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**DRAFT**

Guide to good animal welfare practice  
for  
the keeping, care, training and use of horses



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28 This guide has been produced in 2018 by the  
29 voluntary initiative group on equines under the EU  
30 Platform on Animal Welfare. The positions  
31 expressed in this guide do not necessarily  
32 represent in legal terms the official position of the  
33 European Commission.

34 The guide presents good animal welfare practice  
35 for the keeping, care, training and use of horses. It  
36 is not meant to replace, contradict or put in  
37 question any existing legislation, charter, guide or  
38 guidelines.

39 Photos are used in this document to illustrate some  
40 of the conditions, which are described. They should  
41 not be considered to illustrate the only solution to  
42 the conditions described.

43 Photos used in the paper are kindly granted from:

44 *Photo no. 2:* General Direction for Animal Health  
45 and Veterinary Drugs - Minister of Health Italy

46 *Photo no. 8 and 12:* Janne Winther Christensen

47 *Photo no. 21:* **WHO??**

48 *All other pictures:* Birte Broberg

49

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## 73 **1. Introduction**

74 In 2014 the Commission held a meeting on the welfare of equines which were attended both by  
75 Member States and stakeholders from the equine sector. The discussions during this meeting revealed  
76 that there are challenges concerning equine welfare in the European Union. Consequently, World  
77 Horse Welfare and Eurogroup for Animals prepared the report “Removing the Blinkers”, which  
78 illustrated the welfare challenges in more detail.

79 On 14 March 2017 the European Parliament adopted a resolution on responsible ownership and care  
80 of equidae. In its resolution the European Parliament calls upon the Commission to develop European  
81 Guidelines on Good Practice in the equine sector for various users and specialists, drawn up in  
82 consultation with stakeholders and organisations from the equine sector and based on existing guides.

83 The OIE (World Organisation for Animal Health) adopted a chapter on welfare of working equids to  
84 the Terrestrial Animal Health Code in May 2016.

85 Based on the above background and the principle that every animal has to have “life worth living” it is  
86 necessary, overall, to minimise their negative experiences and to provide them with opportunities to  
87 have positive experiences. This guide on the keeping, care, training and use of horses has been  
88 produced to help achieve this.

89 Horses are kept for a variety of purposes, such as sport, racing, pleasure, tourism, breeding, therapy,  
90 and meat production. The regulatory provisions on the keeping and care of horses differ between  
91 Member States. Only a few have adopted specific legislation on the protection of horses. In some  
92 Member States guidelines have been drawn up either by competent authorities or stakeholders.  
93 Common EU guidelines are believed to help enhance the welfare of horses throughout the Union.

94 It is difficult to assess the number of horses in the EU with any certainty. Figures may be available for  
95 example from breeding, racing or equine sports organisations. When it comes to the part of the equine  
96 sector, where there is no formal organisation, however, figures are unavailable or uncertain. It is  
97 estimated that the EU’s horse population ranges from approx. 4 million to approx. 7.7 million.

## 98 **2. Scope**

99 This guide is addressed to every individual, both professional and non-professionals, who owns one or  
100 more horses, has horses in their possession or in any other way is engaged in the keeping, care,  
101 training and use of horses. It is the responsibility of the owner or keeper of one or more horses to be  
102 aware of the basic requirements of horse welfare, and thus manage their horse or horses in an  
103 appropriate manner.

104 Although this guide in general applies to all categories of horses, it does not specifically address  
105 working horses, as these are already covered by OIE chapter 7.12 of the OIE Terrestrial Animal Health  
106 Code. The guide does not address donkeys and donkey hybrids, as they may have behaviours/needs  
107 different from horses. (See Guide to good animal welfare practice for the keeping, care, training and  
108 use of donkeys and donkey hybrids).

109 This guide addresses areas where there is no specific EU legislation on horses. This means that  
110 transport; killing, including slaughter; identification and registration; and zootechnical and  
111 genealogical matters are not addressed. Nor does this guide address horses that are kept under wild or  
112 semi-wild/feral conditions.

113 In this guide the term “horse” is used to cover both horses and ponies.

## 114 **3. Biological characteristics and behaviour**

### 115 **3.1 Ancestry**

116 Today’s domestic horse, the Przewalski’s horse and other wild horses such as the now extinct tarpan,  
117 share a common ancestor. Knowledge on natural horse behaviour derives partly from studies on  
118 Przewalski’s horses reintroduced to their original habitat, but mainly from studies of feral horses -  
119 offspring of escaped domestic horses that live under natural or semi natural conditions with no or  
120 little human interference.



121  
122 Photo 1. Knowledge on the natural behaviour of horses derives mainly from studies of feral horses.

123 The horse was domesticated more than 5500 years ago. Although certain characteristics, such as size,  
124 type, colour, feed conversion, and temperament have changed, horses have retained much of their  
125 ancestor’s behaviour, especially social and feeding behaviour. The horse is adapted through evolution  
126 to a life as a prey animal living on open plains; this is reflected in the behaviour of horses, and the way  
127 their senses have developed.

### 128 **3.2 Vision**

129 Horses have a wide-angled vision, which enables them to detect movements almost all around them. It  
130 is very important to appreciate that horses’ vision and interpretation of visual images are markedly  
131 different from that of humans.

132

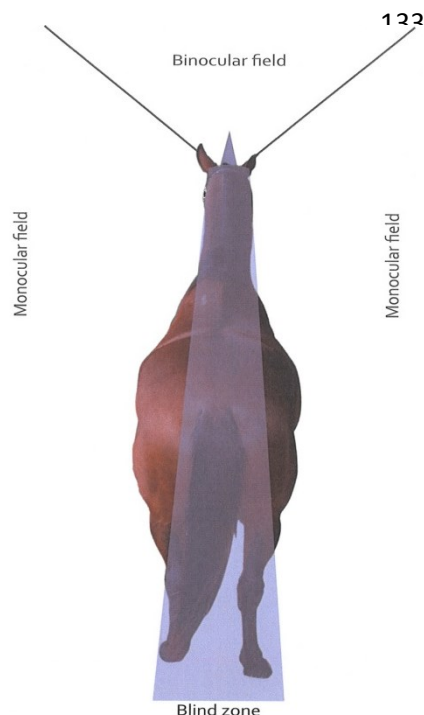


Photo 2. The field of vision of a horse, showing the binocular vision in front of the horse, the monocular vision at the side of the horse, and the blind spot behind the horse.

147 There is only a small “blind area” bordering the flight zone just behind a horse. As the eyes are not  
148 very mobile, horses need to move their heads to see, what is happening in the area of the blind spot.

149 There is also a small blind area in the shape of a triangle in front of the muzzle, which means that  
150 horses do not see what they eat, but feel it with sensitive nerve-receptors in the skin connected to  
151 their whiskers.

152 In the visual field where horses see with both eyes (binocular vision) they are able to see objects  
153 accurately both close by and at a distance up to two meters in front of them. This type of vision makes  
154 it possible for horses to identify feed items (vegetation) in their nearby surroundings, and at the same  
155 time detect possible dangers at a distance.  
156

### 157 3.3 Flight reaction

158 In nature a quick reaction to a danger and escape (flight reaction) is crucial for survival. Much of this  
159 behaviour is present in today's domesticated horse. Sudden, unknown occurrences may cause panic  
160 reactions, such as kicking or flight reaction, even in the most confident horse.  
161

### 162 3.4 Hearing

163 Horses have good hearing, and due to their ability to move the ears independently they are able to  
164 localise sounds/noise, and react to sudden or unusual noise either by alertness or even a flight  
165 reaction. Horses in nature or in paddocks normally stay in visual contact with each other. If one horse  
166 is frightened and tries to escape a possible danger, others normally follow. Likewise, a calm and  
167 confident horse may have a calming influence on a fearful or shy horse.  
168



### 169 3.5 Social interaction and comfort behaviour

170 Horses are gregarious/herd animals. Under natural conditions horses live relatively close together in  
171 groups. The groups typically consist of an adult stallion and a number of mares with offspring,  
172 including young males. Young stallions and older stallions without a group of mares also group  
173 together. The group stabilises itself with a social order, which is challenged when new members are  
174 introduced. A new social order is typically formed within a few days to weeks. Living in groups has a  
175 number of advantages, mainly in relation to social transmission of behaviour, seeking feed and water,  
176 and a defence strategy to avoid or minimize encounters with predators. As an example, all horses of a  
177 group rarely lie down together, as one will remain standing and guard the group. Although there may  
178 be individual differences, horses will generally become anxious and insecure when isolated from other  
179 horses. Lack of social contact both early and later in life may cause development of abnormal  
180 behaviour such as weaving in stabled horses, or more aggressive interactions when on pasture with  
181 other horses. Furthermore, group housed young horses seem to be easier to handle and train than  
182 young horses kept individually.

183



184

185 Photo 3. Flehmen.



Photo 4. Social grooming.

186 Horses communicate through a number of behaviours and olfactory cues, such as flehmen, mouth  
187 clapping (especially in foals and colts), posture, sound, and touching. Touching can be both aggressive  
188 (kicking and biting) and friendly (grooming). Some of these behaviours are innate, while others need  
189 some learning at a young age. Young horses, who are kept isolated have difficulty in engaging with  
190 other horses if introduced into a group at a later stage.

191 Horses carry out different types of comfort behaviour. This behaviour serves different purposes such  
192 as a reaction to itching of the skin, to keep insects away, to keep the coat in a good condition, or for a  
193 social purpose. Comfort behaviour is exhibited even in horses, who are groomed regularly. Comfort  
194 behaviour includes nipping with the teeth, scratching with a leg (typically a hind leg), rubbing against  
195 an object, rolling in sand, mud, snow etc., followed by body and head shaking, and social grooming,  
196 where two horses groom each other (typically on the withers or back).



197

198 Photo 5. Scratching with a leg.



Photo 6. Rolling in sand.

199 Although horses are social animals, they have a social space, which defines the distance that they wish  
200 to keep to other horses. This distance is individual, and is dependent on age and on how well the  
201 horses know each other. During social grooming, for example, the distance is zero. Horses may also be  
202 seen standing close together when trying to keep insects away. Foals and young horses do normally  
203 not react to others entering their social space, and they may be seen lying close together. When horses  
204 are group housed, it is important to take social space into account when deciding how much space they  
205 should be given.  
206



Photo 7. Horses standing close to keep insects away from each other's head.

214

215 Horses have different phases of sleep. In particular, horses require a phase of sleep during every 24  
216 hour period, where they are laying down on their sides with their limbs extended and their muscles  
217 relaxed. To achieve this they need to feel safe, have enough space and a dry lying area. It is important  
218 to keep this in mind for the size and type of indoor accommodation for horses.

219



Photo 8. Horse laying down flat on the side.

### 225 **3.6 Foraging and need for moving**

226 Under natural conditions, horses spend most of the day seeking feed. Depending on feed availability  
227 they may move over large distances. Horses have a need to move, and if kept in a restricted area for a  
228 certain time, which limits their ability to fulfil this motivation, they will express this abundantly once  
229 they are allowed free movement. Especially for foals and colts, free movement and playing with other  
230 horses is important for the development of muscles, joints, tendons, and bone structure. Furthermore,  
231 free movement will enhance their balance and coordination.

232 Horses are herbivores. The natural way for a horse to eat is to move slowly forward, with the head  
233 down, grazing. The period when they don't eat is normally not more than 3 – 4 hours. This more or  
234 less continuous feeding fits the digestive system of the horse, which has a relatively small stomach but  
235 large colon and caecum. In the colon and caecum there is a microbial breakdown of feed, especially  
236 fibrous materials, which has not been digested in the small intestine.

### 237 **3.7 Abnormal behaviour**

238 Abnormal behaviours are seldom or never seen in horses that live under natural conditions. Abnormal  
239 behaviour is a sign that the environment and/or the conditions, in which horses are kept or have been  
240 kept, do not fulfil their needs. Permanent dysfunction of the central nervous system in response to  
241 stressful conditions may mean that developed stereotypies may not resolve despite later changes to  
242 the environment. Many abnormal behaviour are stereotypies such as crib biting, wind sucking, stable  
243 walking, weaving, and auto-mutilation (biting themselves).

244



253

Photo 10. Crib biting is not necessarily performed on the crib.

254 Other abnormal behaviours may be normal behaviours which occur with an abnormal frequency such  
255 as aggressive behaviour. Development of abnormal behaviours differs between individuals. It is a  
256 misunderstanding that stereotypies are contagious. If horses in the same stable develop the same  
257 abnormal behaviour, this most likely reflects that they are kept under the same suboptimal conditions.  
258 In addition, related horses may share the same stress-sensitivity.

## 259 **4. Contact with other horses**

260 As mentioned above, horses are gregarious animals, and lack of social contact with other horses both  
261 early and later in life may cause development of different abnormal behaviours, and lack of

262 development of normal social behaviour. Horses prefer full physical direct contact in paddocks, on  
263 pasture or in group housing.



Photo 10. Especially young horses should have contact to other horses in a paddock or on pasture.

271 It is recommended that horses, at least during a part of the day, have full physical contact with other  
272 horses in a paddock, pasture or in group housing. This makes social grooming possible, and, especially  
273 for young horses, allows for the development of normal social behavioural patterns, including learning  
274 to read the signals of other horses. Horses should always be able to at least see other horses.

## 275 5. Accommodation

### 276 5.1 General considerations

277 The need for social contact with other horses should be kept in mind when designing accommodation  
278 for horses. Furthermore, any accommodation should be dimensioned to fit the size of the horse so that,  
279 at all times, the horse is able to lie down easily, rest in a natural position, turn around, get up  
280 unimpeded, and stand in a natural position.

281 The accommodation should be constructed and maintained so that there are no sharp edges or  
282 protrusions likely to cause injury to the horses. Materials, with which horses may come into contact,  
283 should not be harmful to the animals and should be capable of being thoroughly cleaned and  
284 disinfected.

285 Windows in accommodation for horses should be made of unbreakable glass or be protected by an  
286 appropriately constructed grid or the like to prevent horses from breaking the glass and injuring  
287 themselves.



Photo 11. Window with a grid.

295 The laying area for horses should be non-slippery and provided with an adequate amount of suitable  
296 bedding material, to ensure a dry and comfortable resting area.

297 Passageways should have a non-slip surface and be wide enough to allow horses to pass each other  
298 safely and without difficulty. It is recommended that doors should be at least 1.2 metres wide for  
299 horses and 1.1 metres wide for ponies, and they should be sliding doors or open outwards. Doors to  
300 individual boxes or group housing systems should be fitted with devices that fasten both on top and  
301 bottom.

302 The indoor height should allow the horses to stand in their natural position and carry out normal head  
303 movements.

304 When accommodation for horses is designed, constructed or refurbished, the risk of fire should be  
305 taken into consideration. This is especially important with regard to electric installations. The  
306 materials used should, where possible, be fireproof. The person responsible for the horses should have  
307 a contingency plan in case of fire or natural disasters (e.g. floods).

## 308 **5.2. Stable - indoor housing**

309 The most common indoor housing system is individual (loose) boxes and, in some regions, tie-stalls.  
310 However, group housing is becoming more popular, especially for young horses.

### 311 **5.2.1 Individual (loose) boxes**

312 Individual (loose) boxes should be dimensioned to fit the size of the horse, so that the horse can, lie  
313 down in a natural lateral position, turn around and get up unimpeded, and stand in a natural position.  
314 Boxes for foaling or boxes for a mare with foal at foot need to be larger than boxes for single horses.  
315 When considering space requirements, the time the horse spends in the box, should be taken into  
316 account. The box should be larger, if the horse is stabled for a major part of the day. The upper part of  
317 partitions between boxes should not be solid, but allow horses in neighboring boxes to see each other,  
318 and allow for adequate ventilation. Fittings, such as feeding and watering equipment, should be  
319 positioned, designed and maintained in a way as to avoid injury to the horse, and as far as possible  
320 avoid contamination with urine and feces.

321



322

323 Photo 12. Individual boxes, which  
324 allows horses to touch each other.



Proto 13. Individual boxes, which allows  
horses to see each other.

325

### 326 5.2.2 Group housing systems

327 In group housing systems the total floor area should allow free movement, sufficient access and a  
328 space at feeding and watering stations, and ensure a bedded area large enough to allow all horses to lie  
329 down undisturbed at the same time. Fittings to allow temporary tethering of horses, for example when  
330 a concentrate ration is fed, should be considered. Care should be taken to select groups of horses that  
331 are compatible. Ill or injured horses or horses with deviating behavior (for example aggressiveness) should  
332 be managed according to it, and group housing may not be suitable for such individuals. Facilities for  
333 temporary separation of individuals should always be available. The design of the group housing system  
334 should ensure that all horses are able to move away from each other and to access feed and water at  
335 any time. Dead-ends and sharp corners should be avoided to prevent horses from being trapped.



Photo 14. Horses in a group housing system with access to an outside run.

343

### 344 5.2.3 Tie-stalls as a housing system

345 Tie-stalls severely restrict a horse's movements, and as the horse is often tied with the head up to a  
346 wall, it also restricts the ability to see what is going on around them. This housing system is not  
347 recommended and should therefore be phased out. In the meantime certain minimum requirements  
348 should be considered. The width of the tie-stall should at least allow for the horse to lie with its legs  
349 stretched. The tie-stall should be long enough to accommodate the horse within the stall and also  
350 allow room for a crib.



Photo 15. Horse in a tie stall.

360

361 Except at the head of the horse the partitions should have a height approximately similar to the height  
362 of the horse at the withers. Partitions should be solid and extend to the full length of the stall, in order

363 to prevent horses in neighbouring tie-stalls from kicking each other. If the partitions at the head of the  
364 horse are higher, the upper part should not be solid, but allow the horses in neighboring stalls to see  
365 each other. The length of tether should allow the horse to reach feed and water and lie down without  
366 difficulty. When lying down, the horse should be able to rest the head fully on the floor. Measures  
367 should be taken to avoid a leg being trapped in the tether. This can be done by passing the tether  
368 through a ring or hole, with the rope being weighted in such a way as to keep the rope reasonably tight  
369 whilst allowing the horse sufficient movement to reach its food and water and to lie down in comfort.

### 370 **5.3. Indoor climate**

371 The indoor climate is important for the welfare and health of horses. An inappropriate indoor climate  
372 can be damaging, especially to the respiratory system of horses, and the benefit of fresh, clean air  
373 should not be underestimated. Dust levels, relative air humidity, temperature and gas concentrations  
374 should therefore be kept to a minimum through the provision of proper and adequate ventilation –  
375 ideally natural although in some cases forced/mechanical systems may be required, which gives a  
376 good and evenly distributed airflow through all parts of the horses' accommodation without  
377 unnecessary draught.

### 378 **5.4. Light**

379 During normal daylight hours, there should be natural light, if necessary supplemented with artificial  
380 light at a level, which is sufficient for the horses to clearly see each other and their surroundings. As a  
381 guideline, the light levels should be bright enough for a human to be able to easily read a newspaper.  
382 Furthermore adequate lighting – fixed or portable – should be available to enable the horses to be  
383 thoroughly inspected at any time. The light sources should be out of reach of the horses or should be  
384 protected by appropriate fittings.

385 The lighting regime should follow a 24 hour rhythm and include sufficient uninterrupted periods of  
386 light and dark. As a guideline, the dark period should be at least 6 hours and the light period at least 8  
387 hours. However, this does not apply to horses kept outside

### 388 **5.5 Noise**

389 Noise in stables should not exceed a level and frequency that it affects the horses' health or welfare in a  
390 negative way. In indoor accommodation, any exposure of horses to mechanical noise that is as loud or  
391 louder than a vacuum cleaner should only be for a short time.

## 392 **6. Outdoor keeping**

393 Horses should be protected against adverse weather conditions, as well as against insects and possible  
394 predators as far as reasonably practicable.

### 395 **6.1. Shelter**

396 Sufficient shelter should be available all year round; in the summer to provide the horses with shade  
397 from the heat of the sun and flying insects, and in winter to protect them against wet, windy and cold  
398 conditions. The shelter should be large enough to comfortably provide protection to all horses at the  
399 same time.

400 Sufficient shelter may be provided by the natural surroundings, such as trees, hedges or other natural  
401 vegetation or by purpose-built shelters.



Photo 16. Purpose built shelter

409 Not all horses have the same ability to withstand cold winter conditions. Lighter horse breeds or  
410 breeds that are not adapted to cold conditions are less hardy than, for example, the Icelandic horse or  
411 certain pony breeds, such as Shetland ponies or Exmoor ponies.

## 412 6.2. Pasture / paddocks

413 It is recommended that all horses should be given daily access to paddocks or pasture, where possible  
414 together with other horses, in order to fulfill their need for free movement and social contact.

415 However, there may be situations where veterinary advice or extreme weather conditions make this  
416 contradictory.



Photo 17. It is recommended that horses are given daily access to a paddock or pasture, where possible with other horses.

425

426 Paddocks and pastures should be well drained in order to avoid muddy conditions as much as  
427 possible. They should be kept clear of dangerous objects and regularly checked for poisonous plants.

428 Fences should be clearly visible to the horses, be well maintained, and of an appropriate type and  
429 height to prevent horses from escaping. The sufficient height of the fence depends on the type of  
430 horses within the paddock or pasture. The distance between posts and rails/wires and between  
431 rails/wires will also depend on the size of the horses. Barbed wire should not be used.

432 As a guideline, there should be at least 330 m<sup>2</sup> of paddock per horse, and no paddock should be less  
433 than 800 m<sup>2</sup> when only used for turnout. In order to supply enough grass pastures need to be much  
434 bigger.



435 Horses should be introduced to new types of fence during day-time, and should be supervised for an  
436 appropriate period of time after being introduced to a new fence type or after being moved to a new  
437 paddock or pasture.

438 Horses should also be supervised for an appropriate period of time, i.e. until aggressive interactions  
439 have ceased, and the horses resume feeding, when they are grouped together in a paddock or on  
440 pasture. When new horses are to be introduced into an existing group, it is recommended that the  
441 horses are pre-exposed to each other, e.g. in neighboring boxes or paddocks, before mixing.

442 Tethering on pasture is not recommended. It restricts the free movement of the horse, and it does not  
443 allow for social contact with other horses. Furthermore, there is a risk that tethered horses will  
444 become entangled in their tether and injure themselves.

445 The use of hobbles should be discouraged.

## 446 **7. Care**

### 447 **7.1. Knowledge**

448 Horses should be cared for by a sufficient number of persons, who possess the appropriate ability,  
449 knowledge and professional competence.

### 450 **7.2 Identification and registration**

451 In the European Union provisions as regards the methods for the identification and registration of  
452 equidae have been adopted.

453 The provisions on identification and registration of horses are complex, and persons responsible for  
454 horses are therefore referred to seek more thorough information from the competent authority  
455 dealing with this in the Member State where the horse lives.

### 456 **7.3 Inspection**

457 All horses, including those in paddocks and on pasture, should be inspected at least once a day and  
458 preferably more often. Ill or injured horses, mares in late pregnancy, newborn foals, newly introduced  
459 horses, stallions during the mating season and very old horses should be inspected more often.

460 Any horse, who appears ill or injured, should be given appropriate care without delay. If the horse  
461 does not respond to such care or if the horse is in pain, veterinary advice should be obtained without  
462 delay. Where necessary ill or injured horses should be separated in suitable accommodation.

### 463 **7.4 Infectious diseases and biosecurity**

464 Spread of infectious diseases is one of the main reasons for reduced well-being, illness, death and  
465 significant financial loss in the horse industry.

#### 466 **7.4.1 Prevention of spread of infectious diseases**

467 To prevent spread of infectious disease it is always recommended to separate any horse with  
468 symptoms of being infected from other horses. Horses affected by respiratory infectious disease often  
469 seem generally unwell, not eating or drinking normally. Other symptoms can be: high body  
470 temperature (fever), increased respiratory rate, coughing, nasal discharge, swollen lymph nodes and

471 neurological problems. Horses affected by infectious skin disease show abnormality of the skin  
472 consistent with skin infection, patchy lack of hair etc. All types of infectious disease should be handled  
473 according to the recommendations in this chapter.

474 As all infectious diseases have an incubation period (time from when the infection enters the body to  
475 the horse shows signs of disease) it is recommended to quarantine newly arriving horses from horses  
476 permanently stabled at a premise for an adequate period of time (as a minimum 10-14 days depending  
477 on the health status of the horses). Vaccination status of newly arrived horses should be verified. The  
478 temperature of horses in quarantine should be monitored daily and diagnostic tests to rule out  
479 infection or carrier status can be performed.

480 Cleaning and disinfection of stables and transports between different horses should be performed  
481 regularly. It should be ensured that people managing the horses understand basic hygiene principles.  
482 Equipment should not be shared between horses to prevent the spread of disease, e.g. strangles or  
483 ringworm. Horses should not be allowed to drink from communal water sources when assembled in  
484 new groups (shows, competition, sales etc.).

#### 485 **7.4.2 Limitation of outbreak of infectious disease in a horse population**

486 Depending on the type of disease causing the outbreak different biosecurity measures should be taken  
487 to limit and control spread within the population at risk. All horse owners should follow  
488 recommendations set from authorities or professional organisations as a minimum standard. This  
489 includes separation of ill horses, quarantine of affected premises or regions, and implementation of  
490 standards for hygiene and disinfection, transport and assembly of groups of horses (event, shows etc.).

### 491 **7.5 Veterinary care, medical treatment**

492 A horse, who appears ill or injured should be given appropriate care without delay, if the horse does  
493 not rapidly respond to such care, a veterinarian should be called for to examine the horse. Facilities for  
494 temporary separation of ill or injured horses should always be available.

495 General signs of illness can include lack of appetite, depression, change in behaviour, colic, diarrhea,  
496 coughing, sneezing, discharge from eyes or nose, dermatitis, loss of hair, itchy skin, lameness, back  
497 pain, reluctance to move, head bobbing or facial mimic/body posture indicating pain.

498 Medication of horses should be based on examination, evaluation of symptoms and adequate  
499 diagnostics performed by a veterinarian. Only medication prescribed by a veterinarian for a particular  
500 horse should be used for that horse.

501 In case of chronic medication the prescribing veterinarian should assess the horse with regular  
502 intervals.

503 In particular, care should be taken when administering antimicrobials to horses to counteract  
504 resistance against medicines. Careful veterinary examination including adequate diagnostic work up  
505 should be performed.

506 Medication and treatment of horses should always be according to standards of best practice and  
507 never compromise the overall welfare of the horse. In case of side effects associated with treatment,  
508 they should be reported to the appropriate authority.

## 509 **7.6 Routine health care**

510 It is recommended for horses to have a veterinary examination at least once a year. For geriatric  
511 horses or chronically ill horses this should sometimes be more frequent.

### 512 **7.6.1 Vaccination:**

513 Vaccination against tetanus is always recommended. Horses are very susceptible to infection with the  
514 bacterium *Clostridium tetani* (tetanus). The bacterium is often found in the soil of horse premises. It  
515 enters the body through wounds, including small penetrating wounds, which may be difficult to detect,  
516 or through the navel in newborn foals. Even though affected horses may survive, especially, if the  
517 disease is diagnosed in an early phase, they often have to be euthanized for welfare reasons.

518 Vaccination against equine influenza is mandatory for horses taking part in most competitions, but is  
519 also recommended for other horses, especially those that have regular contact with horses from other  
520 premises.

521 Vaccination against other endemic diseases may also be advisable depending on the geographical  
522 location of the horse. Advice on this should be sought from a veterinarian.

### 523 **7.6.2 Endoparasite monitoring program**

524 Intestinal parasites can be a welfare problem causing weight loss, colic and even deaths. This is  
525 especially the case for foals and young horses, and immunocompromised horses. A monitoring and  
526 targeted programme should be established according to advice from a veterinarian.

527 Appropriate pasture or paddock management practice, in particular collection of feces, is  
528 indispensable in order to reduce the parasitic burden and should always be of high priority in an  
529 endoparasite monitoring and targeted deworming programme. Horses kept in permanent paddocks  
530 where manure is not removed regularly have an increased risk of infestation.

531 The use in healthy adult horses of an anthelmintic without previous laboratory tests or other relevant  
532 diagnostic work to establish parasite burdens should be discouraged to counteract development of  
533 anthelmintic resistance.

### 534 **7.6.3. Hoof care**

535 It is recommended that only trained professionals should trim and shoe horses. The hooves of a horse  
536 should be trimmed at regular intervals. The frequency depends on a number of factors, including age,  
537 use and whether the horse is shod. As a guideline, horses that are shod should be trimmed and have  
538 shoes renewed every 6 – 8 weeks. If horses are used for sport or leisure without shoes, the hooves  
539 should be inspected after use for over-wear. Other horses for example brood mares should be checked  
540 for horn growth at regular intervals, and be trimmed at appropriate intervals to maintain the hooves  
541 in a good and healthy condition.

542 Hooves should be cleaned and checked for signs of disease or injuries, such as thrush, cracks or foreign  
543 bodies (stones for example) at appropriate intervals. If there are signs of hoof problems, such as  
544 lameness, hoofs should be checked immediately.

### 545 **7.6.4 Dental care**

546 Horses wear their teeth slowly when they chew. This may cause the formation of sharp edges or  
547 hooks, which will cause discomfort to the horse, and may be the cause of weight loss or abnormal

548 behavior such as avoiding or fighting the bit and head tossing. Dropping feed (quidding) is another  
549 sign of dental problems.

550 Horses may have painful dental or oral pathology without showing any obvious signs of discomfort  
551 and a number of dental and non-dental problems related to the oral region and eating habits may  
552 develop during the lifespan of a horse, therefore it is advisable to perform an oral examination  
553 including check of teeth with a regular interval and at least annually. It is recommended that only  
554 trained professionals should carry out this examination and any correcting measures.

## 555 **7.7. Feed**

556 Horses should be fed a wholesome diet of a sufficient quantity to maintain them in good condition  
557 (normal weight) and to avoid malnutrition, poor condition or obesity.

558 Grass is an essential food source for horses and grazing should be offered to all horses on a daily basis  
559 whenever possible.

560 Horses' feed ration should always contain sufficient forage such as hay, haylage, straw, dry wrap hay,  
561 silage if they are not fed fully by grass. The horse should be fed such rations in a way, which ensures  
562 sufficient chewing time throughout the day and night, as the horse's digestive system is adapted to a  
563 more or less continuous intake of food with high fibre content.

564 Chewing promotes production of saliva that acts to neutralise the continuous production of acid in the  
565 stomach. To prevent stomach ulcers and enhance gut health horses are therefore dependent on near-  
566 continuous access to forage.



Photo 18. Horses should have access to forage also,  
when they are in paddocks without grass.

575 A guideline for daily supply of forage should be at least 1.2 kg of hay per 100 kg horse or 2 kg dry wrap  
576 hay per 100 kg horse, although this may need to be modified in the case of those prone to weight gain  
577 and/or laminitis.

578 Consuming forage feed resembles the natural feeding pattern of a grazing horse as far as possible.  
579 Horses should have access to forage both when housed, in paddocks or turned out in areas without  
580 grass. If the horse has prolonged time without access to forage (3-4h) it may affect the overall health of  
581 the horse negatively (e.g. disposition for colic, stomach ulcers) and can cause the horse to develop  
582 abnormal and unwanted behavioural patterns (e.g. crib biting, eating sand).

583 Many horses can live on grass or forage alone, supplemented with vitamins and minerals if necessary.  
584 Some groups such as sport horses, young, growing horses or horses meant for breeding purposes have

585 a need for a higher energy consumption due to their level of exercise or basic needs. Therefore, they  
586 may need to be supplemented with high energy feed (concentrate).



Photo 19. Some groups of horses may need to be supplemented with high energy feed.

595 High-energy feed should be given in small rations divided throughout the day (as a guideline at least 2-  
596 3 meals per day depending on the amount of feed being given).

597 High-energy feed should not be given immediately before or after strenuous exercise and the amount  
598 should be adjusted to the current level of work for the horse.

599 All feed sources should be of good hygienic and nutritional quality and stored under hygienic  
600 conditions. Dusty, mouldy or rancid feed should always be disposed of.

601 Feeding equipment should be kept clean and placed in a way that minimises contamination.

602 Any feed change should be done gradually over a period of days.

603 For group housing or in paddocks there should be sufficient feeding space to avoid competition and  
604 aggression among horses.

605 Care should be taken to make individual adjustments of the daily food supply based on the body  
606 condition score of the horse. See annex 2 for guidelines for body condition scoring.

607 The problem of obese horses and those horses developing metabolic disease and laminitis is a  
608 significant and growing threat to horse welfare, and is just as serious a risk to their health as being too  
609 underweight.

## 610 **7.8. Water**

611 Horses' need for water depends mainly on the level of activity, ambient temperature, and water  
612 content of their feed. Horses will typically drink 5 – 10 % of their bodyweight daily. Lactating mares  
613 and horses with a high level of activity, such as racehorses, may routinely drink more.

614 Horses prefer to drink from a water surface, but learn without difficulty to drink from a water cup.  
615 When automatic drinking systems are used, they should be checked daily and should have a water  
616 flow of approx. 8 liters per minute in order to ensure sufficient water intake.

617



618

619 Photo 20. Horses prefer to drink  
620 from a water surface



621 Photo 21. Water cup.

622 Horses should preferably have free access to water, and should not be without water for more than four  
623 hours. This also applies to horses in paddocks and on pasture. During winter conditions with temperatures  
624 below zero extra precautions should be taken to ensure this, for example by providing heated watering  
equipment or a regular supply of liquid water.

625 Watering equipment should be kept clean, and be placed in a way that minimizes contamination. In group  
626 housing or in paddocks and on pasture there should be sufficient drinking space to avoid competition and  
627 aggression among horses.

628

## 629 **8. Handling and training**

630 The welfare of the horse should always be paramount in all aspects of handling and training, both in a short  
631 term and long term perspective. Evidence-based training principles have been developed by the  
632 International Society for Equitation Science (Annex 3).

633 Persons with responsibility for the use, handling or training of horses should have appropriate knowledge,  
634 experience and skills so that they know and understand the normal behavior of horses as well their facial  
635 expressions and body language.

636 Horses should be handled from an early age. However, handling immediately after birth should be avoided  
637 as it disrupts mare-foal bonding. Gentle handling (feeding/brushing) of the mare has long-term effects in  
638 that the foal becomes less fearful towards humans and easier to handle. Foals should learn to be led by a  
639 head-collar, be touched all over the body, and to have their feet lifted.

640 Handlers and trainers should always take the horse's natural flight response into consideration when  
641 handling horses.

642 Training for different activities, such as riding or driving, should not start until the horse has reached a  
643 developmental stage, where the horse is physically and mentally capable of performing the activities,  
644 without risk of injury or distress in either the short or long term. No particular age can be set for this, as it

645 will vary not only between and within breeds, but also according to the discipline, level and training  
646 intensity.

647 Methods normally applied when training horses are negative and positive reinforcement as well as classical  
648 conditioning (i.e. the forming of associations between cues). When negative (subtraction) reinforcement is  
649 used, a pressure is applied to the horse, for example through the reins or the legs of a rider and correct  
650 behavior is rewarded through removal of the pressure. For this method to be effective and not cause  
651 confusion, it is important that the pressure starts at a low intensity and is maintained or gradually increased  
652 until the horse shows the desired response and then stops immediately. In positive (addition)  
653 reinforcement, the horse responds to a cue, e.g. a verbal command, and a reward is given immediately,  
654 when the horse responds correctly (e.g. the horse comes when called for and receives a carrot). When  
655 used correctly and with appropriate knowledge and patience, both methods are suitable to train horses to  
656 show desired responses.

657 Training methods should be adapted to the age of horses and their physical and mental capacity to protect  
658 them from pain, suffering, anxiety, injuries and permanent disability.

659 Insufficient or inappropriate training methods may have a negative impact on the welfare of the horse, and  
660 such methods also lead to aggressive or conflict behavior, which may compromise the safety of the horse  
661 and those handling the horse. Inappropriate training methods also include situations where the trainer is  
662 inconsistent and give conflicting signals to the horse. As an example it will confuse the horse, if when  
663 responding correctly to pressure from the bit or rider's legs, the pressure is not released, or if an unwanted  
664 behavior is not corrected immediately every time it occurs.

665 Training methods should aim to gradually strengthen the physical and mental ability of the horse. All types  
666 of training, incl. intensive hyperflexion, that may harm the horse physically or mentally or cause anxiety or  
667 distress are considered inappropriate.

668 When horses are handled and trained, it may occasionally be necessary to correct the horses, when they  
669 show an unwanted behavior. Importantly, the cause of the unwanted behavior should be identified and  
670 removed if possible. The method used to correct behavior should follow the basic principles of learning  
671 theory, creating the least possible anxiety or pain for the horse and the best short term and long term  
672 results.

673 In all types of training, excessive force should never be applied. It is the responsibility of the handler or  
674 rider to ensure sufficient and updated knowledge about learning theory, training and training methods  
675 before applying it on a horse.

676 The company of a known and calm horse is usually beneficial when a horse has to be habituated to an  
677 unknown environment, for example being loaded for transport or being introduced to a novel environment  
678 or objects.

679 Horses are social animals and prefer to be in the company of other horses. If horses are to be socially  
680 separated, e.g. for training purposes, it is necessary to gradually habituate them to tolerate social  
681 separation. Separation anxiety causes stress and reduces learning ability, and therefore training for other  
682 abilities should not take place until the horse is confident with being alone. Social separation should be  
683 minimized and should only be used for training purposes under human supervision.

684 All horses should be trained to be tied for the time necessary to be groomed, undertake hoof care,  
685 transportation etc. Horses should be gradually trained for being tied using the principles of negative  
686 reinforcement, and in the company of other, calm horses. The tie should have a quick release system.  
687 Horses that are not yet used to be tied should be supervised.

688 Attention should be paid to the surface ground on which horses are handled and trained; it should be  
689 designed and maintained in a way, which reduces factors that could lead to injury.

## 690 **9. Doping**

691 Administration of any substance or method intended to artificially alter the horse's physical or physiological  
692 capacities or to mask health problems, is contrary to the horse's welfare and to the ethics of horse-human  
693 relationship. International codes (race and sports) set lists of prohibited substances and methods. This does  
694 not only include inappropriate use of medicine, but also surgery and other methods that conceal clinical  
695 signs or disease, so the horse can train and participate in competitions. An example is medical or surgical  
696 interference with limb sensitivity.

## 697 **10. Equipment**

### 698 **10.1 Saddlery, harness etc.**

699 Tack and equipment used for handling and training of horses should be fitted and adjusted correctly and  
700 should not cause harm or be used as coercive measures. All equipment should be kept safe, functional,  
701 clean, and well maintained. It should be checked before use.



Photo 22. Equipment should be well fitted  
and checked before use

712 Excessive restriction, for example from side-reins during lunging or pressure from a very tight noseband  
713 should be avoided. As a guideline it should be possible to pass two fingers between the noseband and the  
714 nasal bone of the horse. Special gauges have been designed to streamline this measurement.

715 Equipment and tack such as, for example, whips, spurs, various types of reins and bits etc. are used to  
716 provide tactile signals to the horse. This equipment should be used with care and patience and should  
717 never be used in a forceful way acting as coercive measures. It is the responsibility of the handler or rider to



718 ensure sufficient and updated knowledge about equipment and tack and the correct use of it before  
719 applying it on a horse.

## 720 **10.2 Mechanical equipment**

721 Mechanical equipment such as horse walkers and treadmills are used for exercising horses.



Photo 23. A horse in a treadmill.

730 This equipment should be maintained in good working order according to instructions from the  
731 manufacturer. It should have both an emergency stop and a device which automatically stops the  
732 equipment if a horse falls or tries to baulk. When the equipment is in use, horses should be supervised by a  
733 person, who has the capacity to act correctly in an emergency.

## 734 **10.3 Restraint equipment**

735 In certain situations it may be necessary to restrain horses for their own safety, for the safety of other  
736 horses or those handling the horse. Means of restraint could for example be the use of a twitch or a  
737 restraining box for veterinary treatment or the use of hobbles on a mare during natural breeding to protect  
738 the stallion. Use of these should be temporary and have a sound justification.

739 When a horse has to be restrained the mildest method should be applied, and only for the minimum time  
740 necessary. Restraint should never be a substitute for good management, training or habituation of the  
741 horse. For example, a twitch should not be used on a horse to ease braiding (plaiting), and hobbles should  
742 not be used to prevent a horse from kicking the side of its box, or for turn out in the field.

743 It is recommended that only trained professionals use restraining methods.

## 744 **10.4 Rugs**

745 During cold winter months, waterproof and breathable turn-out rugs may be used to protect horses from  
746 adverse weather conditions.



Photo 23. Horse with a winter rug.

751 Specially designed summer rugs give some protection against insects, but they do not provide adequate  
752 heat protection.

753 If rugs are used, they should be well fitted, checked daily and should be of a type which corresponds to the  
754 ambient temperature.

755 It should be noted that rugs affect the horse's natural thermoregulation, and consideration should be given  
756 as to whether a horse needs a rug.

## 757 **11. Working horses**

758 As with any other horses their basic needs have to be fulfilled and capability of workload considered. Please  
759 refer to chapter 7.12 on welfare of working equids in the OIE Terrestrial Animal Health Code for detailed  
760 consideration of the working horse welfare needs.



Photo 24. Working horse used for transport.

766

## 767 **12. Horses used for sport, leisure, tourism**

768 Horses are used in a number of different contexts, such as sport, races, leisure, tourism, in therapy and  
769 as working horses. No matter the context in which a horse is used, the recommendations in this guide  
770 will apply.

771 When purchasing a horse consideration should be given to the cost of keeping a horse, and to the  
772 intended use of the horse compared to the skills of the person, who is going to use the horse (and care  
773 for the horse, if different). It is advisable that persons, who do not have appropriate prior experience  
774 in keeping or training a horse, seek appropriate advice prior to purchasing or taking on the  
775 responsibility of a horse.

776 Below are some specific points relating to the challenges, which horses or their owners may face in  
777 relation to sport and tourism.

### 778 **12.1 Sport**

779 Most sports organisations (racing, riding, driving etc.) have standards or codes of conduct, which aims  
780 to help ensure the welfare of horses while they are taking part in competitions.

781

782



788 Photo 25. Show jumping.



Photo 26. Driving.

789 This may include rules on what equipment and tack can be used (for example whip and spurs) on  
790 training and correction methods during warming-up and competition, on when pregnant mares can  
791 no longer compete or race, on use of equipment as an coercive measure, and on illegal substances or  
792 methods (doping).

793 These standards and codes are for some federations only enforced during competitions or races, but  
794 they should always be respected during daily training and handling of the horses.

795 Horses should always be fit if competing. No horse should be entered in a competition or race until the  
796 preparatory training has made the horse mentally and physically ready.

## 797 **12.2 Tourism**

798 Horses are used in connection with tourism in different ways. This may be horse trekking, including  
799 carrying tourists to sights of interest with or without a guide, or as carriage horses to drive tourists on  
800 sight-seeing tours, use as different kinds of pet-animals etc.

801 Tourists may not have sufficient knowledge about horses to spot welfare problems, they may not see  
802 the welfare of the horse as their responsibility, or they may repress what they see because they want  
803 to go on the sight-seeing tour. It is therefore essential for the welfare of these horses that the persons  
804 responsible for them have the necessary knowledge, ability and willingness to ensure that the horses'  
805 needs are met, including those for rest, water, feed, protection from inclement weather, well-fitting  
806 equipment and appropriate hoof care.



Photo 27. Carriage horses used in tourism.

812

### 813 **12.2.1 Carriage horses**

814 Carriage horses often work long hours and travel long distances. During the day when at rest, carriage  
815 horses should be positioned in the shade or with access to shelter from sun, rain or snow, and  
816 provided with forage and fresh, clean water. Individual water buckets should be provided, as shared  
817 water troughs can increase the risk of disease spread.

818 Ideally any tight harness equipment should also be loosened or, if appropriate, removed during these  
819 rest periods. Care must be taken to ensure the carriage is not over-loaded and its wheels and harness  
820 are in good condition, so not overburdening the horse. The weight that a horse can pull will be  
821 dependent on the terrain, topography, condition of the horse and experience of horse. It is essential  
822 that all harness equipment fits properly and the carriage is balanced.

## 823 **13. Mutilations and trimming**

### 824 **13.1. Tail docking, trimming and nicking**

825 Docking the tail and trimming the whiskers of horses should be strongly discouraged; the same should  
826 apply to the nicking of tendons to affect tail carriage. Docking of horses' tails may only be carried out  
827 for veterinary reasons.

828



835 Photo 28 and 29. Tail docking and hot iron branding should be strongly discouraged.

### 836 **13.2. Other mutilations**

837 No other mutilations should be performed on horses, except castration, which should only be carried  
838 out by a veterinarian and performed under sedation or anaesthesia followed by long lasting analgesia.  
839 Hot iron branding should be strongly discouraged. If freeze branding is undertaken, it should be done  
840 professionally.

## 841 **14. Breeding**

### 842 **14.1 Responsible breeding**

843 Owners have a huge responsibility when considering whether to breed from their horse and why they  
844 are breeding instead of buying or rehoming. If too many horses are bred without any intended use, it

845 will create a surplus of unwanted horses contributing to poor horse welfare. Owners must consider  
846 whether it is appropriate to breed from their mare or stallion and do their best to ensure they are  
847 breeding quality progeny with desirable attributes that are useful. It may not be in the mare's best  
848 interest to be used for breeding. Horses with heritable disorders, poor confirmation, disagreeable  
849 temperaments or those that are injured should not be bred from, if it is likely that any undesirable  
850 traits will be passed on to any progeny or that the mare's welfare may become compromised during  
851 gestation. Owners, who plan to sell any progeny, should understand the market as well as the costs  
852 and resources associated with breeding, and should be confident that they will be able to find a  
853 responsible owner to purchase the foal once weaned.  
854

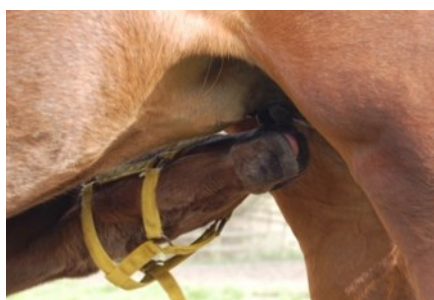
## 855 **14.2 Breeding methods**

856 Horses should not be bred in a manner that may entail suffering. Horses with hereditary disease,  
857 defects or other traits that may inflict pain, suffering or other defects in the offspring should not be  
858 used for breeding. Horses that have had difficulty giving birth or producing offspring that are born  
859 dead should also not be used.

860 A female horse may become sexually mature around one and a half to two years of age. However, if  
861 bred that early it may compromise their growth, thus breeding should not begin until the mare is three  
862 to four years old at a minimum.

## 863 **14.3 Foaling and weaning**

864 The mare should be kept in the environment where foaling is to take place approx. one month before  
865 foaling in order for her to produce antibodies related to the environment. Brood mares should always  
866 be vaccinated regularly according to the protocol for the vaccines to have a sufficient level of  
867 antibodies. Vaccination against Herpes Virus type 1 and 4 should also be considered depending on the  
868 disease situation in the area where the horses are kept. The antibodies are transferred to the foal via  
869 colostrum (antibody-rich milk available immediately after foaling).



875 Photo 30 and 31. Foals should drink colostrum within a few hours after birth, and they should be given  
876 time in a paddock or on pasture already from day one.

877 Colostrum protects the foal from possible disease agents in the environment. It is therefore vital that  
878 the foal drinks milk from the mare within a few hours of birth. If this isn't possible, for example due to  
879 a problem with the mare, then veterinary advice must be sought without delay.

880 Foaling complication is a veterinary emergency: birthing should be monitored to verify the normal  
881 foaling stages and if any abnormalities are observed during parturition, a veterinarian should be  
882 called.

883 If not born outside on pasture, the mare and foal should be given time in a paddock from day one. Care  
884 should be taken to ensure that the fence is clearly visible to the foal, which may not be the case for  
885 electrical fences, so alternative arrangements should be made. The height of the foal should also be  
886 taken into account to ensure the fencing will be secure.

887 Weaning is a stressful experience for both mare and foal and should be carried out in a way to  
888 minimize stress. Stress responses appear to be lower where foals are weaned gradually and allowed to  
889 have social contact with other foals and adult horses.

890 Domestic horses are often weaned prematurely compared to the natural weaning age at approx. 8  
891 months. Weaning should preferably not take place before the foal has reached six months of age. After  
892 weaning, the young horse should be kept in groups with other horses and preferably at least one adult  
893 horse.

## 894 **15. Assessment of the welfare of horses**

895 Horse owners, keepers or those responsible for premises, where horses are kept, may wish to have the  
896 welfare of the horses under their responsibility assessed. A protocol for this purpose has been  
897 developed ([AWIN welfare assessment protocol for horses](#)). It is important to note that correct use of  
898 this protocol requires adequately trained assessors. It is also important to note that such an  
899 assessment cannot replace daily inspection or a clinical examination, when disease or injury is  
900 suspected or identified.

## 901 **16. End of life considerations**

902 Although a small number of horses die of natural causes or due to accidents, most horse owners will at  
903 some point have to face the difficult decision to end the life of their horse.

904 The options are killing or slaughter. Slaughter is an option in most European Countries, unless the  
905 horse has been declared as not intended for slaughter for human consumption. This will be marked in  
906 the Horse Passport (see 7.2 Identification and registration). Killing will typically take place on the  
907 premises where the horse is kept, whereas slaughter will involve transport for a shorter or longer distance,  
908 and maybe even via a market. Before the decision for slaughter is taken, it is necessary to assess whether  
909 the horse is fit for the intended journey to the slaughter house. Furthermore, for animal welfare reasons  
910 transport of slaughter horses over long journeys should be avoided or limited as far as possible.

911 Killing should always be performed, when a horse is suffering and is not responding to treatment, or when  
912 a horse has a chronic and incurable condition, which causes pain or distress.

913 A horse should under no circumstances be abandoned or left to suffer.

914

## 915 Glossary

916 For the purpose of this guide the following definitions are used:

- 917 a) **An olfactory cue** means a chemical signal received by the olfactory system that represents  
918 an incoming signal received through the nose
- 919 b) **Hobbles** mean a devise, which limits the movement of horses. They usually consist of two  
920 leather straps tied around the horse's legs and connected by a short chain or rope. When  
921 used on pasture the hobbles are fitted on the pasterns of the front legs of the horse, and  
922 thus only allow the horse to move slowly over relatively short distances. Hobbles may also  
923 be used as a restraint equipment, e.g. to prevent a mare from kicking the stallion during  
924 natural breeding. In this situation they may be fitted around the pasterns or hocks of the  
925 mare with a rope, which passes between her front legs to a strap around the neck.
- 926 c) **Tethering** means to tie a horse to a long rope or chain (the tether) on pasture to prevent it  
927 from escaping, if on pasture without an appropriate fence. The tether is connected to the  
928 head collar or neck strap of the horse in one end and to a peg stuck in the ground in the  
929 other.
- 930 d) **Paddock** means an enclosure, where horses are turned out for exercise typically without  
931 grass. It can also mean a saddling area at a thoroughbred racetrack
- 932 e) **Pasture** means an area of farmland with grasses, where horses may get all or part of their  
933 daily feed supply depending on the time they spend on pasture
- 934 f) **Biosecurity** means a set of practices employed to prevent the introduction of infectious  
935 organisms into a herd, and their transmission between animals
- 936 g) **Killing** means any intentionally induced process, which causes the death of an animal, this  
937 includes slaughter, which is killing of an animal for human consumption
- 938 h) **Separation due to injury** means a temporary physical separation of an injured horse to  
939 prevent further trauma from contact with other horses and to keep the horse at rest. To  
940 prevent mental stress the horse should be able to see, hear, and if possible, have partial  
941 physical contact with other horses
- 942 i) **Separation in a behavioural context** means the action of permanently or temporarily  
943 keeping horses apart from each other. To prevent mental stress the horse should be able to  
944 see, hear, and if possible, have partial physical contact with other horses
- 945 j) **Quarantine** means separation and restriction of the movement of horses, as a restraint  
946 upon the activities or communication of horses and/or goods to prevent the spread of  
947 infectious diseases.

## Annex 2

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### 949 **Body condition scoring**

950 Source: AWIN, 2015. AWIN welfare assessment protocol for horses. Doi: 10.13130/AWIN  
951 HORSES 2015

952 Body condition scoring is a standardised method to evaluate the amount of fat on a horse's body. Body  
953 condition can be affected by a variety of factors such as food availability, reproductive activities,  
954 weather, performance or work activities, parasites, dental problems, diseases and feeding practices.  
955

#### 956 **How to assess [Individual]**

957 Start with a general visual inspection from the side  
958 of the horse and assess the fat/muscle covering  
959 the neck, ribs, shoulder, back, abdomen and pelvis.  
960 Stand at a safe distance behind the horse and  
961 assess the fat reservoirs/deposits around the tail  
962 bone/caudal vertebra of the horse, assess the shape  
963 of the croup, the visibility of the spine and hip bone.  
964



#### 965 **How to score**

966 Use the Body Condition Score system of Carrol and Huntington (1988 Equine vet j, 20(1) 41-45) with a scale  
967 from 1 to 5. This system is used for all breeds and all purposes of use.



##### **Score 1**

*Neck:* ewe neck, narrow and slack at base.

*Back and ribs:* ribs easily visible, prominent backbone with skin sunken on either side.

973 *Pelvis:* prominent pelvis and croup, sunken rump but skin supple, deep cavity under tail



##### **Score 2**

*Neck:* narrow but firm

*Back and ribs:* ribs just visible, backbone covered but spine can be felt

*Pelvis:* rump flat either side of backbone, croup well-defined, some fat, slight cavity under tail



##### **Score 3**

*Neck:* no crest (except for stallions), firm neck

*Back and ribs:* ribs just covered and easily felt, no gutter along back, backbone well covered but spine can be felt

*Pelvis:* covered by fat and rounded, no gutter, pelvis easily felt

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**Score 4**

*Neck:* slight crest, wide and firm

*Back and ribs:* ribs well covered

*Pelvis:* gutter to root of tail, pelvis covered by soft fat, needs firm pressure to feel



**Score 5**

*Neck:* marked crest, very wide and firm, folds of fat

*Back and ribs:* ribs buried, cannot be felt, deep gutter along back, back broad and flat

*Pelvis:* deep gutter to root of tail, skin dispended, pelvis buried, cannot be felt

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990 For more information see also <http://www.worldhorsewelfare.org/Right-Weight>

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## 994 Training principles

995 The International Society for Equitation Science (ISES) has developed the following training principles:

996

997 Human and horse welfare depend upon training methods and management that demonstrate:

998

### 1. Regard for human and horse safety

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- Acknowledge that horses' size, power and potential flightiness present a significant risk
- Avoid provoking aggressive/defensive behaviours (kicking /biting)
- Ensure recognition of the horse's dangerous zones (e.g hindquarters)
- Safe use of tools, equipment and environment
- Recognise the dangers of being ineffective, inconsistent or confusing
- Ensure horses and humans are appropriately matched
- Avoid using methods or equipment that cause pain, distress or injury to the horse

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*"Disregarding safety greatly increases the danger of human-horse interactions"*

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### 2. Regard for the nature of horses

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- Ensure welfare needs: lengthy daily foraging, equine company, freedom to move
- Avoid aversive management practices (e.g. whisker-trimming, ear-twitching)
- Avoid assuming a role for dominance in human/horse interactions
- Recognise signs of pain
- Respect the social nature of horses (e.g. importance of touch, effects of separation)
- Avoid movements horses may perceive as threatening (e.g jerky, rushing movements)

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*"Isolation, restricted locomotion and limited foraging compromise welfare"*

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### 3. Regard for horses' mental and sensory abilities

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- Avoid overestimating the horse's mental abilities (e.g. "he knows what he did wrong")
- Avoid underestimating the horse's mental abilities (e.g. "It's only a horse...")
- Acknowledge that horses see and hear differently from humans
- Avoid long training sessions (keep repetitions to a minimum to avoid overloading)
- Avoid assuming that the horse thinks as humans do
- Avoid implying mental states when describing and interpreting horse behaviour

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*"Over- or underestimating the horse's mental capabilities can have significant welfare consequences"*

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### 4. Regard for current emotional states

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- Ensure trained responses and reinforcements are consistent
- Avoid the use of pain/constant discomfort in training
- Avoid triggering flight/fight/freeze reactions
- Maintain minimum arousal for the task during training

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- 1032 • Help the horse to relax with stroking and voice
- 1033 • Encourage the horse to adopt relaxed postures as part of training (e.g. head lowering, free
- 1034 rein)
- 1035 • Avoid high arousal when using tactile or food motivators
- 1036 • Don't underestimate horse's capacity to suffer
- 1037 • Encourage positive emotional states in training

1038 *"High arousal and lack of reinforcement may lead to stress and negative affective states"*

1039

1040 **5. Correct use of habituation/desensitization/calming methods**

- 1041 • Gradually approach objects that the horse is afraid of or, if possible, gradually bring such
- 1042 aversive objects closer to the horse (systematic desensitization)
- 1043 • Gain control of the horse's limb movements (e.g. step the horse back) while aversive
- 1044 objects are maintained at a safe distance and gradually brought closer (over-shadowing)
- 1045 • Associate aversive stimuli with pleasant outcomes by giving food treats when the horse
- 1046 perceives the scary object (counter-conditioning)
- 1047 • Ignore undesirable behaviours and reinforce desirable alternative responses (differential
- 1048 reinforcement)
- 1049 • Avoid flooding techniques (forcing the horse to endure aversive stimuli)

1050 *"Desensitization techniques that involve flooding may lead to stress and produce phobias"*

1051

1052 **6. Correct use of Operant Conditioning**

- 1053 • Understand how operant conditioning works: i.e. performance of behaviors become more
- 1054 or less likely as a result of their consequences.
- 1055 • Tactile pressures (e.g. from the bit, leg, spur or whip) must be removed at the onset of the
- 1056 correct response
- 1057 • Minimise delays in reinforcement because they are ineffective and unethical
- 1058 • Use combined reinforcement (amplify pressure-release rewards with tactile or food
- 1059 rewards where appropriate)
- 1060 • Avoid active punishment

1061 *"The incorrect use of operant conditioning can lead to serious behavior problems that manifest as*

1062 *aggression, escape, apathy and compromise welfare"*

1063

1064 **7. Correct use of Classical Conditioning**

- 1065 • Train the uptake of light signals by placing them BEFORE a pressure-release sequence
- 1066 • Precede all desirable responses with light signals
- 1067 • Avoid unwanted stimuli overshadowing desired responses (e.g. the horse may associate an
- 1068 undesirable response with an unintended signal from the environment)

1069 *"The absence of benign (light) signals can lead to stress and compromised welfare"*

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#### 10. Correct use of Shaping

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- Break down training tasks into the smallest achievable steps and progressively reinforce each step toward the desired behavior

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- Plan training to make the correct response as obvious and easy as possible

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- Maintain a consistent environment to train a new task and give the horse the time to learn safely and calmly

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- Only change one contextual aspect at a time (e.g trainer, place, signal)

1080

*“Poor shaping leads to confusion”*

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#### 11. Correct use of Signals/Cues

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- Ensure signals are easy for the horse to discriminate from one another

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- Ensure each signal has only one meaning

1085

- Ensure signals for different responses are never applied concurrently

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- Ensure locomotory signals are applied in timing with limb biomechanics

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*“Unclear, ambiguous or simultaneous signals lead to confusion”*

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#### 12. Regard for Self-carriage

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- Aim for self-carriage in all methods and at all levels of training

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- Train the horse to maintain:

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- gait

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- tempo

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- stride length

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- direction

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- head and neck carriage

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- body posture

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- Avoid forcing any posture

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- Avoid nagging with legs, spurs or reins i.e. avoid trying to maintain responses with relentless signaling.

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*“Lack of self-carriage can promote hyper-reactive responses and compromise welfare”*

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