, research and technical support;
- Monitor the effectiveness of the University's health and safety provisions in consultation with University management and designated Health and Safety Representatives, to ensure continued improvement in terms of eliminating work-related injury and illness;
- Ensure that this Health and Safety Policy is kept current in terms of any changes in legislation.



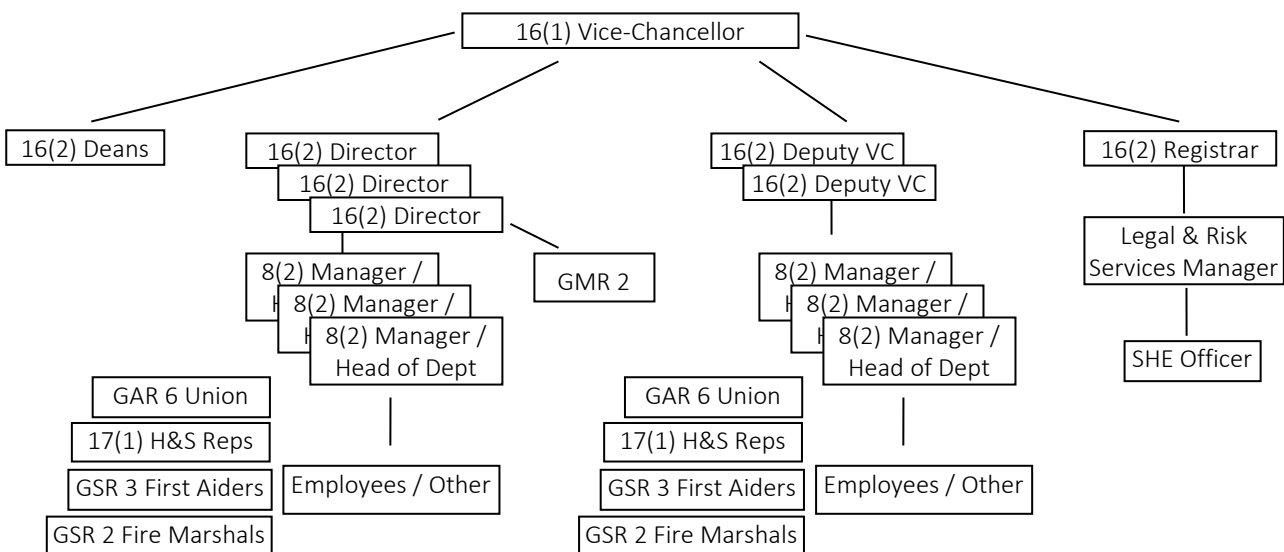
OHS Act, Section 7: Health and safety policy

RU Health and Safety Policy: www.ru.ac.za/safety/about/policy

1.3.2 Line of responsibility

Health and safety must be managed in all areas of campus. For this reason, the OHS Act requires delegation of responsibility at all levels, from the Vice-Chancellor through the various lines of management, including heads of departments, managers, wardens, supervisors, and team leaders.

Roles and Responsibilities at RU



1. Introduction to Health and Safety

Specific roles and responsibilities, as dictated by the OHS Act, should be clearly defined, in writing. Role-players include:

- Senior management;
- Line management (managers, HODs, supervisors, team leaders, wardens);
- Safety, health & environmental officer;
- Health and safety representatives;
- Health and safety committees;
- Supervisor of machinery - GMR 2 (1);
- Trade union representatives
- Employees;
- Mandataries;
- Students.



Good communication and cooperation at all levels in the workplace is vital for good health and safety – not an adversarial ‘us and them’ attitude.



OHS Act, Section 18: Functions of health and safety representatives

OHS Act, Section 20: Functions of health and safety committees

1.3.3 Vice-Chancellor

The *Vice-Chancellor* – referred to as the Chief Executive Officer in the OHS Act – is responsible for the overall management and control of Rhodes University. S/he is charged with certain duties in terms of the OHS Act:

- Ensure that the duties of the employer are carried out;
- Assign any duty to any person under his/her control;
- Remains accountable, even though s/he has delegated responsibility.



OHS Act, Section 16(1): Chief Executive Officer charged with certain duties

1.3.4 Senior Management

Rhodes University has adopted a model and strategy whereby senior management is individually, collectively, and ultimately responsible for identifying risks and being accountable for managing the risks within their operational areas – including health and safety.



Without the active involvement of senior management, an organisation’s health and safety programme will never achieve high standards.

The VC delegates responsibility – *not* accountability – to one or more Section 16(2) appointee(s), as s/he does not have the time or capacity to oversee all health and safety programmes. In a university context, 16(2) appointees are usually Deans and Senior Managers who report directly to the VC – such as DVCs, Directors and Registrars.

Section 16(2) appointees must ensure in their areas of responsibility/accountability that managers and heads of departments (refer to Part 1.3.5) fulfil the duties of the employer.

The 16(2) appointees also sign legal appointment letters for health and safety reps, first aiders and fire marshals.



OHS Act, Section 16(2): assign any duty... to any person under his/her control

RU Vice-Chancellor's Section 16(2) Appointees: www.ru.ac.za/safety/about/162appointees

1.3.5 Managers and Heads of Department

Managers and HODs are responsible for ensuring that day-to-day health and safety management practices are implemented (see also Part 8.2, management control). In terms of the OHS Act, Section 8 (General duties of employers to their employees), this includes:

1. Introduction to Health and Safety

- Provide and maintain equipment and safe systems of work;
- Identify hazards, assess associated risks, and remove/minimise these;
- Inform employees of any/potential hazards and risks;
- Provide the necessary protective measures and ensure these are used by employees;
- Monitor and enforce health and safety control measures, take corrective action where required;
- Provide training, supervision, information and talks to improve safety awareness;
- Appoint Health and Safety Reps, First Aiders and Fire Marshals;
- Continuous risk assessment, including regular health & safety inspections;
- Incidents/accidents to be reported and investigated;
- Copy of the OHS Act and regulations must be available to employees.

Rhodes University's Machinery Supervisor (GMR 2 Appointee) is responsible for ensuring compliance with the provisions of the OHS Act and its regulations in relation to machinery in the workplace. S/he is also responsible for managing the appointed contractors relating to inspection and servicing of fire extinguishers, pressure vessels under pressure, goods hoists and lifts.



OHS Act, Section 8: General duties of employers to their employees

OHS Act, General Machinery Regulations

RU responsibilities of manager and HODs: www.ru.ac.za/safety/about/management

1.4 Responsibilities of the employee

Employees do not only have rights, they also have responsibilities. The OHS Act requires the employee to:

- Take *reasonable care* for the health and safety of him/herself;
- Take *reasonable care* for the health and safety of others who may be affected by his/her acts or omissions;
- Carry out lawful orders;
- Obey health and safety rules;
- Follow stipulated safe work procedures;
- Report any incidents/accidents;
- Report any unsafe conditions in the workplace;
- Co-operate with the employer in addressing safety concerns.



Any employee can be liable to be convicted and sentenced, as well as the employer, if an offence is committed (see 1.5 below). In other words, safety is everyone's responsibility!



OHS Act, Section 14: General duties of employees at work

1.5 Liability

Liability means that you are legally responsible for something. It may be imposed under *civil* law and *criminal* law.

1.5.1 Criminal liability

Criminal law – a type of 'public law' – deals with the relationship between the state and the general population. This means that the state would be involved in a criminal law case against a person who has been negligent or wilfully breaks the law.

Any *employee* found guilty of an offence in terms of the OHS Act shall, on conviction, be liable to a fine not exceeding R50,000 or to imprisonment for a period not exceeding one year, or to both.

An *employer* found guilty of an offence in terms of the OHS Act shall, on conviction, be liable to a fine not exceeding R100,000 or to imprisonment for a period not exceeding two years, or to both.



If any person disobeys orders or rules that were put in place to protect health and safety, it would be a criminal offence.

1.5.2 Civil liability

Civil law – a type of ‘private law’ – deals with disputes between individuals and/or organisations where a (negligent or intentional) wrongful act harms another. The victim lays a claim in a civil law case and if successful, is awarded compensation. For example, the victim of a car accident claims damages against the driver for loss or injuries sustained in the accident.



Note: if a health and safety rep (see Part 2) fails to do something that s/he is expected to do in terms of the OHS Act, s/he shall not incur any civil liability.

1.5.3 Vicarious liability

Vicarious liability means that the Line Manager can be held responsible for any offence committed by a subordinate employee, according to public law. It will depend on whether the employee was found to be acting in a personal capacity, or in the course of his/her employment.

To avoid vicarious liability, the employer should ensure that *all reasonable steps* have been taken to prevent the employee’s acts or omissions.



OHS Act, Section 37: Acts or omissions by employees or mandataries

OHS Act, Section 38: Offences, penalties and special orders of court

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2. HEALTH and SAFETY REPRESENTATIVES

The appointment of health and safety reps helps to develop a culture of health and safety in the workplace.



2.1 Value of health and safety reps

Health and safety reps support their fellow employees with regard to health and safety concerns in the workplace. They also play a vital role in supporting management, through:

- Bringing health and safety problems to their attention;
- Helping them follow correct health and safety procedures;
- Helping take action to resolve health and safety concerns in the workplace;
- Coordinating feedback from employees regarding how safety concerns are dealt with;
- Introducing new employees to the health and safety system at work.



Health and safety reps are the workplace 'eyes and ears' who represent their fellow employees' health and safety interests.

2.2 Health and safety rep appointment

The OHS Act has the following requirements:

- There must be designated Health and Safety Representatives where there are 20 or more employees, or if the inspector (see Part 1.2.3) instructs the employer to do so.
- There must be one H&S rep for every:
 - 50 employees, or part thereof, in most workplaces; or
 - 100 employees, or part thereof, in the case of offices and shops.
- H&S reps should be full-time employees who are familiar with workplace conditions and activities.
- The employer should provide facilities, assistance and training for the H&S rep to carry out his/her functions – as *reasonably* required and agreed on.
- H&S rep activities must be conducted during ordinary working hours; any time *reasonably* spent on this is deemed to be time spent on duties as an employee.
- The employer must consult with employees and/or trade union regarding the election or nomination of H&S reps, their period of office, how they perform their functions, and circumstances in which they may be removed as H&S reps.

2.3 Health and safety rep functions

The OHS Act states that all activities in connection with the designation, functions and training of health and safety reps should take place during ordinary working hours, any time *reasonably* spent doing this should be viewed as time spent on duties as an employee. The main responsibilities of a health and safety rep are to:

Represent fellow employees' interests in terms of workplace health and safety. In summary, this means:

- i. Monitor and report on health & safety concerns in the workplace (see 2.3.1):
and:
 - Review effectiveness of health and safety measures;
 - Identify potential hazards and major incidents;
 - Examine causes of incidents, in collaboration with the employer;
 - Investigate complaints relating to employees' health or safety concerns;
 - Do regular health and safety inspections in your designated workplace;
 - Inform RU Line Manager of any health and safety concerns;
- ii. Serve on a health & safety committee (see 2.3.2):
 - Attend health and safety sub-committee meetings;
 - Discuss health and safety concerns that have not been resolved.

2. Health and safety representatives



If an employee has **agreed** with management to do an optional task (may do) then it becomes **obligatory** to do that task (shall do).

iii. The OHS Act states that health and safety reps may also be responsible for:

- Visiting incident sites and attend inspections;
- Attending investigations/formal inquiries;
- Accompanying an inspector during inspections;
- Participating in internal audits;
- Being accompanied by a technical advisor if approved by your employer

2.3.1 Quarterly health and safety inspections

▪ Reasons for regular health and safety inspections

Regular inspections play an important part in overall workplace health and safety, and help prevent accidents and injuries. Inspections enable the H&S rep to:

- Find out about employees' and supervisors' concerns regarding health and safety;
- Gain a better understanding of the workplace;
- Identify existing and potential hazards;
- Discover underlying causes of hazards;
- Monitor measures put in place to control hazards (e.g. work procedures, personal protective equipment, engineering controls, policies);
- Make recommendations to the employer for corrective action.

▪ Procedure for health and safety inspections

At Rhodes University, health and safety reps are required to:

- Do quarterly health and safety inspections (one per term) in their designated area and complete the report (see checklists below);
- Make sure Line Manager reads and counter-signs inspection report, and supports actions required;
- Keep original and send a copy to the RU Safety, Health and Environmental Officer.

Depending on the workplace, additional and/or more frequent inspections may be necessary. For example, laboratories or machinery should be inspected by specialist staff, and portable electrical equipment and portable ladders may be inspected by the relevant users.

If there is an accident/incident in the workplace, the H&S rep may also help to investigate this and complete an incident report.



Also refer to Part 4.2.2 (inspecting the workplace), Part 5.2 (recording and reporting incidents and injuries), and Part 5.3 (investigating incidents and injuries).



It is important that the H&S rep does not just repeat/copy previous inspection reports. Of course, it helps to refer back to these to check if any recommended actions were implemented.

▪ Health and safety checklists

At Rhodes University, various health and safety checklists are provided to suit the diverse activities and functions on campus. Health and safety reps can use these checklists as templates for their quarterly inspection reports, and change them to suit their particular workplace:

2. Health and Safety Representatives

- Laboratories (Science) & Health Care
- Venues (lecture halls etc)
- Theatre (Drama Dept)
- Offices
- Library
- Food Services (kitchens)
- Maintenance (grounds, workshops etc)
- Housekeeping & Cleaning Services
- Student residences (Wardens)
- Portable ladders
- Electrical appliances

2.3.2 Health and safety meetings

All health and safety representatives must serve on at least one committee, as required by the OHS Act. These meetings provide an opportunity to discuss unresolved health and safety concerns and make recommendations to University management, and also to discuss ways of promoting workplace health and safety.



Every health and safety rep must be a member of at least one committee.



Also refer to Part 3 (health and safety committees)

OHS Act, Section 17: Health and safety representatives

OHS Act, Section 18: Functions of health and safety representatives

OHS Act, General Administration Regulations 6: Negotiations and consultations before designation of health and safety representatives

RU health and safety reps: www.ru.ac.za/safety/hnsreps/rusafetyreps

RU H&S rep functions: www.ru.ac.za/safety/hnsreps/functions

RU health & safety checklists: www.ru.ac.za/safety/checklists

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3. HEALTH and SAFETY COMMITTEES



A health and safety committee must be formed when the employer has appointed two or more health and safety representatives. There may be more than one committee, to avoid excessive numbers at a meeting and to accommodate diverse working environments. The employer must provide the necessary facilities, equipment and stationery for a committee to carry out its functions.

3.1 Duties of the committee

A health and safety committee should:

- **Meet every three (3) months** or more often - the main RU health and safety committee is an institutional committee that meets four times a year, with additional meetings set where required. At RU, the sub-committees meet four times a year, usually (i) March, (ii) May, (iii) July, (iv) October;
- **Discuss incidents** in which someone was killed, injured, or became ill (section 24 incidents);
- **Make recommendations** to the employer regarding health and safety concerns;
- **Keep a record** of all recommendations for at least 3 years.

3.2 Purpose of meetings

The purpose of health and safety committee meetings is for the employer to consult with the committee "...with a view to initiating, developing, promoting, maintaining and reviewing measures to ensure the health and safety of his employees". What this means:

- **Initiating**: putting measures in place and starting systems that promote employees' health and safety.
- **Developing**: strengthening and improving these measures to ensure health and safety.
- **Promoting**: raising awareness and making sure that all employees follow health and safety measures.
- **Maintaining**: keeping up these efforts on an ongoing basis to ensure health and safety.
- **Reviewing**: checking and evaluating the success of these health and safety measures.



The committee should consist of health and safety representatives (at least 50% of the total) and employer's representatives (not more than 50% of the total).

At Rhodes University, six sub-committees report into the main RU Health and Safety Committee:

1. Offices
2. Housekeeping
3. Food Services (kitchens)
4. Maintenance (grounds, workshops, etc)
5. Laboratories (Science) and Health Care
6. Student residences (Wardens, under Division of Student Affairs)



OHS Act, Section 19: Health and safety committees

OHS Act, Section 20. Functions of health and safety committees

RU health & safety committees: www.ru.ac.za/safety/committees

Dates of meetings: www.ru.ac.za/safety/committees/meetingdates

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4. RISKS and HAZARDS

It is important to identify any hazards in the workplace, assess the associated risks, and take appropriate steps to remove or minimise them.

The employer must, as far as is reasonably practicable, make employees aware of any health and safety hazards attached to any work that they do, as specified in the OHS Act section 13. The employer must also provide, and ensure that employees use, the necessary precautionary measures associated with these hazards.

4.1 Hazards

Hazard = a source of or exposure to danger, that can cause injury, illness or death. Hazards are generally considered to be unsafe conditions or unsafe acts, but a more complex perspective is summarised in Part 4.1.3 below.

4.1.1 Unsafe conditions

There are many causes and contributing factors in workplace incidents. Here are some examples of unsafe conditions which could play a role in causing an accident:

- Disorderly/messy work area
- Overcrowded work space
- Poor ventilation
- Faulty equipment
- Protective clothing not available
- Loose items
- Slippery floor
- Moving machinery
- Insufficient lighting
- Hazardous substance storage.

4.1.2 Unsafe acts

Here are some examples of unsafe acts which could play a role in causing an accident:

- Working without safety equipment or protective clothing
- Working without correct skills or knowledge
- Working in a dangerous area
- Working in a rush
- Doing unauthorised work
- Working with items unsecured
- Leaving items standing in an unsafe place
- Working on moving machinery
- Fooling around or taking chances.



Safe working behaviour + safe environment = less chance of accidents.

4.1.3 Hazard classification

For your interest, a more complex perspective classifies hazards according to the following categories:


- **Physical hazards:** such as noise, vibrations, temperature, humidity, dust levels, electricity, lighting, radiation, working at heights, unguarded machinery, moving machinery parts, items that cause slipping or tripping, etc.
- **Chemical:** such as gases, chemical dusts, liquids, fumes, mists, vapours.
- **Biological:** such as blood-borne infections, viruses, bacteria, fungi, insect bites, faeces, poisonous plants and animals.
- **Ergonomic:** such as poorly adjusted workstations and chairs, poor posture, use of force, repetitive actions.
- **Psycho-social:** such as work pressure, job security, job satisfaction, management style, health issues, personal stress.



No person under the influence of alcohol or drugs shall enter any premises where machinery is used (OHS Act, General Machinery Regulations, Schedule D).

4. Risks and Hazards

Some examples of hazards and their potential impacts:

Hazard		Potential impacts
1. Hot surface	Unsafe Condition	i. burn injury; ii. infection; iii. damaged equipment; etc.
2. <i>Touching</i> a hot surface	Unsafe Act	i. burn injury; ii. infection; iii. damaged equipment; etc.
3. Bloody material	Unsafe Condition	i. infection by blood-borne pathogen; ii. HIV/AIDS; iii. hepatitis B virus; iv. long-term health condition; etc.
4. <i>Unprotected</i> handling of bloody material	Unsafe Act	i. infection by blood-borne pathogen; ii. HIV/AIDS; iii. hepatitis B virus; iv. long-term health condition; etc.
5. Exposed moving part on machine	Unsafe Condition	i. injury & blood loss; ii. amputation; iii. infection; iv. damaged machinery; etc.

4.2 Risks

Risk = likelihood/probability that injury or damage will happen, if a situation is out of control.

4.2.1 Risk assessment

The employer is responsible for identifying hazards in the workplace and assessing the associated risk. It may take the form of baseline risk assessments, or issue-based risk assessments, or continuous risk assessments – which include quarterly health and safety inspections.

At Rhodes University, Managers or Heads of Department should ensure that risk assessments are carried out. They should involve relevant staff, and follow the basic steps:

- i. Identify the hazards;
- ii. Identify who might be harmed and how (potential impacts);
- iii. Evaluate the risks and decide on control measures;
- iv. Record the chosen control measures and implement the plan;
- v. Review the assessment and update where required.



It is better to be careful a hundred times than to get killed once.



Also refer to Part 1.3.5 (managers and heads of department), Part 8.1.3 (PPE – personal protective equipment), and Part 8.2.2 (risk management).

4.2.2 Inspecting the workplace

Health and safety reps play an important role in helping the employer identify hazards, through regular health and safety inspections. For this reason, when doing inspections, health and safety reps should:

- **Be thorough:** Set time aside to do an inspection, and check each area carefully.
- **Check all areas:** Look for hidden dangers – items that are out-of-the-way or not visible.
- **Look for redundant items:** Report equipment or material that is not being used, so that it can be removed and/or used elsewhere.
- **Be detailed:** Make notes of exactly where each hazard was found. Take photographs!
- **Look for root causes:** A hazard is a symptom of a deeper root cause; it can only be eliminated if the root cause is identified and eliminated.

4. Risks and Hazards

- **Prioritise**: Give highest priority to dealing with hazards that pose a greater risk.
- **Act immediately on urgent hazards**: Ensure that immediate action is taken to address a hazard that poses a serious threat to health and safety.



Also refer to Part 2.3.1 (quarterly health & safety inspections) and Part 5.3 (investigating incidents and injuries).



As soon as you see a mistake and don't fix (or report) it, it becomes your mistake.



OHS Act, Section 8: General duties of employers to their employees

OHS Act, Section 13: Duty to inform

OHS Act, Section 18: Functions of health and safety representatives

Risk assessment: www.ru.ac.za/safety/resources/riskassessment

Safety monitoring at RU: www.ru.ac.za/safety/checklists

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5. INCIDENTS and ACCIDENTS



In this chapter, we will consider incidents and accidents in terms of health and safety concerns, and also in terms of compliance with the OHS Act. The primary aim of the OHS Act is to *prevent* workplace incidents and accidents.

Some say an 'accident' is a type of 'incident'; others say 'accidents' and 'incidents' are different:

- *Accident*: An event that results in injury or ill-health.
- *Incident*: A near miss event or an undesired circumstance which has the *potential* to cause injury, ill-health, damage or other loss.

Regardless of how we define them, incidents/accidents have unpredictable and harmful results. The employer must investigate the cause and take corrective action to prevent it from happening again.



Accidents do not just happen – they are caused.



Also refer to Part 5.3 (investigating incidents and injuries)

5.1 Incidents and injuries – what all employees need to know

The Human Resources Division, and every Line Manager, should ensure that employees know all University rules and procedures. This includes guidelines on *who* to contact in the event of an incident or injury.

The OHS Act (section 13) states that the employer (represented by HR or a Line Manager) has a duty to inform a health and safety representative as soon as possible if there has been an incident in the workplace.



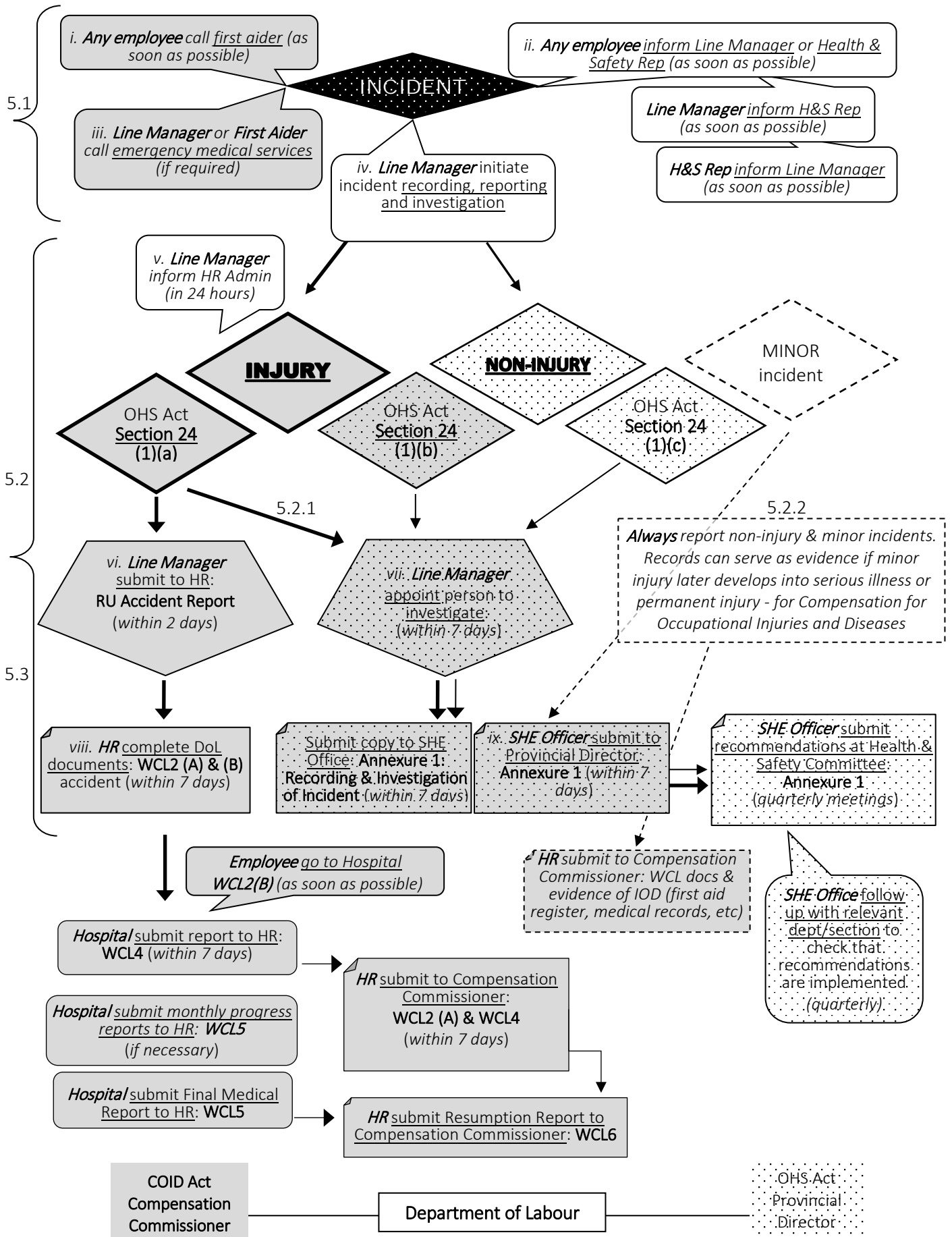
Always report any incident/accident, even if there was no injury. Failure to report as soon as possible implies that you forfeit any right to compensation (COID Act).

- **Procedures at RU:** procedures to follow in the event of incidents or injuries (see diagram on next page)
 - Any employee call first aider [if injury].
 - Any employee inform Line Manager (or Health & Safety Rep – who informs Line Manager) *as soon as possible* [injury or non-injury].
 - Line Manager or First Aider call emergency medical services* if required [if injury].
 - Line Manager inform Health & Safety Rep and initiate incident recording, reporting and investigation [injury or non-injury]
 - Line Manager phone HR Admin within 24 hours regarding Injury on Duty [if injury].
 - Line Manager submit RU accident report to HR Admin within 2 days [if injury].
 - Line Manager ensure recording and investigation of incident + copy sent to SHE Officer [injury or non-injury].
 - HR ensure COID documentation is completed and sent to DoL Compensation Commissioner [if injury]; SHE Officer ensure record of investigation is completed and sent to DoL Provincial Director [section 24 incidents].



To claim for compensation, an employee should have been on duty doing a task that s/he was employed to do, at the time of a section 24 (a) or (b) incident. The Department of Labour assesses each claim, guided by the COID Act.

Summary of Rhodes University procedures



- **Emergency medical services:**

Visit the page www.ru.ac.za/safety/emergencies for a document – *RU Emergency Contact Numbers* – which provides a list of emergency numbers, including emergency medical services.

You are encouraged to add names of key contacts within your building/department, and place the list on your noticeboards.



Dealing with incidents and accidents at RU: www.ru.ac.za/safety/incidents

What to do in an emergency at RU: www.ru.ac.za/safety/emergencies

5.2 Recording and reporting incidents and injuries

This section provides more detail regarding actions required in the event of incidents and injuries. RU Line Managers and Health and Safety Reps are encouraged to familiarise themselves with these procedures.

5.2.1 Section 24 incidents: report to Dept of Labour

Serious incidents/accidents are addressed in section 24 of the OHS Act. These include incidents where the affected person required medical treatment other than first aid, and certain types of near miss incidents.

The OHS Act categorises section 24 incidents as follows:

- **Section 24(a) and (b): injury or ill-health incidents** (Injury on Duty)

Such incidents include:

- When a person dies;
- When a person becomes unconscious;
- When a person loses a limb or part of a limb;
- When a person is injured/becomes ill, or is likely to die or suffer permanent physical defect;
- When a person is unable to work for 14 days or longer;
- When a 'major incident'/disaster occurs. *

* A 'major incident'/disaster is defined by the OHS Act as: "an occurrence of catastrophic proportions, resulting from the use of plant or machinery, or from activities at a work place". This would result in the activation of emergency procedures – see the Rhodes University Emergency Management Plan (also refer to Part 7.3.5, campus-wide crisis).

- **Section 24(c): near miss incidents**

The OHS Act defines a near miss as "any unforeseen event involving one or more hazardous substances which, but for mitigating effects, actions or systems, could have escalated to a major incident". Such incidents involve property damage but no personal injury, where:

- The health or safety of any person was *endangered*;
and
- A dangerous substance was spilled;
- There was an uncontrolled release of any substance under pressure;
- Machinery ran out of control;
- There were flying, falling or uncontrolled moving objects.

Section 24 incidents must be reported by the employer to the Department of Labour (DoL) Provincial Director within seven (7) days. If not, the employer will be guilty of a criminal offence and will have to pay a penalty.

- **Recording section 24 incidents**

Findings of the investigation must be recorded within seven (7) days:

5. Incidents and Accidents

- **Annexure 1**: this *Recording and Investigation of Incident* form is prescribed by the OHS Act, General Administrative Regulations (9).
- A copy of the report must be sent to the **SHE Office** to ensure that due process is followed.
- The **Health and Safety Committee** should examine the report to consider and make relevant recommendations.
- Records must be kept on file for at least **three years**.



OHS Act, Section 24: Report to inspectors regarding certain incidents

OHS Act, Section 13: Duty to inform

OHS Act, Section 31: Investigations

OHS Act, General Administrative Regulations 8: Reporting of incidents and occupational diseases

OHS Act, General Administrative Regulations 9: Recording and investigation of incidents

OHS Act, General Machinery Regulations 7: Reporting of incidents in connection with machinery

COID Act, Chapter V: Claims for compensation, 39: notice of accident by employer to commissioner

Department of Labour: www.labour.gov.za

RU dealing with incidents & accidents: www.ru.ac.za/safety/incidents

Injury on Duty: www.ru.ac.za/humanresources/supportstaff/healthandwellness/safetyandinjuryonduty

▪ **Recording non-employee incidents/accidents:**

The provincial director must be notified if there is an incident involving a non-employee – as prescribed by the OHS Act General Administrative Regulation 8(3) – including the following information:

- Name of injured person;
- Address;
- Name of employer/entity;
- Address;
- Phone number;
- Name of a contact person;
- Names of witnesses;
- Details of the incident, including:
 - i) What happened;
 - ii) Place where it happened;
 - iii) Date and time when it happened;
 - iv) How it happened;
 - v) Why it happened.

5.2.2 Minor incidents: report internally

A minor or non-disabling injury incident involves personal injury that requires some form of treatment, but does not result in disability (temporary or permanent), and no workdays are lost. The affected person may need to stop working for a short time, e.g. to receive first aid.

▪ **Recording minor incidents**

The following serve as records:

- **Annexure 1**: this official *Recording & Investigation of Incident* form is the recommended form of record-keeping, as it complies with the OHS Act.
- **First aid register**: include date, name of injured employee, nature of injury, first aid items used, and name of first aider, when recording details of first aid given for minor injuries.
- **Medical records**: where medical treatment was given by a professional medical practitioner.
- **RU accident report**: the form used according to HR's *Procedures for Injury on Duty*.



Always record non-disabling injury incidents, even if they seem to be minor at the time. It can serve as important evidence in case a minor injury develops later into an unexpected and serious illness or permanent physical defect, which may require Compensation for Occupational Injuries and Diseases.



Also refer to Part 1.1.1 (accident statistics), Part 1.1.3 (prevention is better than cure), Part 4 (risks and hazards), Part 8.1 (health and safety in practice), and Part 8.2 (management control).

5.3 Investigating incidents and injuries

Incident investigation is recognised as best practice – it helps the employer find out what happened, who was affected, where, when, how and why it happened.

Armed with this knowledge, appropriate steps can be taken to prevent an (even more serious) incident in future. The employer must, as far as reasonably practicable, implement the necessary actions to prevent such an incident occurring again.

▪ Considerations for investigations:

Any incident should be investigated as soon as possible; details can be lost or forgotten! The person conducting the investigation may be the user of the machinery concerned, or a member of the health and safety committee, or a health and safety rep in a particular work area, or a person appointed by management. The investigator should:

- Secure the scene (to preserve evidence of what caused the incident, and also to prevent any additional injuries);
- Take note of physical evidence;
- Take note of eyewitness accounts;
- Conduct interviews with affected persons;
- Build up a consistent account of the incident.

▪ Information to be taken into account:

The investigator may need to look at the following information and documentation:

- Records of workplace inspections;
- Policies and procedures applicable;
- Records of risk assessments (relevant to the work being done);
- Equipment operation manuals;
- Records of training (when, and relevance to the work being done);
- Condition of any equipment involved;
- Records of equipment maintenance (preventative maintenance and servicing, or any recurring issues or failures);
- Records of workplace accidents/incidents (and any similar incidents/accidents/injuries in the past?).

▪ Common causes of incidents/accidents:

In most cases, people tend to look for somebody or something to *blame*. However, it is more important to look for the *root cause* – so that we can learn from the incident. Near miss incidents should also be reported and taken seriously – so we can learn from the experience. Armed with the knowledge of how and why it happened, the employer can take appropriate steps (such as making improvements to working conditions and/or practices) to prevent an (even more serious) incident happening again.

Here are a few examples of some common causes of accidents:

- **Lack of planning:** If work is done without proper planning on how best to work safely and effectively, there is more chance of an accident. **Recommendation:** Plan your work, and then work your plan.

5. Incidents and Accidents

- **Lack of instructions:** If work begins before employees know exactly what to do (or perhaps they are too scared to ask questions about the job), there is more chance of an accident.
Recommendation: Employer, provide training. Employees, ask questions, it's the smart thing to do!
- **Poor housekeeping:** If a workplace is disorderly or messy, employees also get disorderly and messy, and there is more chance of an accident.
Recommendation: Keep the workplace well maintained and orderly.
- **Taking shortcuts:** Shortcuts cut life short! If work is done unsystematically and misses out important steps, there is more chance of an accident. **Recommendation:** Follow standard work procedures.
- **Casual attitude:** Being casual can lead to a casualty! There is more chance of an accident when employees think they are too clever to listen to instructions or they think "it will never happen to me", or they work without correct safety procedures and PPE/safety equipment.
Recommendation: Follow safety procedures and use PPE.
- **Distractions:** If employees are distracted (e.g. using a cell phone, chatting) and lose focus, there is more chance of an accident. Don't become a statistic because you took your eyes off the task "just for a minute."
Recommendation: Stop if you must deal with something important, or keep your focus on your work.
- **Stress:** If employees are tired or worrying about health or troubles at home, there is more chance of an accident or injury. Don't let your worries burden you day and night!
Recommendation: Encourage the employee to seek help or counselling.



Prevention is better than cure.

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6. FIRST AID



The OHS Act requires the employer to provide prompt first aid treatment in the case of injury or emergency. First aid aims to:

- Preserve life;
- Prevent the injury or illness from becoming worse;
- Promote recovery.



***First aid definition:** emergency help, using readily available materials, given to a person who is injured or suddenly becomes ill, until professional medical services are available.*

6.1 First aid kits

The Manager or HOD in each section/department/division/hall at Rhodes University should ensure that a first aid kit is available and accessible in their building/area on campus, wherever there are five (5) or more people in the building. Each department/division/section should manage its own first aid supplies

The location of the first aid kit should be clearly indicated with signage, and a staff member (usually the workplace first aider) designated to inspect and manage the contents of the first aid kit.

- **Number of first aid kits:** The number of first aid boxes in the workplace should be determined by the employer. The Manager/HOD should take into account the nature of the work, types of injuries that are likely to occur, and the number of employees in that particular workplace.
- **Contents of first aid box:** The minimum contents required in a first aid box are stipulated in the OHS Act, General Safety Regulations. Contents will vary according to the nature of work, e.g. a researcher doing fieldwork has different needs from an office administrator, or someone working in a kitchen or in a workshop.
- **First aid register:** A *First Aid Register* (e.g. a small notebook) should be kept with the first aid box. The first aider who attends to the injury should record the following details: date, name of person receiving first aid, brief description of injury/illness, first aid items used, and name of first aider.



Also refer to Part 5.2.2 (minor incidents: report internally).

6.2 First aiders

The OHS Act requires all workplaces with ten (10) or more employee to have first aiders. A first aider is any person with first aid training who takes charge of an emergency scene and gives first aid. A first aider is not able to provide professional medical services.

- **Number of first aiders:** There should be at least one first aider, with a valid certificate of competency in first aid, per 50 employees – or per 100 in the case of shops or offices.
- **RU first aiders:** A list of all certified first aiders on campus is kept up-to-date on the RU safety website. Managers/HODS in each building should ensure that an up-to-date list of nearby first aiders is visible near their first aid box.
- **First aid training:** Rhodes University staff who work full-time and intend to remain at the University for the foreseeable future may apply to go on a first aid course. In Grahamstown, first aid training is offered by St John Ambulance Centre in Hill Street. Level 1 training is the standard requirement; some people may also continue on to Level 3. On successful completion of the course, participants receive a Document C accredited Certificate of Competency in First Aid, which is valid for three years.
- **First aider responsibilities:** Rhodes University employees who are first aiders, as part of their workplace responsibilities, are obliged by law to respond to any emergency situation in the workplace. They are not obliged to provide first aid outside the workplace.

6. First Aid



In first aid training, a person who is injured or suddenly becomes ill is referred to as a 'casualty'.

**Think
before
you
act!**

It was a very hot day and a man fainted in the middle of a busy intersection, which caused traffic to come to a standstill. A woman rushed to help him. When she knelt down to loosen his collar, a man stepped forward, pushed her aside and said "It's ok lady, I've done a first aid course."

The woman stood up and watched as he checked for normal breathing and got ready to give the ill man artificial respiration. At this point she tapped him on the shoulder and said, "When you get to the part about calling a doctor, I'm already here."



OHS Act, General Safety Regulations 3: First aid, emergency equipment & procedures

OHS Act, General Safety Regulations Annexure: Minimum contents of a first aid box

OHS Act, General Administrative Regulations 9: Recording and investigation of incidents

Rhodes University first aid: www.ru.ac.za/safety/firstaid

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7. FIRE SAFETY



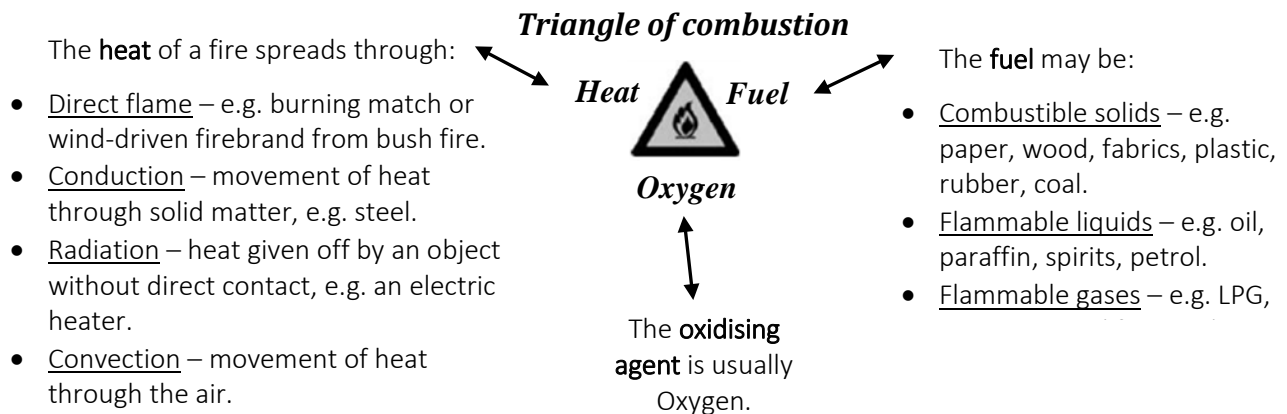
Lives lost in a fire can never be replaced. Many organisations in South Africa never fully recover after a major fire – losing orders, contracts, key employees and reputation – or may have to close down, resulting in lost jobs and services to the community. This is why it is important to focus on workplace fire prevention, as well as being prepared for the unexpected: having an emergency action plan.

7.1 Causes and prevention of fire

Fire is a kind of chemical reaction, involving three major components – illustrated as the three sides of a triangle.

7.1.1 Chemistry of fire and spread

A fire needs fuel + oxygen + heat to start, and to keep burning. It is a kind of chemical reaction, involving these three major components – illustrated as the three sides of a triangle.



Flashover – a fire fighter’s greatest fear. As the smoke and heat from a fire in one room build up, a superheated thermal layer spreads – by convection – causing the rest of the building to burst into flame after only three or four minutes!

7.1.2 Knowing the type of fire

If you know the type of fire you are dealing with, it helps you decide how best to control it. Fires are classed according to the type of material that is burning – most commonly: A (solid organic), B (flammable liquid/gas), C (electrical), or D (metal). This is summarised in **Table 1** (classes of fire) on the next page.

7.1.3 Links between cause and prevention of fire

The major causes of fires – based on the findings of a study of 20,000 industrial fires – are summarised in **Table 2** (causes and prevention of fire). Notice how we can learn from past accidents: by establishing the causes, we can make recommendations for the prevention of further fires in our workplaces.

Electrical problems were found to be the main cause of fires (21%), followed by friction (14%), reaction between different substances (12%), open flames (9%), smoking (8%), spontaneous ignition (8%), hot surfaces (7%), sparks (6%), and overheated materials (3%). The last 12% were attributed to a variety of less common, or unknown, causes.

The study found that most fires started while the premises were unoccupied.

In private homes, the ten appliances most likely to catch fire are the washing machine, tumble dryer, dishwasher, cooker, fridge/freezer, central heating, microwave, toaster/grill, TV and electric blanket.

A common mistake made by many people is to place a hot appliance too close to furniture, such as a heater under a desk. Another dangerous mistake is to block off the ventilation area of electrical equipment – this causes it to overheat and catch fire.

Table 1: Classes of fire

CLASS OF FIRE	MOST SUITABLE extinguisher	OTHER suitable extinguishers
<p><u>A (solid organic materials):</u> solid materials such as wood, paper, coal, plastic and fabrics.</p>	<p>Water: has a cooling effect, but can conduct electricity. Fire hose reels rely on a functioning municipal water supply. Mostly used in stockrooms, schools, offices, etc. <u>Only</u> use to fight class A.</p>	<p>Foam: floats on flammable liquids to tame the fire and helps prevent re-ignition. To clean up the affected area, it must be washed away and left to evaporate. Mostly used in garages, homes, vehicles, workshops, etc. Can be used to fight class A & B.</p> <p>Dry powder</p>
<p><u>B (flammable liquid/gas):</u> oil, petrol, paraffin, spirits, benzene.</p>	<p>Dry powder/DCP: is a multipurpose dry chemical extinguisher, filled with a yellow powder, mono ammonium phosphate, which smothers the fire and absorbs some of the heat. Non-conductive but mildly corrosive if moisture is present, so proper clean-up is essential. Mostly used in schools, general offices, hospitals, homes, etc. Can be used to fight class A, B, C & D.</p>	<p>Fire blanket: is made of fire-retardant material such as fibreglass or wool. The blanket is placed over the fire to cut off the supply of oxygen to the fire. Mostly used in kitchens and laboratories.</p> <p>Carbon dioxide Foam <u>Do not</u> use water!</p>
<p><u>C (electrical):</u> involving contact with live electrical installations, e.g. short-circuiting machinery and overloaded electrical cables.</p>	<p>Carbon dioxide: CO₂ displaces O₂ (oxygen) and smothers the fire. It has limited cooling power. Environmentally friendly. Leaves no residue, so clean-up is not needed. Mostly used where contamination is to be avoided, e.g. kitchens, computer rooms, laboratories, etc. Not very effective on class A fires (only temporarily displaces oxygen). Can be used to fight class B & C.</p>	<p>Dry powder <u>Do not</u> use water!</p>
<p><u>D (metal):</u> involving combustible metals, e.g. magnesium & titanium (used in lightweight equipment), aluminium (in some pots and pans, etc) – mostly in the presence of sawdust, machine shavings & other metal shavings.</p>	<p>Dry powder or special extinguisher approved for use on combustible metals.</p>	<p><u>Do not</u> use water (or other common fire-fighting materials), as it can ‘excite’ combustible metal fires and make them worse.</p>

We will find out more about some of the main causes of fire in *Table 2* on the next page. The column labelled “PREVENTION” provides some recommendations to prevent fire, but note that this is not an exhaustive list.

In your particular workplace, you need to think carefully about the specific types of fire hazards that are present. You need to give careful thought to what kinds of precautions you should have, in order to prevent fire.

Table 2: Causes and prevention of fire

CAUSES (fire hazards)	SOURCE OF IGNITION	PREVENTION (fire precautions)
<ul style="list-style-type: none"> ▪ Poor maintenance of electrical appliances. ▪ Overloaded circuits. ▪ Misuse/abuse of appliances. ▪ Use of incorrect appliances. 	1. Electrical 21%	<ul style="list-style-type: none"> ▪ Ensure wall sockets and multi-plug adaptors are not overloaded. ▪ Switch off appliances when not in use. ▪ Never run cables under carpets. ▪ Have temporary wiring replaced. ▪ Get an electrician to check all wiring on a regular basis.
<ul style="list-style-type: none"> ▪ Hot bearings in machines. ▪ Broken or badly fitted machine parts. ▪ Badly adjusted power drives and conveyors. 	2. Friction 14%	<ul style="list-style-type: none"> ▪ Machinery & equipment should be inspected & tested on a regular basis. ▪ Ensure mechanical equipment is properly maintained. ▪ Report any defects immediately.
<ul style="list-style-type: none"> ▪ Metal particles mixing with materials being processed, causing mechanical sparks. 	3. Reacting substances 12%	<ul style="list-style-type: none"> ▪ Machinery & equipment must be inspected & tested on a regular basis. ▪ Ensure mechanical equipment is properly maintained. ▪ Report any defects immediately.
<ul style="list-style-type: none"> ▪ Misuse/abuse of gas & oil burners. ▪ Abuse & misuse of cutting & welding torches, petrol/paraffin blowtorches. 	4. Open flames 9%	<ul style="list-style-type: none"> ▪ Remove combustible material from area where open flames are used. ▪ Always have a fire extinguisher ready for use. ▪ Personnel doing cutting & welding must be fully trained. ▪ Hot work permits must be issued where required.
<ul style="list-style-type: none"> ▪ Smoking in areas where combustible material is present. ▪ Dropped cigarettes/matches & incorrect disposal. 	5. Smoking 8%	<ul style="list-style-type: none"> ▪ Provide sufficient ashtrays & designated smoking areas. ▪ Empty all ashtrays into metal containers. ▪ Adhere to no-smoking zones. ▪ Keep matches away from children & individuals lacking control.
<ul style="list-style-type: none"> ▪ Oil waste and rubbish. ▪ Build-up of dust/deposits in tumble driers, ducts & flues. ▪ Stored low-grade material waste (mixed paper, cardboard, newspaper, magazines, etc). 	6. Spontaneous ignition 8%	<ul style="list-style-type: none"> ▪ Ensure oil-soaked materials are not left lying around. ▪ Discard oil-soaked materials in metal bins with lids. ▪ Sawdust used as absorptive material on the floor should be swept up and discarded immediately.
<ul style="list-style-type: none"> ▪ Hot surfaces of heaters, irons boilers, hot pipes & flues, etc, too close to materials which can catch fire. 	7. Hot surfaces 7%	<ul style="list-style-type: none"> ▪ Never leave heaters, irons, etc, on when unattended. ▪ Keep combustible materials away from hot surfaces.
<ul style="list-style-type: none"> ▪ Sparks from burning rubbish, furnaces, braais, campfires, angle grinders, etc. ▪ Sparks from industrial vehicles. 	8. Sparks 6%	<ul style="list-style-type: none"> ▪ Keep flammable liquids & combustible materials away from area where there is burning of rubbish, braais, campfires, etc. ▪ Industrial vehicles should be static-proof when working in vicinity of flammable gases.
<ul style="list-style-type: none"> ▪ Abnormal temperatures in industrial processes. ▪ Heated flammable liquids & substances in driers. 	9. Overheated materials 3%	<ul style="list-style-type: none"> ▪ Do not put materials soaked with flammable liquids into driers. ▪ Store cleaning fluids & other flammable liquids in an approved flammable store. ▪ Know the safety info of each liquid – use the material safety data sheet (MSDS).

7.2 Action in the event of fire

7.2.1 Response to fire

If you see a fire, no matter how small, you must immediately alert the local fire department, as they have trained and equipped professionals who can deal with it. Fires spread and get out of control very quickly! Think of the four golden rules:

Fire Action! 4 Golden Rules

In the event of a fire or other emergency, remember four golden rules:



1. **Alarm:** Raise the alarm to alert others – siren/whistle /panic button/air horn/shout “Fire, get out!”



2. **Emergency Services:** Call no matter how small.

Save these numbers on your cell phone:

! CPU Emergency **046 603 8999**

! Makana Fire & Rescue **046 622 4444**



3. **Extinguish:** Only try to extinguish if safe to do so. *



4. **Evacuate:** Everyone must get out. Crawl if necessary, to avoid smoke/heat suffocation.



! Help people with disabilities.



! Close windows and doors if you can.



! Don't take risks: do NOT use lifts; do NOT open closed doors (there may be fire in the room); do NOT go back inside – until instructed by Fire Officer or Emergency Coordinator.



! Meet at your Assembly Point for roll call.



First think about the safety of people, then the safety of the building and its contents.

EMERGENCY NUMBERS

save on your cell phone!

Fire Department: 046 622 4444 / 046 603 6000

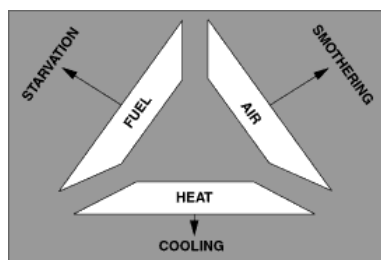
RU Campus Protection: 046 603 8999 (EMERGENCIES) 046 603 8146/7 (CPU office).

7.2.2 Extinguishing fire

Principles of firefighting

Remember the *Triangle of Combustion* (see Part 7.1.1) – we aim to remove one (or more) sides of this triangle to put out a fire.

Starvation: removes fuel from the fire – not possible in most cases.



Smothering: eliminates oxygen supply (air) to the fire – use dry powder, fire blanket or sand.

Cooling: eliminates the heat, so ignition temperature cannot be reached – use water or remove the source of heat (if safe).

Types of fire extinguishers

If you know the type of fire you are dealing with, it helps you choose the correct fire extinguisher. Remember that fires are classed according to the type of material that is burning (*Table 1*). Look for the symbol on the fire extinguisher (A, B or C, or all of these) to check which type of fire it can be used on.

The most common types of extinguishers at Rhodes University are DCP (dry powder) and fire hose reels (water), but in certain areas you will also find CO₂ (computer labs) and fire blankets (kitchens).

Table 3: Types of extinguishers used on class A, B, C and D fires.

Extinguisher type:	WATER	POWDER	CO ₂	FIRE BLANKET
Fire class 				
 Solid materials	✓	✓	✓	
 Flammable liquids	✗	✓	✓	✓
 Electrical	✗	✓	✓	
 Metal	✗	✓	✗	✗

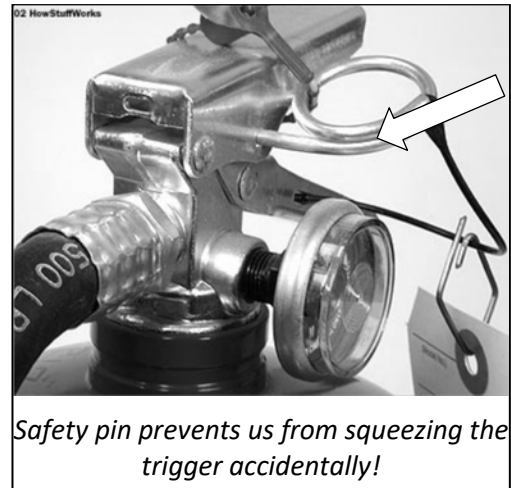


It is against the law to use safety equipment – such as fire extinguishers – for anything other than its intended purpose (OHS Act, Section 38). If found guilty, a person could be fined up to R50,000.

▪ **Using a hand-held extinguisher**

Adopt the **PASS** principle:

- P** – Pull the pin
- A** – Aim the nozzle at base of fire
- S** – Squeeze the trigger
- S** – Sweep the nozzle from side to side



Only attempt to extinguish a fire if:

- ◀ It is small and not spreading;
- ◀ You know how to use the fire extinguisher;
- ◀ You have your back to a known SAFE EXIT.



Do NOT use the fire-fighting equipment in your building for demonstration purposes. Contact the University's Campus Protection Unit or Engineering section for demo equipment. The SHE Officer can also assist with fire safety talks and demonstrations.



Also refer to www.ru.ac.za/safety/fire/extinguishers

7.3 Planning for better fire safety

It is of utmost importance to focus on **preventing** workplace fires. It is equally important to **be prepared for an unexpected emergency**, by having an emergency action plan

7.3.1 Safety inspections

An important aspect of workplace fire safety is to **reduce the risk** of fire by inspecting for hazards. The Fire Department may come to inspect premises at Rhodes University.

Regular monthly checks by fire marshals play a valuable role in ensuring that the workplace remains fire safety compliant. Adopt the **CARE** principle:

- C** – check: Do regular checks in the workplace for fire hazards – such as those listed in **Table 2** (causes and prevention of fire) and in the workplace health and safety inspection checklist – see Part 2.3.1 (quarterly health and safety inspections) and Part 4.2.2 (inspecting the workplace).
- A** – act: Ensure that action is taken as soon as possible to address all hazards you find – either immediate action, or calling in assistance or maintenance staff to implement the necessary fire precautions.
- R** – report: Communicate your findings, recommendations and actions to your workplace health and safety rep– who should record this information in the workplace health and safety inspection report.
- E** – educate: Alert your colleagues of any fire safety concerns, and remind them of ways to improve fire safety – at staff meetings or using your workplace emailing list.

7.3.2 Fire-related resources

▪ **Fire alarms**

It is vital to have a distinctive and recognized system for signalling to all employees that they should evacuate the workplace, or carry out other actions as per the emergency plan. If there is no automatic alarm, the Director/HOD/Manager must ensure that there is some way of warning occupants if their lives are in danger.

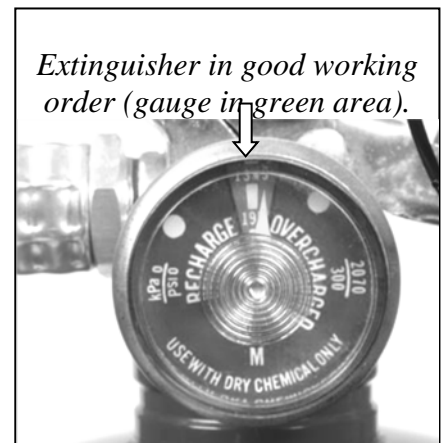
- **Manual evacuation alarm:** Anything that makes a loud noise, e.g. referee's whistle, hand bell, megaphone with siren, air horn, break-glass box, etc. Until such time as a building has an automatic alarm installed, a manually set off device is better than nothing.
- **Automatic fire detection alarm:** A fire alarm system with a smoke/heat/gas detector that sets off automatically in response to smoke/heat/gas. At RU, these have a direct radio link to the Campus Protection Unit, so if the fire alarm system is set off, the CPU will automatically receive a signal.
- **Signal tests:** If your building has an automatic fire detection alarm, you should contact the CPU to arrange for a signal test session, for example, before you hold a fire drill in your building.

At Rhodes University, the *Electrical* section of Infrastructure and Operations is responsible for installing and maintaining fire alarms.

▪ **Firefighting equipment**

At least once a month, fire marshals should check fire hydrants and hand-held fire extinguishers in their area, as follows.

- Check that it is properly mounted;
- Check the label to see when it was last inspected;
- Check that access to the extinguisher is not blocked;
- Check the gauge, if its position has moved out of the green into the red area, it requires servicing – contact the Engineering section;
- Check that signage is in place to indicate location of fire-fighting equipment.



The *Engineering* section of Infrastructure and Operations at RU is responsible for supplying and maintaining fire-fighting equipment – approximately 450 fire hose reels and 1500 handheld fire extinguishers – on campus. They contract a certified service provider to inspect and service all fire-fighting equipment on an annual basis.

▪ **Escape routes and fire exits**

Every person at Rhodes University is responsible for adhering to the rules by keeping escape routes and exits clear of furniture, boxes and other items.

- **Exit doors:** Must be kept clear of obstructions, and should open with one single movement.
- **Escape routes:** Should be clearly marked and kept clear, so that occupants can get out quickly and safely.

Infrastructure and Operations should be contacted for services and support with regard to the above. Also:

- **Emergency lighting** (independent of mains): Should be provided along all escape routes and at all exit doors – *Electrical* section.
- **Signage** (white lettering – minimum of 75 mm in height – on a red background): should be in place to indicate escape routes and exits – *Signage* section.
- **Fire escapes:** External fire escapes (stairs or ladders) may be required in some cases (large buildings with only 1 internal stairwell) – *Engineering* section.

7.3.3 Emergency action plan

Rhodes University's leadership is responsible for leading the emergency management planning process – which includes (i) reducing risks and hazards; (ii) preparing resources to respond to any emergency; (iii) responding to the emergency event, and (iv) returning the workplace to normal after the event.

All buildings at Rhodes University should have a building-specific emergency evacuation procedure, and all occupants should be familiar with these procedures.

▪ **Emergency coordinator**

The Emergency Coordinator should be a senior member of staff, usually a Director, HOD or Manager, whose responsibilities include the following:

- **Coordinating emergency planning**, including calling a workplace meeting* of the emergency team to plan and review workplace emergency procedures – especially before and after fire drills.
- * In larger buildings, different departments/sections/areas should cooperate to establish an emergency team and plan the building's evacuation procedures.
- **Assessing** situations and deciding whether it is an emergency that calls for action and evacuation.
- **Supervising** emergency action and evacuation.
- **Coordinating** outside emergency services, such as the local fire department and emergency medical response, and ensuring that they are available and notified in an emergency.
- **Directing** the shutdown of critical workplace systems, machinery, etc, when required.

▪ **Emergency team**

A coordinated team of responsible staff members must be in place – in all buildings and areas on campus – comprised of the following role-players:

- **Emergency coordinator**: Senior member of staff with supervisory abilities.
- **Fire marshals** (also called fire wardens/floor monitors/incident officers): Two per floor or building area (in case one is not present at the time).
- **Health and safety rep(s)**: Should be involved in emergency planning.
- **First aider(s)**: Should be involved as they need to carry the first aid kit in an emergency. Contact details of nearby first aiders should also be included, in case your own first aider is not present at the time.

▪ **Emergency action planning**

The emergency action plan should at the very least address the following important issues:

- **How to report** fire or emergency;
- **When to evacuate**, and emergency evacuation procedures and routes – including floor plans, routes for each level or area in building;
- **Emergency assembly points** – primary and alternative – approx. 50 metres away (to avoid being injured by falling or burning debris, flying glass from broken windows, etc) where all occupants should meet so that the Emergency Coordinator can check that everyone is present and safe, and give further instructions.
- **Contact details** of all important emergency services, and contact details of all role-players in your department/section/unit;
- **Procedures** of emergency team role-players in your department/section/unit – e.g. who will operate fire extinguishers, who will carry the first aid kit, who will marshal staff out of the building, check the toilets and storerooms, assist people with disabilities, monitor entrance/exit points in the building, etc.

7. Fire Safety

- **Procedures** of specific role-players in your department/section/unit – e.g. who will shut down critical workplace systems, or machinery, etc.

- **Emergency kit**

It is useful to have the following items at the ready for any emergency:

- **Reflective bib/vest:** worn by emergency team members - improve visibility;
- **Whistle or loudhailer/megaphone:** help with directing occupants;
- **Checklists** of building occupants (per area/level);
- **First Aid Box:** to deal with any injuries;
- **Torch or emergency lighting:** in case of poor visibility;
- **Cell/mobile phone;**
- **Emergency Contact List** of emergency service providers etc;
- **Drinking water.**

7.3.4 Information and training

Knowledge and understanding play an important role in reducing risks and hazards. Forewarned is forearmed! Managers or heads of department (or their designees) are responsible for ensuring that all occupants in their buildings are made aware of fire safety.

- **Fire safety talks:** RU Campus Protection Unit and the SHE Officer give fire safety talks to student residences and departments/divisions on campus, by request.
- **Fire drills:** Fire drills should be held annually at least, or quarterly in the case of residences, in all buildings – in consultation with the Campus Protection Unit – and should be attended by all staff and students. The building emergency team should meet before and after fire drills to plan and review their emergency procedures (discussed in 7.4.1 above).
- **Basic fire training:** The RU Safety, Health and Environmental Officer runs a 1-morning fire marshal course, addressing the following: a basic understanding of fire and the safety risks associated with fire, preventing fire, actions to take in the event of a fire, and elements of planning for workplace emergencies and evacuations – in preparation for the role of workplace fire marshal, or other role-player in an emergency evacuation.

7.3.5 Campus-wide crisis

Senior Management is responsible for planning and devising a coherent strategy for the university as a whole to respond to crises or major incidents on campus. The RU Emergency Management Plan should be kept up-to-date for this purpose.

Each and every Manager/HOD – as well as senior management and operational staff – should be familiar with this document and identify the necessary role-players in their area of responsibility.



OHS Act, Environmental Regulations for Workplaces 9: Fire precautions and means of egress

OHS Act, Pressure Equipment Regulations 19: Fire extinguishers

RU fire safety: www.ru.ac.za/safety/fire

RU emergencies www.ru.ac.za/safety/emergencies

RU emergency management plan: www.ru.ac.za/emergencymanagement/emergencymanagement

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WHAT TO DO IN AN EMERGENCY / FIRE

F

FIND the fire

1. If you see or smell smoke, immediately find out where it is.

I

INFORM all

2. Warn occupants as soon as possible.
 - Alarm may be automatic / manual / repeated blasts of whistle

R

REPORT to
emergency
services

3. Call **CPU EMERGENCY ext 8999** (or 8146) as soon as possible.
 - Provide the following info:
Building + Department / floor where the fire is + Your Name
 - CPU will contact Makana Fire and Rescue Services.
 - Call your Building Emergency Coordinator if possible

NEVER TRY to CONTROL a FIRE BEFORE CALLING FOR HELP.

E

EXTINGUISH
fire if safe to do
so

4. Use fire-fighting equipment to control the fire, ONLY if:
 - It is small enough to be contained, and
 - You know how to operate the extinguisher (pull out the pin!)

AVOID BEING TRAPPED: keep your back to an EXIT.

G

GET GOING

5. Even if a fire extinguisher is being used, make sure everyone starts evacuating.
IF the FIRE CANNOT be CONTROLLED SAFELY, LEAVE IMMEDIATELY.

6. Evacuate the building in an orderly manner. DO NOT PANIC:

- Check that all occupants leave the building.
- Assist anyone with mobility / hearing / sight challenges.
- Follow EXIT signs and alert others to do the same.

E

EVACUATE

If there is THICK SMOKE, keep AS LOW AS POSSIBLE, or CRAWL.

A

ASSEMBLE
outside

7. All occupants go to the Assembly Point (at least 50 metres away) at:
 - or alternative announced by Emergency Coordinator
 - Keep clear of the building

DO NOT OBSTRUCT emergency vehicles and personnel

R

RETURN only
when
instructed

8. Only return to the building once directed to do so by the Makana Fire Officer or building Emergency Coordinator.

8. PROMOTING HEALTH and SAFETY

As noted in Part 1.3 (responsibilities of the employer) and 1.4 (responsibilities of the employee) everyone plays a role in promoting safety in the workplace.



8.1 Health and safety in practice

This section gives a brief introduction to aspects that must be considered in promoting health and safety.

8.1.1 Environment

Environment refers to everything around us, including land, air, water and other living things.

▪ Natural environment

Some people think that environmental concerns are just for 'greenies'. However, social, political and economic factors also play a role.

In South Africa, laws have been put in place to protect the environment and promote *sustainability*, because the biophysical/natural environment is our life support system - it is vital for our safety, health and wellbeing.



Sustainability refers to a system where people live in such a way that there is enough for everyone, and for future generations, to have a reasonable quality of life. This means, for example, that we need to:

- Care for natural ecosystems and biodiversity;
- Use water, electricity and other resources wisely;
- Print on both sides of paper (2-sided printing);
- Buy food that is produced locally;
- Use durable shopping bags instead of plastic bags;
- Keep a container for drinking water, don't buy disposable plastic bottled water;
- Be careful about how you dispose of waste.

Consider an example:



*A **fluorescent light bulb** contains small amounts of mercury – a heavy metal. If everybody threw their fluorescent light bulbs in the bin, and all of these were dumped (and get broken) in the Grahamstown landfill site, more and more mercury would build up in the landfill site. This would slowly seep into the surrounding environment, including the groundwater. Mercury does not go away, it accumulates and can harm humans, animals, and plants.*

When we pollute our environment, we end up polluting ourselves and others around us. That is why we should use a separate system for disposing of hazardous waste like used batteries, fluorescent light bulbs and chemicals. And that is why the law requires responsible waste management practices.



Also refer to Part 8.1.4 (hazardous substances).



Environmental concerns at RU: www.ru.ac.za/environment

Environmental laws and policies: www.ru.ac.za/environment/resources/envirolegislation

▪ Work environment

The OHS Act has a number of Environmental Regulations for Workplaces, addressing various issues such as housekeeping (see 8.1.2 below), windows, lighting, ventilation, noise protection, fire precautions and means of egress (evacuation routes, fire escapes, emergency escape doors, fire-fighting equipment, etc – see Part 7.4).



OHS Act, Environmental Regulations for Workplaces 2: Thermal requirements; 3: Lighting; 4: Windows; 5: Ventilation; 6: Housekeeping; 7: Noise and hearing conservation

8.1.2 Housekeeping

Untidiness and lack of organisation can lead to accidents. Good housekeeping – keeping the workplace clear and without obstructions, etc – helps ensure that work is done without unnecessary risks.



OHS Act, Environmental Regulations for Workplaces 6: Housekeeping

8.1.3 PPE – personal protective equipment

It is important to do a risk assessment of all work activities. If an employee is working in a situation where s/he may be exposed to risk or potential risk, s/he will be required to wear personal protective equipment (PPE). Signage (see 8.1.6 below) should be put up when the use of PPE is required. As noted in Part 1.4, it is the responsibility of the employee to obey health and safety rules and procedures laid down by the employer.

Examples of PPE include:

- Safety shoes;
- Hard hats;
- Gloves;
- Aprons;
- Eye protection;
- Ear protection.



The employer may not permit any employee to work if the employee does not use the required safety equipment which has been provided.



OHS Act, General Safety Regulations 2: Personal safety equipment and facilities

PPE at RU: www.ru.ac.za/safety/resources/personalprotectiveequipment

8.1.4 Hazardous substances

Each and every lab or department that works with chemicals and other hazardous materials should have printed Material Safety Data Sheets for each chemical in that area – readily accessible (even during power failures) in case of emergency, e.g. for first aid or fire-fighting info.

The employer is responsible for limiting the amount of hazardous chemical substances or biological agents which may contaminate the working environment. At Rhodes University, there are systems in place for responsible disposal of hazardous waste such as:

- Hazardous biological waste
- Hazardous chemicals
- Toxic solvents & paint
- E-waste
- Fluorescent light bulbs
- Computers
- Cell phones
- Batteries
- Printing cartridges
- Sharps



OHS Act, Hazardous Chemical Substances Regulations 10: control of exposure to HCS

OHS Act, Hazardous Biological Agents Regulations 10: Control of exposure to HBA

RU laboratory safety: www.ru.ac.za/safety/resources/labsafety

RU responsible hazardous waste disposal: www.ru.ac.za/safety/resources/hazmat



Also refer to Part 8.1.1 (environment).

8.1.5 Gas and vessels under pressure

Work with vessels under pressure can be hazardous, for example, there might be an uncontrolled release of a substance under pressure, which could cause an injury. The employer must comply with the Pressure Equipment Regulations, and also the South African National Standards – which provide requirements for handling, storing and maintaining LPG (liquefied petroleum gas).



OHS Act, Pressure Equipment Regulations; General Machinery Regulations

SANS 10087-1, 2004 (Edition 4): The handling, storage, distribution and maintenance of liquefied petroleum gas in domestic, commercial, and industrial installations

OHS Act, Section 24: Report to inspectors regarding certain incidents

Dealing with incidents and accidents: www.ru.ac.za/safety/incidents

8.1.6 Signage

According to the South African Bureau of Standards, the following system applies to safety signage:

- **INFORMATION – general:** WHITE symbol/writing on GREEN (emerald) background. Example: direction to emergency exit.
- **INFORMATION – fire-fighting:** RED symbol on WHITE background. Example: fire hose reel.
- **WARNING:** BLACK symbol on YELLOW (gold) background. Example: fire hazard.
- **PROHIBITORY (don't):** BLACK symbol on WHITE background with RED border or oblique. Example: no smoking.
- **MANDATORY (do):** WHITE symbol on dark BLUE (ultramarine) background. Example: safety shoes must be worn.



OHS Act, Construction Regulations; Hazardous Biological Agents Regulations; Facilities Regulations; General Safety Regulations

Safety signage at RU: www.ru.ac.za/safety/resources/safetysignage

8.1.7 Electrical machinery

Machines and electricity can cause severe injuries. Regulations regarding electrical machinery should be followed in all work areas. For example, machinery and equipment should be operated in a designated area and machine guards should be in place, and portable electrical equipment should be unplugged when being cleaned or repaired.

More than 90% of faults can be picked up by regular visual inspections. It is easy to check the following:

- No obvious signs of damage to the equipment casing, cable or plug;
- No signs of overheating on casing, cable or plug;
- Equipment positioned to avoid strain on cables;
- Equipment, cables and plugs positioned to avoid contact with dampness or water;
- Cables do not create tripping hazards;
- Cable placed where it cannot be damaged (e.g. not trapped by furniture or door);
- No overloading of extension leads or multi-plugs;
- Equipment ventilation points not obstructed.



OHS Act, Electrical Machinery Regulations 4: Operation of machinery

OHS Act, Electrical Machinery Regulations 9: Portable electric tools

Electrical appliances checklist: www.ru.ac.za/safety/checklists

8.1.8 Ladders

The OHS Act requires the employer to ensure that all staff who work with ladders are properly informed and trained in the correct use of ladders. Line Managers are responsible for ensuring that staff receive this training. Ladders should be inspected and maintained on a regular basis. Use the ladder safety checklist on the website.



OHS Act, General Safety Regulations 13A: Ladders

Ladder safety at RU: www.ru.ac.za/safety/resources/ladders

8.1.9 Smoking in the workplace

Cigarettes and butts are a health and safety hazard - they contain toxic and non-biodegradable materials which can remain in the environment for up to 10 years, and they can start runaway fires.

- **RU Smoking Policy:** Both the OHS Act and the Tobacco Products Control Act apply at Rhodes University, and all staff, students and visitors should note:
 - Smoking is not permitted inside any University building or partially enclosed public space - including walkways, corridors, lobbies, stairwells, elevators, toilets, cafeterias, verandas, courtyards, partially enclosed gardens, covered patios and parking lots, sport stadiums, vehicles controlled by the University, and any other common area frequented by persons during the course of their work or study.
 - Smoking outside should be at sufficient distance from any window, entrance or air inlet – not closer than 10 metres – and situated so that no smoke drifts into any building, or into an area where a non-smoker is present.
 - Safely dispose of extinguished cigarettes into designated bins.
- **Rights of Non-smokers:** Non-smokers have a right to *not be forced to breathe second-hand smoke*. It is a human right, in the interests of the common good and public health.

Tobacco use also...			
Harms Development	Harms Environment	Harms Equality	Harms NCDs
Buying tobacco robs families of the resources they need to rise out of poverty. A smoker in South Africa would have to spend 10.6% of the national median income to purchase 10 of the cheapest cigarettes to smoke each day!	Cigarette butts are the most commonly discarded piece of waste worldwide. It is estimated that 767 million kilograms of butts wind up as toxic trash, which is roughly equivalent to the weight of 177 895 endangered African elephants.	To find more customers, the tobacco industry markets its products aggressively to women and children.	People living with mental illness are nearly twice as likely to smoke as other persons.
www.tobaccoatlas.org/country-data/south-africa			



Tobacco Products Control Act 83 of 1993

Smoking in the workplace: www.ru.ac.za/safety/resources/smoking

8.1.10 Wellness

A volunteer group of staff members at Rhodes University are committed to promoting a *culture of wellness* (social, emotional, spiritual, physical and financial wellbeing). These Peer Educators are trained by the Institutional Wellness Specialist to support their fellow workers and provide guidance about where to go for help if a person has concerns or is having problems, for example, relationship problems, alcoholism, drug abuse or health problems. They are trained to treat all information as confidential.

It is important to be sensitive to and manage health issues such as HIV/AIDS appropriately in the workplace. From a health and safety perspective, it is best to make use of *Universal Precautions*. This means that we would *always* take precautions – as if all human blood and body fluids are infectious.



Love each other enough to talk about it.



OHS Act, Hazardous Biological Agents Regulations, Annexure C: Precautions for workplaces.

RU Staff Health and Wellness: www.ru.ac.za/humanresources/supportstaff/healthandwellness

8.2 Management control

The active involvement of senior management in an organisation's health and safety programme will ensure high standards in safety, health and environment. Good management involves planning, organising, resourcing, leading/directing, and controlling.



A mediocre health and safety system lacks the active support of senior management.

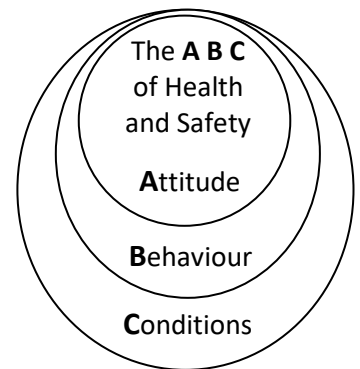
8.2.1 Best practice in safety, health and environment

The likelihood of incidents and accidents can be greatly reduced where both working conditions and working behaviour are safe. Management should control the interaction between three important aspects:

- People;
- Safe systems of work;
- Natural and work environment.



Good communication and cooperation between management and employees are important aspects of any organisation's risk management process.



8.2.2 Risk management

The OHS Act states that the employer should ensure that, as far as is *reasonably practicable*, employees are not exposed to hazards, or that steps are taken to protect them from possible injury.



Reasonably practicable, in the context of risk management, means that the employer takes into account: (i) how significant/severe a risk is, (ii) current knowledge and practices, (iii) the availability of mitigation measures, and (iv) the costs of removing or minimising the risk.

At Rhodes University, Senior Management is individually, collectively, and ultimately responsible for identifying risks and being accountable for managing the risks within their areas of responsibility - including safety, health and environmental risks.

Once the risks have been assessed, management should make decisions regarding how to deal with these risks.

8. Promoting Health and Safety

A common risk control approach is to consider the options in terms of the 4 T's – terminate, treat, transfer or tolerate.

- **Terminate**: Remove the risk by changing a work practice or system. Best option.
- **Treat**: Reduce the risk by implementing engineering and management controls, to minimise the likelihood of its occurrence or minimise its impacts (potential or actual).
- **Transfer**: Pay a third party or insurance company that will take the risk on your behalf.
- **Tolerate**: Take no action because the risk is so low that it is deemed acceptable, or risk reduction/mitigation steps are not cost-effective. Monitor in case changes result in it becoming intolerable.



Also refer to Part 1.3 (responsibilities of the employer), 2.3.1 (quarterly health & safety inspections) 4.2.1 (risk assessment), 4.2.2 (inspecting the workplace), 5 (incidents and accidents), and 9.1 (terms and definitions).

8.2.3 Proactive monitoring

The purpose of proactive monitoring is to predict and control hazardous situations before an incident happens. The employer requires the cooperation of employees in proactive monitoring, which involves:

- i. Carrying out appropriate inspections and reporting;
- ii. Identifying common problems and poor working conditions or practices;
- iii. Providing training that meets workplace needs;
- iv. Taking action to address safety issues that were reported previously;
- v. Identifying the resources (human, financial) required to address safety concerns;
- vi. Ensuring that risk assessments remain valid;
- vii. Reporting any unsafe or unhealthy situation to the employer or to a health and safety rep as soon as possible after comes to the employee's attention.



OHS Act, Section 8: General duties of employers to their employees

OHS Act, Section 13: Duty to inform

Risk assessment: www.ru.ac.za/safety/resources/riskassessment

Safety monitoring at RU: www.ru.ac.za/safety/checklists

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9. HEALTH and SAFETY INFORMATION and RESOURCES

The information provided in this course is not meant to be comprehensive; it serves as a launch pad for your continued learning. You are encouraged to take initiative to find out more, so that your learning and development continue for many years.

9.1 Terms and definitions

Various terms and definitions are referred to in the OHS Act, and in this course. Some of the most common ones are provided below, in alphabetical order.

- Accident: an occurrence that results in personal injury, illness or death.
- Chief Executive Officer: the person who has overall responsibility in the workplace.
- Danger: anything that may cause injury or damage to a person or to property.
- Duty of Care: a legally enforced moral duty to anticipate possible causes of injury and illness, and to do everything reasonably practicable to remove or minimise these possible causes of harm.
- Employee: any person who works for an employer and is paid or is entitled to be paid, or a person who works under the direction or supervision of an employer or any other person.
- Employer: one who employs or provides work for any person, with a stated or unstated agreement to pay that person.
- Hazard: exposure to, or a source of, danger.
- Healthy: free from illness or injury.
- Machinery: any article, or combination of articles, that can be used for converting energy to perform work. It may also be used for receiving, storing, transforming, transmitting, etc... any form of energy.
- Mandatory: an agent or contractor/subcontractor who performs work for the employer, but is also an employer in his/her own right.
- Mitigate: remove, reduce or control a hazard or risk.
- Plant (with regard to OHS Act): buildings, fixtures, fittings, implements, equipment, tools and appliances – anything used in connection with the operations of an organisation.
- Omission: Failure to act.
- Premises: includes buildings, vehicles, vessels, trains and aircraft.
- Properly used (with regard to machinery): used with reasonable care and with due regard to any information or instructions provided.
- Reasonably practicable: This allows the employer to choose the most appropriate/efficient means of controlling a hazard/risk from a range of possibilities, bearing in mind the following:
 - (a) how significant a risk is (its extent and severity),
 - (b) the state of knowledge reasonably available concerning that hazard/risk and of any methods for removing or mitigating that hazard/risk,
 - (c) the availability and suitability of means to remove or mitigate that hazard/risk, and
 - (d) the cost of removing or mitigating that hazard/risk in relation to the benefit of doing so.
- Risk: the probability/likelihood that injury or damage will happen.
- Safe: free from any hazard.
- SANS: South African National Standard.
- User (with regard to machinery): a person who uses plant or machinery for his/her own benefit.
- Work (verb): work as an employee during the course of employment, or as a self-employed person during such time as s/he devotes to work.
- Workplace: any premises or place where a person performs work during the course of employment.

9.2 Documents and websites

- Occupational Health & Safety Act (85 of 1993): www.labour.gov.za/DOL/legislation/acts/occupational-health-and-safety/read-online/amended-occupational-health-and-safety-act
- Tobacco Products Control Act (83 of 1993): www.wipo.int/edocs/lexdocs/laws/en/za/za092en.pdf
- Compensation for Occupational Injuries and Diseases Act (130 of 1993):
www.labour.gov.za/DOL/legislation/acts/compensation-for-occupational-injuries-and-diseases/compensation-for-occupational-injuries-and-diseases-act
- SA Labour Guide Health and Safety Forum: www.labourguide.co.za

9.3 Contact information

Rhodes University:

- Campus Protection Unit: 046 603 8999 (emergencies only), 046 603 8146/7 (general office number)
- Emergency contact list at www.ru.ac.za/safety/emergencies
- Human Resources Division: report Injuries on Duty to Tel 046 603 8112/8009 (HR Administration)
- Institutional Wellness Specialist: 046 603 7075

Department of Labour:

- Contacts: www.labour.gov.za/DOL/contacts
- Grahamstown: 046 622 2104
- Provincial Office, East London: 043 701 3000

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This manual is available online

at

www.ru.ac.za/safety/training

Send comments, suggestions or requests for copies to:

Safety, Health and Environmental Officer

SHE Office
Eden Grove building, Lucas Avenue
Rhodes University
Grahamstown 6140
South Africa

Tel: (+27) 046 603 7205

Email: safety@ru.ac.za