

# Guidance on the Safe Handling of Livestock at Marts and Lairages



## Our vision:

A national culture where all commit to safe and healthy workplaces and the safe and sustainable management of chemicals.

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# 1 Introduction

Livestock Marts and the Lairages of Abattoirs present a unique set of health and safety risks as there are large numbers of animals present in unfamiliar surroundings. It is therefore not surprising that there are many accidents and very large numbers of 'safety incidents' usually involving the staff whose job it is to handle the animals. As a general principle members of the public should not be at risk at Marts or Lairages. Occasionally there have been serious and fatal accidents in Marts and Lairages. The risks can be greatly reduced with a combination of excellent facilities, well trained and competent handlers and well defined safe systems of work. This guidance is focused on eliminating the risk of fatal accidents and on minimising the overall accident risks amongst those working in and around Marts and Lairages in Ireland.

Most animals in the Marts are cattle. Few pigs are traded in the Marts. While there can be significant numbers of sheep traded they are acknowledged to represent less risk to staff. Hence the focus of this Guidance Document is on safety in handling cattle.

The purpose of this Guidance is thus to focus on Safe Systems of Work where large numbers of cattle are handled in places that are unfamiliar to them.

*This document was prepared in support of Goal 5 of the 'Farm Safety Partnership Action Plan 2009 – 2012' – 'To achieve a reduction in the incidence of accidents involving livestock'.*

## 1.1 Why 'Safe Systems of Work'?

'Safe Systems of Work' are a legal requirement that apply to all places of work. It is clearly enshrined in legislation, is extensively tested in the courts and in short means there is a legal onus for the employer to provide:

1. A safe place of work.
2. Safe plant and equipment.
3. Safe methods of working.
4. Competent workers – usually this means they must have specific training or experience.

5. Adequate welfare provision for staff, usually meaning toilets, showers, shelter and canteen facilities.

Achieving 'Safe Systems of Work' is nearly always the result of implementing a credible Health and Safety Management System. The essential components of such are:

1. Policies and a commitment to 'Safe Systems of Work'.
2. Adequate risk assessments and planning.
3. Effective implementation of the outcome of risk assessment and preventive measures.
4. A system to measure performance.
5. Regular review of the whole system.

Such a system sits alongside the quality management system of most workplaces and is not complex to operate. The key is effective policies and a commitment by management and staff to implement it. It always requires clear management structures and the identification of individual responsibilities. The HSA publication "*Workplace Safety and Health Management*" contains all of the required guidelines for these systems. It can be downloaded free of charge from [www.hsa.ie](http://www.hsa.ie).

## 1.2 What is Unique about Marts and Lairages?

The key factor in both is that cattle are presented with a whole new environment:

- Different layout.
- Different people.
- Unfamiliar sounds and often loud noises.
- They are likely to be separated from their herdmates.
- No immediate feed is available.

In short their routine and social order has been broken. They may have disliked being loaded onto and off a trailer or lorry. They may be on edge, to a lesser or greater extent.

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It is therefore entirely understandable that cattle will be more nervous than in the farm environment. Some will react with aggressive behaviours. Normally docile cattle can become dangerous and certainly less predictable.

The temperament of cattle varies, according to their sex, age, breed, inherent quietness and their previous experiences at being handled. One fact is that **cattle that cannot be safely handled on the farm are normally either sold or slaughtered and can be very dangerous to handle in Marts and Lairages**. While these are a small percentage of the cattle received in a Mart or Lairage they present an obvious danger to those handling them.

**It is with this background that the development of Safe Systems of Work in Marts and Lairages presents special challenges, much more so than on the farm.**

## 1.3 Protecting the Animals Welfare

The Animal Welfare Rights are very clearly enshrined in legislation. Essentially this means that any wanton mistreatment of any farmed animal is an offence. The welfare of animals is normally expressed in the five freedoms;

1. Freedom from hunger, malnutrition and thirst - by ready access to fresh water and a diet to maintain full health and vigour.
2. Freedom from discomfort - by providing an appropriate environment including shelter and a comfortable resting area.
3. Freedom from pain, injury and disease - by the prevention or rapid diagnosis and treatment of disease and injury.
4. Freedom to express normal patterns of behaviour - by providing sufficient space, proper facilities and company of the animal's own kind.
5. Freedom from fear and distress - by ensuring conditions and treatment that avoid mental suffering.

EU animal welfare legislation specifically prohibits the striking of animals.

Veterinarians of the Department of Agriculture,

Fisheries and Food will normally check that the above freedoms are complied with in Marts and Lairages and are required to investigate complaints about animal welfare.

The welfare of cattle in transport is strictly controlled and applies to those handled in Marts and Lairages. The details are covered in 'Best Practice for the Welfare of Animals during Transport' published by the Farm Animal Welfare Advisory Council ([www.fawac.ie](http://www.fawac.ie)). Where cattle are transported more than 65km the driver is required to have a certificate of competence which is issued by Teagasc for the Department of Agriculture, Fisheries and Food.

## 1.4 Animal Welfare Rights vs Health and Safety Requirements

On the surface there would appear to be a conflict between the 'welfare rights' of the animals against the requirements for 'Safe Systems of Work' and the 'Duty of Care' to every person at a Mart or Lairage. In particular, how can the "freedoms to express normal patterns of behaviour and from fear and distress" be reconciled with the need for 'Safe Systems of Work'?

In a well managed and designed Mart or Lairage there is usually little conflict between the animals' welfare rights and the need to maintain a safe working environment for workers. This is because neither of these imposes absolute rights.

For Health and Safety the onus is on the Mart or Lairage owners to do all that is "reasonably practicable" to ensure a safe working environment. All mart staff (permanent and temporary) should be shown the DVD of Safe Management of Marts. This is not a requirement for an 'absolutely safe working environment'. It is recognised that in Marts and Lairages there is inherent danger from dealing with live animals and the key is in having a management system that ensures that predictable risks to safety are largely controlled. This must occur within an environment where the rights of the animals are respected. Any handling system that reduces animal stress will be safer for the Mart

# 1 Introduction

or Lairage workers. Rough and aggressive handling is not acceptable in a welfare sense, nor will it help in creating a safe working environment for staff.

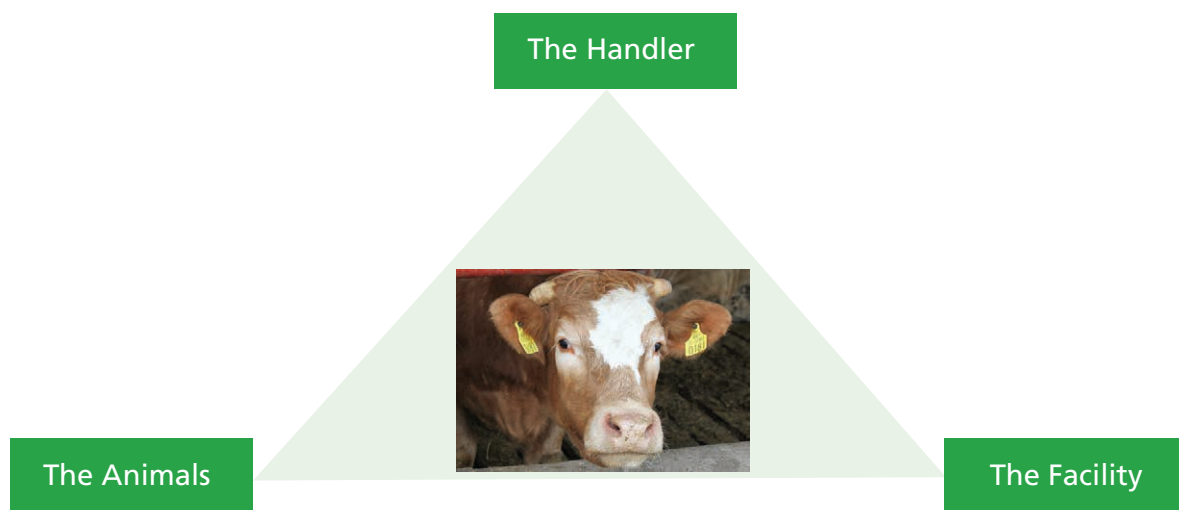
In any given situation in a Mart or Lairage, where there is a choice between human safety or animal rights the balance must always tip in favour of the safety of persons handling the animals. There is no situation where any person in a Mart or Lairage should be injured because of an Animal Welfare/Rights factor.

## 1.5 Understanding the Process of Managing Health and Safety in a Mart or Lairage

Effective management control is implicit in 'Safe Systems of Work' in any Mart or Lairage. If any part of this does not happen then the

'Safe Systems of Work' objective is unlikely to be achieved, meaning that staff and any other persons present are put at unnecessary risks of injury from the cattle.

There are just three basic components in the safe handling of livestock at any Mart and Lairage. These are the handlers, the cattle and the facility. By and large the Mart or Lairage will accept the animals presented to them, the only exceptions being horned cattle (illegal in Marts), diseased or injured animals. Marts can refuse to accept fractious cattle for auction where it is evident that the staff and clients would be endangered by their presence. In most instances the main variables for the safe handling of livestock at a Mart or Lairage are the staff and the facility.



## 2 A Safe Facility

### 2.1 Layout

The layout and nature of the Mart or Lairage has a significant impact on the ease of moving the cattle and hence on the safety of the workers and other persons present. Well designed and maintained facilities should have lower accident rates. A well designed facility enables the calm and ordered movement of cattle. Signage should be well located and clear. It is always better to have too many signs rather than not enough. Signage cover is part of the legal 'Duty to Warn' of a hazard but should not be relied upon alone. The principles of an effective layout for a Mart or Lairage are very well established. These are the main elements of a good layout:

1. The railings must be strong and high enough to deter possible jumpers.
2. Where possible use curved races to move cattle.
3. Aim to avoid 90° bends in narrow races.
4. Where the walls of the inspection/identification races are sheeted there is less side-view visual disturbance for the cattle.
5. In the Crush aim to have at least 6m of clear vision in front.
6. The Crush Gates should be opened from above to prevent the handler from leaning over the cattle's head to open the gate, where possible.
7. Avoid steep inclines, particularly when loading, unloading, and in Lairages in the race leading to the kill-box.
8. The gates must open and close in a direction that facilitates the movement of the cattle.
9. Gates should be the width of the race so they can be latched when open.
10. Gates should be easily latched so you can be sure it is a secure barrier. Self-latching gates are easier to shut – but they can also be more noisy.
11. There should be built in refuge points or 'safety passes' where a handler or others

can shelter or move out of the way, if required.

12. The 'isolation pens' must be easily accessible to the identification/inspection races. These pens must be capable of securing extremely fractious cattle.
13. There should be direct access to the inspection/identification and loading/unloading areas without interrupting the movement of cattle. Often in the Marts this is achieved with overhead walkways or 'split walkways' (at ground level) so that the public can move safely without any direct contact with the cattle. It is important that all public access points are designed so that cattle cannot enter public areas.
14. The entrance and exit points onto public roads must be safe.
15. It should be easy to seal off the facility in the event of cattle escaping.
16. Prevent unauthorised opening of gates.

### 2.2 Layout of the Sale Ring

In the sale ring cattle can be at their most dangerous as they are nearly always separated from other cattle for weighing, and then released into the sale ring with brighter lights, no escape route, many unfamiliar faces and the noise from the loudspeakers. The ringman must be able to release the weighing scales gate and then shelter behind the gate, if necessary. There must be a safe refuge available to him at this point, either a barrier

*Modern Marts and Lairages are well designed, have good cattle flows and are efficient to operate (Ardee Mart)*





## 2 A Safe Facility

*A full semi-circular ring leaves nowhere to hide – they will move around, allowing bidders a number of views (Ardee Mart)*

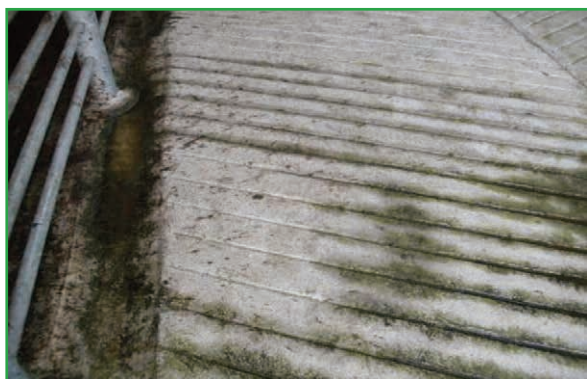


or a narrow exit gate. The sale ring is normally semicircular and should be fully sheeted except for the exit gate. There should not be corners where cattle can put their head down. Where an animal is particularly fractious, the latch on the exit gates should be opened by a second person or by a quick release cord that is activated by the ringman from his refuge.

### 2.3 Surfaces - Slips, Trips and Falls

Marts and Lairages inevitably generate slippery surfaces usually from dung and urine. The surfaces must be such that neither the cattle nor their handlers will slip and there must be no holes or dangerous projections that will cause either to trip. Drains must be of adequate size

*The chance of slipping on a roughened or grooved surface is much lower (Cillin Hill Mart, Kilkenny)*



<sup>6</sup> DAFF S160: Minimum Specification for Bull Housing, DAFF S137: Minimum Specification for Cattle Crush, Race and Enclosure

and manholes covered and properly fitted. It is common practice to use sawdust, wood shaving or straw to soak up some of the muck. Concrete surfaces do need occasional maintenance and in some instances resurfacing. The surfaces should always be left with a rough finish or with a pattern left on them to prevent slips occurring. Any loose stones, pieces of wood, etc., must be removed.

Drainage grates can cause cattle to balk. In general the grates should run in the direction of cattle movement.

In the winter when there may be frost or black ice all icy surfaces should be treated with industrial salt before work commences.

### 2.4 Height of Railings / Gate Fittings / Strength of Steel

The height of railings and gates would normally vary according to the class of cattle being handled. However, the "Precautionary Principle" suggests that both Marts and Lairages should be overbuilt rather than 'just enough'. Standard railings should be at least 1.8m in pens and races and at least 2.1m around the sale ring of Marts. Round pipe work should result in less tissue damage if the handler is thrown or crushed against the railings. The bottom rails should have a gap of at least 30cm to allow the handler to roll away in the event that he ends up on the ground.

The Department of Agriculture, Fisheries and Food have published guidelines for the minimum specifications for Bull Housing and the Cattle Crush, Race and Enclosure<sup>6</sup>, all of which are relevant for Marts and Lairages.



*A downwards slope on the latch requires less effort to close it (Ardee Mart)*



## 2 A Safe Facility

Gates must be pinned or have reversed hinges so that they will not lift off the hinges if an animal gets its head underneath and lifts up. Self locking latches are an advantage. An alternative is a 'gravity latch' where to close it is a largely downwards movement.

In the UK the guidelines for lairages is for the steel to have minimum yield strength of 235N/mm<sup>2</sup> for round, square or rectangular sections (standards EN10210-2, EN10219-2 and EN10255). Welds and hinges must have the same strength in accordance with EN1011-1&2. All steel work should be treated for corrosion protection to the standard EN14713. It matters little whether the corrosion protection is from painting, hot dip galvanising or zinc coating, the main objective being to preserve the inherent strength of the steel work.

### 2.5 Maintenance

Good maintenance is an essential part of maintaining a safe facility. In particular:

1. Ground surfaces must not have slips and trips hazards.
2. Slippery concrete surfaces should be regrooved.
3. All gates must swing freely, the hinges must be secure and latches easily closed.
4. Bent or broken railings should be repaired or replaced.
5. Broken lights must be replaced.
6. The Mart or Lairage must be thoroughly cleaned after each day.
7. Metal corrosion must be controlled so that the inherent strength of the steel is not reduced.

### 2.6 Unloading/Loading Bays

Many problems occur and sometimes escapes can be caused by the nature of the unloading/loading facility in Marts and Lairages. There are some general principles that apply:

1. All Marts and Lairages should have an adequate perimeter fence and gate or cattle grids to confine any escaped animals to the site.

2. Each loading/unloading bay should be around 3m wide with two side folding gates.
3. Loading/unloading bays should be supplied both for typical farmers' trailers (about 20cm above road level) and for trucks (about 50cm above road level).
4. Where it is necessary for an animal to step up to a trailer the step must be less than 20cm.
5. Trailers and trucks must be able to be backed right up to the gates before the ramp is lowered. The ramp angle should not exceed 15°.
6. Positioning guidance lines should be painted on the road surface to help drivers keep their trailer or truck square-on to the loading/unloading bay. These should extend out for at least 8m from the bay.
7. If the trailer/truck has no side gates the pen gates must be used to secure the side.
8. The person lowering the ramp must be able to step behind the side gates or an escape point, should the need arise.
9. The receiving pen should be at least 7m long in order to hold a full load of cattle from a truck.

### 2.7 Lighting

Lighting must be bright enough for the handlers and others present to clearly see the way and any ground hazards. Large contrasts of light should be avoided and diffuse lighting used to reduce shadows. Wherever possible use natural lighting from roof panels. All lighting installations (lamps, switches and sockets) should be IP67 rated.

### 2.8 Noise Levels

Noise levels are generally unlikely to exceed the limits in the 2007 General Applications Regulations. Much more important are the effects on already nervous cattle of sudden and loud noises. Sources can be from:

1. Gates clanging shut.
2. Loudspeaker and intercom systems.

## 2 A Safe Facility

3. Amplified telephone ringers.
4. People shouting.
5. Dogs barking.
6. Vehicle noises and blowing of horns.

Sudden noises should be minimised in all Marts and Lairages.

### 2.9 Control of Vehicles - Parking

Parking is generally not a problem in the Marts as the spaces provided tend to cater for the average sale day rather than the very busy spring market days. When there is a busy Mart day parking must be organised in a controlled and orderly manner. The loading/unloading bays must be left clear with sufficient manoeuvring room for drivers. Traffic attendants in the Mart yard must wear high visibility vests complying with EN471 Class 2 and should have flashlights for dark evenings.

If it is necessary for some vehicles to park on public roads outside of the Mart, they should be confined to one side of the road only through placing "No Parking" cones on the least favourable side.

*Ordered and controlled vehicle parking is much safer for everyone (Cillin Hill Mart, Kilkenny)*



### 2.10 Entry/Exit Points to the Public Road

There must be clear visibility onto and off the public road for 150m each way. In some instances, it may be necessary to widen the road to create a 'turning in' bay in the centre of the road. Long grass and hedges must be trimmed so that it does not obscure the visibility for drivers coming to and from the Mart, or for other road users.

### 2.11 Site Security

There are significant legal issues arising from any damage caused by cattle that escape from a Mart or Lairage. Fencing must be appropriate and well maintained. All Marts and Lairages must have secure perimeter fences and gates to prevent escaped cattle leaving the site. A well-designed cattle grid at the gate will prevent cattle from leaving by the gate and is best practice. An alternative is a gate that is controlled by a member of staff who would have sufficient time to react.

### 2.12 Children/Minors in Marts and Lairages

The definition of a child used in the "Code of Practice on Preventing Accidents to Children and Young Persons in Agriculture" is used;

- a) A "child" is a person under 16 years of age or the school leaving age, whichever is the higher.
- b) A "young person" is a person who has reached 16 years of age or the school leaving age, whichever is the higher, but is less than 18 years of age.
- c) The term "minor" encompasses both "child/children" and "young person's"

The very nature of both Marts and Lairages suggests there is no place at all in them for small children.

1. Children should not go into the yard area or loading/unloading areas of Marts or Lairages.
2. Children are to be under the direct supervision of an adult at all times.
3. There is no situation where older children up to and including the term "minors" should be involved with any work activity involving cattle in either Marts or Lairages.

Note that the guidance in the "Code of Practice on Preventing Accidents to Children and Young Persons in Agriculture" relating to "minors" handling livestock relates to a farm situation, not Marts and Lairages.

## 2 A Safe Facility

*All Marts and Lairages must have signage to indicate the restriction on children/minors.*

### 2.13 Access by Farmers and Agents

Most of the Lairages have strict policies restricting the movement of farmers or their agents. The Marts are entirely different and in most the farmers feel the need to inspect cattle either before or after the sale. The net effect is that farmers will often impede the free and safe control of cattle being moved either to or from the sale ring or inspection point. Change may be difficult as this has been custom and practice over a very long period of time. However, it is essential to control access by members of the public to yard areas where animals are being moved. For example, good practice can include restricting access to yard areas to 20 minutes 'viewing time', once all animals are penned. Some newer Marts have excellent overhead walkways that farmers use to inspect cattle. Yard areas of marts are not a suitable environment for members of the public or children when animals are being moved or penned. All overhead walkways or "catwalks" should have railings that comply with the "Working at Heights Provisions" of the 2007 General Applications Regulations<sup>7</sup>.

Where farmers or hauliers are in the way, Mart staff (who should be clearly identifiable) must ask the farmers or hauliers to stand clear while the cattle are moved past. It is important that the normal 'pathways' of access and egress to the pens or car parks does not impede the safety of the Mart staff moving cattle.

All Marts and Lairages should have signs to warn and restrict access to certain areas.

These may include:

1. "Children not allowed in ....."
2. "Children must be supervised at all times."
3. "Livestock can be dangerous. You are advised to keep away from the pens, the races, and the loading and unloading bays unless absolutely necessary."

<sup>7</sup> 2007 General Applications Regulations SI299:2007 at [www.hsa.ie](http://www.hsa.ie)

4. "Please advise staff before unloading if you have reason to believe that the livestock may be unsafe, wild, fractious or dangerous."
5. "Please use the overhead walkways".

All signage must be in the line of vision, be kept clean and if necessary illuminated.

*At Cillin Hill Mart every pen can be viewed from above – there is no disturbance to the cattle or to the stockmen (Cillin Hill Mart, Kilkenny)*



In defining a 'Safe System of Work' for a Mart or Lairage a fundamental principle is that the gates are set and the way is clear before the cattle are released for movement. Where farmers are in the way, they must be warned of the impending danger and asked to move aside while the cattle are moved through. This assumes that nearly all the work in moving cattle in a Mart is done by the Mart staff and that there are sufficient staff in relation to the numbers being presented for sale.

*A very clear message here to please use the overhead walkways (Cillin Hill Mart, Kilkenny)*





## 3 Effective and Safe Handling of Cattle

Consider these questions:

1. Are we all competent stockmen\*, meaning are we all excellent at handling cattle?
2. What makes a competent stockman\*?
3. Can stockmanship be learned?

First, we are not born with skills as a stockman. 'Stockmanship' is a learned skill. To some people it comes easily...others will always have difficulties in handling animals. A key factor is that the stockman must be able to 'read the animals' - like a book. They obviously can't speak to you but their appearance, demeanour and behaviour tells nearly everything about how they are likely to react. People from a farming background will nearly always have more experience in handling animals though that doesn't mean they are necessarily better stockmen, as their own learning and experience will influence just how effective and safe they are in handling the animals.

### 3.1 Good Stockmanship – What is it?

The competent stockman has a very wide range of skills. These include:

1. Recognises signs of health and ill health – easily identifies sick animals.
2. Understands changes in behaviour – easily identifies aroused animals.
3. Understands animal health - knows when veterinary assistance is needed.
4. Has planned feeding and animal health programmes.
5. Ensures the environment is satisfactory – not only the housing but also the effects of the surrounds like noise, smells and lights.
6. Has the management skill to make the system work.
7. Handles them with care, avoiding unnecessary stress to the animals... and themselves.

\* The word stockman or stockmen is intended in a gender neutral sense.

<sup>1</sup> The word 'fitness' is used with both physical and cognitive meanings.

8. Is calm, patient and observant with the animals.
9. Is cautious but at the same time firm so they know who is in control.
10. Is confident when segregating cattle.
11. Is safety aware and knows when to retreat and get help.
12. Knowing what clothing is appropriate for the job – safety boots, overalls, gloves etc.,

A good stockman will rarely have any conflict with the animal welfare regulations. Good stockmanship is an essential competency for any person handling cattle in a Mart or Lairage. If an individual lacks the necessary skills then specific training is required in order to achieve these skills. These are learned skills and can be improved with training. People lacking these skills should not be working with cattle in either Marts or Lairages.

A good stockman will always be totally focussed on the job and their interaction with the cattle. It is not acceptable to be frequently distracted while handling the cattle. A final factor is that the stockman must have sufficient fitness<sup>1</sup>, strength and agility to ensure not only his own safety but also the safety of others in the vicinity, whether directly handling the cattle or not.

### 3.2 Understanding Cattle Behaviours

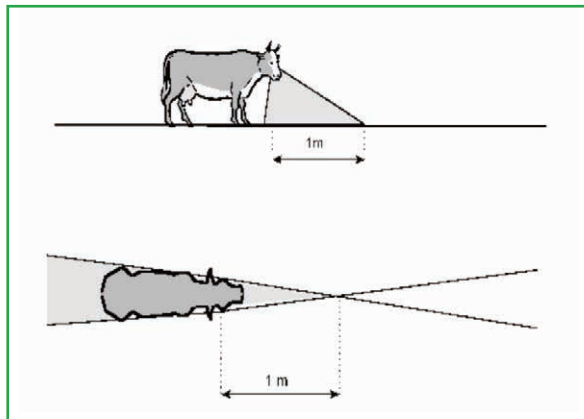
Cattle on farms are a highly social group. Amongst them are leaders, dominant animals, bullies and submissive cattle. Cattle have a highly developed social order within the herd. They always prefer to be amongst their herdmates rather than alone or in an unfamiliar group. They feel 'safest' this way. When they feel safe it means they don't feel under any particular threat. Their behaviours are predictable and generally they don't show aggression towards people handling them.

All cattle have a highly developed sense of smell and hearing, much more so than humans. Their sight is also highly developed

## 3 Effective and Safe Handling of Cattle

though much different from humans. Sight features include a narrow blind spot at the rear and another immediately in front of their nose. Their best vision, other than these small blind spots, is in front where they see with both eyes – binocular vision. To the sides they can see form and movements but not as much detail or depth as here they are only seeing with one eye – monocular vision<sup>2</sup>

*Cattle see quite differently from us*



Cattle routinely recognise at least 100 other herd mates. They also recognise humans, particularly their main handlers and are always nervous or edgy when a new person appears, whether to feed them, move them or to milk them. In a Mart or Lairage they generally won't recognise anyone, nor other cattle if they are coming in singly or if they are separated from their herd mates. This will generally make them nervous and unpredictable.

### 3.3 Different Cattle – Different Dangers

One factor we can do nothing about is the prior experience of cattle with their handlers on farms. This is a highly significant factor. Indeed experienced workers in Marts and Lairages know to be especially cautious of the cattle coming from some farms – irrespective of the breed or sex. This indicates some factor

in the prior handling of these cattle, or a lack of handling, has had some effect on them to the point where they are more of a danger to those working in Marts and Lairages. Mart and Lairage workers must always be alert for such cattle.

*All cattle in Marts and Lairages are immensely powerful (Cillín Hill Mart, Kilkenny)*



### 3.4 Farming Type Effect

All mature dairy cows are accustomed to being handled at least twice daily and are generally very quiet. Indeed any fractious dairy cow is likely to be quickly culled from the herd for safety and convenience reasons. This translates into the Marts and Lairages where the risk from mature dairy cows is generally low relative to beef cattle

Against this though are bulls from dairy farms. Many dairy farms have only one bull, who is often housed by himself for long periods. The net effect is that no dairy bull is to be trusted as they see any human as a potential competitor. They are often unpredictable and may attack even where there is little prior warning of impending trouble.

Beef cattle are generally handled less than dairy cattle and hence are less accustomed to being in a confined and unfamiliar place.

<sup>2</sup>Dimberton 1999

## 3 Effective and Safe Handling of Cattle

During the winter, often the main contact of suckler cows is with a tractor and feeding wagon that daily supplies their feed. So as a group, beef cattle in Marts and Lairages are less predictable than dairy cattle.

### 3.5 Breed Effects of Cattle

The dairy breeds are generally recognised as being more docile than beef breeds, although some of this difference is due to the extent to which dairy cattle are handled. There is a general perception that the 'Continental Beef Breeds' are less docile than the traditional beef breeds such as the Angus or Hereford. Given that the 'Continental Cattle Breeds' such as Charolais, Simmental and Limousin make up the majority of beef cattle, then the reality is that there are good economic reasons for farmers to use these breeds and that any temperament factors have not been a large part of their decision making. American research<sup>3</sup> has shown significant differences between cattle breeds.

Temperament is a heritable characteristic and therefore it is possible to breed out bad behaviour. A docility ranking is available for all bulls used in the Irish cattle breeding scheme<sup>4</sup>.

For Mart and Lairage workers the most important point is that cattle can never be trusted on breed alone. There are fractious cattle in all breeds and behaviour towards handlers will always vary widely both within and between cattle breeds. It is important that Mart and Lairage workers are able to recognise the major breeds of cattle.

*A Young Bull Showing Aggressive Behaviour*



### 3.6 Age Effects of Cattle

Most beef cattle handled will be under 30 months, most dairy cattle will be at least 7 years and bulls can be even older depending on whether they are raised for beef or used as sires. Nearly all cattle will be coming from highly socialised groups but their behaviour towards handlers will be more related to their prior experiences than to any inherent age effect. Older cattle are vastly more experienced but this also means they are more accustomed to a routine. Being loaded onto transport and taken to an unfamiliar Mart or Lairage is a major change for them and it is little surprise that sometimes they will exhibit antagonistic behaviour.

### 3.7 Sex Effects of Cattle

1. In general, never trust any bull whatever age or breed. Never trust even young 8-9 months old bulls as generally they are still less predictable and hence can be dangerous.
2. Older bulls are far more dangerous than young bulls. Bulls become territorial from about 18 months and from then on will fight other bulls for domination. Where two older bulls from different herds are

<sup>3</sup>Voisinet et al 1997

<sup>4</sup>www.icbf.com



## 3 Effective and Safe Handling of Cattle

put together, as can happen at a Mart, it is highly likely they will fight until the 'pecking order' is established. While they are fighting anyone in the vicinity is at a much higher risk of being 'tossed out of the way'. A fractious bull is normally safer to handle if he is shifted with a couple of cows he is familiar with.

3. Jersey bulls are extremely fractious – they are not common in the Marts and Lairages
4. Steers (bullocks) are generally quiet.
5. Cows with new born calves at foot can be extremely dangerous if she thinks that you are threatening her calf.
6. Heifers 'on-heat' are less predictable. They will mount other cattle and in turn be mounted.

*Old bulls are more dangerous, but never trust any bull*



### 3.8 Biohazards from Cattle (Includes Zoonoses)

Many serious diseases can be caught from cattle, though fortunately the incidence is very low. The nature of Mart and Lairage businesses is such that we have to accept there are some biohazard risks that are 'part and parcel' of the work. Most people handling cattle in Marts and Lairages will experience ringworm, that once recognised is easily treated. Some of the bacterial infections can be fatal, though rarely so.

Cattle in Marts and Lairages will inevitably produce more dung and urine than on the farm as they will have apprehensions about what is happening.

The main risks are from:

1. Gut Disorders: A number of bacteria cause gastro-intestinal disorders. These include Campylobacter, \_E.coli 0157, Salmonella and Clostridium perfringens. The overall risk is high.
2. Leptospirosis: There are two forms, Weil's disease that is transmitted by rats and cattle leptospirosis both usually transmitted by contact with infected urine. These can be fatal, if untreated. The overall risk to workers is low.
3. Cryptosporidiosis is commonly transmitted by birds and cattle, causing diarrhoea.
4. Bovine tuberculosis: All cattle coming into Marts and Lairages should be free from TB but there can be very recent infections. There is a higher risk of TB infection to workers in lairages of abattoirs that slaughter the TB reactor cattle coming from farms.
5. Brucellosis: This is now eradicated so the risk is negligible.
6. Q Fever: The bacteria Coxiella burnetti causes flu like symptoms and is widespread. Many Lairage workers have been affected though the symptoms are not often recognised as Q fever.
7. Ringworm: Quite prevalent causing a white crusty lesion.
8. Orf is caused by a virus causing a localised skin lesion
9. Tape and Gut Worms: The incidence is lowest in mature cattle and there will always be some carriers. The hazard is largely avoided with good personal hygiene and the overall risk is low.

## 3 Effective and Safe Handling of Cattle



*Any rats present are a Weil's disease risk*

There is evidence from overseas that the 'Superbug' MRSA is affecting some classes of farm animals, that farm workers are at risk and that there is significant transfer of it to the general population from some animals. The need for excellent hygiene amongst Mart and Lairage workers is obvious.

The key to Safe Systems of Work with regard to biohazards from cattle is the prevention of infections occurring. For Marts and Lairage workers this always involves the following:

1. Practice excellent personal hygiene. Wash your hands thoroughly with hot soapy water before eating or smoking. All staff must have instruction on how to wash their hands properly.
2. Cover all cuts with a waterproof plaster – then keep them dry. Wear waterproof gloves when the skin is broken. Gloves should comply with the EN374-2 standard.
3. Avoid urine splashes directly onto the skin – best to avoid the risk by having the skin covered at all times.
4. When operating a power hose avoid splashes onto the skin. Inhalation of bacterial laden mist can be largely prevented by wearing a portable respirator complying to EN149 type FFP2.
5. Your footwear must be waterproof. Wellington boots with steel toe caps are excellent footwear.

### 3.9 Biohazards from Slurry, Cattle Excreta and Mouldy Feeds and Bedding

A hidden and often unrecognised hazard comes from the biologically active bacteria associated with slurry, dung or mouldy feeds. Collectively these are known as endotoxins. Only some workers are affected and the reactions can range from sinusitis, acute bronchitis or asthma. In extreme cases there can be an allergic reaction that may be fatal. The 'farmers' lung' syndrome is in the endotoxins category.

In some Marts, human wastes (from toilets) may not be kept separated from cattle wastes. This increases the risk of diseases such as Hepatitis A. Human wastes should not be mixed with cattle slurry.

Any worker in Marts and Lairages handling mouldy or decaying feeds, or experiencing dusts and mists from cleaning up using high pressure water jets will experience some inhalation of endotoxins. In some cases a single exposure may cause chronic long term effects.

For most workers good protection will come from a well fitted portable respirator complying with EN149 type FFP2. Workers known to have respiratory allergic reactions or chronic conditions such as emphysema should have a higher level of respiratory protection with an EN149 type FFP3 mask, or not do this type of work at all. Instructions on fitting and wearing masks must be followed carefully to achieve the protection necessary.

*Respirators must comply with at least EN149 - type FFP2*



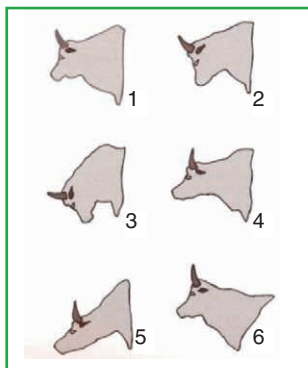
## 3 Effective and Safe Handling of Cattle

### 3.10 Recognising Cattle Behaviours

A competent stockman will nearly always recognise the behavioural signs and sounds of the cattle they are handling. These can be in the form of the head position, the tail, its overall demeanour such as pawing the ground with its legs, or bellowing. Seriously distressed cattle often bellow loudly – a sure sign to the handler to be especially careful and to its herdmates that there is danger. The diagrams below show typical head and tail positions<sup>5</sup>:

*The head position tells just how contented they feel...or otherwise*

- 1 → Neutral position
- 2 → Slightly antagonistic position
- 3 → Highly antagonistic position
- 4 → Confident approach
- 5 → Submissive approach
- 6 → Alert before flight position

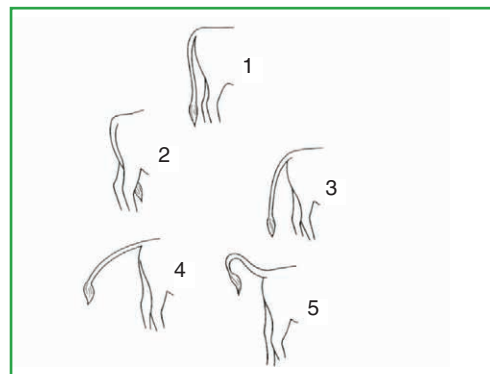


Thus the state of arousal has a large influence on the response by any cattle to the handler. Once aroused their adrenalin levels have increased and they may do any one of three things:

1. They may retreat, put their head in a corner where they cannot see you and wait. This is a frequent response when they are in a group and is a submissive behaviour.

*The tail position also says much about their state of excitement:*

- 1 → Grazing or walking
- 2 → Cold, ill or frightened
- 3 → Threatening, curiosity or sexual excitement
- 4 → Galloping
- 5 → Kicking or playing



2. They may take flight, if there is somewhere to go. If you are standing next to the exit then they will push you out of the way.
3. They may attack as they see you as a threat. Cattle will not typically charge unless they think there is no other option.

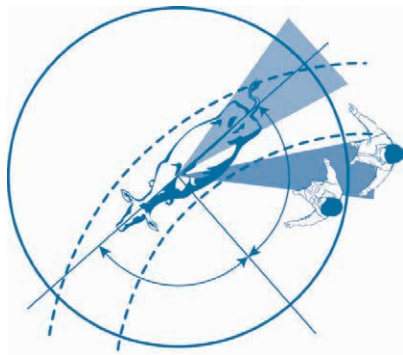
Beef cattle have a 'comfort zone' around them of about 6m. If you are inside that zone – often known as the 'flight zone', they are most likely to react to your presence. The closer you are the more threatened they will feel. In a Mart or Lairage you will nearly always be inside of their flight zone. A further aspect is that the flight zone value of 6m is an average. For most dairy cattle that are handled daily, the flight zone hardly exists as they are very comfortable with handlers up very close. Infrequently handled cattle with poor temperament may feel threatened at any visible distance.

<sup>5</sup> Albright and Arave, 1997, Mounaix et al.



## 3 Effective and Safe Handling of Cattle

*Moving into their flight zone gets a response. Moving out of it stops that response. The longitudinal balance line runs from the tail to the nose and the shoulder balance line through the shoulders<sup>6</sup>*



Their state of arousal is a critical factor. The arousal level is increased by factors such as:

- Being alone or separated from their herdmates.
- Unfamiliar places.
- Strangers handling them.
- Aggressive handlers.
- Transport to and from the Mart or Lairage.
- Dogs, especially noisy dogs that nip their heels.
- Moving quickly to bright lights
- Shadows and contrasting colours.
- Sudden noises, such as a loudspeaker blaring or a clanging gate.
- Hunger.
- Oestrus activity – on heat.
- Being hit with a stick.
- Electric prodders.
- Situations that are novel or strange to them.

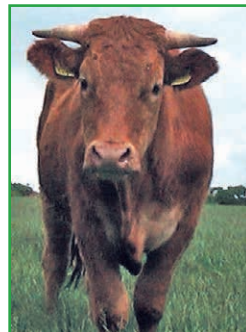
Arousal levels are reduced by the opposite of each of these. It is accepted that the arousal level will always be higher in a Mart or Lairage than on the farm. A key factor in safe handling

is to keep it as low as possible. This is where good planning, good facilities and excellent stockmanship are hugely important factors.

### 3.11 Handling Horned Cattle

The dehorning regulations are universal except for some pedigree animals and unique breeds. Cattle that have not been dehorned are illegal in Marts, but still sometimes get presented for sale. Cattle with horns are likely to be more aggressive to other cattle and present a higher risk to those handling them in a Lairage.

*This pedigree 'Sales' bull was very quiet, though these horns would be too wide for some stunning boxes. With a fractious nature behind them these horns could be lethal.*



*Any horns on cattle pose a higher risk to handlers*

<sup>6</sup> (ACC Bulletin 517 2002)

## 4 Defining 'Safe Systems of Work' for Marts and Lairages

A number of factors will result in safe work practices and a reduced chance of injury occurring. These are:

1. Competent stockmen.
2. Systems that keep the cattle arousal level as low as possible.
3. Well defined systems of work.
4. Early identification of potentially fractious cattle.
5. A layout that results in a good flow of cattle.
6. Safety refuge areas where direct animal contact is unavoidable.
7. Sufficient staff numbers to complete the work required in a safe manner.
8. Signs to indicate hazardous or restricted areas.
9. Staff clearly identifiable with some type of distinctive clothing.

As a general principle, the objective is always to minimise the direct contact between cattle and the handlers. Some direct contact is always inevitable meaning the risk of injury can never be eliminated, only minimised.

### 4.1 Management Control of Safety in Marts and Lairages

Every aspect of safe handling of livestock at any Mart or Lairage requires that someone is in charge of the activities and has management authority. Without this 'Safe Systems of Work' will not be achieved. The role is for the manager (or equivalent) to be continually circulating, watching, directing, assessing risks, ensuring there are sufficient and competent staff, ensuring that maintenance occurs, evaluating outcomes and ensuring there is appropriate accident investigation and remedial action taken, should the need arise. Identification and further training of staff who lack competency either as stockmen or in the humane handling of the stock is a clear responsibility for management.

Management control is a key role and responsibility for the safe handling of livestock at any Mart or Lairage ultimately rests with management. There are no exceptions.

### 4.2 Ready Identification of Mart or Lairage Staff

Company staff handling the animals should be clearly identified by some form of mart branded common clothing. This is particularly important in the Marts where there are often large numbers of farmers present and without this it is not easy to recognise who is a staff member.

### 4.3 Use of Sticks/Electric Prodders in Marts and Lairages

A stick has two purposes. The main function is that it makes the handler appear much larger to the cattle and so helps in maintaining the dominance of the handler over them. As such it is very useful in turning and directing cattle. The second is for self defence in the occasional situation where that is needed. This is the only time when it is acceptable to hit the cattle, and then is best around the nose or face. Indiscriminate use of sticks is unacceptable both in a welfare sense and also may bruise the carcass and raises the animal's arousal level, usually unnecessarily. Cattle handlers who constantly use their sticks to beat cattle demonstrate that they lack stockmanship skills and knowledge, and are also breaking animal welfare regulations.

Sticks should only be wooden. Blackthorn or willow are excellent. They are typically about 1m long. Alternatives to sticks are 'sorting paddles' that are extensively used in the USA or small flags or plastic tassels on the end of a light wooden dowel or stick.

*'Sorting paddles' are an alternative to a stick.*



## 4 Defining 'Safe Systems of Work' for Marts and Lairages

From an animal welfare perspective the 'paddles' are preferable to sticks and their regular use should be investigated and encouraged at all Marts and Lairages.

Sticks should be available for farmers who arrive at a Mart without a 'stick' to assist them when unloading their cattle.

Electric prodders are not to be routinely used other than encouraging cattle into the killing box in a Lairage. When used they are only on the hindquarters, for a maximum of one second and the animal must have a space it can move towards. Use of electric prodders is prohibited in marts.

*Electric prodders are effective but increase arousal of the cattle and are not good practice in a welfare sense.*



### 4.4 Dogs in Marts and Lairages

Dogs are seen by cattle as potential predators and therefore should not be routinely present in either Marts or Lairages. The only exception may be to help recover an escaped animal.



*The most useful farm dog can create chaos and increased risks for all in a Mart or Lairage*

### 4.5 Safe Unloading / Loading of Cattle

Unloading and loading of cattle at Marts and Lairages has frequently resulted in injuries to both staff and those transporting them, and escapes. Escaped cattle can be difficult to contain as they are usually alone and in a totally strange environment. The unloading process is much more ordered where the cattle

can be booked in for delivery in a specified period.

1. The trailer or truck must be positioned to eliminate the chance of cattle escaping by slipping between the vehicle and the siderailings. If necessary, reposition the vehicle so that it is correctly lined up. The Mart or Lairage should supply a 'banksman' to provide directions on the positioning of the vehicle. The 'banksman' must wear a high visibility vest complying to EN 471 Class 2 and must also be clearly identifiable as Mart staff. Safe refuge pens/areas may be required in loading/unloading areas based on written risk assessments.
2. Wherever possible staff should be in charge of unloading and loading of the cattle. Cattle must not be released from the transport until the Mart or Lairage staff have authorised their release and are ready to receive them. The gates must be preset to move them as smoothly as possible.
3. Any steps should be less than 20cm and the ramp angle should not be more than 15°.
4. The unloading/loading pens must have non-slip flooring.
5. The presence of fractious, distressed, injured or horned cattle or bulls should be notified by the driver to Mart or Lairage staff before they are released from their transport. Additional persons may be required. With potentially dangerous animals it is better to have too many persons than not enough. If such animals arrive at night to a Lairage when the day staff are not present, they must be noted by security and a system in place to ensure that this information is made available to the lairage staff before these cattle are handled in the morning. It is essential that such information is communicated to all relevant persons. All Marts and Lairages should have signage in the unloading areas requesting notification to the staff before known fractious cattle are unloaded.



## 4 Defining 'Safe Systems of Work' for Marts and Lairages

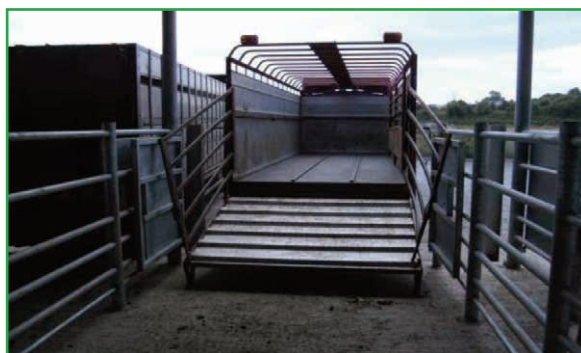
6. The sedation of potentially fractious cattle before bringing them to a Mart or Lairage is totally unacceptable as a management practice and renders meat unfit for human consumption due to residues.
7. Marts can choose not to receive very fractious cattle off the transport. In some instances this will also apply to horned cattle.
8. With injured or sick cattle, there should be a veterinary inspection before they are unloaded.
9. Cattle that might injure each other on account of their species, sex, age or origin should be separated and penned apart from each other on the transport and this separation maintained once released.
10. The transport driver should release the rear gate/ramp. When opening the rear door/ramp of the transport, he must be able to step aside either behind the gate or to a refuge point at the side. He should not walk down the pen in front of the cattle that are being released.
11. When the rear door/ramp is opened, there must not be other persons standing at the side of the exit ramp in the side vision of the cattle. This may cause them to stop.
12. During unloading the handlers should not frighten or excite the cattle, raising their arousal level.
13. Once the rear door/ramp is open the handler should not rush the cattle. They will always want to leave the transport as they never like being confined. It may take 20-30 seconds for one of them to see the opening and move, then the others will follow. Handlers should be trained to be patient!
14. Mart or Lairage staff should never enter the trailer to turn the cattle unless an animal has 'gone down' and an assessment is needed and risk controls in place.
15. When loading cattle at Marts, some trailers are unsuitable both in a welfare

and safety sense. These maybe a narrow horsebox without a tail ramp. There is a much higher risk of escape into the parking area from such trailers. Farmers using such trailers should be asked to find a better method to move their cattle.

*The trailer or truck must be far enough back not to leave gaps like this*



*Truck well positioned – there is no chance of escape (Ardee Mart).*



### 4.6 Safe Work During Inspection and Identification of Cattle

On entering the Lairage each animal may be inspected by a veterinarian and safe systems of work must be in place. In addition, all animals must have their identification passports. At this point in the Marts they will usually get an additional identification tag secured on the back. This work must be

## 4 Defining 'Safe Systems of Work' for Marts and Lairages

carried out in a race, sometimes with the use of a head crush. This work is much more difficult if the Mart or Lairage design does not facilitate the natural movement of the cattle.

1. Keep the cattle in their herd groups as long as possible.
2. When moving them into the inspection race, wherever possible this should be done without direct contact. Where direct contact is unavoidable the 'forcing pens' must not be so crowded so that the cattle are not able to move in the required direction.
3. Only competent, fit and experienced handlers should be involved in this work.
4. Handlers must carry a stick/paddle to help direct the cattle.
5. Those checking the identification must never place their hands through the railings to check a tag etc., inspection should be from an above position. The person(s) checking the tags or making a veterinary inspection must not be standing in a position that impedes the flow of cattle through the system.
6. No one should enter the inspection/identification race under normal circumstances. If an animal 'goes down' then this rule can be relaxed once risk controls are in place and then only under the supervision of the manager.
7. The design should include side gates or a lifting system to move any animal that 'goes down' in the inspection/identification race.
8. If there is a fractious animal then keep it in a group as long as possible.
9. Where restraint is necessary with a head crush the gate should be closed once the animal is in the box so it cannot reverse. There must not be anyone within sight at the front of the crush and the crush must be easily and rapidly closed once the head is through.

10. Once released, make sure there is a clear path to join other cattle.
11. If cattle are being moved to a detention pen there must be a clear pathway to the pen from the inspection area.

*The provision of 'escape slots' means staff have a safe refuge if attacked*



### 4.7 Separating Cattle into Sale or Slaughter Groups

Separating cattle into sale or slaughter groups is one of the more dangerous jobs as direct contact is often unavoidable.

1. Only competent, fit and experienced mart staff handlers should be involved in separating cattle.
2. If the cattle get very aroused/anxious, where possible leave them to settle down for 20-30 minutes before moving in to separate them.
3. The cattle must have room to move within the pen. If the pen is too full they will have nowhere to go.
4. A stick or equivalent is essential to help direct cattle in the required direction. The handler should use the longitudinal and shoulder balance lines to get cattle to move in the required direction (see figure in 3.10, Page 16).
5. There should normally be a second person on the gate, opening and closing it as required.



## 4 Defining 'Safe Systems of Work' for Marts and Lairages

6. With very fractious cattle it is safer for them to be separated without direct contact, usually directly out of the identification/inspection race.
7. The pens must be set in advance so once the cattle are moving they can continue to the intended pen.
8. In Marts this work must not be done while farmers are standing in the races or pens.

*Separation of the cattle nearly always requires some direct contact. Competent stockmen are essential (Cillín Hill Mart, Kilkenny)*



*A curved race leading to the weighing pen with sliding gates to stop them moving backwards is a very safe system (Cillín Hill Mart, Kilkenny)*



*A circular forcing pen with the gates on a central pivot enables the cattle to be moved without any direct contact from staff*



*Circular forcing pens – the gates move only in one direction and are self latching about every 60cm*



### 4.8 Moving Cattle into the Stunning Box (Lairages only)

Once the cattle are in the race leading to the stunning box one person can usually keep them moving up to the box and the 'shooter' will secure them in the box. Other than an animal 'going down' or for cleaning there is no reason why mart staff should enter this race. If cattle won't move forwards it is usually because they sense some obstruction. This can be visual such as someone in front, bright light



## 4 Defining 'Safe Systems of Work' for Marts and Lairages

or shadows, sounds or something they smell, such as blood.

1. Cattle generally move better if there is a slight incline in the race, up to the stunning box.
2. A slight curve also gets better movement as the cattle will follow those they see disappearing ahead of them.
3. Use of one way overhead gates will stop cattle reversing back down the race.
4. Lighting should be dull with no shadows in the race.
5. There should be no sudden noises.
6. There must be no smells of blood in the race.
7. Where an electric prodder is used, the operator must be fully trained. If the prodder is powered from mains electricity it must be operated through a 30mA RCD in case of an electrical fault. The cord must be in excellent condition.
8. The stunning box must be large enough to take any cattle normally presented for slaughter.
9. The stunning box should not have a solid wall at the head end. Cattle will move into it better if they can see a space beyond it.
10. A fixed-shelf head restraining system can improve the accuracy of the stun but can cause the beast to be highly aroused at the time when the opposite is desirable.
11. The stunning process should be fast and efficient. The 'shooter' must be fully trained and hold a firearms license. The 'shooter' should always have a backup charge in case the first is not totally effective.
12. The 'shooter' must not release the stunned animal if there is any doubt about the effectiveness of the stun and the relaxed state of the animal for shackling and sticking to occur.

*Entrance to the race leading to the stunning box – no sharp turns and nowhere else to go*



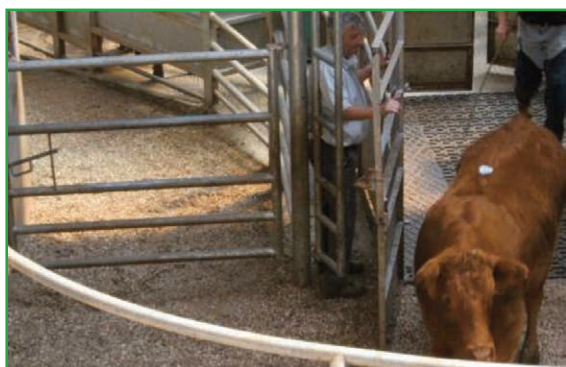
### 4.9 Handling Cattle in the Sale Ring (Marts only)

Cattle can be highly stressed in the sale ring. They are normally alone, the environment is new to them, there are unfamiliar people watching, there is no apparent way out, the loudspeaker of the auctioneer is loud, the lighting is bright and there is an unfamiliar person in the ring with them.

1. Only competent, fit and experienced Mart stockmen should be working in the sale ring.
2. If other Mart staff have identified a fractious animal there must be a communication system in place to ensure this is communicated to the ring man before the animal is released from the weighing box.
3. The ring man should always carry a stick so he can direct the animal at 'an arm's length'.
4. When opening the gate from the weighing box, the ring man should open the gate but not normally enter the box to turn the animal if it doesn't quickly come out.
5. The gate must be opened and the ringman able to shelter behind the gate as the animal comes out. Once the entry gate is closed there must be a barrier or narrow exit gate to shelter behind, should it be necessary to retreat.

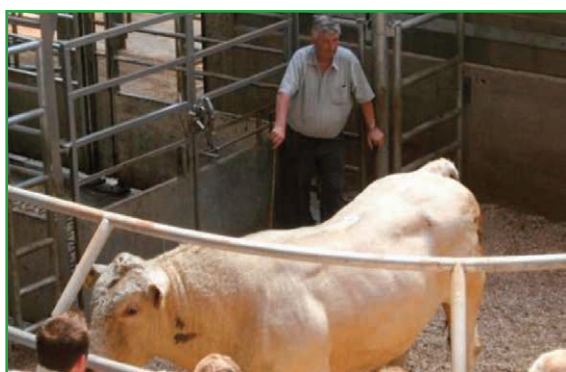
## 4 Defining 'Safe Systems of Work' for Marts and Lairages

*Totally safe release of a fractious bullock into the sale ring (Ardee Mart)*



6. Once the viewing is complete the ring man must be able to release the animal without entering the ring, should the animal be highly aroused. In some cases another Mart staff member will be required to release the exit gate. Understandably, there are few difficulties in getting cattle to move out of the sale ring.
7. Excessive and sudden noise levels should be avoided in the sale ring.

*Taking risks in the sale ring is not part of the job. There must be a place to retreat, when required (Ardee Mart).*



### 4.10 Handling Fractious or Horned Cattle

A key factor to safe handling of fractious or horned cattle is in recognising that there is a danger to those handling them. A proportion of all cattle are potentially fractious. Only competent, able and highly experienced Mart

staff stockmen should be involved with handling known fractious cattle.

Fortunately, the number of very dangerous cattle presented at either Marts or Lairages is very small.

1. All Mart staff should be clearly identifiable. Only competent, able and highly experienced Mart staff stockmen should be involved with handling known fractious cattle. This is not a place for young, very old or inexperienced workers.
2. There must be good communication between those who deliver fractious cattle and those who are receiving them. In the Lairages this may require a formal noting on the cattle record if they are received at night and signage appropriately placed at the gate should ask for the presence of known fractious cattle to be told to the staff receiving them.
3. A 'Risk Assessment' process should be followed for any potentially dangerous animal. This will vary between sites but means that where the danger is apparent in advance then a management plan can be worked out and implemented.
4. At Marts with cattle where there is prior knowledge that they are likely to be dangerous to staff or to the public at large they should not be unloaded. The decision not to unload should be made by the Mart management. Where such cattle are unloaded at a Mart and the management considers that they present too much danger to staff and clients, they should be isolated and only moved again once most of the clients have left.
5. It is an unacceptable practice to sedate cattle known to be highly fractious before bringing them to a Mart or Lairage.
6. Very aroused cattle or cattle that are naturally fractious should be kept with a group of quieter cattle, as far as possible. This can work well with a bull where he is kept with several cows.
7. Horned cattle should not normally be unloaded at Marts. If necessary, such cattle can be sold on the trailer. Cattle that are

## 4 Defining 'Safe Systems of Work' for Marts and Lairages

legally permitted to have horns such as pedigree stock are exceptions.

8. If a fractious animal arrives at a Lairage while killing is occurring, in order to minimise contact, it should be routed directly from the identification/inspection race to the race leading to the stunning box.
9. Mart staff should never attempt to handle a fractious animal alone. At least two competent and agile Mart stockmen must be present, more if required. Elderly staff are at more risk and must be assisted. Those involved must always be aware of possible refuge points for themselves.
10. Cattle that prove impossible to handle in the Lairage should be shot by a competent marksman. In other words, if they can't reasonably be handled then staff should not be put at further and unnecessary risk. Sometimes the 'shooter' is able to get close enough to stun them, using an extension arm for the gun. Alternatively, they can be tranquilised and then stuck. All required precautions must be available and taken to protect other people in the vicinity. Each Lairage should have a policy and procedure covering the killing of such cattle.
11. If animals are tranquilised in Lairages they become unfit for human consumption.
12. If cattle are presented for slaughter with horns too wide to get into the stunning box, they will need to be stunned and stuck before the normal box but in an area where the carcass can be readily moved.

*Any horned cattle represent an increased risk to staff than polled cattle*



### 4.11 Handling Mature Bulls

Unless from the same farm mature bulls should not be mixed as they are very likely to fight. Once a fight starts they will be more focused on each other than on any person trying to move or separate them. As such they are exceedingly dangerous for any person handling them.

1. Do not enter a pen with any bull without some means of protecting yourself. This is normally a stick or a paddle.
2. Only highly experienced and fit Mart stockmen should handle mature bulls. This work must not be done by young or inexperienced stockmen.
3. The handler of mature bulls must always maintain a psychological dominance over them.
4. Persons over 65 years of age handling bulls in a Mart or Lairage should have competent assistance.

*Separating two bulls that are fighting is very dangerous (Cillin Hill Mart, Kilkenny)*





## 4 Defining 'Safe Systems of Work' for Marts and Lairages

### 4.12 Emergency Situations – Escaped Cattle

Nearly all Marts and Lairages have lost cattle into the parking area, and sometimes out into the community. Mostly this occurs with unloading and loading. Cattle don't like being in an unfamiliar place and some will take a chance to escape if they see a gap. If there are no gaps, then they won't escape. The risks involved from escaped, highly aroused and lone animals should not be underestimated and are dangerous both to anyone on site and to the public at large if they escape from the site.

Escaped cattle should be treated as an emergency situation and there must be preplanning and training on how to deal with the situation. This must be outlined in the Safety Statement or in a separate Method Statement.

1. All Marts and Lairages should have an adequate perimeter fence and gate or cattle grid to confine any escaped animals to the site.
2. When an animal escapes a general alarm must be sounded to warn all on the site of the risk. If there is a gate then this must be closed until the animal is under control.
3. Where cattle escape outside of the site An Garda Síochána must be immediately informed of the situation.
4. A competent marksman trained to deal with this type of emergency situation should be available to the site, if required. Often such a person is available from a hunting club. If a shotgun is used it should have a single ball cartridge rather than 'shot'. This option will only be used where the animal has attacked or threatened to attack persons and where containment is not a realistic option. The 'shooting option' must be covered in the Policies and Procedures of each site.
5. Once the site is secure the normal procedure is to release a group of quiet cattle into the yard to keep the escaped animal company.
6. Once the group have settled down, in some instances they can be moved to an adjoining field and moved back to the Mart or Lairage once they have fully settled down. To do this requires that they can be quietly moved into a position where they see that going through a gate into a pen is a positive option. Extreme patience can be required. At least four competent stockmen should be involved. It may be necessary to erect temporary fencing to direct them into the pens.

### 4.13 Cleaning in a Mart or Lairage

All Marts and Lairages are cleaned with Power Washers at the end of each day. High pressure hoses are normally used to move the waste into the drainage system.

1. The surfaces will be slippery so slip resistant footwear with ankle support is essential.
2. The water jets cause an aerosol of organic material that should not be routinely inhaled. 'If staff have sensitivity to this or have respiratory allergies a respirator complying to EN149 type FFP2 should be routinely used to provide a high level of lung protection while power washing.
3. Eye protection complying to EN 166 should be worn while power washing.
4. The water jets must not directly contact any of the lights or other electricity switches.

### 4.14 Availability of First Aid

The nature of the work in handling cattle both at Marts and Lairages requires that there is a trained "Occupational First Aider" always available in the event of an injury occurring. There must also be a stocked first aid kit available for minor cuts and abrasions, and a suitable area to keep any injured person for assessment or until an ambulance arrives. This area should have blankets, a bed and chair available.



## Appendix 1 'Safe Systems of Work' Checklists for Marts and Lairages

The lists below are a guide to 'Safe Systems of Work' for Marts and Lairages. These lists cover the main hazards but will not be complete as some sites will have different risks. There is provision for these to be noted at the bottom of each section.

### a) Unloading and Loading of Cattle from Transport

Source of Hazard	Suggested Control	Site Assessment Okay (✓)/ Needs Attention (X)	Changes Required (List)	By whom and when?
Lorry or Trailer Correctly Positioning	1 Is there adequate space to manoeuvre all vehicles?			
	2 Are there guidance lines painted onto the roadway/yard?			
	3 Is there a competent banksman clearly identifiable as mart staff, to control orderly parking and to guide vehicles into place?			
	4 Can vehicles be parked sufficiently close to the unloading bay?			
Release of the Animals from the Transport	1 Are all livestock entering the facility checked by Mart/Lairage staff?			
	2 Is there a Policy and Procedure in place and adequate signage for receiving known fractious cattle off transport units?			
	3 Is this information brought to the attention of to all persons that will handle these cattle?			
	4 Are the pens preset to run the cattle in?			
	5 Is the floor surface in good condition and clear of debris?			
	6 Are there sufficient identifiable competent staff available?			
	7 Are 'bystanders' controlled so as not to impede the flow of the cattle?			
	8 Are dogs kept out?			
	9 Is there an escape chute/refuge where the person releasing livestock can shelter?			
Loading Cattle onto Transport at Marts	1 Is there a safe system in place to ensure that the transport is suitable to load the animal(s)?			
	2 Are the pens set to run them into the transport?			
	3 Is the floor surface in good condition and clear of debris?			
	4 Are there sufficient clearly identifiable competent staff available?			
	5 Are 'bystanders' controlled so as not to impede the flow of the cattle?			
	6 Are dogs kept out?			
Other Hazards				

## Appendix 1 'Safe Systems of Work' Checklists for Marts and Lairages

### b) Inspection and Identification of Cattle in Marts and Lairages

Source of Hazard	Suggested Control	Site Assessment Okay (✓)/ Needs Attention (X)	Changes Required (List)	By whom and when?
Access to The Ear Tags	1 Is the person reading the tag able to operate from above the animal?			
	2 Are there sufficient identifiable competent staff available?			
	3 Is there sufficient light to easily read the tag?			
Use of a Head Crush (Lairages Only)	1 Is the head crush designed and maintained so that it easily locks into place?			
	2 Does the crush lock into place from above without workers having to lean over the head?			
	3 Is there a clear space immediately in front of the crush that the animal can see on entering the crush?			
Design of the Inspection Race	1 Does the design encourage the flow of cattle through the race?			
	2 Does the width preclude any cattle turning around in the race?			
	3 Are the rails high enough to avoid any chance of cattle jumping out?			
	4 Is there a slight curve leading into the inspection race to encourage the flow of cattle through the race?			
	5 Is the concrete in good condition to minimize slipping by staff or livestock?			
Attaching Additional Labels to the Cattle (marts only)	1 Are identification labels attached to the centre-back only accessed from above the animal, not through the rails?			
Possible Sudden Noises	1 Are there sources of sudden noises that will cause the cattle to baulk or jump minimised?			
Other Hazards				



## Appendix 1 'Safe Systems of Work' Checklists for Marts and Lairages

### c) Separation of Cattle to Sale or Slaughter Groups

Source of Hazard	Suggested Control	Site Assessment Okay (✓)/ Needs Attention (X)	Changes Required (List)	By whom and when?
Competency/Fitness of Staff to Separate the Cattle from their Group	1 Are the staff fully able and wearing identifiable clothing (large enough, agile, competent and mobile enough to safely do this work)			
	2 Do all staff handling livestock have the necessary stockmanship skills?			
	3 Are there sufficient staff on hand to safely do the required work?			
Staff Personal Protective Equipment (PPE)	1 Do all staff handling livestock have steel toe cap boots with non-slip soles and overalls?			
	2 Are suitable sticks, flags or paddles available as an aid to assist in separation of cattle or if necessary for staff to defend themselves and clothing identifying them as mart staff?			
	3 Are chest/back protectors (normally used with horses) available when dealing with extremely fractious animals?			
Design of the Separation Pens	1 Is it possible to divert fractious cattle directly out of the identification/ inspection race into a pen where no direct contact will be needed?			
	2 Are the exit gates logically positioned to direct away the separated cattle?			
	3 Is there an escape/refuge place for staff should such be required?			
	4 Are the rails sufficiently high to deter possible "jumpers" from trying to jump out.			
	5 Is the concrete in a condition to minimise slipping by staff or livestock?			
	6 Is the ground surface in good condition and free of tripping hazards? (These could include sunken drain grates, etc.)			
Other Hazards				

## Appendix 1 'Safe Systems of Work' Checklists for Marts and Lairages

### d) Competency of Mart and Lairage Staff Working with Cattle

Source of Hazard	Suggested Control	Site Assessment Okay (✓)/ Needs Attention (X)	Changes Required (List)	By whom and when?
Physical and Planning Ability of Staff Handling the Cattle	1 Is each staff member fully able? (Large enough, agile, competent and mobile enough to safely do this work).			
	2 Does each staff member have the ability to work without close supervision?			
	3 Is each staff member able to plan ahead to set the gates in a logical manner?			
Stockmanship Skills	1 Does each staff member easily recognise the signs of arousal in cattle?			
	2 Can each staff member easily identify the main cattle breeds likely to be encountered?			
	3 Are sufficient staff members experienced at and trained in handling fractious cattle?			
	4 Is each staff member aware of the Animal Welfare requirements of their job?			
	5 Have staff with lesser stockmanship skills received additional training/ instruction in the required approach to the work?			
Team Working and Communication Skills	1 Does each staff member contribute actively to the team or do some prefer to work alone?			
	2 Does each staff member actively communicate details of animals or groups of cattle to the next person handling them?			
	3 Are language barriers in communicating within the mart of lairage given appropriate attention?			
	4 Wear mart identifiable clothing provided by Mart.			
Other Hazards				

## Appendix 1 'Safe Systems of Work' Checklists for Marts and Lairages

### e) Handling of livestock at the Sale Ring in Marts (Applies to Marts only)

Source of Hazard	Suggested Control	Site Assessment Okay (✓)/ Needs Attention (X)	Changes Required (List)	By whom and when?
Competency, Fitness and Stockmanship Skills (note that all of the provisions of Section d - above - also apply)	1 Is the Ringman fully able? (Large enough, agile enough and mobile enough to safely do this work)			
	2 Is the Ringman a competent stockman? (Does he instantly recognise the signs of arousal and aggressive behaviours, and know the importance of the 'balance lines and flight zone' in controlling the cattle once they are in the sale ring.)			
Design of the Sale Ring	1 Is the surrounding fence high enough to prevent any escape into the viewing stalls?			
	2 Is the Sale Ring a full semi-circle or are there corners where cattle may face into and be difficult to shift?			
	3 When the gates from the weighing pen are opened can the Ringman immediately retreat into a 'safety area' away from the animal in the ring.			
	4 Can the exit gate(s) be opened directly from the 'safety area' of the sale ring?			
Tripping Hazards	1 Is the concrete surface – in good condition to minimise slipping by the Ringman or livestock?			
	2 Is the ground surface in good condition and free of tripping hazards? (These could include sunken drain grates, etc.)			
Bright Lighting and Sudden Noises	1 Is the lighting of the ring adequate to allow clear vision without the use of bright flood lights?			
	2 Is the amplification system of the auctioneer controlled and just loud enough so as not to cause additional distress to the animal in the Sale Ring?			
Other Hazards				



## Appendix 1 'Safe Systems of Work' Checklists for Marts and Lairages

### f) Moving Cattle into the Stunning Box in Lairages (Applies to Lairages only)

Source of Hazard	Suggested Control	Site Assessment Okay (✓)/ Needs Attention (X)	Changes Required (List)	By whom and when?
Design of the Race Leading to the Stunning Box	1 Is the race slightly uphill?			
	2 Is the race slightly curved?			
	3 Are there overhead 'reversing' gates to stop cattle going backwards down the race?			
	4 Does the width of the race prevent smaller animals from turning around?			
	5 Are the walls fully sheeted?			
Lighting and Shadows	1 Is the lighting subdued and dull in the race and stunning box?			
	2 Are shadows /sunlight rays across the race leading to the stunning box eliminated?			
Loud Noises	Are loud clanging noises or loudspeaker systems that create sudden noises minimised?			
Blood Smell	Are blood smells from the 'sticking area' controlled to prevent them reaching the cattle moving up to the stunning box?			
Use of the Electric Prodder	1 Do cattle normally move freely up the race towards the stunning box?			
	2 If the electric prodder is operated from main electricity is it on a 12V step down or otherwise operated through a Residual Current Device (RCD).			
	3 Is the electric prodder fully maintained?			
	4 Are staff trained in the efficient and humane use of the electric prodder?			
Handling of livestock at the Stunning Box	1 Is the stunning box fully maintained particularly the steel work and the hydraulic tipping system?			
	2 Does the stunning box have an opening to the front side providing vision for the cattle to the front?			
	3 Does the stunning box have a fixed shelf head restraining system?			
	4 Is the firearm well maintained and safe for use?			
	5 Is there a backup firearm?			
	6 Is the correct load available in the firearm?			
	7 Is the shooter fully trained and certified?			
	8 Are the firearm(s) locked away when not in use?			
	9 Does the shooter check the effectiveness of the stun before releasing the animal for shackling and sticking?			
	10 Does the shooter check that the 'release area' is clear before the stunning happens?			
Other Hazards				

## Appendix 1 'Safe Systems of Work' Checklists for Marts and Lairages

### g) Maintenance of the Pens, Buildings, Parking Areas

Source of Hazard	Suggested Control	Site Assessment Okay (✓)/ Needs Attention (X)	Changes Required (List)	By whom and when?
Regular Assessment of the Steelwork and Latches	1 Do all gates swing freely and are latches effective using minimal effort?			
	2 Are all railings fully secure and able to withstand the impact of a large fractious animal?			
Regular Assessment of the Floor Surfaces for Trips Hazards	1 Are all drainage culverts fully grated? (Damaged grates should be repaired or replaced.)			
	2 Do surfaces of all concrete floors minimise trips/slips? (Damaged concrete surfaces should be replastered or replaced and concrete that has worn smooth should be 'regrooved'.)			
Waterproof Lights and Switches	1 Are all light fittings in good condition and where necessary waterproof? (Lights should be IP67 rated.)			
	2 Are all switches and plugs at least IP44 rated and in good condition?			
Structural Maintenance of the Mart or Lairage Buildings	1 Are roofs in good condition and with no leaks?			
	2 Are the building structures in sound condition?			
	3 Is the guttering effective and regularly cleaned?			
Parking Areas	1 Are separate areas assigned and signposted for the large cattle transport lorries and farmers trailers?			
	2 Is there a traffic management plan and supervision on busy times and traffic signage?			
	3 Are there lines marked on the road outside the unloading/loading bays to facilitate accurate reversing?			
	4 Are there open culverts / manholes that could be hazardous to children around the parking area?			
	5 Are parking areas maintained to prevent slipping/tripping hazards?			
	6 Is there an 'overflow' parking area or parking plan for very busy days? (This may need to be worked out in advance either with the local authority or An Garda Síochána.)			
Other Hazards				

## Appendix 1 'Safe Systems of Work' Checklists for Marts and Lairages

### h) Control of Farmers / Buyers / Visitors / Children

Source of Hazard	Suggested Control	Site Assessment Okay (✓)/ Needs Attention (X)	Changes Required (List)	By whom and when?
Children in Marts and Lairages	1 Is there signage to indicate that 'Children are not to handle cattle and must be supervised at all time'?			
	2 Is there an 'Active Management Policy' that results in children being confined to the sale ring viewing area or other viewing areas?			
Farmers / Buyers in the Areas where Cattle are Being Shifted	1 Is there signage to indicate that staff need to get a clear run when moving cattle, without obstruction of people in the way?			
	2 Is there an 'Active Management Policy' to get farmers and buyers to use the overhead walkways and public viewing areas where they are provided?			
	3 Is there an 'Active Management Policy' for the control of farmers and buyers so that staff can get a clear run when moving cattle between pens?			
Other Hazards				



## Appendix 1 'Safe Systems of Work' Checklists for Marts and Lairages

### i) Cleaning of the Mart or Lairage After Use

Source of Hazard	Suggested Control	Site Assessment Okay (✓)/ Needs Attention (X)	Changes Required (List)	By whom and when?
Slipping or Tripping on Wet or Greasy Surfaces	1 Is there a system in place to ensure that staff doing the cleaning wear appropriate non-slip footwear? (These are normally Wellington boots with good treads.)			
	2 Are grates replaced immediately if removed to facilitate cleaning?			
Contact of the Water Jet with Live Electricity	1 Is contact by the water jet of live exposed electrical cables prevented?			
	2 Are cleaners trained not to direct water jets at any light fitting or switch?			
	3 Are all electrical circuits protected by RCD's that will trip in the event of a power leakage?			
Personal Hygiene and Inhalation of Endotoxins	1 Is smoking banned while cleaning is occurring?			
	2 Do staff practice excellent personal hygiene with hand washing, during and after cleaning?			
	3 Are all cleaning staff issued with portable respirators complying with EN149 type FFP2 and instructed how and why these are beneficial?			
Other Hazards				

## Appendix 1 'Safe Systems of Work' Checklists for Marts and Lairages

### j) Security and Access / Egress to the Site

Source of Hazard	Suggested Control	Site Assessment Okay (✓)/ Needs Attention (X)	Changes Required (List)	By whom and when?
Vision for Drivers on Entering / Leaving the Site	1 Is there clear vision for drivers leaving the site that does not unduly risk either the driver or other road users? 150m each way is required.			
	2 Is there sufficient space provided for traffic turning into the site that does not unduly restrict or cause risk to other road users?			
Ability to Stop Escaped Cattle Leaving the Site	1 Is there an escaped cattle procedure in place and rehearsed for the site?			
	2 Is the site securely fenced so that it will contain any cattle that escape from the pens or during unloading and loading?			
	3 In the event of livestock escaping from control, is there a means of ensuring they cannot move out through the entrance gate, by closing the gates, cattle grids or both?			
Site Security (Lairages Only)	1 Is there a system in place whereby all access and egress from the site is monitored, either by a gate check or CCTV, or both?			
Other Hazards				

## Appendix 1 'Safe Systems of Work' Checklists for Marts and Lairages

### k) Dealing with Horned, Fractious or Escaped Cattle

Source of Hazard	Suggested Control	Site Assessment Okay (✓)/ Needs Attention (X)	Changes Required (List)	By whom and when?
Identifying Potentially Fractious Cattle	1 Is there signage requesting drivers/ farmers to inform staff of potentially fractious cattle before unloading?			
	2 Does the site have a plan/system whereby all potentially fractious cattle are assessed before they are released from transport units?			
	3 Once it is evident that there is a fractious animal in the Mart or Lairage is there a management plan on how it/they should be handled?			
Safe Handling or Potentially Fractious Cattle	1 Are there sufficient competent and experienced 'stockmen' available to safely handle the animal?			
	2 Is there a management plan in place that specifically deals with fractious and dangerous cattle?			
	3 Are the facilities adequate to handle an extremely fractious animal?			
	4 Is there a legal means of killing an animal that is so dangerous that staff should not be put at further risk?			
Emergency Planning for Escaped Cattle	1 Is there an emergency plan that deals with cattle that escape while unloading / loading, within the yards complex of the site, or that gets up after an apparently effective stunning has occurred?			
Handling Cattle with Extremely Large Horns (Lairages only)	1 Is there a plan of how to handle cattle where the horns are so large they cannot fit into the stunning box?			
Other Hazards				



## Definitions

“**Mart**” means a public place of business where livestock are traded.

“**Lairage**” means the part of an Abattoir where livestock are assembled for slaughter.

“**HSA**” means the Health and Safety Authority.

“**Stockmanship**” is the ability of an individual to competently handle domestic animals, normally meaning cattle, pigs and sheep.

“**Biohazard**” describes an organism or substance derived from an organism that poses a threat to human health.

“**Sale Ring**” means that part of a “Mart” used to show livestock and where the auction occurs.

“**Stunning Box**” means that part of a lairage where the livestock are humanely rendered unconscious before being killed.

“**Fractious**” describes the state of an animal where it is highly aroused and is likely to pose a significant threat to any person handling them. “Fractious” may describe an individual animal or a group of animals.

“**www**” refers to the world wide web, commonly known as “The Internet”.

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