

Veterinary certificates for emergency or casualty slaughter bovine animals in the Republic of Ireland: are the welfare needs of certified animals adequately protected?

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Abstract

All emergency and casualty bovines in the Republic of Ireland that are deemed to be fit for human consumption must be accompanied to the slaughterhouse by an official veterinary certificate (VC). Cullinane et al (2010) conducted a review of bovine cases consigned under veterinary certification to emergency (ES) and casualty (CS) slaughter in the Republic of Ireland during 2006 to 2008. The current paper further evaluates these results, with emphasis on the period of validity, transport distance and transport conditions, and considers whether the current VC adequately protects welfare. Of 1,255 veterinary certificates, the median time between certification and slaughter was 1 (minimum 0, maximum 452) day, with one-fifth in excess of three days. The median straight-line distance between farm and slaughterhouse was 22 km; 82 and 98% study animals were transported distances of no more than 40 and 100 km, respectively. In 27% of VCs, no slaughterhouse was designated; hence the transport distance was not limited. In 77% of all cases, the disability/injury was related to the locomotor system, including 35% with limb fractures. Veterinary certification of the latter as being fit for transport appears to have been in contravention of animal transport and welfare legislation. The welfare of animals would be improved if each VC included a certified period of validity. In future, veterinary certificates should state clearly a maximum period of validity between certification and slaughter, a maximum distance that the animal should be transported and a minimum level of comfort under which the animal must be transported. Historically, in the Republic of Ireland, there was no suitable non-transport alternative available to cattle producers wanting to salvage an otherwise healthy animal that had suffered an accident or injury resulting in acute pain. An alternative is now available, with the introduction of an on-farm emergency slaughter policy.

Keywords: animal welfare, bovine, certificate, emergency, Ireland, slaughter

Introduction

In the Republic of Ireland, the transport of emergency and casualty cattle to slaughter for human consumption (in cases where animals are likely to have suffered from acute or chronic pain, respectively) requires that the animal is accompanied to the slaughterhouse by an official veterinary certificate (VC) (see Figure 1). The certificate must be completed on-farm by the owner's private veterinary practitioner (PVP) at the time of certification. Emergency slaughter (ES) relates to otherwise healthy animals that have suffered an accident or injury, which results in acute pain (such as a fracture), whereas casualty slaughter (CS) relates to animals suffering from chronic conditions (eg

mastitis, chronic arthritis or lameness) (Department of Agriculture, Food and the Marine 2009).

In 2008, a Food and Veterinary Office (FVO) (DG SANCO 2008) mission found that the Republic of Ireland was not in compliance with European legislation on the issue of bovine ES/CS transport to slaughter. During 2009, the practice of on-farm emergency slaughter was introduced in the Republic of Ireland. This practice is applicable where an animal is suffering from acute pain as a result of an accident, and where the animal is considered suitable for human consumption but is not fit for transport. In these cases, the relevant VC accompanies the carcass from the farm to the slaughterhouse.

Figure 1

SERIAL NUMBER

Appendix IV

VETERINARY CERTIFICATE TO ACCOMPANY AN INJURED/CASUALTY ANIMAL INTENDED FOR SLAUGHTER

Owner's Name.....
Address.....
Herd Number

Animal's
Description.....Breed.....Colour.....Sex.....
Tag Number.....

Clinical Examination Date..... Time.....

Clinical Findings and Disability

I wish to state, having carried out a clinical examination of the above described animal, that in my opinion it is not showing signs or symptoms of any disease or condition as per Annex 1 of Regulation 854/2004 which is likely to render its meat unfit for human consumption or to infect other animals in the slaughterhouse or to cause danger to health by contaminating the premises or meat therein.

I have not administered or authorised, nor am I aware of the authorisation and the administration of any medicament, antibiotic, chemotherapeutic or other substance whose withdrawal period has not been completed. I have explained the term "withdrawal period" to the owner or person in charge of the animal.

Transport Authorisation

I hereby authorise the transport of this animal to (state name of slaughterhouse)..... as it is my opinion that such transport is not likely to cause further injury or unnecessary suffering for the animal.

Signature of Veterinary Practitioner

Practice Stamp

Name (Block Letters).....

Address.....

Date..... **Time**

Declaration by the Owner or Person in Charge of the Animal

I wish to state, to the best of my knowledge and belief, that the above described animal has not been treated with any medicine whose withdrawal period has not been completed. The term "withdrawal period" has been adequately explained to me.

Signature.....

Name (Block Letters).....

Veterinary certificate to accompany injured/casualty animals intended for slaughter (FAWAC 2009).

The requirement for the VC was introduced in the Republic of Ireland under Regulation 9 of SI No 114/1995 — European Communities (Protection of animals at time of slaughter) Regulations 1995. A VC must accompany all ES and CS animals to slaughter if intended for human consumption. However, the recently updated VC does not include a certified period of validity, a certified maximum transport distance or certified specified conditions of transport. In the United Kingdom, the British Cattle Veterinary Association (BCVA) guidance for veterinary surgeons on the emergency slaughter of cattle (BCVA 2010) states that a CS animal can be transported to the slaughterhouse on an owner's declaration. However, if the owner is in doubt about the welfare implications of transport, he/she is advised to obtain veterinary advice regarding the transport of the animal. The PVP's advice may be recorded on the owner's declaration; alternatively the PVP may choose to sign the owner's declaration.

In a previous study, Cullinane *et al* (2010) conducted a review of bovine cases consigned under veterinary certification to emergency and casualty slaughter in the Republic of Ireland during 2006 to 2008. The current paper further evaluates these results, with emphasis on the period of validity, transport distance and transport conditions. The paper updates the reader on the current situation on the transport of emergency and casualty animals to slaughter, and considers whether the current VC adequately protects the welfare needs of the certified animal.

Materials and methods

The materials and methods have been described previously (Cullinane *et al* 2010). To summarise briefly, 1,255 veterinary certificates from four large slaughterhouses in the Republic of Ireland during 2006–2008 were enrolled in the study. VCs were cross-referenced with databases managed by the Department of Agriculture, Food and the Marine to gather further information relating to each VC animal and herd. Data were managed and analysed using Microsoft Excel (Microsoft Corporation, Redmond, WA, USA). Farm location data and straight-line transport distances, based on the Land Parcel Identification System (LPIS) and District Electoral Divisions (DEDs), were managed and calculated using Arcview 3.2 (Environmental Systems Research Institute Inc, Redlands, CA, USA).

Results and discussion

Period of validity

Based on the 1,255 VCs examined in this study, 798 (64%) and 457 (36%) animals were consigned on the basis of emergency and casualty slaughter, respectively. In total, 422 (33%) animals were slaughtered on the day of certification, and 1,026 (82%) within two days of certification. The median time between certification and slaughter was 1 (minimum 0, maximum 452) day. Table 1 shows the number (%) of cases, time from veterinary certification to slaughter and distance from farm to slaughter, by primary injury or other disability. Recumbent animals accounted for less than 1% of animals studied.

In its current format, the VC does not provide for a maximum period of validity to be specified. In a number of cases, there was a significant delay between the time the VC was issued and the time the animal was slaughtered. This delay could prolong the suffering of the animal and, in some cases, could facilitate the deterioration of its health. The reasons for the delay most often related to the availability of the slaughterhouse. If an animal fractured a limb on a Friday, the study showed that in a number of instances the animal was left until the following week before it was slaughtered. Some slaughterhouses only dealt with ES/CS animals on certain days each week so it appears that logistics may have taken precedence over the welfare of the animals concerned. In some instances there were delays in owners deciding to cull the animal and then, once that decision was made and the VC obtained, in some cases there were further delays in slaughtering the animal.

Grandin (2000) concluded that cows, which become recumbent on the farm, are almost impossible to load onto a truck in a low stress manner. Although recumbency was only occasionally (< 1%) identified as the 'suspected disability', it is possible that recumbent animals were not uncommon, given the nature of injuries or conditions recorded on a number of VCs. This would include those with obturator paralysis, those with both hocks fractured, those with spinal and pelvic injuries, and those with both hind legs fractured. The study VCs showed several examples of farmers not acting promptly to cull injured and chronically arthritic or lame animals. In some cases, from the information available on the VCs in the study, it appears that animals suffering pain were allowed to endure further, avoidable, suffering before a certificate was sought. Examples from the VCs include an animal with two injured hocks and an injured back that had been extracted from a drain two months previously, fractured foreleg of three weeks duration, or granulation tissue on both hocks due to prolonged recumbency, and chronic lameness as a result of infection in the fetlock of 12-month duration. This latter animal was not transported until six days after the VC was obtained. There is an obvious reluctance on the part of some owners/keepers to make a timely and decisive decision on when to cull animals, contrary to Council Directive 98/58/EC (European Council Directive 98/58 1998).

The previous study showed that the time between veterinary examination and actual slaughter was in excess of three days for one-fifth of all ES/CS animals. Of these, it was noted that the elapsed time for a particular animal with a fractured hip was 23 days, a particular animal with a fractured tibia eight days, and an animal diagnosed with a fractured foreleg was eleven days (Cullinane *et al* 2010). These are some examples where there appears to have been a delay in slaughtering animals with fractures after the PVP had issued the VC. A stipulated period of validity of the VC, as decided by the clinical evaluation of the PVP, could have avoided any undue delay in these cases. The physiological status of a sick or injured animal can deteriorate quickly in a few days. Webster (2005) states that the significance of an animal welfare problem is

Table 1 The number (%) of cases, time from veterinary certification to slaughter and distance from farm to slaughter, by primary injury or other disability. The data in *italics* are further detail of the cases in the 'Locomotory' category and the percentages listed for these subcategories relate to the total number of locomotory cases.

Clinical findings/Suspect disability	Number of cases (%)	Average days from certification to slaughter	Maximum days from certification to slaughter	Average distance farm to slaughter (km)	Maximum distance farm to slaughter (km)
Cardiac	19 (1)	4	45	16	46
Digestive	72 (6)	3	65	22	85
Eye	13 (1)	3	25	42	102
Head	23 (2)	1	4	25	80
Integument	20 (2)	2	22	32	151
Locomotory	965 (77)	3	221	27	188
<i>Fracture/injury</i>					
Foreleg	96 (8)	1	11	26	108
Hindleg	303 (24)	2	61	25	150
Leg (not specified)	80 (6)	1	17	28	129
Spinal/back	146 (11)	5	183	27	188
Hip/pelvis	120 (10)	4	48	29	151
Shoulder	23 (2)	2	8	29	76
<i>Lameness</i>					
Foreleg	12 (1)	4	27	36	126
Hindleg	59 (5)	4	43	28	166
Leg (not specified)	54 (4)	4	57	33	151
Deformed Legs	12 (1)	7	23	27	48
Paralysis	25 (2)	5	52	30	103
Spastic Paresis	8 (1)	32	126	20	42
Recumbent	9 (1)	2	5	45	88
Other	18 (1)	14	221	22	61
Reproductive	79 (6)	2	32	31	166
Respiratory	21 (2)	2	21	21	116
Other	43 (3)	14	452	32	118

defined by its incidence, severity and duration. Any delay in dealing with ES/CS animals causes further suffering. The specification of a period of validity on all VCs is essential for the welfare of the animals concerned. It must be emphasised, however, that both animal owners and PVPs have legal responsibilities to the animals under their care, and an omission on the VC does not lessen their responsibilities or obligations. The failure to care for ill or injured animals appropriately and without delay appears not to be compliant with the European Council Directive 98/58, concerning the protection of animals kept for farming purposes. This Directive is currently included in the European Communities (Welfare of Farmed Animals) Regulations 2010 (SI No 311/2010 2010).

Transport distance and conditions of transport

The median, straight-line distance between each farm and the corresponding slaughterhouse was 22 (minimum < 1, maximum 188) km. In total, 1,030 (82%) and 1,227 (98%) study animals were transported straight line distances of 40 and 100 km, respectively. In 965 (77%) cases, the disability/injury related to the locomotor system (Table 1). The authors checking each VC in the study noted that in the suspected disability section the PVP had specifically diagnosed 340 (35%) of these animals as having suffered a fracture.

A requirement of the VC is that transport is arranged in advance and to a named slaughterhouse. In 27% of the VCs studied, however, a slaughterhouse was not designated.

Consequently, the transport distance was not limited. Article 3 of EC Regulation 1/2005 (Council Regulation [EC] 1/2005 2005) states that “all necessary arrangements have been made in advance to minimise the length of the journey”. This would involve making arrangements with the nearest slaughterhouse. Looking at individual VCs in the authors’ opinion, some animals were transported over unacceptable distances. As the distances in the study are straight-line distances, they are underestimates of the distances that the animals were actually transported. Examples from the VCs in the study include a fractured tarsus with a transport distance of 116 km, a fractured humerus (112 km) and hind-leg paralysis (65 km). An animal with a fractured femur was transported 185 km. Except in a very few cases, there were slaughterhouses within acceptable distances. In cases where suitable facilities are not available, the owner must be prepared to accept the fact that transport of the live animal is not an option.

Further suffering is unavoidable if a bovine with a compromised locomotor system is transported (Broom 2000; Grandin 2000). Broom (2000) reported that quadrupeds prefer to stand with their legs spread out so that they will not stumble or fall when the vehicle moves. Tarrant and Grandin (2000) also highlighted that loss of balance on moving vehicles is a major consideration in cattle transport. Animals that are permitted to travel under the VC must be able to move independently and without pain as required by current European legislation (Council Regulation 1/2005 2005) and must be transported to the nearest slaughter plant and then only if that slaughterhouse is within a reasonable distance. The ‘reasonable’ distance could be a maximum transport distance stipulated on the VC based on the PVP’s clinical evaluation of the animal. If there is any doubt regarding the welfare of the animal, then the alternative of on-farm emergency slaughter, which is now available, should be chosen. It is important to emphasise that Article 3 of the European Regulation 91/628/EEC (European Regulation 91/628 [EEC] 1998) and European Regulation 1/2005 (European Regulation [EC] 1/2005 2005) require that no animal is transported unless it is fit for the intended journey. Annex 1 of these Regulations does allow for the transport of sick or slightly injured animals, but only if the transport would not cause further unnecessary suffering.

EC Regulation 1/2005 Annex 1 Chapter 1 (Council Regulation [EC] 1/2005 2005) states that all animals shall be transported in conditions guaranteed not to cause them further injury or unnecessary suffering. It is the authors’ opinion that the PVP should make specific recommendations regarding the conditions of transport as appropriate to the condition of the animal. The animal should be transported in conditions guaranteed not to cause it either unnecessary suffering or further injury. Conditions might include bedding type, bedding depth, some means of restraining the animal and whether the certified animal should be penned on its own. The transport vehicle itself should be in compliance with EC Regulation (Council Regulation [EC] 1/2005 2005). Even though the transport of the certified animal, if fit for transport, is permitted by the PVP, this fact does not absolve the transporter from their responsibilities under EC Regulation (Council Regulation [EC] 1/2005 2005).

The Food and Veterinary Office

The FVO (DG SANCO 2008) mission reported examining a number of issued VCs that authorised the transport of animals that were clearly unfit for transport. These included VCs for recumbent animals, animals with fractured limbs and animals with pelvic or spinal injuries. The FVO reported that these VCs were contrary to Article 3(b) of Regulation 1/2005 and to Annex 1 Chapter 1 of the same Regulation. The findings of the present study concur with the FVO findings. Although information provided on a number of the VCs was limited, the study results indicate that 35% of the animals had suffered limb fractures (Cullinane *et al* 2010). In order to prevent further suffering, these animals should either have been slaughtered on-farm for human consumption or euthanased and disposed of as an animal by-product. Annex 1, Chapter 1, 2(a) of EC Regulation 1/2005 (Council Regulation [EC] 1/2005 2005) states that animals that cannot move independently without pain or walk unassisted should not be transported.

In addition, the FVO (DG SANCO 2008) mission also reported that the Official Veterinarians (OVs) contributed to the unnecessary suffering of the animals that were certified as they did not verify that the animals had been transported in line with relevant legislation, contrary to Regulation 854/2004 (Council Regulation [EC] 854/2004 2004) and that no measures had been taken by them when transport legislation was contravened, contrary to Regulation 854/2004 (Council Regulation [EC] 854/2004 2004).

The veterinary certification of ES and CS is a particularly important area for animal welfare, yet few studies of this type have been conducted previously. It is important that the management of both ES and CS animals be conducted in a manner such that only animals that are fit for transport are in fact transported. While food safety considerations and the economic perspective of the stakeholders must be considered in the decision-making process, the welfare of the animal and its fitness to travel must be the primary consideration.

Changes brought about by the Competent Authority

Historically, in the Republic of Ireland, there was no suitable non-transport alternative available to cattle producers wanting to salvage an otherwise healthy animal that had suffered an accident or injury resulting in acute pain. The FVO mission recommended that the competent authority ensured that animals not fit for transport were slaughtered on the spot as required by Article 12 of the European Council Directive 93/119. The Department of Agriculture, Fisheries and the Marine (DAFM), ie the competent authority, responded without delay to the FVO report concerning animal welfare issues during transport at the time of slaughter by introducing an on-farm emergency slaughter policy in mid-2009. The Farm Animal Welfare Advisory Council (FAWAC) produced a comprehensive explanatory booklet to coincide with the introduction of the on-farm emergency slaughter (FAWAC 2009). This scheme is now more widely available and is utilised increasingly.

Changing the attitude of some stakeholders towards injured animals and making them more aware of their legal obliga-

tions is paramount. Education on animal welfare has improved but must become more freely available and continually updated. In recent years there have been a number of initiatives to bring about change and improvements in this area. The relevant representative bodies have worked together to improve awareness of the importance of animal welfare. DAFM, the Veterinary Council of Ireland, Veterinary Ireland and the Local Authority Veterinary Services established a lecture presentation on ES/CS transport and on-farm emergency slaughter. This presentation was presented at PVP and OV clinical meetings throughout the country during 2010. Official Veterinarians were provided with a comprehensive standard operating procedure manual to facilitate the enforcement of the relevant European regulations. DAFM also held meetings with other stakeholders, including farming groups in order to increase the awareness of the legislation concerning the welfare of ES/CS animals, fitness to transport and on-farm slaughter. These education initiatives have been welcomed advancements.

All veterinarians have to be prepared to make a professional judgment on the suitability of the animal for transport, for on-farm emergency slaughter or, if necessary, immediate euthanasia and disposal. DAFM has actively provided an awareness of these issues by actively organising and supporting meetings with all stakeholders; arranging training programmes for both PVPs and OVs and continuing to provide training and advice where required. While it is widely recognised that veterinarians are the best placed professionals to advise on the welfare of animals, it is implicit that they require ongoing specific training (Bonafos 2009).

Conclusion

The use of transport authorisation by VC is only applicable where animals are slightly injured or ill and transport would not cause additional suffering (Council Regulation [EC] 1/2005 2005). In these cases, the issues of VC period of validity, transport distance and transport conditions have not been addressed in the recently updated VCs used to accompany an injured animal intended for slaughter. Cullinane *et al* (2010) identified these issues previously. This current paper serves to further highlight the unacceptable consequences of these deficiencies in the present VC as far as animal welfare is concerned.

Notwithstanding the recent availability of on-farm emergency slaughter in the Republic of Ireland, many VCs are and will continue to be issued for transport of ES and CS animals to slaughter where the animals are slightly injured and where their transport will not cause further suffering. The availability of the ES/CS certification process in such circumstances allows farmers to salvage monetary value from injured animals. However, if this is to continue in the current climate, where the public's perception on animal welfare has an increasing influence on both policy and food sales (Horgan & Gavinelli 2006), there must be changes. It is the authors' contention that the changes to the veterinary certificate proposed in this paper would improve significantly the welfare of the animals concerned.

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