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Operational Requirements in Equine Practice

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Glossary

Hazard A hazard is a dangerous phenomenon, substance, human activity or condition. It may cause loss of life, injury or other health impacts and property damage [1].

Risk Risk is the possibility of something bad happening. Risk involves uncertainty about the effects/implications of an activity concerning something that humans value, often focusing on negative, undesirable consequences [1].

Risk assessment A risk assessment is simply a careful examination of what could cause harm to people to enable precautions to be taken to prevent injury and ill health [1].

1.1 Aims of Health and Safety

Effective health and safety within a veterinary practice aims to ensure the well-being and safety of all individuals involved, including staff, clients and animals. The specific aims can be summarised as follows:

- Reduction of risks: Effective health and safety practices aim to identify, assess and minimise risks within the veterinary practice. This involves conducting thorough risk assessments to identify potential hazards, such as dangerous equipment, hazardous substances or unsafe working conditions. The risks can be significantly reduced or eliminated by implementing appropriate controls and safety measures, such as providing personal protective equipment (PPE), establishing safe work procedures and maintaining a clean and organised environment.
- Utilising assessments, controls and quality improvement: Health and safety assessments are crucial to identify hazards and assess risks within the veterinary practice. Regular inspections and evaluations of the premises, equipment and procedures are conducted to ensure compliance with relevant health and safety regulations. Controls, such as engineering controls like ventilation systems and administrative controls like training programs, are implemented to prevent or minimise risks. Additionally, continuous quality improvement processes are established to monitor and enhance health and safety practices within the veterinary practice.
- Identification of animals: It is essential to accurately identify animals within a veterinary practice to ensure proper care and minimise potential risks. This involves maintaining thorough records that include the animal's identity, such as name, species, breed, age and any relevant medical history. Additionally, information regarding the animal's temperament and behaviour is essential for staff to handle and interact with the animals safely and appropriately. Each patient should have an identity tag attached to their mane and additional tags attached to any equipment that clients leave at the practice. Details on the tag include the name of the patient, the name of the client, the procedure to be performed and the date the patient was admitted.

Effective health and safety measures within a veterinary practice consider clients' and staff's specific needs and vulnerabilities. Some individuals may be at special risk due to various factors, such as:

- Asthma: Steps should be taken to minimise exposure to allergens or irritants that could trigger asthma attacks. This may involve proper ventilation, regular cleaning and avoiding known allergens.

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- Visual or hearing impediments: Adequate measures should be in place to ensure effective communication with individuals who have visual or hearing impairments. This may include using visual aids, written instructions or providing sign language interpreters.
- Impaired literacy: Clear and easily understandable communication materials should be provided to accommodate individuals with impaired literacy. This could involve using visual aids, simple language and providing necessary assistance.
- Pregnancy: Pregnant staff members should be provided with appropriate information and support to ensure their safety and the well-being of the developing foetus. This may involve modifying work tasks or providing additional protective measures.
- Age: Special consideration should be given to younger and older individuals regarding their physical capabilities and vulnerabilities. Adjustments may be necessary to accommodate their specific needs and ensure their safety (adjustments may include ensuring the elderly can sit if required and the young are not left unattended on a yard).
- Disabilities: Individuals with disabilities should be provided with reasonable accommodations to ensure their safety and ability to perform their job responsibilities effectively. This may include modifying workstations, providing assistive devices or offering additional support as needed.

By considering the specific needs and risks associated with these individuals, veterinary practices can create a safe and inclusive environment that promotes the well-being of all staff and clients.

1.2 Health and Safety Legislation

In the United Kingdom, health and safety legislation is governed by various acts and regulations that aim to protect worker's and the general public's health, safety and welfare. The primary legislation that forms the foundation of health and safety regulations in the United Kingdom is the Health and Safety at Work Act 1974 (HSWA) and other health and safety legislation in the United Kingdom include [2]:

Health and Safety at Work Act 1974 (HSWA)

This is a primary piece of legislation in the United Kingdom that sets out the legal framework for workplace health and safety. It applies to all employers, employees, self-employed individuals and anyone who controls workplaces and the health and safety of others. Some key aspects of the HSWA are as follows [2]:

- General duties [2]: The HSWA places general duties on employers, employees, self-employed individuals and others to ensure the health, safety and welfare of individuals at work. These duties include:
  - Employers: Have a duty to provide a safe working environment, including safe equipment, proper training and competent supervision. Employers must also ensure the health and safety of others who may be affected by the work activities, such as visitors or the public.
  - Employees: Have a duty to take reasonable care of their own health and safety, as well as that of others who may be affected by their actions at work. They should follow the provided training, use safety equipment properly and report any hazards or concerns to their employer.
  - Self-employed individuals: They are responsible for ensuring their health and safety and that of others affected by their work activities. They must safely conduct their work and comply with relevant regulations.
- Risk assessment: The HSWA requires employers to conduct risk assessments to identify hazards in the workplace and evaluate the associated risks. Risk assessments should be reviewed regularly and updated as necessary. The aim is to identify suitable control measures to eliminate or minimise risks to health and safety.
- Consultation and information: The HSWA emphasises the importance of consultation and communication between employers and employees regarding health and safety matters. Employers must consult with safety representatives or employee representatives on health and safety issues, and employees should be provided with relevant information and training.
- Enforcement and inspections: The Health and Safety Executive (HSE) is the regulatory body responsible for enforcing health and safety laws in Great Britain. The Act grants the HSE powers to inspect workplaces, investigate accidents, issue improvement or prohibition notices if necessary and prosecute those who fail to comply with the legislation.
- Offences and penalties: The HSWA establishes various offences and penalties for non-compliance with health and safety duties. Serious breaches of the HSWA can result in fines, imprisonment or both. The Act also provides for the liability of company directors, managers and other individuals who have consented to or connived in an offence.
- Application to other workplaces: The HSWA applies to a wide range of workplaces, including offices, factories,

construction sites, mines, offshore installations and other premises where people work. It also covers activities that may affect the health and safety of individuals, such as construction work, maintenance and use of equipment.

- The HSWA 1974 is a broad and comprehensive piece of legislation that sets the foundation for health and safety management in the United Kingdom. It establishes the general duties and responsibilities of employers, employees and others and provides a legal framework for promoting a safe and healthy working environment.

Management of Health and Safety at Work Regulations 1999

The Management of Health and Safety at Work Regulations 1999 (MHSWR) is pivotal in ensuring workers' health, safety and welfare in the United Kingdom. These regulations, introduced under the HSWA, provide a comprehensive framework for managing workplace risks and fostering a safety culture. The key provisions of the MHSWR highlight their significance in safeguarding workplace well-being [3].

Risk Assessment

Central to the MHSWR is the requirement for employers to systematically assess workplace risks. Risk assessment involves identifying hazards, evaluating their potential harm and implementing suitable mitigation control measures. This process is critical for creating a safe working environment and preventing accidents, injuries and occupational illnesses [4].

Competent Personnel

Under the MHSWR, employers are obligated to appoint competent individuals to assist with health and safety management. These competent persons possess the necessary knowledge, skills and experience to provide expert guidance on risk assessment, control measures and compliance with relevant regulations. Their involvement ensures that health and safety considerations are prioritised and effectively addressed [3].

Health Surveillance

The regulations recognise the importance of monitoring workers' health in certain high-risk occupations. Employers must implement health surveillance measures to assess and monitor the impact of work-related hazards on employees' well-being. This may involve regular medical examinations, assessments and monitoring of specific health indicators to detect early signs of work-related illnesses and take appropriate preventive measures [3].

Information, Instruction and Training

Effective communication and education form the cornerstone of the MHSWR. Employers are required to provide employees with comprehensive information, instruction and training to ensure they have the necessary knowledge and skills to carry out their work safely. This includes informing workers about potential hazards, safe working practices, emergency procedures and correctly using PPE.

Cooperation and Collaboration

The MHSWR emphasises the importance of cooperation and collaboration between employers, employees and safety representatives. Employers should consult with workers and their representatives on health and safety matters, providing them opportunities to contribute their expertise, report concerns and participate in decision-making processes. This collaborative approach fosters shared responsibility for workplace safety.

Record Keeping

Accurate record keeping is an essential aspect of the MHSWR. Employers must maintain records of risk assessments, training, accidents, incidents and any measures taken to control workplace risks. These records serve as valuable resources for monitoring compliance, identifying trends, evaluating the effectiveness of control measures, and facilitating continuous improvement in health and safety performance.

Workplace (Health, Safety and Welfare) Regulations 1992

These regulations aim to ensure the health, safety and welfare of individuals in workplaces. These regulations provide guidance on various aspects of the working environment to create safe and healthy conditions for employees. Some key provisions of the Workplace Regulations are as follows [3]:

Workplace Conditions

The regulations outline specific requirements for workplace conditions, including ventilation, temperature, lighting, cleanliness and space. Employers are obligated to provide adequate ventilation to maintain a suitable working environment and prevent discomfort due to a lack of fresh air. They must also ensure that the workplace temperature is reasonable and comfortable, considering factors such as the nature of the work being carried out. Adequate lighting is essential to prevent accidents and facilitate safe working conditions. Additionally, employers are responsible for maintaining cleanliness and providing sufficient space to ensure the welfare and well-being of employees.

Sanitary Facilities

The Workplace Regulations emphasise the provision of adequate sanitary facilities. Employers must provide clean and functional toilets, washbasins and other necessary facilities for personal hygiene. These facilities should be conveniently located and maintained in good working order to ensure the health and welfare of employees.

Drinking Water

The regulations require employers to provide suitable drinking water for employees. The water should be easily accessible, clean and free from any potential contamination that may pose a risk to health. Employers must ensure the water supply is regularly checked and maintained to meet appropriate standards.

Rest and Break Areas

Employers are encouraged to provide rest and break areas to allow employees to take regular breaks and rest periods during the workday. These areas should be clean, comfortable and adequately equipped to enable employees to relax and take their breaks in a suitable environment.

Traffic Routes and Passageways

The Workplace Regulations address the need for safe traffic routes and passageways within workplaces. Employers must ensure that pedestrian routes are clearly marked, free from obstructions and designed to prevent accidents and injuries. Adequate measures should be in place to separate pedestrians from vehicles and to ensure the safe movement of vehicles within the workplace.

Safety in Maintenance and Repair

The regulations highlight the importance of maintaining a safe environment during maintenance and repair work. Employers must take measures to prevent potential hazards arising from maintenance activities, such as ensuring the safe use of equipment, providing appropriate training and implementing suitable control measures to safeguard the well-being of employees involved in such work.

Compliance and Enforcement

The Workplace Regulations are enforced by the HSE in Great Britain and the Health and Safety Executive for Northern Ireland (HSENI) in Northern Ireland. These bodies may conduct inspections and investigations to ensure compliance with the regulations. Non-compliance with the Workplace Regulations can lead to enforcement action, including fines or prosecution.

The Workplace (Health, Safety and Welfare) Regulations 1992 provide a comprehensive framework for maintaining safe and healthy working conditions. They place specific obligations on employers to ensure appropriate workplace conditions, sanitary facilities, drinking water, rest areas and safe traffic routes. Compliance with these regulations helps protect employees' well-being and welfare and creates a conducive environment for productivity and overall workplace satisfaction.

Control of Substances Hazardous to Health (COSHH) Regulations 2002

COSHH is a set of regulations in the United Kingdom that aim to protect workers from the risks associated with exposure to hazardous substances. These regulations place responsibilities on employers to control and manage hazardous substances in the workplace. Some key aspects of the COSHH Regulations are as follows.

Hazardous Substances

The COSHH Regulations define hazardous substances as any substances that have the potential to cause harm to health. This includes substances classified as toxic, harmful, corrosive, irritant or sensitising, as well as carcinogenic, mutagenic or harmful to reproduction. The regulations apply to a wide range of substances, including chemicals, dusts, fumes, gases and biological agents.

Risk Assessment

Employers must conduct a thorough risk assessment for all hazardous substances in the workplace. The assessment involves identifying and evaluating the risks associated with the substances, considering factors such as exposure routes, the nature of the work and the potential health effects. The aim is to implement suitable control measures to eliminate or minimise the risks.

Control Measures

Based on the risk assessment, employers must implement control measures to prevent or adequately control exposure to hazardous substances. Control measures may include substituting hazardous substances with less harmful alternatives, using engineering controls such as ventilation or enclosure systems, implementing safe work practices, providing PPE and ensuring proper storage, handling and disposal of hazardous substances.

Monitoring and Health Surveillance

The COSHH Regulations emphasise the importance of monitoring and health surveillance to assess and manage the health risks associated with hazardous substances. Employers may be required to monitor the levels of hazardous substances in the workplace atmosphere and regularly

review exposure measurements. Health surveillance involves monitoring the health of employees who are exposed to hazardous substances to detect early signs of any adverse health effects and take appropriate preventive measures.

Information, Instruction and Training

Employers have a duty to provide employees with comprehensive information, instruction and training regarding the hazardous substances they may encounter in their work. This includes providing details about the potential risks, control measures in place, safe working practices and emergency procedures. Training should also cover the proper use, maintenance and limitations of any PPE provided.

Storage, Handling and Disposal

The COSHH Regulations set out requirements for the safe storage, handling and disposal of hazardous substances. Employers must ensure that hazardous substances are stored in appropriate containers, clearly labelled and stored in designated areas to prevent accidental exposure. Proper handling procedures, including the use of suitable equipment and precautions, should be followed. Disposal of hazardous substances must be carried out in accordance with relevant regulations and guidelines.

Record Keeping and HSE Notifications

Employers are required to maintain records of risk assessments, monitoring results, health surveillance and training provided to employees. These records serve as evidence of compliance and support the ongoing management of hazardous substances in the workplace. In some instances, employers may need to notify the HSE about the use of particularly hazardous substances.

Compliance with the COSHH Regulations is essential for protecting the health and safety of workers who may be exposed to hazardous substances. Employers can effectively manage the risks associated with hazardous substances and create safer working environments by conducting risk assessments, implementing control measures, providing information and training and monitoring exposure levels.

In January 2010, new regulations came into force regarding the classification, labelling and packaging of substances and mixtures (The European Regulation [EC] No. 1272/2008 on classification, labelling and packaging of substances and mixtures – the CLP Regulation) [5]. These regulations changed the symbols used for hazards and replaced the black printing on orange-yellow rectangles that have been used to date; now, nine hazard pictograms with black symbols on a white background with red-rimmed rhombuses are used to provide warnings. Table 1.1 shows the old symbols compared to the new ones and explains their meaning. From June 2015, using the new symbols for all hazardous materials became mandatory.

Personal Protective Equipment at Work Regulations 1992

This sets the regulations in the United Kingdom that aim to ensure the proper selection, use and maintenance of PPE in the workplace. These regulations place responsibilities on employers to provide suitable PPE to protect their employees from workplace hazards. Some key aspects of the PPE at Work Regulations are as follows.

Risk Assessment

Employers are required to conduct a thorough risk assessment to identify hazards and assess the need for PPE. The risk assessment should consider the nature of the work, potential hazards and the effectiveness of other control measures. If hazards cannot be adequately controlled by other means, employers must provide appropriate PPE to mitigate the risks.

Selection of PPE

The regulations emphasise the importance of selecting suitable PPE that effectively protects against the identified risks. Employers should consider factors such as the nature of the hazards, the tasks being performed, ergonomic considerations and employees' individual requirements. PPE should be of the correct size, fit and durability to ensure its effectiveness.

Providing and Maintaining PPE

Employers are responsible for providing PPE to employees free of charge. The PPE should be suitable for the identified risks and in good working condition. Employers must ensure that PPE is properly maintained, inspected, worn and replaced when necessary. Regular checks and maintenance should be conducted to ensure that PPE remains effective and does not pose any additional risks to the wearer.

Instruction, Training and Information

Employers must provide employees with proper instruction, training and information on the use, storage, maintenance and limitations of the provided PPE. Employees should be aware of how to correctly wear and adjust PPE and understand the importance of using it as directed. Instruction and training should also cover the potential risks associated with not using PPE or using it incorrectly.

Table 1.1 COSHH symbols used for hazard identification [2].

Old pictogram and classification	New pictogram and classification	Precautions
 Corrosive	 Corrosive	This symbolises a corrosive material that causes serious skin burns and eye damage; eye damage may be permanent and may corrode metals • Wear suitable PPE • Keep away from metals • Avoid contact with skin and eyes • Wear a mask or respirator if using sprays to avoid inhalation
 Dangerous to the environment	 Hazardous to the environment, a hazard to the aquatic environment	Toxic and has a damaging effect on both land and aquatic environments • Should not be released into the environment • Should not be used near water sources • Containers should be disposed of appropriately
 Flammable	 Flammable	Flammable when exposed to sources such as heat. Some sources may emit flammable gases if contacted by water. Substances include Flammable gases, flammable liquids, flammable solids, flammable aerosols and organic peroxides • Wear suitable PPE • Keep substances away from ignition sources • Use locked flame retardant storage • Keep away from sunlight
 Toxic	 Acute toxicity (severe)	Material that will cause severe toxicity even in a small amount. The effects seen may be life-threatening • Wear suitable PPE • Do not ingest • Do not allow contact with skin or mucous membranes • Dispose of safely
 Explosive	 Explosive	The substance may explode if exposed to an ignition source. Sources may include heat, shock and friction • Wear PPE • Avoid sources of ignition • Store in suitable storage facilities • Dispose of safely
 Oxidising	 Oxidising	Materials can burn even without oxygen and may intensify fires with combustible materials • Use only as directed • Wear PPE • Store in an airtight container and away from children • Keep away from ignition sources • Dispose of safely

Table 1.1 (Continued)

Old pictogram and classification	New pictogram and classification	Precautions
 Hazard	 Health hazard/hazardous to the ozone layer	A substance that may cause irritation or less severe toxicity. It may also damage the ozone layer if realised • Wear PPE • Avoid contact with eye and skin • Do not inhale • Avoid releasing into the environment • Care when disposing
	 Serious health hazard	With short- or long-term exposure, the substance may pose a severe risk to health • Wear PPE • Avoid contact with skin and eyes • Wear a mask or respirator • Store in a cool, dry environment • Store away from children and animals
	 Gas under pressure	Contains a pressurised gas; if realised, gas may be cold or flammable • Store in a secure gas cabinet • Use wall fastenings to prevent falling • Keep away from direct sunlight • Keep away from sources of ignition

Source: Rosina Lillywhite.

Employee Responsibilities

Employees are responsible for using PPE as instructed and reporting any defects or issues with their PPE to their employer. They should also take care of the provided PPE and ensure its proper storage and maintenance when not in use.

Compatibility and Comfort

Employers should consider the compatibility and comfort of the PPE when selecting and providing it to employees. PPE should not cause additional risks or discomfort that could hinder the ability of employees to perform their work safely and effectively. Adequate consideration should be given to the PPE's ergonomics, weight, fit and breathability.

Review and Evaluation

Employers should regularly review and evaluate the effectiveness of the provided PPE through ongoing risk assessments, employee feedback and incident reporting. If changes in work processes, hazards or technology occur, the suitability and effectiveness of the PPE should be reassessed and necessary adjustments should be made.

Compliance with the Personal Protective Equipment at Work Regulations 1992 ensures that employees are adequately protected from workplace hazards by providing, using and maintaining suitable PPE. By conducting risk assessments, selecting appropriate PPE, providing proper instruction and training, and regularly reviewing the effectiveness of the PPE, employers can create safer working environments and prevent injuries or illnesses caused by workplace hazards.

Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013 (RIDDOR)

RIDDOR is a set of regulations in the United Kingdom that requires employers, self-employed individuals and individuals in control of work premises to report certain types of workplace incidents. RIDDOR ensures that significant

workplace incidents, injuries, diseases and dangerous occurrences are reported to the appropriate regulatory authorities. The key aspects of the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013 are as follows:

Reportable Injuries

Employers are required to report specified workplace injuries that result in death, major injuries or certain types of accidents. Under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) 2013, there is a list of specific reportable injuries. These injuries include:

- Fractures other than to fingers, thumbs and toes.
- Amputations.
- Dislocations of the shoulder, hip, knee or spine.
- Loss of sight, either temporary or permanent.
- Chemical or hot metal burn to the eye or any penetrating injury to the eye.
- Injury resulting from an electric shock or electrical burn leading to unconsciousness or requiring resuscitation or admittance to a hospital for more than 24 hours.
- Any burn injury (including scalding) requiring admittance to a hospital for more than 24 hours.
- Scalping requiring hospital treatment.
- Unconsciousness caused by asphyxia or exposure to harmful substances or biological agents.
- Acute illness resulting from exposure to a substance or biological agent.
- Acute illness requiring medical treatment where there is reason to believe it resulted from exposure to a biological agent or its toxins or infected material.
- Injuries requiring the person injured to be admitted to a hospital for more than 24 hours for treatment.

It is important to note that this is a general overview of the specific reportable injuries. The full and definitive list of reportable injuries can be found in Schedule 1 of RIDDOR 2013. This list provides more detailed descriptions and additional specific injuries that fall within the scope of RIDDOR.

Occupational Diseases

Certain work-related diseases are reportable under RIDDOR. The specific work-related diseases that require reporting under RIDDOR include:

- Carpal Tunnel Syndrome: This is a condition that affects the hand and wrist, causing numbness, tingling and weakness due to compression of the median nerve.
- Hand-Arm Vibration Syndrome (HAVS): HAVS is a condition caused by prolonged exposure to vibrating tools or machinery, resulting in symptoms such as numbness, tingling and reduced dexterity in the hands and fingers.
- Occupational dermatitis: This refers to skin inflammation or irritation caused by exposure to hazardous substances in the workplace, such as chemicals, irritants or allergens.
- Occupational asthma: Occupational asthma is a type of asthma triggered by exposure to substances present in the workplace, such as dust, chemicals or fumes.
- Occupational cancer: This includes certain types of cancer that are linked to specific workplace exposures, such as lung cancer due to exposure to asbestos or bladder cancer due to exposure to certain chemicals (aromatic amines, such as benzidine and beta-naphthylamine).
- Occupational silicosis: Silicosis is a lung disease caused by inhalation of silica dust, commonly found in industries such as mining, construction and sandblasting.
- Occupational noise-induced hearing loss: This refers to hearing loss or damage caused by exposure to excessive noise levels in the workplace over an extended period.

It is important to note that these are examples of work-related diseases that require reporting under RIDDOR. The regulations cover a wide range of occupational diseases, and the specific requirements for reporting may vary depending on the circumstances and severity of the disease. For a comprehensive list and detailed guidance, it is recommended to refer to RIDDOR 2013 and accompanying guidance provided by the HSE.

Dangerous Occurrences

RIDDOR requires reporting dangerous occurrences that happen in connection with work activities. Dangerous occurrences refer to near misses or incidents that have the potential to cause significant harm or serious accidents. Examples of dangerous occurrences include the collapse of lifting equipment, explosion or fire, accidental release of a hazardous substance and incidents involving the failure of machinery or equipment.

Specified Injuries to Members of the Public

In addition to reporting injuries and dangerous occurrences to employees, RIDDOR also requires reporting of specified injuries to members of the public who are affected by work-related activities. This includes incidents occurring on or off work premises that result in death or certain types of injuries to members of the public.

Investigating and Learning From Incidents

RIDDOR promotes the importance of investigating and learning from incidents to prevent future occurrences. Employers should conduct thorough investigations to

identify the root causes of incidents and implement necessary measures to prevent similar incidents from happening again.

Reporting under RIDDOR involves notifying the appropriate regulatory authorities about certain workplace incidents, injuries, diseases and dangerous occurrences. Some key points regarding reporting under RIDDOR are as follows:

Who Is Responsible for Reporting

Employers, self-employed individuals and individuals in control of work premises have a legal obligation to report incidents under RIDDOR. This includes companies, organisations and individuals responsible for the management and supervision of work activities.

Reporting Timeframes

Incidents falling within the scope of RIDDOR must be reported within specified timeframes. The timeframes vary depending on the type of incident:

- Fatal accidents: Must be reported immediately or as soon as practicable.
- Major injuries: Must be reported within 10 days of the incident.
- Occupational diseases: Must be reported as soon as they are diagnosed, and work-relatedness is suspected.
- Dangerous occurrences: Must be reported immediately or within 10 days of the incident, depending on the specific occurrence.

How to Report

Reports can be made through various channels, including:

- Online reporting: The HSE provides an online reporting system for submitting incident reports.
- Telephone reporting: Incidents can be reported by calling the HSE Incident Contact Centre.

Additional Responsibilities

In addition to reporting incidents, employers have other responsibilities under RIDDOR, such as conducting investigations into incidents, maintaining records of incidents and cooperating with regulatory authorities during investigations.

It is important to consult the official guidance the HSE provides for detailed instructions, specific reporting requirements and any updates or changes to the reporting process under RIDDOR.

Compliance with RIDDOR is essential for ensuring that significant workplace incidents, injuries, diseases and dangerous occurrences are properly reported and investigated. By promptly reporting incidents and learning from them, employers and regulatory authorities can work together to improve workplace safety, prevent accidents and protect the health and well-being of employees and the public.

The Manual Handling Operations Regulations 1992 (MHOR)

This set of regulations in the United Kingdom aims to protect workers from the risks associated with manual handling activities. Manual handling refers to the lifting, lowering, carrying, pushing or pulling of loads by hand or bodily force. The regulations provide guidance and requirements for employers to assess, control and minimise the risks associated with manual handling. Some key aspects of the MHORs 1992 are as follows:

Risk Assessment

Employers are required to conduct a thorough risk assessment of manual handling tasks in the workplace. The assessment should identify potential hazards, evaluate the risks involved and determine appropriate control measures to reduce the risk of injury. The assessment should take into account factors such as the nature of the task, the characteristics of the load, the working environment and the capabilities of the individuals involved.

Avoidance and Reduction of Risk

The regulations prioritise the avoidance of manual handling activities where reasonably practicable. Employers are encouraged to implement measures to eliminate or reduce the need for manual handling, such as using mechanical aids or redesigning work processes. If manual handling is necessary, employers must take steps to minimise the risk to employees' health and safety.

Training and Instruction

Employers are responsible for providing training and instruction to employees involved in manual handling tasks. This includes educating employees on safe manual handling techniques, correct posture, proper lifting and carrying methods and appropriate handling aids and equipment. Training should also cover recognising potential hazards and reporting any concerns or incidents related to manual handling.

Physical Capability and Fitness

Employers should consider employees' physical capabilities and fitness when assigning manual handling tasks. It is important to match the task to the individual's capabilities, ensuring that the load can be handled safely without

risk of injury. Reasonable adjustments should be made for individuals with specific needs or physical limitations.

Review and Evaluation

Employers are encouraged to regularly review and evaluate manual handling tasks, control measures and the effectiveness of training and instruction. This includes monitoring for any changes in work processes, load characteristics or employees' physical capabilities. If necessary, adjustments should be made to control measures to ensure ongoing safety.

Employee Consultation and Involvement

Employees should be consulted and involved in assessing and controlling manual handling risks. Employee input can provide valuable insights into the practicalities of the tasks, potential hazards and the effectiveness of control measures. Consultation can also help identify areas for improvement and promote a culture of health and safety within the workplace.

The MHOR sets out the maximum weight limit permissible to handle at work. Figure 1.1 shows what these limits are in relation to both men and women; these limits differ depending on how close the weight is to the body.

By complying with the MHOR 1992, employers can effectively identify and manage the risks associated with manual handling activities. Through risk assessments, control measures, training and regular review, employers can create safer working environments, reduce the likelihood of manual handling injuries and protect the health and well-being of their employees.

The Lifting Operations and Lifting Equipment Regulations 1998 (LOLER)

LOLER is a set of United Kingdom regulations that aim to ensure the safe use of lifting equipment in the workplace. The following is only a general overview of LOLER; it is important to consult the specific regulations and seek professional advice to ensure compliance in the context of equine veterinary practice. Some key points are as follows [6]:

Scope of LOLER

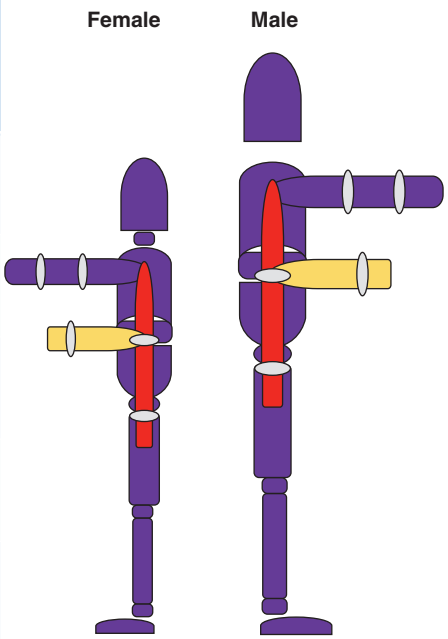
LOLER applies to any lifting equipment used at work, including hoists, cranes, lifts and other devices used for lifting or lowering loads. It covers both mobile and fixed lifting equipment.

Duties and Responsibilities [6]

The regulations impose certain duties and responsibilities on employers, employees and those in control of lifting equipment. Some key responsibilities include:

- Ensuring that lifting equipment is safe, properly maintained and suitable for the intended use.

Height	Weight away from the body	Weight close to the body
Head	3 kg	7 kg
Shoulders	7 kg	13 kg
Elbow	10 kg	16 kg
Knuckle	7 kg	13 kg
Mid-calf	3 kg	7 kg



Weight close to the body	Weight away from the body	Height
10 kg	5 kg	Head
20 kg	10 kg	Shoulders
25 kg	15 kg	Elbow
20 kg	10 kg	Knuckle
10 kg	5 kg	Mid-calf

Figure 1.1 Manual handling guidelines for maximum weight limits at work. *Source:* Rosina Lillywhite.

- Providing adequate training, instruction and supervision for employees involved in lifting operations.
- Conducting thorough examinations and inspections of lifting equipment by competent persons at specified intervals.

Thorough Examination

LOLER requires that lifting equipment undergoes a thorough examination by a competent person (this should be someone who is trained and qualified in the inspection of lifting equipment) at regular intervals. The examination should ensure that the equipment is safe to use, properly maintained and complies with relevant safety standards. Hoist and lifting equipment in equine practice should be inspected every 6–12 months depending on the equipment and usage.

External Trained Inspector Duties [6]

- Ensuring that the hoist is suitable for the intended purpose and has the appropriate lifting capacity.
- Regularly inspecting the hoist for any signs of wear, damage or malfunctions.
- Providing adequate training for personnel involved in hoisting operations, including safe handling of animals and correct use of the hoist.
- Consulting with specialist veterinary equipment suppliers or professionals for specific guidance on the use and maintenance of hoists in equine veterinary practice.

It is crucial to review the full text of LOLER and seek guidance from regulatory authorities, professional bodies or health and safety consultants to ensure compliance with the specific requirements of LOLER and any additional regulations or guidelines applicable to equine veterinary practice.

The Waste (England and Wales) Regulations 2011

Waste disposal is regulated in the United Kingdom to ensure proper management and environmental protection. Several regulations govern waste disposal, with the key legislation being the Environmental Protection Act 1990 and the Waste (England and Wales) Regulations 2011. Important aspects of the waste disposal regulations include:

Duty of Care

The duty of care applies to anyone who produces, carries, keeps, treats or disposes of waste. It requires individuals and organisations to take all reasonable measures to prevent waste's escape or illegal disposal. This includes ensuring proper storage, transportation, and disposal of waste and keeping records and providing information when transferring waste to others.

Waste Hierarchy

The waste hierarchy is a key principle in waste management. It emphasises the need to prevent waste generation, promote reuse, recycle and recover energy from waste before resorting to disposal. The regulations encourage individuals and organisations to follow this hierarchy and make efforts to minimise waste generation and maximise resource recovery.

Waste Classification

Waste is classified based on its properties and potential environmental and health impacts. The regulations define different categories of waste, including hazardous waste, non-hazardous waste and inert waste. Proper classification is important as it determines the appropriate handling, storage and disposal methods for different types of waste.

Waste Carriers and Brokers

Individuals or businesses involved in the transportation of waste are required to register as waste carriers or brokers with the appropriate regulatory authority. This helps to ensure that waste is transported by authorised and responsible parties, minimising the risk of illegal dumping or mishandling.

Waste Management Licenses and Permits

Certain waste management activities like operating waste treatment facilities or landfills may require specific permits or licenses. These permits ensure that waste management activities are carried out in compliance with environmental standards and regulations.

Duty to Separate and Segregate Waste

The regulations encourage the segregation of waste at the source to facilitate recycling and proper disposal. Businesses and individuals are encouraged to separate different types of waste, such as recyclables, organic waste and hazardous waste, to enable effective waste management and resource recovery.

Landfill Regulations

The Landfill Directive, implemented through the Waste (England and Wales) Regulations 2011, sets standards and requirements for landfill operations. It aims to minimise the environmental impacts of landfilling, such as soil, water and air pollution. The regulations impose restrictions on the types of waste that can be landfilled and require compliance with specific operational and monitoring requirements.

Compliance with waste disposal regulations is essential to protect the environment and human health, and promote sustainable waste management practices. Individuals and organisations need to understand their responsibilities, follow proper waste management procedures and work towards minimising waste generation and maximising recycling and resource recovery.

The Hazardous Waste Regulations 2005

The Hazardous Waste Regulations 2005 are a set of regulations in the United Kingdom that specifically address the management, classification and disposal of hazardous waste. These regulations aim to protect human health and the environment by ensuring that hazardous waste is handled, stored, transported and disposed of safely and responsibly. Here are key aspects of the Hazardous Waste Regulations 2005.

Definition of Hazardous Waste

The regulations provide a definition of hazardous waste based on its properties, as determined by the European Waste Catalogue (EWC) codes. Hazardous waste is classified based on its potential to cause harm to human health or the environment due to its toxic, corrosive, infectious, explosive or other hazardous properties.

Duty of Care

The Hazardous Waste Regulations impose a duty of care on waste producers, carriers and handlers to ensure that hazardous waste is managed appropriately. This includes preventing the escape or harm of hazardous waste, maintaining proper documentation and ensuring that waste is transferred to authorised carriers or facilities.

Classification and Labelling

Hazardous waste must be properly classified and labelled to indicate its hazardous properties. The regulations require waste producers to accurately determine the EWC codes and hazardous properties of the waste they produce. This classification is crucial for ensuring the waste is handled and disposed of correctly.

Storage and Packaging

Hazardous waste must be stored in suitable containers or storage facilities to prevent leaks, spills or any escape that may harm human health or the environment. Proper packaging, labelling and segregation of hazardous waste are necessary to avoid cross-contamination and to ensure safe handling.

Transfer and Documentation

Proper documentation must be maintained when hazardous waste is transferred from the waste producer to a carrier or waste management facility. Waste transfer notes should include information about the waste's origin, classification, quantity and destination and the parties involved in the transfer.

Treatment and Disposal

Hazardous waste should undergo appropriate treatment to reduce its hazardous properties or render it safe for disposal. Treatment may include physical, chemical or biological processes. Hazardous waste must be disposed of at authorised facilities that have the necessary permits and comply with environmental regulations.

Penalties and Enforcement

Non-compliance with the Hazardous Waste Regulations can result in penalties, fines or legal action. Environmental regulatory authorities, such as the Environment Agency in England or the Scottish Environment Protection Agency in Scotland, have powers to monitor, inspect and enforce compliance with the regulations.

Waste producers, carriers and handlers must familiarise themselves with the requirements and obligations outlined in the Hazardous Waste Regulations 2005. They should consult the official guidance provided by the environmental regulatory authorities for detailed information on waste classification, storage, transportation and disposal procedures to ensure compliance with the regulations and promote the safe management of hazardous waste.

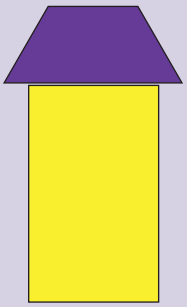
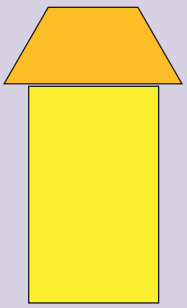
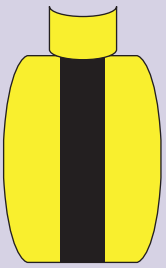
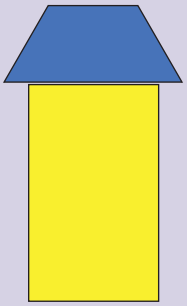
Exact waste disposal requirements are set out by individual waste collection companies. Table 1.2 shows the general types of waste produced and the correct disposal method.

The Health and Safety (Display Screen Equipment) Regulations 1992

The Health and Safety (Display Screen Equipment) Regulations 1992, often referred to as the DSE Regulations, are a set of guidelines and regulations aimed at safeguarding the health and well-being of employees who use DSE regularly during their work. The regulations were introduced in the United Kingdom and are part of broader efforts to address potential health risks associated with using computers, laptops, tablets and other display screen devices in the workplace [6].

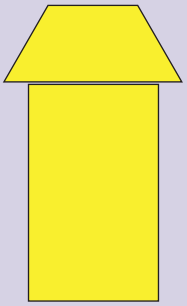
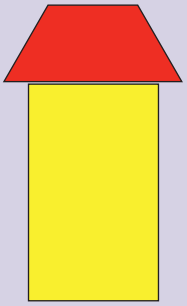
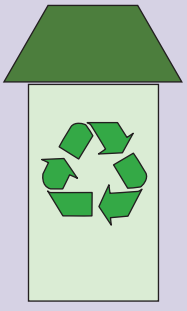
Key provisions of the Health and Safety Display Screen Regulations 1992:

Table 1.2 Types of waste and correct disposal methods.

Types of waste	Description	Bin/bag type
Hazardous waste		
Infectious	Infectious waste bags, also known as clinical waste bags or biohazard bags, are used to collect and store waste contaminated with potentially infectious materials. These bags are made of robust and leak-proof material and are often colour-coded following industry standards, such as using orange bags for infectious waste (waste that contains potentially harmful microorganisms that can infect hospital patients, staff and the general public). They may have biohazard symbols or markings to indicate their contents	
Cytotoxic and cytostatic	Cytotoxic and cytostatic waste should be segregated from other types of healthcare waste to prevent cross-contamination. Use dedicated containers that are clearly labelled and distinguishable from general waste bins. Colour-coded bins, such as purple-lidded yellow bins, may be used to indicate their specific purpose	
Sharps	Sharps containers are designed to collect used needles, syringes, lancets and other sharps items. These puncture-resistant containers have a secure lid to prevent accidental injuries and contamination. They are typically colour-coded, often with a bright yellow bottom with an orange lid sharps with an orange lid contain infectious sharps	
Non-hazardous waste		
Offensive	Offensive waste is non-infectious waste, which is unpleasant and may cause offence to those coming into contact with it. It includes: • Outer dressings and protective clothing, e.g. masks, gowns and gloves that are not contaminated with body fluids • Hygiene waste and sanitary protection, e.g. nappies and incontinence pads • Autoclaved laboratory waste Offensive waste should only be placed in a yellow and black striped 'Tiger' bag	
Pharmaceutical	The blue waste stream is used for waste medicinal products that are not cytotoxic or cytostatic Blue-stream pharmaceutical waste bins must be sent for incineration at a suitably authorised facility. Blue-lidded containers are for any waste containing non-hazardous medicinal drugs that are expired, unused, contaminated, damaged, denatured or no longer needed	

(*Continued*)

Table 1.2 (Continued)

Types of waste	Description	Bin/bag type
Sharps	Sharps containers are designed to collect used needles, syringes, lancets and other sharps items. These puncture-resistant containers have a secure lid to prevent accidental injuries and contamination. They are typically colour-coded, often with a bright yellow bottom with a yellow lid. Sharps with a yellow lid contain non-infectious sharps	
Animal byproducts		
Cadavers	The disposal of equine cadavers (deceased horses) is an essential aspect of equine management to ensure proper biosecurity, environmental protection and public health. Incineration: Incineration involves the controlled burning of the cadaver in a specialised facility. This method effectively destroys the remains, reducing the risk of disease transmission. Incineration can be carried out on-site or at dedicated facilities. Burial: Burial involves burying the equine cadaver in a designated burial site that complies with local regulations. The burial site should be located away from water sources, ensuring minimal environmental impact. Depth and site requirements may vary and local authorities should be consulted	
Body parts	Disposal of anatomical waste materials that are potentially infectious or biohazardous use of red-lidded containers to indicate that the waste inside is anatomical in nature and requires special handling and disposal procedures	
Domestic waste		
Non-recycling	General waste disposal bins may be used to collect non-hazardous or non-infectious waste generated in healthcare settings, such as packaging materials, food waste or non-contaminated items. These bins are typically designed for easy waste disposal and are often colour-coded for different waste streams, following standard waste management practices	
Recycling	The disposal of recycling refers to the proper management and handling of recyclable materials to ensure they are processed and reused in an environmentally sustainable manner. Recycling helps conserve resources, reduce waste and minimise environmental impact	

Source: Rosina Lillywhite.

- Scope of application: The regulations apply to all employers whose employees habitually use DSE as a significant part of their work duties for continuous or extended periods. It covers a wide range of job roles, from office workers using computers to control room operators and data entry personnel.
- Risk assessments: Employers must conduct a thorough assessment of the health and safety risks associated with using DSE in the workplace. This assessment includes identifying potential hazards and evaluating factors such as workstation layout, equipment, lighting and the work environment.
- Ergonomic workstations: Employers must ensure that DSE workstations are ergonomically designed to promote comfort and minimise the risk of health problems. This includes providing adjustable chairs, properly positioned screens, adjustable keyboards and adequate lighting.
- Breaks and rest periods: Employees who regularly use DSE are entitled to adequate breaks or changes in work tasks to minimise the potential strain on their eyes, muscles and overall well-being. These breaks should be given at appropriate intervals, and the work should not be continuously demanding.
- Eye tests: Employers are required to provide free eye tests to employees who use DSE regularly. If the eye test indicates that specific glasses or corrective lenses are needed solely for DSE use, the employer must provide them at no cost to the employee.
- Training and information: Employers are responsible for providing adequate training and information to employees on how to set up their workstations correctly, adjust their posture and minimise health risks associated with DSE use.
- New employees and job changes: Employers must ensure that new employees who will be using DSE as part of their job role receive proper training and information before commencing work. Similarly, employees who change their workstations or job tasks must be provided with appropriate training and information.
- Health surveillance: Employers should offer health surveillance to employees who are at particular risk due to their work with DSE.

Employers must comply with the DSE regulations to protect their employees from potential health risks associated with prolonged DSE use. Failure to adhere to these regulations can result in legal consequences and potential harm to the well-being of the workforce. By creating ergonomic work environments, providing adequate training and conducting risk assessments, employers can foster a healthier and more productive workplace for DSE users [6].

Legionella Testing

Legionella is a type of bacteria that can cause a severe form of pneumonia known as Legionnaires' disease. The bacteria are commonly found in freshwater environments, such as lakes and streams, but they can also thrive in man-made water systems, including cooling towers, hot tubs, water tanks and plumbing systems. The bacteria *Legionella pneumophila* is responsible for the majority of Legionnaires' disease cases. It is transmitted to humans primarily through the inhalation of contaminated water droplets or aerosols. It is important to note that Legionella is not transmitted from person to person, meaning it is not contagious.

Consequences of contracting Legionnaires' disease:

- Legionnaires' disease: This is the severe form of infection caused by the Legionella bacteria. Symptoms typically appear within 2–10 days after exposure and may include high fever, chills, cough, muscle aches, headaches and difficulty breathing. In severe cases, patients may develop pneumonia, which can be life-threatening, especially for those with weakened immune systems or underlying health conditions.
- Pontiac fever: This is a milder and more common form of Legionella infection. It is a flu-like illness with symptoms such as fever, headache, muscle aches and fatigue. Unlike Legionnaires' disease, Pontiac fever does not affect the lungs and is usually not life-threatening. Symptoms typically appear within 24–48 hours after exposure and may last for several days.
- Long-term effects: Survivors of Legionnaires' disease may experience lingering health issues, such as fatigue, neurological symptoms and respiratory problems. In some cases, the recovery period can be prolonged, and individuals may require ongoing medical care and support.
- Outbreaks and public health concerns: Legionnaires' disease outbreaks can occur when a source of Legionella contamination affects multiple people in a specific area or facility. These outbreaks can lead to significant public health concerns, investigations and measures to control and prevent further transmission.

In the United Kingdom, the requirements for Legionella testing and control are outlined in the Health and Safety Executive's Approved Code of Practice and Guidance document known as 'Legionnaires' disease: The control of Legionella bacteria in water systems (ACOP L8). Here are the key requirements for Legionella testing in the United Kingdom [7]:

Risk assessment: Employers or those in control of premises are required to conduct a suitable and sufficient risk assessment of the water systems within their premises.

The risk assessment should identify and assess the risk of exposure to Legionella bacteria and should be reviewed regularly or whenever there is a significant change in the water system [7].

Competent person: A competent person or an appointed competent contractor should perform the risk assessment and manage and control Legionella risks. This person should have the necessary knowledge, skills and expertise to effectively assess and manage Legionella risks [7].

Control measures: The risk assessment should identify appropriate control measures to manage and minimise the risk of Legionella contamination. Control measures may include temperature monitoring, water treatment, regular cleaning and disinfection and maintenance of water systems [7].

Monitoring and testing: Routine monitoring and testing for Legionella should be conducted as part of the overall control measures. This includes regular water sampling and testing for the presence of Legionella bacteria. The frequency and extent of testing should be based on the risk assessment and should be determined by a competent person.

Documentation: Employers or duty holders are required to maintain up-to-date records of the risk assessment, control measures implemented and the results of monitoring and testing. These records should be readily available for inspection by enforcing authorities. It is important to note that the frequency and extent of Legionella testing may vary depending on the risk assessment findings. Higher-risk systems may require more frequent testing, while lower-risk systems may have less regular testing. The ACOP L8 guides the recommended frequencies for different types of systems [7].

Additionally, it is important to follow the guidelines provided by the United Kingdom HSE, local authorities and other relevant regulatory bodies to ensure compliance with specific requirements and any updates or changes to regulations. For detailed and up-to-date information, it is recommended to refer to the ACOP L8 and consult with qualified professionals or specialists in Legionella risk assessment and control [7].

Asbestos Testing

Asbestos testing requirements in the United Kingdom for workplace testing are governed by the Control of Asbestos Regulations 2012. These regulations aim to protect workers and others from the risks associated with exposure to asbestos in the workplace. Asbestos is a hazardous material known to cause serious health issues, including lung diseases and various cancers [8].

The key requirements for asbestos testing in the United Kingdom workplace are as follows [8]:

- Asbestos Management Survey: Employers are legally responsible for identifying and managing asbestos-containing materials (ACMs) in their workplaces. An asbestos management survey is the initial step to identify the presence, location and condition of any ACMs. This survey assesses the risk of exposure and helps develop a management plan to prevent the release of asbestos fibres into the air.
- Refurbishment and Demolition Survey: Before any refurbishment or demolition work occurs, a survey must be carried out. This survey is more intrusive than the management survey and involves thorough inspection and sampling of suspected ACMs to determine their presence and condition.
- Asbestos sampling and analysis: Sampling of suspected ACMs must be done by trained and competent personnel. An accredited laboratory then analyses the samples to confirm the presence and type of asbestos fibres.
- Risk assessment and management plan: Based on the survey findings and asbestos analysis, a risk assessment should be conducted to evaluate the potential risks of asbestos exposure to workers and others in the vicinity. A management plan should be put in place to mitigate these risks and ensure the safe handling, removal or encapsulation of ACMs.
- Asbestos register: Employers must keep an up-to-date asbestos register, which includes information about the location, condition and type of asbestos-containing materials in the workplace. This register should be readily accessible to all employees and relevant contractors.
- Training and information: Employers must provide adequate asbestos awareness training to employees who may encounter ACMs during their work. Training should cover the risks associated with asbestos exposure, safe work practices and procedures to follow in case of accidental disturbance.
- Licensed contractors: Only licensed contractors are allowed to undertake the work for higher-risk asbestos removal work. Licensing ensures contractors have the expertise, equipment and procedures to safely handle asbestos.
- Health surveillance: Employers should provide appropriate health surveillance to workers who are likely to be exposed to asbestos fibres, as required by the regulations.

Compliance with these asbestos testing and management requirements is crucial to protect workers' health and ensure legal compliance in the United Kingdom workplace. Employers should take asbestos-related risks seriously and

take appropriate measures to prevent exposure to this hazardous material [8].

1.3 Risk Assessments

A risk assessment is a systematic process of identifying, analysing and evaluating potential risks or hazards that could impact a project, process or organisation. It involves assessing these risks' likelihood and potential impact and developing strategies to mitigate or manage them effectively. A risk assessment aims to proactively identify and understand potential risks to make informed decisions and take appropriate actions to minimise their negative consequences. It helps organisations prioritise their resources, allocate budgets and implement controls to reduce the likelihood and impact of risks. Risk assessments can be conducted in various contexts, such as business projects, health and safety management, information security, environmental impact studies and financial planning. The process typically involves the following steps [8]:

- Risk identification: Identifying and documenting potential risks affecting the project or organisation.
- Risk analysis: Assessing the likelihood and impact of each identified risk, considering factors such as probability, severity, frequency and vulnerability.
- Risk evaluation: Prioritising risks based on their significance and determining which risks require immediate attention and mitigation efforts.
- Risk treatment: Develop strategies and action plans to mitigate, avoid, transfer or accept the identified risks.

Risk monitoring and review: Continuously monitoring and reviewing the effectiveness of risk management strategies and controls and adjusting them as needed. A well-executed risk assessment helps organisations anticipate and prepare for potential risks, reduces the likelihood of costly surprises, improves decision-making and enhances overall resilience [8].

Writing a detailed risk assessment involves documenting the risk assessment process's findings, analysis and recommendations. The following is a step-by-step guide on how to write a comprehensive risk assessment report [8].

Introduction

- Provide an overview of the purpose and objectives of the risk assessment.
- State the scope and boundaries of the assessment (e.g. specific project, department or organisation). Include a brief description of the methodology used for the assessment [8].

Executive Summary

- Summarise the key findings, high-priority risks and major recommendations.
- Highlight the overall risk profile and any critical areas of concern.
- Keep the summary concise and focused on the most significant aspects.

Methodology

- Describe the approach and methods used to conduct the risk assessment.
- Explain the data sources, tools, techniques and stakeholders involved.
- Provide any limitations or constraints encountered during the assessment.

Risk Identification

- Present a comprehensive list of identified risks organised by relevant categories.
- Include a brief description of each risk, highlighting its potential impact and likelihood.
- Assign unique identifiers or codes to facilitate reference throughout the report [8].

Risk Analysis

- Assess and analyse each identified risk in detail.
- Evaluate the likelihood or probability of occurrence for each risk.
- Evaluate each risk's potential impact or consequences on the organisation, project or process.
- Use a consistent rating scale or methodology to quantify and compare risks.
- Present the risk analysis results in a structured and easy-to-understand format, such as tables or charts.

Risk Evaluation

- Evaluate the risks based on their analysis results.
- Consider additional factors such as legal and regulatory requirements, stakeholder concerns and risk tolerance levels.
- Prioritise the risks based on their severity and significance.
- Highlight any risks that require immediate attention or urgent mitigation measures.

Risk Treatment

- Provide recommendations for managing and mitigating the identified risks.
- Propose specific risk treatment strategies for each high-priority risk.
- Clearly outline the actions, controls or measures that need to be implemented.
- Describe any contingency plans or alternative approaches for risk management.

Risk Monitoring and Review

- Outline the process for ongoing monitoring and review of the risks and risk management measures.
- Define key performance indicators or metrics to track the effectiveness of risk controls.
- Specify the frequency and responsibilities for monitoring and reporting on risk status.

Conclusion

- Summarise the main findings and conclusions of the risk assessment.
- Emphasise the importance of proactive risk management and the need for ongoing vigilance.
- Consider highlighting any areas of uncertainty or areas requiring further investigation.

Appendices

- Include any supporting documentation, data or detailed analysis that may be relevant but too extensive for the main report.
- Attach any supplementary information, references or resources used during the risk assessment.

To maintain clarity, concise language should be used and the information should be presented logically and in an organised fashion. The report should be tailored to the intended audience: senior management, project stakeholders or regulatory bodies [8].

Table 1.3 shows an example of a detailed risk assessment for trips and slips in veterinary practice; this should be utilised alongside Figure 1.2, which is the grading matrix for the risk assessment; this should be used to combine the severity and likelihood scores to give the overall risk score.

1.4 Fire Safety

The Regulatory Reform (Fire Safety) Order 2005 primarily governs United Kingdom fire safety requirements and legislation. This legislation places responsibilities on both employers and employees to ensure the safety of individuals in the workplace. Some key points to consider are as follows [9]:

- **Responsible person:** The employer or the person in control of the premises is designated as the 'Responsible Person' under the legislation. This could be the employer, business owner, occupier or managing agent.
- **Fire risk assessment:** The Responsible Person must carry out a fire risk assessment of the premises to identify potential hazards, evaluate the level of risk and implement appropriate fire safety measures. The assessment should be regularly reviewed and updated as necessary.
- **Fire safety measures:** Based on the fire risk assessment findings, the Responsible Person must implement suitable fire safety measures. This includes providing appropriate firefighting equipment, maintaining fire detection and alarm systems, establishing emergency evacuation procedures and ensuring the availability of escape routes.
- **Training and information:** Employers must provide adequate fire safety training to employees, including instruction on the correct use of firefighting equipment and evacuation procedures. Information about the risks identified in the fire risk assessment should also be communicated to employees.
- **Fire drills and evacuation plans:** Employers should conduct regular fire drills to familiarise employees with evacuation procedures and ensure effective responses in the event of a fire. The evacuation plan should be clearly displayed, indicating escape routes, assembly points and any specific roles or responsibilities.
- **Maintenance and testing:** It is essential to regularly maintain and test fire safety equipment, such as fire extinguishers, fire alarms, emergency lighting and sprinkler systems. Records of maintenance activities and tests should be kept.
- **Cooperation and coordination:** In multi-occupancy buildings, collaboration and coordination among employers or responsible persons are crucial to ensure fire safety. They should communicate and cooperate to address shared fire safety issues, evacuation plans and emergency response procedures.

Non-compliance with fire safety legislation can result in penalties, including fines or imprisonment. Employers and

Table 1.3 Risk assessment for slips and trips in veterinary practice.

Slips, trips and falls											
	Hazard			Risk rating				New risk rating		
Activity	Hazard description	Personnel at risk	Existing controls in place	Likelihood	Severity	Risk Level	Additional control measures required	Likelihood	Severity	Risk Level
Accessing and exiting the building. Moving around the practice outside.	Slip or fall on ice or mud outside, causing bruises, cuts, sprains, and strains. Potential for dislocation or break of the limb in extreme cases.	All employees, students and visitors	Suitable footwear to be worn at all times Grit to be applied to icy patches in the car park etc. Mud to be cleared around the edge of the building Ensure suitable lighting is provided and report any issues Clear snow before applying grit	2	3	6	Mark off any known high-risk areas in extreme conditions	1	3	3
Accessing and exiting the building. Moving around the practice outside.	Trips or falls on uneven ground in the car park.	All employees, students and visitors	Notify the maintenance team if an area is posing a continued risk Wear suitable footwear at all times. Plan a safe route to avoid uneven ground where possible Provide suitable lighting in external areas	2	3	6		2	3	6
Moving around within the building	Trips or falls over items left in walkways equipment, stock, post, empty boxes, rubbish etc.	All employees, students and visitors	Ensure all walkways remain tidy at all times, stock, post etc. to be stored away properly, not on the floor or out of the way All employees responsible for ensuring this happens Remove empty boxes and rubbish to designated areas Report any damaged flooring	2	2	4		2	2	4

(*Continued*)

Table 1.3 (Continued)

Slips, trips and falls											
	Hazard			Risk rating				New risk rating			
Activity	Hazard description	Personnel at risk	Existing controls in place	Likelihood	Severity	Risk Level	Additional control measures required	Likelihood	Severity	Risk Level	
Moving around within the building	Trip over open desk drawers, filing cabinet drawers	All employees, students and visitors	Do not leave desk draws or filing cabinet drawers open. Shut if a risk is identified.	1	3	3		1	3	3	
Moving around within the building	Trip over electrical cables, extension leads, mats	All employees, students and visitors	Ensure computer cables and all electrical cables are correctly tidied away, and avoid crossing walkways. If unavoidable to cross a walkway, use suitable covers. Ensure static mats are of suitable wait and replace if edges curl	2	2	4		2	2	4	
Moving around within the building	Slip-on wet floor could lead to a bad sprain or possibly even breakage of limb.	All employees, students and visitors	Ensure all spillages are promptly wiped up Ensure plenty of products to clean up spillage Use wet floor signs until dry Ensure mud/door mats in entry points to dry wet shoes	2	2	4		2	2	4	
General Precautions	Slips, trips, falls	All employees, students and visitors	All employees are to be responsible for the tidiness and cleanliness of the offices and to report any concerns to the practice principles.			0		0	0	0	

Source: Rosina Lillywhite.

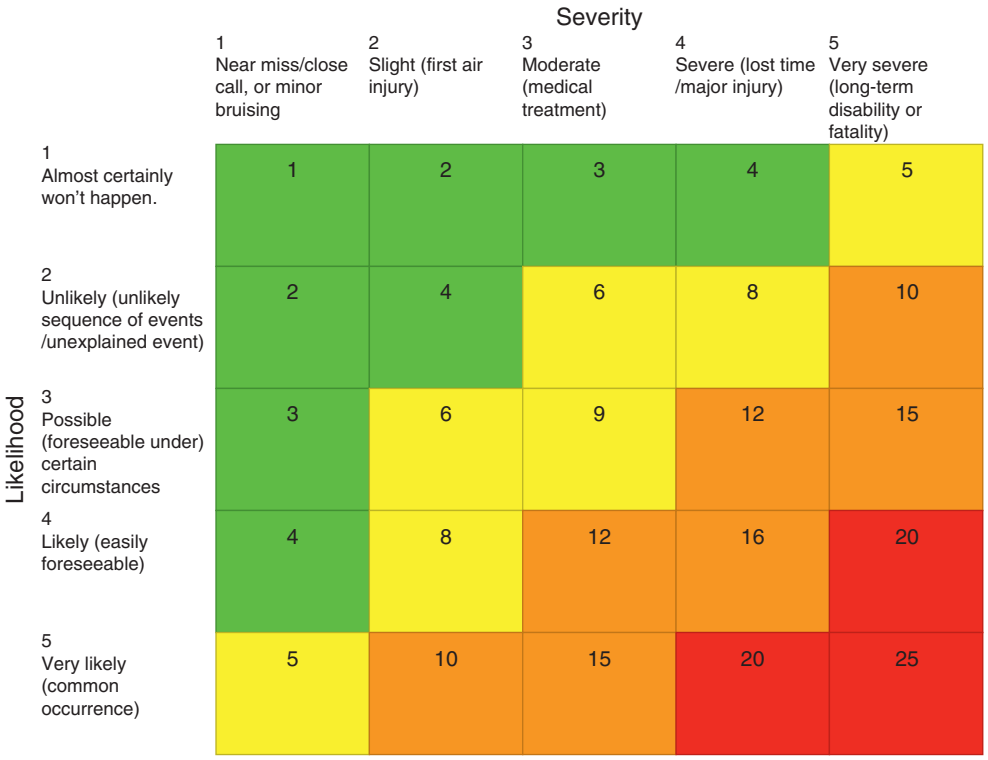


Figure 1.2 Risk grading matrix for a risk assessment. *Source:* Rosina Lillywhite.

employees must familiarise themselves with their specific obligations under the Regulatory Reform (Fire Safety) Order 2005 and seek guidance from fire safety professionals or local fire authorities if needed [9].

The Fire Triangle

The fire triangle, also known as the combustion triangle, is a simple model used to understand the three essential elements required for a fire to occur and sustain itself (Figure 1.3). These elements are heat, fuel and oxygen. Without any one of these components, a fire cannot start or continue to burn. The fire triangle is a fundamental concept in fire safety and firefighting.

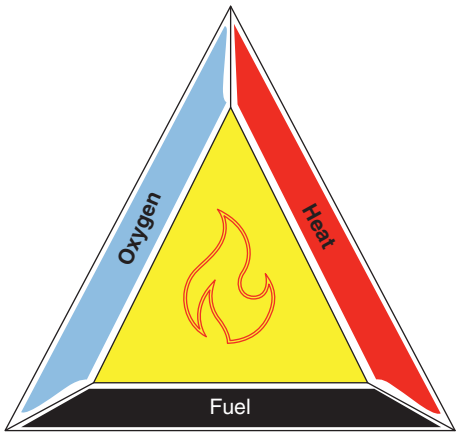


Figure 1.3 The fire triangle. *Source:* Rosina Lillywhite.

- Heat: Is the first element of the fire triangle. It is the energy that raises the temperature of the fuel to its ignition point. The ignition point is the temperature at which the fuel starts to undergo a chemical reaction with oxygen, releasing heat and light, resulting in combustion. Heat can be generated from various sources, such as open flames, electrical sparks, hot surfaces, friction or chemical reactions.
- Fuel: Is the second element of the fire triangle. It refers to any material that can burn and sustain combustion. Common examples of fuel include wood, paper, cloth, gasoline, natural gas, oil and plastics. Different fuels have different ignition points and burn at varying rates. The type and amount of fuel present in a fire can significantly influence its intensity and spread.
- Oxygen: Is the third element of the fire triangle. It is essential for the combustion process, as it acts as an oxidiser, enabling the fuel to burn. When the fuel's molecules combine with oxygen, they undergo a rapid chemical reaction called oxidation, producing heat, light and combustion byproducts such as smoke and gases. The presence of oxygen in the air (typically around 21% in ambient air) allows fires to spread and sustain themselves.

The interaction of these three elements is what sustains a fire. Removing any one of the elements can extinguish the fire. Fire safety measures often focus on controlling one or more aspects of the fire triangle. For instance:

- Cooling: Reducing the temperature by applying water or other cooling agents to the fuel can prevent the material from reaching its ignition point.
- Starvation: Removing or reducing the fuel supply can deprive the fire of the material needed to burn.
- Smothering: Cutting off the oxygen supply, such as covering the fire with a fire blanket, can extinguish the fire.

Understanding the fire triangle helps individuals and firefighters assess fire risks, develop fire safety plans and implement effective firefighting strategies to control and extinguish fires safely.

Fire Extinguishers

In the United Kingdom, fire extinguishers play a crucial role in fire safety and are an essential part of the fire protection measures in various premises [9].

Types of Fire Extinguishers

Different types of fire extinguishers are available, each designed to tackle specific types of fires. The most common types in the United Kingdom are [9]:

- Water extinguishers (red label): Suitable for Class A fires involving solid materials like wood, paper or fabric.
- Foam extinguishers (cream label): Effective on Class A and B fires involving flammable liquids such as petrol, oil or paints.
- Powder extinguishers (blue label): Suitable for Class A, B and C fires, which include flammable gases like propane or butane.
- CO_2 extinguishers (black label): Designed for use on electrical fires and flammable liquids. They do not leave any residue, making them suitable for areas with sensitive equipment.
- Wet chemical extinguishers (yellow label): Specifically for Class F fires involving cooking oils and fats, commonly found in commercial kitchens.

Figure 1.4 displays the available fire extinguishers in the relevant class categories.

Selection and Placement

The selection and placement of fire extinguishers should be based on the specific risks and fire hazards present in a premises. It is essential to consider the type of fire that is likely to occur and the nature of the materials in the surrounding environment. The number and location of fire extinguishers should comply with British Standard BS 5306, which provides guidelines for fire extinguisher

Classification	Fire type	Powder	Foam	CO^2	Water	Wet Chemical
Class A	Solids (e.g. wood, plastic, paper)	✓	✓	✗	✓	✗
Class B	Flammable Liquids (e.g. solvents, paints, fuels)	✓	✓	✓	✗	✗
Class C	Gases (e.g. butane, propane, LPG)	✓	✗	✗	✗	✗
Class D	Metals (e.g. lithium, magnesium)	✓	✗	✗	✗	✗
Electrical	Equipment (e.g. computers, servers, TVs)	✓	✗	✓	✗	✗
Class F	Cooking Oils (e.g. cooking fats, oilve oil)	✗	✗	✗	✗	✓

Figure 1.4 Fire extinguishers and relevant class categories. *Source:* Rosina Lillywhite.

provision. Generally, fire extinguishers should be easily accessible, prominently located and positioned along escape routes and near potential fire hazards [9].

Maintenance and Inspection

Fire extinguishers in the United Kingdom must undergo regular maintenance and inspection to ensure they are in proper working condition. The maintenance should be carried out by a competent person who is trained in fire extinguisher servicing. The maintenance frequency and requirements are outlined in British Standard BS 5306 Part 3. This involves routine visual checks, periodic servicing and pressure testing at specified intervals. Records of maintenance activities should be kept, including dates, details of servicing and any repairs or replacements [9].

Training and Proper Use

Employees and occupants of premises should receive proper training on fire safety, including instruction on how to use fire extinguishers effectively and safely. Training should cover the identification of fire types, selecting the appropriate extinguisher and the correct techniques for operation. It is important to note that while fire extinguishers can be a valuable tool in tackling small fires, their use should be limited to situations where it is safe to do so. In case of larger or spreading fires, the immediate priority should be an evacuation and notifying the fire services. It is advisable to consult with fire safety professionals or local fire authorities for specific guidance on fire extinguishers and their requirements based on individual premises and local regulations [9].

Fire Notices

In the United Kingdom, several types of fire notices may be required in a workplace to ensure fire safety information is communicated effectively. The specific requirements can vary based on the nature of the premises and the applicable regulations. Some common types of fire notices are as follows [9]:

- Fire action notice: This notice provides instructions to building occupants on what actions to take in the event of a fire. It typically includes guidance on raising the alarm, calling emergency services, evacuation procedures, assembly points and any specific roles or responsibilities individuals may have during an emergency.
- Fire exit signs: These signs are used to indicate the location of emergency exits and escape routes. They are designed to be highly visible and should comply with relevant safety standards. Fire exit signs often feature a pictogram of a running person or an arrow indicating the direction of the exit.
- Fire equipment signs: These signs identify the location and type of fire safety equipment in the premises. They may include signs for fire extinguishers, fire blankets, fire alarms, emergency lighting or other firefighting equipment. The signs typically consist of symbols or images representing the specific equipment.
- Fire assembly point signs: These signs indicate the designated assembly point or points where occupants should gather after evacuating the building. The signs are usually placed in outdoor areas away from the building and should be clearly visible to ensure a safe and organised assembly during emergencies.
- Fire safety information signage: These signs provide general fire safety information and awareness. They may include signs indicating fire escape routes, fire assembly point locations, general fire safety reminders or instructions on reporting fire hazards.

It is important to consult the specific region's applicable fire safety regulations and standards to determine the specific requirements for fire notices in individual workplaces. Additionally, engaging with fire safety professionals or local fire authorities can provide valuable guidance and ensure compliance with relevant regulations [9].

1.5 Personal Protective Equipment (PPE)

In veterinary practice, various types of PPE are used to ensure the safety of veterinary staff when handling hazardous substances or performing procedures that may pose a risk of exposure. Infomration regarding some common types of PPE found in veterinary practice, their uses and when they are required is presented below [4]:

- Gloves: Disposable gloves, typically made of latex, nitrile or vinyl, protect the hands from contact with chemicals, bodily fluids, pathogens and other potentially harmful substances. Gloves are required when handling medications, cleaning contaminated areas, performing procedures involving bodily fluids or tissues and during surgery.
- Face masks protect the respiratory system, including surgical masks or respirators (such as N95). They are particularly important when there is a risk of airborne transmission of infectious diseases or when working in environments with dust, fumes or strong odours. Face masks should be worn during procedures that generate aerosols, such as dental surgery, or when working with animals suspected or confirmed to have respiratory infections.

- Protective eyewear: Safety glasses, goggles or face shields are worn to protect the eyes from potential splashes, sprays or debris that could cause injury or contamination. They are necessary when handling hazardous substances, performing surgeries, dental procedures.
- Protective clothing: Veterinary staff often wear protective clothing, such as lab coats or gowns, to protect their skin and clothing from contamination. These garments act as a barrier against chemicals, bodily fluids or other substances encountered during procedures. Protective clothing should be worn when handling hazardous substances, during surgery or when there is a risk of contamination during patient care. Protective clothing can also be worn in the form of non-disposable gloves when handling horses to protect the handler from burns or injury if the horse pulls away suddenly. A riding helmet of an appropriate standard should also be worn when handling equine patients.
- Respiratory protection: Respiratory protection, such as respirators or masks with specific filters, may be required in certain situations where there is a risk of airborne hazards or exposure to harmful gases, fumes or chemicals. This includes working with hazardous chemicals, performing procedures generating aerosols or working in environments with poor ventilation.
- Footwear: Sturdy, closed-toe shoes or boots should be worn to protect the feet from accidental spills, falls or sharp objects. Proper footwear is important in any veterinary setting to reduce the risk of injuries.

The use of PPE in veterinary practice is dictated by the specific hazards present and the procedures being performed. It is important to assess the risks associated with each task and ensure that appropriate PPE is provided and worn by all personnel involved. Regular training and reinforcement of PPE use are essential to promote a safe working environment and minimise the risk of exposure to hazards [4].

Radiation PPE is used in veterinary practice when working with or around sources of ionising radiation. Different types of PPE commonly used for radiation protection are as follows [4, 10]:

- Lead aprons: Lead aprons are worn to protect the body from scattered radiation during diagnostic imaging procedures such as X-rays or fluoroscopy. These aprons are made of lead or lead-equivalent materials and provide shielding to the torso, abdomen and reproductive organs.
- Thyroid shields/collars: Thyroid shields or collars are leaded shields that are worn around the neck and thyroid area during radiation procedures. They protect the thyroid gland from direct or scattered radiation.
- Lead gloves: Lead gloves are used to protect the hands and fingers when handling or working near radiation sources. They provide shielding against direct contact with radioactive materials or X-ray equipment.
- Lead glasses: Lead glasses, also known as radiation safety glasses, are designed to protect the eyes from radiation exposure. They have leaded lenses to reduce the penetration of X-rays or other forms of ionising radiation.
- Radiation monitoring devices: In addition to PPE, personnel working with radiation may use radiation monitoring devices such as dosimeters or film badges. These devices measure and track the amount of radiation to which an individual has been exposed, helping to ensure that exposure levels remain within safe limits.

It is important to note that radiation PPE should be accompanied by adherence to proper radiation safety protocols and practices. Veterinary staff working with radiation should receive appropriate training on radiation safety, including the correct use and maintenance of PPE, handling and storage of radiation sources and the principles of radiation protection. Furthermore, regulatory requirements and guidelines regarding radiation safety may vary between countries or regions. Following local authorities' specific regulations and recommendations is crucial, and consulting with a radiation safety officer or expert to ensure compliance with all necessary precautions (see Chapter 7 for further information).

1.6 Accident Reporting

The accident report process in a veterinary practice typically involves documenting any incidents or accidents that occur within the facility. This process is important for maintaining a safe working environment, ensuring proper treatment of animals and managing liability concerns. While specific practices may vary, here is a general outline of the accident report process in a veterinary practice [11]:

- Immediate response: When an accident or incident occurs, the veterinary staff should provide immediate care to injured animals or individuals. They should also assess the situation to ensure the safety of everyone present.
- Notify supervisor: The staff members involved in the incident should inform their immediate supervisor or manager about what happened. Depending on the practice's protocols, this can be done verbally or through a designated reporting system.
- Document details: The person responsible for filing the accident report should gather all relevant information about the incident. This includes the incident's date,

time and location, names of individuals involved, description of what happened and any relevant details or observations.
- Collect witness statements: If there were witnesses to the accident, their statements should be collected as well. These statements can provide additional perspectives and help establish an accurate account of the incident.
- Report completion: The staff member responsible for the accident report should complete the necessary forms or documents using the gathered information. This may include a standardised accident report form provided by the practice or specific software or digital systems used for reporting.
- Review and investigation: The supervisor or manager should review the completed accident report and may conduct an investigation if necessary. The purpose is to understand the causes of the accident, identify any underlying issues and take appropriate measures to prevent similar incidents in the future.
- Corrective actions: Based on the findings of the review and investigation, the veterinary practice should implement any necessary corrective actions. This may involve additional training, modifications to protocols or procedures or making changes to the physical environment to enhance safety.
- Communication and follow-up: The supervisor or manager should communicate the findings and any implemented corrective actions to the individuals involved in the accident and other relevant staff members. Regular follow-up may be required to monitor progress and ensure that the necessary changes are effective.
- Recordkeeping: All accident reports, witness statements, investigation findings and related documentation should be appropriately filed and maintained as part of the practice's recordkeeping system. If required, this information may be used for future reference, insurance purposes or legal matters.

It is important to note that specific protocols and requirements may vary between veterinary practices, so it is advisable to consult individual practice's policies and procedures for precise instructions on the preferred accident reporting process [11].

Figure 1.5 shows an example of an accident report form that could be used in practice.

1.7 Maintaining Equipment in Practice

Maintaining practice equipment in a veterinary practice is essential for providing high-quality care to animals and ensuring the smooth functioning of the facility. Some key points to consider for the maintenance of practice equipment are as follows [12]:

- Regular inspections: Perform routine inspections of all equipment to identify any signs of wear, damage or malfunction. This includes diagnostic machines, surgical instruments, anaesthesia equipment, dental tools and imaging devices. Check for loose or broken parts, frayed cables, leaks and any other issues affecting the equipment's performance.
- Create a maintenance schedule: Establish a maintenance schedule for different types of equipment. This schedule should outline the frequency of inspections, cleaning, calibration and servicing based on the manufacturer's recommendations. Develop a system to keep track of maintenance tasks and ensure they are completed on time.
- Cleaning and disinfection: Clean and disinfect equipment regularly to prevent the spread of infections. Follow the manufacturer's instructions for cleaning and using appropriate disinfectants. Pay special attention to items that come in contact with animals or biological samples, such as examination tables, surgical instruments and laboratory equipment [13].
- Calibration and calibration logs: Calibration is crucial for accurate readings and measurements from diagnostic equipment. Establish a calibration schedule and maintain a log of all calibration activities. Some equipment may require professional calibration, so ensure arrangements with qualified technicians or service providers are made.
- Repairs and replacements: Promptly address any equipment malfunctions or damages. Train staff members to identify problems and report them to the appropriate authority. Depending on the severity of the issue, repairs or replacement of equipment may be necessary. Keep spare parts, if available, for quick repairs.
- Staff training: Train the veterinary staff on equipment use, cleaning and maintenance. Ensure they understand the importance of regular maintenance and encourage them to report any concerns or issues promptly. The knowledgeable staff can contribute to identifying problems early and preventing further damage.
- Documentation: Maintain detailed records of all equipment maintenance activities, including inspections, cleaning, repairs and calibration. Documenting these tasks helps track the equipment's history, identify recurring issues and demonstrate compliance during audits or inspections.
- Collaborate with suppliers: Maintain contact with equipment suppliers or manufacturers to stay updated on maintenance recommendations, software updates and any recalls or safety notices. They can provide valuable

ACCIDENT INVESTIGATION REPORT			
Company Name		Unit/Contract:	
Incident location			
Date of incident		Status:	*Ongoing*
Type of incident		Injury or Illness caused:	
Potential severity	Major [ ]	Serious [ ]	Minor [ ]
Recurrence Probability	High [ ]	Medium [X]	Low [ ]
Background Information			
Description of How Accident Occurred:			
Evidence/Media			
Insert here or refer to Appendices			
Incident Investigation			
Immediate causes **Contributory/Root Causes:**			
Supporting Documents			
The following supporting documents have been consulted in preparation of this accident investigation report (Also refer to Appendix C)			

Figure 1.5 Accident report form example. *Source:* Rosina Lillywhite.

Conclusion, Preventative and Corrective Actions
The following Immediate/Containment actions are recommended: **RIDDOR Report:** complete necessary filing to local authority relating to the RIDDOR reportable event within 10 days of accident ***The following Preventative actions are recommended for consideration:*** ***Further Opportunities for improvement:***

Completed by:			
Name	**Role/Position**	**Signed**	**Date**

Appendix A – Evidence/Photos/Videos

Appendix B – Accident Report Form

Appendix C – Supporting Documentation

Figure 1.5 (Continued)

information on best practices for equipment care and assist with repairs or replacements when needed.

- Portable appliance testing (PAT): PAT is a process used to assess the safety of electrical appliances. The testing is typically performed by a competent person who inspects and tests the appliances for potential electrical faults or hazards. Various checks and tests are conducted on the appliance during a PAT test, including visual inspections, earth continuity testing, insulation resistance testing and functionality checks. The specific tests performed depend on the type of appliance and the level of risk associated with its use. PAT testing aims to ensure that electrical appliances are safe to use, especially in environments where they may pose a risk to the individuals using them or to the premises. This testing helps identify faults or defects that could lead to electrical shocks, fires or other hazards and should be carried out at least annually; some premises may be required to carry out testing every six months [13].
- Remember that the specific maintenance requirements may vary depending on the type of equipment in veterinary practice. Always consult the manufacturer's guidelines and seek professional assistance as necessary.

Identifying Faults in Equipment

It is important to remember that identifying faults in practice equipment is essential to prevent injury to staff, clients or visitors to the practice and to maintain practice equipment in good working order. Table 1.4 displays the possible

Table 1.4 Equipment faults and action required.

Equipment fault	Sign of fault	Action to take
Chemical and Biological Spills	Presence of spilled chemicals or biological agents, unusual odours, visible contamination.	• Ensure personal safety by wearing appropriate personal protective equipment (PPE) like gloves, goggles, and masks. • Isolate the area to prevent further contamination. • Follow established procedures for spill containment, clean-up, and disposal of hazardous materials. • Report the spill to the designated personnel responsible for handling such incidents, such as a supervisor or safety officer.
Glass Breakages	Shattered or broken glass, sharp edges, scattered glass fragments.	• Ensure personal safety by wearing gloves and taking precautions to avoid injury from glass shards. • Isolate the area to prevent access by others and minimise the risk of injury. • Safely clean up the broken glass using appropriate tools (e.g., broom, dustpan) and dispose of it properly. • If the breakage was due to a structural or safety issue, report it to maintenance personnel or the relevant department.
Infection and Infestation	Presence of pests, signs of infestation (e.g., droppings, nests), signs of infectious material or waste	• Avoid direct contact with infected or infested areas. • Notify the appropriate personnel responsible for pest control or facility maintenance. • Follow established procedures for cleaning, disinfection, and pest control. • Take necessary precautions to prevent the spread of infection or infestation, such as quarantining affected areas if required.
Electrical Faults and Equipment	Malfunctioning or non-operational equipment, tripped circuit breakers, power outages, burning smells, sparks, overheating.	• Ensure personal safety by disconnecting or switching off the equipment and isolating the power source if possible. • If there is an immediate danger, evacuate the area and contact emergency services if necessary. • Report the fault to the appropriate personnel responsible for maintenance or repair of electrical equipment. • Tag or label the faulty equipment to prevent further use until it has been repaired or replaced by qualified personnel.
Fire and Gaseous Leaks	Smoke, flames, burning smells, activated fire alarms, hissing sounds, and strong odours from gas leaks	• In the event of fire, follow established emergency evacuation procedures, activate fire alarms, and contact emergency services. • If there is a gas leak, evacuate the area immediately, avoid creating sparks, and notify emergency services and relevant authorities. • Report the incident to the appropriate personnel, such as the fire marshal or safety officer, and follow the organisation's reporting procedures for fire or gas-related incidents.

Source: Rosina Lillywhite.

faults to look out for in practice equipment and the relevant action to take if a fault is identified.

1.8 Emergency First Aid

Emergency first aid in the workplace refers to the provision of immediate and basic medical assistance to an injured or ill person until professional medical help arrives. Key points to consider in relation to emergency first aid in the workplace are as follows [14]: cardiopulmonary cerebral resuscitation (CPCR), choking, wounds, fractures and burns.

Appointing First Aiders

The number of first aiders required in a workplace depends on the size of the workplace, nature of the work and the level of risk involved. The HSE provides guidelines on the recommended ratios of first aiders to employees. First aiders should receive appropriate training to provide first aid in the workplace. The training should cover topics such as CPCR, bandaging, treating burns and fractures and handling medical emergencies [14].

First Aid Training

- Employers should ensure that there are an adequate number of trained first aiders available at all times, taking into account shift patterns, absences and other factors.
- First aid training should be provided by competent training providers who follow recognised standards and guidelines.
- First-aiders may need to undergo refresher training periodically, typically every three years, to keep their skills and knowledge up to date.

Responsibilities of First Aiders [15]

- First aiders should be familiar with the first aid facilities and equipment available in the workplace.
- They should assess the situation, provide appropriate first aid and seek professional medical help when necessary.
- First aiders should maintain confidentiality and treat individuals with respect and dignity.

First Aid Kits and Equipment

Ensure that the workplace is equipped with a well-stocked first aid kit that is easily accessible to all employees. Regularly check the contents and replenish supplies as needed. Additionally, workplaces may require specific first aid equipment based on their nature of work or industry such as eye wash stations or a defibrillator.

First Aid Kits

Availability and accessibility [16]:

- Employers are required to provide suitable and sufficient first aid equipment in the workplace.
- First aid kits should be easily accessible to all employees, and their locations should be clearly marked.
- The number and size of first aid kits needed will depend on the size and nature of the workplace and the level of risk identified in the risk assessment.

Contents of First Aid Kits [16]

- First aid kits should contain a range of items suitable for treating common workplace injuries and illnesses.
- The contents of the first aid kit should be based on the findings of the workplace risk assessment.
- Typical items that may be included in a first aid kit are adhesive dressings, sterile eye pads, bandages, disposable gloves, scissors, resuscitation face shields and guidance on first aid.

Regular Inspection and Restocking

- The person responsible for first aid arrangements in the workplace should regularly check and restock the first aid kits.
- The contents should be maintained in good condition, with items in date and sealed properly.
- Records should be kept of inspections, including dates, details of items checked and any replenishments made.

It is important to note that specific requirements for first aiders and first aid kits may vary based on the country, industry and regulatory authorities. It is advisable to consult the local health and safety regulations and guidelines relevant to practice to ensure compliance with the specific requirements.

Documentation and Reporting

Maintain accurate records of any incidents, injuries or illnesses that occur in the workplace. Follow the reporting procedures set by the practice which may include completing incident reports and notifying relevant personnel or authorities. Remember, while emergency first aid is important, it should never replace the need for professional medical care. Once professional help arrives, provide them with all relevant information and cooperate with their instructions [4].

1.9 Working Time Requirements and Pay

The Working Time Regulations (WTRs) in the United Kingdom provide legal provisions to protect workers' health, safety and well-being by establishing limits on working hours, rest breaks and annual leave entitlement. The key points to understand about the Working Time Regulations include [17]:

Maximum weekly working hours: The WTR limits most workers' average working time to 48 hours per week. This average is typically calculated over a reference period of 17 weeks. Workers can voluntarily choose to work longer hours by signing an opt-out agreement, but they cannot be forced or pressured into doing so. Some categories of workers, such as certain mobile workers and those in certain industries, may have different rules and exemptions regarding maximum working hours. Other requirements include the following [17]:

- Rest breaks and rest periods: Workers aged 18 and above are entitled to a minimum 20-minute uninterrupted rest break if their working day exceeds six hours.
- Workers under the age of 18 are entitled to a 30-minute uninterrupted rest break if their working day exceeds 4.5 hours.
- Workers are entitled to a daily rest period of 11 consecutive hours in each 24-hour period.
- Workers are entitled to a weekly rest period of at least 24 consecutive hours in each 7-day period or at least 48 consecutive hours in each 14-day period.

Annual Leave Entitlement [17]

- Full-time workers are entitled to a minimum of 5.6 weeks (or 28 days) of paid annual leave per year (including bank holidays).
- Part-time workers' leave entitlement is calculated pro-rata, depending on the number of days or hours they work in a week.
- Public holidays can be included as part of the annual leave entitlement if stated in the employment contract.

Night Work

The WTR includes specific provisions for night workers, defined as those who regularly work at least three hours during the night period, typically between 11 p.m. and 6 a.m. Night workers are entitled to receive regular health assessments and have the right to transfer to day work if deemed necessary for health reasons. There are additional restrictions on the average weekly working hours for night workers, and they should not exceed eight hours on average over a 17-week reference period [17].

Record Keeping and Enforcement

Employers are required to maintain records of workers' working hours, including any opt-out agreements, for at least two years. The HSE is responsible for enforcing the WTR in relation to working time and rest breaks, while the employment tribunals deal with disputes related to annual leave entitlement. It is important to note that there are certain exceptions and variations to the WTRs for specific sectors, such as veterinary, healthcare, emergency services and armed forces. It is advisable to consult the official United Kingdom government resources or seek legal advice to understand the specific application of the WTR to a particular industry or employment situation [17].

Refer to the United Kingdom government's official website or consult the advisory, conciliation and arbitration service (ACAS) guidelines for detailed and up-to-date information on the WTRs.

National Minimum Wage (NMW)

In the United Kingdom, the government sets the minimum pay requirements to ensure workers receive a fair minimum wage for their work [18]. The NMW is the minimum hourly rate that most workers in the United Kingdom are entitled to receive varies, depending on the worker's age and whether they are an apprentice. The rates are updated annually [19].

National Living Wage (NLW)

The NLW as of April 2024 has been made available to all those 21 years old and above, previously this has only been available to those 23 years old and above. The NMW and the NLW are reviewed by the government each year and updated in April, so it is important that the most up to date figures are referred to [19].

Additional Considerations

It is important to note that the minimum pay requirements may differ for certain groups or circumstances, such as workers in specific industries, those on apprenticeships or individuals with disabilities. Some workers, such as those who are self-employed, volunteers or in certain educational or training programs, may not be entitled to the NMW or NLW. However, specific rules and exceptions apply, so it is advisable to consult official guidance or seek legal advice for individual circumstances. Employers are legally obligated to pay their workers at least the minimum wage rates applicable to their age and employment status.

The rates are periodically reviewed and updated by the government. It is essential for employers to stay informed about the current rates to ensure compliance with the minimum pay requirements.

For the most up-to-date information on the NMW and NLW rates, it is recommended to refer to the official United Kingdom government website or consult the HM Revenue and Customs (HMRC) guidance on minimum wage compliance.

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