Workplace Health and Safety Regulation 2008

On 1 September 2008, the *Workplace Health and Safety Regulation 1997* was repealed and replaced by the *Workplace Health and Safety Regulation 2008*. The new Regulation:

- remakes provisions of the old Regulation
- removes the rural industry exemption from existing regulatory requirements (except in relation to operator licensing for earthmoving equipment and particular cranes) over the next two years
- changes the numbering.

Workplace Health and Safety Queensland will be undertaking a process to review and update all forms and documents on the departmental website to ensure consistency with the new regulation. Until this process is complete, all forms and documents must be read in conjunction with the information provided in the comparison table (PDF, 255 KB). The comparison table has been provided to assist with the practical application of the *Workplace Health and Safety Regulation 2008*. It is not intended to provide a determination or comment on compliance or to provide legal interpretation. It is intended as a guide only and is provided as an information source only.

Workplace Health and Safety Amendment of Codes of Practice Amendment Notice (No. 1) 2008

A number of workplace health and safety codes of practice have been amended to bring them into line with the *Workplace Health and Safety Regulation 2008*. Current codes of practice need to be read in conjunction with the information provided in the *Workplace Health and Safety Amendment of Codes of Practice Amendment Notice (No. 1) 2008* (PDF, 322 KB). However, this document does not include amendments to the following codes of practice:

- Compressed Air Recreational Diving and Snorkelling
- Recreational Technical Diving
- Scaffolding
- Safe Design and Operation of Tractors

Code of Practice for horse riding schools, trail riding establishments and horse hiring establishments 2002

Important information about the Code of Practice

1. The code was made on 16 January 2001.
2. The code commenced on 1 January 2002.
3. The code was amended on 28 April 2006.
4. The code expires 10 years after it commenced.

What is this Code of Practice about?

The *Code of Practice for Horse Riding Schools, Trail Riding Establishments and Horse Hiring Establishments 2002* states ways to manage exposure to risks identified as typical in horse riding schools, trail riding establishments and horse hiring establishments.

Workplace health and safety obligations and the *Workplace Health and Safety Act 1995*

The *Workplace Health and Safety Act 1995* imposes obligations on certain persons to ensure workplace health and safety. Workplace health and safety is ensured when persons are free from death, injury or illness created by workplaces, relevant workplace areas, work activities or by plant or substances for use at a workplace. Ensuring workplace health and safety involves identifying and managing exposure to the risks at your workplace.

Obligations of a person who conducts a business or undertaking (a 'relevant person')

The *Workplace Health and Safety Act 1995* places obligations on a person who conducts a business or undertaking. The Act refers to a person who conducts a business or undertaking as a 'relevant person'. The obligation applies whether or not –

- the relevant person conducts the business or undertaking as an employer, self-employed person or otherwise; and
- the business or undertaking is conducted for gain or reward; and
- a person works on a voluntary basis.

'Relevant persons' have an obligation to ensure –

- the workplace health and safety of their workers and any other persons is not affected by the conduct of the relevant person's business or undertaking; and
- their own workplace health and safety.

The term 'relevant person' is also used in the *Workplace Health and Safety Regulation 1997*.

Where this code of practice provides advice to employers and self-employed persons on managing exposure to risks, other persons who conduct a business or undertaking may also find this advice applicable depending on their circumstances.

Queensland Government
Department of Employment and Industrial Relations

How can I meet my obligations?

Under the Act, there are three types of instruments to help you meet workplace health and safety obligations – regulations, ministerial notices and codes of practice.

If there is a regulation or ministerial notice about a risk, you MUST do what the regulation or notice says.

If there is a code of practice about a risk, you MUST either –
(a) do what the code says; or
(b) do all of the following –
- adopt and follow another way that gives the same level of protection against the risk;
- take reasonable precautions; and
- exercise proper diligence.

If there is no regulation, ministerial notice or code of practice about a risk, you must choose an appropriate way to manage exposure to the risk and take reasonable precautions and exercise proper diligence to ensure that your obligations are met.

NOTE: There may be additional risks that are not specifically addressed in this Code of Practice. You are still required to identify and assess these risks, and ensure that control measures are implemented and reviewed to eliminate or minimise exposure to these risks.

This Code of Practice for Horse Riding Schools, Trail Riding Establishments and Horse Hiring Establishments 2002 was developed by a number of organisations and individuals interested in improving safety in horse riding and trail riding establishments. Thanks are due to the people who worked on this Code of Practice for their efforts to improve safety while still remaining commercially viable. It is now up to the industry to improve safety for themselves, and for the large numbers of the public who undertake horse riding activities.

Contents

1 Introduction

Horse riders have a higher risk of serious injury than participants in most other sports. Factors that influence this include the following:

- horses are capable of acting independently of the rider and the extent to which the rider has control of the horse can suddenly change;
- horses are capable of acting independently, whether being ridden or not;
- the horse is a large animal and the rider's head can be up to 3 metres above the ground.

Head and spine injuries are a significant problem. Various studies have shown that head injuries are by far the leading cause of death from horse related incidents (ranging between 49 and 77 % of deaths). The most common injury to people when riding or working with horses is to the head and spine (over 55 % of injuries), followed by fractures to the extremities (about 25% of injuries). Events most likely to lead to injury when dealing with horses include being:

- thrown or falling from the horse;
- crushed by the horse;
- kicked by the horse.

Most accidents at horse riding schools, trail riding establishments and horse hiring establishments are associated with horses themselves, either from riding or handling. Activities involving horses can never be without risk. The proprietor of the riding establishment should devise safe systems of work to minimise the risks. Throughout this code of practice the word 'horse' includes pony, mule, jenny, donkey and other equines.

Recent research[1] on horse-related injury in Australia, based on 20 years data from 1979 to 1998, indicates that:

- between 1979 and 1998, there were an estimated 20 horse related deaths per annum in Australia.
- in Queensland, the rate of 0.25 horse related deaths per 100,000 people is significantly higher than the national average (almost double), and higher than any other State or Territory.
- in Queensland, the estimated rate of 29.4 horse related incidents per 100,000 people is also significantly higher than the national average, and higher than any other State or Territory.

1.1 Before commencing any activities or work

Before commencing any work or activities, workers and riders should undergo induction training and be provided with information relating to the risks involved. Chapter 3 provides guidance on training requirements. As a minimum, clients of a horse riding establishment should be provided with information on:

- the relevant risks and control measures in place;
- procedures with which they are expected to comply (such as following instructions);
- relevant safety procedures in place (such as wearing safety helmets when riding); and
- restricted areas of the workplace.

It is recommended that the establishment hold appropriate Public Liability Insurance for clients.

1.2 Who is this Code of Practice intended for?

This Code of Practice is intended for persons with an obligation under the *Workplace Health and Safety Act 1995 (the Act)*, including managers of horse riding schools, trail riding establishments and horse hiring establishments, as well as their workers and workplace health

[1] Cripps RA. Horse-related injury in Australia. Australian Injury Prevention Bulletin 24, AIHW Cat. No. INJ26, May 2000. Research Centre for Injury Studies, Flinders University, 2000.

and safety officers and representatives. It describes the main risks associated with handling horses; the machinery, equipment, substances and work practices found in horse riding schools, trail riding establishments and horse hiring establishments; and what should be considered to safeguard the health and safety of workers, clients and visitors to the premises.

2 Managing health and safety

Note: See Chapter 8 for more information on Workplace Health and Safety Legislation

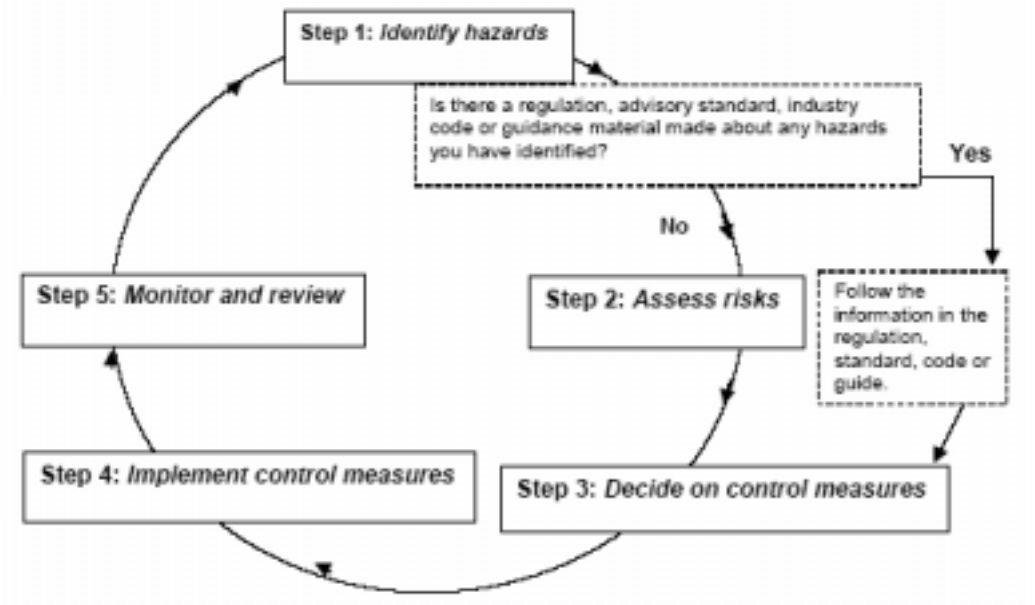
The *Workplace Health and Safety Risk Management Code of Practice* is a generic risk management code that applies to all Queensland workplaces to which the Act applies. This code of practice and the Act provide a risk management process that you must follow to meet your health and safety obligations. Undertake the risk management process:

- Now if you have not done it before;
- When a change occurs (eg. changing work procedures);
- After an incident or 'near miss' occurs;
- At regularly scheduled times appropriate to the level of risk at your workplace.

Workplace health and safety risk management process:

1. **Identify** hazards
2. **Assess** risks that may result because of the hazards
3. **Decide** on control measures to prevent or minimise the level of risk
4. **Implement** control measures
5. **Monitor** and **review** the effectiveness of control measures

This process is illustrated below.



Step 1 - Identify hazards

List all things at your workplace that have the potential to cause harm. General types of workplace hazards can be classified under:

- work environment
- energy (eg. electricity)
- manual tasks
- noise
- substances (eg. chemicals)
- plant.

Look for hazards by dividing your workplace into logical groupings such as tasks (cleaning stables, exercising horses, riding lessons, etc) or locations (office, stables, arena, etc).

Before proceeding to step 2, identify the risk associated with each hazard. (A risk is the likelihood that death, injury or illness might result because of the hazard.) If any of the risks are readily managed, attend to these straight away. If there is a regulation, ministerial notice, code of practice and/or guidance made about the risk, refer to that document(s).

Step 2 - Assess risk

Next, assess the risks associated with each identified hazard. This step results in a prioritised list of risks that require further action. For each risk:

Determine the likelihood of an incident occurring at your workplace

Very likely	- Could happen frequently
Likely	- Could happen occasionally
Unlikely	- Could happen, but rarely
Very unlikely	- Could happen, but probably never will

Consider, for example:
- number of times a situation occurs;
- number of people exposed and duration of exposure;
- skills/experience of persons exposed;
- position of the hazard relative to people and other hazards;
- special characteristics of workers/clients that may affect the likelihood;
- quantities of materials or point of exposure;
- environmental conditions;
- condition of equipment;
- effectiveness of existing control measures.

Determine the consequences of an incident occurring at your workplace

Extreme	- Death, permanent disablement
Major	- Serious bodily injury
Moderate	- Medical treatment without hospitalisation
Minor	- First aid only, no lost work time

Consider, for example:
- potential for the hazard to evolve and compound into a more dangerous situation;
- substance concentration;
- material volume;
- speed of projectiles or moving parts;
- height;
- worker or client position relative to the hazard;
- weight;
- forces and energy levels.

Risk Priority Chart

LIKELIHOOD: How likely is it that it will occur?	**CONSEQUENCES: How severely could it hurt someone?**			
	EXTREME (Death, permanent disablement)	**MAJOR (Serious bodily injury)**	**MODERATE (Casualty treatment)**	**MINOR (First aid only, no lost time)**

VERY LIKELY (Could happen frequently)	1	2	3	4
LIKELY (Could happen occasionally)	2	3	4	5
UNLIKELY (Could happen, but rare)	3	4	5	6
VERY UNLIKELY (Could happen, probably never will)	4	5	6	7

This stage of the risk assessment is a way of ranking risks in terms of their priorities. The risk scores obtained have no absolute value. This chart ONLY ranks the risks.

The scores (1-7) in the risk priority chart indicate how important it is to do something about each risk, as follows:

Score	**Action**
1, 2 or 3…	Do something about these risks immediately
4 or 5…	Do something about these risks as soon as possible
6 or 7…	These risks may not need immediate attention

Use the ratings for each risk to develop a prioritised list of workplace risks requiring action.

Step 3 - Decide on control measures to manage exposure to identified risks

Firstly, try to eliminate the hazard. This may mean discontinuing dangerous work practices or removing hazardous substances or equipment. If this is not possible, prevent or minimise exposure to the risk by:

- substituting a less hazardous material or equipment;
- isolating the hazard from the person, or the person from the hazard.
- redesigning the workplace equipment or work processes so work can be done differently;

When exposure to risk is not, or cannot be minimised by other means:

- Introduce administrative controls, which involves using procedures or instructions for example job rotation, supervision; and/or
- use personal protective equipment (PPE) as the final barrier between people and the hazard, eg. helmets.

Administrative controls and PPE should only be used:

- as a last resort when there are no other practical control measures available;
- as temporary measures while a more permanent solution is found;
- to supplement other controls (that is, as back up controls).

The control measures you choose should:

- adequately control exposure to the risk;
- not create another hazard;
- allow workers to do their work without undue discomfort or distress.

Step 4 – Implement control measures

Undertake those activities necessary to allow the measures to operate effectively.

- Develop work procedures in relation to the new control measures to ensure they are effective.
- Communicate with workers and others about the control measures to be implemented and the reasons for the change.
- Supervise the workers to verify the new control measures are being used correctly.
- Maintain the control measures. Work procedures should spell out maintenance to ensure ongoing effectiveness of the new control measures.

Step 5 – Monitor and review the effectiveness of measures

Determine whether chosen control measures have been implemented as planned.
- Are chosen control measures in place?
- Are these measures being used?
- Are these measures being used correctly?

Determine whether chosen control measures are working.
- Have the changes made to control exposure to the risks resulted in what was intended?
- Has exposure to the assessed risks been eliminated or adequately reduced?
- Determine whether there are any new problems.
- Have the implemented control measures resulted in the introduction of any new problems or in the worsening of any existing problems?

Set a date to review the entire workplace health and safety risk management process. Under the Act, you have an obligation to ensure workplace health and safety by managing exposure to the risks associated with ALL hazards at your workplace. Workers are also obliged to follow instructions with regards to health and safety.

For further information on managing health and safety, see:
- Workplace Health and Safety Risk Management Code of Practice

3 Training

The Training Supplement of the Risk Management Code of Practice recommends employers provide adequate and appropriate training by following these steps:
1) Determine who needs to be trained;
2) Determine what training is required;
3) Determine how training will be delivered;
4) Ensure the training is provided;
5) Evaluate the training; and
6) Keep training records.

The different types of workplace health and safety training have different purposes, as follows:
- **Induction training** refers to the initial training given to workers when they commence employment or are new to the job. This training is of a general nature and may involve a workplace tour, information about conditions of employment, administration, organisational structure, emergency procedures and workplace amenities.
- **Supervisor and management training** is provided to help ensure that the supervision and management of the health and safety issues is appropriately carried out in the workplace.
- **Specific job training** involves providing information about the risks associated with the job.
- **Specific hazard training** involves providing information about the risk(s) associated with a particular hazard.
- **Ongoing training** or refresher training should be provided periodically to ensure that work continues to be performed safely.
- **Emergency procedures training** is provided to ensure workers know what to do in the event of an emergency.
- **First aid training** is provided to ensure appropriate procedures are followed for administering first aid.

The amount of detail required and the extent of training undertaken will depend on:
- The nature of the workplace hazard(s);
- The degree of risk associated with these hazards;
- The complexity of aspects of work, such as operating procedures and equipment;
- Other control(s) being implemented; and
- The qualifications and experience of the worker.

Section 113 of the *Workplace Health and Safety Regulation 1997* states that an employer must give a worker who may be exposed to a hazardous substance at the workplace induction and ongoing training about the substance. The induction and training must be appropriate having regard to the level of risk identified in a risk assessment; and the workers who may be exposed to the substance.

The employer must keep a record of the induction and training given to a worker for 5 years from the date of the last entry in the record, which must contain information on the date of the session, the topics covered, the name of the person who conducted the session, and the names of the workers who attended the session.

In general, all people exposed to risk should be provided with information about:
- The workplace health and safety legislation;
- The organization's workplace health and safety program/policy;
- The workplace health and safety risk management process;
- The control measures in place to minimise exposure to risks associated with workplace hazards, the correct use of controls and how to ensure they are kept in full working order;
- Any known residual risk;

- Safe working procedures;
- How to use and maintain equipment (refer to operators' manuals);
- Any special safety information needed (such as safety precautions for working under certain conditions).

Employers should take into account their workers' capabilities, as regards health and safety, when giving them tasks to do (for example, previous training, knowledge and experience). Employers should also ensure their workers are provided with adequate health and safety training. Training is an important way of achieving health and safety competence and helps to convert information into safe working practices.

New workers (including volunteers and casual staff) should receive induction training on health and safety, including arrangements for first aid, emergency procedures, fire and evacuation. The needs of young workers should also be given particular attention. However, training is needed at all levels, including top management.

Risk assessments should identify where specific training is required, for example manual tasks, or using hazardous substances. Training needs may change when workers transfer or take on new responsibilities, or staff return to work after long periods of absence, or there is a change in equipment or systems of work or procedures.

The competence of staff should be monitored where lack of job knowledge and skills can adversely affect health and safety. Where such a lack is identified, any necessary update or refresher training should be provided. Special attention may need to be given to workers who deputise for others. Their skills are likely to be underdeveloped and they may need more help in understanding the health and safety issues. Staff who work only at weekends may also have training needs and can easily be overlooked. Accidents and ill
health can often be traced to poorly informed decisions through lack of training. Training can improve job performance, and it is sensible to keep a record of significant training events.

3.1 Instructors

Only instructors who can demonstrate their competence for the training being provided, and have a standard at least equivalent to the appropriate qualifications from equestrian organisations, should be employed to undertake the task. Instructors, and anyone in charge of a ride leaving the premises, should also hold a current First Aid certificate.

Qualification certificates from a Registered Training Organisation, at a level commensurate with the task, should be appropriate for the activities carried out by the horse riding school, trail riding establishment or horse hiring establishment.

Recognition of Prior Learning. The objective of the Recognition of Prior Learning (RPL) for the Vocational Education and Training system is to ensure that an individual's prior learning achieved through formal and informal training, work experience or other life experiences is appropriately recognised. The principles governing the recognition of prior learning for Queensland's Vocational Education and Training system are those specified in Principle 12 of the National Assessment Principles set by the National Training Framework Committee.

3.2 Instruction of riders and clients

The health and safety of clients and riders can be at risk if they have inadequate knowledge, skills or experience related to riding. For instance, some people may panic while riding. Panic can contribute to faulty decision-making and unwittingly give the horse inappropriate messages – leading the horse to react with the wrong response to a situation. Instruction and advice can help reduce the likelihood of riding related panic and accidents.

Before riding, clients and riders should be given advice relating to the following:
- Characteristics and behaviour of horses;
- The risks and control measures in place (such as wearing safety helmets when riding);
- Selecting and using riding equipment;
- The riding environment;
- Dealing with certain problems;
- Procedures with which they are expected to comply (such as following instructions);
- All riding and stable protocols.

Where appropriate, demonstrations should be used to enhance understanding.

The instructor should ensure that the advice has been understood.

3.3 Instructor : student ratios

A risk assessment to determine the *instructor : student* ratio for riding schools, and the *guide : rider* ratio for trail riding establishments, will include consideration of the following issues:
1) Instructor / guide experience and qualifications;
2) Student / rider experience and ability;
3) Horse temperament and experience;
4) Level of training provided for the horses being used;
5) Type of riding or lesson being undertaken.

The following examples provide some guidance (note that these are examples only, and need to be tailored to the individual establishment and purpose through undertaking a risk assessment):
- Example 1 – Riding lessons in a properly fenced arena: In general, using horses that are trained and accustomed to the task, this would not exceed 8 riders with one trainer, or 10 riders with one trainer and one assistant.
- Example 2 – An easy trail ride: In general, using horses that are trained and accustomed to the task, a qualified and experienced head guide would accompany no more than 12 competent riders. On a more difficult trail, or with more inexperienced riders, this number would be significantly lower and may require an assistant.

For further information on training, see:
- *Workplace Health and Safety Regulation 1997* – See section 113 (training requirements about hazardous substances)
- Training (Supplement 2 of the Risk Management Code of Practice), Workplace Health and Safety Queensland, Department of Industrial Relations
- Recognition of Prior Learning for the Vocational Education and Training System in Queensland, Division of Training, Department of Employment and Training

4 Environment and welfare

4.1 Stabling

Horse riding schools, trail riding establishments and horse hiring establishments will need to consider whether the size and construction of the stable is adequate and provides a safe place of work. Lack of space can contribute to handlers being crushed or trodden on when attending to the horse. Access to the stable area should be restricted, and signed to indicate this restriction. If visitors are able to access the area around the stables, signage may be required giving details of risks (such as horses kicking or biting), and appropriate control measures.

Paddocks should be clean and well drained, and provide shelter and shade for horses in holding areas.

Ventilation

It is important that the stables are well ventilated. Stables tend to be dusty and have gases from urine and faeces, which pose a potential hazard to the handlers if good ventilation is not provided. Stables with high-pitched roofs generally have good air circulation. Windows hinged at the bottom with the sides blocked will allow airflow up and around the stable and provide extra ventilation. Windows should be either protected by metal bars or made of toughened, laminated or wired glass.

Stable floors that are soundly constructed, slip-resistant to both horse and handler and impervious to moisture will help to prevent slips, trips and falls. Concrete slabs with a grooved surface are slip resistant and can assist with drainage. Smooth concrete becomes slippery when wet and may need to be treated or replaced to reduce the risks of slipping.

Internal walls and partitions

Walls and partitions of strong construction, solid and free of nails and other protrusions will help to prevent injury to horse and handler.

Doors

Stable doors in two halves, so that the upper portion can be left open, will allow anyone wishing to enter the stable to see where the horse is and its condition before opening the lower half. The horse may injure itself by banging its hip joints or legs and may also trap the handler between the doorframe and itself if the doors are too narrow. Doors, which open outwards, allow quick access to be gained to an injured person lying behind the door or to sick horses. A horse can easily push through a flimsy or damaged door. Doors of substantial construction fitted with two heavy-duty hinges on each door with bolts at the top and bottom will help to prevent this.

Lighting

All electric wiring and light bulbs should be protected. Light switches should be outside the stable and never within reach of a horse. They should be specifically designed for external use. The main control should be in a secure area so that lighting cannot be switched off inadvertently. Safe procedures should be developed, and if necessary, adequate equipment provided for changing light bulbs and similar activities.

Access to haylofts

A properly constructed staircase, which is provided with handrails, is the preferred means of access to haylofts. Where ladders are used, it is important that they:

- Are maintained in good condition, of sound construction with no defects and in particular the rungs of any wooden ladder should not be solely supported by nails or screws;
- Supported on a firm, level surface;
- Securely fixed to the structure with lashings, straps or proprietary clips, so that it cannot slip;
- Extended to a height of at least 1.05 m above the landing place or above the highest rung on which the user has to stand unless there is an equivalent suitable handhold;
- Placed at a suitable angle to minimise the risk of slipping (ideally at about 75° to the horizontal, i.e. about 1 m out from the building for every 4 m in height).

For more information on access to haylofts, refer to AS/NZS 1892- Portable ladders, and AS 1657- Fixed platforms, walkways, stairways and ladders.

4.2 Collecting yard

Riders should mount horses in a fully enclosed safe area which is level, has a surface that minimises the risk of slipping and is kept free from obstructions.

4.3 Riding arenas

Riding arenas enclosed by suitable fencing will help to provide a secure area where both horse and rider can be more easily managed. The fencing should ideally be post and rail with the rails facing inwards (to protect the riders outside leg) and high enough to deter the horses from jumping over (at least 1.2 m). Gates wide enough to allow the horse and handler to pass through will assist in minimising injury to the horse, rider or handler. A safe riding arena will be well drained, free from holes and other obstructions. Glass and other rubbish should be removed immediately. If the riding arena is floodlit, the cables should be protected from horse, rider and traffic. Show jumps and any other equipment used should be soundly constructed with no sharp edges or protrusions, and cleared from the riding area when not in use.

Jump cups must be removed from the wings when not required.

4.4 Indoor schools

Ideally, doors into the indoor school should be of a sliding type or open outwards and be provided with kicking boards. It is advised that kicking boards, no less than 1.35m high, should be fixed to the internal walls and slope outwards at an angle of around 10°. The school should be well lit with the lights set at a height that will not interfere with the horse and rider. There should be no obstructions or protrusions. Old shavings from stables should not be used in the indoor arena without adequate ventilation, to minimise potential inhalation of particulates and fibres.

Displaying a sign giving instructions on entering, leaving and use of the school will help to ensure that everyone is aware of the correct procedures. Providing training for both the horse and rider on how to enter the school steadily will help to prevent accidents occurring from horses rushing in and out of the school.

4.5 Riding outside the arena at riding schools

Riding outside the arena at riding schools should only occur after a thorough risk assessment has been undertaken. Issues to be taken into account include:

- Rider competence;
- Suitability and experience of the horse;
- Riding surface;
- Presence of other horses (especially if they are at rest);
- Adequacy of supervision.

It would not be reasonable for a riding school to use horses outside the arena when the horses are not used to it, without additional supervision and close control.

4.6 Electric fencing

Electric barriers should not be used in arenas, or in an area that horses while being ridden are likely to come into contact with them. Any electric barriers should be installed and maintained to *AS 3014 – Electrical installations – Electric fences*.

4.7 Visitor access

Where possible, car parks should be situated away from the riding area, and, where appropriate, speed limits imposed. A traffic flow system, which takes account of pedestrian movements and minimises reversing, will reduce the risk of an accident. Viewing areas that are clearly defined and well lit will allow visitors to watch others riding without being exposed to danger. Visitors should not be allowed to interfere with those riding. Small children, and some people with an intellectual impairment, should be carefully supervised as they often show no fear with horses and do not appreciate the dangers of being near to horses.

4.8 General horse handling

Loading and unloading facilities

Safe loading and unloading of horses in transport will include loading and unloading in a calm manner, particularly where horses have not previously been transported. Use anti-slip loading ramps that are not steeply inclined. Attendants should not stand directly beneath the ramp when lowering or raising it.

Handling in restricted areas

If a horse has to be moved in a restricted area or near obstructions that pose a risk either to the horse or the handler, the horse should always be led.

Lunging area

Lunging a horse with a rider should only be carried out in a defined fenced area by competent people. Only those authorised or undergoing instruction should be permitted within the area during lunging. The lunging area should be a flat surface with adequate footing for the task and the horse should be familiar with being lunged.

4.9 General housekeeping

Many accidents result from trips and falls that may be prevented by good housekeeping. Accidents can be avoided if the means of access to the riding school and any passages, paths or roads and any part of the premises to which workers or visitors have access are kept clear of obstruction and have surfaces which minimise the risk of slipping. Pot holes, broken steps, stairs or treads, uneven paving, holes in stable floors, defective gates and door fastenings, broken gates and doors, projections of wood or metal in unexpected places, passages blocked by barrels, buckets, bales of hay or straw, and forks or shovels lying about in or by any access ways are all potential hazards to visitors and workers at the premises. Good housekeeping prevents accidents occurring.

4.10 Children

Extra care must be taken to ensure that children are not put at risk from work activities. Horses, tractors and other machinery, buildings and chemicals can present particular risks to children and young people unless adequate precautions are taken. Falls and falling objects, as well as drowning in water or suffocation in grain, are particular risks.

4.11 Amenities for workers

Facilities for washing, dining, drinking water and sanitation must be provided, as well as dressing rooms.

5 Tack / riding equipment

Rider safety and control of the horse may be seriously impaired unless all tack is in good condition and checked before use to ensure it is free from defects. Particular attention should be paid to the stitching, as the life of the thread is short compared to that of the leather. Horse sweat rots the stitching and leather, so all tack should be kept clean and supple and be well maintained. It is important that the tack is suitable and comfortable to both the horse and the rider. Each horse should have its own correctly fitted tack that is suitable for the activity to be carried out.

A register of riding equipment should be kept. This register should detail date of purchase, date and details of maintenance and inspection, etc.

5.1 The saddle

If properly looked after and well maintained, saddles will last for many years. Regular safety checks should be carried out on the saddle, these will include the following:

a) Girth straps and their attachment. Saddles should be securely attached to the horse when in use. The method of attachment must also keep the saddle properly in place. A double buckle, or single buckle with surcingle, or other secondary means of attachment, can be used to ensure the saddle stays in place, particularly in case the primary means of attachment becomes dislodged. Girth straps are stitched onto webs that pass over the saddletree. The stitching will eventually perish and will need to be replaced. Girth straps also become worn, usually stretched and split around the holes. When this occurs the strap should be replaced. Saddles that have girth straps attached to the tree by tacks are often insecure and should be avoided.
b) Stirrup bar safety catch. If used, this should always be in the open or down position when the saddle is being used. This allows the stirrup leather to be freed from the saddle in the event of a fall, minimising the risk of the rider being dragged.

5.2 Stirrup leathers

Stirrup leathers should be inspected thoroughly before use, for the thickness of the leather in relation to the stirrup bar, the stitching on the buckle end and around the holes. Any stirrup leather found to be less than satisfactory (i.e. with cracked, worn leather or rotten stitching) should not be used. Stirrup leathers that are too long for the rider should have extra holes punched in them and not be wound around the stirrup iron to make them shorter.

5.3 Stirrup irons

High quality stirrup irons are less likely to snap or become deformed. Soft metals such as brass are not recommended. It is important that the stirrup iron is of the correct size for the rider, so that it slips off the foot easily in an emergency but is not too big, allowing the whole foot to slip through and become trapped. Consider using safety irons that are available for children and novice riders. All the safety stirrups incorporate a design or device that allows the foot to be released in an emergency.

5.4 Bridles

Bridles should be of good quality. The stitching should be regularly inspected, along with the buckles and hook studs. Buckles should not be sharp so as to cut into the leather or have bent or loose tongues. Bent or loose hook studs should be replaced. Rein stops should be used on the reins when using a running martingale. This prevents the rings of the martingale becoming

fast on the buckles or hook studs on the reins near the bit and impairing the rider's control over the horse.

5.5 Bits

High quality snaffle bits are less likely to snap and become deformed.

6 Matching horse and rider

6.1 Evaluating the rider

All riders are to be considered as a beginner unless an evaluation shows otherwise. The following definitions are provided as a guide for evaluating a rider:

- **Beginner rider** – a person who has never ridden a horse, up to a person who can mount a horse, dismount a horse and stop a horse. May be confident at riding the horse at a walk.
- **Medium rider** – competent at riding the horse both at a walk and a rising trot.
- **Competent rider** – confident and competent at riding a horse at a walk, trot and canter. Displays abilities at controlling the horse.

In competitions, riders should only ride within their assessed level of skill.

6.2 Selecting a suitable horse

Instructors at a horse riding school should ensure that the horse or pony provided for a rider's use (worker, trainee or client) is suitable and safe for that person, taking into account age, size, experience, general riding ability and any known handicap or limitation of the rider. Riders should be given information about the horse's character and behaviour.
Beginner riders should be given a quiet, steady horse or pony and the instructor to student ratio adjusted accordingly. The lesson should be held in a small, secure area.

Allocation of horses should be undertaken by the head guide or trainer, or another suitably qualified and experienced person. The person allocating horses should be familiar with the characteristics of the horses.

Horses which regularly buck, or which regularly behave unpredictably, should be excluded. Stallions, mares in foal, or lactating mares should generally not be used, unless an assessment of the horse shows they are suitable and additional measures are taken to reduce the risks involved.

When trail riding, on no account should novice riders be allowed to ride on the road unless led or accompanied by an experienced, competent person.

Carefully match the horse to the task expected of it. For example, horse riding in an arena and on a trail requires horses with different temperaments and characteristics. Not all horses are suitable for both tasks. The potential nervousness of a rider, used to riding the same “school horse” in an arena, may become a problem on a trail, particularly where the rider is unfamiliar with this activity. Additional precautions need to be taken.

Extra supervision and/or control need to be exercised when taking a horse out of its usual environment or activity.

No more than one person should ride a horse at any one time, except in very controlled circumstances, such as when the horse is used for vaulting under the control of a trained lunge person.

6.3 Horse behaviour and senses

The evolution of the horse has taken place over millions of years and the modern horse is gregarious and a herbivore. Wild horses form herds and each herd has a dominant mare. Horses kept in fields also have a leader and lower ranks.

The horse is not naturally aggressive to people and will normally run away when frightened. However, it will fight to establish a social hierarchy, protect its young, secure food, and defend itself if it feels threatened and cannot escape.

In order to handle horses safely the instincts and senses of the horse must be considered. Accidents can easily be caused by a handler (or a visitor to the premises) upsetting or frightening the horse.

The horse has the same five senses as human beings:

a) Sight. The horse is a non-predator and is thought to have relatively poor sight. A horse that appears to be looking into the distance may actually be using other more developed senses. Unlike humans, the horse is able to see images to the left and right at the same time due to the eyes being at the side of the head. A horse should always be approached from the side and not from its blind spot (directly in front or behind), as this could startle it.
b) Smell. Smell is a very important sense to the horse and is used to detect good from bad. If a horse is confused it will sniff the air. It should be noted that some perfumes have a musk base that could excite horses, particularly stallions. Therefore perfumes should not be worn and scented soaps and body sprays should be avoided when working with stallions.
c) Hearing. The horse has large mobile ears and acute hearing. Often it can hear something well before it sees the object or before humans hear the same noise, if humans are able to hear the noise at all. By turning its ears towards the sound, a horse is able to accurately determine the direction from which it is coming.
d) Touch. The sensory nerves throughout the body are more pronounced in areas devoid of hair or with little skeletal frame such as the ears and muzzle. Handlers often exert pressure on these areas when attempting to restrain difficult horses.
e) Taste. This is the least used of the senses and is insignificant as an indicator of horse behaviour.

6.4 The frightened horse

In the field

The horse will throw its head up and prick its ears. It will tense the muscles from the muzzle to the tail, open the nostrils to smell and fill its lungs with oxygen ready for flight. In a field, the horse will only attack when cornered. Horses which bolt when frightened often knock people down or run into things because the horse is looking behind at whatever frightened it, rather than where it’s going. This is known as 'blind fright'.

In the stable

The horse when frightened will initially still try to run away but, because it is cornered, will then revert to its survival instincts. It will usually give a warning before biting or kicking by swinging its rear end, swishing its tail and flicking its ears. If the warning is ignored, it will tense from muzzle to tail, clench the tail between its rear legs and kick or lay its ears flat back with the eyes standing proud, curl the mouth and lunge forward with the neck straight, ready to bite. It is important that everyone involved in handling horses can recognise the warning signs for their own well-being. Horses known to be temperamental should only be handled by experienced staff and have a warning sign on their stable doors.

Causes of fear

Any sudden movement, sudden noise or any unusual event or occurrence can frighten horses and ponies. Horses do not have reasoning power and are creatures of habit. If a horse has become used to an environment it may react in an unforeseen way, even when there is no obvious danger in the reasoned opinion of a human, for example the presence of a new road sign could result in a horse refusing to follow a previously established route.

7 Safety when riding

7.1 Personal protective equipment (PPE)

Suitable personal protective equipment should be used wherever there is a risk to health and safety that cannot be adequately controlled by other means. This includes, eg the provision of suitable footwear where there is a risk of foot injuries, helmets where there is a risk of head injuries or suitable outdoor clothing if the job involves working outside.

It may also be necessary to consider protective equipment for horses, such as breastplates and cruppers where needed in steep country, or other circumstances.

Protective helmets

The high number of head injuries, often of a severe nature, which occur when riding makes wearing protective helmets necessary. Handlers and riders who may be exposed to head injury should wear suitable protective helmets, correctly adjusted and fitted. Protective helmets considered suitable conform to AS/NZS 3838– Helmets for horse riding and horse related activities.

As an alternative standard, helmets approved to the following standards may be suitable:
- AS 2063 - Previous Australian Standard (valid until December 2001)
- EN 1384 - Current European Standard
- ASTM F1163 - Current US Standard

It is important to check that helmets are correctly worn and adjusted. New riders may need to be shown how to carry out adjustments.

Protective helmets should be replaced periodically according to use and manufacturers' recommendations. Damaged or dropped helmets should not be worn until checked as being safe for use by the manufacturer or other competent person.

Rider clothing

Certain items of riding equipment such as protective helmets and safe footwear should be worn. Long trousers and a shirt are also necessary.

Footwear

Riding boots are preferred but suitable alternatives may be allowed for. For example, stout, strong shoes with a good heel (up to 2.5 cm) help prevent the foot from slipping through the stirrup iron. Riders should not be allowed to wear trainers or sandals unless suitable and safe adaptations to the tack have been made. Sensible footwear is essential for riding. Suitable footwear should also be worn when handling horses and mucking out to protect the feet from trampling and prevent possible puncture wounds by the fork.

Other clothing

It is recommended that arms and shoulders be covered to minimise the risk of abrasions during a fall, even in hot weather. Loose clothing should be fastened so that it cannot flap about, to help prevent distractions to the horse or rider. Tight clothing may restrict free movement of the body. Tying back long hair will help with visibility. It is advisable that jewellery, in particular rings

and earrings, are not worn. Rings may become caught in the horse's mane and cause cuts to the fingers, while earrings can become tangled in hairnets and may rip the ear lobe. Alternatively, gloves may afford protection against rings becoming caught.

Backpacks, cameras or any other loose items that could affect control of the horse, should not be worn.

Body protectors may be appropriate in some circumstances.

For further information on personal protective equipment, see:
- Personal Protective Equipment – Supplement 1 of the Workplace Health and Safety Risk Management Code of Practice

7.2 Road safety

Every year there are a number of road accidents involving horses and motor vehicles. Generally, horses and motor vehicles should be kept apart. Horses are easily frightened by noisy, large vehicles and other events not normally encountered in a stable or field, for example a person mowing the lawn, or children playing football. Motorists often do not appreciate the behaviour of horses and will drive too quickly and too closely to the horse.
However, there are occasions when horses have to go onto the roads to gain access to trails, or when training either horse or rider. Only horses that are trained in traffic should be allowed on the road, especially if being ridden by an inexperienced rider.

Groups should be kept small, no more than five or six, and organised so that:
- The least experienced riders are on the quietest horses;
- Riders with least experience are in the middle of the ride;
- Young or nervous horses are positioned on the inside of an older experienced horse. Under no circumstances should riders ride more than two abreast;
- Experienced riders are always at the front and rear of the ride.

The majority of road surfaces are very slippery and it is recommended that the ride be conducted at a walking pace. Never canter on grass verges at the side of roads. It is important that the riders are clearly visible to motorists. Fluorescent and reflective tabards and armbands are available for riders and lee bands for the horses.

Workers should have received sufficient and adequate information, instruction and training to allow them to ride safely on roads without putting themselves or others at risk.

Leading a horse on a road
Movement of horses across or along a road should always be undertaken in a safe manner and riders should be supervised and trained to adhere to safety procedures for horses.

Horses led either on foot or from another horse should preferably be on the left-hand side of the road.
A halter should be worn when leading a horse on a road.

Riding a horse on a road
When riding a horse on a road, be aware of the following:
- All riders and horses should be checked in an enclosed area before going onto a road, with practice exercises such as:
    - How to queue up while a gate is opened or closed;
    - How to cross a road;
    - What to do in case someone needs to dismount;

    - How to respond to the hand or voice signals given by the ride controller or others.
- Avoid busy main roads as much as possible.
- Give clear and accurate signals, and remember other road users.
- Acknowledge and return courtesy, a smile and a nod will help to maintain a good relationship between riders and other road users.
- Avoid riding in failing light or darkness. If you have to, always wear reflective gear, and fit leg bands above the fetlock joints of your horse.
- When teaching a horse to ride safely along a road, have a steady horse present.
- When riding with a group of more than eight horses on the road, form into groups, each with a competent guide.
- Never ride more than two abreast on the road.
- If your horse slips and falls, stay calm and let the horse “find its feet”. Check that the horse is uninjured before remounting on non-slippery ground
- Avoid riding on the road in foggy conditions or after dark.
- Don’t “trickle” over a major crossing. Always cross in a group when there is more than one rider.
- It may be appropriate for one or more of the controllers to dismount and control the road traffic while the ride crosses.

8 Workplace health and safety legislation

8.1 What is the aim of the Workplace Health and Safety Act 1995?

The *Workplace Health and Safety Act 1995* sets out the laws about workplace health and safety for all workplaces, relevant workplace areas, work activities and for plant or substances for use at a workplace. The Act aims to prevent a person's death, injury or illness being caused by a workplace, by a relevant workplace area, by work activities, or by plant or substances for use at workplaces.

A workplace is any place where work is performed, or is to be performed, by a worker or person conducting a business or undertaking. Specified high risk plant is plant that may be a risk to public health and safety, for example, lifts and air conditioning units. The Act has a list of specified high risk plant.

8.2 Who does the act apply to?

The Act applies to all workplaces, relevant workplace areas, work activities and plant or substances for use at a workplace. The following persons have obligations under the *Workplace Health and Safety Act 1995* –

- Persons who conduct a business or undertaking whether as employers, self-employed persons or otherwise;
- People in control of workplaces;
- Principal contractors;
- Designers, manufacturers and suppliers of plant;
- Erectors and installers of plant;
- Manufacturers and suppliers of substances to be used at workplaces;
- Obligations of designers of structures used as workplaces;
- People in control of relevant workplace areas;
- People in control of fixtures, fittings or plant included in relevant workplace area;
- Owners of plant;
- Workers and other people at workplaces – for example customers and visiting salespeople.

8.3 What are your obligations?

You can have more than one set of obligations under the Act. For example, you may be an employer and a principal contractor at the same time and at the same workplace. In this case, you would have two sets of obligations - those of an employer and a principal contractor. The following provides a brief overview of the requirements for particular obligation holders. For more specific information, you should refer to Part 3 of the *Workplace Health and Safety Act 1995*.

Persons conducting a business or undertaking have an obligation to ensure the workplace health and safety of:

- all workers carrying out work for the business or undertaking
- volunteers who perform work activities for the business or undertaking
- all other people including, customers, visitors to the workplace, passers by and neighbours
- themselves.

A person conducting a business or undertaking includes employers, self-employed persons and others.

People in control of workplaces are obliged to ensure that the risk of injury or illness is minimised for people coming to work at the workplace. This includes the risk of injury or illness from plant and substances. A person in control of a workplace must also ensure that there is safe access to and from the workplace for everyone.

People in control of relevant workplace areas must ensure the relevant workplace area is safe and without risk to health.

Principal contractors for construction work have a number of obligations generally aimed at ensuring that all work is carried out so as to ensure workplace health and safety and that workplace activities do not involve any risk to the public.

Designers, manufacturers and suppliers of plant (including specified high risk plant) are obliged to ensure that the plant is safe and does not pose a health risk when used properly. Obligations cover the design, construction, testing and examination of plant and the provisions of information about its safe use.

Designers of structures used as workplaces must ensure that the structure that is designed as a workplace can be used, repaired and maintained in a safe way for relevant persons when used as a workplace and for the purpose for which it was designed.

Erectors and installers of plant (including specified high risk plant) are obliged to erect or install the plant using safe procedures. They must also ensure that nothing about the way the plant was erected or installed makes it unsafe or a risk to health when used properly.

Manufacturers and suppliers of substances to be used at workplaces are obliged to ensure that the substances are safe and without risk to health when used properly. They must also ensure that the substances undergo appropriate examination and testing and that information about their safe use is available.

Persons in control of fixtures, fittings or plant included in relevant workplace area have an obligation to ensure the fixtures, fittings or plant are safe and without risk to health.

Owners of plant are obliged to ensure that it is maintained so as to be safe and without risk to health when used properly.

Workers and other people at workplaces are obliged to follow instructions given by an employer or principal contractor. They must not deliberately put the workplace health and safety of anyone at risk, injure themselves or misuse anything provided for workplace health and safety. Workers must use personal protective equipment if an employer provides it and if the workers have been instructed in its use.

8.4 What are the penalties for a breach of an obligation?

If you breach an obligation under the Act you can be prosecuted. Penalties are substantial: the maximum penalty for a breach causing multiple deaths is $150,000 or 3 years imprisonment for an individual, and $750,000 for a corporation.

Following a regulation, ministerial notice or code of practice will provide you with a defence in a prosecution for a breach of an obligation.

If you do not follow a code of practice, you must show that you took reasonable precautions and exercised proper diligence in choosing a way to manage exposure to the risk, or that the breach happened as a result of factors over which you had no control.

8.5 Registration

Registrable plant and registrable plant designs must be registered with Workplace Health and Safety Queensland. The *Workplace Health and Safety Regulation 1997* lists what must be registered, the fees that must be paid and the procedures for applying for registration. Also, certain building and construction work must be notified.

For further information on Workplace Health and Safety Legislation, see:
A Quick Start to Workplace Health and Safety Legislation
Workplace Health and Safety Act 1995
Workplace Health and Safety Regulation 1997

9 Manual tasks

Manual tasks are part of nearly all work done in the horse riding schools, trail riding establishments and horse hiring establishments. The tasks include any activity where workers grasp, manipulate, carry, move (lift, lower, push, pull), hold or restrain a load. They include a wide range of tasks from lifting and carrying heavy water buckets to helping people mount horses. Manual tasks represent a significant risk of injury.

Within this industry, manual tasks contribute to musculoskeletal injuries affecting all parts of the body, particularly the back, shoulder and wrist. These account for half or more of the industry's:
- Cost of worker's compensation claims
- Number of days lost from work
- Absences over six months.

Sprains and strains of backs and limbs are often sustained from manual tasks particularly where lifting is required. Injuries are commonly linked with ongoing wear and tear to the joints, ligaments, muscles and intervertebral discs. They are only occasionally caused by a one-off overload situation. Manual task injuries can result in physical impairment or even permanent disability.

Over a period of time, damage can gradually build up through:
- Handling of loads - frequent lifting with the back bent or twisted, or pushing/pulling loads with forceful exertions
  (For example, placing heavy saddles away, manoeuvring horses in a restricted area)
- Working in a fixed position with the back bent, continuous sitting or standing
  (For example, riding horses for long periods)
- Repetitive work with the hand or arm, and having to grip tools or loads tightly
  (For example, veterinary or healthcare for the horse)
- Working with the neck, shoulders and arms in a fixed position
  (For example, using foot care tools)

The loads handled in the manual tasks will vary in size, weight, shape, fragility, stability, etc. Some may be difficult to grasp. Others may be sharp. The best way of handling the load considering the circumstances should be determined. There are additional complications when handling animals or people in this industry: the load lacks rigidity; there is particular concern on the part of the handler to avoid hurting the person or animal; and to complicate matters, the load will often have a mind of its own. These factors are likely to increase the risk of injury to the handler compared with handling an inanimate load of similar weight and shape.

Heavy items stored at high or low levels or handling in restricted workspaces need particular attention. For example, saddle racks placed at high levels may cause problems. Some saddles are heavy and awkward to lift, and heavy items falling from a height can cause injuries to

people. Uneven and slippery floors can also put extra strain on the handler. For outdoor workers the extremes of temperature or wind can affect their manual handling capabilities.

9.1 Controlling manual tasks risks

To prevent musculoskeletal injuries you need to manage the risks related to manual tasks. The risks can be managed by working through the following process:

1. Identify hazards associated with manual tasks as not all manual tasks are harmful. Problem tasks are usually associated with:
   a) Making a change in the work (for example, new method of work or new equipment)
   b) Indications that something may be wrong (for example, workers report discomfort or you observe potential problem tasks)
   c) A particular incident or injury
2. Assess the risks within the problem tasks to see if there are any parts of the task that need fixing.
3. Decide on controls to the problem that will minimise the risks.
   Consider the combination of risk factors and what needs to be done (such as heavy loads, awkward postures and forceful exertions). Designing the manual tasks to either eliminate or minimise the risk is best. Design controls (i.e. changes made to the work area, equipment or the way work is done) are more sustainable than administrative controls (training, work organisation and maintenance).
4. Implement control measures.
   Ensure workers and others know about them.
5. Monitor and review the effectiveness of the measures to see that they are working and not causing any other problems

9.2 Control measures

Redesign the task

It should not be assumed that a particular manual handling operation is unavoidable or cannot be changed simply because it has always been the practice. Many simple changes can minimise the risk of injury including:

- Use a trolley or wheelbarrow rather than carrying bales of hay;
- Take the horse to the hay rather than carry it to the animal;
- Small water buckets could be used to fill large buckets;
- Use hoses or pipes to reduce the need to carry water buckets. (Take care to ensure the hosepipe is positioned where it does not become a tripping hazard);
- Select well-designed tools and equipment (for example lighter saddles).

Aids that restrain the horse during manual tasks and assist the task being performed (particularly where they improve the work area design and layout) should be used where possible. For example, mounting blocks should be used in preference to giving a 'leg-up'. (Note: helping riders into the saddle is a manual task that presents significant risk in this industry – see section 9.3).

The variation in workers capability (related to age, gender, injury, and health), skills and experience and their physical characteristics can mean that some workers are at increased risk of injury. Manual tasks should be designed or adapted to suit all workers.

Administrative controls

Fatigue increases the likelihood of manual tasks injuries; therefore the number and length of rest or recovery periods are important. Organise work to spread manual tasks throughout the working shift. This allows workers longer recovery periods between the manual activities. Staffing levels will affect workloads and rest and recovery periods.

Training workers in good lifting, carrying and handling methods is no substitute for other risk control methods such as improving the design of the task. Training should not be used as the only control solution for problem manual tasks but as an addition to them. Manual handling methods require both specific training and practice. Ideally, training should be tailored to the particular manual task operation likely to be undertaken and be carried out where possible on the job or in conditions that are as realistic and relevant as possible.

9.3 Example manual task – "Assisting a rider to mount"

This task represents significant risk of injury. A risk assessment indicates that the assistant or handler can assume awkward bending and reaching postures while suddenly taking part weight of the rider (applying forceful exertions to the body). They may be forced to take full weight of a rider where the rider does not give assistance during the mount. This further increases the risk of injury.

A design control for this problem manual task would be to use a mounting block where possible. This eliminates the need to handle altogether, apart from limited support and stabilisation that may be required. Mounting blocks save the handler from potential injury, and additionally reduce awkward forces on the horse during mounting. Make sure the block is sturdy and steady, and is placed where it is not a tripping hazard.

Where it is not possible to use a block (for example, out on trail) the handling method should be approached as follows (with training provided):

- Riders should be asked whether assistance is required and only assisted where necessary.
- Both the rider and the person assisting the rider stand on the left side of the horse.
- The person assisting instructs the rider to take most of their weight themselves and not to depend wholly on the person assisting.
- The rider takes up the reins, normally holding onto some mane, but faces the side of the horse, the right hand on the waist or pommel, left leg bent at the knee.
- The assistant holds their left hand under the rider's knee, and the right hand at the rider's ankle.
- The rider is further instructed to spring up from their right foot on the agreed signal.
- On an agreed signal (on the count of three) the rider springs up from the right foot and is assisted high enough to clear the cantle with the right leg and ease into the saddle.
- To reduce the risk of back injury, the assistant takes care to keep close to the rider, maintains the lower lumbar curve in their back and bends the knees before assisting.

For further information on manual tasks, see:

- Workplace Health and Safety Manual Tasks Code of Practice 2000
- An Employer's Guide to the Manual Tasks Code of Practice 2000
- A Systems Approach to the Risk Management of Manual Tasks

10 Hazardous substances

The Workplace Health and Safety Regulation 1997 requires employers to prevent or control exposure to hazardous substances at work. The Regulation was introduced to ensure that exposure to the hazardous substance is prevented, or where this is not reasonably practicable, adequately controlled. The employers' responsibility extends to the protection of any person who may be affected by the hazardous substance, and not just their workers.

The employer is required to carry out an assessment of the health risks faced by their workers, and to state the action they intend to take to prevent or control the exposure of his or her workforce to hazardous substances. Substances that are hazardous to health include those that are very toxic, toxic, harmful, irritant or corrosive. In a horse riding school, trail riding establishment or horse hiring establishment, such substances include disinfectants, cleaning

agents, detergents, insecticides and veterinary products. Some of these may be hazardous substances and may create a risk to health if improperly used or mixed together.

The Regulation requires all employers to:
(a) Assess the risk to their workers and themselves from exposure to hazardous substances at work and so establish whether precautions are needed;
(b) Prevent exposure, or if prevention is not practicable reduce the exposure to as low a level as is practicable (at least below the exposure standards), where a risk assessment shows that an employer, self-employed person or worker may be exposed to a hazardous substance at a workplace;
(c) Make sure that control measures are implemented as soon as practicable and are effectively maintained;
(d) Where necessary, monitor the exposure of the workers and arrange for health surveillance by a designated doctor;
(e) Provide workers with induction and ongoing training about hazardous substances.

10.1 Risk Management

Employers should look at the work activities to identify if hazardous substances are being used, and then determine what the risks are and how they might be managed. The basic process is as follows:
(a) Obtaining and reviewing product information
    (i) What substances are present and in what form?
    (ii) What harmful effects are possible? Using the label and the MSDS*;
(b) Assessing the risk
    (i) Where and how the substances are actually used and handled?
    (ii) Whether workers can come into contact with the hazardous substance?
    (iii) How do workers come into contact (skin, inhalation, eyes)?
    (iv) Who could be exposed, to what extent, for how long and under what circumstances?
    (v) How likely is it that exposure will happen?
(c) Controlling the risk
    (i) Is there a safer substitute material or substance that can be used?
    (ii) Are protective clothing or control measures needed?

10.2 Obtaining and reviewing product information

Certain information about products should be found on the label. A material safety data sheet (*MSDS) for that product needs to be obtained from the supplier or manufacturer. They have a legal duty to supply such information. Many proprietary substances, for example cleaning materials, contain risk phrases such as “Toxic in contact with skin”, or “Irritating to respiratory system”, and their corresponding safety phrases “Avoid contact with skin” and “Do not breathe vapour”. You will need this kind of information to help make your risk assessment.

Where health and safety information is contained on a label, and contents are to be decanted into smaller containers, they must also be labelled stating the substance’s product name and risk and safety phrases, unless used immediately.

10.3 Assessing risk from hazardous substances

The risk assessment for hazardous substances should cover at least the following for each substance:
(a) What are the potential routes of exposure, for example, via the skin or via inhalation?
(b) What are the health consequences?
(c) Who is likely to be exposed, to what concentration, for how long and how often?
(d) What arrangements are needed for preventing exposure or adequately controlling exposure, for monitoring or health surveillance, for informing staff i.e. instruction and training?

The risk assessment must be written down for all hazardous substances used in your workplace. The assessment does not require all substances used in the workplace to be covered, for example soap. Some chemicals, which are relatively harmless on their own, may become extremely hazardous when mixed, for example bleach and toilet cleaner. It is important that the workers are aware of this potential hazard. Substances used daily, which may not be labelled as hazardous, may have the potential for causing health problems and should not be overlooked. For example, waste oil, used frequently as a substitute for hoof oil, can cause skin disorders such as acne.

Sometimes air monitoring for assessing risk from exposure to hazardous substances is advisable, such as in industrial processes where substance exposure can be extensive and long term. For most workplaces in horse riding schools, trail riding and horse hiring establishments, this is an unlikely requirement.

10.4 Controlling exposure

Hazardous substance exposure is controlled by different methods (often referred to as a hierarchy of control). If you can find a less harmful or toxic product that also does the job, use it. If the substance has fumes or vapours or is dusty, employ practices that minimise its spread throughout the workplace and use it only where there is good ventilation, for example, use it outside if possible. Always practice good housekeeping and minimise the number of workers having to use a hazardous substance, and the time they are exposed to it. Suitable training/instruction would then be given on how to use the product safely, and, where appropriate, protective equipment provided and staff instructed to use that equipment.

Where there is no other possible control (such as in applying pesticides), use personal protective equipment such as gloves, eye protection and respirators. If respirators are needed, they should comply with AS/NZS 1716 and be selected and used in accordance with the guidance provided by AS/NZS 1715.

The risk management process should be kept under review to ensure that appropriate control measures are being carried out and to check whether there have been any significant changes to working procedures, new materials etc. which would merit reassessment.

10.5 Steps in the management of a hazardous substance

This example outlines the steps involved for one substance – a Pesticide that contains Chlorpyrifos:

1. **CHECK MSDS TO SEE WHETHER CHLORPYRIFOS IS A HAZARDOUS SUBSTANCE**
   - Check label and MSDS register (It is a requirement to keep a register containing a list of all hazardous substances used in the workplace, and to place a copy of any MSDS obtained in the register)
2. **PLACE MSDS IN REGISTER IF NOT ALREADY THERE**
   - Also place copy of MSDS into workplace
3. **RISK ASSESSMENT**
   - Review MSDS, label and potential health effect
   - Observe operations and assess whether there is potential for skin, eye contact or inhalation
   - Observe controls already in place to assess their effectiveness
4. **DECIDE WHETHER RISK IS SIGNIFICANT**
5. **MAKE A RISK ASSESSMENT RECORD**
   - Review substance, record health effects, significance of risk
   - Record way chlorpyrifos is used (ie control measures already in use)
6. **IS HEALTH SURVEILLANCE REQUIRED?**

- Health surveillance by a designated doctor (usually if risk is significant)
- Obtain copy of health surveillance report

7. IMPLEMENT CONTROLS

- As determined by risk assessment (using the control hierarchy) and advised in health surveillance report

8. UNDERTAKE HAZARDOUS SUBSTANCES INDUCTION ON-TRAINING

9. KEEP RECORDS OF RISK ASSESSMENT, ANY MONITORING, HEALTH SURVEILLANCE, CONTROL MEASURES, and of any INDUCTION and ON-TRAINING

10. MONITOR and REVIEW EFFECTIVENESS of CONTROL MEASURES

An example of Hazardous Substances used – Pesticides
Pesticides including fungicides, herbicides, insecticides, public hygiene pest control products, rodenticides and wood preservatives are a group of hazardous substances which can be used in this industry, and which can be associated with significant risks to health and safety. Everyone who uses pesticides should be competent in the tasks undertaken and should have received adequate information and training to use pesticides safely and legally. Only approved pesticides should be used. The instructions on the label or the MSDS should be rigidly adhered to.

All pesticides should be stored in a suitably constructed, secure bin, cabinet, chest or vault capable of resisting fire for at least 30 minutes and robust enough to withstand reasonably foreseeable accidental impact. The store needs to be fitted with a sump that will retain the total capacity of the contents stored, in the event of all containers failing simultaneously (such as in the case of a fire). It should not be sited within a staff room, office, or any areas used for storing or preparing animal feed and if kept outside then it needs to be waterproof. The pesticide store should be identified by a cautionary warning sign and smoking prohibited in the area. For large quantities of pesticides, containers specifically manufactured to comply with the legislative requirements for storage are available on the market. Otherwise, a purpose-built pesticide store should be constructed.

Many pesticides are designed to act via a dermal route. For this reason it is important in your risk assessment to recognise the skin as the principal route through which entry occurs. Control procedures are provided primarily through protection of the skin. Gloves and protective clothing such as overalls are usually mandatory when mixing and applying pesticides. Eye protection and respiratory protection may be required when diluting the concentrates, and when cleaning up if splashes are incurred.

For further information on hazardous substances, see:

- Workplace Health and Safety Regulation 1997
- Workplace Health and Safety *Hazardous Substances Code of Practice 2003*

10.6 Dangerous goods

Sometimes the hazardous substances or other goods in use or stored at a facility may also be dangerous goods. Dangerous goods are those materials, which by virtue of their intrinsic properties represent risks mostly to safety should they spill, leak, catch fire or be involved in fires. The principal concerns about dangerous goods are thus their capacity to catch fire and burn, or to cause risk to safety if they should spill or leak. Dangerous goods interest is mostly concerned with their safe storage and also in their handling in storage. Dangerous Goods are usually denoted by a typical Class grouping. For example, flammable liquids are Class 3, toxic and harmful substances are Class 6.1, and corrosives are Class 8.

Those materials of principal interest here are flammable fuels and toxic substances. Most of the pesticide group mentioned above in 10.5 fit into Class 6.1. Storage of flammable products

(generally Class 3) is regulated by the *Flammable and Combustible Liquids Regulations* administered by the Local Government in your area.

If you need to store significant quantities of dangerous goods at your workplace, you will need to determine whether or not there are special storage requirements.

11 Plant (machinery and equipment)

All machinery and its safeguards should be kept in good condition and be regularly serviced in accordance with the manufacturer's instructions. In general, machinery should only be used for the task for which it was designed. Sometimes accidents have occurred when machinery has been misused. Any person using a machine should be given appropriate information, instruction and training on how to use the machine and on the hazards or risks associated with its use. When not in use, machinery should be disconnected or isolated from its power supply to protect against unauthorised use and to reduce the potential for accidents. In particular, the following points should be followed:

- Damaged plant should be withdrawn from service.
- Make sure plant meets relevant Australian Standards.
- Make sure plant with moving parts is adequately guarded.
- Implement regular inspection and maintenance programs.
- Provide adequate supervision of workers and others using plant.
- Develop and use safe work practices and operating procedures.
- Make sure any worker who is required to use an item of plant is competent in its use.

11.1 Approaching dangerous parts - power isolation

When access to the dangerous parts of any of the above machines is needed for maintenance, cleaning, adjustment and blockage removal, the machine should be isolated from the power, ie switched off by means of an isolating switch or unplugged at the mains. For power take-off (PTO) driven machines, the tractor power should be disconnected and the PTO disengaged.

11.2 Tractors

Routine checks will help to ensure that:

- Brakes on tractors and equipment are connected and working efficiently;
- Steering is maintained so that there is no excessive free movement and no unnecessary play on the front wheel bearings;
- Tyres are inflated to the correct pressure and have adequate tread. They should not be used if they have suffered damage that could affect their safe use.

Tractors can overturn in certain situations such as on a slope, or when driven recklessly. Provide tractors with a Roll Over Protective Structure (ROPS) to give the driver protection in the event of overturning.

Drivers should be adequately trained, particularly to recognise potentially dangerous situations. The training should emphasise the need for care and concentration when working with tractors and, in particular, the importance of paying attention to changes in ground conditions that may affect the safety of the operation.

A tractor power take-off (PTO) and the PTO shaft of a machine can be extremely dangerous and normally requires guarding. Some equipment, however, is designed in such a way that there is no access to rotating points.

The tractor PTO should be protected by a shield covering the top and both sides of the PTO so that people and their clothes are protected from contact with it. This shield should be substantially constructed and be capable of supporting at least 120 kg. When the PTO is not in use it may be covered by a fixed cap and the shield is not then required.

Certain components on tractors can be a hazard and need guarding, for example engine fan, dynamo pulley, fan belt run on points and the fuel injection coupling drive.
The tractor should have a suitable mounting and dismounting step fitted not more than 550 mm from the ground. All hydraulic controls need marking to show the effect of movement and the tractor should have a positive stopping device.

11.3 Grass cutters

In addition to the guarding of the cutting discs or blades and moving parts, the grass cutter should normally be provided with a skirt that reaches to the ground. Fatalities have occurred when the machine has thrown out stones that have hit people nearby. Accidents have also arisen when the blades and attachments of rotary mowers are not properly maintained or fixed in a position and fly loose. Blades and cutting discs should be replaced if they become damaged or worn to the extent that safety may be compromised.

11.4 Chaff cutters

Guards are required to prevent access to the blades. The guards should prevent the blades from being reached through either the inlet or outlet of the machine. In addition, care should be taken when feeding in the material.

11.5 Steam / water pressure cleaners

Steam/water pressure cleaners are often used for washing down vehicles, buildings and yards. People using these machines can die from electrocution, or receive burns or shocks from these machines. Most injuries occur when the metal lance at the end of the flexible hose becomes live through an electrical fault. Electrical faults are caused by:

a) An unsafe or inadequate electric extension cable;
b) The wrong type of power cable connector, especially one that is not watertight;
c) Damage to the power cable by running the cleaner over it, by another vehicle running over it, or by heat from the machine;
d) A loose earth wire inside the plug.

An electric shock from one of these machines is likely to be made more severe by the wet conditions that surround the machine and operator. The machine should be used with a circulating current earth monitoring device or a residual current device. These devices should be fitted at the mains supply point, where they should be protected from splash by a waterproof cover.

For further information on plant (equipment and machinery) safety, see:
- *Plant Code of Practice 2005*
- *Safe Design and Operation of Tractors Code of Practice 2005*

12 Electrical safety

Electricity can kill if you give it the chance. Even if you survive an electric shock, there can be serious side effects such as burns, and follow on injuries caused by the shock, for example, falling from a ladder or contact with moving machinery.

The *Electrical Safety Regulation 2002* sets out specific requirements about electrical equipment and installations at a workplace. These include:

- Taking extra safety measures when working near overhead electric lines;
- Protecting extension leads and flexible cables from damage;
- Either (for class 3 or 4 work):

- Using residual current devices (RCD's). Also known as safety switches, these devices are designed to detect very small leakages of current to earth and react by stopping the electricity; or
- Inspecting, testing and tagging certain electrical equipment on a regular basis;

- Not using double adaptors and piggyback plugs to do certain work.

Only a licensed electrician can do electrical work, for example, repair appliances, wiring.

Employers and self-employed people must:
- Locate and protect extension leads and flexible cables so they are not damaged by anything (including liquid). For example, using a suitable cover to provide protection against crushing or other damage in pedestrian, horse and vehicle traffic areas;
- Consult the local electricity authority if any people or equipment are likely to come within 2 metres of an overhead electric line. This does not apply to electrical workers working near overhead electric lines.

There are different requirements for different classes of work. Many employers and self-employed people will do more than one class of work.

Class of Work Examples	
Class 1 work:	Construction work, regardless of the estimated final price at practical completion and work done in conjunction with this work.
Class 2 work:	Assembly, fabrication, installation, maintenance, manufacturing, refurbishment or repair work, eg: - Installing the interior fittings of a shop - Fabricating steelwork - Repairing leaking pipes
Class 3 work:	Any other work, such as: - Cleaning a motel - Cooking in a restaurant - Providing exercise facilities at a gymnasium - Teaching at a school
Class 4 work:	Office work, such as using computers, photocopiers, or fax machines.

Most horse riding establishments would generally be in class 3 or 4.

Class 3 or 4 electrical work requirements
Employers and self-employed people must make sure:
- Specified electrical equipment is inspected, tested and tagged by a competent person at prescribed intervals and immediately withdrawn from use if it is not safe to use; or
- Specified electrical equipment is connected to a type 1 or 2 residual current device (either a portable device or one installed at a switchboard). The residual current device must be tested at prescribed intervals and withdrawn from use if it is not working properly.

Horses and electrical equipment

Electrical sockets and wiring sited away from the reach of horses will prevent them seizing cables and plugs with their teeth when the sockets are in use. Socket outlets and switches sited outdoors should be of weatherproof construction.

Where it is unavoidable to have a trailing cable, this should be adequately protected from mechanical damage and should not cause a tripping hazard. Damaged cables should generally

be replaced completely. Never carry out makeshift repairs to cables. When joining flexible cables, proper connectors should be used.

Suitable and properly maintained residual current devices (RCD's) should be installed where clippers, grooming machines and pressure washers are used. In addition, all electrical equipment used outdoors should be controlled by a RCD.

Clipping and electrical grooming should be carried out by a competent person.
Bedding and water buckets should be removed and the area should be dry. An additional person assisting who is capable of handling the horse will help if it becomes difficult or nervous. Cleaning the appliances after use will prevent them becoming clogged with hair, grease and dust from the horse's coat.

For further information on electrical safety, see:
- Electrical Safety Office, Department of Industrial Relations

13 Solar UV protection

Although sun exposure produces a variety of health risks, the most obvious risks are to be eyes and to the skin. Both short and long term eye injuries can result from exposure to the sun, for example, inflammation, swelling and increased sensitivity to light initially and later, damage to the cornea and lens of the eye.

Skin changes caused by the cumulative effects of UV rays include premature aging, wrinkling and various types of skin cancer. In fact two out of every three people in Australia get some form of skin cancer. UV radiation can also cause skin conditions due to interaction with specific chemicals, including some present in industrial compounds. These produce photosensitivity, which cause the skin and other tissues to react in a severe way to exposure to sunlight.

The risk of developing skin cancer is directly related to the intensity and duration of exposure to sunlight. Intensity is affected by factors such as time of day, extent of reflection and shade, altitude and season of the year. Sun damage can occur on cloudy days and exposure sufficient to be harmful can be a year round problem in Northern Queensland. Virtually all people in Australia are at risk of skin cancer. However, fair-skinned people, particularly those who freckle or who never tan or tan poorly, are more at risk.

Groups especially at risk in Queensland include those working with horses in the outdoor environment. Work involving exposure to direct sunlight between 10am and 3pm, the hottest part of the day, is particularly harmful.

Control measures

Because of the risk of cancer, there is theoretically no safe level of exposure to UV radiation and exposure should be reduced to a minimum. Every workplace should carry out its own assessment of sun exposure. Employers and workers need to identify the jobs, tasks and work breaks that expose workers to solar UV rays. Implementing various administrative procedures, using natural and/or artificial shade, and providing personal protection should reduce exposure to sunlight. For example this can mean:

- Rescheduling outdoor work programs, where possible, to be performed outside the hours of greatest sun intensity, thereby avoiding direct exposure to sunlight during the hottest part of the day between 10am and 3pm;
- Making maximum use of natural shade from the trees, buildings and other structures or supplying portable structures that are easy to erect and dismantle;
- Advising individuals at particular risk and ensuring that all workers whose work involves direct exposure to sunlight make maximum use of personal protection against the hazards of solar UV rays.

After steps have been taken to minimise exposure, the next most important measure is the use of adequate protective clothing. Key features for selection of appropriate clothing include the design, tightness of weave and permeability of the material to assist evaporation of sweat. Non-reflective darker colours are preferable to white garments that reflect solar rays back on to the skin. Light summery weaves can transmit as much as 50 percent of sun's rays, while the lighter weave or knit reduces the amount of penetration.

Ensure that the use of personal protection itself does not create a secondary hazard to a worker. Impermeable materials such as disposable overalls with plastic linings do not allow sweat to evaporate and will increase heat stress in hot climates. Also, certain loose fitting clothing which can screen out the sun's rays and allow air circulation may constitute a secondary hazard if worn near plant or machinery with moving parts.

For adequate head and face protection, hats with brims of 10-12cm should provide enough shade, but will not stop solar rays reflecting up from water, corrugated iron and aluminium sheeting surfaces. Sunglasses that comply with *AS 1067 Sunglasses and Fashion Spectacles – Non Prescription Types* can provide eye protection.

As well as suitable clothing, sunscreen should be used when appropriate. Adequate supplies of sunscreen lotion should be maintained at any outdoor work location. Broad spectrum sunscreens rated at a factor of 15+ should be applied to dry skin 15-30 minutes before going out into the sun and reapplied every two hours. To avoid lip cancer and other sun damage to lips, clear lipsticks incorporating sunscreens should be applied. Some materials, for example zinc cream, produce almost total blocking of solar UV radiation.

Workers should be educated regarding early warning signs of skin cancer and provided with information on self-screening for skin cancers.

14 Heat stress

Excessive exposure to heat may lead to a number of heat illnesses ranging from mild (prickly heat) to life threatening (heat stroke). Body temperature is a balance between heat generated (internally) or taken in (from the environment), and heat lost. It is important to keep a balance which avoids a rise in core body temperature that may lead to heat illnesses. An increase in heat generated or taken in, whether by heavy or intensive outdoor work or by staying outdoors for long periods in high temperatures, must be offset by an increase in heat loss. Sweating is the most effective way to lose body heat.

> ***Heat stress*** *is the aggregate of environmental and physical work factors or conditions that constitute the total heat load imposed on the body.* The environmental factors of heat stress include air temperature, radiant heat exchange, air movement and water vapour pressure. Physical work contributes to total heat stress by producing metabolic heat in the body in proportion to the intensity of work or exercise. Clothing also affects heat stress.
>
> ***Heat strain*** *is the effect on the person or reaction to heat stress (hot conditions).*

Heat loss

When the temperature reaches the mid-30s and beyond, the body relies on sweating to lose heat. It is important to allow evaporation to happen, because unevaporated sweat is not effective in cooling the body. In rural and remote Queensland's high temperature and high humidity, this can be difficult. There can also be a problem if you are wearing protective clothing and your sweat cannot evaporate underneath it.

Evaporation

To help evaporation of sweat:

- Wear as little clothing as possible – however balance this against sun protection.
- Clothing should be light, preferably cotton and able to "breathe".
- Take regular breaks to cool down – length of breaks depends on the intensity or heaviness of the activity, the temperature and humidity, air movement and clothing.
- If wearing protective clothing, remove at regular intervals in the shade to allow your body sweat to evaporate.

To avoid heat stress, the golden rule for people in hot conditions who may be feeling weak or faint is to stop immediately, take in fluids and cool down.

Heat Illness	Condition	Treatment
Prickly Heat	This is an itchy and painful skin rash caused by blockage of the sweat ducts and an increase in pressure in the ducts.	Keep the rash cool and dry, stop hot work until it has settled down.
Heat Fainting	Blood vessels in extremities dilate to increase heat transfer to the skin causing reduced return blood flow to heart. In turn this temporarily reduces the blood flow to the brain and the person faints.	Lie person in shade, provide cool water and fan manually to cool core body temperature.
Heat Cramps	Painful muscle cramps	Lie person in shade, provide cool water and fan manually to cool core body temperature.
Heat Exhaustion	A serious heat illness that may progress to heat stroke if not promptly treated. Most common in non-acclimatised individuals. Person complains of weakness and/or nausea and/or giddiness and appears pale, breathless and exhausted. Skin is usually moist (sweating).	Lie person in shade, provide cool water and fan manually to cool core body temperature.
Heat Stroke	A medical emergency with a high fatality rate in untreated cases. This is caused by a rise in body core temperature to dangerous levels of 41ºC and higher. The person becomes confused, staggers and may collapse. The skin may be moist or dry (no sweating, in which case cooling does not occur). Anyone doing hot work who exhibits confusion and odd behaviour should be treated initially as having heat stroke.	1. Urgent first aid required. Remove clothing, wet skin and fan to increase evaporation. 2. Seek medical assistance urgently.

Guidelines to prevent heat strain

- **Drink small amounts of water regularly, at least 2 litres of cool water a day, more if sweating heavily.** Use cool water jugs, canvas water bags and water coolers indoors.
- **Acclimatisation.** Introduce new workers gradually to hot work. The body needs time to learn to lose heat efficiently. Most of the acclimatisation will occur in 4 to 7 days, and should be complete within 14 days.

- **Provide shade and air movement where possible.** Shade reduces the radiant heat load from sun, air movement increases sweat evaporation.
- **Schedule hot jobs for cooler parts of the day.** For instance, consider starting heavy work very early in the day and finishing by 10 am before temperatures begin to soar.
- **Provide cool rest areas where possible.** These enable a rapid return of core temperature to normal.
- **Wear lightest clothing that provides sun protection.** A balance is needed between clothing for sun protection, including a hat, and clothing that allows heat loss through evaporation.
- **Diet.** For most people the diet contains adequate salt. Those on low salt diet or acclimatising may need some salt supplementation such as sports drinks. Excessive salt (eg salt tablets) can worsen dehydration.
- **Alcohol.** Avoid drinking alcohol during the day. Alcohol increases urine output and therefore fluid loss.
- **Be careful where protective clothing is required.** Protective clothing such as plastic overalls, gloves and respirators allow no evaporation. In hot conditions, serious heat illness can occur rapidly. Choose a cool time of the day if possible.

15 Accidents and incidents

15.1 Recording and reporting of injuries, illness and dangerous events

Persons conducting a business or undertaking and principal contractors must make a record of every work injury, work-caused illness and dangerous event that happens at their workplace. Where there is a serious bodily injury, work-caused illness or dangerous event a notice must be sent to Workplace Health and Safety Queensland. When a notifiable event occurs, the scene must not be interfered with. Also, if a death occurs Workplace Health and Safety Queensland must be informed as soon as possible. Part 7 of the Workplace Health and Safety Regulation 1997 provides details of the requirements.

15.2 Work caused illness

Where a person at work suffers from a disease that is linked with specified work activities, the employer should immediately implement appropriate control measures. The diseases and specified work activities most relevant to horse riding schools, trail riding establishments and horse hiring establishments are:

(a) *Occupational asthma*, caused by the dust from dry arena surfaces, or from handling barley, oats, rye, wheat or maize;
(b) *Extrinsic alveolitis* (Farmer's lung), caused by the exposure to moulds or fungal spores;
(c) *Leptospirosis* (Weil's disease), caused by handling animals or work in places that are or may be infested by rats.

15.3 First aid

All workplaces must have appropriate provision for first aid. The form it should take depends on various factors, including the nature and degree of the hazards at work, whether there is shift working, what medical services are available, and the number of workers. The Workplace Health and Safety *First Aid Code of Practice 2004* contains guidance and advice to help employers meet their obligations.

Records of all work caused illnesses and accidents must be made in the approved form and kept in a suitable, accessible place. Records should include at least the name of the casualty, date, time and circumstances of the accident, with details of the injury sustained and any treatment given.

15.4 Safety for fire and other emergencies

An emergency plan must be developed and implemented. Having an appropriate emergency plan in place, and following it can reduce the consequences of fire and other such emergencies. Having regular fire drills is a necessary part of every emergency plan. Tragedies do happen and can happen anywhere. Planning for emergencies can mean the difference between life and death. Issues that require consideration include:

- Fire;
- Accident or illness - for example, occurrence of a serious accident or illness requiring first aid, such as a significant fall from a horse or a heart attack;
- Internal emergencies - for example, explosion; water, electrical, gas or ventilation systems failure; structural damage; spills or leaks of hazardous substances;
- Personal threat - for example, armed robbery. This is especially relevant where cash is kept on the premises;
- Bomb threat; and
- External emergencies - for example, neighbouring storage tanks are leaking fumes or a noxious gas.

Suggested elements of an emergency plan include:

- Appointment and duties of key personnel;
- Internal and external communication - for example, raising alarms; declaring emergency; informing outside authorities such as police and fire service; informing relatives, media;
- Emergency procedures - actions to be taken for each type of emergency, for example evacuation procedures, first aid procedures, questions to ask in the event of a bomb threat;
- Duties of non-emergency personnel;
- Testing and maintenance program for emergency equipment – including fire extinguishers, blankets and hoses, first aid kits, emergency lighting, alarms;
- Education and training of all persons involved, including the use of mock evacuations followed by a debriefing session; and
- Relevant information for rescue authorities.

For further information on the development of emergency plans, approach your local fire and rescue authority for assistance.

For further information on accidents and incidents, see:

- *Workplace Health and Safety Regulation 1997*
- Workplace Health and Safety *First Aid Code of Practice 2004*

Appendices

The following appendices are provided for information only, and do not form part of this Code of Practice.

Appendix 1 – Self-audit checklist

The following checklist may be used to help direct attention to areas that require regular examination. It is by no means an exhaustive list and should be adapted to suit the establishment.

A. Instructor Qualifications

Riding instructors are responsible for ensuring safety of educational programs. They must be experienced, responsible and have an understanding of the special needs of riders. In addition to having good riding skills, an instructor must be able to teach and communicate well with learners.

Requirements	Yes / No / NA
1.1. The head instructor and/or equestrian director holds current and appropriate riding instructor certification.	
1.2. The head instructor and/or equestrian director has at least 12 months experience in teaching group horsemanship.	
1.3. The head instructor and/or equestrian director has personal equestrian abilities corresponding to the needs of the program.	
1.4. The head instructor and/or equestrian director has training and experience in stable management and horse care.	
2. Riding instructors are qualified and competent.	
Suggestions	Yes / No / NA
3. Assistant instructors are qualified and competent, or under the supervision of a qualified instructor.	
4. Instructors are qualified in the seat they are teaching and their certificate level meets the needs of the program.	
5.1 The instructors and assistants have had training in instruction and training methods, and are able to use this in the program.	
5.2 The instructors and assistants have the knowledge and ability to demonstrate correct equestrian techniques and to school horses.	
5.3 The instructors and assistants meet appropriate standards of clothing, conduct and horsemanship.	

B. Planning and Design of Riding Areas

Requirements	Yes / No / NA
1. A safe area for riders to handle their horses before and after riding, separated from public (non-riding) access.	
2. Rules and requirements are clearly provided to people arriving for riding activities.	
3. A riding ring or arena used for instruction: - Has fences which are at least 1.2 metres high - Has rails or fencing materials on the inside of the posts - Has gates at least 1.2 metres high, sturdily constructed with safety latches - Has a surface which provides good footing, and is as level as possible - Is kept free of obstructions such as rubbish, rocks, holes, water troughs, mounting blocks and other obstructions, including other animals - Is large enough for the expected number of riders, yet small enough to maintain adequate control - Is regularly inspected and maintained.	
4. Riding trails: - Mainly have safe footing and adequate head clearance - Are typically located away from main highways - Have unremovable hazards identified or mapped - Are clearly identified or mapped, and instructors are given trail orientation - Any bridges are sufficiently strong enough to support the horses and riders - Are rated for their level of difficulty, and expected level of competence required - Have emergency access, where appropriate - Are regularly inspected and maintained, where appropriate - Minimum impact procedures are applied to all situations.	

C. Safe Procedures – Working with Riding Groups

Requirements	Yes / No / NA
1. Riders are under direct supervision and control of a riding instructor at all times, whether mounted or unmounted.	
2. Instructors and the equestrian director have a comprehensive knowledge of all horses in the program, and can judge their suitability for various riders and trails.	
3. Student : instructor ratios must be based on a risk assessment which takes into account issues including: - Nature of the ride - Rider experience.	
4. All riders must wear safe and suitable clothing, including: - Long pants and shirt - Protective helmets designed for horse riding	

	activities, preferably to AS/NZS.3838 – Riding boots or other footwear appropriate for use with the stirrups used.	
5.	The quality and condition of equipment used on and with horses is: – Appropriate for the intended use – The correct size for the rider – Correctly fitted to the horse – Adequately maintained.	
6.	Safety checks are done on equipment and rider's clothing before each class begins, and each time a rider is mounted.	
7.	Before each rider is allowed out on a trail ride, they are instructed in and can demonstrate horse control.	

D. Health and Humane Treatment of Horses

The horse director and riding staff have a responsibility to the horses used in their programs. Students should be encouraged to learn, respect and develop responsibility for the health and safety of the horses in their care.

Proper horse care requires knowledge of their needs, expert knowledge of horse management and planning for appropriate methods of care. Following the standards listed below will increase safety and provide for the well being of the horses being used.

Requirements		**Yes / No / NA**
1.	Horses are properly fed and watered.	
2.	Salt and other supplementary minerals are regularly provided for all horses as required.	
3.	Horses: – Work no longer than 6 hours per day in the ring – Work no longer than 8 hours per day on a trail – Have at least one day per week with no work – Are given at least a short period of turn-out or other daily exercise – Are in proper condition for the expected work load.	
4.	Horses are provided with proper hoof care, including at least: – Daily cleaning and checking of hooves – Trimming or shoeing on a regular basis by a qualified or experienced person.	
5.	Horses: – Are regularly vaccinated and de-wormed – Have their teeth regularly inspected, and floated as required.	
6.	Horses are treated humanely at all times and are handled with care, kindness and consideration.	
7.	Sick or injured horses are not used for lessons, trail rides, or otherwise hired out.	
8.	A horses injuries or ailments are treated immediately by an appropriate qualified or experienced person.	
9.	Each horse has suitable tack, properly adjusted and properly fitted to that horse.	
10.	If stalls, sheds and barns are used for housing horses, they are free of holes, bare electrical wires, projections	

	and other hazards.	
Suggestions		**Yes / No / NA**
11.	Care is taken to prevent contamination of feed from dirt, droppings, insects and other foreign objects.	
12.	If stalls are used for overnight housing, they are large enough for the horse to safely and comfortably lie down.	
13.	Horses are carefully groomed before being tacked up for use.	
14.	Living areas for horses, such as stalls, paddocks and corrals, are kept clean, dry, well drained and free from accumulated soiled bedding and manure.	
15.	Ticks, flies and other external parasites are controlled on and around horses.	
16.	Pastures for horses should have: - Access to shelter from the elements - Safe, well maintained fencing - No rubbish, holes, junk, vehicles, poisonous plants or other known hazards.	
17.	Provision is made for the disposal of accumulated manure.	

E. Coordinating Riding Program with Available Facilities

Goals which contribute to meeting the goals of the facility should be established for a riding program. These goals should be clearly stated to the riding staff and be made available to clients.

Requirements		**Yes / No / NA**
1.	The director of a facility that has an equestrian program should be familiar with limitations and potential problems of riding programs. The health and safety of riders should be the primary consideration, followed closely by the health, safety and welfare of the horses.	
Suggestions		**Yes / No / NA**
2.	The goals are realistic for the program considering the facilities, financial capacity of the clients, and training and ability of staff.	
3.	The program goals include: - Safe practices in riding and handling horses - Awareness of responsibilities to clients, horses and the environment - Quality instruction.	
4.	There is a comprehensive written policy about the use of horses and riding areas, including use by staff.	
5.	Staff have been provided with clearly written job descriptions and responsibilities.	

F. Emergency Facilities and Protocol

Requirements		**Yes / No / NA**
1.1	Buildings and adjacent areas have a fire prevention program and a written plan of action in case of fire.	
1.2	Staff understand and can implement the plan of action which will ensure people are safely evacuated, followed by the evacuation of the horses.	

1.3	Fire extinguishers are available, and are appropriately located.	
1.4	Practice evacuations are held for staff, including the evacuation of horses.	
2.	A person with a current first aid certificate is available during all horse riding activities.	
3.	First aid kits are available at riding areas and are checked and re-stocked on a regular basis.	
4.	For trekking in remote areas: – A current first aid certificate is held by the guide – Appropriate communication equipment is available (an EPIRB is recommended for very remote area operations).	

Appendix 2 – Horse riding agreement form (sample)

The following agreement form should be modified to suit the requirements of the establishment. An agreement form helps to clarify the responsibilities of both the rider and the establishment.

HORSE RIDING AGREEMENT FORM (sample)

Name of Horse Riding Establishment
Address, Telephone and Fax Numbers

Rider's Name	**Age**	**Weight**	**Horse Riding Experience**
		(Max 102kg/225lb/16st)	(please indicate) Little/none Some Average Experienced
Does the rider have physical and/or mental health conditions and/or disabilities which may affect his/her safety and ability to ride a horse? YES NO (circle one) If "Yes" describe here:			
Does the rider speak English? YES NO (circle one) If No, which language?			

This agreement shall be legally binding upon the rider and if the rider is a minor or mentally impaired, on the legal guardians of the rider. In consideration of the services of Name of Establishment and its employees, agents and associates (hereinafter referred to as "The Company"), the rider or guardian acknowledges as follows:

Horse riding is a physical activity that is not without risks of personal injury to the rider, including permanent disablement or death in extreme cases. Numerous injury risks are present, including collisions and falls, despite safety precautions taken.

Horses are strong animals with wills of their own that act on instinct, cunning and fear. Horses can be trained, but the behaviour of individual horses cannot always be predicted or anticipated and a fall from a horse cannot always be prevented. If a horse is frightened, provoked, hurt or mistreated, it may divert from its training and behave according to its natural survival instincts. That behaviour may include stopping short, changing speed or direction, shifting its weight, bucking, rearing, falling, kicking, biting or running from what it perceives as danger.

"The Company" provides the rider with skilled instructors and competent supervisors (insert details of qualifications/recognised competency level), suitable equipment and protective gear (insert relevant safety standards). "The Company" also selects its horses for their suitable temperaments and sound basic training for the required horse riding activities provided and " The Company" follows a recognised risk reduction program.

"The Company" maintains/does not maintain Public Liability Insurance to cover the rider in case of injuries associated with the horse riding activities provided by "The Company" (insert details of Insurance Company & $ amount of insurance cover).
"The Company" has first-aid treatment available for injuries and will arrange for riders to receive, or be transported to receive, medical treatment in urgent circumstances as soon as possible, should it be required.

"The Company" relies upon the details provided by the rider or guardian as to the rider's age, weight, riding experience and physical & mental capability in matching horse and rider. Subject to having been adequately instructed and/or assessed capable by skilled "The Company" representatives, the rider, upon mounting a horse selected for its suitability and taking up the reins, is in primary control of the horse. The rider's safety largely depends upon the rider's ability to carry out instructions given appropriate to the rider's assessed capability and the rider's ability to remain balanced in the riding position on the moving horse.

The rider shall request the ride assistant to assist in the adjustment of all equipment prior to or during the ride as necessary.

Riders must obey information signs encountered during the horse ride and all instructions by "The Company" representatives whilst on the property and during the ride.

The rider or guardian understands that "The Company" and its associates agrees to take all reasonable precautions but is not responsible for acts, occurrences or elements of nature beyond its control that can scare a horse, cause it to fall or react in some other potentially unsafe way. If any rider does not comply with the conditions set out herein, or in the opinion of "The Company" representatives, engages in inappropriate or hazardous behaviour, the ride may be cancelled and moneys charged need not be refunded in part or full.

"The Company" reserves the right to refuse to allow a person to participate in any horse riding related activity whilst on the premises on the basis of a disclosed impairment.

All accidents or personal injury or loss or damage to property must be reported to "The Company" representatives before leaving the property. If this is not possible due to injury, such report must be made in writing within 14 days thereafter and all claims must be made within 12 months of the date of the injury, loss or damage. The rider or guardian agrees that any claim not made within the 12-month period will be waived.

The rider or guardian acknowledges the risks of horse riding as stated on this form and the rider or guardian has read and understood the terms and conditions of this contract and signifies that this agreement shall be effective and binding.

RIDERS SIGNATURE …… DATE ……

GUARDIAN'S SIGNATURE (if rider is under 18 years old or mentally impaired)

…… DATE ……

RIDER / GUARDIAN'S ADDRESS……

(OFFICE USE ONLY)

Assessment of the rider's horse riding capability.	Assessment of the rider's physical/mental capacity to safely ride a horse.	How does the rider or guardian demonstrate their understanding of the terms of this contract?

Group:	Horse:	Start:	Finish:	Comments:

Appendix 3 – Biological hazards, zoonoses and other diseases

This section deals with hazards related to microbiological hazards and zoonoses. Microbiological hazards include those arising from dusts, moulds and fungi in hay, or from animals. Zoonoses are diseases that can be transmitted from animals to humans. Ringworm and leptospirosis (Weil's disease) are two such diseases and steps must be taken to protect workers.

Hazards associated with dusts / allergens

Exposure to dusts can cause or aggravate asthma and other allergic lung conditions. Substances causing these effects are called respiratory sensitisers. A respiratory sensitiser is a substance which, when inhaled, can trigger an irreversible allergic reaction in the respiratory system. Once this has occurred, subsequent exposure - even to minute amounts - may produce respiratory illness including:

(a) *Rhinitis* - runny nose, nasal congestion (for example, hay fever);
(b) *Extrinsic Allergic Alveolitis (EAA)* - breathlessness and flu-like symptoms. Continued exposure can lead to lung damage (for example, farmer's lung);
(c) *Asthma* attacks of wheezing, chest tightness and breathlessness resulting from constriction of the airways.

Known respiratory sensitisers found in horse riding schools, trail riding establishments and horse hiring establishments are dusts found in horses' coats and moulds and fungal spores from hay, straw and animal feeds.

Symptoms may start within minutes of exposure or be delayed for several hours (such as occurring at night) in which case their association with work may not be immediately recognised. However, relief from symptoms during rest days and holidays often points to an occupational cause. The earlier a sensitised person is removed from exposure, the greater the likelihood of avoiding serious damage to health. However, the potential to react to the sensitiser will stay with the individual for life. If exposure is allowed to continue, respiratory symptoms are likely to become progressively worse and may result in chronic disease.

Do not create more dust than necessary when working. Increase ventilation, for example groom outside, keep doors and windows open when handling hay or straw inside. Soaking hay and using 'clean' bedding or 'dust free' bedding all helps to reduce the concentrations of dust and spores. If exposure is for long periods, such as when stacking straw during delivery, wear a suitable particle dust respirator that complies with AS/NZS 1716. A particle P1 respirator (disposable or maintainable type) should be applicable in most circumstances, but heavy dust concentrations may require a P2 respirator. Wearers need to be clean-shaven for simple respirators to work effectively and be instructed in their use.

Ringworm

Ringworm is primarily associated with cattle although other animals are affected, such as horses, pigs, sheep, vermin. The infection is transmitted either by direct contact with lesions of people and animals who have the infection, or by indirect contact with contaminated objects such as floors, clothing and towels. Spores can remain viable outdoors for several months and indoors for up to five years. Ringworm appears as flat, spreading, ring-shaped lesions on the skin.

Infected animals should be treated and steps should be taken to prevent the spread of the disease. Protective clothing, ie rubber gloves, washable overall/apron and rubber boots should be worn when handling infected animals. The clothing should be thoroughly washed after use and treated with a suitable fungicide. All cuts should be kept clean and covered with a waterproof dressing. The hands, forearms, face and neck should be washed after work.

Leptospirosis (Weil's Disease)

This is a serious and sometimes fatal infection that is transmitted to humans by contact with urine from infected rats. Other forms of the disease are associated with cattle urine. The bacteria can enter the body through cuts and abrasions and through the lining of the mouth, nose, throat and eyes after contact with infected urine or contaminated water such as in ditches, ponds and slow flowing rivers. Rat urine may also contaminate animal feed and bedding. The symptoms are a flu-like illness with a persistent and severe headache. In severe cases the kidneys may be damaged and jaundice develops.

To protect workers from leptospirosis a strict pest control system must be employed to eradicate rats. All cuts and broken skin should be covered, using waterproof adhesive strips or plasters. Hands should be washed after handling any animal or possible contaminated material, for example bales of straw, and always before eating, drinking or smoking. Suspect illnesses should be reported to a doctor promptly.

Tetanus

Although it is not zoonotic, tetanus can be passed from horses to people. The tetanus bacillus lives in the intestine of horses and soil contaminated with droppings. Manure heaps provide a good growth medium for the organism. The organism enters the human body usually through a cut, abrasion or penetrating injury. This could be from a bite by an infected horse or being stabbed in the foot by a contaminated pitchfork. Often the workers do not notice minor wounds and leave them untreated and uncovered.

People affected suffer from severe muscle contractions, usually in the neck but also in the body. The disease is very painful and may end in death.

It is essential that everyone in contact with horses should be vaccinated against tetanus. Information should also be given on the types of injury likely to give rise to tetanus and how to deal with such an injury, such as seeking medical attention. All cuts and broken skin should be kept covered by a waterproof dressing.

Tetanus in Horses: Veterinary treatment will not always save an animal once signs of infection become apparent, but immediate veterinary attention is essential. The usual incubation period for tetanus is one to three weeks, the first signs being progressively developing stiffness and reluctance to move. Muscles in the region of the wound or hind limbs are normally first to be affected. Spasms of the head muscles cause difficulty in chewing (hence the common name, 'lockjaw'), flaring of the nostrils and a classic startled expression. The ears may be erect, the tail held out and the animal's reflex reactions to sudden movements or noise are heightened, causing more violent, general spasms. The temperature may rise to 43°C.

Regular vaccination of all horses against tetanus is essential. The mortality rate may be as high as 90%, and in horses that recover the convalescent period is usually around 6 weeks.

Vaccination is quick, simple and highly effective and the only practical means of long-term protection. Permanent vaccination with tetanus toxoid can be started at any age from three months onwards. The course consists of two primary injections given approximately four weeks apart followed by a booster vaccination a year later and thereafter at 2- 5 yearly intervals.

In addition to vaccination, good hygiene and management will help in minimising the risk of infection. Regular inspection of hooves and the lower limbs for cuts will assist in spotting potential sites where tetanus may enter. To reduce the risk of injury, clear yards, paddocks and stables of likely causes of injury (such as barbed wire), and routinely disinfect stables.

Pregnant mares are often given a tetanus booster in the later stages of pregnancy (usually in the eleventh month). This increases the antibodies available in the colostrum (first milk), protecting the foal for approximately six weeks. To supplement this many foals are given a tetanus antitoxin soon after birth providing temporary cover of three to four weeks. A further dose can be given at four weeks.

Tetanus vaccination is often coupled with influenza vaccination and several companies produce combinations of influenza and tetanus vaccine.

Equine Influenza (flu)

This is a viral disease of the respiratory tract, which is highly contagious among horses. The first sign which you are likely to notice in the horse is a harsh, dry cough which will last for 2- 3 weeks and may well persist much longer. Although you may not detect it, the cough will probably have been preceded by a rise in temperature for 1-3 days from the normal 38°C to 41°C. Initially there will be a clear discharge from the nostrils which later becomes thick and purulent.

Equine FLU debilitates a horse, leaving it susceptible to secondary infections. Influenza can develop into bronchitis or bacterial pneumonia. However, even when there are no complications from secondary infections, the animal will need to be rested for at least 3 weeks and often considerably longer.

An infected horse is itself a source of infection to others and it is important to make every effort to isolate infected animals. The incubation period for the disease is only 1-5 days and, with horses remaining infectious for 6-10 days after the onset of clinical signs, equine flu can rapidly be spread.

Seek a veterinary surgeon's advice, not just at the onset of symptoms, but also before restarting exercise.

The only practical way to prevent infection with equine 'flu viruses is to vaccinate horses regularly. There are several 'flu vaccines available. Different strains and sub-types of influenza viruses occur, the two main types being A/Equi 1 and A/Equi 2. This vaccine covers against the commonly occurring strains of influenza. However, influenza viruses vary periodically and are subject to a phenomenon known as antigenic drift and such variations may result in a breakdown in immunity.

Horses are subject to numerous infections that may cause coughing and a nasal discharge. Just as human colds and other infections may be incorrectly diagnosed as flu, equine flu also has its mimics. The cough or the virus are terms often heard but usually refer to causes other than equine flu. For instance, many respiratory problems in the horse are due to equine herpes viruses and not flu viruses.

Contact a veterinary surgeon if a horse shows signs of any infection. Failure to get a definitive diagnosis could leave the horse, and others, at risk of complications.

Appendix 4 – Veterinary treatment

Keep all veterinary drugs and medicines in a designated, secure (for example, locked) cabinet, chest or cupboard to prevent access by children, unauthorised persons, animals, birds and vermin. The medicines should be stored in accordance with the recommendations on the label, or the veterinary surgeon's instructions, to ensure they meet their stated shelf lives. Unsuitable storage conditions may lead to veterinary medicines becoming contaminated, spoiled by vermin or otherwise becoming ineffective, for example, some veterinary medicines can be damaged by exposure to light.

All people who handle and/or administer veterinary medicines should be given adequate information, instruction and training and be competent. Information should also be given on the potential dangers of the veterinary medicines being inadvertently administered to those attending the horse, as some may be fatal to humans in the dose required for horses. Employers and the self-employed should ensure that the appropriate procedures are followed; that only the minimum quantity of veterinary medicine necessary for treatment is removed from the store; and that the horse is kept calm and is securely restrained while the veterinary medicine is administered.

All syringes and needles must be disposed of using a 'sharps bin'. Proprietary sharps bins can be obtained from suppliers of animal health products. Used needles must not be disposed of in domestic waste. On no account should soft drink cans, plastic bottles or similar containers be used for the disposal of needles, since these could present serious hazards to staff if they were to be disposed of in domestic waste. Section 49 of the *Environmental Protection (Waste Management) Regulation 2000* provides details of requirements.

Veterinarians may use their own portable x-ray equipment at horse riding schools, trail riding establishments and horse hiring establishments. The operator of this equipment will be responsible for ensuring its safe use, but employers should be aware of the dangers and ensure that only nominated staff who have been fully instructed and protected are permitted to assist in radiography work. The Radiation Safety Act 1999 and Radiation Safety Regulation 1999 provide details of requirements. The Code of Practice for the Safe Use of Ionising Radiation in Veterinary Radiology provides further advice. It is recommended that only fully trained and experienced people assist veterinarians. Simple treatment may normally be undertaken within the horse's own stable. Complex treatment should only be administered if the horse is adequately restrained.

A. Disposal of medicines

All outdated or unwanted veterinary medicines should be disposed of safely. Prior to disposal all wastes should be stored safely and securely.

B. Restraining the horse

The horse should be handled quietly but firmly by an experienced person, or held in a crush. A head collar may be needed for horses where extra control is required, or where the horse is known to be difficult. Some possible methods of restraint are:

1. Holding up the horse's front leg;
2. Holding a fold of skin on the neck;
3. Using a twitch on the upper lip of the muzzle.

It is important not to be over-aggressive, as this will upset the horse. Using the minimum amount of force and keeping the horse calm will help to diffuse a potentially hazardous situation. The handler should wear strong or safety footwear, gloves and protective helmet. Treatment given in a quiet, secure area away from distractions will help to calm the horse.