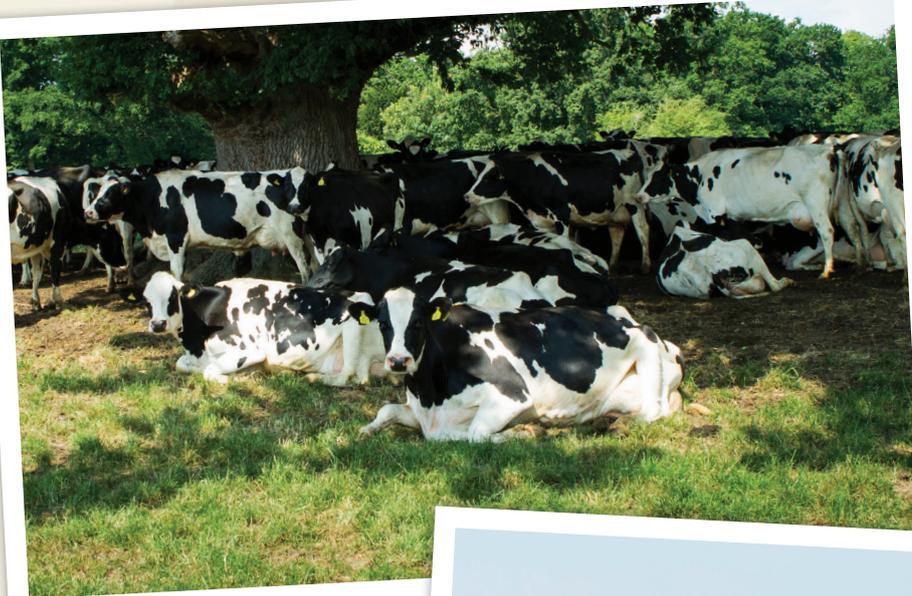




RSPCA welfare standards for

DAIRY CATTLE



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Contents

Introduction	iii
Food and water	1
Food	1
Water	2
Environment	6
Buildings	7
Thermal environment and ventilation	8
Lying area/space allowance	10
Cubicle housing	11
Lighting	13
Calving accommodation	13
Pasture	15
Milking parlour	16
Robotic milking systems	17
Dairy	17
Bull pens	18
Handling facilities	18
Fencing	19
Disposal of waste	19
Climate change and animal welfare	19
Management	20
Managers	20
Stock-keepers	21
Handling	22
Identification	23
Equipment	23
Inspection	24
Farm dogs	24
Protection from other animals	25
Transition/freshly calved cows	29
Health	31
Health and welfare monitoring	31
Lameness	33
Body condition scoring	35
Mastitis	36
Husbandry procedures	36
Breeding/calving	37
Medications/vaccinations	38
Downer cows	39
Casualty animals/emergency slaughter	39
Welfare Outcome Assessment	41

Transport	43
Livestock markets.....	43
Casualty animals	43
Training.....	43
Handling/loading/unloading	44
Transport	45
Slaughter/killing	47
Training.....	47
Casualty animals	48
Closed circuit television.....	49
Lairage.....	50
Pre-slaughter handling	51
Slaughter equipment	51
Stunning	52
Slaughter/killing methods	53
Sticking.....	54
Slaughter of pregnant cattle	54
Specific standards and guidance for the rearing of calves	56
Food and water	56
Food	56
Water	59
Environment	60
Lighting	61
Calf hutches.....	61
Management	63
Receiving new calves onto the unit.....	63
Handling facilities	63
Transport/marketing of calves	64
Health and welfare	65
Transport	67
Slaughter/killing	68
Male dairy calves.....	69
Appendix 1	70
Herd biosecurity.....	70
Appendix 2	71
Transport – standard operating and emergency procedure	71
Appendix 3	72
AHDB Dairy Mobility Scoring.....	72
Appendix 4	75
AssureWel Dairy Cattle Assessment Protocol and Scoresheet	75
Index	83

Introduction

The '*RSPCA welfare standards for dairy cattle*' are used to provide the only RSPCA-approved scheme for the rearing, handling, transport and slaughter/killing of dairy cattle. The '*RSPCA welfare standards for dairy cattle*' take account of UK legislation, government welfare codes, scientific research, veterinary advice, recommendations of the Farm Animal Welfare Committee (FAWC) and the practical experience of the farming industry.

The standards are based upon the 'Five Freedoms' as defined by FAWC. Although these 'freedoms' define ideal states, they provide a comprehensive framework for the assessment of animal welfare on farm, in transit and at the place of slaughter, as well as representing an important element of farm assurance requirements.

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

These freedoms will be better provided for if those who have care of livestock practise/provide:

- **caring and responsible planning and management**
- **skilled, knowledgeable and conscientious stockmanship**
- **appropriate environmental design**
- **considerate handling and transport**
- **humane slaughter.**

Guide to the use of the RSPCA welfare standards

- (i) The numbered requirements are the standards, all of which must be complied with.
- (ii) Boxed sections (indicated by (i)) give additional information, including: providing the reasoning behind a standard, expand on a standard, state how a standard can/will be assessed and/or highlight areas where the standards will be reviewed in the future.
- (iii) It is expected that all relevant UK legislation regarding farm animal husbandry and welfare on-farm, during transport, and at the abattoir, will be fully implemented in addition to the RSPCA welfare standards.
- (iv) **Farmers are required by law to have a thorough knowledge of the Defra '*Code of Recommendations for the Welfare of Livestock: Cattle*'.**



* RSPCA Farm Animals Department

The RSPCA's Farm Animals Department develops the RSPCA welfare standards for farm animals. These detailed documents are intended to represent 'best practice' in the care and welfare of farm animals.

The RSPCA works to continually develop and improve the welfare standards using a range of information, including the latest scientific research and practical farming experience. We regularly consult with other animal welfare and agricultural scientists, veterinary surgeons, and farming industry representatives. This helps to ensure that the RSPCA welfare standards continue to be at the forefront of farm animal care and welfare, and are also achievable on commercial farms.

The standards also take account of feedback from RSPCA Farm Livestock Officers, who carry out monitoring of the RSPCA Assured scheme, RSPCA Assured Assessors who audit scheme members, and the scheme members themselves.

We always value constructive feedback and ideas for improvement from those who are implementing the RSPCA welfare standards. Comments/feedback can be discussed with:

- a) RSPCA Farm Animals Department scientific staff, by contacting them on the below details:

Address: Farm Animals Department

RSPCA
Wilberforce Way
Southwater
Horsham
West Sussex
RH13 9RS

Telephone: 0300 123 0183

Email: farm-animals@rspca.org.uk

- b) RSPCA Farm Livestock Officers, who can discuss any issues during farm visits and offer advice, and can provide feedback to the RSPCA Farm Animals Department scientific staff.

The RSPCA does not approve equipment, but sets standards to ensure any equipment permitted for use is managed appropriately to safeguard the welfare of animals.



* RSPCA Assured

RSPCA Assured is the RSPCA's farm assurance and food labelling scheme. RSPCA Assured assesses and approves farms, hauliers and abattoirs that meet all of the applicable RSPCA welfare standards. (Please note that RSPCA Assured does not approve equipment).

Products from animals reared under the RSPCA Assured scheme can be labelled with the scheme's food label: 'RSPCA Assured.' Use of the RSPCA Assured name and mark are strictly subject to RSPCA Assured membership, traceability, licence fee and artwork approval. Membership of the scheme is subject to an annual fee and successful assessment, as well as monitoring visits by Farm Livestock Officers from the RSPCA's Farm Animals Department.

RSPCA Assured is a charity in its own right and not for profit. Any surplus income goes back into improving farm animal welfare.

Any queries relating to the operation of the RSPCA Assured scheme (e.g. administration, assessments etc.) should be directed to the RSPCA Assured office (0300 123 0014; info@freedomfood.co.uk).

Food and water

Livestock need to have ready access to fresh water and a diet to maintain full health and promote a positive state of well-being.

Food

- FW 1.1** Approved units must:
- have a nutrition plan
 - review the nutrition plan at least twice yearly.
- FW 1.2** Cattle must be fed a wholesome diet which:
- is appropriate to their species
 - is fed to them in sufficient quantity to maintain them in good health
 - satisfies their nutritional needs.
- FW 1.3** Cattle must have access to food each day, except when required by the attending veterinary surgeon.
- FW 1.4** Producers must have a written record of the constituents, and their inclusion rate, of compound and home mixed feeds.
- FW 1.5** No feedstuffs containing mammalian or avian derived protein are permitted, with the exception of milk and milk products.
- FW 1.6** Cattle must be fed so that their body condition is likely to sustain full health and normal reproductive capacity over their maximum foreseeable life span.
- FW 1.7** Efforts must be made to avoid sudden changes in the type and quantity of food.
- FW 1.8** Adult cattle and calves must be provided with fibre to allow them to ruminate, which must be of such quality and length as to help avoid acidosis.
- FW 1.9** Cattle must have no necessity to compete for food.
- FW 1.10 *** Fresh food must be kept within reach of cattle at all times.
- FW 1.11 *** Any uneaten feed must be removed prior to the next feed delivery being presented.
- FW 1.12** Extra trough space must be made available if a restricted diet is applied.



In feed barrier systems, cattle can push food away from the barrier as they carry out their foraging behaviour. This feed then needs “pushing up”, i.e. moving back closer to the feed barrier, so the cattle can access it at all times.

FW 1.13 * Feeding space allowance for adult cattle must be as follows:

Channel Island 600mm/head

Other breeds 750mm/head

*



Troughs or feeding surfaces should have a smooth base to encourage exploration and foraging. Any edges of the feeders coming into contact with the cattle should be smooth.

FW 1.14 Cattle must not be maintained in an environment which is likely to predispose them to nutrient deficiency.

FW 1.15 Managers must:

- a) be aware of any mineral deficiencies on the farm
- b) correct these as appropriate.

FW 1.16 All food troughs and feeding equipment must be managed hygienically at all times.

FW 1.17 Feeding and watering equipment must be designed, constructed, placed and maintained so that potential contamination of any feed and water is minimised.

FW 1.18 Control practices must be in place to minimise access to poisonous plants and unsuitable feedstuffs.

FW 1.19 To prevent the introduction and potential spread of disease, procedures must be in place to prevent the contamination of stored animal feeds.

Water

FW 2.1 * All animals must be provided with continuous access to an adequate supply of clean, fresh drinking water each day, except when required by the attending veterinary surgeon.

*



Water sources should be placed strategically to ease competition at peak times of drinking, such as after milking. Cattle can drink 15-20 l/min at their peak. We would recommend a flow rate of at least 10 l/min. Flow rate should be sufficient to maintain water level during peak times. A large diameter water supply pipe and a high pressure are required to achieve sufficient flow rates. Professional advice should be obtained if insufficient flow rate is a problem.

FW 2.2 * The drinking quality of non-mains water must be:

- a) independently tested
- b) tested frequently, and at least as frequently as required by the local authority for the testing of non-mains water for the purposes of human consumption
- c) tested at the source.

FW 2.2.1* The water quality test records relating to standard FW 2.2 must:

- a) clearly indicate whether the water tested is considered an acceptable source of drinking water for livestock
- b) be kept for at least 2 years.

*

i It is important to stress that water quality may change over time and therefore one should not rely on past analysis. Although water testing should be conducted routinely under normal circumstances, any unusual situation such as changes in water smell, clarity, taste or changes in animals eating or drinking habits, loss of performance, or health problems should immediately trigger the need for testing.

FW 2.3 When cattle are housed, the flow rate of water delivery systems must allow 10% of the herd to drink at any one time.

FW 2.4 Minimum drinking space must be calculated on the basis that cattle of 350 to 700kg must be provided with 450 to 700mm of water trough space per head.

i This drinking space can either be in a linear trough or a round trough, using trough perimeter as the linear measurement.

Herd size	Minimum effective drinking perimeter (m)
50	2.25
100	4.50
125	5.65
150	6.75
200	9.00

(Figures based on standard FW 2.3 - 10% of the herd must be able to drink at any one time)

FW 2.5 * A sufficient number of drinking sites must be provided to prevent undue competition for water.

*

i Each group of cows should have access to drinking water at a minimum of two separate sites.

FW 2.6 * If individual drinkers/bowls in isolation pens or short-term housing are used, there must be at least 2 individual drinkers/bowls for up to 10 cattle and 1 drinker/bowl per additional 10 cattle thereafter.

*

i The following table from AHDB Dairy’s Water Provision booklet indicates cattle water requirements taking into account milk yield, ration dry matter and ambient temperature. It should be used as a guide to estimate individual or herd water requirements.

Dairy milk yield	20 litres			30 litres		
	<16°C	16-20°C	>20°C	<16°C	16-20°C	>20°C
Ration DM%	Litres of water per cow per day					
30	50	57	65	71	82	94
40	54	62	71	76	87	100
50	57	66	76	79	91	105
60	62	71	82	84	96	110
70	64	74	85	87	100	115

Source: AHDB Dairy ‘Dairy Housing – a best practice guide’ Booklet, Chapter 11 ‘Water Provision’ which can be downloaded from the website www.dairy.ahdb.org.uk or requested by post via the website, or by phone: 024 7647 8702.

FW 2.7 All drinking facilities must be:

- a) kept thoroughly clean
- b) managed in a way which ensures that they are capable of dispensing sufficient water at all times.

FW 2.8 Water troughs must:

- a) not result in wetting/fouling of bedded areas
- b) be accessed, where possible, from concrete.

i Ideally, the water trough should be set into the bedded area with the front of the trough in line with the division separating the bedded area and the hard standing/loafing area, where there is one. This will assist scraping. The water trough should be walled-off on the bedded side to a height of approximately 1.4m above the level of the bedding. This will force the cattle onto the loafing area to drink and will help to prevent any poaching of the bedded area.

At pasture, the area around the water troughs should be managed to avoid excessive poaching and, if necessary, consideration should be given to troughs on concrete aprons.

Cattle should not be expected to have to walk more than 250m to access water, if maximum intakes are to be achieved.

Wherever possible, troughs and gateways should be sited away from the bottom of slopes and dips in the ground. This will ensure better drainage and will allow areas of deep mud to be avoided.

FW 2.9 When cattle are kept extensively at grass, a supply of sufficient fresh, clean water must always be available.

FW 2.10 If natural water sources are used, advice must be taken regarding any potential disease risk.

i Natural water sources are not recommended.

FW 2.11 Provision must be made to ensure an emergency supply of suitable drinking water is available in case normal supplies fail, for instance, due to freezing, drought etc.

Environment

The environment in which livestock are kept needs to take into account their welfare needs and be designed to protect them from physical and thermal discomfort, fear and distress, and allow them to perform their natural behaviour.

- *  **If good practices and procedures are being implemented on-farm, the following should be achieved and be seen as contributing to positive dairy cow welfare:**
- all cattle are clean
 - no areas of hair loss, lesions or swellings visible on hocks, carpal joints, udders and back of the neck
 - no broken tails
 - a clinical mastitis incidence of <25cases/100 cows
 - a lameness prevalence of <10%.

- *  **All farm areas should be kept clean and tidy, i.e. equipment not in use, debris and rubbish kept tidily away.**

E 1.1 Where management systems, designs or layout of facilities not covered in the RSPCA welfare standards are being employed or considered, these must be referred to, and discussed with, the RSPCA Farm Animals Department before they can be considered for certification.

E 1.2 There must be nothing in the cattle's environment that is likely to cause injury or distress to the animals that can be avoided.

 **Injury is defined as damage severe enough for the formation of granular scar tissue and to an extent significantly greater than would be caused by accidental bumps and scratches.**

E 1.3 Except where preservatives with an insecticidal role are used, cattle or calves must not come into contact with toxic fumes or surfaces, for example from paints, wood, preservatives or disinfectants.

- *  **Indicators of a poor environment include:**
- | | |
|---------------------------------|---------------------------|
| ■ neck calluses | ■ interdigital infections |
| ■ knee, hock swellings/calluses | ■ haematomas |
| ■ teat/udder injuries | ■ abscesses |
| ■ bruised soles | ■ broken tails |
| ■ laminitis | ■ chronic scar tissue |
| ■ soft feet | ■ very dirty animals. |

E 1.4 All out wintered dairy cattle will be treated as a novel system (to include pads used for lying down) and must be referred to the RSPCA Farm Animals Department for further evaluation.

Buildings

- E 2.1** For all accommodation, the key points relating to welfare must:
- be recorded on the farm site plan
 - be amended accordingly.
- E 2.2** Regarding standard E 2.1, the key points recorded must include:
- total floor area
 - number of cubicles or bedded area
 - number of cattle in relation to age, weight, feeding and drinking, and bedding space.



If practical, this information should be displayed at or near to the entrance to each building.

- E 2.3** Dairy systems which house cattle all year round are prohibited. See also standard E 8.1.
- E 2.4** Smooth concrete floors must be grooved (9mm deep) or treated with a non-slip coating.



Floors should be made of non-slip material or be maintained so as to reduce the risk of slipping. Floors should never be so rough as to cause foot damage nor so smooth as to result in slipping. Rubberised flooring can be incorporated into areas of heavy use, such as collecting yards, milking parlours and feed passageways. This makes walking surfaces more comfortable and reduces the risk of causing injury to the soles of the feet. Careful management of these compounds is required to avoid them becoming slippery.

- E 2.5** All electrical installations at mains voltage must be:
- inaccessible to cattle
 - well insulated
 - safeguarded from rodents
 - properly earthed
 - tested at least once a year.



By law, electrical installations need to be tested every 3 years as part of the Periodic Inspection Report. However, at least once a year, the 'trip switch' needs to be tested to ensure it is in correct working order.

- E 2.6** Buildings must be of a height adequate to allow the normal expression of mounting behaviour at oestrus.
- E 2.7** Passages must be of such a design and width, and so constructed, to allow 2 animals to pass freely.
- E 2.8** Efforts must be made to minimise, and ideally exclude, the number of blind alleyways in buildings, in order to avoid the incidence of bullying by dominant animals.
- E 2.9** Internal surfaces of housing and pens must be made of materials which can be readily cleansed and disinfected or be easily replaced when necessary.
- E 2.10** Cow brushes (home made/purpose built) must be installed in the cattle housing.

- E 2.11** Cow brushes must be maintained so that they are:
- a) suitable for purpose
 - b) accessible to the cows.
- E 2.12** Cow brushes must be installed at the following ratios:
- a) one brush (static or rotary) per 100 cows
 - b) herds below 100 cows installed at the rate of one per 50 cows.

Thermal environment and ventilation

- E 3.1 *** The thermal environment must not be so hot or so cold as to significantly affect production or cause distress.

*



As a guide, comfortable temperatures can range between -15°C to +25°C for healthy adult cattle. Air speed in the environment will affect this, for instance if air speed is high, the lower temperature for comfort will rise (i.e. the temperature at which a cow is comfortable in those conditions will be higher). For calves, the thermal environment should not have a temperature below +7°C (unless clean calf jackets are applied) or above +25°C.

- E 3.2** Local chilling of the udder due to lack of bedding and draughts must be prevented.

- E 3.3** Effective ventilation of buildings, permitting air movement at low velocity whilst avoiding draughts and ingress of rain and snow, must be provided.



The prime concern of winter housing is to keep cattle out of wind, rain and snow which reduces insulation.

Properly designed natural ventilation reduces the risks associated with mechanical failures.

This is best achieved by:

- **space boarding along side walls to a depth of at least 1 metre below the eaves, and from eaves to the ridge at each gable end**
- **100mm planks with gaps of 20mm**
- **open roof ridges.**

- E 3.4** Provisions must be made to ensure that, when cattle are housed, aerial contaminants do not reach a level at which they are noticeably unpleasant to a human observer.

E 3.5 * Building ventilation must achieve a relative humidity below 80% when ambient conditions allow.

i The objective is to provide a large volume of air and high ventilation rates to remove the moisture produced by the stock and to reduce the number of airborne pathogens being passed from animal to animal.

Factors contributing to provide good ventilation include sufficient and correctly positioned air inlets and outlets, and correct air inlet-outlet height differential.

For example, adequate inlet and outlet capacity; sufficient height to the eaves (14.2m/14ft); a solid wall up to 3m (10ft) high; 2 inch spaced Yorkshire boarding between the wall and the eaves and the gable ends. (Gable ends are not always enclosed if the prevailing weather conditions are favourable).

Professional advice should be sought if ventilation problems are being encountered.

E 3.6 * Ammonia, dust and relative humidity must be measured and recorded in each building:

- a) at least quarterly
- b) using meters or testing tubes (for ammonia, dust and relative humidity) or using sensory evaluation (for ammonia and dust only).

E 3.6.1 * If using sensory evaluation to assess ammonia/dust, the standardised protocol shown in the information box below must be used.

i Whilst the use of calibrated meters is encouraged, the following air quality assessment protocol can be used instead:

Step 1: Using the chart below, assess ammonia and dust levels (at the animal's level) immediately upon entering the housing.

Step 2: Just prior to leaving the housing during that inspection, assess the air quality once again.

Step 3: Record the highest score from the two assessments.

Score	Description
0	Zero: odour and dust not noticeable; easy to breathe.
1	Weak: odour and dust hardly noticeable; can breathe without effort.
2	Moderate: odour and dust distinct; experience watery eyes and/or coughing.
3	Strong: odour and dust irritating; experience stinging eyes and/or mouth, and/or excessive coughing/sneezing.

E 3.7 * When using sensory evaluation to assess air quality, scores of 2 and 3 indicate that ammonia and dust are excessive and air quality must be improved without delay.

E 3.8 * When using meters or testing tubes to assess air quality:

- a) ammonia must not exceed 25ppm
- b) dust must not exceed 10mg/m³.

E 3.9 A building must provide adequate air space:

Weight class (kg)	Minimum unit building volume
Up to 60	7m ³
61 to 100	10m ³
101 to 200	15m ³
> 201	20m ³

E 3.10 When removing slurry from under slats, care must be taken to avoid fouling the air with dangerous gases which may be fatal to man and animals.

E 3.11 When cattle are kept in partially roofed units they must be provided with:

- a) effective shelter from the wind
- b) a dry, comfortable lying area.

E 3.12 For summer conditions, a shaded area must be accessible to the cows.

E 3.13 Care must be taken if trees are used for shade, as they are often used by a number of biting fly species for congregation areas.



Consideration may need to be given to the provision of artificial shade or to allowing animals to have access to buildings. Summer temperatures which are consistently above 25°C will limit the productivity of an animal as well as potentially compromising its welfare.

Lying area/space allowance

E 4.1 Cattle kept in straw yard accommodation must be kept on, or have access at all times to, a lying area which is:

- a) well-drained or well maintained with dry bedding
- b) of sufficient size to accommodate all cattle lying down together in normal resting posture.

E 4.2 The floor space allowances in straw yard accommodation must be as follows:

Weight of animal (kg)	Minimum bedded lying area (m²)	Minimum non-bedded/loafing area (m²)	Minimum total area per animal (m²)
< 100	1.5	1.8	3.3
101 to 199	2.5	2.5	5.0
200 to 299	3.5	2.5	6.0
300 to 399	4.5	2.5	7.0
400 to 499	5.5	2.5	8.0
500 to 599	6.0	2.5	8.5
600 to 699	6.5	2.5	9.0
700 to 799	7.0	3.0	10.0
> 800	8.0	3.0	11.0

(Space allowances for weights in the range of 200kg to 800kg comply with British Standard BS 5502:2005)

E 4.3 Cows must be able to lie down in a normal position without risk of being trodden on or kicked by other cows.

E 4.4 Loose housed, growing cattle must be grouped according to size and age.

- E 4.5** The space allowance for cattle housed in groups must take account:
- of the presence or absence of horns
 - the size of the group.
- E 4.6** All cattle must at all times have:
- sufficient freedom of sideways movement to be able to groom themselves without difficulty
 - sufficient room to lie, freely stretch their limbs and to rise.
- E 4.7** Cattle must not be closely confined except in the following circumstances:
- for the duration of any examination, routine test, milking, blood sampling, veterinary treatment
 - while they are being fed on any particular occasion
 - for the purpose of marking, washing or weighing
 - while accommodation is being cleaned
 - during the procedure of artificial insemination
 - awaiting entry to the milking parlour
 - while they are awaiting loading for transportation.
- E 4.8** The use of housing systems in which cattle are tethered either for the whole, or part, of the housing period is prohibited.

Cubicle housing

*

- i** The emphasis of cubicle design should be to maximise the comfort of the animal. Given the wide range of sizes and bodyweights within and between herds and individual breeds, it is difficult to prescribe actual dimensions of cubicles. We strongly recommend the following:
- cubicle dimensions should be suitable for the largest 10% of cows in the herd
 - cubicle width should be at least 1.8 x hip width (measured as the distance between the pin bones)
 - cubicle length depends on cubicle layout and size of cow. AHDB Dairy's '*Dairy Housing – a best practice guide*' (which can be downloaded from the website www.dairy.ahdb.org.uk or requested by post through the website or by phone: 024 7647 8702) includes the following table as guidance:

Weight of cow (kg)	Total length of bed (m)		
	Open front	Closed front	Head to head
550	2.10	2.40	4.20
700	2.30	2.55	4.60
800	2.40	2.70	4.80

- E 5.1 *** For cubicle housing systems, animals must be provided with a minimum total social/loafing area (exclusive of cubicles) of 6m² per head.

- E 5.2 Unbedded areas must be:
 - a) slatted or of solid concrete
 - b) scraped at least twice daily.
- E 5.3 Slats must not result in injury to feet.
- E 5.4 Cubicle housing must provide a clean, dry and comfortable bed, free from contamination.
- E 5.4.1 * Recycled Manure Solids (RMS) are not permitted as bedding substrates.
- E 5.5 Adequate bedding must be provided on the cubicle base.
- E 5.6 Bedding must be managed in a way that maximises cow comfort.
- E 5.7 * Fouled bedding must be removed at least twice daily.
- E 5.8 Animals using cubicles must be able to stand with all 4 feet in the dry cubicle.
- E 5.9 Animals must be able to change position from standing to lying and vice versa in a normal manner without difficulty or injury, in each cubicle.
- E 5.9.1 There must be a minimum of 0.7m provided for forward lunging and bobbing of the head, in each cubicle.
- E 5.9.2 * Where the 0.7m forward lunge space cannot be met it must be clearly demonstrated that the largest cows in the herd have sufficient, unobstructed space to rise and lie down without hindrance.

*  **A scoring protocol to assess rising behaviour. Assess the largest 20% of cows in the group, or the largest 12 cows, whichever is the greater number. Where possible, observe each cow rising and score its rising motion as follows (adapted from Huxley and Whay, 2006):**

0	Unrestricted	Rises as if she were in an open space
1	Mild restriction	Rises smoothly and comfortably but with slight modification, e.g. a slight side lunge
2	Moderate restriction	Takes time to rise and/or makes contact with the cubicle structures whilst rising
3	Severe restriction	'Dog sits' to stand up or makes multiple attempts and shifts to rise.

If any of the cows assessed fall into category 2 or 3, then it will be concluded that the cows do not have sufficient space to rise and lie down in a normal manner.

Source: Huxley, J. and Whay, H. R. (2006) Welfare: Cow based assessments Part 2: Rising restrictions and injuries associated with the lying surface, *Livestock*, 11 (4): 33-38.

- E 5.10 The cubicle must be constructed so that it prevents the animal from standing or lying so far forward that it either consistently soils the back of the bed or becomes unable to rise normally.
- E 5.11 Cubicle divisions must be designed to:
 - a) align a cow properly in her own cubicle
 - b) prevent interference with her neighbour
 - c) prevent injury to her neighbour or herself.

- E 5.12** Cubicle divisions must be constructed or adapted so that space sharing is possible.
- E 5.13** Where cubicles are narrower than the ideal, rigid lower horizontal rails must be removed and replaced by a flexible alternative.
- E 5.14 *** At least 5% more usable cubicles than cows must be provided and preferably 10 to 20%.

*  **A usable cubicle is one that meets our space and comfort standards (see standards E 5.6, E 5.8, E 5.10, E 5.11 and E 5.12).**

- E 5.15** The step between the cubicle bed and the dung passage must:
 - a) avoid slurry being pushed into the bed during scraping
 - b) encourage cows to enter the cubicle headfirst.
- E 5.16** The height of the step must not be such that it results in an increased incidence of concussion injuries to the soles.
- E 5.17 *** Heifers must be familiar with the cubicle environment prior to them entering the transition period (see information box above standard TC 1.1).
- E 5.18** Provision must be made for milking isolated cows.
- E 5.19** All flushing and automatic slurry systems must be designed and used so as not to compromise the health and welfare of the cattle.

Lighting

- E 6.1** In all cattle housing, adequate lighting, whether fixed or portable, must be available to enable them to be thoroughly inspected at any time.
- E 6.2** Housed cows must have access for the normal period of daylight hours to an area lit to a level of 200 lux at cow eye level.
- E 6.3** During housing, a period of low level lighting must be provided to promote resting behaviour.

 **A light intensity of 50 lux is sufficient to allow a person of normal eyesight to read standard newsprint without difficulty.**

* Calving accommodation

- E 7.1** Where any cows which are calving are kept in a building, they must be kept in a pen or a yard that is fully bedded.
- E 7.2** The pen or yard must be of such a size and equipped with a means of restraint so as to permit a person to safely attend the cows and their calves.
- E 7.3** Cattle that are calving must be kept separate from other livestock other than calving cows.
- E 7.4** When housed there must be enough calving space to accommodate the number of cows calving.

- E 7.5 *** If individual calving pens are used:
- a) pens must be at least 12m²
 - b) cows must not remain in a pen for more than 48 hours
 - c) when in the pen, cows must be able to see and hear other cows.

*



Accommodation for cows/heifers that are calving should provide sufficient space/pens for the expected calving pattern. However, providing more space/pens is recommended to allow for variation in expected peak demand.

- E 7.6** Hospital, calving and isolation pens must be designed so that they can be managed hygienically.
- E 7.7** Adequate provision for securing cattle must be provided.
- E 7.8** Adequate provision for milking isolated cows must be provided.
- E 7.9** Calving cows and heifers must be inspected at least twice per day.

* **Pasture**

E 8.1 * Cattle must have access to pasture for at least:

- a) 4 hours per day, and ideally 6 hours
- b) the minimum number of days per year calculated using the following farm-specific equation:

Number of days in the year – Predicted number of days whereby access to pasture may not be reasonable due to inclement weather – Average transition/freshly calved period (in days) = expected minimum number of days available for each cow to have access to pasture per year.

Calculations and the relevant farm data must be available upon request.

*



The calculation used in standard E 8.1 takes into account the number of days in the year, the local meteorological conditions for the farm and the farm's average transition/freshly calved period.

The example calculation below assumes the following typical scenarios for each parameter, i.e. a 365 day year, 165 days whereby access to pasture is considered unreasonable and an average transition/freshly calved period of 90 days:

$$365 - 165 - 90 = 110 \text{ days}$$

Therefore, we would expect most UK farms to provide their cattle with access to pasture for at least 110 days per year.

*



Producers should note:

- **Access to pasture may be provided at any time in a 24 hour period, providing conditions allow.**
- **The period of the year that cows will go out will vary according to how an individual cow's production cycle coincides with the calendar year and local weather conditions.**
- **It should be ensured that cows are given sufficient access to a supplementary diet that can meet their nutritional and intake requirements.**
- **Planning should be undertaken with available pasture in mind to ensure sufficient rotation to allow for pasture recovery.**
- **Animals should be turned out into a pasture with a grass height and density capable of providing a contribution to nutritional requirements.**
- **Prior to turnout, provision of long fibre is essential to reduce the risk of acidosis and bloat in the early part of the grazing season.**

E 8.2 * A plan must be drawn up, according to the individual farm's calving pattern, to specify how the access to pasture requirement will be met. This must be made available upon request.

*



The plan should address field space and rotation, number of cows expected to calve at certain times of year and specifically how spring calvers and high yielding cows will meet the requirement.

E 8.3 * If the cows did not have access to the pasture for the calculated minimum number of days (see standard E 8.1) then a review must be written as part of the VHWP (see standard H 1.1) describing the circumstances surrounding why it was not possible. This document must be made available upon request.

- E 8.4 *** Producers must ensure that the welfare of cattle is not compromised by providing access to pasture by ensuring:
- a) cow tracks are designed to not risk damaging the animals feet
 - b) cow tracks are maintained in a condition which does not damage the feet of the animals
 - c) there is enough shade and shelter available for all animals to use it at any one time
 - d) animals are given sufficient protection from biting insects.

*** (i) Cow tracks should be wide enough for at least two cows to walk side by side and should not have tight corners or any bottleneck points. When cattle are put out to pasture as a herd, the following track widths from AHDB Dairy’s ‘Cow Tracks’ booklet should be used as a guide:**

Number of cows in herd	Width of track (surfaced)
200	4m
300	5m
400	6m
500	7m

We would recommend obtaining and reading this booklet prior to building a track to ensure optimal design that can be downloaded from www.dairy.ahdb.org.uk or requested by post either through their website, or by calling 024 7647 8702.

Providing sufficient protection from biting insects involves treating both the animals and the shelters if possible. Animals should not be excessively annoyed by insects (i.e. repeated stamping, tail swishing and head swiping) and animals should be happy to use the shelter/ shade supplied.

E 8.5 Pasture must be managed so that the cattle are kept clean.

*** (i) Pasture is often only used to give the animals exercise. Ideally, exercise area stocking densities should be 10 to 12 cows per acre. Consideration should be given to the soil type and rainfall of the area when deciding on an appropriate stocking density. At pasture, the stocking density should allow the animals to perform their natural behaviours without hindrance.**

Milking parlour

E 9.1 The highest standards of hygiene must be practised in the parlour to reduce the risk of infection.

E 9.2 Udder, teats and flanks must be clean, dry and free from sores on entry to the parlour.

E 9.3 'Multi-use' udder cloths must not be used.

E 9.3.1 Medicated teat towels must be used according to the manufacturers' recommendations.

E 9.4 Parlour staff must have clean hands when handling teats.

E 9.4.1 Consideration must be given to the use of rubber gloves.

- E 9.5** Routine 'fore-milk' examination must be made to identify early cases of mastitis.
- E 9.6** Milking machinery must be properly maintained.
- E 9.7** All teats must be properly dipped or sprayed with appropriate teat products after milking.
- E 9.7.1** An emollient must be used when teats are dry, chapped or cracked.
- E 9.8** Following completion of milking, cows must be encouraged to remain standing for approximately half an hour to allow the teat canal sphincter to close before returning cows to the relatively dirty conditions of the cubicle house or straw yard.
- E 9.9** Measures must be in place to minimise the risk/incidence of mastitis in dry cows.
- E 9.10** Milking machine testing must be carried out and recorded at least every 6 months.
- E 9.11** Proper application, function and maintenance of the milking machinery must be ensured by:
 - a) avoiding under and over milking
 - b) selecting appropriate teat cup liners
 - c) checking teat cup liners daily and replacing damaged/rough teat liners
 - * d) replacing liners according to manufacturers' recommendations
 - e) ensuring the vacuum regulation is functioning correctly and preventing vacuum fluctuation
 - f) ensuring correct pulsation rate and a correct release/squeeze ratio.

Robotic milking systems

- E 9.12** Any robotic milking system must have equipment that is:
 - a) clean
 - b) properly maintained (the maintenance requirements must be at least the same as those for a static milking parlour).
- E 9.13** The area around the robotic milking system must:
 - a) be clean and tidy
 - b) contain no loose objects or sharp protrusions that could injure the cattle.
- E 9.14** The area around the robotic milking system must be lit so that the cattle can be easily inspected.
- E 9.15** Cattle must be monitored so that it can be confirmed that they are using the robotic milking system effectively.
- E 9.16** Cattle must be inspected in the same way as herds using non-robotic systems.
- E 9.17** The robotic milking system must have measures in place to control insects, birds or mammals that may frighten the cattle or prevent them from using the equipment.

Dairy

- E 10.1** Producers must adhere to the appropriate Food Hygiene Regulation(s).

Bull pens

- E 11.1** Bull pens must be sited so as to allow the bull sight, sound and odour of other cattle and general farm activity.
- E 11.2** Bulls must be attended to at least twice daily by farm staff.
- E 11.3** Individual accommodation for an adult bull of average size must include a bedded sleeping area of not less than 16m².
- E 11.4** For very large bulls, the sleeping area must not be less than 1m² for each 60kg liveweight.
- E 11.5** An exercise and service area must:
- a) be provided
 - b) be no less than 25m² in total area.
- E 11.6** Bull pens must:
- a) be safe for the stock-keepers tending them
 - b) include adequate restraining facilities
 - c) include an escape route.

Handling facilities

- E 12.1 *** There must be provision of holding and handling facilities (whether indoors or outdoors) that minimise stress and prevent injury of the animals passing through the system.
- E 12.2** Races and gates must be designed so that animals can move through them unhindered when required.
- E 12.3** When operating gates and catches, every effort must be made to reduce excessive noise that may cause distress to the animals.
- E 12.4** If a problem relating to standard E 12.3 is identified, noise reduction mechanisms must be fitted as necessary.
- E 12.5** Loading facilities must provide a ramp of no more than a 20% incline.
- E 12.6** To prevent animals from slipping or falling off, all loading ramps and tail boards must be:
- a) appropriately designed
 - b) covered with litter.



Consideration should be given to providing a loading bay and/or ramp that enables animals to walk straight into or out of the vehicle on the level or slight gradient.

Fencing

- E 13.1** All fencing must be adequately inspected and maintained.
- E 13.2** Electric fences must be designed, installed, used and maintained so that contact with them does not cause more than momentary discomfort to the cattle.
- E 13.3** The use of electric fences on self-feed silage systems is prohibited.
- E 13.4** Alternative feed barriers must be designed so as to avoid any potential threat to the animals; for example, becoming trapped between the feed face and the barrier.

Disposal of waste

- E 14.1** Animal waste and effluents must be stored and disposed of in such a way as to:
- a) minimise the risk of spread of disease to other animals or humans
 - b) avoid polluting the environment.
- E 14.2** Muck and slurry storage must be located in a safe situation and precautions taken to avoid the spread of disease both to livestock and humans.
- E 14.3** Muckheaps in fields must be fenced off to prevent direct access by grazing livestock.

Climate change and animal welfare



The issues relating to climate change have the potential to significantly affect the welfare of farm animals. The RSPCA believes that it is now appropriate to react to, think ahead, and consider what can reasonably be done to mitigate any negative effects that adverse weather conditions may have/be having on the welfare of farm animals now, and in the future.

Examples of important considerations include:

- the need to ensure that the farm buildings can withstand more severe weather conditions will become more necessary
- ensuring that ventilation systems are working efficiently will be even more important
- in addition to ventilation systems, misters/showers may be provided in the collecting yard or above the feed line to assist temperature regulation and where provided ensuring that they are working efficiently will be even more important
- there may be reduced water availability for drinking, so ensuring that drinking water systems are working efficiently will be even more important.

A high degree of caring and responsible management and stockmanship is vital to ensure good animal welfare. Managers and stock-keepers need to be thoroughly trained, skilled and competent in animal husbandry and welfare, and have a good working knowledge of their system and the livestock under their care.

- *  If good practices and procedures are being implemented on-farm, the following should be achieved and be seen as contributing to positive dairy cow welfare:
- cattle are confident and comfortable around the stockpeople
 - cattle move through the handling system easily
 - cattle are free from any handling injuries.

- M 1.1** All records and other documentation that the '*RSPCA welfare standards for dairy cattle*' require the producer to keep and maintain must be made available to the RSPCA Assured Assessor and RSPCA Farm Livestock Officer.

Managers

- M 2.1** Personnel with responsibility for the management of approved establishments must be named and recorded.
- M 2.2** Managers must ensure that all stock-keepers:
- a) have access to a copy of the current version of the *RSPCA welfare standards for dairy cattle*
 - b) are familiar with its content
 - c) understand and apply its content.
- M 2.3 *** Managers must:
- a) develop and implement a suitable training programme for stock-keepers with regular updates and opportunities for continuing professional development and keep records of such training within the VHWP (see standard H 1.1)
 - b) demonstrate the staff with responsibilities for stock care have the relevant and necessary skills to perform their duties
 - c) ensure that the VHWP is:
 - i. implemented
 - ii. updated annually, and
 - iii. that the required data is recorded appropriately
 - d) maintain records of production data and use of medication, which must include:
 - i. documentation on all incoming and outgoing stock on the farm
 - ii. types and quantities of medicine used (it is a legal requirement to record all medicines that are administered).
 - e) develop and implement a transport plan to an abattoir which:
 - i. includes a method of identification of animals (see standard M 5.2), and
 - ii. minimises waiting time for the cattle.

- M 2.4 *** Managers must:
- a) develop and implement plans and precautions to prevent/cope with emergencies such as fire, flood, storm damage, breakdown of environmental control systems, or interruption of supplies. e.g. food, water, electricity
 - b) provide an emergency action board sited in a prominent position that is visible to all farm staff and the emergency services, which must include:
 - i. the procedures to be followed by those discovering an emergency, e.g. fire, flood, power failure
 - ii. the location of water sources for use by the fire services
 - iii. a map grid reference, GPS co-ordinates and postcode for the location of the unit
 - c) develop and implement a biosecurity plan to minimise the risk of introducing disease onto a site.
- M 2.5** Should an emergency require the removal of livestock to unregistered premises, RSPCA Assured and the RSPCA Farm Animals Department must be informed immediately.
- M 2.6** Managers must:
- a) have access to, and make available to all stock-keepers, a copy of the Defra (formerly MAFF) booklet *'Emergencies on Livestock Farms'* (PB 1147, 1992) (Available online)
 - b) have access to the Defra booklet, *'Farm Fires: advice on farm animal welfare'* (PB 9326, 2011)
 - c) be familiar with and implement the relevant content from the publications cited in a) and b), above.
- M 2.7** All farms must be milk recorded using a recognised International Committee for Animal Recording (ICAR) approved milking system.

Stock-keepers

- M 3.1 *** Prior to being given responsibility for the welfare of livestock, stock-keepers must be given appropriate verifiable training for their specific area/s of responsibility. Evidence of attendance must be provided upon request.

*



Verifiable training can be obtained through attending a course run by Lantra or NPTC. A local veterinary practice may also run appropriate courses.

- M 3.2 *** All stock-keepers must:
- a) understand the times and circumstances in which cattle are prone to welfare problems on their own unit
 - b) be able to demonstrate their competence in recognising and dealing with problems relating to a)
 - c) have appropriate knowledge and understanding specific to their area of work
 - d) be able to recognise signs of normal behaviour, abnormal behaviour and fear
 - e) be able to recognise signs of common diseases and understand their prevention and control, and to know when to seek veterinary help.

- M 3.3 *** Specific areas of knowledge relating to standard M 3.2 which stock-keepers must have a knowledge of are:
- what constitutes good nutrition in cattle
 - body condition scoring and locomotion scoring
 - the functional anatomy of the normal foot, its care and treatment
 - the functional anatomy of the normal teat and udder
 - the requirement for good parlour hygiene and a well maintained milking machine
 - breeding implications, particularly the selection of bulls for heifers, calving and the care of the new-born calf, including routine procedures such as castration and disbudding
 - administration of drugs, particularly orally and via injection.
- M 3.4** Stock-keepers must be able to demonstrate competence in handling animals in a positive and compassionate manner.
- M 3.5 *** Stock-keepers must be able to demonstrate their proficiency in procedures which have the potential to cause suffering, e.g. injections, oral dosing, foot trimming, disbudding, castration, marking, calving, per rectum procedures, e.g. AI and PDs.
- M 3.6** When loose housed, polled and horned cattle must not be grouped together, except where a social group exists.
- M 3.7** Precautions must be taken to prevent injury through bullying.

Handling

- M 4.1** Cattle must be handled quietly and firmly at all times, with care to avoid unnecessary pain or distress.
- M 4.1.1** The behavioural characteristics of cattle must be taken into account when they are being moved, so as to avoid unnecessary fear or distress (see information box below).



Behavioural characteristics of cattle which have important consequences for their welfare include:

- **They have poor vision for distance and detail; therefore they should not be led into shadowy areas.**
- **They are easily startled and so should not be subjected to sudden movement of nearby objects.**
- **Their hearing is similar to humans, so they should not be subjected to sudden loud noise.**
- **Their instinct to herd is strong so they should not be isolated.**

- M 4.2** Animal handlers must:
- be trained
 - understand the likely stress factors cattle may be subjected to
 - appreciate how cattle react towards other cattle, towards man and to strange noises, sights, sounds and smells.
- M 4.3** Cattle must not be moved or loaded unless:
- the way forward for the lead animal is clear
 - there is adequate space available for them to move into.

- M 4.4** Cattle must not be rushed or run along tracks/races/passageways or through gateways.
- M 4.5** Animals must not be pulled or lifted by the tail, ears or limbs.
- M 4.6** Sticks must not be used for hitting cattle.



Sticks or other benign handling aids may be used as extensions of the arms.

- M 4.7 *** Electric goads must not be present or used on any site.
- M 4.8** A cattle-handling unit must be available, comprising a collecting system and a method of restraint, appropriate to the type, temperament and numbers of stock to be managed.

Identification

- M 5.1** Neckbands, tailbands or legbands must:
- only be used for identification purposes
 - be fitted with care and adjusted as required to avoid unnecessary pain or distress.
- M 5.2** The marking of cattle must be done:
- with care by trained, competent operators
 - so as to avoid unnecessary pain or distress to the animals.



Acceptable methods of permanent on-farm marking include ear tagging as approved by Defra, tattooing, freeze-branding (in a manner which avoids unnecessary pain), or implanted electronic transponders, to be carried out by a trained stock-keeper.

- M 5.3** Aerosols or paints used for temporary marking must be non-toxic.

Equipment

- M 6.1** When equipment is installed which affects animal welfare, stock-keepers must be able to:
- demonstrate an ability to operate equipment
 - demonstrate the ability to carry out routine maintenance
 - recognise common signs of malfunction
 - demonstrate knowledge of action to be carried out in event of a failure.
- M 6.2** All automatic equipment must be thoroughly inspected by a stock-keeper, or other competent person, not less than once each day, to check that there is no defect in it.
- M 6.3** Where a defect relating to standard M 6.2 is found:
- the defect must be rectified immediately, or
 - if this is impracticable, such measures as are required to safeguard the livestock from suffering unnecessary pain or distress as a result of the defect must immediately be taken and maintained until the defect is rectified.

- M 6.4** Where the automatic equipment includes a ventilation system, the system must contain:
- an alarm which will give adequate warning of the failure of that system to function properly
 - an alarm which will operate even if the principal electricity supply to it has failed
 - additional equipment or means of ventilation (whether automatic or not) which, in the event of such a failure of the ventilation system, will provide adequate ventilation so as to prevent the livestock from suffering unnecessary distress as a result of the failure.

Inspection

- M 7.1** When cattle are housed, stock-keepers must:
- inspect their livestock, and the equipment upon which such stock may depend, at least twice daily
 - record any observations and/or actions taken.
- M 7.2 *** Any welfare problems seen during an inspection by the stock-keeper/producer must be dealt with appropriately and without delay and recorded.



Welfare problems of sufficient severity that they should have been noticed on previous inspections and dealt with, shall be taken by the RSPCA Assured Assessor or RSPCA Farm Livestock Officer as evidence of negligence of duties by the stock-keeper.

Farm dogs

- M 8.1** Dogs, including working dogs, must:
- be properly trained
 - not cause injury or distress to cattle
 - be kept under control at all times.
- M 8.2** Producers must ensure that the dogs are well cared for, with suitable housing, feeding and proper attention to their health and welfare needs.
- M 8.3 *** All dogs must receive regular, appropriate vaccination and treatment of internal and external parasites with the date of administration and details of each treatment recorded within the VHWP (see standard H 1.1).
- M 8.4 *** Dogs must not be allowed to scavenge on carcasses or animal part, including placentae.

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The parasite Neospora caninum is a problem in the cattle industry and can infect cattle (initially) through the ingestion of an infected dog's faeces. Infected cows can pass it on to their foetus if pregnant, or abort. Dogs can become infected via scavenging infected carcasses, placentae/aborted foetuses or potentially through a raw food diet. Bitches can also transmit the infection to puppies through the placenta and those puppies would then pass the organism in their faeces. We would recommend taking all possible steps to avoid infection in the first place, and always clearing up after your dog around the farm.

Protection from other animals

M 9.1 * A written Wild Animal Control Plan (WACP) must:

- a) be in place, and
- b) implemented on farm.

M 9.2 * Levels of potentially harmful wild animals (e.g. rodents and birds) must be humanely managed to avoid:

- a) the risk of disease spread to livestock
- b) damage to livestock buildings and the services on which livestock depend
- c) contamination and spoilage of feed.

*



In England and Wales, the following legislation applies to the management of wildlife:

- **Wildlife and Countryside Act 1981**
- **Animal Welfare Act 2006**
- **The Conservation of Habitats and Species Regulations 2010**
- **Protection of Badgers Act 1992**
- **Pests Act 1954**
- **The Spring Traps Approval (England) Order 2012**
- **The Spring Traps Approval (Wales) Order 2012**
- **The Small Ground Vermin Traps Order 1958**
- **Food and Environment Protection Act 1985**
- **The Control of Pesticides Regulations (COPR) 1986**
- **Animals (Cruel Poisons) Act 1962**

Equivalent legislation applies in Scotland and Northern Ireland.

- M 9.3 *** The primary means of protecting livestock from wild animals, as documented in the WACP, must be by:
- a) physical exclusion methods
 - b) the removal of elements in the vicinity of the dairy cattle that could encourage the presence of wild animals
 - c) maintaining units in a clean and tidy condition to minimise the risk of wild animals gaining access to the unit.

* **i** **Physical exclusion measures are the most humane and effective methods of providing protection from wild animals. Proofing measures should only be applied after the area has been checked and cleared as applying proofing can interfere with rodent behaviour and encourage them to spread to other areas. Methods of proofing and physical exclusion include:**

- construction/maintenance of fencing that is appropriate for excluding the wild animals in question
- removal of shelter/cover (e.g. weeds, heaps of rubble, broken equipment etc.) in the area surrounding livestock buildings
- removal/protection of obvious food sources
- maintenance of drains
- maintenance/proofing of buildings against wild animals
- storing bedding away from animals.

* **i** **Rodents are less likely to inhabit an area if there is no cover or food supply. Reduced food availability will also increase the likelihood of rodents consuming bait, where applied. When stores or livestock buildings are empty, the opportunity should be taken to check and maintain spaces and introduce any necessary controls before restocking.**

- M 9.4 *** Where any lethal method of control is being considered, a site survey of the unit must be carried out before applying the control (i.e. bait or traps), identifying:
- a) the type, level and extent of the problem species
 - b) any non-target animals likely to be present
 - c) any housekeeping and proofing issues.

M 9.5 * Where any lethal method of control is used, its use must have taken into account the results of the site survey (standard M 9.4).

M 9.6 * The WACP must include provisions that specifically exclude the snaring or gassing of animals, and the use of glue traps.

M 9.7 * Long-term baiting must not be used as a routine rodent control measure.

* **i** **Long-term baiting should not be necessary if bait or traps are applied effectively. Long-term baiting can also contribute to bait resistance in rodents.**

* **i** **The RSPCA is opposed to the use of poisons that cause animal suffering and it is important not to rely solely on the use of rodenticide. The RSPCA is concerned about the welfare of all animals that have the capacity to suffer, and therefore all alternative forms of humane deterrent should be exhausted before resorting to the use of poisons for rodents.**

* **i** Any baiting programme should be considered carefully and justified in risk assessments for each location where used. Consideration should be given to using non-toxic baits in order to ascertain the presence of rodents, which may necessitate the use of rodenticide.

M 9.8 * When bait and/or traps are used, records of the use must be kept and:

- a) state the location of the bait/traps
- b) state what bait/traps were used
- c) state the volume/number of bait/traps placed
- d) state the name of the person who placed the bait/trap
- e) be retained for at least two years.

M 9.9 * Bait and traps must:

- a) be placed in suitable positions, and
- b) be sufficiently protected to avoid harming non-target animals.

* **i** Site plans should highlight potential high risk areas for wild animal activity rather than permanent baiting locations.

M 9.10 * Bait must be used according to the manufacturer's instruction for:

- a) storage
- b) usage, including areas of use and replenishment
- c) disposal.

M 9.11 * Traps must be:

- a) used according to the manufacturer's instructions
- b) maintained in good order
- c) disposed of appropriately if no longer fit for purpose, e.g. have broken
- d) stored safely and securely.

M 9.12 * Bait points must:

- a) be monitored regularly, and
- b) records of monitoring be kept including:
 - i. levels of activity at each bait point
 - ii. any missing or disturbed bait
 - iii. the name of the person responsible for monitoring the bait points.

M 9.13 * Trap points must:

- a) be monitored at least twice a day, ideally at dawn and dusk, and
- b) records of monitoring be kept including:
 - i. level of activity at each trap
 - ii. any missing or disturbed traps
 - iii. the name of the person responsible for monitoring the traps.

M 9.14 * Any injured, sick or dying wild animals found – that have been targeted for control – must be humanely dispatched immediately to prevent further suffering.

*



Regular replenishment of bait will help prevent sub-lethal doses, which can result in a build-up of resistance to the active ingredient.

M 9.15 * Where bait is used, dead animals must be disposed of safely, in line with the manufacturer's product label.

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Safe disposal of wild animals that have died as a result of poisoning reduces the risk of secondary poisoning in non-target species, such as domestic and other wild animals (including birds), that may consume the carcasses.

M 9.16 * Once treatment has finished, all traps and traces of bait must be:

- a) removed
- b) disposed of according to the manufacturer's instructions.

M 9.17 * Domestic animals must not have access to the unit, other than farm dogs and cats.

M 9.18 * Farm cats must be:

- a) in a healthy condition
- b) regularly wormed (record to be kept in medicine book).

M 9.19 * Wild animal control methods must be covered by the farm COSHH assessment, where required.

M 9.20 * Managers must ensure all stock-keepers:

- a) have access to a copy of the Campaign for Responsible Rodenticide Use, '*UK Code of Best Practice and Guidance for Rodent Control and the Safe Use of Rodenticides*'
- b) are familiar with the content
- c) understand and apply its content.

*



Producers are strongly encouraged to complete the free, self-study training course on rodent control available at: <http://rodentcontrolonfarms.co.uk/login/index.php>. The content of the course is based on a LANTRA course and is approved by the Campaign for Responsible Rodenticide Use. Further information is also available in the AHDB document '*Rodent Control on Farms: A practical guide to effective and responsible use of bait rodenticides*'.

* Transition/freshly calved cows

* Transition/freshly calved cows need to be provided with an enhanced environment which takes into account their specific health and welfare needs. Management practices also need to be tailored to optimise the health and welfare of these animals.

- *  If good practices and procedures are being implemented on-farm, the following should be achieved and be seen as contributing to positive dairy cow welfare:
- endometritis prevalence <5%
 - clinical ketosis prevalence <2%
 - subclinical ketosis prevalence <20%
 - left displaced abomasum prevalence <1%
 - hypocalcaemia prevalence <5%
 - clinical mastitis prevalence <8% in the first 30 days of lactation
 - cows dying/being culled in the first 60 days post-calving <4% total cows calving.

- *  The transition/fresh period can be variable depending on the animals involved, but as a rough guide, 90 days is a realistic baseline figure.

- TC 1.1 *** Transition/freshly calved cows must:
- a) be given a total feeding space allowance of 100cm per cow
 - b) have a specific section in the nutrition plan
 - c) be introduced to changes in nutrition gradually
 - d) have steps taken to increase their lying comfort
 - e) undergo minimal social stress caused by group mixing.

- TC 1.2 *** If housed in cubicle systems as a group, there must be at least 15% more cubicles than the expected number of transition/freshly calved cows at any one time.

TC 1.3 * If housed in straw yard accommodation, the floor space allowances must be as follows:

Weight of animal (kg)	Minimum bedded lying area (m²)	Minimum non-bedded/loafing area (m²)	Minimum total area per animal (m²)
400 to 499	6.5	3.0	9.5
500 to 599	7.0	3.0	10.0
600 to 699	7.5	3.0	10.5
700 to 799	8.0	3.5	11.5
>800	9.0	3.5	12.5

*



It is recommended that transition/freshly calved cows are kept under particularly close observation and that the following is achieved:

- **body condition score (BCS) should be undertaken every fortnight during late lactation, aiming for a BCS of 2.5-3 at drying off which should be maintained until she calves**
- **luke warm water or rehydration electrolytes should be offered to cows after calving**
- **screening for disease should be undertaken regularly in the three weeks post-calving with high levels of hygiene maintained**
- **feed should be managed to maximise intake – 5% feed should be left over each day and refusal removed.**

TC 1.4 * Heifers' feet must be pre-conditioned to concrete prior to the heifer entering the transition/freshly calved period. Also see standard E 5.17.

The environment in which livestock are housed needs to be conducive to good health.

*



If good practices and procedures are being implemented on-farm, the following should be achieved and be seen as contributing to positive dairy cow welfare:

- a high conception rate and low calving-conception interval
- no cow with a mobility score of 3 or higher
- all animals are clear of IBR, BVD and Johne's Disease, or there are plans in place proactively controlling these diseases.

Health and welfare monitoring

- H 1.1 *** All dairy units must have a written Veterinary Health and Welfare Plan (VHWP) drawn up in consultation with the attending veterinary surgeon and other suitably qualified persons, for example nutritionists and/or person(s) responsible for the animals. This plan must include:
- a) the names and specific roles of all personnel involved with the care of livestock on the farm
 - b) an infectious disease and vaccination plan with details of any vaccines required to be used, target animals and boosters required
 - c) a parasite control plan that specifies strategies to prevent infestations and worming programmes, including target animals and medicines to be used
 - d) a biosecurity and infectious disease control policy for controlling the spread of infectious disease between stock, which must include disease investigation and surveillance, the introduction of incoming stock and the isolation of stock with infectious disease
 - e) a protocol for bringing new animals on site, including hire bulls, and including health screening, quarantine, vaccination, parasite control and lameness control. The timing and mechanisms by which these will be achieved must be clearly laid out
 - f) procedures for the management of casualty animals and downer cows, including methods for humane emergency slaughter
 - g) an effective procedure for identifying animals that are undergoing/have undergone treatment, which is known to all farm staff
 - h) procedures for the safe disposal of pharmaceutical waste, needles and other sharps, in accordance with the relevant waste disposal regulations.
- H 1.2** Pain relief must be provided when any procedure performed on the animal is likely to inflict pain during and/or after the procedure, for example therapeutic foot trimming. All pain management must be recorded.
- H 1.3 *** The VHWP must be reviewed at least annually and updated as necessary.
- H 1.3.1** Dairy producers must arrange for quarterly veterinary visits to review health records and health and welfare management.
- H 1.3.2** The timing of visits relating to standard H 1.3.1 must be such that maximum health, welfare and management advantage is achieved.

- H 1.4 *** The individual farm VHWP must:
- a) identify and list all the health and welfare conditions currently affecting and likely to affect the herd (see standard H 1.5)
 - b) document (i) how, (ii) when and (iii) how often each condition will be monitored
 - c) record the type of animal affected (i.e. age, stage of production etc.)
 - d) record the level of each condition for the farm
 - e) set a threshold limit for the level of each condition for the farm
 - f) monitor the level of each condition for the farm
 - g) for each condition, develop and implement a plan designed to prevent any increase in, and/or reduce the average level of, that condition for the farm (a prevention plan) including the method of control to be used
 - h) ensure a treatment plan is developed for the health and welfare conditions listed in standard H 1.5.
- H 1.4.1 *** If any conditions exceed the agreed threshold limits established in the VHWP they must be reviewed and revised in consultation with the relevant advisor in order to address any problems which have been identified.
- H 1.5 *** The following health and welfare conditions, where applicable to the unit, must be listed in the VHWP (see standard H 1.4):
- a) metabolic disorders (hypocalcaemia, hypomagnesaemia, ketosis, displaced abomasum, bloat, acidosis)
 - b) problems at calving
 - c) injuries
 - d) body condition
 - e) incidence of lameness
 - f) incidence of mastitis
 - g) mortality – including sudden deaths and those humanely killed as unfit
 - h) the main disease problems known or suspected to be present on-farm, e.g. mastitis, Johnes, TB, IBR and many others.
- H 1.6 *** All sudden deaths, disease outbreaks and cattle killed as unfit must be reported to the veterinary surgeon if appropriate.
- H 1.6.1 *** The outcome of any action relating to standard H 1.6 must be recorded.
- H 1.7** Provision must be made for the segregation and care of sick and injured animals.
- H 1.8** Any cattle suffering from illness or injury must be:
- a) segregated if necessary
 - b) treated without delay.
- H 1.9** In relation to standard H 1.8, veterinary advice must be sought when needed, or if necessary, such animals must be humanely killed.

H 1.11 If abnormal behavioural activities develop repeatedly in any particular animal(s), a programme of modification and enrichment must be:

- a) agreed together with the farm veterinary surgeon
- b) pursued until the problem is solved.



The repeated rubbing of brushes designed for the purpose should not be regarded as abnormal behaviour.

Likely possible abnormal behaviour patterns:

- repeated rubbing in the absence of disease
- tongue rolling/aerophagia
- bar biting/chewing
- pica (licking/chewing solid objects)
- eating soil/sand/dirt
- navel sucking
- ear sucking
- urine drinking

* Lameness

H 2.1 * The VHWP must include a foot care plan. This must include the following:

- a) the identification of all conditions that could affect foot health on-farm and the specific methods of control to help prevent/reduce them
- b) the feet of all cattle to be inspected for signs of abnormal wear, infection or excessive growth at least annually, by a competent foot trimmer (see information box, below)
- c) the feet of every animal to be inspected at drying off
- d) regular footbathing to be implemented, if deemed necessary
- e) a target prevalence for lameness, tailored to the individual farm.



A competent foot trimmer is defined as a trimmer registered with the National Association of Cattle Foot Trimmers (NACFT) or the Cattle Hoofcare Standard Board (CHCSB) and having achieved at least the Dutch Diploma or NPTC Level 3.

H 2.2 Close attention must be given to the condition of the feet.

H 2.3 * Cattle with a lameness score of 2 or 3 must receive immediate attention.

H 2.4 * At least one permanent member of staff, named in the VHWP, must have undergone recognised training in foot trimming, delivered by someone who holds a hoof-trimming instructor qualification. Evidence must be provided upon request.



Training must be provided by NPTC (level 2), Lantra or a local veterinary practice.

H 2.5 * All lactating cattle must be mobility scored at least four times a year by a registered mobility scorer and the results recorded in the VHWP.

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As a target, the annual average prevalence of lameness in the herd should be no more than 15% for score 2.

There is currently a zero tolerance policy for score 3s or higher. This threshold may become mandatory in future reprints of the standards.

See the AHDB Dairy Mobility Scoring system in Appendix 3 for more information.

H 2.5.1 Where a score 3 is identified, there must be a record of the treatments that the animal has and is receiving, which must include the necessary pain relief and appropriate housing if applicable.

H 2.6 Producers must be able to demonstrate their methods for the prevention and treatment of acute foot conditions.

H 2.7 * A footbathing facility must provide:

- a) a treatment containing an antibacterial agent at the appropriate concentration, which is regularly topped up or replaced
- b) foot dipping of the entire herd at intervals appropriate to the antibacterial agent in current use
- c) a minimum fluid depth of 75mm
- d) a non-slip entry and exit.

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A pre-treatment foot washing facility to remove excess dirt and organic matter is recommended if the treatment bath is shorter than 3.0m.

H 2.8 * Antibiotic agents must not be used in footbaths.

* Body condition scoring

H 3.1 Body condition change in cattle must be carefully planned, maintained and recorded in the Veterinary Health & Welfare Plan (VHWP), according to the stage of production.

H 3.2 * Body condition scoring must be undertaken at least four times per year at the following times during a cow's production cycle:

- a) drying off
- b) calving
- c) 60 days post-calving
- d) 100 days prior to drying off

and the results recorded in the VHWP.

*



Body condition scoring guidance can be found on the AHDB Dairy website. To maintain good health and fertility, cows should not lose more than 0.25 of a body condition score during their production cycle. The following scores are the minimum acceptable ranges for various stage of the production cycle:

- **at drying off: 2.5-3.0**
- **at calving: 2.5-3.0**
- **at 60 days post-calving: 2.0-2.5**
- **at 100 days prior to drying off: 2.5-3.0.**

Although these are minimum ranges, it should be noted that cattle should not be allowed to get excessively fat (BCS ≥ 4).

H 3.3 * The nutrition plan (see standard FW 1.1) must clearly detail how excessively thin (BCS < 2) and excessively fat (BCS ≥ 4) animals will be managed to ensure they achieve a BCS suitable to their stage of production.

* Mastitis

- H 4.1 *** A mastitis treatment and control plan must be detailed within the VHWP and include the following:
- pain relief treatments, which must be implemented for every affected cow
 - a drying off policy based on targeted use of antibiotic therapy at drying off (prophylactic use of antibiotics at drying off is not permitted)
 - a target incidence of clinical mastitis established according to the individual circumstance on-farm
 - a cull policy.

*  **If the target incidence for clinical mastitis established in the VHWP is exceeded over a 2-month period, further investigations should take place to try and identify the specific organism involved. The best way to achieve this is to regularly monitor the types of mastitis causing bacteria within the herd by taking aseptic samples of milk from all clinical quarters. These samples should be kept in the freezer and older samples discarded so that around 10 are retained. Therefore, if treatment strategies begin to be less successful, there are recent milk samples available for bacteriological analysis.**

*  **We recommend producers obtain and read the ‘*Guidelines on the Responsible Use of Antimicrobials in Dry Cow Management*’ and implement its recommendations. This document is issued by the Responsible Use of Medicines in Agriculture (RUMA) alliance (<http://www.ruma.org.uk/cattle/responsible-use-of-antimicrobials-in-dry-cow-management/>)**

- H 4.2** All cases of mastitis must be treated promptly, and underlying predisposing factors corrected.
- H 4.3** Cows with chronic mastitis must be identified and humanely slaughtered.
- H 4.4 *** The following must be monitored and recorded as part of the VHWP:
- individual cow cell counts
 - clinical cases of mastitis, including quarter(s) affected and the duration of each case
 - antibiotic tube usage.
- H 4.5** Any cows with mastitis must be marked and milked last, and the milk discarded, or milked with a separate cluster and bucket.

* Husbandry procedures

- H 5.1** The removal of horns from more mature cattle must:
- only be performed by a veterinary surgeon
 - not be a routine procedure.
- H 5.1.1** For show animals, practices or procedures which may be detrimental to welfare and have no purpose other than cosmetic enhancement are prohibited.

* Breeding/calving

- H 6.1** Induction of parturition must never be used as a routine management procedure.
- H 6.1.1** Breeding must be planned in such a way that caesarean section does not become a routine procedure.
- H 6.2 *** Non-veterinarians performing per rectum investigations or artificial inseminations must have achieved a recognised standard in the relevant techniques.

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Alternatives to per rectum pregnancy diagnosis should be considered, for example:

- **blood testing for Pregnancy Associated Glycoproteins (PAGs). This is only possible if there is a voluntary waiting period of at least 60 days. Testing can occur 30-60 days, or more than 80 days after service. If PAG's are high during these periods then the cow is in calf.**
- **milk or blood testing for progesterone. At 18-24 days post-service, low levels indicate the cow is not in calf. At more than 24 days post-service high levels indicate pregnancy or a persistent Corpus Luteum.**

- H 6.3** Non-veterinarians performing per rectum ultrasound pregnancy detection must:
- a) have received appropriate training in the relevant techniques
 - b) have reached a recognised standard.
- H 6.3.1** Embryo Transfer and Ovum Pick-up are not permitted except in exceptional circumstances. Requests for permission to perform these procedures must:
- a) be submitted in writing to the RSPCA Farm Animals Department by the producer in conjunction with the unit's veterinary surgeon
 - b) include the reasons for the request being made
 - c) include an indication of numbers involved.



Embryo Transfer and Ovum Pick-up are invasive techniques and have been identified by the Banner Committee (1995, Report of the Committee to consider the Ethical Implications of Emerging Technologies in the breeding of Farm Animals) and the Farm Animal Welfare Council (1997) as posing a risk to animal welfare.

- H 6.3.2** The use of genetically modified and/or cloned animals, and their offspring, is prohibited.
- H 6.4** Cows must be clean at calving, paying particular attention to udder and teats.
- H 6.5** Calving aids must only be used to assist a delivery and not to produce a calf as quickly as possible.
- H 6.6** Before any type of calving aid is used, the cow must be examined to ensure that the calf is properly presented and of a size where natural delivery can be reasonably expected, without causing undue pain and distress to either the dam or the offspring.

* Medications/vaccinations

- H 7.1** Medicines must be:
- clearly labelled
 - stored in accordance with the label instructions.
- H 7.2** Medicines must be kept in a secure, lockable store which is safe from animals, children and birds.
- H 7.3** The medicine store must be separate from food producing areas.
- H 7.4** A nominated person must:
- be responsible for the management of the medicine store
 - keep appropriate records for stock control purposes.
- H 7.5** Any medicines used must be:
- licensed for use in the UK
 - applied in accordance with UK and EU legislation.

i It is recommended that producers obtain, read, and where appropriate apply, the advice contained with the latest version of the '*Guidelines on Responsible Use of Antimicrobials in Cattle Production*', issued by the Responsible Use of Medicines in Agriculture (RUMA) alliance (RUMA, Acorn House, 25 Mardley Hill, Welwyn, Hertfordshire, AL6 0TT; www.ruma.org.uk).

* **i** **Antibiotics should only be used when necessary, and always used responsibly.**

Prevention is better than cure, and it is the implementation of prevention strategies alongside the adoption of farming practices that prioritise and promote animal welfare that are key to reducing antibiotic use.

For more information on this issue, please see our information sheet available on our website.

- H 7.6 *** The use of antibiotics on-farm must be reviewed annually and this review must form part of the VHWP (see standard H 1.1).

* **i** **When reviewing the use of antibiotics on-farm, the following should be considered:**

- the different classes of antibiotic drug used
- which group/s of animals were treated, and for which condition/s
- the number of animals treated per occasion
- the total amount of each individual drug within a class that was used (in mg/kg or mg/pcu) per occasion
- a specific section covering all the above for 'Critically Important Antibiotics' (CIAs).

A group of animals refers to animals of a similar/the same age and/or stage of production.

This review is intended to highlight which groups of animals are suffering from particular diseases and therefore aid the development and implementation of targeted prevention strategies.

H 7.6.1 * In light of the findings of the antibiotic use review (see standard H 7.6), an action plan must be drawn up aimed at reducing the use of antibiotics on the farm through improvements in animal husbandry.

H 7.7 All personnel involved in the administration of animal medicines must be competent to do so.

* **Downer cows**

H 8.1 Any recumbent animal must be examined by a veterinary surgeon before the farmer attempts to use lifting gear and, initially, the veterinary surgeon must supervise the operation.

H 8.1.1 Whatever type of lifting gear is used, care must be taken not to cause unnecessary pain or distress to the animal.

H 8.1.2 * Animals must only be lifted if there is full body support.

H 8.1.3 * If animals must be moved, they must not be dragged.

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Possible injury-free methods of moving recumbent cattle are as follows:

- on a piece of plywood covered with a good layer of bedding
- on a spare gate, covered in tarpaulin/sheeting and a good layer of bedding
- along a path constructed of deep straw, whilst laid on a tarpaulin/piece of sheeting
- in a foreloader bucket deeply lined with straw.

H 8.2 All recumbent (downer) cattle must be treated without delay.

H 8.3 Where the prognosis for recovery of a recumbent (downer) cow is poor, early intervention by humanely destroying the animal on farm must be undertaken.

H 8.4 All procedures for dealing with downer cattle must be documented as part of the VHWP, all staff must be fully conversant with the procedures and understand their content.

Casualty animals/emergency slaughter

H 9.1 Each farm must have provisions for the prompt, humane slaughter of emergency/casualty cattle, carried out by a named, trained, competent member of staff or a licensed slaughterman.

H 9.1.1 Where provisions relating to standard H 9.1 are not possible, a veterinary surgeon must be called out to carry out the procedure.

H 9.1.2 * Names and contact details of staff who are trained in humane slaughter, and a slaughterman, must be in the VHWP (see standard H 1.1) and must be available to all staff members.

H 9.1.3 * Equipment for the slaughter of animals must be:

- a) maintained according to the manufacturer's instructions
- b) easily accessible to the relevant member of staff
- c) checked at least monthly and immediately prior to use.

H 9.2 If there is any doubt as to how to proceed, the veterinary surgeon must be called at an early stage to advise whether treatment is possible or whether humane slaughter is required to prevent suffering.

H 9.3 If an animal is in severe pain that is uncontrollable, then the animal must be promptly and humanely slaughtered.



It is not illegal to slaughter an animal to prevent further severe suffering if a method of humane slaughter is available on the premises and there is someone competent to undertake the procedure. However, for non-emergency casualty slaughter, a slaughterman's licence is required if a captive bolt pistol is used.

H 9.4 All carcasses must be disposed of strictly according to current legislation.

H 9.5 A record must be kept of how and where all such carcasses are disposed of.

* Welfare Outcome Assessment

- * Welfare standards for farm animals are primarily based on 'inputs', i.e. they describe what must be provided to the animals in terms of certain resources, such as housing, space, feed, veterinary care and management practices. However, it is important to know what effect these inputs are having on the welfare of the animals and therefore look at the 'outcomes' of these inputs, i.e. the impact of these inputs on the health, physical condition and behaviour of the animals themselves. This practice is known as 'Welfare Outcome Assessment'.

- *  RSPCA Welfare Outcome Assessment¹ has been developed for dairy cattle and offers a practical and scientifically informed method to provide a more objective, animal-focused picture of the level of welfare being achieved on-farm for certain key welfare measures. The welfare measures selected for assessment are listed in Appendix 4 at the back of the document.

¹RSPCA Welfare Outcome Assessments are informed by AssureWel, a collaborative project led by the RSPCA, Soil Association and University of Bristol with a primary aim of developing farm animal welfare outcome assessments for use within farm assurance schemes.

- *  The following information is applicable to RSPCA Assured members only:

Members of the RSPCA Assured scheme will receive a Welfare Outcome Assessment as part of their routine RSPCA Assured farm assessment visits. Additional Welfare Outcome Assessments may also be undertaken by RSPCA staff, such as Farm Livestock Officers, as part of the RSPCA Assured certification process.

WA 1.1 * It must be ensured that a Welfare Outcome Assessment is conducted:

- a) according to the protocol in Appendix 4 at the back of this document
- b) using the assessment form, and in the case of RSPCA Assured scheme members, the scheme's equivalent current Welfare Outcome Assessment form must be used
- c) on a regular basis or, for RSPCA Assured scheme members, during each scheme assessment visit,
- d) by
 - i. a suitably competent person that is independent from the direct management of the farm, and
 - ii. in the case of RSPCA Assured scheme members, by the relevant scheme personnel.

- *  **With reference to standard WA 1.1 c), Welfare Outcome Assessments should be carried out approximately every 12 months.**

- *  **With reference to standard WA 1.1 d), a suitable person to conduct the assessment would be a qualified vet; a relevant, independent consultant with a good knowledge of dairy cattle welfare and production; a Farm Assurance Scheme Assessor; or the company fieldsman (or, if the company does not have a Fieldsman, someone with an equivalent role within the company).**

- WA 1.2 *** A completed copy of the Welfare Outcome Assessment form (see standard WA 1.1 b)) or a record of the results must be kept:
- a) on farm
 - b) for a minimum of five years.
- WA 1.3*** With regards to standard WA 1.2, the document left on farm must include the following information:
- a) the date of the audit
 - b) the group audited
 - c) the name, organisation and job title of the person who undertook the assessment
 - d) the age of the herd at the time of the assessment
 - e) any action to be taken (see standard WA 1.4)
 - f) the signature of the person undertaking the audit.
- WA 1.4 *** Any health/welfare issue identified as an area of concern must be included within the VHWP (see standard H 1.5).

*



The Welfare Outcome Assessment will not always provide a definitive farm level prevalence for the measures assessed. The assessment has been designed to identify areas of welfare concern that are likely to be more widespread on the farm and therefore warrant further investigation and careful monitoring. Welfare Outcome Assessments can also indicate areas where welfare is being safeguarded.

Transport

Animal transport systems need to be designed and managed to ensure livestock are not caused unnecessary distress or discomfort. The transport and handling of livestock needs to be kept to an absolute minimum. Personnel involved in transport need to be thoroughly trained and competent to carry out the tasks required of them.

*



If good practices and procedures are being implemented on-farm, the following should be achieved and be seen as contributing to positive dairy cow welfare:

- no injuries as a result of transport
- no deaths on arrival
- during handling, loading and unloading: <2% of animals vocalise, <3% to slip and none fall.

Livestock markets

T 1.1 * Cattle must not be presented for sale at livestock markets or collection centres with the exception of lactating animals going to specialist sales and maiden heifers intended as dairy replacements.



Cattle presented for sale at livestock markets will automatically lose their RPSCA Assured status.

T 1.2 * Animals born in the UK must not be exported live, either directly from the farm of origin, or indirectly via a third party.

T 1.3 * Producers must be able to provide verification of compliance with standard T 1.2 on request.

T 1.4 * Producers must register with any auction markets they use that the animals they sell are not for export.

Casualty animals

T 2.1 A sick or injured animal may only be transported:

- a) if it is being taken for veterinary treatment or it is being taken to the nearest available place for humane slaughter
- b) if the said animal is suitable for loading, travelling and unloading.

Training

T 3.1 Personnel in charge of cattle transporters must:

- a) have completed an approved training course, preferably validated
- b) be able to demonstrate competence in handling cattle when loading and unloading them, and while in transit.

T 3.2 * The Humane Slaughter Association (HSA) has developed a training programme (*'The Road Ahead – livestock welfare in transit'*) for use by hauliers. This must be utilised as part of the staff training programme.

- T 3.3 *** Hauliers must:
- a) have access to a copy of the current version of the *'RSPCA welfare standards for dairy cattle'*
 - b) be familiar with its content
 - c) understand and apply its content.

- T 3.4** Animal handlers and hauliers must be trained to:
- * a) understand the stress factors cattle are likely to encounter
 - b) appreciate how cattle react to other cattle
 - c) appreciate how cattle react to man
 - d) appreciate how cattle react to strange noises, sights, sounds and smells
 - * e) appreciate how driving style impacts the animals in transit.

T 3.5 The behavioural characteristics of cattle must be taken into account when they are being moved, so as to avoid unnecessary fear or distress (see information box below).

i Behavioural characteristics of cattle which have important consequences for their welfare include:

- **They have poor vision for distance and detail; therefore they should not be led into shadowy areas.**
- **They are easily startled and so should not be subjected to sudden movement of nearby objects.**
- **Their hearing is similar to humans, so they should not be subjected to sudden loud noise.**
- **Their instinct to herd is strong so they should not be isolated.**

Handling/loading/unloading

T 4.1 Sticks must not be used for hitting cattle.

i Sticks and benign handling aids may be used as extensions of the arms.

T 4.2 * The presence and use of electric goads is not permitted on any vehicle or unit.

T 4.3 Races and gates must be designed and operated so that animals can move through them unhindered when required.

T 4.4 When operating gates and catches, every effort must be made to reduce excessive noise which may cause distress to the animals.

T 4.5 If a problem relating to standard T 4.4 is identified, noise reduction mechanisms must be fitted as necessary.

T 4.6 Cattle must not be moved or loaded unless:

- a) the way forward is clear
- b) there is adequate space available for them to move into.

T 4.7 Loading facilities must provide a ramp of no more than a 20% incline.

- T 4.8** To prevent animals from slipping or falling off, all loading ramps and tail boards must be:
- appropriately designed
 - covered with litter.
- T 4.9** All tailboards must be fitted with foot battens.
- T 4.10** If a loading ramp is to be modified or newly installed, a reverse ramp must be provided.



When a 'reverse ramp' is installed, it is the vehicle that negotiates the incline until the tail gate is level with the ground and animals walk straight into or out of the vehicle on the level or slight gradient.

Transport

- T 5.1** The timing of transport for any purpose must be planned between haulier and producer(s), and slaughterhouse, if applicable, to minimise travelling and waiting time for the cattle.
- T 5.2** Cattle must be unloaded immediately at the slaughterhouse.
- T 5.3** Cattle, including calves, must not be transported for more than 8 hours (from loading of first animal to unloading of the last).
- T 5.4** Cattle, including calves, must have access to water up to the point of transport.
- T 5.5** Cattle must have access to food up to at least 4 hours before loading onto the lorry.
- T 5.6** All deaths and serious or widespread injuries must be recorded and reported to:
- the driver
 - the haulier
 - the slaughterhouse manager
 - the farm manager
- before the next consignment from the same source is collected.
- T 5.7 *** An on-farm record must be maintained of all incidents during transit and kept within the VHWP.
- T 5.8** All incidents relating to standard T 5.7 must be investigated and the results of the investigation recorded.
- T 5.9** Where causes relating to standard T 5.7 have been identified, prompt action must be taken to prevent further deaths and suffering occurring.
- T 5.10** All transporters must have a 'livestock capacity document' on board at all times.



The 'livestock capacity document' will give data on the size of transporter and the carrying capacity for different livestock species under different climatic conditions.

- T 5.11** Transporters must provide minimum headroom, when standing in a natural position, of:
- Calves – 10cm above highest point of animal
- Cattle – 20 cm above highest point of animal.

T 5.12 The floors of all vehicles must be covered with sufficient bedding in order to provide comfort and reduce the likelihood of injury.

T 5.13 * The following space allowances must be provided during transport:

	Cattle weight (kg)	Area per head (m²)
Small calves	50	0.3 to 0.4
Medium calves	110	0.4 to 0.7
Heavy calves	200	0.7 to 0.95
Medium cattle	325-549	0.95 to 1.29
Heavy cattle	550-699	1.30 to 1.59
Very heavy cattle	≥ 700	≥ 1.60

T 5.14 * Appropriate lighting, whether natural or artificial, must be available when loading and unloading cattle and to enable cattle to be thoroughly inspected at any time.

T 5.15 * There must be no sharp edges or protrusions on any vehicle, internally or externally, that are likely to cause injury or distress to an animal.

T 5.16 * Air quality and air flow must be maintained on vehicles in a way that does not negatively affect the welfare of the animals.

T 5.17 All hauliers must have a written Standard Operating and Emergency Procedure to implement during transportation (see Appendix 2).

Slaughter/killing

All slaughter/killing systems need to be designed and managed to ensure livestock are not caused unnecessary distress or discomfort. The pre-slaughter handling of livestock needs to be kept to an absolute minimum. Personnel involved in the slaughter need to be thoroughly trained and competent to carry out the tasks required of them.

*



If good practices and procedures are being implemented on-farm, the following should be achieved and be seen as contributing to positive dairy cow welfare:

- misstuns <1%
- vocalisations of cattle in the stunning and slaughter areas (including the race) <2%
- slips <3% and no animals falling
- <10% of animals require any encouragement to move through the slaughter facility.

Training

- S 1.1** Managers must develop and implement an animal welfare policy.
- S 1.1.1** The animal welfare policy (see standard S 1.1) must include written procedures regarding:
- a) maintaining animal welfare in the abattoir
 - b) the responsibilities and duties of staff
 - * c) emergency procedures, including for escaped, trapped or injured livestock.
- S 1.2 *** The animal welfare policy must be reviewed at least annually and updated where necessary.
- S 1.3** Managers must appoint at least 1 trained Animal Welfare Officer (AWO), who is responsible for the implementation of the animal welfare policy.
- S 1.3.1** All AWOs must:
- * a) hold a certificate of competence for all operations they are responsible for overseeing
 - b) have attended the Bristol University Animal Welfare Officer training programme, or other similar recognised, named, validated course on animal welfare at abattoirs
 - * c) keep a record of actions taken to improve animal welfare in the abattoir for which they are responsible.
- S 1.4 *** Managers must:
- a) develop and implement a training programme for all staff handling and slaughtering animals
 - b) ensure the following operations are only carried out by persons holding a certificate of competence for such operations:
 - i. handling and management of animals in the lairage
 - ii. restraint of animals for stunning/killing
 - iii. stunning/killing of animals
 - iv. assessment of effectiveness of stunning
 - v. shackling or hoisting of animals post-stunning
 - vi. bleeding of animals post-stunning
 - c) ensure all certificates of competence are resulting from attendance at an approved training course.

- S 1.5** The Humane Slaughter Association (HSA) has developed a training *programme* (*'Humane Slaughter – Taking Responsibility'*) for use in abattoirs. Managers must obtain a copy of this and utilise it as part of the staff training programme.
- S 1.5.1 *** Staff must have access to the HSA booklet *'Best Practice Guidelines for the Welfare of Cattle in Abattoirs'* and to any relevant HSA handbooks for their area of expertise, e.g. stunning, handling etc. These must have been read, understood and the recommendations applied by the relevant personnel.
- S 1.6** An AWO must:
- be present on the site at all times whilst slaughter is being carried out
 - make frequent and thorough checks throughout the day to ensure that animals are being effectively stunned and are insensible throughout the slaughter operation.
- S 1.7** Where it is suspected that animals are not being effectively stunned, the slaughter line must be stopped and immediate remedial action taken.
- S 1.8** The managers, AWOs and all slaughter staff must:
- have access to a copy of the current *Defra Codes of Practice* relating to slaughter (available online)
 - * have access to a copy of the current *'RSPCA welfare standards for dairy cattle'*
 - * be familiar with and implement their relevant content.
- S 1.9 *** The AWO must ensure that animal welfare during the slaughter process is not compromised by operator fatigue.
- S 1.10 *** To reduce the likelihood of operator fatigue, managers must ensure that rotation of staff is practiced as necessary, and recorded, as a Standard Operating Procedure.
- S 1.11 *** Noise must be kept to a minimum at all times, in all areas of the abattoir, both from staff and equipment.
- S 1.11.1 *** Noise levels must be monitored by the manager or AWO.
- S 1.11.2 *** When acceptable noise levels are exceeded the causes must be investigated and addressed.

*  **Maximum decibel levels may be set in the future. Unacceptable noise levels are those which are causing fear and distress in the animals, such as startle responses or reluctance to move through the handling system.**

Casualty animals

- S 2.1 *** Except in exceptional circumstances, cattle which are unable to walk must be slaughtered:
- without delay
 - without the animal being moved, i.e. on the lorry or in the lairage pen
 - using humane casualty slaughter equipment and procedures.

*  **Delay in killing cattle unable to walk can only be justified in exceptional circumstances, i.e. when the welfare of other animals would otherwise be adversely affected.**

- S 2.1.1 *** Appropriate, well-maintained slaughter/killing equipment must be easily accessible for use in emergencies.

- S 2.2** Casualty animals must be killed in accordance with methods outlined in standard S 7.1 or, alternatively, injection of an overdose of a drug with anaesthetic properties which causes immediate loss of consciousness and then death, to be administered by a veterinary surgeon, may be used.
- S 2.3 *** A member of staff must be present to check animals on arrival and must:
- have access to a copy of the Defra booklet *Welfare of Animals During Transport – Guidance Notes: Part 2a, Fitness to Transport*
 - be familiar with its content and implement its recommendations.

Closed circuit television



The use of Closed Circuit Television (CCTV) in areas where live animals are present can assist those responsible for monitoring and enforcing animal welfare within the abattoir in ensuring that standards are maintained. It is strongly recommended that CCTV footage is also used for in-house training programmes and to provide an additional level of security at the abattoir.

- S(TV) 1.1** A functional CCTV system must be installed and operational to monitor animals undergoing the following processes at the abattoir:
- unloading from vehicles into the lairage
 - lairaging, including the movement of animals out of the lairage towards the stun point
 - stunning, including animals approaching the stun area
 - shackling
 - sticking.
- S(TV) 1.2** CCTV cameras must be positioned to ensure a clear view of the processes being monitored is achieved at all times.
- S(TV) 1.3** It must be possible to observe clearly the view from each camera at all times via one or more monitors.
- S(TV) 1.4** CCTV footage must be recorded at all times where animals are undergoing any of the processes listed under standard S(TV) 1.1.
- S(TV) 1.5** The recorded CCTV footage must be:
- retained by the abattoir for a period of at least three months, and
 - available for viewing on site by RPSA Assured field staff and RSPCA Farm Animals Department staff on request.



Where possible it may be useful for managers to retain CCTV footage for longer than the three months specified in standard S(TV) 1.5, for their own monitoring and security purposes.

Lairage

- S 3.1** Slaughterhouse managers must ensure that the premises are constructed and maintained so as to prevent any injury being caused to animals confined there.
- S 3.2** The slaughterhouse must provide a lairage facility which:
- is constructed so as to provide shelter from direct sunlight and adverse weather conditions
 - provides animals with a dry lying area
 - is of adequate size and construction for the number of animals confined there (see standard S 3.5)
 - provides adequate draught free ventilation
 - is properly lit to permit animals to be inspected
 - has drainage facilities for faeces and urine
 - is able to be thoroughly cleaned between batches of animals
 - provides easy access to adequate water, which must be available at all times, and to food, if necessary.

*



Food of a suitable quality for animals in lairage should be provided in sufficient quantity, twice daily, until no earlier than 12 hours before slaughter.

- S 3.3** The lairage facility must have isolation pens available, in which sick or injured animals can be isolated, located close to the unloading area and within easy access of the stunning area.
- S 3.4** When cattle are kept in a lairage, normal housing stocking densities must apply.
- S 3.5** The floor space allowances must be as follows:

Weight (kg)	Minimum bedded lying area
< 100	1.5m ²
101 to 250	2.5m ²
251 to 350	3.5m ²
351 to 450	4.5m ²
451 to 550	5.0m ²
551 to 600	5.5m ²
601 to 650	6.0m ²
651 to 700	6.25m ²
> 700	6.5m ²

Where animals are to be housed overnight in a lairage, then fully bedded pens without any hard standings are acceptable.

- S 3.6** Isolation pens must be available for use at all times.
- S 3.7** Cattle which, because of their sex, age or origin, are likely to be aggressive, must be separated from each other at lairage and must stay in on-farm groups (or be sub-divided).
- S 3.8** Cattle in lairage pens must not be exposed to bright artificial light or direct sunlight except during antemortem inspection, which must be carried out in a minimum of 220 lux illumination.

Pre-slaughter handling

- S 4.1** Cattle must be handled calmly and quietly, with care to avoid unnecessary excitement or distress.
- S 4.2** Race design and construction must encourage cattle to move forward, with:
- as few right angled bends as possible
 - no projections and obstructions in the races and passageway
 - appropriate lighting.



Solid, high sides to races and passageways, and avoidance of projections, obstructions and sharply angled bends, will facilitate this requirement.

- S 4.2.1 *** Race design must include emergency release gates that allow livestock back to the lairage.
- S 4.3** Cattle must not be moved or loaded unless:
- the way forward for the lead animal is clear
 - there is adequate space available for them to move forward.
- S 4.4 *** Flooring throughout the slaughterhouse must be non-slip in races and passageways.
- S 4.5 *** The presence and use of electric goads is prohibited in any abattoir.
- S 4.6 *** All cattle must be slaughtered within 12 hours of their last feed.
- S 4.7 *** If cattle require cleaning and/or clipping prior to slaughter this must be carried out by competent staff.
- S 4.7.1 *** If washing cattle, the following must be observed:
- a pressure washer may not be used
 - the water stream is not directed at sensitive areas (e.g. the head, groin and udder)
 - the water is at a suitable temperature
 - the process is stopped immediately if the animal shows signs of distress or an unreasonable level of restraint is required.

Slaughter equipment

- S 5.1** The equipment used for the stunning and killing of animals, including the stunning pen and/or restraint devices, must be designed, manufactured and maintained to ensure rapid and effective stunning or killing.
- S 5.2** All slaughter equipment must be thoroughly and appropriately cleaned after use.
- S 5.3** Slaughter equipment must be checked at least once daily by an AWO to ensure it is in working order and in a good state of repair.
- S 5.3.1 *** Stun and slaughter equipment must be tested to ensure it is in correct working order prior to the first use of the day.
- S 5.4** A record of the check on slaughter equipment must be made.

- S 5.5 *** Reserve equipment for the stunning and killing of animals must be:
- a) kept at the place of stun/killing for use in an emergency
 - b) tested at least once daily by an AWO to ensure it is in good working order and a good state of repair.
- S 5.6** A record of the check on reserve equipment must be made.

Stunning

- S 6.1 *** All cattle must be stunned prior to slaughter using a permitted method which renders them instantaneously unconscious and insensitive to pain and maintains that state until the point of death.

- S 6.1.1 *** Permitted methods of stunning include:

- a) free bullet (stun-kill)
- b) penetrative concussion, e.g. captive bolt
- c) electrocution (stun-kill).

*



Signs of effective captive bolt stunning (one phase):

- animal collapses
- no rhythmic breathing
- fixing, fully dilated pupils
- no corneal reflex (i.e. no blink reaction when the surface of the eyeball is lightly touched)
- relaxed jaw
- tongue hanging out.

Deviation from the above may be an indication that the stun has been ineffective or that animals are beginning to recover from the stun.

- S 6.1.2 *** Contact triggered captive bolt devices are only permitted on animals when sufficient head restraint is used.

*



Restraint within a stunning pen does not provide sufficient head restraint when using a contact triggered captive bolt device. Sufficient restraint may involve the following:

- a head shelf resulting in passive restraint
- a head yoke resulting in active restraint.

It should be noted that passive restraint is preferable for the welfare of cattle. A head yoke combined with a chin lift can result in strong aversive behaviour in cattle and should be avoided.

- S 6.1.3 *** If there is any indication that a stun has not been effective, or that animals are displaying signs of recovery from a stun, re-stunning must take place immediately.

- S 6.2** Cattle must not be allowed into the slaughter box unless the slaughterman is ready to immediately stun the animal.

- S 6.3** All stunning pens for cattle must be constructed to:
- restrict backwards, forwards or sideways movement
 - allow release of the animal's head as soon as the stunning has been completed
 - allow the slaughterman free access to the animal's forehead while it is restrained.
- S 6.4 *** Cattle must be effectively stunned before being released from the stunning pen.
- S 6.5** Cattle must only be stunned when they can be stuck immediately afterwards with a stun-to-stick interval of no more than 60 seconds.
- S 6.6 *** The effectiveness of stunning must be recorded for at least 10 animals:
- at the very start of each day's killing and
 - at least every 2 hours.

*



When fewer than 10 animals are being stunned all animals must be assessed.

- S 6.6.1 *** The records of checks on the effectiveness of stunning must include:
- the name of the person undertaking the checks
 - the number of cattle assessed
 - the date and time of the assessments
 - the number of cattle not effectively stunned
 - the action taken to correct ineffective stunning.

Slaughter/killing methods

- S 7.1 *** Cattle must be slaughtered/killed by bleeding out (sticking) following an effective stun.
- S 7.2 *** Where electrocution is used to stun-kill adult cattle, the electrodes must be placed so that they span:
- the brain, enabling the current of 1.28 amps to pass through it for a period of at least 1 second, using a 50 to 1500 Hz alternating, clipped or rectified sine wave or square wave, immediately followed by placing of the electrodes so that they span the heart for a period of at least 3 seconds to cause a cardiac arrest, using a current frequency of less than 100 Hz alternating, clipped or rectified sine wave or square wave, or
 - the brain and the heart for a period of at least 3 seconds at >1.51 amps to cause a cardiac arrest, using a current frequency of less than 100 Hz alternating, clipped or rectified sine wave or square wave.
- S 7.3** Where animals are killed individually, the apparatus must:
- incorporate a device which measures the impedance of the load and prevents operation of the apparatus if the minimum required current cannot be passed
 - incorporate an audible or visual device indicating the length of time of its application to an animal in each cycle of application
 - be connected to a device indicating the applied current, positioned so as to be clearly visible to the operator.

Sticking

- S 8.1 *** Cattle must be stuck using a sharp knife at least 12cm/5 inches long.
- S 8.2** An incision must be made in the jugular furrow at the base of the neck, directing the knife towards the entrance to the chest to sever the major blood vessels.
- S 8.3 *** Blood loss from the cattle must be rapid and profuse.
- S 8.4** Two knives must be used; the first to open the skin and the second to sever the arteries.
- S 8.5** After incision of the blood vessels, there must be no further dressing procedure performed on the animal for at least 30 seconds, and in any case until all brain-stem reflexes have ceased.
- S 8.6** Where one person is responsible for the stunning, shackling, hoisting and bleeding of cattle, they must complete all these operations on each individual animal in turn.

* Slaughter of pregnant cattle

- S 9.0 *** Abattoirs must have a written protocol in place for dealing with animals in late gestation, and this must be made available to the RSPCA Assured Assessor or RSPCA Farm Livestock Officer.
- S 9.1 *** There must be a named person such as the AWO who is responsible for ensuring that the animals are treated according to the requirements laid down in the standards.
- S 9.2 *** Cows in the last third of their gestation period (i.e. ≥ 27 weeks pregnant) must not be sent for slaughter, except for disease control of emergency/casualty slaughter purposes.
- S 9.3 *** Producers sending pregnant animals to slaughter (see standard S 9.2) must inform the slaughterhouse of the impending arrival of any animals that may be, or suspected to be, in the last third of gestation.
- S 9.4 *** Any foetus in the last third of gestation (i.e. the dam is ≥ 27 weeks pregnant), or suspected of being in the last third of gestation, must not be removed from the maternal carcase until at least 5 minutes after maternal sticking, but preferably between 20-30 minutes after the dam is dead in order to ensure that the foetus does not gasp and start to breathe air.
- S 9.5 *** If, for any reason, a foetus is found to be showing signs of life upon removal from the uterus (i.e. a foetus that has gasped and is now conscious), it must be immediately killed with an appropriate captive bolt or by a blow to the head with a suitable blunt instrument.

S 9.6 * Attempts at reviving the foetus must not occur under any circumstances.

*



Evidence obtained from research carried out on foetal responses show that there are several mechanisms that prevent foetal consciousness prior to birth. This is important to prevent foetal suffering when the dam is slaughtered. Suffering can only occur when an animal is both sentient (i.e. neurologically mature) and conscious. Sentience is only possible once the foetus has completed about 75% gestation time (i.e. 30 weeks gestation) prior to which the neurological connections are not considered compatible with sentience. Without consciousness, evidence shows that the foetus cannot experience pain or breathlessness and thus cannot suffer. The RSPCA welfare standards for dairy cattle do not allow the slaughter of any animal in the last trimester of pregnancy, except in the case of an emergency, or for disease control purposes. When a cow/heifer is slaughtered in the last trimester and the foetus is removed from the uterus too early, a stimulus can be evoked similar to that of birth. This can activate the gasping reflex. If an animal successfully takes in air, consciousness and thus the capacity to suffer can ensue. It is best to leave the foetus in the uterus within the carcass for around 20-30 minutes to ensure it is dead prior to removal. If this is not possible then clamping the trachea of the foetus prior to removal is an alternative, but may not be practical to do. A foetus left in utero or with a tracheal clamp will show movements such as kicking, which can give the impression that the animal is suffering whilst it dies. However, whilst a lack of consciousness is maintained, research suggests that suffering cannot occur at this time.

Further information on this issue can be found in the following:

Mellor, D. J. 2003. Guidelines for the humane slaughter of the foetuses of pregnant ruminants. *Surveillance* (30(3), pp. 26-28.

Mellor, D. J. 2010. Galloping Colts, Fetal Feelings and Reassuring Regulations: Putting Animal-welfare Science into Action. *Journal of Veterinary Medicine Education*, 37(1), pp. 94-100.

OIE Terrestrial Animal Health Code Article 7.5.5

RSPCA welfare standards for dairy cattle – specific standards and guidance for the rearing of calves

The following standards must be read in conjunction with, and are in addition to, the RSPCA welfare standards for dairy cattle (dated January 2018).

*



If good practices and procedures are being implemented on-farm, the following should be achieved and be seen as contributing to positive calf welfare:

- overall calf mortality <3%
- calf pneumonia incidence <5 cases/100 calves/year
- calf scour incidence <5 cases/100 calves/year
- evidence of abnormal oral behaviours (e.g. sucked navels or ears) in less than 1% of calves.

Food and water

Food

- FW(C) 1.1** Calves must be fed a wholesome diet which:
- a) is appropriate for their age, weight and digestive system
 - b) is fed to them in sufficient quantity to maintain them in good health and promote a positive state of wellbeing
 - c) fully satisfies their nutritional needs, including their mineral requirements.
- FW(C) 1.2** Calves must have daily access to food, except when required not to, as part of any therapy prescribed by the attending veterinary surgeon.

FW(C) 1.3 * Every newborn calf must:

- a) receive adequate colostrum from its dam (at least 3 litres), or from another source, as soon as possible after it is born and certainly within the first 6 hours of life
- b) continue to suckle for the first 24 hours of life, or where this is not physically possible, fed ideally via an artificial teat.

*



Adequate colostrum is considered to be approximately 10% of birth body weight in the first 6 hours and totals about 20% birth body weight in the first 24 hours.

Colostrum quality is also important and colostrum should have at least 50g IgG per litre to ensure sufficient passive transfer.

Some producers may find it necessary to carefully stomach tube any calves which may be unable to achieve the required intake of colostrum within the first 24 hours.

The preferred method of feeding is by teat feeder.

FW(C) 1.3.1 * In relation to standard FW(C) 1.3, after the first 24 hours, calves must be offered free access to pasteurised whole milk (or transition milk) to ensure that they are consuming at least 8 litres of milk per day until weaning.



Due to the problems associated with Johne's disease and newly born calves, it is strongly recommended that when there is an identified risk of the disease on the unit, veterinary advice is taken with regard to the management of new-borns, prior to calving. In order to minimise the likelihood of infection, consideration may have to be given to removing the calf from its dam earlier than that recommended in the RSPCA welfare standards for dairy cattle.

FW(C) 1.4 Specific management practices for new-born calves with respect to reducing the risk of conditions, such as Johne's disease, developing must be recorded in the VHWP (see standard H 1.1).

FW(C) 1.5 Bought in calves must have received colostrum as set out in standard FW(C) 1.3 and standard FW(C) 1.3.1.

FW(C) 1.6 Milk substitute must be mixed according to the manufacturer's instructions unless prescribed otherwise by the attending veterinary surgeon.

FW(C) 1.7 * Calves under 28 days of age must be fed 6 litres (or 15% of their birth bodyweight, whichever is the most) of milk across at least two feeds per day. If being fed artificial replacer, the volume required must be according to nutritional requirements.

FW(C) 1.8 Efforts must be made to avoid sudden dietary changes.

*



Evidence shows that gradual weaning (by decreasing milk volume over 3-10 days) results in better dry matter intake post-weaning and is less stressful for calves, thus has positive welfare implications. Gradual weaning should be accommodated where possible.

FW(C) 1.9 * All non-suckled calves must receive liquid food daily:

- a) at least for the first 8 weeks of life, and
- b) until they are eating adequate quantities of suitable solid food, at least 1kg dry matter per day of a calf starter ration.

- FW(C) 1.10 *** Unweaned calves must have unlimited access to palatable, dried feed and fibrous roughage from 8 days of age.
- FW(C) 1.11 *** Calves must not be weaned before 8 weeks of age, unless on veterinary advice it is viewed as detrimental to the welfare of the calf to continue to maintain them on a milk-based diet for this period of time.
- FW(C) 1.12** The removal of calves from pens into social groups must not coincide with weaning.
- FW(C) 1.13 *** If the calf is more than 14 days old, it must have access each day to dried feed or forage material containing sufficient digestible fibre (which shall be not less than 100 to 200g daily depending on the age of the animal) to enable appropriate rumen development.
- FW(C) 1.14** Roughage must be supplied separately to bedding material and must be available to the calves at all times.
- FW(C) 1.15** Starter roughage for calves must be good quality hay or straw.

 **The objective should be to encourage rumen development using long fibre. High dry matter big bale silage/haylage is acceptable.**

- FW(C) 1.16** Wet acidic silages must be avoided.
- FW(C) 1.17** The calves' diet must prevent anaemia and any mineral and vitamin deficiency.
- FW(C) 1.18** The iron content in the diet must be sufficient to maintain a blood haemoglobin level of 9g/dl (decilitre).
- FW(C) 1.19** If blood haemoglobin levels in a significant number of calves in a batch (>25%) at slaughter are below 9g/dl, a full investigation must be made to establish the potential cause and any necessary remedial action taken for the next batch of calves.

 **The relationship between dietary iron and blood haemoglobin is complex, and will depend on iron levels in milk, water, roughage, original iron status of a calf and the calcium content of water supplies. Specification of a dietary iron level alone, therefore, many not guarantee freedom from anaemia. The European Commission's *'Scientific Veterinary Committee Report on the Welfare of Calves'* recommended that:**

a) where calves are fed a diet which is lower in iron than 50mg/kg, blood haemoglobin levels should be monitored

b) all calves should be fed in such a way that their blood haemoglobin level does not fall below 7.2g/dl.

Signs of anaemia include:

- reduced appetite
- reduced growth rate
- pale mucous membranes
- rapid heart rate
- lethargy, inactivity and weakness.

FW(C) 1.20 The results of any blood tests must be made available to the RSPCA Assured Assessor or RSPCA Farm Livestock Officer.



Testing for blood haemoglobin levels should be limited to the slaughter plant once it has been established that a system can consistently produce well grown healthy calves.

FW(C) 1.21 Calves must have no necessity to compete for food.

FW(C) 1.21.1 Where calves are fed by an ad-lib automated system, the producer must be able to demonstrate that there is no competition between calves which may result in limiting their intake.

FW(C) 1.22 * If a teat feeding system is being used, the position of the teats must be arranged so that the calves can drink in a natural position.

FW(C) 1.23 * Bull calves must be treated equally to heifer calves.

FW(C) 1.24 Where calves are bucket fed, each calf must have access to an individual bucket.

FW(C) 1.25 Where milk is delivered into a trough, there must be sufficient space for all calves to drink without hindrance at the same time.



Some recommendations give trough frontages of 350mm per calf for individually fed calves. Other guides suggest 3 calves per linear metre or 1.1 times the shoulder width of the animal.

FW(C) 1.26 Where calves are rationed through the use of a transponder, the feed station must be designed to allow all calves to drink without hindrance.

FW(C) 1.27 All feeding equipment and utensils must be managed in an hygienic manner, in order to minimise the risk of disease challenge.

FW(C) 1.28 Calves must not be muzzled.

Water

FW(C) 2.1 All calves must have continuous access to an ad-lib clean fresh water supply.

FW(C) 2.2 * There must be at least one drinking space per ten calves unless they are on an ad-lib milk feeding system.

FW(C) 2.3 All water troughs/bowls must be capable of delivering water in sufficient quantities at all times.

FW(C) 2.4 All drinking vessels/facilities must be managed and maintained in an hygienic manner.

FW(C) 2.5 Water trough/bowls must not result in undue wetting/fouling of the bedded areas of the calves.

Environment

- E(C) 1.1** Any adjacent dairy unit associated with the calf rearing facility, must fulfil the requirements of the recognised national dairy farm assurance scheme as a minimum.
- E(C) 1.2** There must be nothing in the environment, such as sharp edges or drafty conditions which have the potential to cause the calves injury or distress.
- E(C) 1.3** Internal surfaces of the housing and calf pens must be made of materials which can be readily cleansed and disinfected, or be easily replaced when necessary.
- E(C) 1.4** Environmental enrichment must be provided for calves from 6 weeks of age onwards.



Examples of environmental enrichment are securely attached short lengths of chain, brushes or hayballs.

- E(C) 1.5 *** Where high levels of abnormal sucking behaviour is seen in bucket-fed calves, calves must be transferred to a teat feeding system.
- E(C) 1.6 *** Ventilation systems, natural or forced, must be designed and managed to maintain air quality (see standard E 3.4).
- E(C) 1.7** Calves must have access at all times to a lying area which is:
- well drained and/or well maintained with dry bedding
 - of a sufficient size to allow all calves to lie down at the same time in a normal resting posture without hindrance
 - of a sufficient size to allow all calves to stand up, turn around, lie down, rest and groom themselves without hindrance.
- E(C) 1.8** Calf pens must be of a size that is appropriate for the age, size and breed of the animal.
- E(C) 1.9 *** In systems designed for rearing dairy bull calves where the animals are fully housed with no hard standing, the minimum total area allowance must be as follows:

Liveweight (kgs)	Minimum total area (m ²)
< 100	2.0
101-200	3.5
201-250	4.0
251-300	4.5
301-350	5.5

*



For liveweights above 350kg and for heifer calves being reared as dairy herd replacements, the space requirements contained in standard E 4.2 will be required. These space requirements will require both a bedded area and a hard standing.

- E(C) 1.10** The floor must not be slatted.
- E(C) 1.11 *** Calves must not be housed individually after 8 weeks of age.

- E(C) 1.11.1** The group socialisation of calves must be completed by 8 weeks of age.
- E(C) 1.12** Where there is a high risk of infectious disease, consideration must be given to the individual quarantining of calves for the initial rearing period.
- E(C) 1.12.1** Individual quarantine accommodation for calves must be of minimum dimensions 1.0m x 1.8m providing a minimum floor space of 1.8m².
- E(C) 1.12.2** Construction and siting of individual calf pens used for quarantine must be such that each calf has an opportunity to see, smell and hear other calves.

*** Lighting**

- E(C) 2.1** Calves must not be subjected to 24 hour lighting periods.
- E(C) 2.1.1** Calves must not be kept permanently in darkness.
- E(C) 2.2** There must be adequate fixed or portable lighting to enable the calves to be inspected at all times.

 **There should be light levels of 100-200 lux at calf level to aid inspection of calves.**

- E(C) 2.3** To meet their behavioural and physiological needs, appropriate natural or artificial lighting must be provided.
- E(C) 2.4** Artificial lighting must function for a period at least equivalent to the period of natural light normally available between 9am and 5pm.
- E(C) 2.5** Low level lighting/dark periods must be provided to promote resting behaviour.

Calf hutches

***  Some scientific evidence suggests that paired housing can be beneficial for calf welfare. We will be monitoring further research into this issue and exploring whether it informs in a meaningful way future editions of the RSPCA welfare standards.**

- E(C) 3.1** Hutches must be made of a material which minimises heat stress and wide temperature fluctuations.
- E(C) 3.2** The ventilation of the hutch must be able to remove excess humidity and condensation whilst at the same time eliminating draughts but retaining constant air circulation.
- E(C) 3.3** Tethering of calves is prohibited.
- E(C) 3.4** Hutches must be placed on a free draining base and affixed to the ground to prevent movement in high winds.
- E(C) 3.5** Hutches must be sited in a sheltered spot, away from prevailing weather.
- E(C) 3.6** There must be enough bedding in the hutch to exclude any draughts.
- E(C) 3.7** Calves must have access to a dry bed at all times
- E(C) 3.8** Hutches must be of a size appropriate to the age and breed of the animal.

- E(C) 3.9 *** Each calf hutch must provide a sheltered, dry bedded area which as a minimum complies with the requirements laid out in standard E 4.2.
- E(C) 3.10** Hutches must be arranged so that calves may see, hear and touch other calves in neighbouring hutches.

Receiving new calves onto the unit

M(C) 1.1 * Movement of calves on or off farm must not occur at less than 7 days of age unless required for veterinary purposes.

*  **The aim of the RSPCA Assured scheme is to adopt a birth to slaughter policy. The RSPCA recognises that at the present time this is not always possible for cattle, but will continue to work towards this objective.**

*  **Mixing calves from different sources should be avoided. However, it is acknowledged that this is not always possible for veal producers when sourcing black and white bull calves from multiple farms.**

M(C) 1.2 All calves coming onto the unit must be the appropriate weight for their age.

 **A ten day old black and white bull calf should weigh at least 50kgs.**
A requirement for a colostrum provision profile may be required in the future.

M(C) 1.3 On arrival, calves must be allowed to rest for 1-2 hours and assessed for general health and hydration status before further handling/feeding.

M(C) 1.4 After being rested, calves showing signs of disease or dehydration must receive a minimum of 2.5 litres of a proprietary electrolyte solution, with a second feed to be repeated according to manufacturers or veterinary recommendations at an appropriate time.

 **If the calves have come from the same source and have travelled for less than an hour, consideration can be given to feeding them the same milk based feed that they have been accustomed to at their previous location, provided there are no apparent signs of ill health.**

M(C) 1.5 The Veterinary Health and Welfare Plan (VHWP) (standard H(C) 1.1) must clearly identify the potential disease risks associated with mixing calves from different sources and the actions which have to be taken to reduce the risk of disease outbreaks from happening, including the provision of appropriate quarantine measure for new calves.

Handling facilities

M(C) 2.1 There must be a suitable handling system in place which allows the animals to be loaded and examined/treated as necessary.

Transport/marketing of calves

M(C) 3.1 Calves from RSPCA Assured approved herds must not be exported live from the UK, either directly from the farm of origin, or indirectly via a third party.

- (i)** Standard M(C) 3.1 can be achieved by:
- a) retaining the calves on the farm of birth
 - b) selling to other producers who are rearing the animals within the UK (you must be able to supply the RSPCA Assured Assessor or RSPCA Farm Livestock Officer with evidence of this)
 - c) any other method that can be verified to the satisfaction of the RSPCA and RSPCA Assured as avoiding live export of the calves.

M(C) 3.2 Producers must be able to provide verification of compliance with standard M(C) 3.1 to RSPCA Assured Assessors and RSPCA Farm Livestock Officers at the time of their visit.

- (i)** Evidence that could verify compliance with standard M(C) 3.1 includes:
- ear tag information (e.g. purchase receipts and records)
 - movement book and passport information
 - data on number of calves born, number killed on-farm and number sold/moved off farm.

- (i)** RSPCA Assured is investigating the possibility of RSPCA Assured-specific ear tags being made available, which would identify calves born into RSPCA Assured approved herds.

M(C) 3.3 Producers must register with any auction markets they use, the requirement that calves they sell are not for export.

- (i)** Producers are encouraged to move towards reducing the distance travelled by calves they sell, by identifying and using more local outlets whenever possible. Moves towards increasing the proportion of calves moved directly from farm-to-farm should also be pursued in order to reduce the risk of associated welfare issues.

Health and welfare

H(C) 1.1 All units must have a bespoke Veterinary Health and Welfare Plan (VHWP) drawn up in consultation with the attending veterinary surgeon, covering the issues as set out in the main health section of the RSPCA welfare standards for dairy cattle (see standard H 1.1).

H(C) 1.2 The VHWP must:

- a) include the vaccine, biosecurity and hygiene protocols of the unit
- b) identify and document the potential disease risks associated with mixing calves from different sources, and the actions taken to reduce the risk of disease outbreaks happening
- * c) contain target levels for diseases present on farms and plans to achieve these
- d) be reviewed at least annually and updated as necessary
- e) be made available to the RSPCA Assured Assessor or RSPCA Farm Livestock Officer (FLO).

H(C) 1.2.1 * In relation to standard H(C) 1.2 (b) prophylactic dosing of calves with an antibiotic is not permitted. (Metaphylactic treatment is permissible).

*



Prophylactic treatment is intended to prevent sickness or disease developing in a group of healthy animals where a veterinary surgeon has diagnosed there could be a high risk of bacterial infection. Metaphylactic treatment is intended to control disease spreading in groups of animals where some are already sick.

H(C) 1.3 * The following health records for each batch of calves must be kept as part of the VHWP and made available upon request:

- a) calf mortality (including dead on arrivals)
- b) scouring/digestive upsets
- c) respiratory ailments
- d) abnormal oral behaviours.

*



Abnormal oral behaviours include ear/sheath/umbilical sucking, i.e. “cross sucking”, tongue rolling and excessive licking. Animals showing such behaviours should be provided with environmental enrichment to help direct the behaviour. If abnormal oral behaviours are a problem in several animals, a teat feeding system should be provided, if not currently being used. If being used, then consideration should be given to the speed with which milk flows through the teats and to the use of slower flowing treats.

H(C) 1.4 The unit must have the facility to segregate sick animals as required by the attending veterinary surgeon.

H(C) 1.5 Sick individuals must be provided with a source of artificial heat where necessary.

- H(C) 1.6** The only potentially injurious husbandry procedures permitted under the RSPCA welfare standards for dairy cattle are as follows (except those done for therapeutic reasons by a veterinary surgeon):
- a) removal of supernumerary teats using local anaesthetic up to 5 weeks of age
 - b) disbudding during the first 5 weeks of life, or as soon as a prominent bud has formed, using a hot iron under local anaesthesia
 - c) castration by the application of a rubber ring after 24 hours of age and before 7 days of age, or by Burdizzo clamp after 24 hours of age and up to 2 months of age.

- H(C) 1.6.1** Procedures relating to standard H(C) 1.6 must:
- a) not be performed on sick animals
 - b) only be performed in a way which minimises suffering
 - c) only be performed by a veterinary surgeon, or by trained and competent stock-keepers
 - d) only be performed using appropriate, properly maintained equipment.

*



Potentially injurious husbandry procedures should not be carried out at the time of weaning or grouping of calves as increased stress at these times can lead to increased disease susceptibility. Ideally, at least two weeks should be left between weaning and disbudding or castration. This two week period could take place either before or after weaning.

- H(C) 1.6.2 *** A long-acting pain-relieving drug, such as a non-steroidal anti-inflammatory, must be administered at the time of the procedures detailed in standard H(C) 1.6.

Transport

- T(C) 1.1 *** Calves must have access to food and water up to the point of transport.
- T(C) 1.2** Transporters must provide minimum headroom, when standing in a natural position, of:
Calves – 10cm above highest point of animal.
- T(C) 1.3** The following space allowances must be provided during transport:

	Weight (kg)	Area per head (m²)
Small calves	50	0.3 to 0.4
Medium calves	110	0.4 to 0.7
Heavy calves	200	0.7 to 0.95

Slaughter/killing

The slaughter of calves is to be conducted in a manner that ensures a high level of welfare is achieved and takes into account practices and procedures specific to calves unique needs. The setting up of a supply chain with veal or beef producers prevents the slaughter of calves that may otherwise be considered commercially unviable.

*



If good practices and procedures are being implemented on-farm, the following should be achieved and be seen as contributing to positive calf welfare:

- no mis-stuns
- calves slipping <3%, no calves falling
- calves vocalising <5%
- no healthy calves killed on-farm.

S(C) 1.1 Slaughter operators must be able to demonstrate that particular attention is given to the considerate handling of calves.

S(C) 1.2 * Calves may be stunned using one of the methods in standard S 6.1.1 or alternatively, by head-only electrical stunning.

S(C) 1.2.1 * In the case of head-only electrical stunning:

- a) it must be ensured that electrical stunning equipment delivers the appropriate current (see standard S(C) 1.2.2)
- b) the current must be checked at the start of the killing process for each batch of animals using a 'tester' that can simulate the resistance offered by the calves and can check the current and amperage outputs at the tongs
- c) the outcome of each check referred to in b) must be recorded.

S(C) 1.2.2 * In the case of head-only electrical stunning, the minimum current level during stunning must:

- a) be no less than 1.25 amps for animals younger than 6 months, and no less than 1.28 amps for animals over 6 months
- b) be attained within 1 second
- c) be maintained for at least 3 seconds.

* **i** Signs of effective head-only electrical stunning include:

a) Tonic phase

- animal collapses and becomes rigid
- no rhythmic breathing
- head is raised
- forelegs extended and hind legs flexed into the body

b) Clonic phase

- gradual relaxation of muscles
- paddling or involuntary kicking (can be severe)
- downward movement of eyeballs
- urination and/or defecation

Deviation from the signs outlined above may be an indication that the stun has been ineffective or that animals are beginning to recover from the stun.

S(C) 1.3 * Techniques to lower the resistance of the calves to the electrical current must be used.

* **i** Resistance to current flow may vary depending on the condition of the electrodes, the site of contact with the calf's head, and the quality of the connection with the calf's head. The efficiency of current flow can be improved by regular decarbonising and cleaning of electrodes (when dry) with a wire brush.

Male dairy calves

* **i** The RSPCA aspires to eliminate the practice of on-farm killing of dairy bull calves (other than for health reasons). This could mean the on-farm killing of healthy calves may be prohibited under these standards in the future.

S(C) 2.1 * Killing/slaughter of calves on-farm must be carried out by a trained, competent member of staff, named in the VHWP (see standards H 1.1 and H(C) 1.1).

S(C) 2.2 * Personnel that are responsible for calf slaughter/killing must have read, understood and apply the recommendations of the publication '*Humane Dispatch and Disposal of Infant Calves*' by the Humane Slaughter Association.

S(C) 2.3 * Calves must only be slaughtered/killed on-farm using one of the following methods:

- a) free bullet
- b) captive bolt and exsanguination
- c) humane killer (a purpose-made, single shot weapon with a chamfered muzzle and vented barrel)
- d) chemical euthanasia by overdose of an anaesthetic drug (carried out by a veterinary surgeon).

S(C) 2.4 * Calves that are non-viable or unfit must be slaughtered/killed without delay.

S(C) 2.5 * Prior to slaughter/killing, all calves on-farm must be treated as those not intended for slaughter/killing, i.e. appropriate quality and quantity of colostrum given, space allowance adhered to etc.

Herd biosecurity

All approved units must have a written plan describing precautions to limit the introduction of and/or spread of disease onto and within the unit (this could be considered as part of the Veterinary Health and Welfare Plan). Herd health is important from financial, welfare and food safety perspectives.

The written policy must include procedures for cleaning and disinfection of buildings and equipment, specifying the approved dilutions at which chemicals are to be used.

- * All such chemicals must be on the approved Defra list for the purposes of the Diseases of Animals (Approved Disinfectants) (Amendment) (England) Order 2007. Exceptions are acceptable only under veterinary direction.
- * The written policy must include procedures for wild animal control (see standards M 9.1 – M 9.20).

Units must have written waste management procedures (manure, slurry, all farm waste and general rubbish). Waste materials of any nature must not be a risk to animal health or compromise the control of pests.

Domestic animals must not have access to the unit, other than farm dogs and cats, which must be in a clean, healthy condition and regularly wormed (recorded in Medicine book).

Domestic pets, birds, and wild animals must not have access to carcasses.

Feed stores, offices, toilets, etc., must be maintained in a clean, hygienic condition.

Transport – standard operating and emergency procedure

Items to be included

1. Out of hours telephone numbers and emergency procedure.
2. Accident procedure.
3. Certificate of motor insurance.
4. Tyres – punctures – codes of practice.
5. Mobile phones or other communication equipment (and procedures for use).
6. Guidelines on correct environmental conditions during the journey, depending on length of journey and ambient temperature.
7. RSPCA welfare standards relating to transport of dairy cattle and calves.
8. Procedure for loading/unloading of cattle delivery vehicles.
9. Procedure for delivery of cattle to customer sites.
- * 10. FTA – the current version (2017 at the time of printing) of *'The Driver's Handbook'* including Tachograph Regulations.
11. Fire extinguishers.
12. Operating procedures for roadside checks.
13. List of good hygiene measures, including procedure for cleaning of lorries prior to collection of cattle.
- * 14. British Cattle Movement Service booklet: *'Guidance on keeping cattle, bison and buffalo in Great Britain'* (Version 1.0, July 2015)
15. Daily journey sheets.
- * 16. Torch.

Appendix 3

AHDB Dairy Mobility Scoring

How to score your herd

If you haven't scored your herd for a while, information and film clips can be viewed on the AHDB Dairy website: dairy.ahdb.org.uk/mobility

In general:

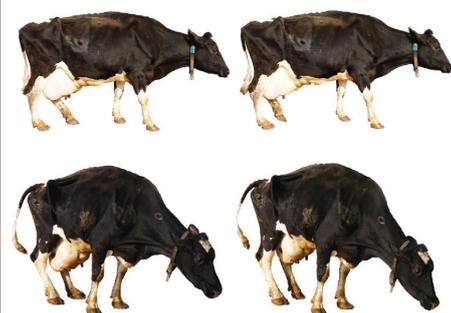
1. Check your herd ideally at least once a month.
2. Choose a time and a place which will allow you to observe cows, ideally on a hard (i.e. concrete), non-slip surface. Monitor each cow individually allowing them to make between 6-10 uninterrupted strides. Watch the cow from the side and the rear, and if possible ensure the cow turns a corner as part of her test.
3. Record the identities of cows scoring 2 or 3 and schedule treatment within 48 hours for score 2 cows and without delay for score 3 cows. Check regularly to ensure treatment is working.
4. Keep a tally of cows that are score 0 and 1.
5. If you are uncertain about the exact score of a cow, make repeat observations. If you are still unsure, examine her feet.

Key benefits of scoring

1. Every cow is regularly assessed for the early signs of poor mobility prompting foot trimming and action lists.
2. Mobility trends can be monitored to identify new problems at an early stage.
3. Provision of figures for benchmarking performance.
4. General foot health awareness is increased.
5. Motivates farm staff to improve herd mobility and therefore overall herd health.

For further information on using the mobility score contact your local Extension Officer or AHDB Dairy on 024 7647 8686.

AHDB Dairy Mobility Score

Category of score	Score	Description of cow behaviour	Suggested action
<p>Good mobility</p> 	0	<p>Walks with even weight bearing and rhythm on all four feet, with a flat back.</p> <p>Long, fluid strides possible.</p>	<ul style="list-style-type: none"> • No action needed • Routine (preventative) foot trimming when/if required • Record mobility at next scoring session.
<p>Imperfect mobility</p> 	1	<p>Steps uneven (rhythm or weight bearing) or strides shortened; affected limb or limbs not immediately identifiable.</p>	<ul style="list-style-type: none"> • Could benefit from routine (preventative) foot trimming when/if required • Further observation recommended.
<p>Impaired mobility</p> 	2	<p>Uneven weight bearing on a limb that is immediately identifiable and/or obviously shortened strides (usually with an arch to the centre of the back).</p>	<ul style="list-style-type: none"> • Lamé and likely to benefit from treatment • Foot should be lifted to establish the cause of lameness before treatment • Should be attended to as soon as practically possible.
<p>Severely impaired mobility</p> 	3	<p>Unable to walk as fast as a brisk human pace (cannot keep up with the healthy herd).</p> <p>Lame leg easy to identify – limping; may barely stand on lame leg/s; back arched when standing and walking.</p> <p>Very lame.</p>	<ul style="list-style-type: none"> • This cow is very lame and requires urgent attention, nursing and further professional advice • Examine as soon as possible • Cow will benefit from treatment • Cow should not be made to walk far and kept on a straw yard or at grass • In the most severe cases, culling may be the only possible solution.

Mobility Score



Farm: _____

Date: _____

Scorer: _____

Total number of cows scored: _____

Score 0 and 1 Acceptable mobility	Score 2 Likely to benefit from treatment	Score 3 Very lame. Treatment urgently required
Tally the number of cows	Record the ID's of any cows showing signs of Score 2	Record the ID's of any cows showing signs of Score 3
Group 1		
Number of cows:	Number of cows:	Number of cows:
Group 2		
Number of cows:	Number of cows:	Number of cows:
Group 3		
Number of cows:	Number of cows:	Number of cows:
Group 4		
Number of cows:	Number of cows:	Number of cows:
Total cows: %	Total cows: %	Total cows: %
Mobility index		
% of cows in the herd scoring 0 and 1		%

www.dairy.ahdb.org.uk/healthyfeet

* Appendix 4

AssureWel Dairy Cattle Assessment Protocol and Scoresheet

Dairy Cattle
Assessment protocol

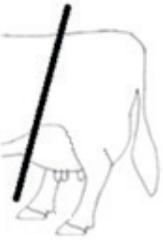


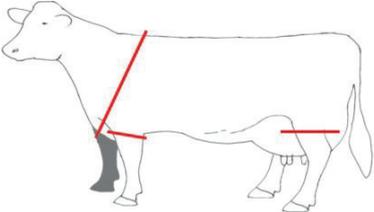
Guidance on sampling:

Individual measures	
1a. Mobility – individual scoring 2. Body condition 3. Cleanliness 4. Hair loss, Lesions 5. Swellings	<ul style="list-style-type: none"> Assessed on 20 cows from the dairy herd, sampled randomly from all groups of milking cows by assessor. Lying cows need not be included if it might risk their welfare. 3 or more cows out of the 20 to be assessed jointly with the stockperson (record assessor's score only).
Herd measures	
6. Broken tails 7. Response to stockperson	<ul style="list-style-type: none"> Assessed across all milking cows.
All animals on farm	
8. Cows needing further care	<ul style="list-style-type: none"> Assessed across all animals on farm. For example identify any mobility score three cows not receiving adequate care / treatment.
Records measures	
1b. Mobility – assessment 1c. Mobility – lameness per 100 cows 9. Mastitis 10. Calf / Heifer survivability 11. Cull and Casualty Cows	<ul style="list-style-type: none"> From records.

1. Mobility	
a) Individual scoring (Red Tractor Measure)	Individual measure
<p>Sample: 20 cows selected at random (3 or more assessed jointly with stockperson)</p> <p>Assess using the DairyCo scoring method. Observe cows, ideally on a hard (i.e. concrete) non-slip surface. Monitor each cow individually allowing them to make between 6-10 uninterrupted strides. Watch the cow from the side and the rear.</p> <p>Scoring:</p> <p>0/1 = Good/Imperfect mobility Walks with even weight bearing and rhythm on all four feet, with a flat back; long fluid strides possible; or steps uneven (rhythm or weight bearing) or strides shortened; affected limb/s not immediately identifiable</p> <p>2 = Impaired mobility Uneven weight bearing on a limb that is immediately identifiable and/or obviously shortened stride (usually with an arch to the centre of the back)</p> <p>3 = Severely impaired mobility Unable to walk as fast as a brisk human pace (cannot keep up with the healthy herd) and signs of impaired mobility (score 2)</p> <p>Please indicate if mobility scoring is carried out at pasture.</p>	
	
<small>Images kindly supplied by DairyCo</small>	
b) Assessment	Records
<p>Verify if mobility scoring is being carried out on farm. Check and comment on who is carrying this out, any formal training they have received and the frequency and scope (e.g. whole herd) of mobility scoring conducted.</p>	
c) Lameness per 100 cows (Red Tractor Measure)	Records
<p>From the RT Herd Health Plan (Annual Monitoring and Review section) record the number of recorded cases of lameness per 100 cows for the previous 12 months.</p>	

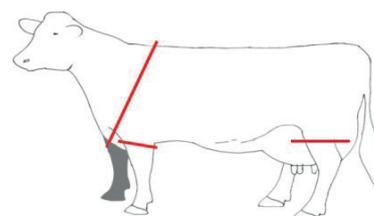
2. Body condition (Red Tractor Measure)	Individual measure
<p>Sample: 20 cows selected at random (3 or more assessed jointly with stockperson)</p>	
<p>Visually assess cattle based on the Defra condition scoring method, viewing the animal from behind and from the side, the tail head and loin area:</p>	
<p>Scoring:</p>	
<p>Thin = Defra score 1 to less than 2</p> <p>Score 1: Tail head – deep cavity with no fatty tissue under skin. Skin fairly supple but coat condition often rough. Loin – spine prominent and horizontal processes sharp.</p>	
<p>The following list should assist in making a confident decision with cows in BCS <2.</p>	
<p>Individual vertebra will be distinct along the backbone. Individual horizontal processes are visible as individual bones and give a prominent shelf-like appearance to the loin. Outline of 4 or more ribs are visible. Outline of the hook bone is visible and angular with no fat padding. Outline of the pin bone is visible and angular with no fat padding. Tailhead is prominently visible. Either side of tailhead is sunken and hollow. There are folds of skin in the depression between the tail head and pin bone. Thurl is sunken and curved in.</p>	
<p>Moderate = Defra score 2 or 3 to less than 4</p> <p>– Good</p> <p>Score 2: Tail head – shallow cavity but pin bones prominent; some fat under skin, skin supple. Loin – horizontal processes can be identified individually with ends rounded.</p> <p>Score 3: Tail head – fat cover over whole area and skin smooth but pelvis may be seen. Loin – end of individual horizontal process cannot be seen; only slight depression in loin.</p>	
<p>Fat = Defra score 4 to 5</p> <p>Score 4/5: Tail head – completely filled or buried and folds and patches of fat evident. Loin – cannot see horizontal processes and completely rounded appearance (a slight loin depression may still be seen).</p>	
<p>The following list should assist in making a confident decision with cows in BCS ≥4.</p>	
<p>Back is solid and straight. Individual horizontal processes are no longer visible as individual bones but a rounded shelf-like appearance is still observable. Hook bones are rounded with obvious fat padding or may not be obviously visible because they are buried in fat. Pin bones are rounded with obvious fat padding or may not be obviously visible because they are buried in fat. Tail head and thurl is filled in.</p>	

3. Cleanliness (Red Tractor Measure)	Individual measure
<p>Sample: 20 cows selected at random (3 or more assessed jointly with stockperson)</p> <p>Visually assess the one randomly selected <u>side</u> of the animal <u>and behind</u>, only including the hind quarters to coronary band and udder:</p> <p>Scoring:</p> <p>0 = Clean No dirt or only minor splashing present</p> <p>2 = Very Dirty An area of dirtiness (i.e. layer or plaques of dirt) amounting to at least forearm length (40cm) in any dimension.</p>	 

4. Hair loss and Lesions (Red Tractor Measure)	Individual measure
<p>Sample: 20 cows selected at random (3 or more assessed jointly with stockperson)</p> <p>Visually assess the following regions of one (randomly selected) side of the animal, from a distance not exceeding 2m (see picture):</p> <ol style="list-style-type: none"> Head & Neck Body (including flank, back & hindquarter) Front leg (carpus) Rear legs (including outside of the near leg and inside of the far leg as well as the udder with teats) <p>Scoring:</p> <p>0 = No hair loss or lesion No lesions or hairless patches $\geq 2\text{cm}$ diameter. No hair is missing or any hairless/bald patch is smaller than a £1 coin (2cm diameter).</p> <p>H = Hairless patches One or more hairless patches (may include scars) $\geq 2\text{cm}$ diameter</p> <p>L = Lesion One or more lesions (areas of skin damage i.e. wound or scab) $\geq 2\text{cm}$ diameter. (Score as a lesion even if accompanied by a hairless patch. Do not include scars)</p>	 <div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%; text-align: center;">  </div> <div style="width: 50%; text-align: center;">  </div> <div style="width: 50%; text-align: center;">  </div> <div style="width: 50%; text-align: center;">  </div> <div style="width: 50%; text-align: center;">  </div> <div style="width: 50%; text-align: center;">  </div> </div>

5. Swellings (Red Tractor Measure – 2S only) **Individual measure**

Sample: 20 cows selected at random (3 or more assessed jointly with stockperson)
 Visually assess the following regions of one (randomly selected) side of the animal, from a distance not exceeding 2m (see picture):



- a. Head & Neck
- b. Body (including flank, back & hindquarter)
- c. Front leg (carpus)
- d. Rear legs (including outside of the near leg and inside of the far leg as well as the udder with teats)

Scoring:

0 = No swelling
 No swelling or no swelling $\geq 2\text{cm}$ diameter (smaller than grape-sized)



1S = Mild swelling (Not included in Red Tractor)
 Mild swelling is such that the normal anatomy of the area is enlarged, poorly defined or obscured.
 Around the hock and the knee this will be apparent as a lack of definition of the tendons and other structures around the joint, and the hock will appear to have lost the 'waist' to the joint.
 On other parts of the body the swelling will be 2- 5cm in diameter e.g. a golf ball.



2S = Substantial swelling
 Substantial swelling is an abnormal enlargement which is a prominent / pronounced extension away from the body.
 Around the hock and the knee (carpus) this will be apparent as an obviously rounded swelling $>5\text{cm}$ in diameter, e.g. the size of a clementine.
 On other parts of the body the swelling may be long, rather than round.



NB: swollen hocks = a thickening of the joint such that the usual joint anatomy becomes poorly defined or obscured.

6. Broken tails **Herd measure**

Whilst assessing the herd, record the number of animals that show evidence of a broken tail, including tails that are bent, short or injured.
 Investigate and record possible causes of any broken tails observed.

7. Response of cattle to stockperson	Herd measure
<p>Check whether the person present for the assessment is the regular stockperson.</p> <p>Throughout the visit, observe the response of the cattle to the stockperson as they approach and interact with the cattle. As far as possible assess response to the stockperson alone, rather than the assessor.</p> <p>Scoring: 0 = Sociable (to the stockperson) 1 = Relaxed 2 = Nervous</p>	
8. Cows needing further care	All animals on farm
<p>Assess the whole herd - including the milking herd, dry cows, in-calf heifers, calves, hospital pens and animals that are due to leave the farm.</p> <p>Record and comment on the number of any sick or injured cows that would benefit from further intervention (including mobility score 3 cows).</p> <p>Further interventions could include further treatment, hospitalisation (i.e. removal from the main herd) or culling.</p> <p>Do not include sick or injured cows already receiving suitable care.</p>	
9. Mastitis (Red Tractor Measure)	Records
<p>Record the number of recorded cases of mastitis per 100 cows for the previous 12 months.</p>	
10. Calf / Heifer Survivability (Red Tractor Measure – calves only)	Records
<p>Record the number of losses per 100 cows calved (for the previous 12 months) for the following categories:</p> <p>a) 0 - 24hrs - all calves (including stillborn) b) 24 hrs - 42 days - all calves c) 42 days - 1st calving - dairy heifers d) 1st calving - 2nd calving - dairy heifers.</p>	
11. Cull and Casualty Cows (Red Tractor Measure – a and b only)	Records
<p>Check farm records and record the number of animals in the last 12 months per 100 cows for the following categories:</p> <p>a) No. planned culls b) No unplanned culls or casualty cows (died or killed on farm) in the last 12 months. c) No. of enforced culls, e.g. TB.</p> <p>Please record reasons if known</p>	

AssureWel_Dairy_Protocol_Version 2_ October 2013



FF Reg. Number	
Date	
Assessor name	
Breed	
Average age	
Age range	

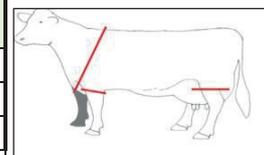
	Number	Housing		
Milking Cows		Housed	Part pasture	Pasture
Dry Cows		Housed	Part pasture	Pasture
Heifers (6 mnths-1st lactation)				
Calves (<6mnths m&f)				
Number of cows assessed				

Housing type	Cubicles	Kennels	Loose	Mixed	Other:	
Bedding type	Straw	Sawdust	Sand	Mats	Mattresses	Other:
Milking routine	1/day	2/day		3/day	Robotic	

Individual measures

Cow	ID	Mobility Good/Imperfect-0/1 Impaired - 2 Severely Impaired - 3	Body Condition Thin - (1 -<2) Moderate - (2 - <4) Fat - (4 - 5)	Cleanliness 0 = Clean: no dirt/only minor splashing 2 = Very dirty: plaques>forearm length	Hair Loss, Lesions and Swellings			
					Head & Neck	Body	Front Leg	Rear Legs
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

Total Scores	Mobility		Body Condition		Cleanliness		Hair Loss, Lesions & Swellings				
	Score	Cows /20	Score	Cows /20	Score	Cows /20	Score	Head & Neck	Body	Front Leg	Rear Legs
	0-1		Thin		0		0				
	2		Mod		2		H				
	3		Fat				L				
							1S				
							2S				



Mobility scoring carried out at pasture

General Comments

Herd measures

No. Broken Tails	
Broken Tails Comments / Causes	
Response to stock-person?	sociable relaxed nervous
Regular stock-person?	yes no
Cows needing further care (including score 3 cows)	
Comments (including cow ID)	
Is mobility scoring being carried out?	Yes No
Comment (including: who by, training, frequency and scope):	
No. of recorded cases of lameness per 100 cows for the previous 12 months. (%)	
Mastitis (no. cases per 100 cows)	
No. of recorded cases of mastitis per 100 cows for the previous 12 months. (%)	
Comment	

Mortality

Calf / Heifer Survivability (no. losses per 100 cows calved)			
Calves: birth - 24 hours m & f (%)	Calves: 24 hours - 42 days m & f (%)	Heifers: 42 days - 1st calving (%)	Heifers: 1st calving - 2nd calving (%)
Cull and Casualty Cows (number per 100 cows) (%)			
Planned culls (for replacement)	Reason:		
Unplanned culls or casualty cows (died or killed on farm)	Reason:		
Enforced culls e.g. TB	Reason:		

Changes

What changes to improve welfare (in resources, management or livestock) <u>have you made</u> in the last 12 months?	
What changes to improve welfare (in resources, management or livestock) <u>do you intend to make</u> in the next 12 months?	

Non-Compliance

Were any related non-compliances (standard number) issued:	Yes	No	If yes please indicate the relevant standard number:
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Advice

Is the producer interested in being contacted for advice about the results of any of these	Yes	No	The animal welfare advisor is available for any queries relating to the measures and to give advice on strategies to help improve results.
Point of contact			
Agrees to third party data use	Yes	No	During your visit, your herd has been assessed on the welfare outcome measures above. The feedback sheet is for your information only, please keep it in your records. The information on the sheet will be used for the purposes of the RSPCA monitoring and the development of RSPCA standards. If it were ever to be used more widely, data will be anonymised/pooled to ensure individual farm identification is not possible.

AssureWel Score sheet March2015

Index

Subject	Page	Subject	Page
Aerial contaminants		Calves – health and welfare	
E 3.4	8	H(C) 1.1 to H(C) 1.5	65
Ammonia		H(C) 1.6 to H(C) 1.6.2	66
E 3.6 to E 3.8	9	Calves – hutches	
Animal welfare officer		E(C) 3.1 to E(C) 3.8	61
S 1.3, S 1.3.1	47	E(C) 3.9 to E(C) 3.10	62
S 1.6, S 1.8 to S 1.9, S 1.11.1	48	Calves – management	
S 5.3	51	M(C) 1.1 to M(C) 2.1	63
S 5.5	52	M(C) 3.1 to M(C) 3.3	64
S 9.1	54	Calves – transport	
Behaviour		T(C) 1.1 to 1.3	67
E 2.6	7	Calves – slaughter/killing	
E 6.3	13	S(C) 1.1 to S(C) 1.2.2	68
M 3.2	21	S(C) 1.3 to S(C) 2.5	69
M 4.1.1	22	Calving	
H 1.11	33	E 7.1 to E 7.4	13
T 3.5	44	E 7.5 to E 7.9	14
E(C) 1.5	60	E 8.2	15
E(C) 2.3, E(C) 2.5	61	M 3.3, M 3.5	22
H(C) 1.3	65	H 1.5	32
Body condition		H 3.2	35
FW 1.6	1	H 6.1 to H 6.6	37
M 3.3	22	Calving aids	
H 1.5	32	H 6.5, H 6.6	37
H 3.1 to H 3.3	35	Carcass disposal	
Buildings		H 9.4, H 9.5	40
E 2.1 to E 2.10	7	Castration	
E 2.11 to E 2.12, E 3.3	8	M 3.3	22
E 3.5, E 3.6	9	H(C) 1.6	66
E 3.9	10	Casualty animals	
E 7.1	13	H 1.1	31
E 11.1 to E 11.6	18	H 9.1 to H 9.2	39
M 9.2	25	H 9.3 to H 9.5	40
Bull pens		T 2.1	43
E 11.1 to E 11.6	18	S 2.1 to S 2.1.1	48
Calves – environment		S 2.2 to S 2.3	49
E(C) 1.1 to E(C) 1.11	60	Cloned animals	
E(C) 1.11.1 to E(C) 3.8	61	H 6.3.2	37
E(C) 3.9 to E(C) 3.10	62	Colostrum	
Calves – food and water		FW(C) 1.3, FW(C) 1.3.1	57
FW(C) 1.1 to FW(C) 1.2	56	FW(C) 1.5	57
FW(C) 1.3 to FW(C) 1.9	57	S(C) 2.5	69
FW(C) 1.10 to FW(C) 1.19	58		
FW(C) 1.20 to FW(C) 2.5	59		

Subject	Page	Subject	Page
Cubicle housing		Embryo transfer	
E 2.2	7	H 3.6.1	37
E 5.1	11	Emergencies	
E 5.2 to E 5.11	12	FW 2.11	5
E 5.12 to E 5.19	13	M 2.4, M 2.5, M2.6	21
E 9.8	17	S 1.1.1	47
TC 1.2	29	S 2.1.1	48
		S 4.2.1	51
Dairy		S 5.5	52
E 10.1	17	Feeding space	
		FW 1.13	2
Disbudding		TC 1.1	29
M 3.3, M 3.5	22	Fencing	
H(C) 1.6	66	E 13.1 to E 13.4	19
Disease		Fibre	
FW 1.19	2	FW 1.8	1
FW 2.10	4	Flooring	
E 14.1, E 14.2	19	E 2.4	7
M 2.4, M 3.2	21	T 5.12	46
M 9.2	25	S 4.4	51
H 1.1	31	E(C) 1.10	60
H 1.5, H 1.6	32	Food	
S 9.2	54	FW 1.1 to FW 1.12	1
FW(C) 1.4	57	FW 1.13 to FW 1.19	2
FW(C) 1.27	59	E 10.1	17
E(C) 1.12	61	M 2.4	21
M(C) 1.4, M(C) 1.5	63	H 7.3	38
H(C) 1.2	65	T 5.5	45
Disinfectants		S 3.2	50
E 1.3	6	FW(C) 1.1 to FW(C) 1.2	56
Dogs		FW(C) 1.3 to FW(C) 1.9	57
M 8.1 to M 8.4	24	FW(C) 1.10 to FW(C) 1.19	58
M 9.17	28	FW(C) 1.20 to FW(C) 1.28	59
Downer cows		T(C) 1.1	67
H 1.1	31	Foot care	
H 8.1 to H 8.4	39	H 2.1	33
Drinking space		Handling	
FW 2.4	3	E 9.4	16
E 2.2	7	E 12.1 to E 12.6	18
FW(C) 2.2	59	M 3.4, M 4.1 to M 4.3	22
Dust		M 4.4 to M 4.8	23
E 3.6 to E 3.8	9	T 3.1	43
Electric goods		T 4.1 to T 4.7	44
M 4.7	23	T 4.8 to T 4.10	45
T 4.2	44	S 1.4	47
S 4.5	51	S 1.5.1	48
Electrical installations		S 4.1 to S 4.7.1	51
E 2.5	7	M(C) 1.3, M(C) 2.1	63
		S(C) 1.1	68

Subject	Page	Subject	Page
Horned cattle		Livestock markets	
M 3.6	22	T 1.1 to T 1.4	43
Hygiene		Loading	
E 9.1	16	E 4.7	11
E 10.1	17	E 12.5, E 12.6	18
M 3.3	22	T 2.1, T 3.1	43
H(C) 1.2	65	T 4.1 to T 4.7	44
Identification		T 4.8 to T 4.10, T 5.3, T 5.5	45
M 2.3	20	T 5.14	46
M 5.11	23	S(TV) 1.1	49
H 2.1	33	S 3.3	50
Injuries		Locomotion scoring	
E 5.11	12	M 3.3	22
E 5.16	13	Lying area	
E 9.13	17	E 3.11, E 4.1 to E 4.4	10
E 12.1	18	E 4.5 to E 4.8	11
M 3.7	22	TC 1.3	30
M 8.1	24	S 3.2, S 3.5	50
M 9.14	28	E(C) 1.7	60
T 5.6	45	Managers	
Inspection		FW 1.15	2
E 6.1	13	M 2.1 to M 2.3	20
E 7.9	14	M 2.4 to M 2.7	21
E 9.14, E 9.16	17	M 9.20	28
E 13.1	19	T 5.6	45
M 6.2	23	S 1.1, S 1.3, S 1.4	47
M 7.1 to M 7.2	24	S 1.5, S 1.8, S 1.10, S 1.11.1	48
H 2.1	33	S 3.1	50
T 5.14	46	Mastitis	
S 3.2, S 3.8	50	E 9.5, E 9.9	17
E(C) 2.2	61	H 1.5	32
Isolation pens		H 4.1 to H 4.5	36
FW 2.6	4	Medicines	
E 7.6	14	M 2.3	20
H 1.1	31	H 1.1	31
S 3.3, S 3.6	50	H 7.1 to H 7.6	38
Lairage		H 7.6.1 to H 7.7	39
S 1.4	47	Milking parlour	
S 2.1	48	E 4.7	11
S(TV) 1.1	49	E 9.1 to E 9.4.1	16
S 3.1 to S 3.8	50	E 9.5 to E 9.11, E 9.12	17
S 4.2.1	51	M 2.7	21
Lifting gear		Noise	
H 8.1, H 8.1.2	39	M 4.2	22
M 4.5	23	T 3.4, T 4.4 to T 4.5	44
Lighting		S 1.11 to S 1.12	48
E 6.1 to E 6.3	13	Ovum pick-up	
T 5.14	46	H 6.3.1	37
S 3.8	50		
S 4.2	51		
E(C) 2.1 to E(C) 2.5	61		

Subject	Page	Subject	Page
Other animals		Show animals	
E 14.1	19	H 5.1.1	36
M 9.1 to M 9.2	25		
M 9.3 to M 9.7	26	Slaughter	
M 9.8 to M 9.13	27	H 1.1	31
M 9.14 to M 9.20	28	H 4.3	36
		H 9.1 to H 9.2	39
Poisonous plants		H 9.3 to H 9.5	40
FW 1.18	2	T 2.1, T 3.2	43
		S 1.1 to S 1.4	47
Quarantine		S 1.5 to S 2.1.1	48
H 1.1	31	S 2.2 to S(TV) 1.5	49
E(C) 1.12 to E(C) 1.12.2	61	S 3.1 to S 3.8	50
M(C) 1.5	63	S 4.1 to S 5.4	51
		S 5.5 to S 6.2	52
Ramps		S 6.3 to S 7.3	53
E 12.6	18	S 8.1 to S 9.5	54
T 4.8	45	S 9.6	55
		FW(C) 1.19	58
Records		S(C) 1.1 to S(C) 1.2.2	68
FW 1.4	1	S(C) 1.3 to S(C) 2.5	69
FW 2.2.1	3		
E 2.1, E 2.2	7	Space allowance	
E 3.6	9	E 4.1 to E 4.4	10
E 9.10	17	E 4.5 to E 4.8	11
M 1.1, M 2.1, M 2.3	20	TC 1.1	29
M 2.7	21	TC 1.3	30
M 7.1, M 7.2, M 8.3	24	T 5.13	46
M 9.8, M 9.12 to M 9.13	27	S 3.5	50
M 9.18	28	E(C) 1.12.1	61
H 1.2, H 1.3.1	31	T(C) 1.3	67
H 1.4, H 1.6.1	32	S(C) 2.5	69
H 2.5, H 2.5.1	34		
H 3.1, H 3.2	35	Sticking	
H 4.4	36	S(TV) 1.1	49
H 7.4	38	S 7.1	53
H 9.5	40	S 8.1 to S 8.6, S 9.5	54
WA 1.2	42		
T 5.6, T 5.7, T 5.8	44	Stock-keepers	
S 1.3.1	47	E 11.6	18
S 1.10	48	M 2.2, M 2.3	20
S(TV) 1.4, S(TV) 1.5	49	M 2.4, M 3.1 to M 3.2	21
S 5.4	51	M 3.3 to M 3.7	22
S 5.6	52	M 6.1	23
S 6.6, S 6.6.1	53	M 7.1	24
FW(C) 1.4	57	M 9.20	28
H(C) 1.3	65	H(C) 1.6.1	66
S(C) 1.2.1	68		
		Straw yard accommodation	
Robotic milking		E 4.1, E 4.2	10
E 9.12 to E 9.17	17	E 9.8	17
		TC 1.3	30
Shelter			
E 3.11	10	Stunning	
E 8.4	16	S 1.4	47
S 3.2	50	S 1.5.1 to S 1.7	48
E(C) 3.5	61	S(TV) 1.1	49
E(C) 3.9	62	S 3.3	50

Subject	Page	Subject	Page
Stunning (continued)		Ventilation	
S 5.1	51	E 3.1 to E 3.4	8
S 5.5, S 6.1 to S 6.2	52	E 3.5 to E 3.8	9
S 6.3 to S 6.6.1	53	E 3.9 to E 3.13	10
S 8.6	54	M 6.4	24
S(C) 1.2, S(C) 1.2.2	68	E(C) 1.6	60
		E(C) 3.2	61
Supernumerary teats		Veterinary Health and Welfare Plan (VHWP)	
H(C) 1.6	66	E 8.3	16
		M 2.3	20
Thermal environment		M 8.3	24
E 3.1 to E 3.4	8	H 1.1, H 1.3	31
E 3.5 to E 3.8	9	H 1.4 to H 1.5	32
E 3.9 to E 3.13	10	H 2.1, H 2.4	33
		H 2.5	34
Training		H 3.1, H 3.2	35
M 2.3	20	H 4.1, H 4.4	36
M 3.1	21	H 7.6	38
M 4.2	22	H 8.4, H 9.1.2	39
M 5.2	23	WA 1.4	42
M 8.1	24	T 5.7	45
M 9.20	28	M(C) 1.5	63
H 2.4	33	H(C) 1.1 to H(C) 1.3	65
H 6.3	37	S(C) 2.1	69
H 9.1, H 9.1.2	39		
T 3.1 to T 3.2	43	Veterinary surgeon	
T 3.3 to T 3.5	44	FW 1.3	1
S 1.1 to S 1.4	47	FW 2.1	2
S 1.5 to S 1.11.2	48	E 4.7	11
H(C) 1.6.1	66	M 3.2	21
S(C) 2.1	69	H 1.1	31
		H 1.6	32
Transport		H 8.1, H 9.1.1, H 9.2	39
E 4.7	11		
M 2.3	20	Waste disposal	
T 1.1 to T 3.2	43	E 14.1 to E 14.3	19
T 3.3 to T 4.7	44	H 1.1	31
T 4.8 to T 5.11	45		
T 5.12 to T 5.17	46	Water	
S 2.3	49	FW 2.1 to FW 2.2	2
		FW 2.2.1 to FW 2.5	3
Transport		FW 2.6 to FW 2.10	4
E 4.7	11	FW 2.11	5
M 2.3	20	M 2.4	21
T 1.1 to T 3.2	43	T 5.4	45
T 3.3 to T 4.7	44	S 3.2	50
T 4.8 to T 5.11	45	S 4.7.1	51
T 5.12 to T 5.17	46	FW(C) 2.1 to FW(C) 2.5	59
S 2.3	49	T(C) 1.1	67
Troughs		Winter housing	
FW 1.12	1	E 1.4	6
FW 1.16	2	E 3.3	8
FW 2.4	3		
FW 2.8	4	Wood preservatives	
FW(C) 1.25, FW(C) 2.3	59	E 1.3	6



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