Welfare of competition horses

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Summary: In the large majority of cases and circumstances, horses benefit from their association with man. However, abuse of horses can occur, due to neglect or through the pressures of competition.

The welfare of all animals, including competition horses, has become increasingly topical over the past ten years.

Equestrian sport is coming under closer public scrutiny due to reports of apparent abuse. The bodies responsible for regulating these sports strenuously endeavour to protect the welfare of horses which compete under their rules and regulations.

The Fédération Equestre Internationale (FEI: International Equestrian Federation) is the sole authority for all international events in dressage, show-jumping, three-day event, driving, endurance riding and vaulting. The FEI rules illustrate the ways in which the welfare of competing horses is safeguarded.


INTRODUCTION

The relationship between man and horse goes back many millennia. Horses have probably been raced by their owners for as long as they have been ridden.

Prior to World War I, the horse was indispensable for national survival, in both economic and military terms. The period between the two World Wars saw a gradual decline in the importance of the horse and a reduction in the number of people skilled in dealing with horses. After World War II, working horses virtually ceased to exist.

Of course, there are many countries in which the rural and urban communities still depend heavily on equids for survival, but consideration of these situations is not within the scope of this paper.

By contrast, a veritable explosion of interest in the horse as a leisure animal has occurred in the last fifty years. This has coincided with a period of greater mechanisation and a resultant increase in leisure time. In many cases, this has brought many newcomers into close contact with horses. People who do not come from a rural community, and who have no inherent knowledge of the horse as a living entity, know little of the needs of the species or the optimum methods of care.

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Few people are wantonly cruel to animals, but neglect can often result from ignorance and lack of knowledge. This is seen as a failure in the responsibility to care for the welfare of animals. In principle, a horse which is adequately fed, housed, watered and exercised is likely to be content and able to undertake its duties effectively.

However, in countries where large numbers of horses are "broken in" each year, a percentage of injuries and deaths is still considered acceptable, and some trainers continue to claim that breaking-in by force (where the principle appears to be to break the spirit of the animal and make it submissive to the demands of the rider) can nevertheless result in a useful animal.

In 1992, a great deal of adverse publicity was given to the welfare situation of the competition horse.

Firstly, there were three fatal falls during the cross-country phase of the three-day event at Badminton (United Kingdom). Then the National Broadcasting Company (NBC) in the United States of America (USA) presented somewhat biased coverage of the three-day event at the Olympic Games in Barcelona, resulting in the expression of outrage by the media and the public. Subsequently, a horse suffered a broken back during a show-jumping event at Wembley Stadium in London. Finally, when a horse named "Mr Brooks" broke a leg during the Breeders Cup in Florida, a wave of adverse publicity ensued.

This combination of circumstances inflicted considerable damage on the image of equestrian sport. This image was further tarnished by the publication in *Sports Illustrated* (USA) of a story on fraud, which described a case where horses had allegedly been killed to claim insurance money.

Furthermore, a recent edition of *Animals International* (the publication of the World Society for the Protection of Animals) (1) grouped together on a double-page spread photographs and accompanying texts on the following subjects:

- clubbing seals to death in the Arctic
- bear baiting, using bull terriers, in Asia
- a horse falling at the Olympic three-day event in Barcelona.

The caption referring to the last of these reads, "Cross country cruelty at the Olympics" and goes on to state that "horses collapsed from exhaustion" and "numerous horses were withdrawn or eliminated due to fatigue". In fact, only two horses suffered from exhaustion (a serious and regrettable occurrence, in itself) but both fully recovered, while 72 horses out of a total of 82 starters and all 18 teams completed the endurance phase, representing an excellent result and without doubt the most satisfactory in Olympic history.

The negative publicity generated by television coverage persistently showing viewers a lengthy succession of falls (including at least one which had no connection at all with the Olympic Games in Barcelona) undermined the efforts being made by responsible organisations to improve the welfare of competing horses.

**CONTROL OF EQUESTRIAN COMPETITIONS**

Different equine activities (racing, polo, show-jumping, etc.) are governed by different bodies, each of which has a separate set of rules and regulations designed to safeguard the health and welfare of the participating horses.
Clearly, the scale of control will vary according to the size and status of the event. The role of the *Fédération Equestre Internationale* (FEI) can be considered as an example.

The FEI is the sole authority for all international events in dressage, show-jumping, three-day event, driving, endurance riding and vaulting. The FEI was founded in 1921 by the national equestrian federations of Belgium, Denmark, France, Italy, Japan, Norway, Sweden and the United States of America, and has since grown to the current total of 103 affiliated national federations throughout the world. The FEI secretariat is based in Lausanne, Switzerland.

The Olympic Games take place every four years, and the equestrian section of these games includes the disciplines of dressage, show-jumping and three-day event. In the even years between the Olympic Games, the FEI World Championships (now known as the World Equestrian Games) take place in the same equestrian disciplines, with the addition of driving, endurance riding and vaulting. Every year, or in alternate years, other FEI World, Regional and Continental Championships take place. Participating in these Championships are senior riders and drivers, and also young riders, juniors and pony riders.

Many other international events in the above disciplines are organised each year. Over 400 events take place per annum and, on average, 100 horses participate in each event.

National federations administer the sport at the national level and the FEI administers affairs at the international level. Committees formulate the rules and regulations and look after the interests of the various disciplines.

The FEI maintains a list of officials, nominated by their national federations, who are expected to keep informed of FEI matters by attending appropriate courses and seminars in their specific fields.

The FEI has a system whereby each affiliated national federation is requested to nominate one Contact Veterinarian and a number of Event Veterinarians, depending on the international activities of the country.

The Contact Veterinarian should maintain communication with the FEI and should be familiar with equestrian sport. He or she should be aware of new developments in the epidemiology and control of national and international equine diseases, and should be fully informed with regard to health requirements for the import and export of horses to and from the country. Clearly, to perform these functions efficiently, the Contact Veterinarian should have ready access to, and maintain contact with the national veterinary authority.

The Event Veterinarian should be professionally and practically involved in the equine field. He or she acts as the Veterinary Delegate or as a member of the Veterinary Commission at an international event and ensures that the veterinary aspects of the event conform to FEI requirements.

The FEI now has a network of some 500 Contact and Event Veterinarians in the affiliated national federations around the world, and is therefore in the position (albeit unofficially) of having access to veterinary and animal health information in many parts of the world.

At least one Event Veterinarian, known as the Veterinary Delegate, is appointed to be responsible for the control of the veterinary aspects of each international event. At major events, a Veterinary Commission is appointed. The President of the Commission
is usually a representative of the host nation, assisted by an associate member (also from the host nation). In addition, a Foreign Veterinary Delegate is appointed. The reason for appointing a Foreign Veterinary Delegate is to fulfil a supervisory role in ensuring that all countries are treated equally and fairly with regard to veterinary matters. The FEI then follows up reports with member national federations and, if problems have arisen, attempts to find solutions for future events.

**VETERINARY SERVICES AT EVENTS**

The veterinary services at events controlled by the FEI differ from those elsewhere. Small shows and pony club rallies frequently rely on a local veterinary practice to respond to requests for attention, whereas first-aid and treatment at larger meetings and polo matches may be provided by one or more veterinary surgeons who are retained to be in attendance, frequently on an honorary basis.

Horseracing authorities also provide structured veterinary coverage, and this is frequently divided into two separate branches. In the United Kingdom, for example, Veterinary Officers employed on a full-time basis by the racing authorities deal specifically with welfare matters (fitness to compete, use of the whip, racing equipment, etc.). The Veterinary Officers have further responsibilities for disease control (vaccine status, hygiene, contagious disease, etc.) as well as for veterinary aspects of the integrity of horseracing (identification, sampling for dope testing, poor racing performance, etc.). During racing, direct veterinary care for the horses is supplied by Veterinary Surgeons appointed by the management of each racecourse. These Veterinary Surgeons are deployed to suit the layout of the course and the style of racing, and their role is to ensure that proper emergency cover is available, and that there are adequate facilities for the treatment and transportation of injured horses (to an approved referral centre if necessary), or for the humane destruction of injured animals for which treatment is inappropriate.

At this type of equine event, good communication by radio is essential, and a properly maintained network is made available by the racing authorities.

The criteria prescribed by the FEI for the provision of veterinary services at events is summarised below.

** Stable area**

The FEI lists the following requirements for the stable area at events:

- Suitable stables should be provided in a secure area with adequate lighting and ventilation. Loose boxes of at least 9 m² are recommended, although 20% of the loose boxes must be at least 12 m² to accommodate the largest horses. These should be cleaned and disinfected before the arrival and after departure of the horses.

- At least two loose boxes should be provided for diseased or injured horses.

- Adequate and suitable fodder should be made available, although many competitors provide their own.

- Straw, wood shavings and paper should be available for bedding.

- Adequate isolation facilities should be situated well away from other stables but within a secure location.
In line with the long and fruitful collaboration which the Office International des Epizooties (OIE) has enjoyed with the FEI, the OIE decided, during its 54th General Session in May 1986, to organise some permanent co-operation with the three principal international equine organisations, i.e. the International Trotting Association, the International Conference of Racing Authorities and the FEI.

These three organisations participated in a Joint Meeting at the OIE headquarters in March 1987, and signed an agreement based on permanent collaboration in the diagnosis and epidemiological supervision of the most important contagious equine diseases. This agreement encourages, among other matters, close co-operation between the national veterinary authorities and national equestrian federations in each country.

Furthermore, in order to help in monitoring outbreaks of non-notifiable and notifiable equine diseases around the world, over 20 countries also subscribe to the International Collating Centre (ICC) at the Animal Health Trust in the United Kingdom. The ICC issues quarterly reports of disease outbreaks, which form the basis of a world-wide information exchange service.

**Veterinary arrangements**

The following must be available on a 24-hour basis during events:

- at least one Treating Veterinarian, who must not be a member of the Veterinary Commission or a Veterinary Delegate
- the services of a farrier
- an effective method of communication for all Treating Veterinarians on duty
- ready access to an equine clinic, including X-ray facilities.

**Assistance for diseased or injured horses**

Provisions for diseased or injured horses should include the following:

- at least one Treating Veterinarian on duty at the arena during competition, who is fully equipped to deal with all emergencies, including possible euthanasia
- first-aid stations
- screens to be erected around injured horses (i.e. to shield them from the public)
- a low-loading transporter to remove dead or seriously injured horses from the course or the arena, and sufficient personnel familiar with such procedures
- additional Treating Veterinarians and transporters are required for the "endurance" phase of three-day events and the "marathon" phase of driving events.
HORSE PASSPORTS

An efficient disease control survey or programme requires provisions for the accurate identification of animals, and records of vaccination and testing for transmissible diseases. The “horse passport” can assist in the achievement of this goal.

All racehorses are required to be issued with passports, and all other horses which compete internationally must possess an FEI passport or a national passport approved by the FEI. A national passport system can readily be established, using the FEI passport as a model.

FEI passports contain the following information regarding the horse:
- details of ownership
- confirmation of identity at each event attended (also providing a record of all events and countries visited)
  - any medication (dope) tests undergone
  - passport number, name, changes of name, year of birth, country of birth, sex, colour, breed, registration number, sire, dam, sire of dam (where known), description and silhouette
  - a record of vaccinations against equine influenza (compulsory) and other diseases (optional)
  - a record of all official laboratory health tests for transmissible diseases
  - official endorsement by customs at frontiers.

Similar information is included in passports for racehorses. There is no chronological record of events attended, but the passport is routinely and regularly inspected and endorsed by veterinary officers during identification and vaccine status checks, and during the sampling procedures.

The passport is a valuable certificate of identification, health and ownership, and provides a record of the international movements of each horse. Following some minor modifications, the passport was officially adopted by the International Committee of the OIE at the 61st General Session in May 1993.

MEDICATION CONTROL

As described above, the FEI and the racing authorities place great emphasis on ensuring both the health and welfare of participating horses. This includes strict control of medication.

Doping is an emotive and topical subject, and the majority of international sports federations are striving hard to be seen to administer a “dope-free” and healthy sport. However, keeping horses healthy and sound can be a major problem, and the dividing line between using medication to treat injury and disease on the one hand, and preparing horses for competition on the other, is very narrow and difficult to define.

In principle, it is obviously right to use medication to cure injuries and disease, but it is patently wrong to use drugs to influence the performance of a horse at the time of competition. Within the FEI, it is accepted that the commercial aspects of the sport exert great pressure on owners to enter horses for competitions, sometimes more frequently than they should.
Other factors are also involved. For example, the ground surface on which animals are required to compete is not always ideal. Furthermore, horses must often compete against the clock, which necessitates twisting and turning at speed, on joints which are not necessarily designed to withstand such stresses.

Efforts are being made to counteract the pressures of competition and, although the international calendar is becoming more full, the FEI is attempting to arrange dates of events in a geographical sequence to minimise travel. In addition, a consultant has been appointed to advise on ground surfaces, and course designers have been asked to pay greater attention to the welfare aspects of courses.

This naturally places great emphasis on physical fitness, a subject which has not always received the attention it deserves. Despite advances in modern training techniques, prolonged exercise on roads, which was unavoidable before the advent of mechanised transport, could still be recommended as being of great benefit. In the past, horses which could not stand up to such rigorous exercise were quickly weeded out, leaving only the soundest animals to compete and subsequently breed. Sadly, in these busy modern times, the necessity for physical fitness is easily neglected, as a routine is established which takes the horse from stable to indoor school and back to stable. This can lead to attempts to cover up the inadequacies of this regime through the use of medication, to the detriment of the horse and its welfare.

Apart from these welfare considerations, the FEI works on the principle that all horses taking part in competition must compete on their inherent merits. The use of a “prohibited substance” might influence the performance of a horse or mask an underlying health problem, and could falsely affect the outcome of a competition, thereby also having an influence on the genetic potential of the horse.

The FEI follows very closely the stringent system which applies in horseracing. At a meeting in Rome in 1977, an International Conference of major racing administrators, analysts and veterinarians approved a list of prohibited substances. This concept of a list of substances, with minor modifications from time to time, has remained in force to the present day.

The relevant FEI regulation currently states that “any horse found to have a prohibited substance in any of its tissues, body fluids or excreta at an event as a result of a medication test is automatically disqualified from all competitions at that event.”

It may be argued that it is unrealistic to ban the administration of non-steroidal anti-inflammatory drugs (NSAIDs) to alleviate the discomfort of a horse. But for a rider to comment, “I gave him some Bute to pass the veterinary inspection” is surely an indication that the welfare of the horse is being ignored.

Why does the FEI take this puritanical stand and how does it set about enforcing it? Primarily, this policy is designed to protect the integrity of the sport and the welfare of the competing horses. Public perception of equestrian sport can be adversely affected by reports of drug misuse or other issues involving any form of abuse to horses. Publicity surrounding the recent exposure of training methods by certain international riders in Europe has been highly damaging to the reputation of equestrian sport.

As prize money and rider sponsorship deals increase in value, the pressures on the competitor become greater and greater. The temptation to cheat the system, whether by the use of drugs or by more sinister means, is omnipresent. There is always a minority in any sport which succumbs to this temptation. The FEI and its major sponsors are aware
of this. The latter have indicated their dissatisfaction by threatening to withdraw sponsorship if the FEI does not demonstrate, in a tangible manner, a serious intention to tackle the problem.

It has been stated that the FEI is totally opposed to the use of drugs at the time of competition. This must be qualified by advising that threshold levels/ratios have been established for the following substances: arsenic, salicylic acid, theobromine, nandrolone and dimethyl sulfoxide. Recognising that banal illness and injuries do occur at events, provision is made that these may be treated following receipt of written approval from the Veterinary Commission. The Ground Jury will then decide, on the recommendation of the Veterinary Commission, whether the horse may continue to compete at the event.

A minimum of 5% of competing horses is selected for sampling either randomly or specifically. In addition, the first four individuals and at least one horse from each of the first four teams must be sampled at the Olympic Games, World and Senior Continental Championships and World Cup finals. Also, horses may be selected for sampling if there are grounds for suspicion (a notable example being a horse which is of doubtful soundness at the inspection before competition and appears to have fully recovered by the time of reinspection).

At present, the FEI regulates the control of medication at major events by using one of two slightly different systems, as follows:

a) From the mid-1970s until the end of 1989, control was enforced by the respective organising committees. The veterinarian appointed by the committee collected the samples and sent them to any one of a number of FEI-approved laboratories for analysis. The laboratory subsequently reported the results to the FEI which instigated proceedings in the case of a positive report. Many such cases did not stand up to investigation by the legal system due to breakdowns in the procedure, which were usually caused by veterinarians who performed the function so infrequently that they did not realise the necessity of respecting the chain of evidence.

b) In 1990, the FEI introduced its own Medication Control Programme (MCP), initially only in Western Europe. Under the MCP, a number of veterinarians are employed by the FEI on a daily fee basis to collect samples at events. Samples are forwarded for analysis to the Horseracing Forensic Laboratory (HFL) in Newmarket, United Kingdom, which reports to the FEI. The HFL is also responsible for analysing all the post-race samples collected at United Kingdom racecourses (excluding those in Northern Ireland), as well as having contracts with many other equine sporting and horseracing authorities. Under this new regime, few cases have failed to withstand the scrutiny of the legal system.

Under both systems in 1990 (the first year of the newly-introduced MCP), a total of 965 horses at 196 FEI events were sampled world-wide. Of these samples, 38 revealed the presence of 17 different prohibited substances.

However, of the 965 horses tested, 617 animals were sampled under the MCP at 121 events, and 36 of these samples revealed the presence of prohibited substances.

In the same year (1990), the HFL analysed 12,366 samples. A breakdown of the results of these tests is shown in Table I.

The decrease in the percentage of positive findings from FEI samples, from 5.8% to 2.3% in three years, suggests that the MCP is having a beneficial effect in controlling drug misuse in horses competing at FEI events.
TABLE I

Results of testing performed at the Horseracing Forensic Laboratory in Newmarket, United Kingdom, for the presence of prohibited substances in samples from competition horses submitted by various organisations between 1990 and 1992

<table>
<thead>
<tr>
<th>Source of samples</th>
<th>Year</th>
<th>No. of samples</th>
<th>Positive samples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jockey Club of Great Britain</td>
<td>1990</td>
<td>7,355</td>
<td>14 (0.2%)</td>
</tr>
<tr>
<td>Overseas Authorities (including FEI)</td>
<td>1990</td>
<td>5,011</td>
<td>112 (2.2%)</td>
</tr>
<tr>
<td>Fédération Equestre Internationale (FEI)</td>
<td>1990</td>
<td>617</td>
<td>36 (5.8%)</td>
</tr>
<tr>
<td></td>
<td>1991</td>
<td>875</td>
<td>33 (3.8%)</td>
</tr>
<tr>
<td></td>
<td>1992</td>
<td>1,058</td>
<td>24 (2.3%)</td>
</tr>
</tbody>
</table>

As scientific methodology becomes more sophisticated, infinitesimal quantities of substances can be detected for longer periods after administration. Although the FEI appreciates and welcomes the ongoing improvements in analytical sensitivity, the Federation recognises the difficulty which these developments cause to those responsible for preparing a horse for competition. In addition, the regulatory authority is faced with a dilemma. On the one hand, is the detection of trace amounts of substances genuinely desirable, when these may have little or no pharmacological action? On the other hand, as the potency of drugs increases, it is clearly necessary to detect these small amounts, as they may well constitute a gross abuse of the horse while awarding the animal an unfair advantage in competition.

In view of the above, the FEI has established a preliminary investigation body, the Medication Sub-Committee, to screen the analytical data and provide an essential buffer between the “all or none” position required of analytical science and the commonsense flexibility of everyday existence. This body advises the legal system whether the person responsible (competitor) has a genuine case to answer, and helps to ensure – before proceeding with a prosecution – that the analytical data will withstand the subsequent detailed investigation at an enquiry. The formation of this body is considered to be a major step forward in recognising current trends in the preparation of horses while still maintaining the best interests of the sport as a whole.

The FEI Judicial Committee fully investigates all instances of the presence of a prohibited substance. If the person responsible is found guilty, the Committee will impose penalties, ranging from compulsory disqualification and monetary fines to periods of suspension. Appeals against Judicial Committee decisions may be presented to the International Olympic Committee Court of Arbitration for Sport (CAS).

To promote the welfare of the horse and a positive public perception of the integrity of equestrian sport, a strong stand is taken against the use of drugs at the time of competition. Competitors must be made aware that public confidence must be maintained in the interests of the sport, and therefore of the competitors themselves.

In 1990, the Hurlingham Polo Association (HPA), which (in common with many other horse sport associations) had not previously published a medication control policy, produced a list of permitted substances, together with a list of maximum permissible concentrations for some drugs. In so doing, the HPA has recognised the need to control drug use in this most robust of sports.
FEI ETHICS REVIEW COMMITTEE

In 1989, the FEI General Assembly agreed to establish the Ethics Review Committee. This Committee is composed of representatives of the administrators of the sport and other interested professionals, including the chairmen of the Judicial and Veterinary Committees, riders from each of the three Olympic disciplines, representatives from the Organising Committees (OCs), a doctor, a veterinarian and medication experts and, more recently, representation from national federations, the media, welfare bodies, sponsors and marketing agencies. The purpose of the Committee is to continually review the ethical conduct of the sport, with a view to protecting the welfare of the competing horses and creating a better image.

The improvements and safeguards introduced by the Ethics Review Committee are described below.

**Stable security**

The purpose of stable security is as follows:

- to protect horses from the unwanted attention of the public
- to prevent the removal of horses from the stables for the purpose of illicit schooling
- theoretically, to prevent the attentions of a potential “doper” (although, if doping were to happen, this would be much more likely to be performed by a person with authorised access to the stables, such as a competitor or the groom of another horse).

**Stewarding**

Stewarding is required principally to supervise horses and competitors at all times when they are not actually competing. This includes the stable area, which should be controlled by periodic visits on a 24-hour basis, and the practice arena, which should have permanent stewarding at all times when the arena is officially open. The arena should also be checked at other times to ensure that no unauthorised schooling takes place when the area may appear to be unsupervised.

Clearly, efficient stewarding is extremely important to prevent horse abuse, in addition to various other functions. To fulfil these functions, the FEI has appointed an overall Honorary Steward General. Each national federation has a Steward General and a number of stewards who officiate at international events in their country.

**Warning cards**

Warning cards have been introduced, which are used rather as in football. The President of the Ground Jury and the Chief Steward can instantly award a warning card to a competitor who is seen physically abusing a horse or verbally abusing an Official. If the rider accepts the card, no further action is taken. If a further card is issued within one year, or if the rider rejects the card on the spot, the normal legal procedures are instituted.

**Code of Conduct**

A Code of Conduct was introduced in 1990 and has subsequently been updated. This Code must be published in schedules of all international events. The FEI also recommends that the Code is published in the programmes of events and that it receives the widest possible publicity.
The text of the Code reads as follows:

In all equestrian sports the horse must be considered paramount.

The well-being of the horse shall be above the demands of breeders, trainers, riders, owners, dealers, organizers, sponsors or officials.

All handling and veterinary treatment must ensure the health and welfare of the horse.

The highest standards of nutrition, health, sanitation and safety shall be encouraged and maintained at all times.

Adequate provision must be made for ventilation, feeding, watering and maintaining a healthy environment during transportation.

Emphasis should be placed on increasing education in training and equestrian practices and on promoting scientific studies in equine health.

In the interests of the horse, the fitness and competence of the rider shall be regarded as essential.

All riding and training methods must take account of the horse as a living entity and must not include any technique considered by the FEI to be abusive.

National Federations should establish adequate controls in order that all persons and bodies under their jurisdiction respect the welfare of the horse.

The national and international Rules and Regulations in equestrian sport regarding the health and welfare of the horse must be adhered to not only during national and international events, but also in training. Competition Rules and Regulations shall be continually reviewed to ensure such welfare.

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RESEARCH PROJECTS

Many organisations sponsor research into the health and welfare of horses.

In the United Kingdom, for example, the major funding body – the Horserace Betting Levy Board (HBLB) – makes an enormous contribution. The HBLB is charged with the duty of collecting money from the betting industry, which is applied for the following purposes:

- the improvement of breeds of horses
- the advancement of veterinary science or education
- the improvement of horseracing.

Further important funding for welfare projects is provided by charitable bodies, such as the International League for the Protection of Horses (ILPH) and the Home of Rest for Horses.

Other trusts and commercial sources make valuable contributions, and various research projects are similarly being undertaken at the instigation of the FEI.

Transport stress

Horses, and particularly show-jumping horses, are transported a great deal and travel great distances in the course of their international careers. Such travel may be by sea, road, rail or air, or any combination of these, and the stress imposed may lead to respiratory disease, which manifests as shipping fever.
As an example, a long-haul flight from Great Britain to Australia may take over 40 hours, during which time all the horses travelling will be at risk. Or, more specifically, Swedish horses competing in the USA may be required to travel via Frankfurt, in which case they must withstand a journey of many hours by road, sea and air.

Funds provided by the ILPH have enabled valuable research to be undertaken, primarily by the Irish Equine Centre. This research has culminated in a series of recommendations to horse owners and regulatory authorities aimed at reducing the stress of travel and hence the incidence of disease.

The results of this research have also been published in the form of a booklet, entitled “Recommendations to horse owners and their representatives on the transport of horses” (2).

These recommendations may be summarised as follows:

- check health status prior to and on the day of travel
- take care in the administration of laxatives
- ensure adequate air hygiene
- provide clean, good quality hay every six to eight hours
- avoid delays and provide adequate ventilation
- provide overnight rest periods when appropriate
- obtain express customs clearance and relaxed airport curfews from the relevant authorities
- check health status after arrival.

Clearly, one of the major areas of concern is delay at frontier crossing points. Air flow through a moving vehicle, or in an aircraft during flight, tends to maintain the level of air hygiene within acceptable limits. This is not the case if vehicles are stationary, when a marked deterioration in air quality can occur within one or two hours.

For horses and other livestock, longer periods of confinement in a stationary situation lead to greater environmental stress. Undue delays at border crossings and airports, and the curfew regulations imposed by airport authorities can result in serious health hazards, especially for horses. The above facts have been brought to the attention of governments and airline authorities through the work of the OIE and the International Air Transport Association (IATA).

Inadequate planning for journeys or poor preparation of essential customs and health status documentation cannot be condoned; poor planning necessarily results in delays. However, there is still a pressing need for rapid clearance of customs and health status documents for horses in transit.

Heat and humidity

Horses are occasionally required to compete in hot and humid conditions. Such conditions were experienced to some degree at the Olympic Games in Barcelona in 1992. Experience has shown that humidity rather than heat is the major problem, although a high combination of the two factors can be very harmful.

In 1996, the Olympic Games take place in Atlanta, Georgia (USA), where the conditions are expected to be even less favourable than in Barcelona. The International Olympic Committee decides on the venue of the Olympic city, leaving the FEI with two choices. The FEI must either agree to proceed with the equestrian disciplines at this
venue, or withdraw, in which case equestrian sport risks being permanently eliminated from the Olympic Games for the future.

Clearly, the FEI wishes to remain within the Olympic Movement without imposing undue hardship on participating horses. Hence, funding from AB Volvo matched by the FEI and boosted by the ILPH has enabled a research programme to be established with the aim of obtaining essential information on horses competing under hot and humid conditions. This funding has been awarded to the Animal Health Trust in Newmarket, United Kingdom, although parallel work will be conducted by a number of other institutions world-wide.

On behalf of the FEI, an Equine Sports Medicine Conference is being organised in Atlanta in March 1994. The purpose of this meeting is to bring together the various scientists working in this field with the following objectives:

- to consider the current state of knowledge of thermoregulation and the control of this phenomenon in equine sports
- to review the challenge for horses competing in hot and humid conditions
- to provide a forum for scientific discussion, so that clear guidelines can be formulated for the planning of the Olympic equestrian events
- to publish comprehensive Proceedings of the Conference.

It is expected that the results of such research will enable the FEI to determine which modifications, if any, will be required for the format of the various disciplines, with particular emphasis on the endurance phase of the three-day event. The benefits of this research may have far-reaching effects for other horses, including racehorses, and other working equids.

Other research sponsored by the FEI

In addition, the FEI currently sponsors research into the following aspects of the welfare of competition horses:

- investigating methods by which a small number of riders hypersensitise the legs of horses with a view to making these so sensitive that the animal will go to great lengths to avoid hitting a fence
- establishing a threshold level for the anti-inflammatory glucocorticoid hormone, cortisol (hydrocortisone).

Both of these projects are being conducted at the HFL and are also generously funded by AB Volvo.

“WORKING TOGETHER FOR EQUINES”

The programme Working Together for Equines is funded by the ILPH and is composed of two well-known and highly-respected professionals: a veterinarian and a farrier.

To date, the programme has established bases and/or given clinics and seminars in Algeria, India, Israel, Jamaica, Jordan, Mexico, Morocco, Turkey and elsewhere, and trains local farriers and veterinarians in foot care and other veterinary matters. The programme is willing to travel to wherever these services may be required and is motivated by the
concept that a sound animal will benefit the owner by working better. The teaching is performed primarily on the working animal, and extension of this knowledge is certain to lead to better care of all equids throughout the developing countries.

**OTHER WELFARE CONCERNS**

For the major part, this paper has dealt with the welfare of FEI competition horses. Areas of interest and concern for the welfare of other horses are described below.

**Racehorses**

The racing of two-year-old horses is regularly raised as a subject of controversy. There is concern that the racing of horses before the animals are physically mature is detrimental to their long-term development and, in particular, that this may lead to skeletal pathology. However, this was clearly not the case with "Red Rum", which ran and won as a two-year-old and subsequently won three Grand Nationals (a 4.5-mile steeplechase over very difficult fences), and is now enjoying a healthy retirement in old age:

Drugs such as the diuretic frusemide and the pain-killer phenylbutazone are permitted in many racing jurisdictions in the USA and elsewhere, and the suggestion is sometimes made that the use of such drugs should be extended to racehorses in other countries. However, opponents of such a change consider that good veterinary medicine should not involve masking pain and discomfort with drugs while allowing the horse to continue competing, but should ensure that damaged tissues are rested.

Other practices which incite similar debate are the firing of limbs (application or insertion of a hot iron to the damaged tissue to cause inflammation and stimulate an increased blood supply to the area), de-nerving (physical or chemical interference with the nerve supply to remove sensation from a painful area, e.g. in a case of navicular disease), tracheotomy tubing (surgery to provide a fistula in the trachea for horses with breathing problems) and other corrective surgical interventions. Many people now consider firing to be barbaric, and while de-nerving is an acceptable procedure in leisure animals to ease the discomfort of navicular or related diseases, this practice cannot be considered ethical in the racing animal. Indeed, de-nerving is one step beyond the administration of drugs and is normally performed only when drugs have failed.

Poor racetrack design and poor fence design can lead to unnecessary injury. Ground which is too soft or too hard, or an unfavourable camber on bends in the track, can increase the stresses on the legs of the horses, while kick-back from all-weather surfaces can lead to eye and respiratory problems. Many of these problems could be eliminated by careful selection of design and materials, although adhering too rigidly to a standardised design could devalue horseracing by removing much of the diverse charm of the sport.

The other welfare issue which has received recent media attention is the use of the whip. Most racing authorities have some rules regarding this practice. While it is recognised that carrying a whip is essential for the safety of both horse and rider, new measures have been introduced in the United Kingdom to reduce the chances of horses being injured by the whip, and attention is being paid to whip design. Recently, there have also been calls to introduce pre-race fitness examinations for racehorses, as well as post-race inspections for all horses which fall during a race, and a ban on re-mounting after falls.
Show and pleasure horses

Extreme practices are used in some breeds to alter natural movement (3). For example, caustic chemicals are applied to the pasterns of Tennessee Walking Horses, in conjunction with the use of heavy weights, to assist in emphasising the characteristic gait of this breed. The introduction of ginger and other irritants into the anus is used to produce higher tail carriage.

Excessive lungeing and even blood-letting, in order to calm horses down before a class, are common in some areas. Other inhuman practices include leaving a horse with the head tied down between the forelegs or tied up at an unnatural height, and riding with over-use of draw reins for prolonged periods.

Abuse of the pleasure horse is usually due to ignorance rather than deliberate cruelty. A typical example is the pony which is given to a child and which becomes forgotten once the novelty has passed. This can result in general neglect, involving lack of protection from adverse weather conditions (heat and cold), malnutrition, feet problems, parasites, wounds and lack of exercise or sporadic hard exercise when unfit, as in school holidays. The horse is naturally a social or herd animal, but many pets are kept alone, and this in itself can be stressful. Finally, there is the “killing with kindness” syndrome, where the animal is grossly overfed; this frequently leads to laminitis and suffering.

CONCLUSION

The vast majority of competition horses are looked after well and do not create a welfare concern. However, a minority of people abuse horses – physically, through medication, or by other means – in an attempt to gain an unfair advantage. The regulators of the sport can never be complacent. The root metaphor must be the symbiotic unity of man and horse, mutually interdependent, rising to heights which neither could achieve alone.
d'endurance et le saut. Les règles de cette Fédération sont donc un bon exemple de la manière dont peut être assurée la protection des chevaux de concours.


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Resumen: En la gran mayoría de los casos, los caballos se ven beneficiados por su relación con el ser humano. Sin embargo, estos animales pueden padecer a veces abusos o malos tratamientos, sea por negligencia, sea derivados de los apremios típicos de las competiciones deportivas.

La preocupación por el bienestar de todos los animales, incluyendo a los caballos que participan en competiciones deportivas, se ha incrementado durante los diez últimos años.

La opinión pública se muestra más atenta al tratamiento de los animales en los deportes ecuestres, sobre todo después que se señalaron algunos casos de malos tratos. Por su parte, las autoridades responsables no cejan en sus esfuerzos de proteger a estos animales mediante reglamentaciones diversas.

La Federación Ecuestre Internacional (FEI) es la única autoridad responsable en el conjunto de los encuentros hípicos internacionales con pruebas tales como: doma, concurso de salto, concurso de tres días o completo, carrera simple, driving, carrera de resistencia y carrera con obstáculos. Las reglamentaciones que establece la FEI son un buen ejemplo de cómo se puede garantizar el bienestar de los caballos de competición deportiva.


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REFERENCES

