

**ESTABLISHING A GOOD
HORSE-HUMAN RELATIONSHIP**

**ENSURING
THE RIGHT DIET**

**PROVIDING AN
APPROPRIATE LIVING SPACE**

**ENCOURAGING PHYSICAL
AND EXPLORATORY ACTIVITY**

**FACILITATING
SOCIAL CONTACT**

**ENSURING
GOOD HEALTH**

PREVENTING PAIN

**ENSURING DECENT
END-OF-LIFE CARE**

EQUINE WELFARE CHARTER



CONTENTS

Introduction.....	3
To facilitate acceptance of the Charter.....	4
The signatories agree	6
To always do better and spread understanding.....	7
The eight EW measures signed.....	8
Practical factsheets explaining the eight measures.....	10
<i>Using the practical factsheets</i>	12
<i>Augmented reality > instructions</i>	13
<i>Practical factsheet 1</i>	14
<i>Practical factsheet 2</i>	26
<i>Practical factsheet 3</i>	41
<i>Practical factsheet 4</i>	50
<i>Practical factsheet 5</i>	61
<i>Practical factsheet 6</i>	72
<i>Practical factsheet 7</i>	87
<i>Practical factsheet 8</i>	98
<i>Appendix A</i>	106
<i>Appendix B</i>	110
<i>Appendix C</i>	114
<i>Appendix D</i>	122
<i>Appendix E</i>	129



INTRODUCTION

The Equestrian world has for many years been concerned about ensuring the welfare of their animals, and to highlight and disseminate the knowledge and expertise of French professionals. It has therefore decided to take collective action to highlight and explain the concept of equine welfare, to continue and improve practices featuring safety and performance, increasing respect for their economic benefit, and for their craft.

To ensure this, a whole range of French equestrian and veterinary associations – Fédération Nationale du Cheval, l'Association Vétérinaire Équine Française (VNEF), la Fédération Française d'Équitation (FFE), France Galop, le Groupement Hippique National (GHN), and Le Trot – backed by the expertise of the French Livestock Breeders' Institute, have developed this

"EQUINE WELFARE CHARTER"



The Equine Welfare Charter takes a "horse-centric" approach, adopting the measures that are the most conducive to animal welfare, common to all aspects of equestrian economic activity and use, based on professional experience and scientific knowledge, with existing regulations as the springboard.

The Equine Welfare Charter comes with a technical manual aimed at equestrian professionals to help them implement best practices.

The Equine Welfare Charter and its manual apply to all types of horses for all purposes including breeding, recreation, sport, work, draught and racing, of all ages. A voluntary initiative, it is aimed at all equestrian professionals who would want to adopt this approach, including breeders, foal raisers, stud farmers, owners, trainers, jockeys, equestrian centre directors, equestrian vets, etc. whether just starting out or established. It is strengthened by as many members as possible.

*In this document, the term "horse" means any member of the equine family;
"work" or "working" means any way in which the horse is used.*

TO FACILITATE APPROPRIATION OF THE CHARTER:

An inter-sectoral, technical and decision-making structure:

Professional organisations in the equestrian sector (Sport, Recreation, Work, Racing, Meat production) all share a common ethical approach to horse welfare. They have therefore decided to work together to develop a Charter that would be easily appropriable in every human-animal relationship. Two Committees have been set up to do this:

- >> **The Steering Committee sets the strategy, and approves the work of the Technical Committee.** It is composed of the AVEF, FFE, FNC, France Galop, GHN, and Le Trot. It is chaired and run by the FNC. It has set the roadmap for the technical committee to meet the Charter objectives.
- >> **The Technical Committee** is tasked with providing the technical and scientific expertise to develop the Charter. It is composed of members of the entities comprising the Steering Committee along with the French livestock institute IDELE respected for its experience and expertise in establishing best practices for other animal species, as well as APCA, IFCE, FEG, SHF and SFET.

In addition to work undertaken by these committees, various discussion and cooperation meetings have been organised with all the players likely to share the objectives in the Charter, by the professional bodies who subscribe to animal welfare: independent experts, representatives of animal protection associations, scientists, etc.

Scope of the Charter:

The Charter provides a common basis for recommendations and best practices, irrespective of how used, based on regulations, to promote a minimum level of behaviour that everyone should respect. It excludes transportation and slaughtering issues, as well as sanitation and health concerns which are already covered by guides to best practices. Similarly, breeding and genetics involving specialist intervention are not covered by the Charter.

The general principles of the OIE (World Organisation for Animal Health) Terrestrial Animal Health Code regarding animal welfare is the regulatory basis of the Charter. The eight horse welfare principles have been adapted for the Equestrian world based on the ten OIE principles. This is because there are currently no regulations or recommendations specifically covering horses, and the equestrian world has had to rely on general European and French texts. Each equestrian sector (Sport, Recreation, Work, Racing, Meat production) has developed its own specific codes to ensure the welfare of the horses in these diverse situations (eg: the Racing Code, FEI Regulations, etc.). Horse keepers' obligations in terms of identification, livestock register, transportation register, location declaration, and public health veterinarian's declaration, are the basis of those regulations.

A list of the regulatory texts to which the Charter and its manual refer, is presented in course of the manual as appropriate for each measure of equine welfare.

One initiative, two documents:

After refining the target and objectives of the Charter, the Steering Committee decided, based on the successful experience of other sectors, to present the equine welfare initiative in the form of two separate but complementary documents: the industry's Charter of Commitment and its Technical Manual.

- >> The Charter itself, presenting the principles and commitments, defines the ethical and technical objectives shared by the professional organisations who are signatories to it. The principles adopted are based on the definitions and principles of the World Organisation for Animal Health (OIE). Aimed at professionals, this is the primary – comprehensive and precise – communication of principles and commitments. The Charter resulting from all this work was officially signed at the International Agricultural Show in March 2016.
- >> The Technical Manual contains practical recommendations and horse welfare measurement indicators, as well as a self-assessment tool that professionals can use to check that they are on the right track. Based on the Charter objectives and the equine welfare measures outlined in it, the Manual takes an illustrated, user-friendly approach designed to appeal to the widest possible audience, to offer practical and technical recommendations that can be used as a basis for progress. Aimed at advisors and professionals, it assumes a basic understanding of equine biology and equine husbandry.



An analytical approach:

In the absence of reference documents, such as the risk analyses produced by the EFSA in other industries, the Technical Committee set up an initial analytical phase inspired by those methodologies.

In practical terms, the Technical Committee produced a summary of the factors potentially harmful to equine welfare and the associated risk factors, based on available bibliographical data and the professional expertise of its members. To identify the factors potentially harmful to equine welfare, the Technical Committee adopted the definition of welfare used by the OIE, based on the five freedoms enunciated by the Farm Animal Welfare Council (FAWC) and the criteria used in the Welfare Quality project. For each potential harm factor, the Committee attempted to assess a general indicator of its seriousness for the animal and its frequency in practice. It found that different sectors all used the same principles to handle the specific risks in various situations. For each harm factor, it also identified the main known risk factors. Lastly, this analysis table was reviewed in terms of the Charter commitments by introducing self-assessment indicators as a basis for progress.

A self-assessment approach:

The national Equine Welfare Charter takes an improvement-focused approach, making it possible for every industry professional who wants to adopt this Charter to do so especially if their practices have room for improvement. As industry professionals can intervene at any point of the equine biological cycle, in rearing or keeping, with a wide range of options, it was considered best initially to advocate self-assessment to attract the largest possible membership. This allows professionals to assess their own position using the questionnaire and/or the "equine welfare practices self-assessment" app. They then define the measures in which they want to improve, and the timeframe within which they believe they can do so. They can contact an expert, and take numerous training courses, to help them achieve their goal. The app allows them to easily identify the most appropriate training for the practices they can improve.

An approach that is designed to evolve:

The Equine Welfare Charter is designed to set out the entire equestrian industry's commitment to implementing practices to respect equine welfare. It relies on the voluntary commitment of industry professionals who, via this initiative, demonstrate their professionalism, know-how, and desire for continuous improvement. Its content is designed to evolve to incorporate new research and to aim for certification status so that this initiative can permit professionals to obtain official recognition in the form of a label or a certification.

Training for professionals:

Training for industry professionals is an integral part of this initiative, in accordance with the 11th OIE principle: *"Those raising and caring for animals must have adequate skills and knowledge to ensure that the animals will be treated in accordance with the measures presented above"*. It is therefore essential that horses are cared for by staff who possess the appropriate aptitudes, knowledge and professional skills. For industry professionals, this means:

- >> Being able to appropriate the equine welfare measures in order to implement them;
- >> Demonstrating a level of understanding of animal welfare to guarantee the five freedoms: freedom from hunger, thirst and malnutrition; freedom from fear and distress; freedom from pain, injury and disease; freedom from discomfort; freedom to express normal behaviour.

To do so, professionals have been and are able to obtain precise information about the following aspects:

- >> *understanding of the regulations governing the keeping and protection of horses;*
- >> *understanding of the physiology of horses, their basic needs, their behaviour, and the concept of stress;*
- >> *understanding of the practical aspects of handling horses;*
- >> *understanding of the emergency care to give to horses while awaiting veterinary expertise, the emergency measures to take at the end of their life, and preventive biosecurity measures;*
- >> *specific information in the Equine Welfare Charter, or equivalent.*

The "equine welfare practices self-assessment" app allows professionals to identify the appropriate training to enhance their understanding of and practices in horse welfare.

Work has been done in association with agricultural training funds to help finance training for professionals: VIVEA for farm managers and spouses; FAFSEA for employees.



THE SIGNATORIES AGREE:

Whereas:

- >> Horses are central to the age-old relationship between humans and animals and still today provide numerous services (recreation, work, sport, racing, food, therapy, locomotion, etc.). This closeness demonstrates the importance of protecting their physical and mental integrity.
- >> Over the past 20 years, horse professionals have improved their working practices in terms of equine welfare, along with developments in new scientific understanding, legislative changes, new learning methods, and horse users' growing awareness of animal welfare issues.
- >> The development of biological and behavioural sciences has enabled a formalised consensus body of knowledge that:
 - establishes the relationship between horses' welfare, their performance and peoples' safety;
 - contributes to the development of practical information and effectiveness indicators for horse welfare.
- >> Wellbeing is the physical and mental state of an animal, that results from satisfying its essential physiological and behavioural needs while taking into account its capacity for adaptation, as defined by ANSES (French National Agency for Food, Environmental and Occupational Health & Safety).
- >> Animal welfare is a shared social objective. This consensus has long been enshrined in European conventions and treaties as well as in French legislation. The World Organization for Animal Health is now recognised as the standard setting body in this field. Its ten principles are based on the five freedoms:
 - freedom from hunger, thirst and malnutrition;
 - freedom from discomfort;
 - freedom from pain, injury and disease;
 - freedom to express normal behaviour;
 - freedom from fear and distress.

A common action mode:

- >> Provide support to equine professionals in carrying out their activities with a triple performance goal in mind (economic, social and environmental), while taking animal welfare into account including its ethical dimension;
- >> Disseminate the know-how and expertise of animal welfare professionals;
- >> Promote the Charter in each of their organisations;
- >> Encourage scientific research into, and the production of technical literature on, horse welfare;
- >> Strengthen and expand the knowledge base and skills relating to horse welfare at initial and during continuous training;
- >> Include this Equine Welfare Charter in a continuous improvement initiative and regular reviews, to promote the development of practices and scientific knowledge.

Two fundamental principles:

- >> People responsible for horses require an adequate level of the necessary skills and knowledge;
- >> Horse keepers undertake to implement the appropriate measures for their welfare and to assess their effectiveness.



TO ALWAYS DO BETTER & DISSEMINATE:

Technical content:

Based on a progressive approach, the Charter is available to all horse industry professionals who want it. They can progress at their own pace to all the objectives based on the eight measures of horse welfare considered appropriate by professionals:

- >> Horse-human relationship;
- >> Appropriate diet;
- >> Appropriate living environment;
- >> Physical and exploratory activity;
- >> Social contact;
- >> Good health;
- >> Prevention of pain;
- >> Decent end-of-life.

Organisation of the content:

The eight measures formulated by professionals are presented initially in a general form, then each is explained in a practical and pragmatic way in a factsheet set out as follows:

- >> Detailed objectives of the measure;
- >> Self-assessment of practices in line with the measure;
- >> Horse-centric welfare and environmental indicators of the measure. The indicators are factors used to measure the animal's state of wellbeing for the measure concerned. They are based on the AVEF matrices, consensus scientific data etc. and refer to the main alert thresholds identified during the risk analysis. They are presented in the form of diagrams and photos, to the extent possible;
- >> Vigilance points of the measure. Vigilance points refer to the risk factors identified during the risk analysis;
- >> In practical terms, What should I do if ? This section refers to the "horse welfare expectations" part of the risk analysis and meets those expectations through consensus good practices, the data acknowledged by all. For each situation, the problem encountered is posed in the form of a question and then the answer is given;
- >> What you need to know. This section corresponds to the main zootechnical knowledge connected with the measure. More-detailed understanding may be developed in the appendices;
- >> To go further. This section is the scientific and technical basis of the factsheet, with all the references used to develop it. Their placement during the course of the document makes it easy to find the references corresponding to the measure ;
- >> What the regulations say. It is a list of texts that constitute the regulatory basis of the resume.

Some preliminary statements:

Horse welfare involves first of all prohibiting all deliberate active mistreatment, as well as all passive mistreatment, due to lack of knowledge, or not, that would harm the physical or psychological integrity of the animal. Pain is a paramount factor when considering animal welfare.

When a horse is suffering harm, the visible signs may be physical, physiological or behavioural. Horse professionals must be able to recognise these signs.

Practice, whether for sporting, recreational or work purposes, must be reasonable in the light of the horse's state of health and welfare, so as not to cause avoidable pain or injury.

Lastly, it is essential to note that abandoning a horse, especially if old, causes major harm to the animal's health and welfare.



THE FOLLOWING EIGHT MEASURES ARE CONSIDERED APPROPRIATE BY HORSE PROFESSIONALS:



MEASURE 1

Make sure to establish a relationship of trust when handling the horse and in their contact with humans.



MEASURE 2

Ensure an adequate supply of water and feed that is appropriate for the horse's physiological and behavioural needs and for the intensity of the work it is asked to do.



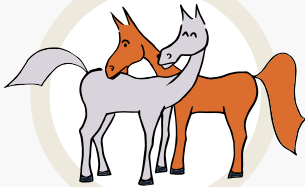
MEASURE 3

Offer the horses a clean, cared-for living space to prevent the risk of injury and disease, and permit them to adjust to climatic fluctuations.



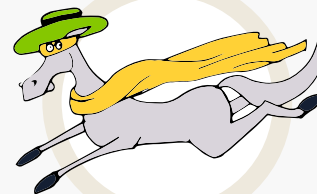
MEASURE 4

Make sure to structure and arrange the horses' living environment in a way that allows them to express their natural behaviour and offer them resting and working comfort.



MEASURE 5

Respect the gregariousness of horses by encouraging positive social contact between them to minimise behavioural problems.



MEASURE 6

Collectively define good practices for the rearing, keeping and use of horses with the goal of minimising risks to their health.



MEASURE 7

Prevent or alleviate pain.



MEASURE 8

Make sure that horses, throughout their lives, have the necessary care, and approach death in decent conditions when therapies are ineffective or economically unsupportable.

Signé à Paris, le 4 mars 2016,



Pour l'Association Vétérinaire Équine Française,
Charles-François LOUF



Pour la Fédération Française d'Équitation,
Serge LECOMTE



Pour la Fédération Nationale du Cheval,
Marianne DUTOIT



Pour France Galop,
Edouard de ROTHSCHILD



Pour le Groupement Hippique National,
Philippe AUDIGE



Pour Le Trot,
Dominique de BELLAIGUE

Avec le soutien :



de la Fédération Nationale des
Syndicats d'Exploitants Agricoles,
Xavier BEULIN



des Jeunes Agriculteurs,
Thomas DIEMER



Avec l'appui



MEASURE 1

Make sure to establish a relationship of trust when handling the horse and in their contact with humans.

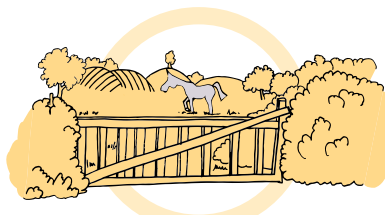
Sheet 1 - page 14



MEASURE 2

Ensure an adequate supply of water and feed that is appropriate for the horse's physiological and behavioural needs and for the intensity of the work it is asked to do.

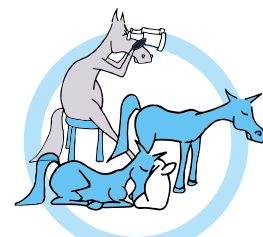
Sheet 2 - page 26



MEASURE 3

Offer the horses a clean, cared-for living space to prevent the risk of injury and disease, and permit them to adjust to climatic fluctuations.

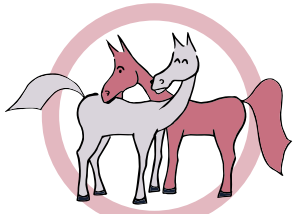
Sheet 3 - page 41



MEASURE 4

Make sure to structure and arrange the horses' living environment in a way that allows them to express their natural behaviour and offer them resting and working comfort.

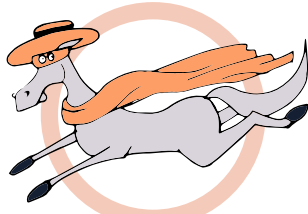
Sheet 4 - page 50



MEASURE 5

Respect the gregariousness of horses by encouraging positive social contact between them to minimise behavioural problems.

Sheet 5 - page 61



MEASURE 6

Collectively define good practices for the rearing, keeping and use of horses with the goal of minimising risks to their health.

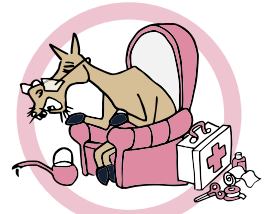
Sheet 6 - page 72



MEASURE 7

Prevent or alleviate pain.

Sheet 7 - page 87



MEASURE 8

Make sure that horses, throughout their lives, have the necessary care, and approach death in decent conditions when therapies are ineffective or economically unsupportable.

Sheet 8 - page 98

USING THE PRACTICAL FACTSHEETS

HOW TO MAKE THE BEST USE OF THE MANUAL?

The architecture of the factsheets explaining the eight measures of horse welfare is presented in the introductory section of the manual (see page 7). To make the best use of the manual, it is recommended that you start by doing an initial self-assessment of your practices, then review them after reading and implementing the elements in the factsheet.

Self-assessments can be done as often as you consider necessary to progress in your practices.

Following each positioning, it is recommended that you “take stock” of yourself and your animals to define an action plan for the next 6 or 12 months. Taking a step back like this allows you to take a critical view of your practices, question them and envisage ways of improving them.

The following postcard can serve as a template for doing so.



AUGMENTED REALITY > INSTRUCTIONS

HOW TO USE THE ENHANCEMENT OF THE MANUAL?

Augmented reality allows the manual to be enhanced with animations, videos, access to additional documents via a tablet or smartphone.

1



Download the
"Horse Welfare" app.

2



Find and flash the pages that have
the horse symbol.



3



View the enhanced content.

"Horse Welfare" free app on:



MEASURE 1

MAKE SURE TO ESTABLISH A RELATIONSHIP OF TRUST WHEN
HANDLING THE HORSE AND IN THEIR CONTACT WITH HUMANS.



OBJECTIVES

- This is about understanding learning principles.
- Learning must be gradual, appropriate to the horses' physical and mental abilities.
- Special attention must be paid to new or stressful situations so as to minimise restiveness, behavioural problems and accidents.



- *I handle my horses regularly for their comfort and my safety*
- *I know the potential sources of stress for my horses and I avoid them as much as possible to prevent behavioural problems*
- *I observe my horses' behaviour to assess their degree of stress and to anticipate their reactions*
- *I know the learning principles for horses and I use them for their education, especially in important phases (weaning, breaking-in, loading, training), and to establish a trusting relationship*
- *I adapt the work and equipment to each horse*

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OBJECTIVE HORSE-CENTRIC & ENVIRONMENTAL INDICATORS

1 > assess the horse's reaction to a person **approaching**



© AR

the horse naturally goes towards the person: attention, ears forwards or moving, relaxed;



© AR

the horse is indifferent to the person: does not approach or run away;



© La Cense

the horse is in a state of stress or alertness: upright neck, vocalises, defecates;



© Jessica Rodriguez

the horse runs away or avoids the person.

2 > assess the horse's reaction to **contact** with a person



the horse accepts contact with the person: attention, ears forwards or moving, relaxed;



the horse accepts handling by the person;



the horse shows occasional signs of discomfort when being handled: ears flat, swishing tail, the horse shoves the person;



the horse exhibits aggressive behaviour towards the person: nips, kicks, lashes out, rears up...

3 > assess the horse's attitude in use



the horse shows no signs of discomfort: attention, ears forwards or moving, relaxed;



the horse shows signs of discomfort or avoidance: ears laid back, swishing tail, head-flicking, open mouth, upright neck, swayed back;



the horse shows signs of strong resistance or aggressiveness towards the person: nips, kicks, rears up...

The optimisation of living conditions, feed, stabling, social interaction, health etc., is prerequisite for building a good horse-human relationship. The points presented below help to establish an optimal relationship during interactions with people, while protecting everyone's safety.

- Understanding and taking into consideration the horse's **sensoral, behavioural and cognitive characteristics**;
- Understanding the horse's **physiological characteristics**:
 - > Biomechanical;
 - > Biology of effort;
 - > Physical development;
- **Interactions** with the horse:
 - > Skill and behaviour of interveners during interactions;
 - > Frequency and duration of interactions;
 - > Specifics of handling foals: first days of life; social context;
 - > Absence of mistreatment;
 - > Non-coercive equipment and techniques;
 - > Understanding and implementing learning principles;
 - > Work appropriate to the horse's ability: physical and mental limits.

IN PRACTICAL TERMS, WHAT SHOULD I DO ?...

It is important to remember, as it says in the introduction, that professionals who handle and educate horses, at any stage of their life, have to have great animal sense. They must have sufficient experience and understanding to ensure that their gestures and attitudes are right, precise and appropriate to be understood and reassuring for the horse.

See Appendix A "Learning principles".

1 >> What should I do if the horse is uneasy or surprised by a person's interaction?

A horse's highly developed sensory abilities enable it to detect subtle signals emitted by the person, whether voluntary or not.

Taking the horse's sensory abilities into consideration when approaching and working, it preserves the safety of the horse-human relationship and permits the horse to associate this relationship with positive events.

For example: preventing the horse from feeling surprised, such as by whistling when approaching from behind; allowing the horse time to adjust to sudden changes of light; adjust to intensity of aids to each horse; whether on foot or in the saddle, etc.



© pixabay

Cyclists make their presence known by talking, thereby avoiding surprising any horses.

2 >> What should I do if the horse displays problems during interactions with people: aggressiveness, fear, lack of attention or respect, undesirable or dangerous behaviour?

Such horse-human relationship problems can have multiple causes: physical pain, an inappropriate environment (in particular, lack of interaction with peers), a past experience, or an inappropriate learning method. For any given problem, the behaviours expressed can differ from horse to horse and from context to context.

When such problems appear, you should attempt to determine the cause(s), with the help of skilled professionals, to resolve them.

See sheets for measures 2, 3, 4, 5, 6 and 7.

Adherence to learning principles is a prerequisite for minimising interaction problems with people.

Proper application of the learning principles involves clear signals: consistent use of aids, identical signals for the same request and made at the right time. This allows the horse to understand them correctly, contributes to its motivation, and avoids unintended learning responsible for undesirable behaviour.

The learning principles and examples of unintended learning are presented in Appendix A.

Fear should not be used, in order to avoid flight when learning, to protect the safety of the rider/handler and horse. The behaviours acquired in this way and/or unintendedly, are harder to reverse and suppress.

Appropriateness between the horse's characteristics - less or more fearful, gregarious, sensitive to touch, etc. - its use and its user are equally conducive to the safety of the horse-human relationship, as well as the horse's welfare and performance.

In general, horses that are more emotional, lively and touch-sensitive will be more suited to sporting disciplines and experienced riders. The opposite characteristics will generally be less suitable for inexperienced riders.

To have the "ideal" horse and keep it, demands constant vigilance regarding its environmental conditions and choice of learning methods, which can make it more emotional.

3 >> *What should I do if the horse is afraid?*

It is important to analyse the reasons for the horse's fear and to know its history as well as its past experiences. You should make sure to provide a great deal of calmness, patience, and clarity to reassure the horse and give it a framework. The use of passive reinforcement can help reduce the fear caused to the horse by a particular object.

For example, place objects that may scare a horse, somewhere where it can explore them at its own pace and run away from them unhindered to permit habituation.

You should not use force to make a horse go to something that scares him.

See Appendix A "Learning principles".



© Delphine Laborde
© Magali van der Heyden



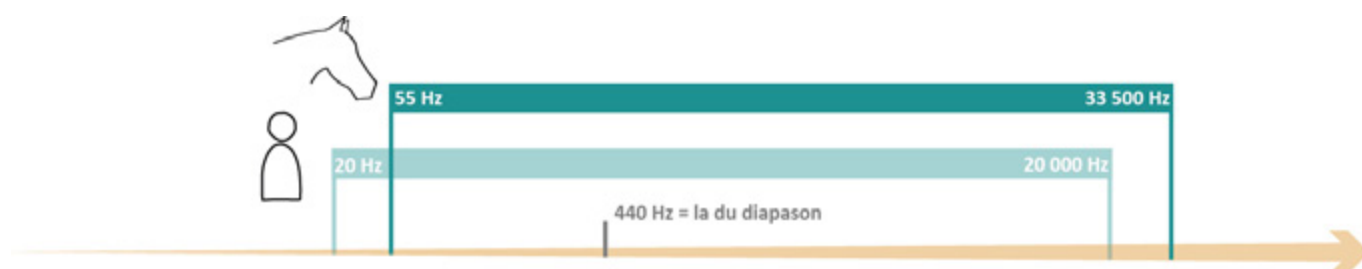
Horses willingly approaching objects that could scare them.

WHAT YOU NEED TO KNOW

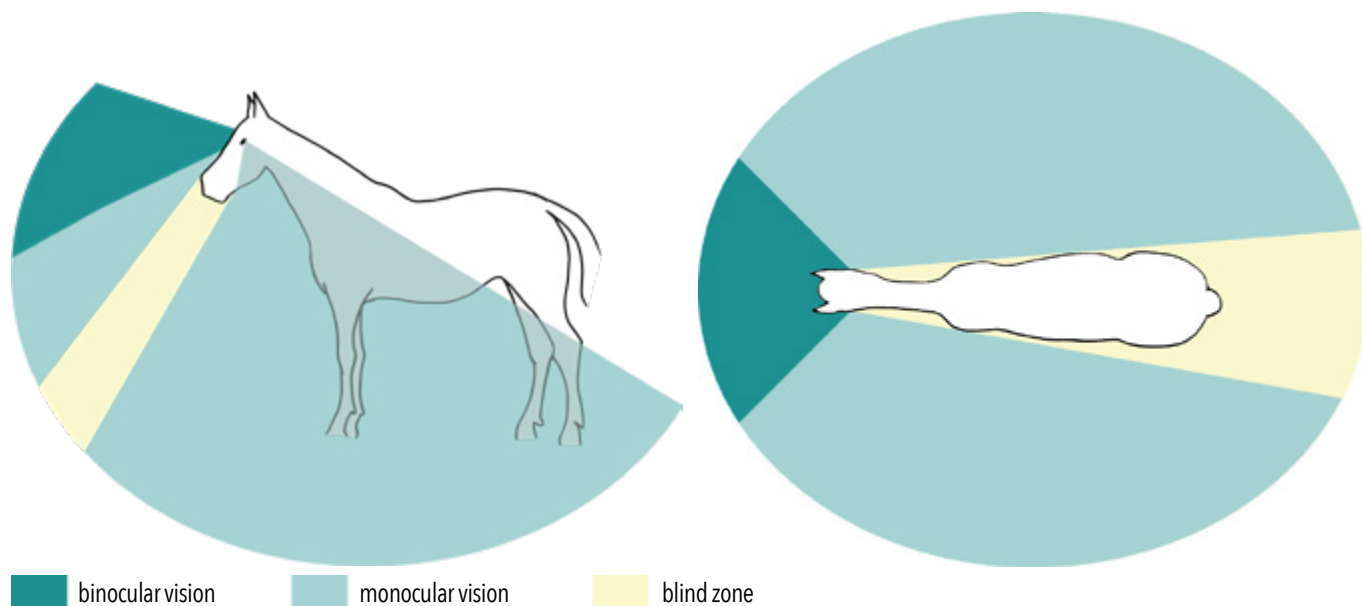
➤ *Horses have highly developed sensory abilities*

Horses have highly developed sensory abilities that allow them to survey their environment attentively to prevent attack by a predator.

Clearly understanding how a horse perceives its environment allows you to understand its reactions. The senses most likely to impact their relationship with people is sight, hearing and touch, which are factors that should be kept in mind: panoramic vision, perception of high-pitched sounds, high tactile sensitivity, etc.



Sound perception in horses and in people: horses perceive ultrasound, ie., sounds with a frequency between 20,000 and 10,000,000 Hertz, inaudible to humans.



Equine vision.

➤ *Reactivity in horses.*

Reactivity, which may be reflected in exacerbated fear response, is one of the aspects of horse temperament. To the extent that it has a genetic basis, it is natural in horses and it should be taken into consideration when establishing a relationship with the horse. The horse's past experiences may modulate its emotionality.

➤ Alert posture in horses.

In horses, the alert posture, or vigilance posture, is characterised by an upright posture, with upright neck and raised tail, with neck, ears and head in a fixed position.

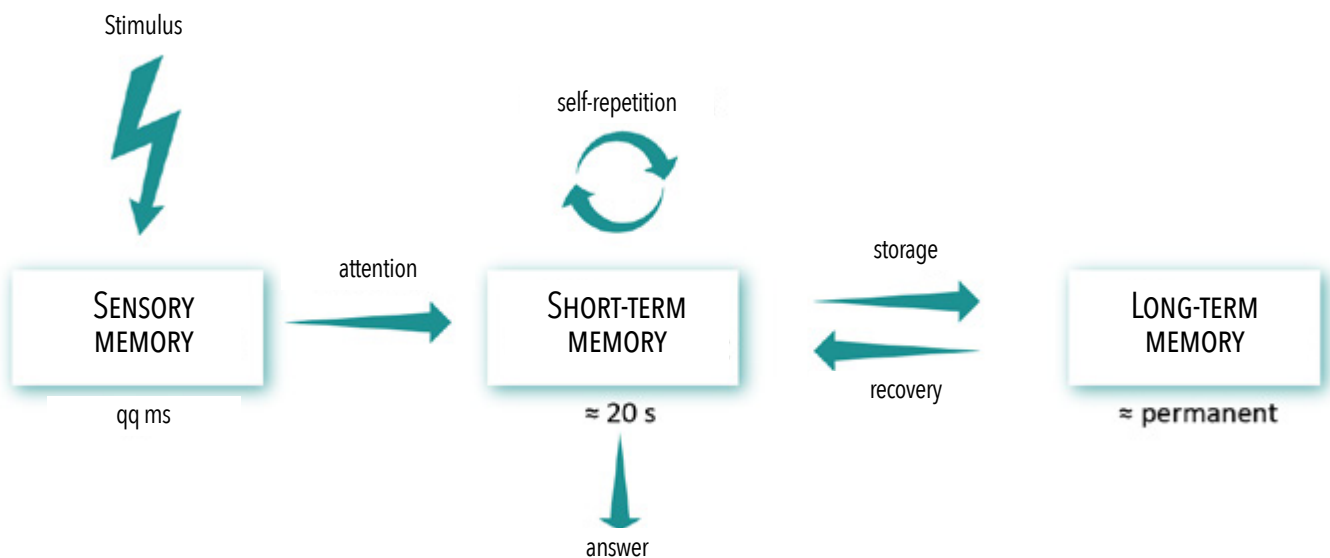


Horse in alert posture.

➤ Memory in horses

Working memory, or short-term memory, is the horse's ability to remember a recent event once the event is no longer present. A horse's short-term memory is about 20 seconds. This explains the necessity of using very short time periods when learning, for example between obtaining the desired behaviour and the reward, or between an undesirable behaviour and punishment.

Horses also have long-term memory: they can retain information from things they learned in previous years, whether desired behaviours or not. It is therefore important to take the horse's past experiences into consideration to explain certain behaviours.



source: Atkinson & Shiffrin, 1968

Memory in horses.

➤ Horse-human relationship

This relationship is established over time, during successive interactions developed while with the mother, which in turn influences the relationship that will be built with the future horse. It is important to allow the horse to be, as much as possible, the active participant in this relationship. Frequent and brief interactions are preferable to long and infrequent ones. Certain periods are more conducive to establishing a relationship, such as weaning and breaking-in. However, post-natal handling should certainly be avoided.

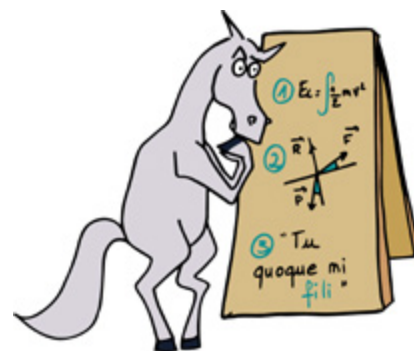


Example of relationships with horses of different breeds and ages.

Implementing the learning principles, during regular and appropriate handling, contributes to obtaining a horse that trusts people. The first riderless learning can start while it is with its mother before weaning and continue regularly until breaking-in, and then be used for care and work. The weaning and breaking-in periods need particular care when establishing the horse-human relationship.

Understanding and respecting the horse's abilities facilitates good progression in the horse's work, while minimising its defensiveness or lack of motivation. Special attention should be paid to:

- its physical abilities: growth, muscularity, cardiac and respiratory training;
- its mental abilities, by setting achievable challenges through regular and gradual training, minimising pain, and facilitating success in its exercises;
- its attention and concentration abilities.



The use of equipment, such as saddles, girths, bits, bridles, nosebands or reins, etc., properly maintained, clean, the right size, and used appropriately, helps develop the horse-human relationship by encouraging learning, avoiding pain and defensiveness in horses (see factsheet for measure 7).

The learning principles are described in Appendix A.

➤ Specifics of handling foals

The mother bonds with its young in the first few hours. If the foal does not need emergency care at birth, it is beneficial to let the mare lick it and let the foal have its first suckle, before being handled by a human. This permits an exclusive, reciprocal and secure bond to be established between the mother and its young, helps the foal to integrate properly into the group, and better acceptance of human contact. This must not exclude the essential surveillance of the mother-foal pair during the first hours of its life.

It is then possible to handle the foal carefully, leaving it free to leave and as much as possible be the active participant in the relationship, for a few minutes a day, over the course of its first two weeks: brushing, grooming, holding its feet, etc. It will then be easier to handle over the course of the next months. The mother, which is a model for the foal, can also be used as mediator of the relationship with people, as it is being handled. This approach has beneficial effects on the horse-human relationship for up to a year later. Weaning can also be an opportunity to augment interactions with the foal to maintain the relationship with people.



Examples of handling of foals at different stages of their development.

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WHAT THE RULES SAY

Article R 214-17 du CRPM, alinéa 3 – relatif aux matériels utilisés par les personnes qui élèvent, gardent ou détiennent des animaux domestiques

Article L 214-3 du CRPM – relatif à l'interdiction d'exercer des mauvais traitements sur les animaux domestiques

Article A 322-119 du Code du sport – relatif à l'état du matériel utilisé

Arrêté du 25 octobre 1982, Annexe I, chap I, chap IV – relatifs aux aptitudes / compétences / connaissances des personnes en charge du soin des animaux, à l'absence de souffrance et d'effet néfaste sur la santé de l'élevage, la garde, l'utilisation et la détention des animaux

Article 158 du Code des Courses au Galop – relatif au dressage du cheval

Article 7, chap I du Règlement Général PEJET 2018 – relatif au bien-être animal

FEI Code of conduct for the welfare of the horse – relatif au bien-être de chevaux en compétition

Code de bonnes conduites du règlement général SHF des épreuves d'élevage 2018 – relatif aux bonnes conduites à tenir pour que le poney/cheval soit souverain

MEASURE 2

ENSURE AN ADEQUATE SUPPLY OF WATER AND FEED THAT IS APPROPRIATE FOR THE HORSE'S PHYSIOLOGICAL AND BEHAVIOURAL NEEDS AND FOR THE INTENSITY OF THE WORK IT IS ASKED TO DO



OBJECTIVES

- This is about ensuring that the horse remains healthy and preventing the risk of frustration by maintaining a balanced diet and adequate feeding time, notably by the daily intake of fibre.



WATERING

I give my horses free access to good quality water to ensure their health, all year round.

I have water troughs designed to prevent the risk of injury to horses

I protect and maintain the water points

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

FEED

I provide my horses with a sufficient quantity and quality of feed, particularly fibre, to keep them in good health and satisfy their physiological needs and behaviours

I provide horses that work with feed appropriate to their physical activity

I ensure high standards of hygiene during production, harvesting, storage and distribution of the feed

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

WATERING

1 > assess the horse's state of dehydration, by combining at least two of the following tests:

- **presence** / **absence** of colic
- by the skin fold test: pinch the skin between thumb and index finger at the shoulder or in front or middle of the neck, to assess the horse's state of dehydration. The assessment consists of observing how long the skin after being firmly pinched takes to return to normal:
 - Normally, the fold disappears in less than two seconds and the skin returns to normal;
 - In the case of moderate dehydration, the fold remains visible for between two and three seconds;
 - In the case of more severe dehydration, the fold remains visible for more than three seconds;



Skin fold test.

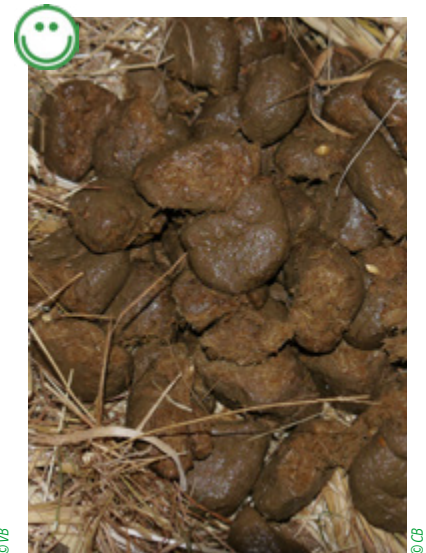
- the skin fold test shows: the horse is not drinking or drinks normally when presented with a pail of water if not thirsty and drinks avidly if thirsty;
- by observing the droppings: droppings that are dry and hard are a sign of dehydration.



Water pail test.



Droppings look dry and hard, presence of parasites (gastrophiles).



Droppings look normal.

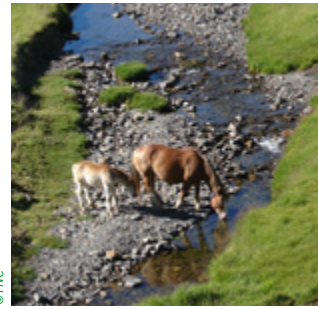
2 > assess the **presence** / **absence** and type of water point (examples not exhaustive)



Automatic trough.



Trough.



Natural water point.



Pond.

3 > assess the state of operation of the water point



Trough in proper working condition, with ice broken to allow the horse to drink in winter.



Leaking trough.

4 > assess the cleanliness of the water point



Water point satisfactory for horses.



Water point too murky to allow horses to drink from it.

Note: the colour of the water is not a criterion of quality for horses.

More important are murkiness, odour, taste, and absence of contaminants (absence of green algae).

5 > measure the water temperature: ideally, the water temperature is above 8°C in order to minimise digestive disorders (colic...)

FEED

1 > assess the horse's Body Condition Score (BCS)

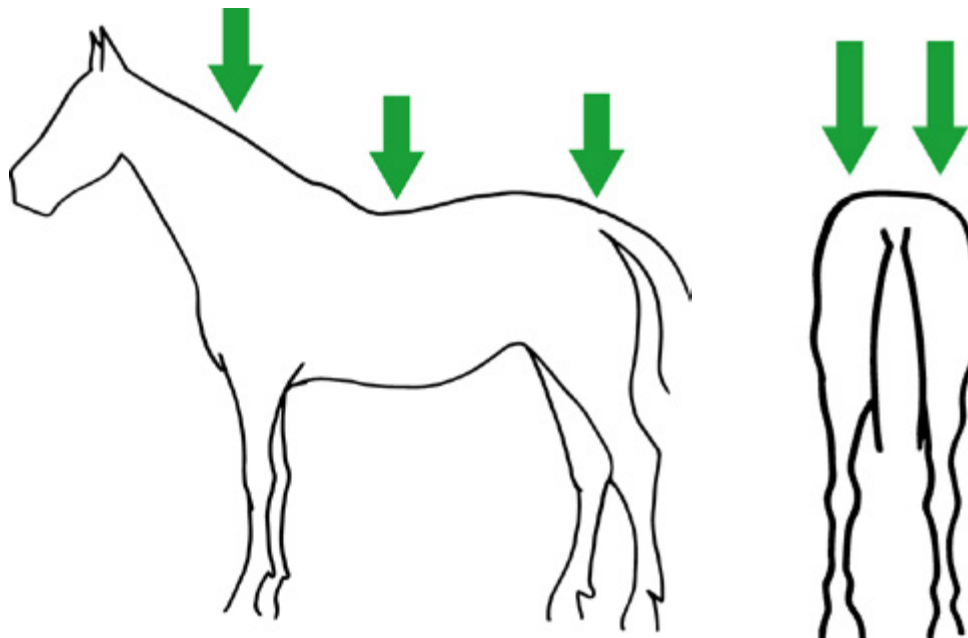
BCS is a standard assessment of the degree of fat cover in animals which, however, must be **weighted by the individual predispositions of each individual. It is dependent on the availability of feed and feeding practices, reproductive stage, performance and activities (work, etc.), parasites, dentition, and state of health.**

The assessment of the degree of fat cover is made using visual criteria and palpation to assess the degree of sub-cutaneous fat deposits. Using the BCS system with a simplified scale defines three levels: abnormal thinness, normal BCS, abnormal obesity. This scale can be used for any breed of horse.

1.1 > visual assessment

Assessment of the degree of fat cover starts with a general inspection of the animal's side, to assess the fat covering the neck, ribs, shoulder, back, abdomen and pelvis. The topline is a criterion assessed only visually.

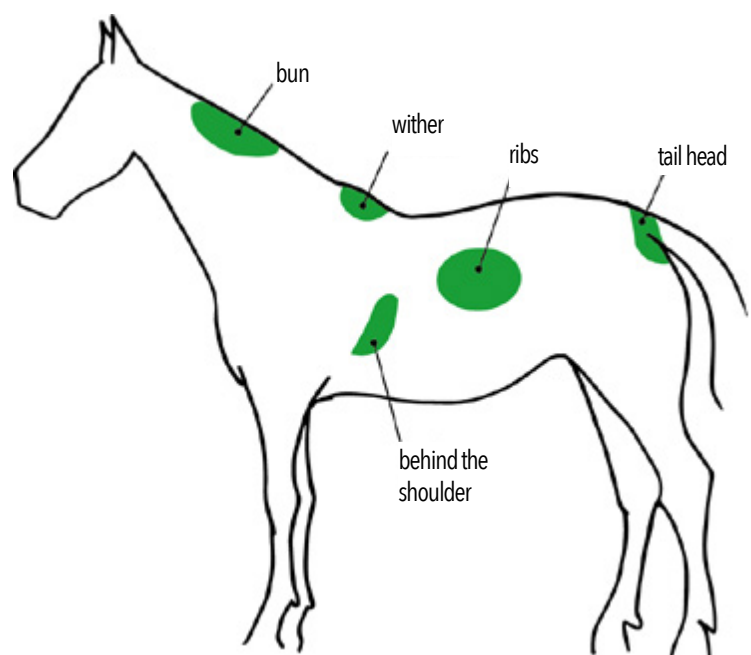
Then position yourself behind the horse, at a safe distance, and assess the fat around the vertebral bones at the top of the tail, the shape of the rump, the visibility of the spinal column and hip bones. The shape of the rump is a criterion assessed only visually.



1.2 > assessment by palpation

Palpation is used to assess the extent and thickness sub-cutaneous fat deposits, ie., superficial.

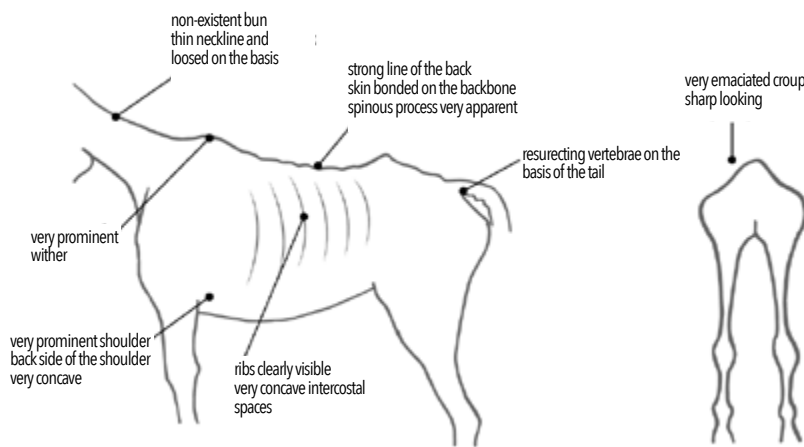
These deposits can be assessed using your hand, at different points of the horse. The palpation zones are the neck, withers, behind the shoulder, the ribs, and where the tail attaches.



1.3 > the scoring system

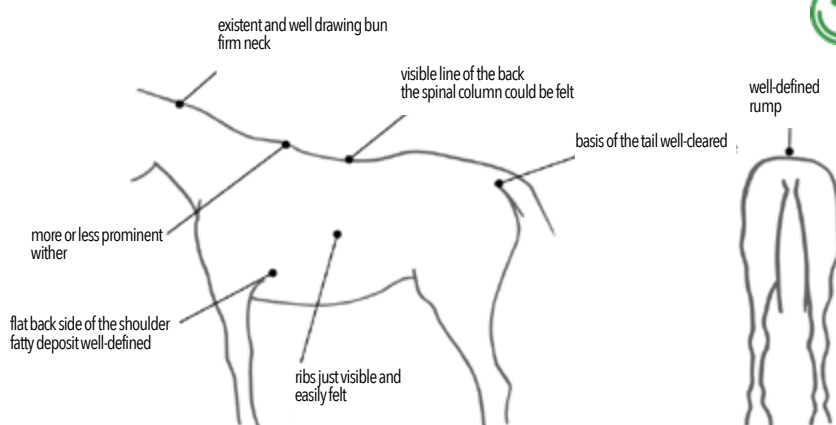
It determines the horse's score and thus its body condition:

- Score of 1 corresponds to abnormal thinness;
- Scores 2, 3 and 4 correspond to normal condition where 3 is the optimal score;
- Score of 5 corresponds to abnormal obesity.



Abnormal thinness (Score 1)

- Neck: goat-like neck, thin and loose the base;
- Back and ribs: ribs easily visible, prominent backbone, sunken skin;
- Pelvis: prominent pelvis and rump, sunken hindquarters but supple skin, very sunken under the tail.



Normal BCS (Score 2 to 4):

Score 2:

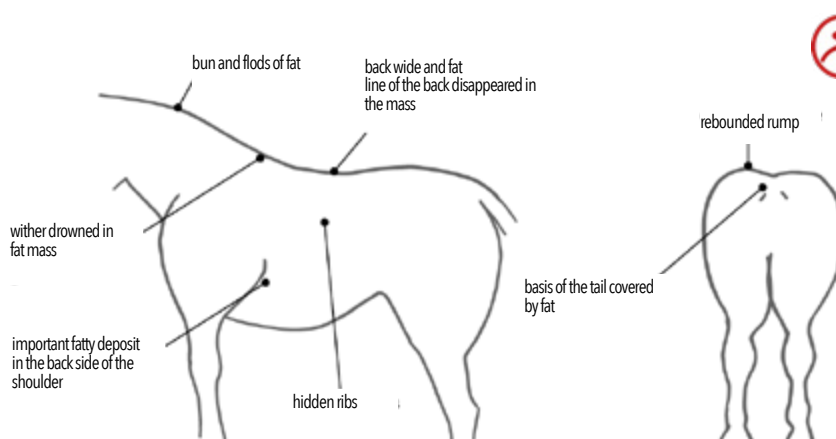
- Neck: narrow but firm;
- Back and ribs: ribs just visible, covered backbone, but spinal column can be felt;
- Pelvis: flat hindquarters on both sides of the backbone, well-defined rump, a bit of fat, slight cavity under the tail;

Score 3:

- Neck: no ridge, (except on stallions), firm neck;
- Back and ribs: Ribs just covered and easily felt, no groove along the back, spinal column well covered but backbone can be felt;
- Pelvis: fat-covered and rounded, no groove, pelvis easily felt;

Score 4:

- Neck: slight ridge, wide and firm;
- Back and ribs: ribs well covered;
- Pelvis: groove just at the base of the tail, pelvis covered with soft fat, requires firm pressure to feel it.



Abnormal obesity (Score 5)

- Neck: marked ridge, very wide and firm, folds of fat, chignon, coiled mane;
- Back and ribs: ribs not visible and cannot be felt, deep groove along the back, back wide and fat;
- Pelvis: wide groove up to the base of the tail, pelvis not visible and cannot be felt.

2 > assess the horse's appetite: **presence** / **absence** of appetite, refusal to eat some types of feed, etc.

3 > assess the daily quantities consumed: if feed remains unconsumed from one day to the next, that larger quantities are not given than that recommended for the morphology, age and activity of the horse, etc.

4 > assess the **presence/absence** and type of stereotypies.

See Appendix B "Behavioural problems" to characterise them.

5 > assess the condition and type of fodder and additives, if any.



Hay bales.



Good quality hay.



Mouldy hay.

WATERING

- Physiological condition of the horse (see "What you need to know");
- Troughs: state of functioning and filling capacity;
- Trough appropriate to the horse's needs and activity;
- Guaranteed access to the trough for all horses: number and position of troughs, management of hierarchy in batches;
- Trough management during a working period; between the return to equestrian centres, training, before and during competitions, before and during races...;
- Water quality: dirty, potability, temperature, prolonged stagnation, health risks...

FEED

- The feeding of horses must be calculated based the animal's physiology and activity: composition and frequency of feeds, distribution order of the feeds, duration of feeding time...;
- Quantity and quality of feeds, in particular intake of and access to fibrous feed;
- Guaranteed access to feed for all horses: number of places at the rack, number of feeding points, hierarchy management in batches (see factsheet for measure 5), management of cohabitation of multiple species...;
- Grazing: estimation and management of the availability and quality of grass, horse physiology and morphology, rotation management, management of overgrazing/undergrazing, grazing on too young grasses...;
- Oral-dental disorders or other health problems (see factsheet for measure 6);
- Management of specific risks: mould, dusty hay, presence of toxic plants in the pasture (see Appendix C "Plants toxic to horses")...

IN PRACTICAL TERMS, WHAT SHOULD I DO ?...

WATERING

1 >> *What should I do if the horse shows signs of prolonged thirst: indicators of dehydration, colic... ?*

- Contact a veterinarian if the horse's state of dehydration requires it;
- Inspect the watering systems every day to make sure they are working properly, in particular if there is a risk of freezing;
- If water is distributed using pails or if access is split into shifts, set up a water supply, for example every six hours or so, to ensure that the horse always has the best quality water;
- Make sure that the troughs are safe and cannot tip over and empty or cause injury to the horses;
- Keep the troughs clean;
- Make access to water points easy and safe for the horses. When possible, it is recommended that water points be installed at the horse's chest height. This allows the horse to be in a natural position when drinking and it cannot, even when pawing with its forelegs, put its feet in it. This also minimises the risk of contamination;
- When putting new watering systems in place, give the horses the time they need to adjust to them;
- Adjust water availability to the needs and activities of each horse (see "What you need to know");
- Be vigilant in cold spells: water can freeze and it may be necessary to break the ice, several times a day, so the horses can access the water;
- Carefully check the water quality at natural water points and provide, if uncertain about its quality, an additional artificial trough. Water analyses can be carried out to check water quality: physical, chemical, and bacteriological quality, contamination by herbicides and pesticides. Note that the colour of the water is not a criterion of quality for horses. It is more important to analyse murkiness, odour, taste and temperature;
- Adjust the water supply to the ratio of dry material in the feed. Horses need two to four litres of water per kilo of dry material consumed;
- Make sure that all horses of the same herd can have access to the water, including dominated horses. It may be necessary to split the water across several locations and/or increase the number of access points. In the case of automatic troughs in open stables and/or grazing shelters for a group, it is recommended that there be at least two troughs so that one is always in working order if the other has a mechanical fault. The size and composition of the group should also be taken into consideration. For example, if there are ponies and horses, adjust the height of part of the troughs so that they can all drink;
- Seek advice from technical experts or vets if problems persist.

FEED

The Body Condition Score (BCS) should be interpreted based on the horse's physiological stage, age, and use.

1 >> *What should I do if the horse refuses to feed?*

If the horse is not feeding but otherwise seems healthy, make sure that:

- there is nothing in the feed or rack preventing the horse from feeding (such as a dead animal...);
- there has been no change to the composition or quality of its feed;
- it can drink easily;
- it has no dental problems, mouth wound or mouth sore, or inflamed gums or tongue. Contact a veterinarian or horse dentist to check the horse's mouth;

If the horse has not been feeding for more than 12 hours and/or it does not seem comfortable: check its physiological parameters (see factsheet for measure 6) and contact a veterinarian.

2 >> *What should I do if the horse is abnormally thin (NEC <2)?*

- Check the horse's history and state of health, including any dental problems, hoof and foot problems, parasitism, as well as in the group in which it happens to be;
- Make sure that feed troughs are appropriate for the horse and that there are more than enough of them in the case of groups. It is recommended that feed troughs for concentrates have no sharp edges to avoid injury. They can be attached to a wall, preferable in a corner, or placed on the ground. For stalls or grazing shelters that have to accommodate a herd of horses, the feed trough should either occupy the entire length of the supporting wall, or be on the two short sides of the shelter or stall;
- Assess the quantities and quality of the feed available or distributed, especially the presence/absence of mould and toxic plants (see Appendix C);
- Review the ration: put in place a plan to gradually, over several days, replace the distributed feed with feed adjusted to needs or by introducing one or more supplements in the ration;
- Make sure in particular to analyse the quantity and quality of the pasture grass or hay. Tip: grazing time provides an initial assessment of quality. If horses are solely or primarily grass-fed, it is recommended that a "grass ration" study be carried out. A horse generally needs between 0.5 and 1 ha of pasture, depending on the region, soil quality, climate, rotation, type of farming: mixed horses/cattle or not;
- Make sure that all horses of the same herd can have access to the feed, including old or weaker horses. Observing the group at feeding time should allow you to check whether each animal has its "place at the table". As a reminder, feed should be split across several locations and the number of distribution points should be increased if necessary.
- Check and keep different species' feed separate when they cohabit.
- Seek advice from technical experts or vets if problems persist.

3 >> *What should I do if the horse is obese (NEC >4)?*

- Assess the quantities and quality of the feed available or distributed;
- Put in place a plan to gradually replace the distributed feed with feed adjusted to energy needs or by reducing supplements in the ration, or to increase the horse's exercise / work. You have to remain vigilant that a horse put on a diet gets enough fibre intake in his ration. In general, particularly in summer, horses do not need concentrates;
- A horse put on a diet requires careful monitoring to make sure that it does not develop deficiencies;
- Seek advice from technical experts or vets if problems persist.

4 >> What do if a horse has recurring ulcers? (see factsheet for measure 6)

- Consult a veterinarian;
- Make sure that the horse's living environment is not a source of stress;
- Make sure to provide hay first, when hay and supplementary feed (grain, pellets, etc.) are distributed to horses;
- Increase the ratio of fibrous feed in the ration of these horses;
- Increase the duration of feeding time;
- Split/spread out the intake of concentrated feed by increasing the number of daily feeds;
- Make feed transitions gradual, particularly when first turned out in the field.

5 >> What should I do if when the horse displays stereotypies connected with poor management of feed?

It is recommended that you lengthen the time it takes the animal to ingest its food, for which there are several options:

- Increase the ratio of fibrous feed in the rations of those horses and/or reduce concentrates;
- Lengthen feeding time: distribute the hay in hay nets or other slowfeeding system such as hayracks.

When putting these systems in place, they have to be positioned carefully: if they are too high, horses will adopt a position with their heads too high and stretched, which can cause osteo joint disorders.



Examples of slowfeeding systems.

WHAT YOU NEED TO KNOW

WATERING



Horses need a sufficient quantity of water and their needs can vary greatly.

Water is the most important nutrient for horses. Horses' water needs are a function of age, weight, climatic conditions (temperature, humidity), work, state of health, type of feed, as well as physiological stage for mares. Horses need 5.2 litres of water/100kg/day, which means providing 10-15 litres per day for 200-300 kg ponies, 15-25 litres for 300-400 kg horses, 25-30 litres for 450-500 kg horses, and more for horses over 500 kg. These needs have to be doubled or tripled for working horses. They are more for mares at the end of gestation and at the start of lactation (up to 80 litres per day).



FEED



Horses are herbivores, but are not ruminants

Horses are monogastric animals, with one small non-elastic stomach. In natural conditions, they spend about 15-16 hours a day grazing grass and other more woody food, such as rushes or tree bark. They eat and digest continuously.

The cellulose component of the feed is digested by the microbial flora in the large intestine. It is therefore important for them to have a regular intake of fibre to maintain the flora balance. The fibre ratio of feed is defined by the ratio of crude cellulose. The principal fibrous food consumed by horses are grass, hay, baled hay, dried hay and straw.

Feed supplements, or concentrates, are intended to cover only needs connected with physiological conditions or particular activities. They are composed of grains such as oats, barley, or corn, as well as commercial feedstuffs that can be used as supplements or complete feed (pellets). Feed supplements, high in starch content, are digested in the small intestine and absorbed quickly by the body.

The distribution order of the feed must respect these different digestion processes. If they are not available at will, it is recommended that fodder be distributed first, at least one hour before the concentrates.

The INRA feed tables can be used to calculate the recommended quantities of fibre and concentrates to cover horses' needs.

Use	Daily intake						Consumption of dry material (kg)*
	CFU	DNM (g)	Ca (g)	F (g)	Mg (g)	Na (g)	
Saddle horse 450 kg ¹							
Maintenance							
> horse at rest	4.2	275	23	14	6	11	6.6-8.0
Work							
> very light ² 4	5.1	350	25	14	7	21	8.0-9.0
> light ² 4	6.6	450	27	15	8	36	9.0-11.0
> medium ² 4	7.6	515	32	17	9	46	10.0-13.0
> intense ³	6.9	470	32	17	9	39	9.5-11.5

* The lowest values have been chosen for a feed high in concentrates, the highest values to maximise consumption of fodder.

¹These intakes are for geldings and mares.

²The horse is considered to work 2hrs/day.

³The horse is considered to work 1hr/day.

⁴A short outing is considered as light work for 1hr outing, and light work for 2hrs outing. Hacking/horse-riding is considered as light work for 2-4 hrs riding, and medium work for more than 4hrs riding.

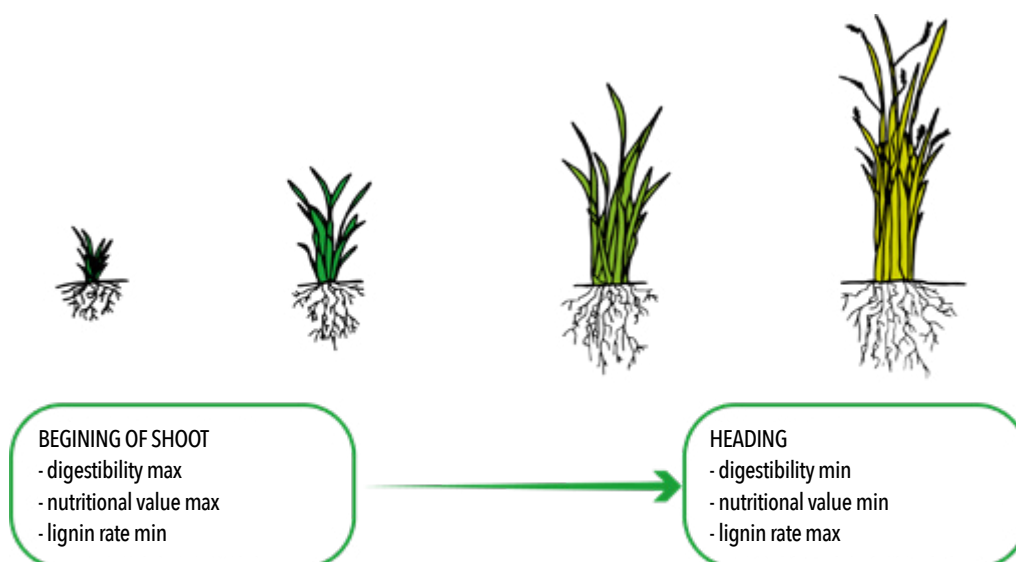
Example of the horse feeding table proposed by INRA.



Grass, an asset for horses

Well-farmed, well-maintained grassland composed of diverse species suitable for horses can provide them with a complete feed. However, be careful, sport horses may need supplements adjusted to their needs.

The plants that make up "grass" have a growth cycle that require rest periods. To ensure that horses get the nutrition they need, it is recommended to keep the grass in leafy stage. It is actually at that stage that the grass is richest, particularly in soluble sugars and proteins. In the following stages, the stems lengthen and harden, then spikes form, reducing the nutritional value of the grass.



Partitioning the pasture into several parcels through which the horses can rotate allows the grass to rest and regrow. Depending on the pedoclimatic conditions, rotating the parcels allows the grass three to five growing cycles per grazing season and helps keep the grassland in a leafy state.

A parcel can be used for approximately one week by horses then allowed to rest for three to six weeks, depending on the plants' growth period, or be grazed by sheep or cows. Depending on how vigorous the spring growth is, sub-parcels can be reserved for mowing/cutting, then reintegrated into the rotation in summer if necessary.

To avoid overgrazing, which leads to the degradation of the grassland, preventing the grass from regrowing, increases the risk of parasites and dietary deficiencies, the horses should be switched to a different parcel. Grass that grows less than 5 cm can be an indicator of overgrazing, depending on the type of horse and pasture.



Mown pasture.



Dense, rich pasture.



Tall pasture, spiky.

Refused areas, or areas not eaten by the horses, can appear in the parcel. This can be due to:

- the presence of plants that the horses do not like;
- degradation of the grassland by overgrazing which encourages the appearance of grassless areas, favourable for weeds to take hold that horses do not eat, such as docks, sorrels, thistles or buttercups.



Pasture with refused areas.



Mixed cattle/horse pasture.

Combining cattle and horses simultaneously or in rotation is beneficial for the grassland. Cattle are less selective than horses and graze less closely to the ground, significantly reducing refusal.

Mowing or crushing can also eliminate uneaten spiky plants.



Mixed cattle/horse pasture.

The grazing load placed on grasslands is calculated based on the growing period and horses' needs:

- in the fast-growing period in spring, it is possible to increase the grazing load, whereas in summer it can be reduced;
- mares in foal or with babies at their side have bigger needs than horses with no particular sporting activity.

As an indication, it is recommended that mares in foal have 40 to 50 ares per livestock unit (LU). For saddle horses, a mare with a baby beside it correspond to 1.2 LUs and an adult to 0.78 LUs.

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WHAT THE RULES SAY

Directive 98/58/CE, Annexe, points 17 – relatifs aux installations d'alimentation et d'abreuvement

Article R 214-17 du CRPM, alinéa 1 – relatifs à l'interdiction de priver les animaux domestiques de la nourriture ou de l'abreuvement qui leur est nécessaire

Article L 214-1 du CRPM – relatif à la compatibilité des conditions de détention avec les impératifs biologiques de l'espèce

Arrêté du 25 octobre 1982, Annexe I, Chap I – relatif à la qualité et la quantité de l'alimentation et de l'abreuvement dispensés aux animaux, aux installations d'alimentation et d'abreuvement, à l'inspection de l'état des animaux

Articles 28 et 29 du Code des Courses au Galop – relatifs à l'entretien alimentaire des chevaux

Article 1.5 du Règlement FFE – relatif à la lutte contre la violence sur les animaux, dont celle de laisser le cheval sans nourriture, eau

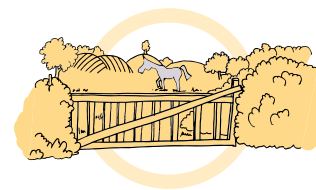
Article 7, chap I du Règlement Général PEJET 2018 – relatif au bien-être animal, dont l'interdiction de laisser un cheval sans nourriture, eau

FEI Code of conduct for the welfare of the horse – relatif au bien-être de chevaux en compétition

Code de bonnes conduites du règlement général SHF des épreuves d'élevage 2018 – relatif aux bonnes conduites à tenir pour que le poney/cheval soit souverain

MEASURE 3

OFFER THE HORSES A CLEAN, CARED-FOR LIVING SPACE TO PREVENT THE RISK OF INJURY AND DISEASE, AND PERMIT THEM TO ADJUST TO CLIMATIC FLUCTUATIONS



OBJECTIVES

- This is primarily about ensuring space with good living conditions, particularly in terms of floor, fencing and rails.
- It is also about encouraging horses to best use their environment to protect themselves from weather by providing natural or artificial shelters.
- Appropriate spaces should be provided to best manage certain specific situations (integration of a new arrival, breeding, foaling, weaning, quarantine, etc.).



- *I regularly check the condition of my buildings and parcels*
- *My facilities and parcels are fenced with appropriate materials to protect my horses when outside and to prevent them from escaping*
- *I offer my horses living spaces appropriate to their physiological needs*
- *Out in the field, I offer my horses natural or artificial shelters that allow them to protect themselves from extreme weather*
- *My infrastructure is arranged to be able to manage special situations such as quarantining and foaling*

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OBJECTIVE HORSE-CENTRIC & ENVIRONMENTAL INDICATORS

1 > assess the **absence/presence** of injuries related to fencing, feed troughs, corners of walls, doors... : wounds, abrasions...

See factsheet for measure 6 for a description of injuries.

2 > assess the **absence/presence** of chronic health problems related to poor living conditions: respiratory, locomotion disorders.

See factsheet for measure 6 for a description of disorders.

3 > assess the **possibility/impossibility** for all horses to find shelter.

4 > assess the **possibility/impossibility** for all horses to move around inside their living area without injuring themselves.

5 > assess temperature-regulation behaviour:

- signs of hyperthermia: unusual behaviour, increased body temperature, increased breathing rate, increased heart rate, sweating, colic;
- signs of hypothermia: unusual behaviour, reduced body temperature, exhaustion, shivering, colic.

See factsheet for measure 6 for assessment of physiological parameters.

6 > assess the quantity (none/insufficient/sufficient), cleanliness (dirty or not) and type of bedding (straw, shavings, flax, etc.).



No bedding.



Insufficient bedding.



Sufficient bedding.



Dirty bedding.



Clean bedding.

- In the case of a **new building** (see Appendix D):
 - > Placement of buildings and parcels in relation to prevailing winds and natural breezes;
 - > Overall design of stables: ventilation, insulation, lighting, etc. ;
 - > Presence of spaces to manage special situations: isolation box for a horse in quarantine, box big enough for foaling...
- For horses housed **under shelter** (see Appendix D):
 - > Design of the living space is appropriate for the size of the horse, design of the stalls is appropriate for the horses in the batch;
 - > Height of door, feed troughs, hay racks, water troughs appropriate for the horses;
 - > Type of door or fencing permitting the horse to get information from its environment;
 - > Appropriate walls and doors: no sharp edges, interstices, dangerous areas, including at feed troughs, hay racks and water troughs, where the horse can get stuck, slip, stick a limb into a space ...;
 - > Use of materials that facilitate cleaning and disinfection, including for floors;
 - > Quality and maintenance of bedding.
- For horses housed **in the field/pasture or paddock** (see Appendix D):
 - > Fences visible and not dangerous;
 - > Regular surveillance and maintenance of fencing. If the fencing is electrified, make sure that the current passes through its entire length, with sufficient intensity, by using testers;
 - > Presence of natural shelter: hedges, trees, bushes, slopes, etc. or artificial shelter in relation to the number of horses in the field. The nature and design of the shelters must allow the horses to protect themselves against extreme weather in the geographic region concerned: protection against prevailing winds, excessive sunlight, heavy rain...;
 - > Artificial shelters: height of feed troughs, water troughs appropriate for horses, appropriate doors: no sharp edges, interstices, dangerous areas, including at feed troughs and water troughs, where the horse can get stuck, slip, stick a limb into a space...;
 - > Quality of floors.
- **Thermal comfort** connected with practices:
 - > Appropriate management of clipped horses: dried after exertion, use of covering...;
 - > Proper use of coverings: quantity and quality appropriate for the horse's situation.

IN PRACTICAL TERMS, WHAT SHOULD I DO ?...

1 >> What should I do if the horse shows signs of thermal discomfort (hot spells, cold spells...)?

If the horse shows signs of thermal discomfort in the heat:

- check the horse's state of health;
- assess its state of dehydration (see skin fold test on sheet 2), assess the physiological criteria: temperature, breathing rate, heart rate (see factsheet for measure 6);
- shower and water the horse;
- if the signs persist, call a veterinarian.

To make sure that these discomforts do not recur, it is recommended that you:

- indoors: check the quality of the ventilation, if it is not possible to improve it, put the horses outdoors as much as possible, provided there is shelter and depending on the weather;
- outdoors: check for the presence of any shaded areas.

If the horse shows signs of thermal discomfort in the cold:

- check the horse's state of health;
- assess the physiological criteria: temperature (see factsheet for measure 6);
- warm up the horse: "seal" it up, cover it, put it indoors or put on a covering if it lives outdoors;
- indoors: make the bedding thicker to improve the insulation of its living space;
- if the signs persist, call a veterinarian.

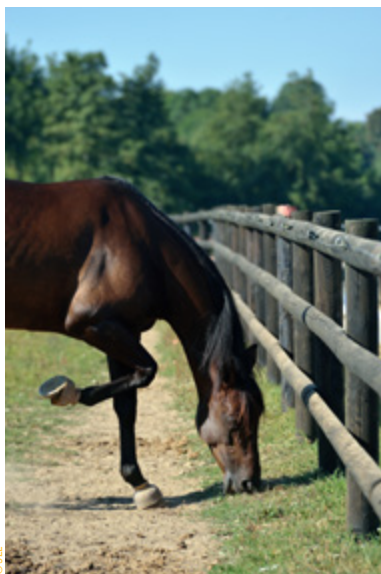
To minimise these incidents, minimise air currents indoors and outdoors, and check the feed ration and adjust it if necessary.

2 >> What should I do if the horse shows signs of injury from the fencing?

- see factsheet for measure 6 for the treatment of injuries;
- make sure that the fencing is appropriate for horses;
-



Fencing that could be doubled up with an electrified wire to minimise the risk of injury from the neck passing between the horizontal bars.



A wooden rail to minimise the risk of injury for the horse.



Fencing that could be lined to minimise the risk of the horse jumping into the mesh.

- check the condition of the fencing: absence of damaged sections that could cause injury;
- repair any damaged sections;
- change the type of fencing when it is not repairable or when it is dangerous; if there are barbs or a damaged fence, take action to minimise their effect on the horses. It is possible to line the existing fencing with an electrified wire sufficiently spaced by separators or pegs to prevent contact with the horses.



Fencing in good condition, well maintained and doubled up with an electrified wire.



Barbed wire should be doubled up with an electrified wire if possible.

3 >> What should I do if the horse shows signs of injury from elements of the horse's accommodation (box, shelter, etc.)?

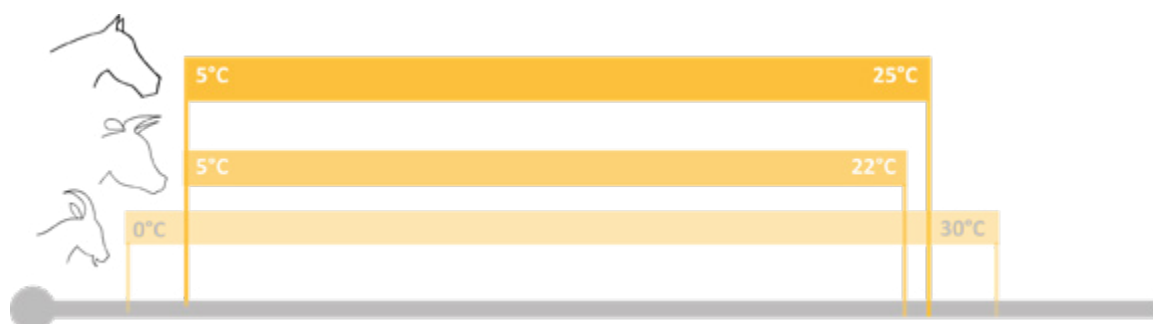
- see factsheet for measure 6 for the treatment of injuries;
- check that the accommodation is appropriate for horses: strength of materials, size of space, organisation, height of elements in the accommodation, no sharp edges, interstices, etc. (see "vigilance point");
- repair defective elements;
- adapt the arrangements to remove the causes of injury: solutions exist for lining walls, for minimising the risk of slipping... It is possible to contact a building specialist to identify the arrangements possible.

Appendix D shows elements for the construction of new accommodations, which can also be used to improve an existing accommodation.

WHAT YOU NEED TO KNOW

➤ *The temperature comfort zone for horses in temperate regions is between 5° and 25°C.*

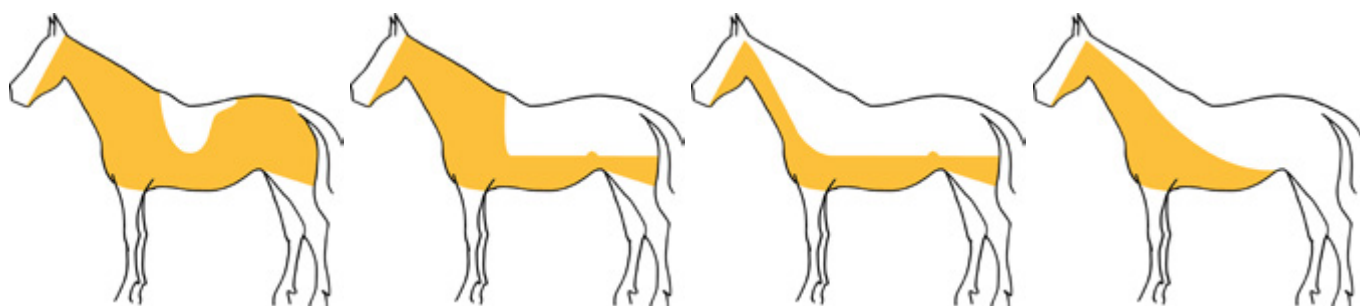
Horses can withstand very hot and very cold temperatures provided they are acclimatised to it gradually. Climatic comfort conditions can vary depending on the age of the horse, their breed, and particularly the type and density of their coat, how they are clipped, and their state of health. A horse's temperature comfort zone is much wider than a human being's.



Thermal comfort zone of different livestock.

➤ *The consequences of clipping for horses*

Clipping modifies the horse's temperature regulation system. It should also be reserved for working horses, and those horses must be protected appropriately during the winter.



Différents types de tontes.

➤ *Combating extreme temperatures*

Horses are animals that can live outdoors all year round. The natural protection of the coat, appropriate feed and watering, as well as access to natural or artificial shelter are the most effective ways of combating extreme temperatures. Hardy breeds are generally better adapted to very low temperatures.



Natural shelter.



Natural protection of the coat.

➤ *The importance of bedding for horses.*

Traditionally, bedding consists of wheat straw, which is preferable to straw from other cereals, such as barely or oats. Good straw is straw that:

- is dry and mould-free;
- comes from plants that are not diseased in order to ensure good absorption capacity;
- does not introduce health risks for the horses, as can be the case with straw from dubious or unknown sources or that pose health risks.

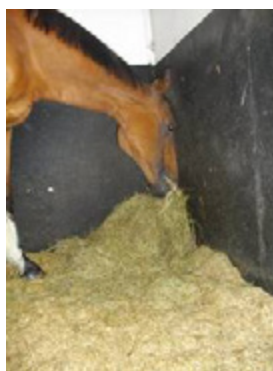
There are types of bedding that can be used instead of straw, such as flax shives, or wood shavings or dedusted sawdust... These types of bedding can be used to improve absorption capacity or minimise dust. They can also be used to manage sensitivities to dust or certain allergies.

These types of replacement bedding cannot be consumed by the horses. Their utilisation therefore requires adjusting the intake of fibrous feed, in particular by easier access to fodder (unless indicated otherwise by a vet) in order to respect as much as possible the horse's time budget devoted to finding and consuming food (see factsheet for measure 4).

All types of bedding require regular surveillance and maintenance to preserve their absorption ability, their role as insulation, and ensure a healthy living space for the horses: removal of degraded areas, renewal...



Straw.



Flax shives.



Wood pellets.

➤ *The importance of the condition of the floor for horses.*

In general, the condition of the floor has an impact on the health and welfare of horses.

See sheets for measures 4 and 6.

➤ *Fencing appropriate for horses*

Good fencing for horses is:

- visible;
- safe and secure;
- solid: can withstand the force that can be exerted by the horse – with the exception of electrified wires;
- maintained: deteriorated elements replaced, wire voltage checked, free of bushes/vegetation...;
- appropriate for the size of the horse: height of the wires;
- no danger of injury to horses: barbed wire is lined with an electrified wire sufficiently spaced by separators or pegs to prevent contact with the horses.

Solid fencing is generally made of treated or rot-resistant wood. The height is appropriate for the size of the horse(s). It has two or three rails, that can be replaced with PVC strips.

There are two types of electric fencing: shielded ribbons or wires at least for the top part. When the fencing is properly installed and properly maintained, horses respect it and there are few accidents.

Electric wires reduce the space used by the horses and they tend to keep clear of it. When a group of horses is corralled, the dominant ones may be more stressed by staying close to the electrified wires. Nonetheless, when horses are used to electric fencing, it normally does not create stress.

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WHAT THE RULES SAY

Directive 98/58/CE, annexe points 4, 11, 12 – relatifs à l'isolement des animaux malades ou blessés, à la qualité de la lumière dans les bâtiments d'élevage, à la protection des animaux non gardés dans des bâtiments

Article R 214-17 du CRPM, alinéas 3,4 – relatifs à l'habitat et à l'environnement des animaux domestiques

Article R 214-18 du CRPM, alinéas 1, 2 – relatifs à la garde en plein des animaux des espèces bovines, ovine, caprine et des équidés

Article L 214-1 du CRPM – relatif à la compatibilité des conditions de détention avec les impératifs biologiques de l'espèce

Article A322-123 du code des sports – relatif à la bonne conception des établissements ouverts au public pour l'utilisation d'équidés

Arrêté du 25 octobre 1982, Annexe I, Chap I, IV – relatifs aux matériaux de construction, aux sols, aux parcs/enclos, à la désinfection et la désinsectisation, à la qualité de l'air, à la qualité de la lumière, à l'isolement des animaux malades / blessés, à la protection contre les intempéries et le soleil, aux conditions de garde des animaux en plein air dans le cadre de l'élevage, la garde et la détention des animaux

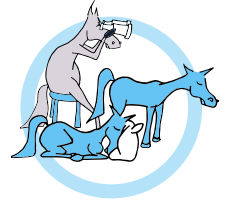
Arrêté du 25 octobre 1982, Art 2 – relatif à l'absence de souffrance et d'effet néfaste sur la santé de l'élevage, la garde et la détention des animaux

Articles 28 et 29 du Code des Courses au Galop – relatifs aux conditions d'hébergement des chevaux

FEI Code of conduct for the welfare of the horse – relatif au bien-être de chevaux en compétition

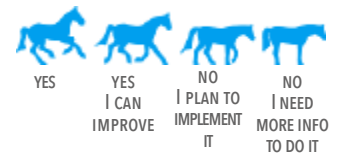
MEASURE 4

MAKE SURE TO STRUCTURE & ARRANGE THE HORSES' LIVING ENVIRONMENT
IN A WAY THAT ALLOWS THEM TO EXPRESS THEIR NATURAL BEHAVIOUR AND
OFFER THEM RESTING AND WORKING COMFORT



OBJECTIVES

- This means maintaining the land, bedding and appropriate floors, making sure that each horse, including when part of a group, has sufficient space to choose its postures, rest standing up or lying down, exploring, ...
- Horses need to have sufficient activity, continuous or split throughout the day: roaming free, walking, working on foot, in traces, or carrying a rider.
- It should not be tied up for long periods.



COMFORT WHEN RESTING

- *I provide my horses with sufficient, comfortable living space so that each horse can express its natural behaviour, such as getting up and lying down unhindered*
- *Indoors, I make sure that my horses have sufficient, good quality bedding so they can rest comfortably*

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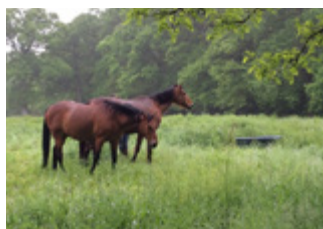
ACTIVITY

- *I make sure my horses have regular exercise*
- *For horses that work, I arrange their activity, so they can have appropriate work interspersed with periods when they can relax and roam freely or rest.*
- *I maintain the work surfaces to ensure the horses' comfort and protect their health*

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COMFORT WHEN RESTING

1 > assess the horse's waking state: alert upright, resting upright, resting on its chest, resting on its side



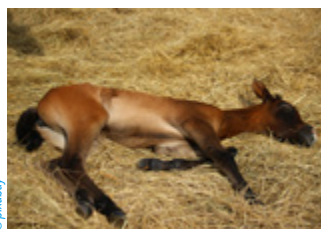
Alert upright.



Resting upright.



Resting on its chest.



Resting on its side.

2 > assess the **absence/presence** of signs of discomfort from resting: stains, bedsores, condition of frogs, etc.

3 > assess the horse's behaviour:

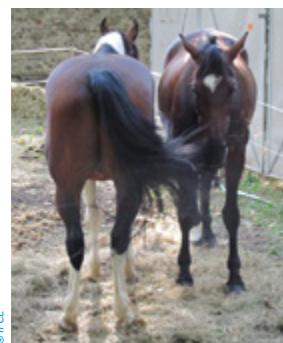
- **absence/presence** of aggressiveness towards humans and peers;
- **absence/presence** of stereotypies: see Appendix B to characterise them
- **absence/presence** of defensive behaviour against insects and/or skin damage due to insects.



Aggressive behaviour towards a peer.



Examples of defensive behaviour against insects.



ACTIVITY

1 > assess the **absence/presence** of limping and/or injury due to activity

See factsheet for measure 6.

2 > assess the **absence/presence** of signs due to insufficient activity: swelling of one or more limbs, ...

3 > assess the **absence/presence** of rebound and/or stereotypies due to activity (see Appendix B to characterise them)

Note: exacerbated motor behaviour when the horse is set free after prolonged inactivity or overly restricted activity is natural release behaviour.



Release behaviour when set free.



Calm horse when set free.

COMFORT WHEN RESTING

- Comfort when resting **in boxes or open stables**:
 - > Size of box: can move around in the stall, lie down, roll over, and get up;
 - > Density of living space: horses can all rest at the same time;
 - > batch management takes into consideration:
 - >> affinities: stress created by separation and causing rest/sleep disorders;
 - >> antagonisms: aggressive behaviour preventing rest/sleep;
 - > Bedding: presence, type, quality, quantity and maintenance.
- Comfort when resting **outdoors**:
 - > Arrangement/maintenance of spaces;
 - > Presence of areas where all horses can lie down dry at the same time;
 - > Presence of natural or artificial shelters where horses can rest shielded from the sun, wind, rain, insects, etc.;
 - > In the management of outings for horses who are alternately indoors and outdoors, the proliferation period for biting insects is taken into consideration;
 - > batch management takes into consideration:
 - >> affinities: stress created by separation, causing rest/sleep disorders;
 - >> antagonisms: aggressive behaviour preventing rest/sleep;

ACTIVITY

- Mobility of horses in **boxes or open stables**:
 - > Living and mobility space is adequate and/or big enough;
 - > Occasional restraint for treatment, preparation... ;
 - > Period of mobility, work and/or relaxation is long enough and/or frequent enough;
 - > Regular outings.
- Mobility of horses **outdoors**:
 - > Type and quality of ground: dry, muddy, frozen, slippery, stony...;
 - > Type and quality of work surfaces: soft and shock-absorbing, paved...;
 - > Hygiene of artificial surfaces: presence of droppings, fermenting/rotting organic matter...

IN PRACTICAL TERMS, WHAT SHOULD I DO ?...

1 >> What should I do if the horse shows signs of fatigue... ?

Take into consideration the horse's physiological condition: in the case of a pregnant mare close to foaling, it is generally recommended to provide surfaces that are lined with the normally recommended material, old horses can also need adapted arrangements (see factsheet for measure 8)...

Take into consideration the specific diseases and disorders that require adapted arrangements (see factsheet for measure 6).

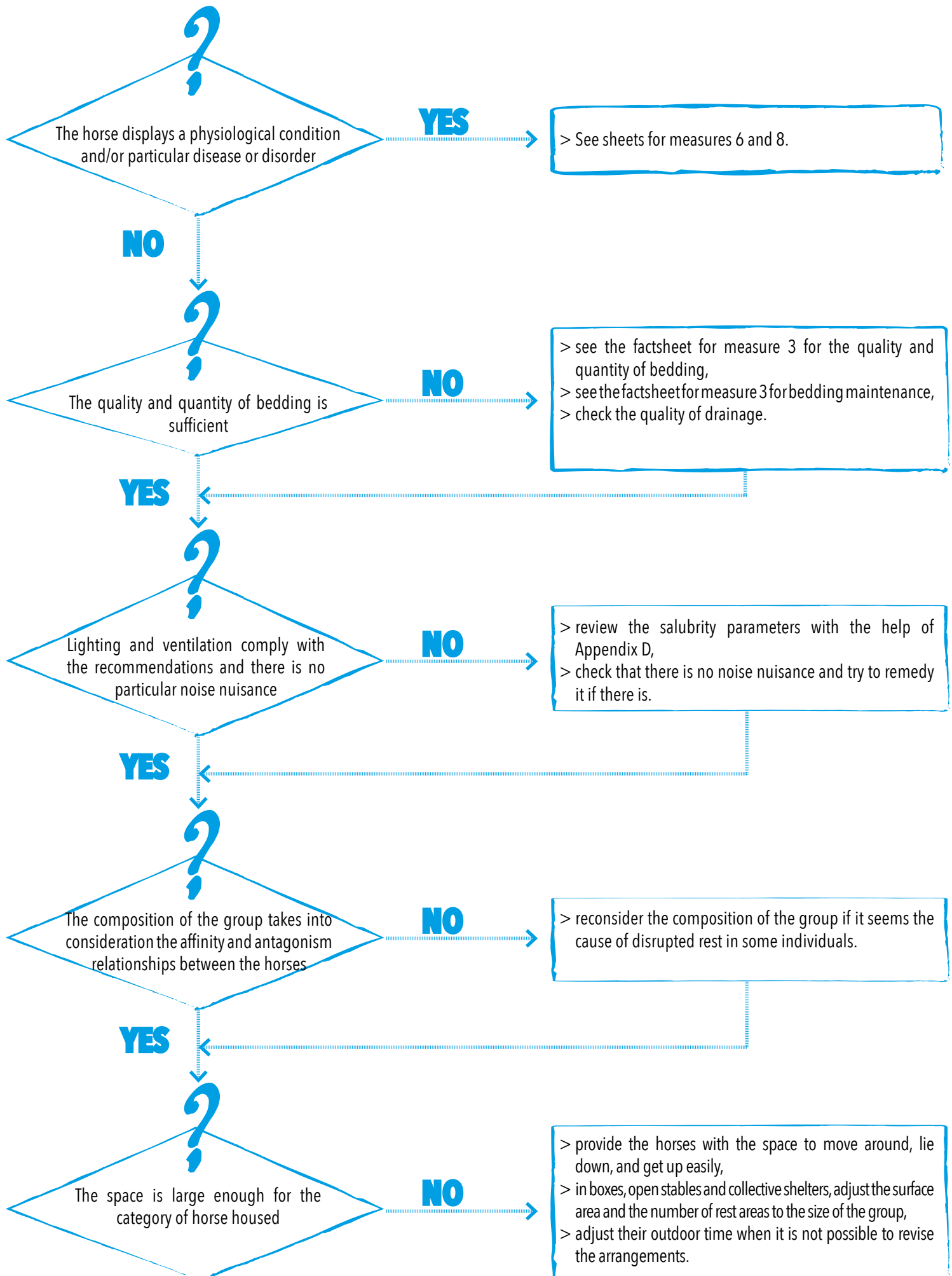
Analyse the cause of the discomfort using a flow chart appropriate for the horse's indoor or outdoor living area, and try to remedy it.

See the first two flow charts.

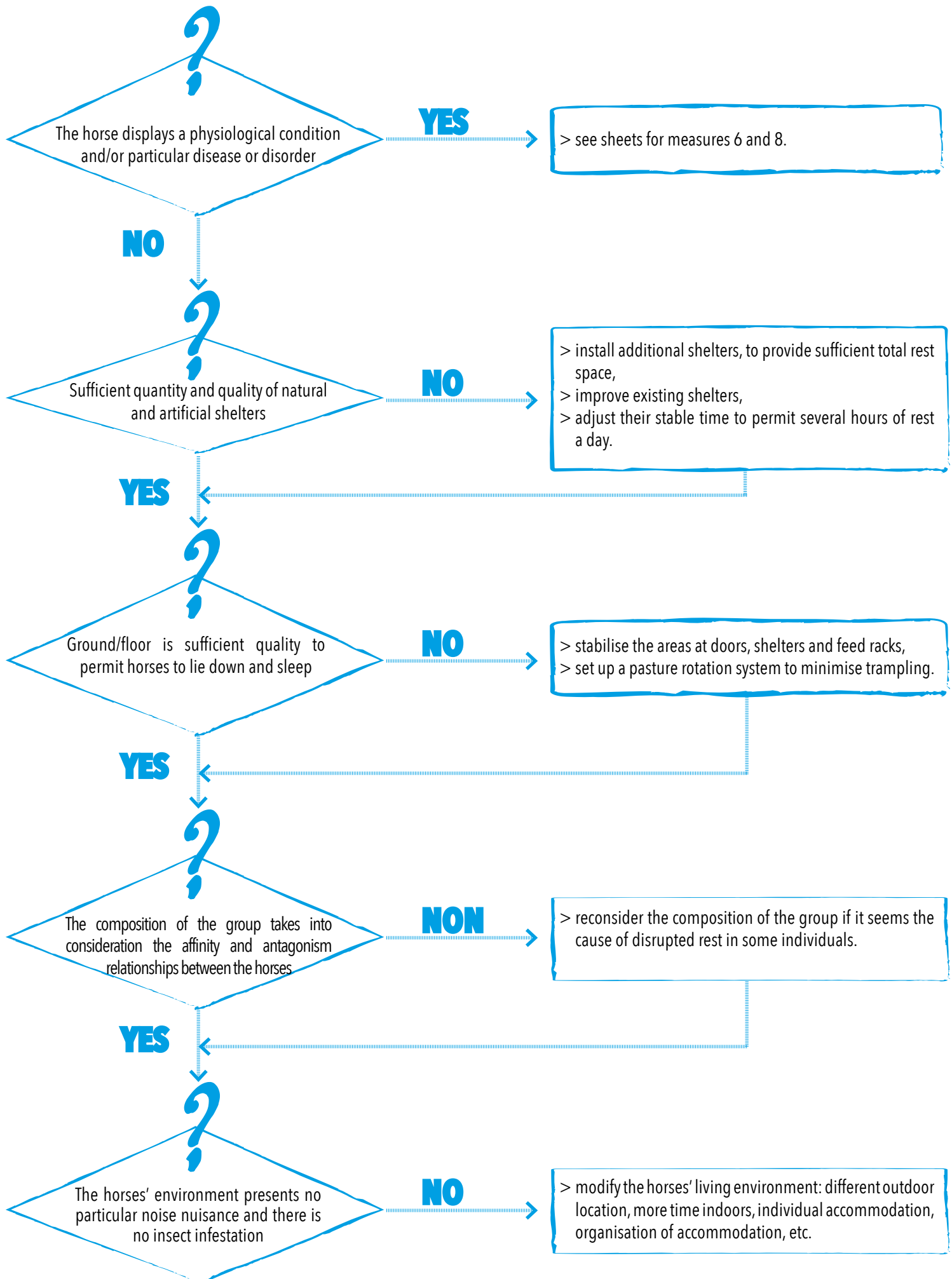
2 >> What should I do if the horse displays mobility problems?

Analyse the cause of the observed difficulties using the third flow chart.

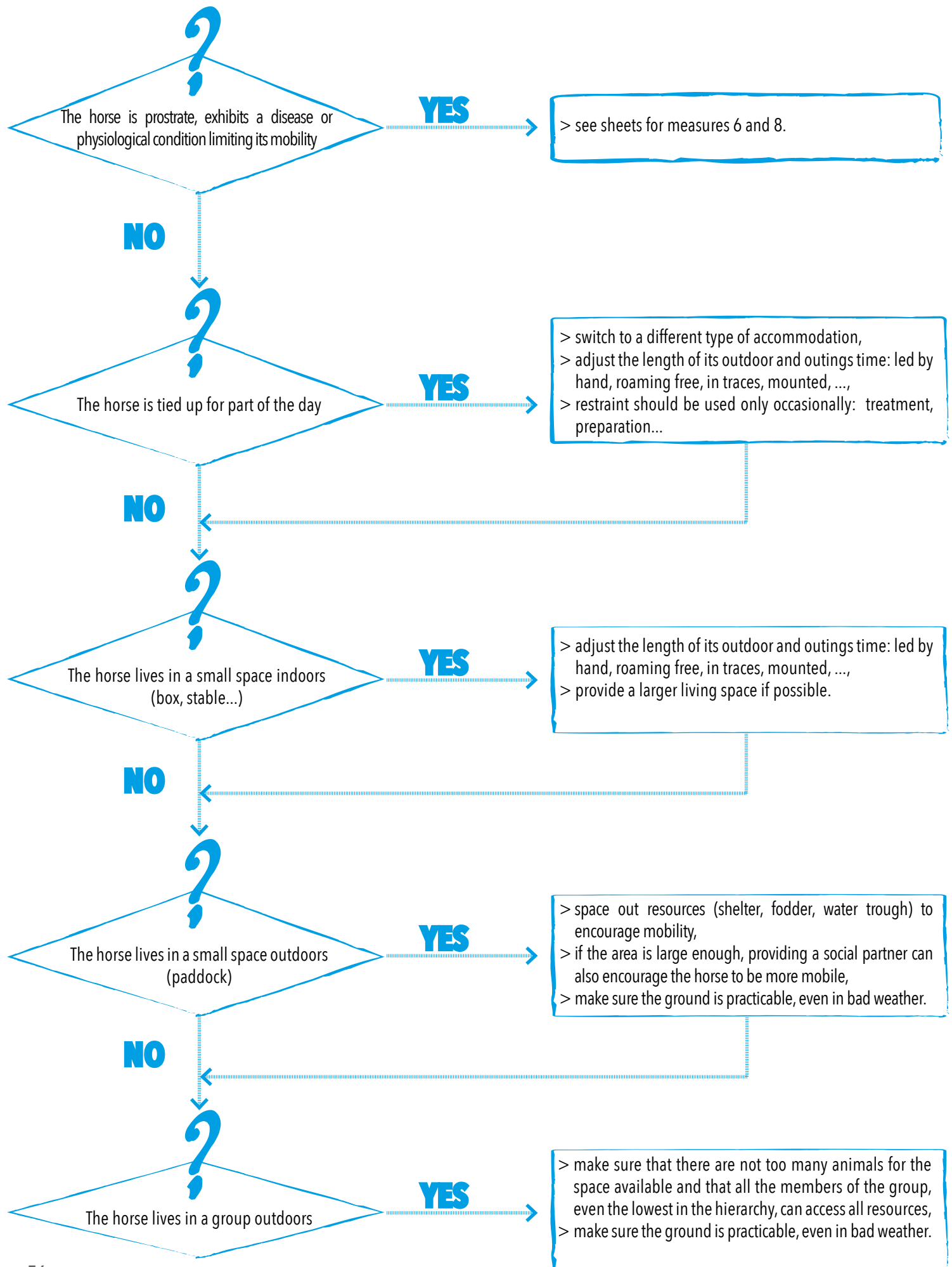
Horses shows signs of fatigue indoor accommodation



Horses shows signs of fatigue outdoor accommodation



The horses display mobility problems

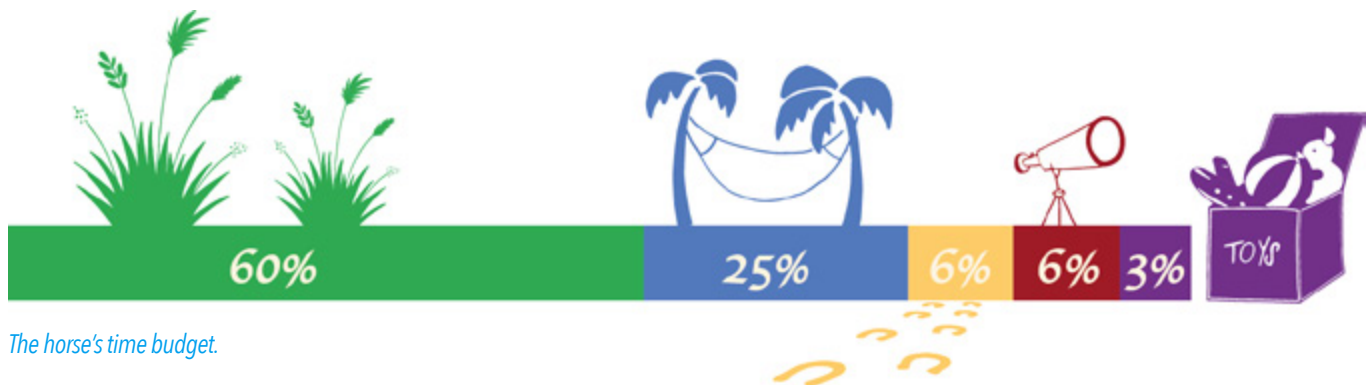


WHAT YOU NEED TO KNOW

➤ *The horse's time budget*

A horse's daily activities in natural conditions can be broken down into a few basic categories, the most important of which are searching for and eating food, resting, and moving around. To put them into scale, their distribution over 24 hrs is traditionally called time budgeting reflecting the horse's observed behaviours:

- Searching for and eating food: 14-15 hrs, ie., 60% of its time budget;
- Resting upright or lying down; 6 hrs, ie., 25% of its time budget;
- Roaming around, mainly walking, unconnected with finding food: 1-2 hrs, ie., 6% of its time budget;
- Watching its environment: 1-2 hrs, ie., 6% of its time budget;
- Other: grooming, interactions with peers, breeding, excretory behaviours...



The horse's time budget.

➤ *Horses have a 24-hour cycle of alternately wakefulness and sleep*

A horse's diurnal cycle is a 24-hour cycle of activity/rest. It is governed by sunlight and temperature. It is also active for up to two-thirds of nighttime. Horses sleep for 30-60 minutes at a time. They can sleep standing up or lying down on their chest (like a cow) or on their side. The sideways position, where the horse has its body and limbs extended, is the only position that allows it to relax all its muscles and achieve REM sleep. Without these short phases of deep sleep, horses can exhibit decreased performance, develop sleep disorders, and even injure themselves due to falling asleep unexpectedly.

In the wild, horses do not fall asleep unless they feel safe. The members of a group rarely go to sleep all at the same time.



Horses have three resting positions.



Outdoors, horses rarely all sleep at the same time.

➤ *Straw allows horses a variety of options*

Horses with access to shelter generally exhibit a preference for straw bedding that allows them to express a wide range of behaviours: rest, exploration, nibbling... This bedding must be of good quality.



➤ *Horses are not territorial animals*

In the wild, horses travel some 15 kilometres a day, mainly walking, within their living/foraging range. They find there everything they need: water, food, peers, shelter... The ranges of different groups of horses can overlap, as horses are not territorial.



Groups of horses walking in line.



➤ *Gaits*

Most horses have three natural gaits: walk, trot, gallop. In the wild, horses usually walk. This gait, each foot moving symmetrically, is the slowest: about 6 to 7 km/h. The trot is a leaping gait, with diagonal pairs of legs moving forward at the same time (front leg on one side at the same time as the back leg on the other side). The average speed of a trot is 14-15 km/h. Horses gallop to flee, and gallop is the fastest gait (20-30 km/h). Gallop is an asymmetrical gait, with three even beats and an extra fourth beat for propulsion.

In the wild, horses rarely walk backwards. Similarly, they spontaneously avoid obstacles, preferring to go around them. They will not jump over them unless cornered.

When a horse is working, the quality of the ground affects its mobility and may contribute to the risk of osteo joint and tendon injuries. Research has shown that the biomechanical effects of the ground, as well as recommended floors, vary depending on use. For example, the most sophisticated biomechanical surfaces dampen vertical impact on the hoof, the maximum longitudinal force, the maximum speed of vertical load on the limb. The chosen surface must be the right balance between horse comfort and expected performance. For example, sand-fibre tracks are very shock-absorbing but can require more effort from the horse.

TO GO FURTHER

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WHAT THE RULES SAY

Directive 98/58/CE, annexe points 4, 11, 12 – relatifs à la qualité de la lumière dans les bâtiments d'élevage, à la protection des animaux non gardés dans des bâtiments

Article R 214-17 du CRPM, alinéas 3,4 – relatifs à l'habitat et à l'environnement des animaux domestiques

Article R 214-18 du CRPM, alinéas 1, 2 – relatifs à la garde en plein air des animaux des espèces bovines, ovine, caprine et des équidés

Article L 214-1 du CRPM – relatif à la compatibilité des conditions de détention avec les impératifs biologiques de l'espèce

Article A322-123 du code des sports – relatif à la bonne conception des établissements ouverts au public pour l'utilisation d'équidés

Arrêté du 25 octobre 1982, Annexe I, Chap I, IV – relatifs aux matériaux de construction, aux sols, aux parcs/enclos, à la désinfection et la désinsectisation, à la qualité de l'air, à la qualité de la lumière, à la protection contre les intempéries et le soleil, aux conditions de garde des animaux en plein air dans le cadre de l'élevage, la garde et la détention des animaux

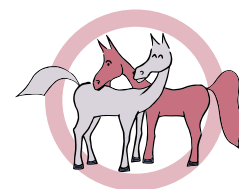
Arrêté du 25 octobre 1982, Art 2 – relatif à l'absence de souffrance et d'effet néfaste sur la santé de l'élevage, la garde et la détention des animaux

FEI Code of conduct for the welfare of the horse – relatif au bien-être de chevaux en compétition

Code de bonnes conduites du règlement général SHF des épreuves d'élevage 2018 – relatif aux bonnes conduites à tenir pour que le poney/cheval soit souverain

MEASURE 5

RESPECT THE GREGARIOUSNESS OF HORSES BY ENCOURAGING POSITIVE SOCIAL CONTACT BETWEEN THEM TO MINIMISE BEHAVIOURAL PROBLEMS



OBJECTIVES

- This means arranging horses' living area to permit sensory contact (visual, olfactory, tactile, auditory) and, as much as possible, to avoid continuous social isolation.
- Horses should be grouped according to the characteristics of the individuals and to encourage stability of that composition over time.



- *I allow my horses to have as much close contact as possible with others, especially tactile contact*
- *I design the composition and size of groups so that all the horses can feed, drink, rest, and move around unhindered*
- *I make sure that non-dominant horses can evade characters*
- *I keep my horses in as stable groups as possible*
- *I take into consideration the affinities and incompatibilities between the horses in the batches*
- *I keep weaned foals with peers while they are growing up*

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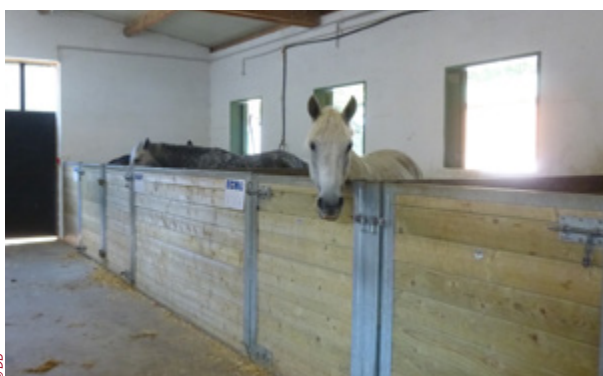
OBJECTIVE HORSE-CENTRIC & ENVIRONMENTAL INDICATORS

1 > assess the possibility of dissociation between the boxes



© AR

horses live in a group: unlimited contact;



© DB

horses can touch and groom at least part of each others' body;



© paho-horse-stables-stal-philippe-lejeune

horses can sense the proximity of another horse but cannot touch or groom each other;



© CP

horses can see another horse but cannot touch or smell it;



© pixabay

horses are isolated, without visual, olfactory or auditory contact with another horse.

2 > assess the type of social contact:

- duration, frequency and quality of affiliative interactions: closeness between peers, allogrooming or mutual grooming, playing with foals...
- duration, frequency and quality of antagonistic interactions or confrontations: threats, bite marks and/or kicking, injuries...



Bites.



Allogrooming or mutual grooming.



Playing with foals.

3 > note any isolated individuals:

- individual not integrated into the group;
- isolated individual not interacting with its peers;
- individual with constrained behaviour: feeding, mobility, sleeping...

4 > assess the **presence/absence** of behavioural problems:

- aggression against its environment, peers, people;
- self-harming behaviours;
- stereotypies: see Appendix B to characterise them.



Self-harming behaviours.



© VB

- Horse's **environment**: possibility of contact, even if only visual, with peers;
- **Availability** of resources:
 - > surface, size and organization of the areas containing the resources, possibility for each individual to move around, feed, drink, rest, wallow,... possibility for dominated to withdraw;
 - > quantity of available resources;
- **Stability** of the social structure:
 - > horses often switched to new social groups;
 - > introduction of a new individual;
 - > composition of herds: affinities and incompatibilities between horses taken into consideration, mares and fillies inappropriately together;
 - > horses are shod;
- **Foal / mother relationship**: separation in the first month of life.

IN PRACTICAL TERMS, WHAT SHOULD I DO ?...

If the horse displays a particular physiological condition (old horse, pregnant mare...) and/or particular disease, see as a priority the sheets for measures 6 and 8.

1 >> *What should I do if I have to integrate a horse into a group?*

To minimise stress and accidents, a new individual should be integrated in a group gradually.

Horses shoes should be removed, at least the hind legs, if possible. To distract the individuals in the group so they do not focus on the new arrival, make sure there are abundant resources: lots of grass or fodder, for example. Make sure they are in a big enough space, so the new arrival can run away from the others.

Ideally, the new arrival is placed in an adjoining field, so that the first contact is at a distance. If the horses are kept indoors, put the new individual in a box next to the box of a well-behaved member of the group.

It is recommended that, if possible, the new individual should not be introduced on its own: select a mildly-mannered member of the group and put it with the new horse. A few days will be sufficient to create affinities between the two horses. Once the newly formed pair are stable and calm, they can be integrated into the group. When possible, this integration step should be done in a third field as all the horses in the group will perceive that as a neutral venue.

2 >> *What should I do if the horse exhibits behavioural problems resulting from isolation from its peers?*

It should be integrated into the group in accordance with the rules in the preceding point.

If it cannot be integrated into a group, choose accommodation conditions that permit contact, at least visual contact, between the horses:

- indoors: boxes facing each other, open partitions, windows, mid-height walls, large group boxes (two or more horses), and anything else possible, or adjust the length of time it spends with the group outdoors;
- outdoors: collective or adjacent paddocks.

In the special case of weaning, it is recommended that the animal be permitted contact with peers of a variety of ages.



© JLL



© DB



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Examples of arrangements permitting contact between horses: adjoining paddocks (top left), active stable (top centre), open stable (top right), boxes with open walls (bottom left), stalls with mid-height walls (bottom right).

3 >> *What should I do if the horses display signs of aggressiveness between peers?*

First of all, make sure that the horse does not have health problems or pain (see sheets for measures 6 and 7) and call a veterinarian, if necessary.

It is recommended that you:

- provide sufficient space in the areas where the resources are concentrated: for feeding, watering, sleeping, etc., so that all the horses can feed, drink and rest at the same time;
- calculate the load/density based on the space available;
- in group accommodations indoors or outdoors: review the composition of the batches, taking into consideration their compatibilities and affinities;
- in individual accommodations indoors or outdoors: review the occupancy arrangements of boxes and/or paddocks, taking into consideration their compatibilities and affinities;



Examples of arrangements with sufficient space in resource areas, and taking horses' compatibilities into consideration.

WHAT YOU NEED TO KNOW

➤ *Intraspecies communication, ie., communication between horses*

Horses communicate with their peers with their five senses:

- sight,
- hearing,
- smell,
- taste,
- touch.

Visual communication plays an essential role in social relationships in horses. Tactile communication is also important: it reinforces the social relationships between horses, particularly through mutual grooming, also called allogrooming. Olfactory communication is particularly used in reproduction.



Visual signals are horses' preferred way of communicating with their peers.



Odour is essential in marking behaviour, when stallions mark their presence by covering other horses' droppings.



An open-mouthed whinny can be heard up to 1 km away. It is used to re-establish contact after a separation.



Flehming is a behaviour in which the horse inhales with its upper lip curled back exposing its front teeth. Holding this air allows it to analyse smells and pheromones.



Horses are gregarious, social animals

In the wild, horses form stable social groups and develop affinities with some of their peers.

There are two main types of groups in a social structure: the family, and the group of bachelor males.

The family, also called the harem, generally consists of one stallion (sometimes two in the case of an alliance), one to three mares, along with foals, yearlings, and colts and fillies up to 2 or 3 years old. Young males join a group of bachelor stallions. Young females may join them, may be taken by another stallion, or stay in their original group if their father is no longer the alpha male. The family is a stable structure and includes horses of all ages.



Harem.



Stallion gathering its harem.

The bachelor males group consists of young horses who have not yet formed their own group and includes males of all ages. There they learn the social norms that will be useful in their future lives: fighting, behaviour, display, marking rituals...

This structure is less stable than the family due to horses constantly arriving and leaving.

Young males can leave the bachelor group. They will then live alone until they form their own harem or capture one. An old displaced male may also then go live alone for a while, before possibly joining a group of bachelor males.



Group of bachelor males.



Group of bachelor males.

➤ *Horses develop various types of social interactions in a group.*

The group's stability allows a social structure to be established that ensures it can operate peacefully, particularly in keeping lower ranking members safe. By keeping antagonistic relationships subtle and not overt, the group remains stable (subtle signals such as ear movement, etc.) Dominant status confers privileged access to resources: water, feed, space to rest, etc.

Within the group, horses develop privileged relationships with one or more peers. These affinity relationships manifest as close spatial proximity, which does not necessarily mean contact between the horses, and specific behaviours: mutual grooming, head-to-tail fly swatting... The "nearest neighbour" method, using prolonged observation of the group and identifying, at regular intervals, the horse closest to the individual being observed, can quickly identify the horses that like it.

Social behaviour is learned, which is not possible in a group consisting of horses of different ages. The earlier that this learning starts, the easier the integration into the herd.



Spatial proximity (left and top right) is a clear signal of affinity between horses. Mutual grooming (bottom right) is a specific behaviour indicating affinity, but not as obviously as spatial proximity.

➤ *Horses can exhibit behavioural problems.*

If the living conditions offered to horses overwhelm their ability to adapt and are a source of chronic stress, they can develop behavioural problems: stereotypies, apathy, aggression... These are signs of unhappiness, which are complicated to address and detrimental to the horse. The best strategy is to prevent them arising by making sure to provide an environment that allows them, as much as possible, to express their natural behaviour.

See Appendix B for more information about behavioural problems.

TO GO FURTHER

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WHAT THE RULES SAY

Directive 98/58/CE, Annexe, point 17 – relatif à l'absence d'effets nuisibles résultant de rivalité entre les animaux liés aux installations d'alimentation et d'abreuvement

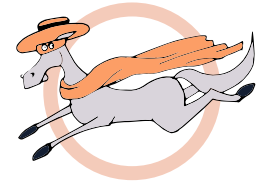
Article L 214-1 du CRPM – relatif à la compatibilité des conditions de détention avec les impératifs biologiques de l'espèce

Arrêté du 25 octobre 1982, Annexe I, Chap I, Chap IV – relatifs à l'absence d'effets nuisibles résultant de rivalité entre les animaux liés aux installations d'alimentation et d'abreuvement

FEI Code of conduct for the welfare of the horse – relatif au bien-être de chevaux en compétition

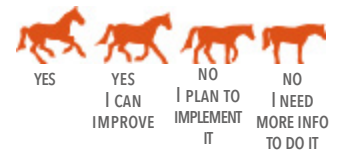
MEASURE 6

COLLECTIVELY DEFINE GOOD PRACTICES FOR THE REARING, KEEPING AND USE OF HORSES WITH THE GOAL OF MINIMISING RISKS TO THEIR HEALTH



OBJECTIVES

- This means, in addition to prophylactic measures and health tracking, providing adequate monitoring to ensure fast care when immediate treatment is needed and to prevent suffering.
- Sick or injured horses must be treated before resuming normal activity and/or put to sleep.
- Doping is prohibited. Similarly, the use of physical procedures or medical treatments aimed at hiding the effects or signs of injury to permit the animal to continue working, is detrimental to the health and welfare of the horse and is prohibited.
- Breeding stock should be selected as much as possible to ensure genetic diversity.
- Work intensity and work schedules must suit the horse's abilities.
- Harnessing, equipment and artificial aids must not be continuously painful or cause wounds.
- Awareness of abnormal behaviour exhibited by a large proportion of horses, must be investigated to identify causes and corrective measures.



I implement all the necessary measures to ensure that my horses stay physically and mentally healthy.

I check my horses on a daily basis and I can recognise health danger signs.

I respond fast to take the appropriate action: first aid, call a vet...

I call professionals for help, or administer first aid if I can, in accordance with the action plan established with my vet and the professionals concerned: dentistry, hoof trimming, horseshoeing, parasite and insect control...

I comply with my obligations under horse health regulations: identification, livestock register, keeper's declaration, public health veterinarian's declaration, livestock health reports, regulatory vaccination, including obligations regarding the breeding stock of each breed...

I am familiar with and interact with the equine health monitoring network RESPE to access real-time health and disease information in my region and nationwide in France. I implement health measures as necessary: screening, restrict movement, quarantining, vaccination...

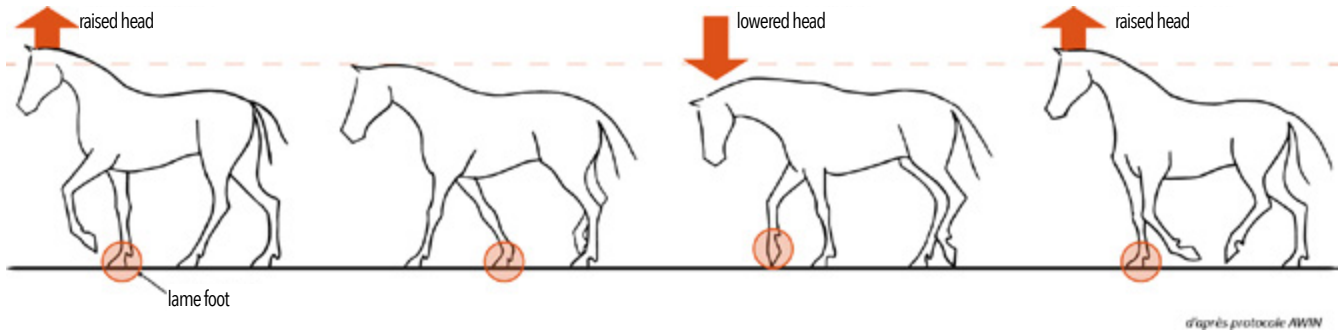
I am familiar with the latest health education courses and have taken them or signed up my employees to take them

YES	YES I CAN IMPROVE	NO I PLAN TO IMPLEMENT IT	NO I NEED MORE INFO TO DO IT
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OBJECTIVE HORSE-CENTRIC & ENVIRONMENTAL INDICATORS

1 > assess general external parameters:

- horse's body condition: use factsheet for measure 2:
- locomotion: **absence**/**presence** of mobility problems, inability to move, pain-relief postures (see indicators factsheet for measure 7);



- wounds: **absence**/**presence**, location, number, size, bleeding, pus, oedema...



Superficial wounds.



Gangrene.



Deep wounds.

- Coat: shiny/dull, brittle, uniformity



Coat is shiny, uniform.



Coat is dull, uneven.



Coat is rough, dull.

- condition of feet: deformed or asymmetric hoof, quality of trimming, worn horseshoe, presence/absence of hoof cracks, swellings, abscesses...



Hoof rot.



Abscess on hoof with laminitis.



Deformed hoof or slipper-foot.



Fractured hoof capsule.



Cracked.




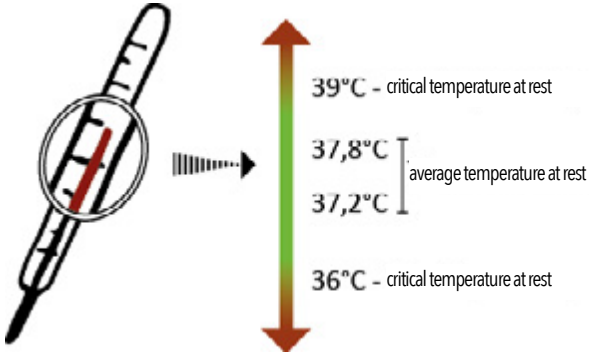
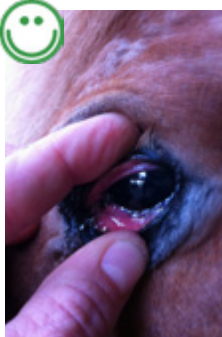
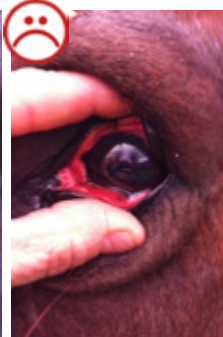
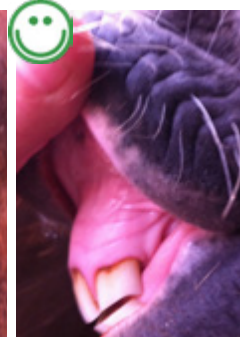
Club foot (bottom right in the photo).

- dentition: **absence**/**presence** of unchewed feed;
- excretion: urination and defecation, in particular frequency and appearance of urine and droppings.

2 > assess behavioural changes:

- horse doesn't get up;
- absence**/**presence** of pain-relieving strategies: horse always uses the same limb to get up, horse leans heavily on hind limb... (see factsheet for measure 7);
- change in the amount of feed or water consumed;
- absence**/**presence** of behavioural problems and change in sociability (see factsheet for measure 5 and Appendix B);
- signs of agitation, nervousness, anxiety (see indicators factsheet for measure 7);
- signs of equine depression syndrome: hypomobility, hyporeactivity, frozen stance with horizontal neck, wide eyes, and voluntary social isolation (see indicators factsheet for measure 7).

3 > assess physiological parameters:

Physiological parameters or warning signs	 Adult constantly resting/sleeping	Assessment method
Temperature	between 37.2°C and 37.8°C	
Respiratory rate	10-16 per minute	<p>Position yourself diagonally so you can see the ribcage and abdomen moving. Count the number of breaths or nasal movements.</p> <p>A horse's breathing cannot easily be seen. When it is abnormal, its breathing appears forced, fitful, or uneven.</p>
Heart rate	36-48 per minute	<p>Listen to its heart or take its pulse: place your fingers under the lower jaw, so that your index finger is on the maxillary artery, so you can take its pulse. Count the number of beats over the course of 1 minute. Be careful, do not press so hard on the artery that you block its blood flow.</p>
Mucous membranes	should be pink and wet	<p>The condition of mucous membranes have great prognosis value.</p> <p>They can be assessed on a daily basis by examining oral mucosa or ocular conjunctiva.</p> <div>    </div> <div> <i>healthy mucosa</i> <i>purple-red mucosa</i> <i>healthy mucosa</i> </div>
Discharge from nose and eyes	light serous discharge or none (pale yellow or transparent)	<p>Assess the type of discharge (serous, mucosal or purulent), colour (transparent, yellow to green), and quantity, to determine the possible impact on the upper respiratory tract.</p> <p>A light serous discharge is harmless whereas a purulent discharge is a warning sign.</p>

The other factsheets in the manual describe vigilance points for equine health.

- **Prevention:**
 - > Hygiene of premises, personal hygiene, biosafety measures;
 - > Compliance with equine health regulations: identification (see Appendix E: keeper's obligations), livestock register, keeper's declaration, public health veterinarian's declaration, annual health reports, livestock health report, regulatory vaccination, and other records including obligations relating to breeding stock per breed;
 - > Develop and follow treatment protocols: vaccinations, appropriate deworming...;
 - > Regular attention to hooves: appropriate frog, horseshoe, ongoing treatment...;
 - > Regular attention to teeth;
 - > Group management: see factsheet for measure 5;
 - > Safe and appropriate living space: see factsheets for measures 2, 3, 4 and 8, protection from strays or wild animals...;
 - > Type and quality of ground/floor surface.
- Physiological and/or behavioural **changes**:
 - > Change in physiological constants and/or external parameters;
 - > Abnormal behaviour: apathy, isolation, mobility problems, horse that paws the ground or watches its sides...;
 - > Excessive reaction to unusual stimulation: restiveness, phobias, anxiety, depression, stereotypies... (see Appendix B: behavioural problems).
- When **"using"** a horse (see factsheet for measure 1):
 - > The effort demanded of the horse is appropriate for its state of health;
 - > The horse's harness is adjusted to be appropriate for its use;
 - > Intelligent/reasonable use of artificial aids, and regulations adhered to for every type of use: racing codes, sport regulations, etc.;
 - > Doping and similar;
 - > The mare's stage of pregnancy is taken into consideration when being asked to work.
- In terms of **reproduction**:
 - > Training for operators, equipment and techniques used: dummies, restraint systems...;
 - > Foaling problems.
- **Excessive recurrence** of certain problems: ulcers, colic, hoof abscesses, lesions benign or otherwise, pododermatitis or mange)...;
- Occurrence of a **serious accident**.

IN PRACTICAL TERMS, WHAT SHOULD I DO ?...

In the introduction, you will have read that an animal with health problems could exhibit unexpected and dangerous reactions. Preserving the health and welfare of horses also enhances the safety of the people in contact with them.

1 >> *What should I do if the horse is afraid?*

If the horse is lying down on its side or chest and responds to voice and touch signals, but cannot get up

- make sure it has enough space to get up (eg: horse jammed in a box) and if it does not, give it the necessary space;
- if it has tried to get up but still cannot, secure the environment: keep everyone a safe distance away, remove any object that could be harmful, calm the animal by positioning only one person at its head and as far as possible from its forelegs;
- assess the physiological criteria: (see factsheet for measure 6);
- contact a veterinarian for advice on what to do.

If the horse does not respond to voice and tactile signals:

- assess the physiological indicators: state of awareness, temperature, respiratory rate, pulse, colour of mucous membranes, skin folds;
- contact a veterinarian for advice on what to do.

2 >> *What should I do if the horse is injured?*

Assess the situation:

- priority is bleeding;
- where to look: skin, deep tissue, joint area;
- degree of contamination and dirt.

First aid:

- apply a tourniquet if necessary;
- clean and disinfect the wound;
- protection: dressing if possible.

Depending on the severity of the wound, contact a veterinarian.

3 >> *What should I do if the horse displays mobility problems?*

Mobility problems can be caused by many things and are often painful for the horse. If a horse has mobility problems, you should:

- Check that its hooves are in good shape: mobility problems are often caused by poor horseshoeing or trimming.
- Note the conditions in which the horse is used and change them, if necessary: overly intense and/or too frequent work, incompatible with the horse's physiology, degraded ground, etc.
- A severe, persistent medically untreated lameness must be referred to a veterinarian as soon as possible. A horse must be used appropriately, to suit its capability range, stopping at the point where it cannot do any more;
- If you suspect laminitis, do not make the horse walk. Contact a veterinarian, and then:
 - > check that its feed is appropriate for what it is being asked to do;
 - > investigate possible genetic predispositions;
 - > check that it is properly shod;
 - > check for disease trigger symptoms;
- In a case of muscle inflammation (myositis) or swelling (oedema or lymphangitis), contact a veterinarian and check:
 - > its feed is appropriate for what it is being asked to do;
 - > its programme of activity is appropriate;
 - > there are no exceptional circumstances (weather, transport...).

4 >> What should I do if the horse presents with a contagious, infectious or parasitic disease?

- Minimise the risk of contagion by isolating the sick animal in an appropriate location if necessary;
- Implement the quarantine procedures provided for the introduction of new individuals into a group;
- Make sure to separate batches with different health requirements, such as foals kept for breeding and foals kept for training;
- Check and ensure personal hygiene, premises hygiene, and equipment hygiene;
- Improve preventive care, vaccination and deworming programmes, in line with veterinary advice.

5 >> What should I do if a horse has a chronic or dry hacking cough or is breathing abnormally (rapid, fitful, jarring...)?

It is recommended that you call a veterinarian and review its accommodation conditions (see factsheet for measure 3), the quality of fodder and bedding (see factsheets for measures 2 and 3), stabling practices (aisleways swept regularly), transport conditions...

6 >> What should I do if the horse displays itching symptoms (pruritis, skin disorders...)?

To minimise the appearance of these health problems, it is recommended that you implement the necessary preventive, hygiene and therapeutic measures. Chronic itching can be detrimental to the horse's welfare.

When you notice itching, you should:

- Prevent and treat skin disorders connected with poor-quality bedding or pastures (mange), external parasites, and pathogens (mange, ringworm, infection...) by improving the quality of bedding (see factsheet for measure 3) or pastures (see paragraph below);
- Prevent and treat skin disorders connected with summer insects: summer dermatitis, keratoconjunctivitis... Harmful insects have to be controlled for the sake of the horse's welfare and to prevent the diseases that the insects carry: shelters, masks and coverings rugs for protection, reasonable use of insect repellent, different times for outings... (see factsheet for measure 3);
- As a veterinarian for a differential diagnosis of seasonal recurrent dermatitis as well as allergies, and parasitic, bacterial, fungal and other infections....

7 >> What should I do if the horse shows recurring signs of colic or ulcers?

When a horse shows recurring signs of colic or ulcers, you should review its rations, particularly in fibre content, your deworming (gastrophilus / bot fly) and watering policies, stress/anxiety factors, the intensity of the work it is asked to do... A whole range of professionals (vets, nutritionists, etc.) can be asked for help and advice.

In the case of recurring colic showing signs of gastric ulcers, you should confirm your suspicions by asking for additional ulcer tests.

8 >> What should I do if the horse displays behavioural or stereotypies?

See factsheet for measure 5 and Appendix B "Behavioural problems"

9 >> *What should I do if the horse experiences foaling problems?*

Ideally, you should have anticipated this eventuality by seeking advice from a veterinarian to set up accident prevention measures for the mare, her foal, and the carers at foaling, as well as a procedure to follow while awaiting the birth.

10 >> *What should I do if the parasite pressure in the fields is too high?*

Nearly 90% of horse parasites are found in the horse's environment. Measures to minimise parasite pressure in the horse's outdoor environment will have more impact than deworming.

You should take a few simple steps to minimise parasite pressure in fields:

- Switch paddocks as soon as you have dewormed. This is because, after deworming, resistant parasites lay eggs that will, in turn, produce resistant parasites. If you switch paddocks immediately after treatment, it is the resistant parasites that will dominate the parasite population;
- Keep the healthiest paddocks for the most sensitive horses: foals, young horses and old horses;
- If possible, set up fields where horses and ruminants can graze together. As most horse parasites attack only horses, their ingestion by ruminants stops their reproductive cycle. This means they can no longer lay eggs, thereby reducing grassland contamination;
- Use rotation to destroy parasites, alternating crushing and grazing. Intelligent field maintenance can also reduce parasite pressure: harrowing in hot dry periods rather than in wet spells, using healthy compost...;
- Adjust deworming to reflect defecation: analyse faecal matter to be able to put in place an intelligent deworming policy (see "What you need to know"). You should do this analysis with the help of a veterinarian;
- Picking up dropping off the pastures over a week is a good cleaning method, especially in high density usage.

WHAT YOU NEED TO KNOW

➤ Daily monitoring of a horse's health

The person **responsible** for a horse or horses has to **monitor their health and welfare**, in light of their living and working conditions. He/she must also make sure that the facilities and equipment are operating properly.

Assessment of animals' general state of health includes broad external parameters, behavioural parameters, and physiological parameters.

Behavioural and postural changes, and unusual or repetitive behaviour, are generally signs of health-related or wellness problems. If detected, the horse manager should investigate them more closely, to identify what is triggering them or contributing to them.

Training and education can help horse carers to improve their observational skills and keep their understanding up to date (see "To go further"). Health information and health advisories are also available on various networks, such as the RESPE.



Operating since 1999, the RESPE is an equine health monitoring network. It consists of a network of veterinarian sentinels spanning the entire country, who have set up the health monitoring and alert network.

➤ The importance of prevention

Livestock Health Report (Bilan Sanitaire d'Élevage) and treatment protocols

The Livestock Health Report (Bilan Sanitaire de l'Élevage / BSE) is issued annually by a veterinarian. It certifies that the livestock meets quantitative and qualitative health standards, and reports the principal disorders observed in the past year, including any considered to be priorities for improving the health of the livestock. It is also used to assess improvement over time. The Certificate is essential for the attending veterinarian to be able to establish a treatment protocol.

Proper health management requires prophylactic and preventive care, and treatment protocols developed in conjunction with a veterinarian. Those protocols must describe how medications can be administered without prior clinical examination to deal with the pathologies listed in the document. They must, in particular, contain information regarding vaccination, management of internal and external parasites, colic, foot care, and dental care.

Vaccination

Regulations require horses participating in joint events to be vaccinated against equine influenza. FEI, FFE, and racing regulations often have specific protocols that must be respected.



Attention : aucune injection vaccinale dans les 4 jours qui précèdent la compétition

Tetanus vaccination is strongly recommended, as horses are particularly susceptible to infection by *Clostridium tetanii*. Infection can set in even from a superficial wound. They should be vaccinated at least every two years.

Vaccination for rhinopneumonitis is mandatory for breeding stock in accordance with Stud Book regulations. It has to be done annually.

Deworming

Horse parasites vary depending on the age of the horse and its lifestyle: strongyles (hookworms), cyathostomes or small strongyles, gastrophiles, roundworm, tapeworms...

Horses have to be dewormed at reasonable intervals to prevent excessive infestation conducive to disease. The purpose of deworming is not to eradicate all parasites in the body but to minimise infestation to allow the animal to develop its own immunity. Inappropriate deworming encourages the development of resistant parasites.

Deworming must take into consideration the horse's age, physiological condition, living conditions (outdoors or indoors) and its existing level of parasite infestation: coproscopy can optimise the deworming programme. Deworming must be coordinated with grazing management.

Biosafety measures

A biosafety plan puts in place farming practices to minimise:

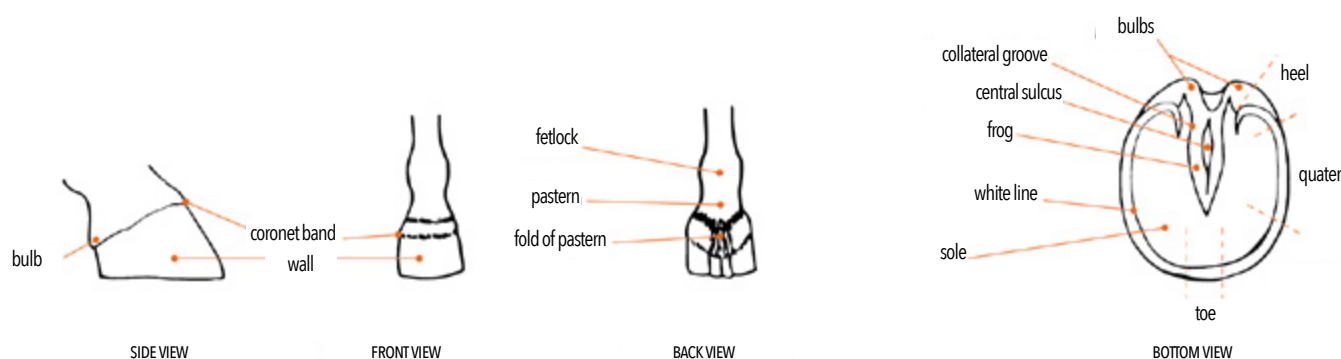
- The introduction of infectious diseases: circulation of people, feed, water, machinery and equipment, introduction of new horses or other animals, and insect and rodent control;
- Disease transmission between farm horses: management of sick horses and dead animals;
- Transmission of diseases to other work horses.

These preventive measures can reduce the risk of disease and financial loss (care and treatment, non-use...). A veterinarian can help develop a biosafety plan.

"No hoof, no horse!"

A horse's feet support its body weight, give it purchase, shock absorption and propulsion. Their very complex structure allows them to respond to all these demands.

A horse's feet are the end points of its limbs. They are formed from different types of tissue, are rich in blood vessels, and end in the hoof. Made of a horny material, the hoof protects the foot. The horn grows continuously, top-down. The shape of the hoof varies from horse to horse.



Proper foot care ensures that they stay in good condition, contain no foreign bodies, are not abnormally warm, and have no lesions or injuries.

They should be checked by the horse manager and maintained by a professional, at regular intervals appropriate for the horse's age, breed, physiological condition and what it is used for. Special attention should be paid to old horses.

In the wild, the hoof's constant growth is compensated by constant wear from the ground. How the hoof is worn away depends on how it is used. Trimming and/or shoeing can adapt it to the work that the horse is asked to do.

The purpose of trimming is to maintain the horse's hoof, to produce an optimal shape and length, based on what the horse is used for and its individual predispositions. Horseshoeing protects the horse's hoof by giving it a metal sole. The professional in charge of trimming and shoeing horses is called a farrier.



Farriers trimming horses' hooves.



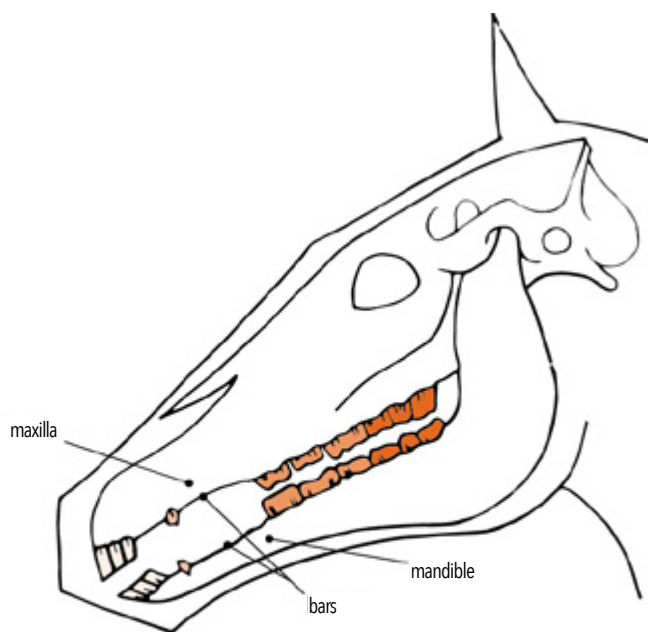
A horse's teeth

Mares have 36 teeth: 12 incisors, 12 premolars, 12 molars. Male horses have 40: the additional 4 teeth are canines. The rare females who have such canines are sterile.

Horses can also have extra molars called wolf teeth which are usually in the upper jaw although can also appear in the lower jaw. Located at the interdental space where the bit is placed, they can be painful when they come in contact with the bit and therefore require extraction by a veterinarian.

A horse's teeth grow constantly. Their growth is compensated by wear against the opposite teeth when chewing. Incisors and canines grow less fast than premolars and molars.

Its teeth allow it to cut, chew and grind grass and its feed. It is therefore essential to have the horse's teeth checked regularly by a professional, veterinarian or horse dentist to maintain the chewing surface of the teeth. The frequency of checkups depends on the horse's age, breed, physiological condition and what it is used for. Special attention should be paid to young foals and old horses.



■ molars
■ premolars

■ canines
■ incisors

➤ Reproduction

Gestation and foaling

An adult mare has a seasonal ovarian cycle. The length of an ovarian cycle varies greatly depending on the individual and the season, but averages about 21 days. The natural reproductive season, which depends on the photoperiod, extends from March/April to September in the Northern Hemisphere.

After fertilization, the gestation period is approximately 340 days. The first ultrasound scan is generally done on or after the 14th day of gestation.

In the wild, mares prefer to foal at night and in nice weather: more than 90% of foalings occur at night. They generally foal lying down, but can also do so standing up and the foal is expelled quite fast. The hooves are the first to appear, followed by the nose, then the head and the rest of the body: it is an anterior, dorsosacral presentation, in an extended posture.



Foaling and first contact between the mare and its foal.

It is not possible, as yet, to accurately predict the exact time of foaling. Changes in the mare's behaviour and physiological signs suggest that foaling will be imminent, but the mare may delay the birth if she feels disturbed.

If, during birth, the position, posture or duration of the foaling is abnormal, a veterinarian must be called quickly as the foal's survival time is short. It is essential to prepare an intervention plan with the veterinarian's advice, in advance.

The use of gestating mares and foaled mares

Gestating mares can be used, with careful attention to their physiological condition and the existing regulations governing various types of use: in sports, pregnant mares are prohibited from trot racing, are permitted until 4 months' gestation for galloping and FEI, not defined in FFE regulations, and up to 8 months' gestation for working horses in accordance with the OIE Terrestrial Animal Health Code. In general, it is recommended that pregnant mares not be worked after 6 months' gestation.

The use of foaled mares should also respect their physiological condition. The OIE terrestrial animal code for working horses prohibits their use in the first 3 months after foaling.

➤ *With ageing, come signs of specific diseases and disorders*

As horses progress through their lifespan, specific diseases and disorders will require special treatment: arthritis, Cushing's disease, hirsutism, equine metabolic syndrome, heart failure, etc, as well as signs of cerebral degeneration (senility, depressive syndromes, etc.).

See factsheet for measure 8.

➤ *Doping is harmful to horse welfare*

Doping, or anything intended to artificially alter the horse's physical or psychological capacities or to mask health problems, is contrary to the horse's welfare and to the ethics of the horse-human relationship (see factsheet for measure 7).

TO GO FURTHER

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- BAUMGARTEN L., PSA, 2010. *Détention des chevaux conforme à l'espèce, guide pratique.*
- BOUREAU V. et al., 2015. *Etat de bien-être des chevaux. Guide pour une évaluation de terrain.* Juin 2015, 20p.
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- OIE, 2016. *Bien-Être des équidés au travail. Code Sanitaire pour les animaux terrestres – chapitre 7.12 – articles 7.12.1 à 7.12.13.*
- OVF, 2001. *Comment détenir les chevaux.* 22p.
- PRADIER S., 2013. *Les conséquences pratiques et physiologiques du vieillissement chez le cheval. Pratique Vétérinaire Equine, n° spécial Gériatologie des équidés*, 45, 10-17.
- WARING GH., 2003. *Horse Behavior, Second Edition.* Noyes Publications, 457p.
- 40^e JOURNÉE DE LA RECHERCHE EQUINE, Paris, 2014. *Epidémiologie et pathologie. Actes réunis par l'IFCE. Le Pin au Haras : IFCE, 2014, 185p.*
- 42^e JOURNÉE DE LA RECHERCHE EQUINE, Paris, 2016. *Bien-être des équidés. Actes réunis par l'IFCE. Le Pin au Haras : IFCE, 2016, 184p.*
- Site du RESPE : www.respe.net

WHAT THE RULES SAY

Directive 98/58/CE, Annexe, points 12, 17 – relatifs à la limitation des risques de contamination de la nourriture et de l'eau, à la protection contre les risques pour leur santé des animaux gardés en plein air

Règlement 1950/2006/CE – relatif à une liste de substances essentielles pour le traitement des équidés

Règlement d'exécution 2015/262 – relatif au passeport équin

Article L 2014-1 du CRPM – relatif aux conditions de détention d'un animal, être sensible

Article R 214-17 du CRPM, alinéas 1, 2, 3, 4 – relatifs à l'interdiction de priver les animaux domestiques de l'alimentation et de l'abreuvement nécessaires, à l'interdiction de laisser les animaux sans soins en cas de maladie ou de blessure, à l'absence de blessures ou d'accidents liés à l'habitat ou l'environnement des animaux domestiques

Article L 234-2 du CRPM – relatif à l'autorisation d'administration d'un médicament vétérinaire à un animal

Article L 212-1 du Code du Sports – relatif aux compétences du personnel en lien avec la pratique de l'équitation

Article R 13335-2 du Code de santé publique – relatif à l'obligation d'éliminer les déchets de soins

Articles L 5141-1, L 5111-1, L 5145-5, L 5141-9, L 5143-2 et L 5143-5 du Code de santé publique – relatifs aux médicaments autorisés et à l'approvisionnement autorisé

Arrêté du 25 octobre 1982, Annexe 1, Chap I, chap IV – relatifs aux conditions de garde d'élevage et de parage des animaux, à la limitation des risques de contamination de la nourriture et de l'eau, à la minimisation des risques d'atteinte sur la santé des animaux gardés à l'intérieur et/ou en plein air, au nettoyage et à la désinfection des locaux d'hébergement, à l'absence de blessures liées aux harnachements, à l'apport de soins appropriés et suffisants, à l'inspection de l'état des animaux et à la procuration de soins nécessaires

Arrêté du 25 octobre 1982, Art 1-5 – relatifs aux conditions d'élevage, la garde et la détention des animaux

Arrêté du 24 avril 2007 – relatif à la surveillance sanitaire et aux soins régulièrement confiés au vétérinaire

Arrêté du 22 juillet 2015, Art 6-1 – relatif aux obligations en matière de stockage des médicaments vétérinaires contenant une ou plusieurs substances antibiotiques

Article 1.4 du Règlement FFE – relatif à la lutte contre le dopage

Article 1.6 du Règlement FFE – relatif au respect de l'éthique sportive

Article 1.7 du Règlement FFE – relatif aux contrôles en lien avec la protection sanitaire

Article 7.3 du Règlement FFE – relatif au nombre de participations journalières autorisées par poney/cheval

Article 7.5 du Règlement FFE – relatif au harnachement

Articles 28 et 29 du Code des Courses au Galop – relatifs à l'entretien sanitaire des chevaux

Article 123 du Code des Courses au Galop – relatif à l'interdiction de courir au-delà des 120 jours suivant la dernière saillie

Article 137 du Code des Courses au Galop – relatif à l'état sanitaire du cheval avant la course

Article 138 du Code des Courses au Galop – relatif au contrôle des ferrures

Article 198 à 201 du Code des Courses au Galop – relatifs au contrôle de l'absence de substance prohibée dans le prélèvement biologique effectué sur le cheval

Annexes 5 et 15 du Code des Courses au Galop – relatifs aux conditions dans lesquelles sont effectuées et analysées les prélèvements biologiques et au code pratique des traitements administrés aux chevaux à l'élevage et à l'entraînement

Article 14 bis du Code des Courses au Trot – relatif à l'autorisation de courir des juments saillies

Article 15 du Code des Courses au Trot – relatif la vaccination et à l'état sanitaire du cheval

Article 73 du Code des Courses au Trot – relatif au contrôle des matériels et conditions de leur utilisation en course

Article 77 du Code des Courses au Trot – relatif au contrôle de l'absence de substances prohibées dans les prélèvements biologiques effectués sur un cheval

Article xx du Code des Courses au Trot – relatif au déferrage des chevaux en courses

Chapitre IV et code de bonne conduite de la réglementation internationale au Trot

Article 7, chap I du Règlement Général PEJET 2018 – relatif au bien-être animal, dont l'interdiction de concourir avec un équidé épuisé, boiteux, blessé

Article 7, chap V du Règlement Général PEJET 2018 – relatif aux contrôles de médication

FEI Code of conduct for the welfare of the horse – relatif au bien-être de chevaux en compétition

Code de bonnes conduites du règlement général SHF des épreuves d'élevage 2018 – relatif aux bonnes conduites à tenir pour que le poney/cheval soit souverain

Article 12.5 du règlement général SHF des épreuves d'élevage 2018 – relatif à la lutte contre le dopage

Article 42 du règlement général SHF des épreuves d'élevage 2018 – relatif aux contrôles réalisés sur le poney/cheval, en matière de tenue du registre d'élevage, d'identification et de protection sanitaire

MEASURE 7

PREVENT OR ALLEVIATE PAIN



OBJECTIVES

- Early detection of conditions that may cause or reveal pain in horses (limping, injuries, pain-relieving posture...) and their treatment.
- Actions or handling that may cause pain may not necessarily do so every time. In all other cases, alternative less-painful solutions should always be sought or the pain treated.



HUSBANDRY

- *I can recognise the first signs of pain in horses*
- *I make sure to maintain my horses' feet and pay attention to the quality of the ground/floor*
- *If my horse shows signs of a disease or condition, I follow my veterinarian's recommendations and advice*
- *I allow my horse a sufficient period of rest or convalescence before resuming work*
- *I am particularly careful about monitoring at foaling time (before, during, after) to ensure the mare is not in labour too long. I call the veterinarian if the mare or foal shows signs of excessive pain*
- *I put in place an appropriate weaning technique to minimise stress and risk of accidents, sources of physical or psychological pain*

YES	YES I CAN IMPROVE	NO I PLAN TO IMPLEMENT IT	NO I NEED MORE INFO TO DO IT
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USE

- *When using my horse, I do not use devices or methods that may injure it*
- *When using my horse, I do not use anything intended to artificially mask pain, including any form of doping*
- *When using my horse, I use artificial aids judiciously, complying with the regulations of the discipline*
- *After use, I check that no injury has been caused by the harness*
- *I do not use violent or artificial methods intended to generate painful stimuli during learning: obstacle bars, pins in reins that can cause injury, non-regulatory gaiters, etc.*
- *I refrain from doing anything that pointlessly causes pain: thermocauterization, soring, setoning*

YES	YES I CAN IMPROVE	NO I PLAN TO IMPLEMENT IT	NO I NEED MORE INFO TO DO IT
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OBJECTIVE HORSE-CENTRIC & ENVIRONMENTAL INDICATORS

Most signs of pain are non-specific. They have to be interpreted in light of the context in which they are identified.

1 > assess any change in general condition: body condition, coat...

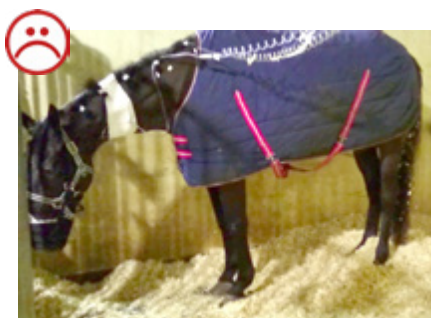
The factsheets for measures 2 and 6 suggest how to assess the horse's general condition

2 > assess any change in physiological parameters: heart rate, respiratory rate, sensitivity to infection.

See factsheet for measure 6 for a description of disorders.

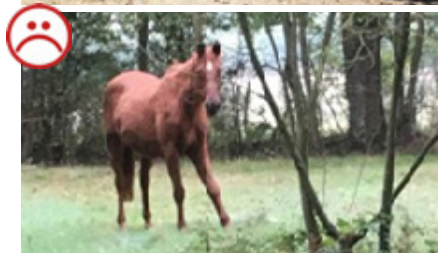
3 > assess sudden or lasting changes in the horse's daily behaviour:

- assess any change in feeding and watering when distributing meals or by observing the quantities of feed and water consumed, if possible;
- assess the absence/presence of pain-relieving postures: stretched position, weight shifting foot-to-foot, protective of a limb...;
- assess the absence/presence of signs of apathy: head hung low, isolation, refusal to get up, reticence to move, refusal to feed, sleeping/lying down longer than normal, stoic posture...;
- assess the absence/presence of signs of nervousness, agitation or anxiety: horse paws the ground, taps feet, keeps flicking its head or shaking one or more of its limbs...;
- assess the absence/presence of signs of aggressiveness: towards peers, humans, objects, itself, its own foal...;
- assess the absence/presence of behavioural problems: stereotypies (see Appendix B), restiveness...;



Head hung low and stoic posture.

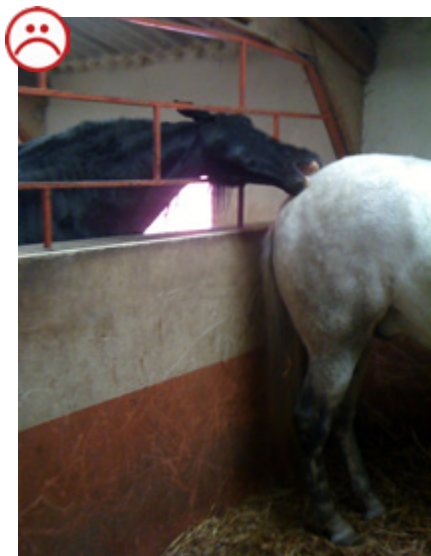
Horse anxious and agitated.



Pain-relieving postures: horse stretched (top), taking weight off left hind leg (bottom).



Aggressiveness to a peer.



Aggressiveness to a peer.



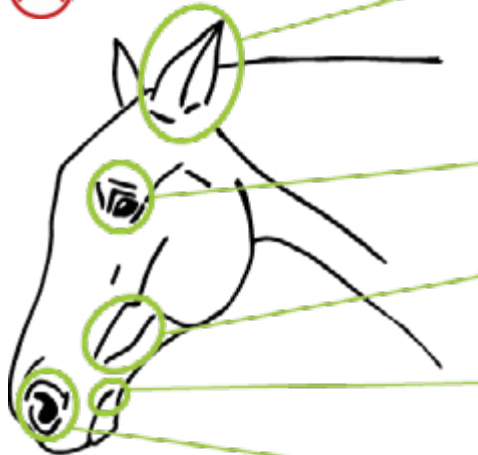
Aggressiveness to a peer.

assess the **absence/presence** of facial grimaces or expressions of pain: straight ears facing back, eyes closed, tense facial muscles, pinched labial commissure, dilated nostrils.



Source: AWIN protocol

Horse with no facial signs of pain.



ears flat back on neck

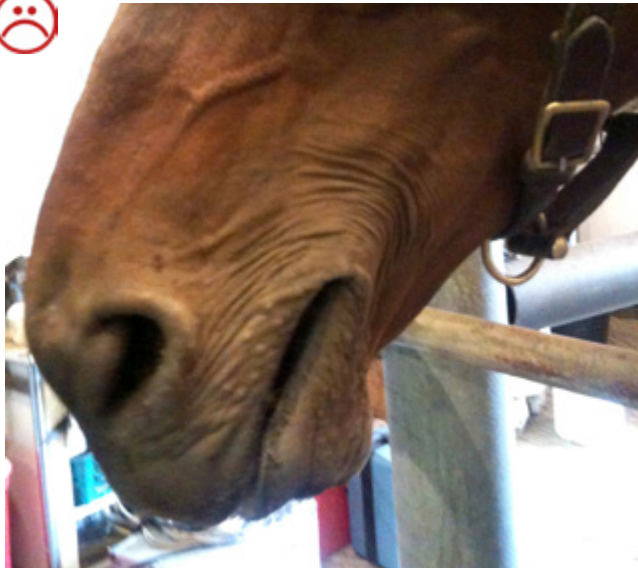
contracted eye muscles or closed slit eye

facial contractions

pinching of the labial commissure

expanding of the nostrils

Horse shows all the facial signs of pain known by scientists.



Pinched labial commissure and dilated nostrils.



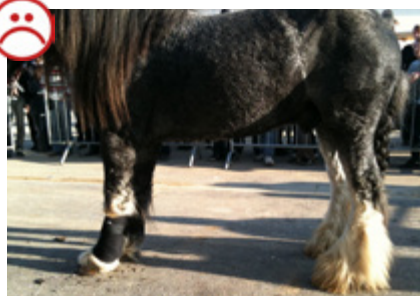
Presence of numerous signs of pain, unconnected with the approach of a person.

4 > assess any change in the horse's performance in use: heart and respiratory rate, speed, distance run, size of stride/gait/jump, pace, regularity...

5 > assess the **absence/presence** of signs of musculoskeletal pain: pain-relieving posture, weight shifting foot-to-foot, abnormal weight distribution, limb favoured and unweighted, limb rotated, abnormal attitude, reticence to move, limp (see factsheet for measure 6).



Limb favoured, unweighted.



Laminitis posture.



Posture to relieve cervical fracture.

6 > assess the **absence/presence** of signs of abdominal pain: stretched posture, vocalisations and/or groaning, horse is curled up, taps stomach with its limbs, watches its flanks, stretches out, torpor and depression...



Stretched position.



Horse watching its flanks.



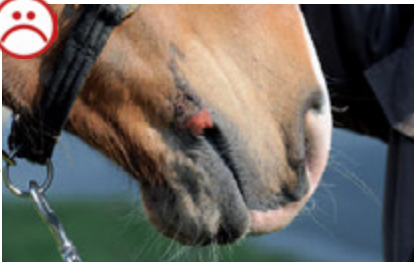
Horse tapping its stomach.



Horse curled up.

7 > assess the **absence/presence** of lesions that may be causing pain, connected with its harness and/or use: on its head, at the labial commissure, withers, straps/girth...

These lesions should be looked for when brushing and after use. The factsheet for measure 6 characterises them.



Top left: lesion at the labial commissure.

Top centre: lesion caused by strap.

Bottom left: wound caused by a halter left too tight on a young fast-growing horse.

Bottom centre: wound on withers.

Bottom right: lesion on withers due to improperly used covering.



- **Prevention:**
 - > Raise awareness of the keeper and people in contact with the horses of the importance of identifying signs of pain;
 - > Appropriate environment: safe, appropriate living space, group management, regular horse maintenance, health monitoring, etc. (see factsheets for measures 2, 3, 4, 5, 6 and 8);
 - > Management of transition phases: change of environment, change of feed...
 - > Develop a protocol for assessing and treating pain;
- When **"using"** a horse (see factsheet for measure 1):
 - > Use must be appropriate to:
 - >> the user: ability level, training,
 - >> the horse's state of health: effort demanded, duration and intensity of work,
 - >> the harness: type, adjustment;
 - > Intelligent/reasonable use of artificial aids, and regulations adhered to for every type of use: racing codes, sport regulations ...;
 - > Doping and similar;
 - > The mare's stage of pregnancy is taken into consideration when being asked to work.
- **Reproduction:** difficult foaling.

IN PRACTICAL TERMS, WHAT SHOULD I DO ?...

It is important to restate the point made in the introduction, that in situations that are painful for the horse, you must always position yourself appropriately, so that both you and the horse are safe.

1 >> What should I do if the horse's behaviour is symptomatic of pain?

If the horse exhibits behaviour(s) symptomatic of acute or chronic pain (see "horse-centric & environmental indicators"), you should:

- Put in place pain-relieving measures, in accordance with a veterinarian's recommendations, including those in the Livestock Health Report, if any (see factsheet measure 6);
- Let the horse have the time it needs to heal;
- Analyse the environment, changes to rearing practices, and how the horse is being used, to identify potential sources of pain;
- Adjust or modify the environment and/or how the horse is used, to avoid any new manifestation of pain.

2 >> What should I do if the horse shows signs of abdominal pain?

In most cases, it is colic (see factsheet for measure 6).

However, you should:

- assess without delay the horse's behavioural and biological parameters: heart rate, colour of mucosa, presence of intestinal transit, degree of dehydration...;
- promptly notify the veterinarian to find out what to do: walk the horse, water it, put it on a diet, potentially administer treatments provided in the previously prepared treatment protocol, consult the veterinarian onsite or at a clinic...

3 >> What should I do if the horse shows signs of postural or musculoskeletal pain (favours a limb, limps ...)?

You should check the condition of the horse's feet to make sure there is no problem that could be causing the pain (see factsheet for measure 6).

In the absence of foreign bodies, you should consult a veterinarian to be able to implement the appropriate measures: immobilise the horse or the affected limb, administer treatments provided in the previously prepared treatment protocol, let the horse rest, consult the veterinarian onsite...

Preventive measures can keep it from recurring:

- Review how the horse is being managed and used;
- Check the condition of the ground/floor and that it is appropriate for the work the horse is being asked to do;
- Check that its feeding plan is appropriate for the work it is being asked to do...

4 >> What should I do if the horse shows signs of pain caused by the harness?

As soon as the first signs of pain are noticed, you should:

- Remove the source of the pain if possible: remove or adjust the offending harness, or even stop using it;
- Assess the severity of the lesions: coat is worn away, skin eroded, wound...;
- Put in place pain-relief measures and to not hesitate to ask a veterinarian.

It is recommended that you use a harness that is adjusted to the horse and check for the presence of harness-related lesions or injuries before and after each time the horse is used.

5 >> What should I do if the horse shows signs of pain caused by the wound?

You should assess the severity of the pain from the wound, bearing in mind that pain is not proportional to the size of the wound.

See factsheet 6 "In practical terms, what should I do if?" for recommendations.

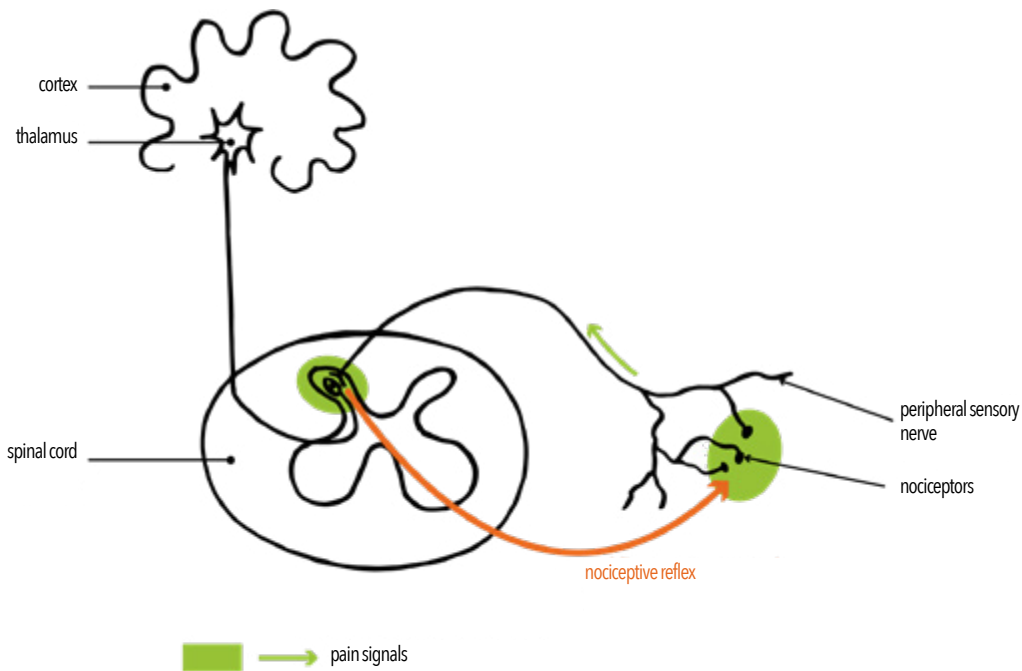
WHAT YOU NEED TO KNOW

➤ What is pain?

Pain in animals is described as a "sensory and emotional experience represented by the animal's 'awareness' of a breach or threat of a breach of the integrity of its tissues, causing a physiological and behavioural reaction intended to minimise the injury or threat that it constitutes and promote healing". Pain is a physiological phenomenon, the body's alert system that permits it to avoid and/or minimise any harmful or injurious phenomenon.

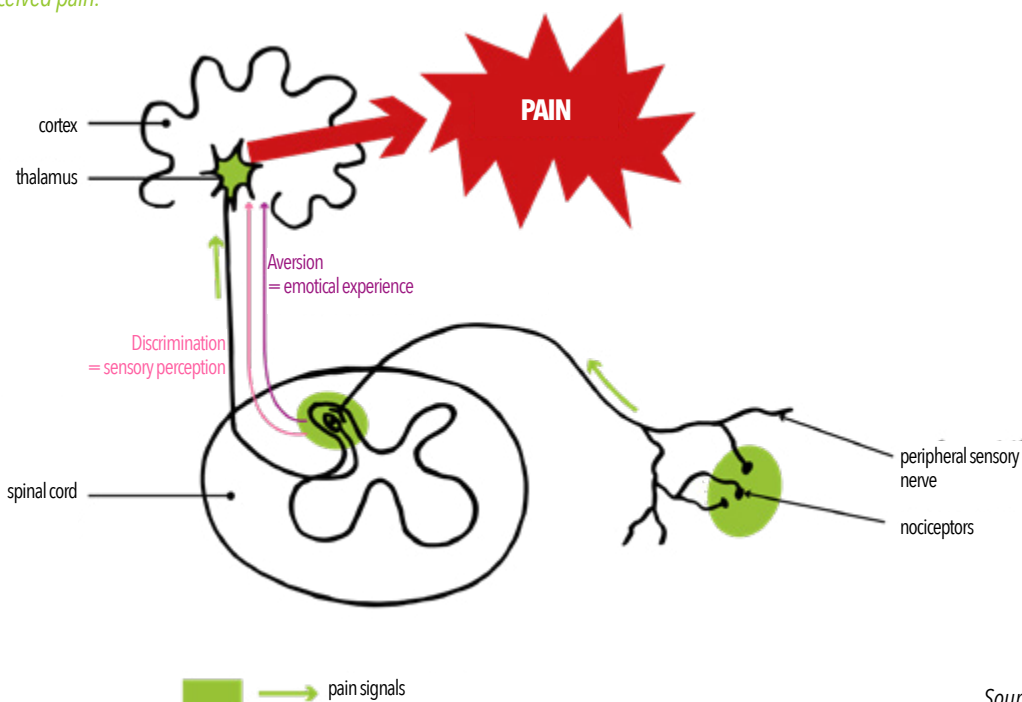
Pain is difficult to quantify. Signs of pain are generally both physiological and behavioural. They are not necessarily strikingly obvious, regardless of the intensity of the pain. Pain intensity can also manifest as a decrease in performance.

The two main stages in how pain is processed



Source: Jacques Servière

1/ nociception reflex loop triggering the nociceptive pain prevention reflex in response to a painful signal. For example, this may be the kick that the horse will make in response to a perceived pain.



Source: Jacques Servière

2/ the emotional reaction to a painful signal: the information travels to the brain, which feels the pain and permits an appropriate behavioural reaction.

A distinction should be drawn between acute pain and chronic pain:

- Acute pain is an aversive sensory experience that causes an avoidance motor reaction. It can, if recurring, cause a change in the individual's behaviour, through conditioning. Acute pain in horses will induce avoidance reactions: flight, immobility, sudden aggression...
- Chronic pain has a deleterious effect, with repercussions on the horse's general condition, behaviour and immune defences. It will induce a lasting change in the horse's entire set of behaviours: feeding, social, exploratory... It may cause hypersensitivity and hyperalgesia.



Horse suffering from acute pain (colic).



Horse suffering from chronic pain.

Acute pain will turn into chronic pain if it persists.

In horses, the two predominant types of pain are abdominal pain and locomotive pain (see "horse-centric indicators" and "in practical terms, what should I do if?").

➤ *The "3R"s principle.*

Following the 2008 Rencontres Animal & Société conference, a joint scientific study of pain in farm animals was conducted by INRA in partnership with schools of veterinary medicine, l'Assistance publique- Hôpitaux de Paris, the Collège de France and the CNRS. These multidisciplinary studies clarified the concept and analysis methods used to understand pain in productive livestock.

By analogy to the ethical concept of the "3R"s (Reduce, Refine, Replace) which progressively taken hold since the '50s in the field of animal experimentation, the joint study proposed formulating a separate "3R"s strategy to understand the practices that can cause pain in animals:

- Remove the cause of the pain, i.e., the practice in question,
- Replace a painful procedure with intervention that is less so,
- Reduce pain by therapeutic means.

The work done based on these theoretical approaches by the "Horse Welfare" Combined Technological Network (Réseau Mixte Technologique) has led to significant developments in certain practices to the benefit of both animals and breeders. They validate the principle of opting for replacement, when the primary goal of pain removal is impossible. Every possibility for pain relief must be used when it is not possible to do otherwise, with the advice of a veterinarian.

➤ *Surgical procedures in horses: castration, sutures...*

All surgery, and notably surgery of convenience such as castration, must be performed under local, regional or general anaesthetic by a veterinarian, in accordance with law, including alleviation of the pain induced by the use of analgesics.

The decision to opt for surgical castration must be taken after consideration of the benefit/disadvantage balance for the horse. It requires informed consent by the owner or owner's representative and the veterinarian. The castration-box technique is considered outdated and contrary to the animal's welfare as it does not permit satisfactory control of pain.

➤ *The fight against doping*

Doping consists of administering substances or using procedures with the aim of altering horses' performance in competitions. It is contrary to respect for the animal's welfare.



Any technique intended to artificially mask pain is contrary to the animal's welfare. These are mainly surgical or chemical neurectomy, cryotherapy and thermocauterisation. These practices can have dramatic consequences for the horse: aggravation of lesions, fatigue fractures...

Similarly, any technique intended to increase the sensitivity of the horse's skin in order to alter its performance is contrary to animal welfare. This includes, in particular, the use of physical or chemical procedures to increase the sensitivity of the horse's limbs.

The trot racing code, the gallop racing code and the FEI distinguish two classes of substances:

- "banned" substances¹: these can under no circumstances be administered to a race horse or competition horse. They are, for example, anabolic steroids, erythropoiesis stimulants, synthetic oxygen carriers, growth factors, etc. If detected in a doping test, penalties are always imposed and can be very severe.
- "Prohibited" substances²: these are primarily therapeutic substances, and can be administered to race horses or competition courses for therapeutic purposes as part of a treatment prescribed by a veterinarian, justified by the horse's state of health. However, these substances must not be present in the body of a horse while it is participating in a race or competition.

For animals taking part in sports events, banned substances are different at national level than at international level. Thus, in France, the list of banned substances is set by the Decree of 2 May 2011. At international level, the list is set by the FEI and reviewed each year.

Any treatment administered to a horse during a competition/race period or during training, must be justified by a specific diagnosis, administered as part of an ongoing and transparent owner/veterinarian relationship, in the interests of the horse's health and welfare and not for the purpose of winning a prize. The use of medical procedures or treatments aimed at masking the effects or signs of injury in order to permit training or participation in a competition to continue is banned.

¹ Banned substances under FEI regulations, class 2 substances under the trot racing code, banned substances under the gallop racing code

² Prohibited substances under FEI regulations, class 1 substances under the trot racing code, prohibited substances under the gallop racing code

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WHAT THE RULES SAY

Article R 214-17 du CRPM, alinéa 2, 3, 4 – relatifs à l'interdiction de laisser sans soins en cas de maladie ou de blessure, à l'absence de souffrances liés à l'habitat ou l'environnement des animaux domestiques

Article L 214-3 du CRPM – relatif à l'interdiction d'exercer des mauvais traitements sur les animaux domestiques

Articles L 234-2, D 234-6 et R 234-8 du CRPM – relatifs aux substances interdites

Arrêté du 25 octobre 1982, Annexe I, Chap I, chap IV – relatifs à l'absence de nuisance des matériaux utilisés pour la construction des locaux d'hébergement, à l'apport de soins suffisants, à l'utilisation de harnachements appropriés, aux conditions de détentions, à l'inspection de l'état des animaux et à la procuration de soins nécessaires pour éviter des souffrances

Arrêté du 25 octobre 1982, Art 2 – relatif à l'absence de souffrance et d'effet néfaste sur la santé de l'élevage, la garde et la détention des animaux

Article 171 du Code des Courses au Galop – relatif à l'usage de la cravache

Article 198 à 201 du Code des Courses au Galop – relatifs au contrôle de l'absence de substance prohibée dans le prélèvement biologique effectué sur le cheval

Annexes 5 et 15 du Code des Courses au Galop – relatifs aux conditions dans lesquelles sont effectuées et analysées les prélèvements biologiques et au code pratique des traitements administrés aux chevaux à l'élevage et à l'entraînement

Article 14 du Code des Courses au Trot – relatif à l'incapacité de courir d'un cheval

Article 73 du Code des Courses au Trot – relatif au contrôle des matériels et conditions de leur utilisation en course, en particulier l'usage de la cravache et des rênes munies d'accessoires métalliques

Article 77 du Code des Courses au Trot – relatif au contrôle de l'absence de substances prohibées dans les prélèvements biologiques effectués sur un cheval

Titre II-A des Conditions générales des programmes des courses au Trot – relatif aux chevaux déferrés

Article 77 du Code des Courses au Trot – relatif au contrôle de l'absence de substances prohibées

Article 1.4 de Règlement FFE – relatif à la lutte contre le dopage

Article 1.5 du Règlement FFE – relatif à la lutte contre la violence sur les animaux

Article 1.6 du Règlement FFE – relatif au respect de l'éthique sportive

Article 7, chap I du Règlement Général PEJET 2018 – relatif au bien-être animal, dont l'interdiction de faire acte de brutalité, de cruauté et de mauvais traitements

Article 7, chap V du Règlement Général PEJET 2018 – relatif aux contrôles de médication

FEI Code of conduct for the welfare of the horse – relatif au bien-être de chevaux en compétition

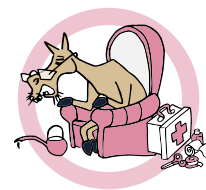
Code de bonnes conduites du règlement général SHF des épreuves d'élevage 2018 – relatif aux bonnes conduites à tenir pour que le poney/cheval soit souverain

Article 12.5 du règlement général SHF des épreuves d'élevage 2018 – relatif à la lutte contre le dopage

Article 42 du règlement général SHF des épreuves d'élevage 2018 – relatif aux contrôles réalisés sur le poney/cheval, en matière de tenue du registre d'élevage, d'identification et de protection sanitaire

MEASURE 8

MAKE SURE THAT HORSES, THROUGHOUT THEIR LIVES, HAVE THE NECESSARY CARE, AND APPROACH DEATH IN DECENT CONDITIONS WHEN THERAPIES DO NOT EXIST



OBJECTIVES

- End of life, disability, end of career, ageing, must all be addressed with appropriate care and treatment.
- When the condition of a horse offers no hope for cure or recovery and when no effective and economically supportable therapies exist, death must happen in decent conditions.



SERIOUS ACCIDENT AND INCURABLE DISEASE

- *I know what to do in an accident: treatment protocol, steps to take...*
- *I know that euthanasia is reserved for horses that are obviously suffering*



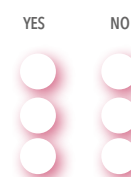
OLD HORSE

- *I can't tell the difference between an old horse and a sick horse*
- *I am aware of the special care required for an old horse*



END OF LIFE

- *I know that a healthy horse can be sent to an abattoir, provided it meets eligibility requirements*
- *I know my knackering/rendering obligations*
- *I know what to do when my horse dies*



OLD HORSE

1 > assess the horse's body condition

Note: after age 30, muscle loss at the topline and hindquarters can suggest abnormal thinness but are just normal signs of ageing and not malnutrition.

See factsheet for measure 2 to assess the horse's body condition.



Old horse.



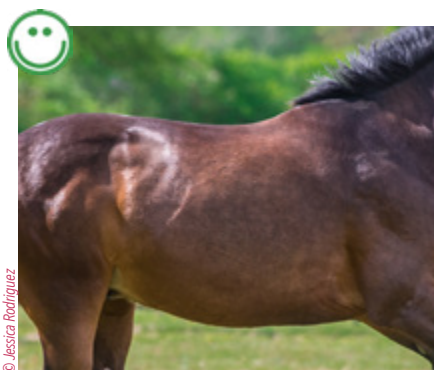
Old horse.

2 > assess how the horse feeds:

- **absence/presence** of feeding problems;
- **absence/presence** of chewed but uningested food residue;
- **absence/presence** of unchewed and/or undigested food residue in droppings.

3 > assess the quality of the horse's mobility: **absence/presence** of limping (see factsheet for measure 6)...

4 > assess the quality of the horse's coat: **absence/presence** of hirsutism, sheen (see factsheet for measure 6)...



Coat is shiny, uniform.



Coat is rough, dull.



Coat is typical of Cushing's disease.

END OF LIFE

In the event of a serious accident, do a pain assessment using the pain indicators described in the factsheet for measure 7. In general, do this assessment more frequently for old horses.

SERIOUS ACCIDENT AND INCURABLE DISEASE

- Put in place a treatment protocol with the veterinarian's advice;
- **Euthanasia** conditions:
 - > Fast intervention for horses with serious diseases that cannot be cured, or where treatments are ineffective and economically unsupportable, or that cannot be moved (see non-transportability guide);
 - > Put in place a protocol in conjunction with the entity's consulting veterinarian, to choose the fastest and least traumatic method for the horse.

OLD HORSE

- Adjust **living space** :
 - > Concentrate resources in a smaller area to minimise the distance the horse needs to walk between key parts of its environment: shelter, water point, hayrack...;
 - > Ensure an old horse has a place in the hierarchy that allows it to access resources, including companionship and place to rest;
 - > The least dusty environment possible;
- Adjust **monitoring** to be more frequent and more detailed: parasites, teeth, feet, eyes, vaccination, weight gain or loss.

END OF LIFE

- **Natural death**:
 - > Put in place a protocol for managing animals found to have died, that includes rendering or incineration;
 - > Put in place a euthanasia protocol to ease end-of-life suffering.
- If the intention is to send the horse to an **abattoir**:
 - > Assess the horse's transportability (see non-transportability guide);
 - > Appropriate or approved means of transport (see transport guides);
 - > Transport to a certified horse abattoir (see guide to good abattoir practices).

IN PRACTICAL TERMS, WHAT SHOULD I DO ?...

Before we start, we must restate that the horse's pain must be assessed before any decision is made about an old horse and its quality of life.

OLD HORSE

1 >> What should I do if an old horse increasingly presents with disorders, autoimmune diseases and tumours?

You should be vigilant in your vaccination programmes and adjust them to the epidemiological context as recommended by the veterinarian. You should also adopt a stronger parasite management programme.

SERIOUS ACCIDENT AND INCURABLE DISEASE

1 >> What should I do if the horse cannot get better, or be moved: serious accident, incurable illness?

The horse will have to be euthanised promptly, by a veterinarian, in accordance with the in-house protocol.

END OF LIFE

1 >> What should I do if the horse cannot be fed, watered or moved?

The horse will have to be euthanised promptly, by a veterinarian, in accordance with the in-house protocol. You must then call the rendering or incineration services.

2 >> What do I have to do if I want to send my horse to an abattoir?

It is essential that the horse be verified fit for human consumption. Depending on the medications it had been administered, the horse may be slaughtered after a period of time specified by regulations, or removed from the food chain. You must also make sure that the box "unfit for human consumption" has not been ticked.

Any identified horse that is in good health regardless of age can be routed into the food chain.

Horses with no "medication treatments" report are automatically excluded/unsuitable for human consumption. If you need a duplicate document, see the regulations (see "what the regulations say").

It is also essential to make sure that the horse is transportable, arrange how it will be transported, and that the abattoir has agreed to accept it (see "to go further" and "what the regulations say").

3 >> What should I do if a horse whose "medication treatment" report has the "unfit for human consumption" box ticked, or it does not have a "medication treatment" report at all?

The horse cannot be included in the food chain. This definitive exclusion means that the animal has to be left to die a natural death, to the maximum extent of its life, unless euthanised if necessary. You must then call the rendering or incineration services.

➤ *Horses are animals that live a long time and have particular needs*

The average life expectancy of a horse is 25 years. Ponies and donkeys can live up to 35 years. Horses are generally considered to be old when they reach 15 years of age, at which point their age can no longer be estimated from their teeth. At an advanced age, they can experience cerebral ageing reflected in slower reflexes, sensory changes, balance problems, and even general weakness, which must not be confused with illness or disease.

Dental anomalies and problems are more frequent in old horses, due to its teeth continuously growing and being worn down throughout the course of its life.

Older animals' living conditions affect the quality and health of their feet: living in the field, feed...

Old horses are predisposed to age-related diseases and conditions: Cushing's disease, arthritis... They are also more sensitive to autoimmune diseases and tumours (see factsheet for measure 6).

➤ *Euthanasia in horses*

Euthanasia is a veterinary procedure to cut short the life of an animal whose condition given the current state of knowledge is regarded as incurable and is accompanied by intolerable suffering for the animal. The priority when making the decision is respect for the animal's welfare.

Euthanasia for economic or convenience reasons to benefit the owner of the horse is not acceptable. A veterinarian has every right to refuse it.

A euthanised horse must then be rendered or incinerated (see below).

➤ *The horsemeat industry*

Once all assurances have been given, a healthy horse can be sent to an abattoir, provided it is properly identified (see Appendix E) and has not been given medications preventing it from entering the food chain and the owner has not declared it unfit for human consumption. To ensure consumer protection, the admission of horses into the human food chain is strictly controlled and supervised. Identity checks of horses arriving at abattoirs and verification that they have certified "medication treatment" reports that guarantee that there is no risk to consumers from drug residue.

In France, the meat industry takes all necessary steps to ensure the wellbeing of horses throughout the slaughtering process, in particular the Guide to Abattoir Good Practice (Guide des Bonnes Pratiques en Abattoir) (see "to go further").

➤ *In the case of horse found dead*

A horse found dead from natural or accidental causes cannot be brought into the food chain. It has to be rendered or incinerated. Failure to do so incurs a €3,750 fine (Art. L. 118-5 of the Rural and Maritime Fishing Code).

The fee-based rendering or incineration service must be contacted as soon as possible and in any case within 48 hours.

In the case of a carcass being sent for rendering, the removal fee varies from region to region based on the animal's weight and the distance travelled to collect it. ATM (Animaux Trouvés Morts) is an online service that allows you to report the death of a horse and pay for its removal at rates it has negotiated with the rendering plants.

Incineration fees vary according to the weight of the horse. To the incineration fee must be added the cost of transporting the horse to the incinerator, which varies from region to region.

The horse's death must be reported to the equine central information database (SIRE) within 30 days, along with its registration documents and registration card (returnable on request). This must be reported when the rendering agent collects the carcass or by the DD(CS)PP veterinary services or by the owner.

When the carcass is being collected, the owner is required to provide its SIRE number. If it does not have one, SIRE must be contacted.

➤ Accident management

In the case of a serious accident involving a horse, the PAS (Prevent, Alert, Save) protocol sets out what has to be done. The PAS protocol is posted onsite, along with the names and phone numbers of the persons responsible for its implementation. At the very least, it is known by the people who work at the site.

The PAS protocol consists of three phases:

- Prevention: to avoid further harm, put the animal in as safe a condition as possible, ensure the safety of the people present, other horses, and the public if any;
- Alert: call the person in charge of the operation or entity, then the veterinarian to obtain help as soon as possible, before the situation become more serious. Then call the owner
- Save: give first aid, reassure.

➤ Repurposing race horses and high level competitors

A horse's athletic career is usually finished before it is old. It can also be suddenly interrupted by an injury depriving the horse of a future career in competition or racing, or preventing it from starting one.

By thinking ahead and supporting their conversion, you ensure their welfare far removed from racetracks, cross-country, show jumping and dressage, for a new future as a recreational or amateur sport horse, or simply put out to pasture.

This job of repurposing or conversion must be done by experience people, so that an athletic animal that has spent its whole career being asked to develop very specific abilities, such as reactivity, speed, endurance... can learn a "new role" as a recreational or sport animal guided by experienced professionals with great respect for their charges. Their future partner(s) will be able to use the horse in its new endeavours in total safety.

In France, there are still few entities that offer conversion guidance. Associations such as "Au-delà des Pistes" and "La ligue française de protection des chevaux", offer these types of services, in partnership with racetrack operators.



Created in 2016, Au-Delà des Pistes works to promote the conversion of racehorses. It is the official partner of France Galop for the placement of horses who stop training when their competitive career has ended or due to injury.

Au-Delà des Pistes also organises Conversion Days at racecourses, featuring thoroughbreds converted to other disciplines, and in 2018 created horse-jumping trials for reformed gallopers.



The league invites any gallop racing professional who wants to divest itself of a racehorse to contact it. In such a case, the horse is cared for by the league and is directed to an establishment where it readjusts to a life of leisure. After being gradually retrained and observed for at least several months, the horse is offered to a host family. It remains the property of the league.

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WHAT THE RULES SAY

Règlement 853/2004/CE - relatif aux règles spécifiques d'hygiène applicables aux denrées alimentaires d'origine animale

Règlement 854/2004/CE - relatif aux contrôles officiels concernant les produits d'origine animale destinés à la consommation humaine

Règlement 1/2005/CE - relatif à la protection des animaux pendant le transport et les opérations annexes

Règlement 1950/2006/CE - relatif à une liste de substances essentielles pour le traitement des équidés

Règlement 504/2008/CE - relatif à l'application des directives concernant les méthodes d'identification des équidés

Règlement d'exécution 2015/262 - relatif au passeport équin

Directive 156/2009/CE - relative aux conditions de police sanitaires régissant les mouvements d'équidés et les importations d'équidés en provenance de pays tiers

Décision 93/196/CE - relative aux conditions sanitaires et à la certification sanitaire requise pour les importations d'équidés de boucherie

Articles L 226-1 à L 226-6 et L 228-5 du CRPM - relatifs à l'équarrissage

Article R 223-18 du CRPM - relatif au respect obligatoire des règles d'hygiène et de désinfection dans les abattoirs

Article R 223-20 du CRPM - relatif aux mesures de nettoyage ou de réfection prescrites par le préfet en cas de danger de contagion pour les animaux du voisinage

Article L 5143-4 du Code de la santé publique - relatif aux médicaments vétérinaires

Décret n° 2012-1036 du 7 septembre 2012 relatif à l'identification et à la déclaration de détention des équidés domestiques

Décret n° 2012-1335 du 30 novembre 2012 relatif à l'identification et aux livres généalogiques des équidés

Arrêté ministériel du 5 juin 2000 relatif au registre d'élevage

Arrêté ministériel du 21 mai 2004 relatif à l'identification complémentaire des équidés par pose d'un transpondeur électronique

Arrêté ministériel du 2 avril 2008 relatif à l'identification et la certification des origines des équidés

Arrêté ministériel du 24 avril 2009 établissant les modèles de document d'identification des équidés

Arrêté du 14 novembre 2012 relatif aux modalités de mise en œuvre des informations sur la chaîne alimentaire dans les filières d'ongulés domestiques et de ratites

Note de service DGAL/SDSPA/N2010-8096 du 6 avril 2010 relative aux modalités de gestion des anomalies relatives aux échanges intra-communautaires d'animaux vivants et en provenance des autres États membres

Instruction technique DGAL SDSPA 2015 6 - relative aux contrôles des équidés à l'abattoir, en lien avec l'identification et l'ICA

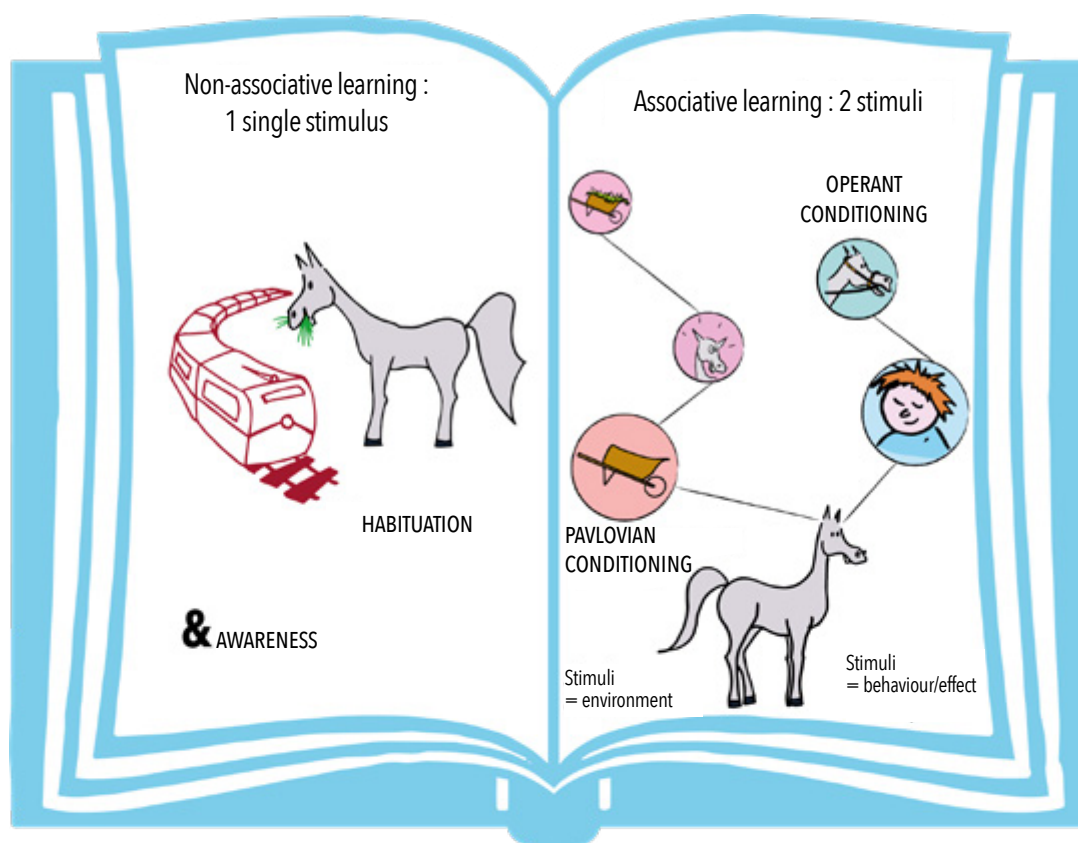
APPENDIX A

LEARNING PRINCIPLES

Learning is a process whereby an individual's behaviour or psychological activities change in a relatively stable manner, through experiences.

Non-associative learning involves a single stimulus or signal, whereas associative learning, or conditioning, is by the association of two events. These can be two environmental stimuli, such as classic or Pavlovian conditioning, or by associating behaviour-and-consequence as part a conditioning strategy.

In horses, these three main types of learning occur on a daily basis.

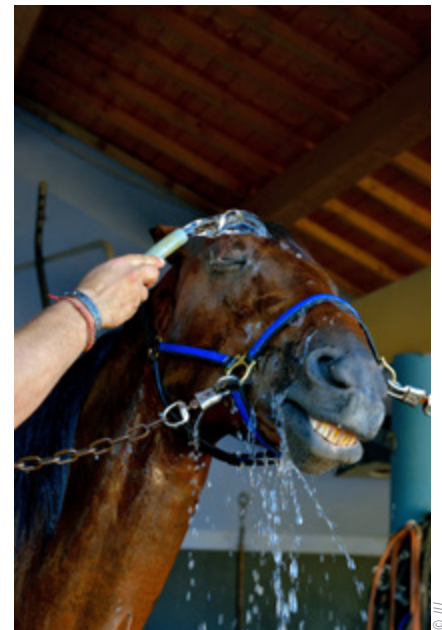


HABITUATION/SENSITISATION

Habituation, or accustomisation, is an attenuation of the subject's reaction to a stimulus to the extent that it can be repeated with no positive or negative consequences for the subject. This reduction of response intensity can in this case not be attributed either to a reduction of sensory ability, or to motor fatigue. To habituate a horse to a stimulus, you need to be careful not to trigger fear, and must therefore be patient.

Example: horse afraid of fly spray.

To get it used to this object, the handler starts by showing it the bottle without operating it. At another session, he will press the spray canister out in the open, far away from the horse. He will repeat this, coming closer and closer to the horse. The handler will then spray at the least sensitive areas of the horse. This process must proceed in stages. It is essential for each step in this process to be successful before moving to the next step. It is also possible to opt for associative learning with positive reinforcement (see next page).



Properly conducted, the habituation process can eliminate horses' anxiety during showering and drying.

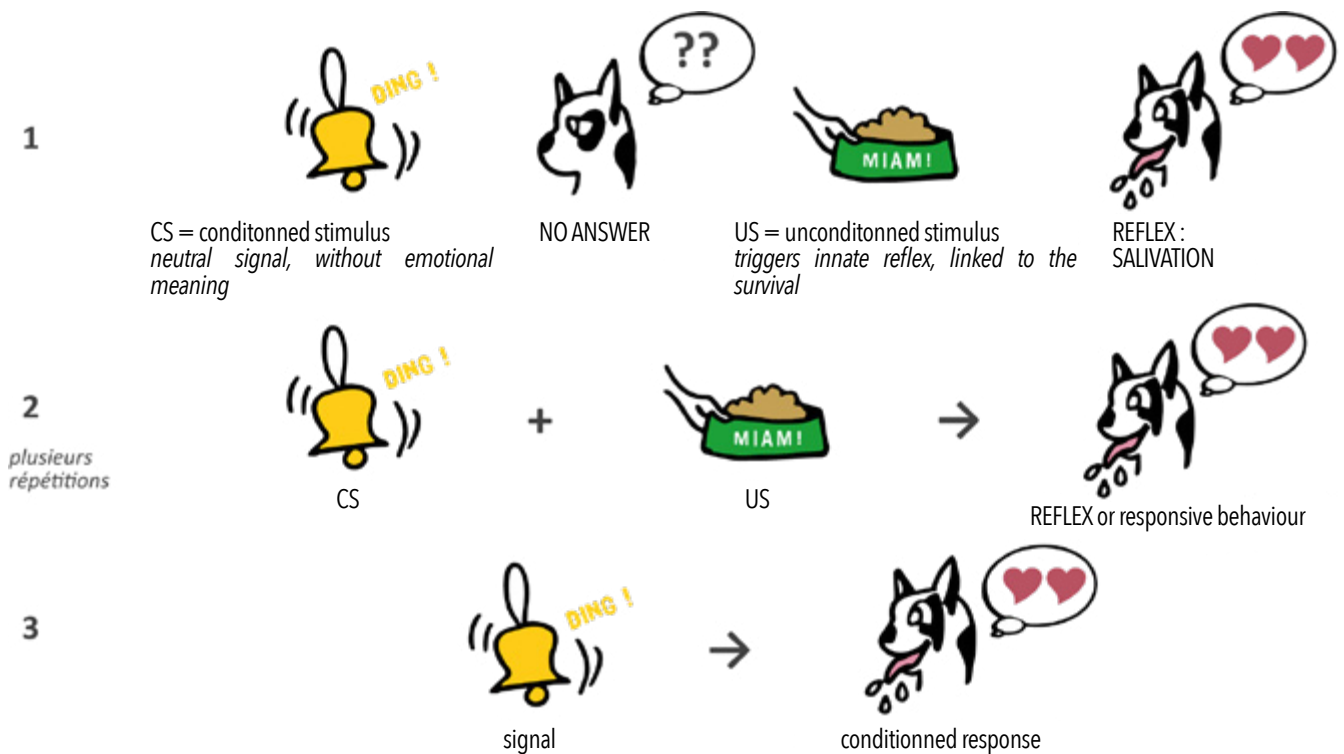
If the handler races past the outlined steps and exceeds the horse's tolerance level, a recurring situation can have the reverse effect: the horse will be sensitised rather than habituated.

Sensitisation is a process whereby the probability of the expression of a behaviour increases with the repetition of the stimulus. The horse's response becomes more and more intense and/or rapid. In the previous example, switching directly from showing the horse the fly spray to spraying it on its body, runs the risk that the horse will exhibit a flight response the next time the bottle is merely presented. Instead of learning not to be scared of it, the horse learns to react even more strongly to it.

CLASSIC OR PAVLOVIAN CONDITIONING

This form of learning results from the association of two environmental stimuli. One of them is initially neutral, with no value to the animal, such as a wheelbarrow. The second has a positive or negative connotation for the horse, such as feed pellets which inevitably induce excitement, for example, in the animal. The repeated presentation of these two stimuli, first the wheelbarrow, then the pellets that it contains, as happens when distributing rations using a wheelbarrow, will create learning in the animal. Ultimately, merely the presentation of an empty wheelbarrow will cause an excitation reaction in the horse even if it contains no pellets.

In horsemanship, it is this same process that enables a user to make him/herself understood with simple voice commands. If a punitive action (eg: punitive slap) is always associated with the word "NO", after several repetitions merely saying the word, which initially had no value for the horse, will suffice for the user to make him/herself understood.



Source: Lili Chin

How Pavlovian conditioning works in dogs: the repeated association of the sound of the bell, which normally elicits no reaction in the dog, with distribution of food, causes the dog to salivate merely from hearing the sound of the bell.

OPERANT CONDITIONING

Operant conditioning is associative learning in which the horse learns to associate its behaviours with their consequences.

In this type of conditioning, reinforcement is an event that causes an increase in the probability of the exhibition of a response. This reinforcement concept is thus linked to an underlying motivation.

It is possible to distinguish two types of reinforcement:

- positive reinforcement: the occurrence of an event that increases the probability of the response. For example, food is positive reinforcement for a starving person.
- negative reinforcement: the suppression or avoidance of an event that will increase the probability of the response. For example, a horse will jump over a small barrier when it sees a flash of light announcing an electric shock in the starting gate, because jumping the barrier will enable it to avoid receiving the aversive stimulus.

To facilitate learning and motivate the horse to exhibit the expected behaviour, positive or negative reinforcement is used, or even a combination of the two.

For example: learning to stop

When the rider puts pressure on the horse's mouth by pulling on the reins and the horse stops, the rider has to signal to the horse that that was the expected response, to encourage it to keep repeating that behaviour in future. To do so:

- the rider removes the pressure on the horse's mouth. The horse thereby avoids an aversive event, which is negative reinforcement. The faster the horse reacts, the more easily it will avoid the aversive event. In this way, even light pressure on its mouth should be enough to get the horse to stop;
- the rider can also stroke the horse, which is positive reinforcement (provided the horse is used to, or has been habituated to, associating stroking with a positive event).



© pixabay

In addition to voice commands, the rider uses negative reinforcement to make the horse back up. The rider puts pressure on it while it is moving forward, which causes discomfort. When the expected behaviour is obtained, i.e., the horse starts backing up, the rider stops exerting pressure, which makes the horse comfortable again.

AND PUNISHMENT?

If the purpose of reinforcement is to encourage a behaviour, the purpose of punishment is to discourage it. It should be used only sparingly for several reasons:

- it must happen as soon as possible, as soon as the undesirable behaviour is manifested, for it to be properly understood, which is not always easy to do. For example, giving the horse a slap on the nose when it bites;
- the risk is that you may be punishing something other than what you wanted to punish. For example, when a horse throws its rider off, if the rider punishes the horse after catching it, the horse will associate the punishment with being caught and not with having thrown the rider;
- the horse does not learn the desired response;
- it may, if punishment becomes abusive, damage the horse-human relationship and create a stressful, fearful atmosphere that will be harmful to learning in general.

It has been demonstrated in various species, including horses, that using only negative reinforcement and punishment creates a bad relationship with humans.

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APPENDIX B

BEHAVIOURAL PROBLEMS

Although the stereotypies we describe are the best known behavioural problems and those most often encountered in horses, they are not the only ones. Horses can also exhibit deviant behaviour – ie., behaviour inappropriate in the context – from bad habits from learned behaviour, to phobias, aggression, etc.

Whatever the problem exhibited, it is essential to contact an ethologist or behavioural veterinarian to try to identify the cause of the problem.

STEREOTYPIES // DEFINITION

Stereotypies, also called tics, are described as a succession of motor actions executed repetitively, for no apparent purpose, uncontrollably and not stopping spontaneously. Only a strong external stimulus can interrupt it. They are observed in every animal species, domestic or wild, in captivity. They cover a very heterogeneous range of observed behavioural sequences. **The presence of stereotypic behaviour is always pathological and a sign of malaise, past or present.**

Some stereotypies are harmful for sport purposes (eg: head-flicking), others are less debilitating, but all are just as pathological (eg: wind-sucking).

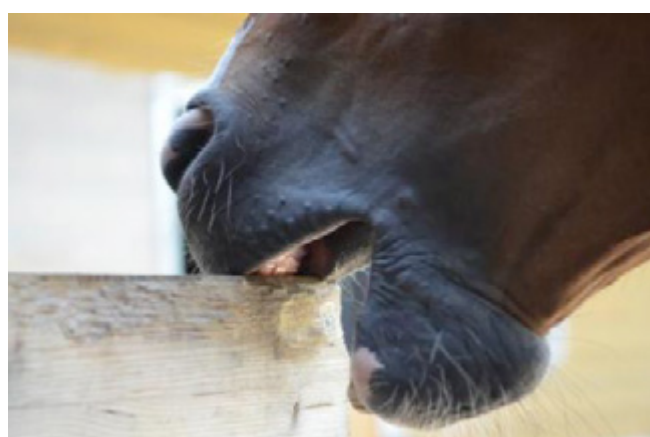
STEREOTYPIES // MAIN TYPES OBSERVED IN HORSES

ORAL TICS

Cribbing and wind-sucking

"Cribbing" is when the horse grabs a fixed object with its teeth, often repeatedly in the same place: the door of its box, feeding trough, fencepost... It contracts its neck and utters a guttural sound. Studies conducted to determine whether the horse is breathing in or breathing out have so far produced contradictory results. It seems, however, that air is sucked in and held in the upper respiratory tract, without being swallowed and reaching the stomach (see photo below).

When this behaviour occurs "in the open" without the horse grabbing an object of any kind, it is called "air-sucking".



A cribbing horse: its teeth are fastened on a wooden upright and its neck is contracted.

Tongue rolling

Tongue rolling is a stereotypy in which the horse makes incessant movements with its tongue inside or outside its mouth. The behaviour is often accompanied by excessive saliva production which can have harmful effects on digestion. There are a wide variety of oral tics in addition to this one, other tongue movements, lip curling, teeth grinding...

Note: tongue movements when the horse is mounted are a sign of discomfort and an attempt to escape the rider's hand action and not a stereotypy.

LOCOMOTOR TICS

"Bear tic" or zoochosis

The best-known locomotor tic is the "bear tic" or more generally zoochosis. The horse makes rhythmic back-&-forth movements from foreleg to foreleg, rocking its entire forequarters, head and neck. It is very prevalent in many other species of zoo animals, particularly in bears whence one of the names for this stereotypic behaviour.



Horse exhibiting zoochosis: rocking from foreleg to foreleg is clearly visible in the movement of the head and neck.

Surveying, pacing in the stall and other ambulatory tics

Other repetitive and unvarying locomotor behaviours can be observed, similar to zoochosis: a horse that paces its stall or paddock for hours, always tracing the same path... These stereotypic behaviours can create serious locomotor problems.

Head-flicking

This stereotypy is characterised by a succession of sudden and repeated movements of the head and neck. It may up and down, flicking vertically, or side to side, flicking horizontally, or a mix of the two. This is often accompanied by snorting, rubbing nostrils on various surfaces, intolerance to light, and mouth tics... Head banging is the most violent and visible syndrome, and the most handicapping for the use of the horse.

Little is known about the causes of this stereotypic behaviour, but several spring to mind: neuritis of the facial nerve, respiratory allergy, ophthalmic disorder...

Banging

The horse bangs on the door when rations are distributed. This behaviour initially motivated by the distribution of feed can become compulsive and end up being reinforced until it becomes a stereotypy: stable staff paying more attention to an individual that bangs on the door of its box tend to serve it first, which constitutes a reward for the horse and reinforces its behaviour (see Appendix A "Learning principles").

Did you know: normal behaviours can become stereotypies

Lignophagia, which consists of chewing wood and bark, and coprophagia, which means consumption of faeces, are normal behaviours in the equine ethogram.

If the behavioural sequence become repetitive, invasive and uncontrolled, with no stop signal, these behaviours turn into compulsive behaviours, to the point of becoming a stereotypy.

This list is not exhaustive and presents only the most common stereotypic behaviours in horses. Some horses can develop their own particular tic. Once an abnormal behaviour has become repetitive with no apparent purpose, it may be a tic that the horse has developed.

STEREOTYPIES // CONDUCTIVE AND TRIGGERING FACTORS

The behaviours produced are varied. They can be pre-existing behaviours in the ethogram¹ reinforced in a deviant way (eg: banging), or new behavioural sequences initially not present in the normal ethogram for the species (eg: wind-sucking). They may have genetic origins and/or may be connected with the horse's inability to express its entire range of behaviour.



© VB

Horse cribbing in a field.

Frustration, inability to express an appropriate behaviour in a given situation or to obtain a desired resource, could cause deviant behaviour, if the situation persists and repeats, evolving into stereotypies. Some writers hypothesise that they permit the animals who manifest them to survive in an environment that overwhelms their ability to adapt to it.

Engaging in such behaviours would generate an internal reward signal, via the system of cerebral endorphins, ie, pleasure hormones. This results in addiction, which would explain its invasive and indeed pathological force, quickly becoming a stereotypy.

Once incorporated into the horse's behavioural repertoire, the stereotypy becomes an automatic, involuntary action. It is the behavioural response of choice for the animal when stressed by any event, just like a stressed human who bites their nails when stressed.

With horses, how they are fed and the conditions in which they are kept are the first factors to consider as they do not always meet the horse's needs: a continuous supply of high-fibre feed, opportunity to roam at length... Weaning and deprivation of social contact can also be responsible for the appearance of tics, but the cause is often a combination of multiple factors.

Stereotypies are often underestimated, or noticed too late once they have already taken hold.

STEREOTYPIES // CONSEQUENCES

The consequences of stereotypies on a horse's health and cognitive abilities are still relatively unknown and the results of the few existing scientific studies do not always agree with each other. However, studies have shown that they result in a decline in the ability to learn.

Consequences on the body

Although cribbing and wind-sucking have long been held responsible for the formation of gastric ulcers, studies have failed to scientifically demonstrate the cause-and-effect relationship between the two events. It would seem that ulcers and stereotypy are two unrelated consequences of stress on the body. The fact that a horse apparently does not swallow air when engaging in this behaviour also supports this view.

¹An ethogram is an exhaustive list and detailed description of the behaviours exhibited by the individuals of a species

Oral stereotypies are also often associated with abnormal wear of the incisors and with digestive disorders caused by excessive salivation or poor mastication.

Locomotor tics are often responsible for a major loss of energy and thus of condition, abnormal and sometimes asymmetrical wear of the hoof, as well as osteo joint and muscular disorders.

Consequence on behaviour

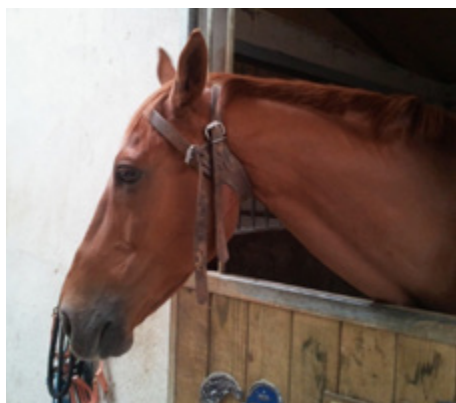
Current consensus is that these behavioural problems are clear manifestations of an alteration to the animal's wellbeing. The impact on work performance is relatively unknown but recent studies show that more careful attention to the animal's welfare is beneficial to its working and sporting performance.

STEREOTYPIES // TREATMENT

Coercive methods have long been employed to try to prevent tic behaviour in horses: nose-clips on wind-suckers, baskets for cribbers, electrification of feeding troughs and stall doors, removal of wood to prevent lignophagia... However, recent studies show this approach is counterproductive as it raises the horse's stress levels.

In fact, as stereotypies are actually stress adaptation mechanisms, preventing their expression is not recommended. On the contrary, the advice is to identify the cause(s) of these signs of malaise so as to modify the horse's living conditions and management. Appropriate treatment of stereotypic behaviour disorders requires a holistic view of the causes and consequences of this pathological behaviour. In such cases, an ethologist or veterinarian specialising in behavioural disorders should be consulted.

However, once it is firmly rooted in the individual's behavioural repertoire, a stereotypy can persist even after the animal is removed from the environmental conditions responsible for its appearance. The most effective approach is therefore a preventive one. It will be much more effective than a curative approach.



© IFCE



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© SaraBB

Different systems used to prevent horse tics: (left) nose-clip for wind-sucker, (centre) swan-neck grille for head-flicker, (right) basket for cribber

These systems should be banned.

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APPENDIX C

PLANTS TOXIC TO HORSES

Plants that are toxic to horses cause problems if ingested. Depending on the type of plant, the amount ingested, and the weight of the horse, problems can range from benign symptoms to death in a matter of hours.

It is important to be very vigilant about toxic plants for two main reasons:

- first, unlike ruminants, horses do not have bacterial flora in their stomach that detoxify what they eat;
- second, horses cannot vomit or regurgitate harmful food.

Horses naturally recognise most toxic plants when they are fresh and do not eat them if they are fed properly, particularly if they have appetising fibre available whenever they want it. However, if toxic plants are dried and mixed with hay, horses do not notice them.

It is recommended that pastures and freely available hay be inspected on a regular basis to identify and eradicate any toxic species. Preventing overgrazing also prevents infestation by weeds. Lastly, it is prudent not to keep ornamental plants and to be vigilant when out hacking.

There are many types of toxic plants: trees, ornamental plants, cultivated plants, wild plants.

Did you know: What to do if you suspect poisoning

It is recommended that you:

1. never panic, even if the symptoms are alarming.
2. note the symptoms, if possible, take a sample of the suspect plant or fodder.
3. call the veterinarian.

In the following list, plants that are deadly to horses are marked with this symbol:





Boxwood
Buxus sp.

Ingestion causes trembling, vertigo, convulsions, and respiratory problems. The outcome is not always fatal for horses.



Laburnum
Laburnum anagyroides

This is an ornamental shrub very often found in gardens. The entire plant is toxic to horses. After ingestion, the horse tries to vomit, goes into convulsions followed by coma.



European spindle
Euonymus europaeus

Ingestion causes constipation followed by diarrhea, convulsions. It is rarely fatal.



Yew
Taxus baccata

This is the most toxic plant for horses 250 g can kill a 450 kg horse. Ingesting yew causes balance problems and convulsions, and usually immediate death, without symptoms.



Cherry laurel
Prunus laurocerasus

Ingesting a big amount can cause respiratory and nerve problems.



Pink laurel
Nerium oleander

Ingesting 50 g is enough to cause prostration and cardiac toxicity that can lead to death.



Rhododendron
Rhododendron sp.

Ingestion causes damage to the nervous system, salivation, colic, diarrhea, followed by paralysis and death from suffocation.



Black locust
Robinia pseudoacacia

Its bark is toxic and fatal to horses. Ingestion causes copious salivation, colic, diarrhea, heart problems. Death can occur in three days.



Cedar
Thuja sp.

This plant is not fatal to horses. Ingesting large amounts causes gastroenteritis.



© beecopticapiculture.com

Rapeseed

Brassica napus

These are mainly cakes made from seeds that are toxic. They cause hypersalivation, dry cough, dark urine.



© coopdefrance.coop

Flax or Linseed

Linum usitatissimum

It is the flax seed that is toxic. The toxicity disappears when the seed is heated, which is what happens when it is made into oil or cakes. If ingested before being processed, it causes loss of coordination, the digestive tract shuts down, diarrhea, takes a long time to expel.



© A. Roux

Black mustard and field mustard

Brassica nigra - Sinapsis arvensis

Their seeds cause gastroenteritis. Copious liquid is secreted by the nostrils and the horse dies of suffocation.



© semencesdeprovence.com

Sorghum

Sorghum bicolor

Sorghum sprouts have a high hydrogen cyanide content and are toxic. Ingestion causes salivation, eyes rolled back, convulsions. Death occurs within an hour.



© nd48, pagesperso-orange.fr

Vetch

Vicia sativa

It contains hydrogen cyanide, is allergenic and photosensitizing.



© alastair rae

Arum

Arum maculatum

This is a non-fatal plant, which causes swelling of the tongue, and pain in the mouth and pharynx. A poisoned horse presses its jaw on the ground.



© jardin-secreet.com

Belladonna

Atropa belladonna

Ingestion causes nervous disorders, blindness, prostration and death.



© jardin-secrets.com

Poison hemlock

Conium maculatum

This is a fatal plant. It closely resembles wild carrot but has spots on its stems. It causes paralysis and suffocation in one hour.



© gijbenjac.com

Autumn crocus

Colchicum autumnale

This is toxic even in hay. Ingestion causes sweating, colic, spasms, urinary problems, paralysis of the hindquarters.



© H. Zell

Jimsonweed or devil's snare

Datura stramonium

This is toxic even in hay. Signs of poisoning can take several days to appear: tachycardia, mydriasis, colic stasis, alternating prostration-excitation. Ingestion can also cause a positive doping test result (presence of atropine in the biological sample).



© nevit dillen

Purple foxglove

Digitalis purpurea

Its toxicity is greater when the plant is in hay. Signs of poisoning appear only after a long period of consumption: blood in droppings, anorexia, erratic heartbeat. It is rarely fatal.



Spurge

Euphorbia sp.

Spurge is toxic even in hay. Ingestion causes burning mouth, bloody diarrhea, convulsions, haematuria.



Bracken

Pteridium acilinum

Bracken is toxic even in hay. Symptoms appear several days after ingestion: weakness, trembling, spasms and convulsions.



Male fern

Dryopteris filix-mas

It is toxic even in hay. Symptoms appear several days after ingestion: weakness, trembling, spasms and convulsions.



Galega

Galega officinalis

Galega is toxic even in hay. It causes colic, generalised oedema and death in hours.



Mistletoe

Viscum album

Ingestion increases heart rate and causes loss of coordination.



Ground ivy

Glechoma hederacea

Symptoms appear after about a week: colic, fever, heart failure.



Annual mercury
Mercurialis annua

It is toxic even in hay. Ingestion causes gastroenteritis, urticaria, oedema, blood in urine.



Black nightshade and bitter nightshade
Solanum nigrum - Solanum dulcamara

These are non-fatal. Ingestion causes weakness, prostration and oedema to the front part of the body.



Cat's ear or flatweed
Hypochoeris radicata

Ingestion causes locomotor problems that can result in euthanasia. If a lot of it is present in the field, it is a sign of low phosphorous and potassium levels and overgrazing.



Horsetail
Equisetum arvense

Horsetail is toxic even in hay. After several weeks of repeated ingestion, the horse presents with haematuria, neural disorders, and can die from paralysis.



Bulbous buttercup
Ranunculus bulbosus

Ingestion causes black diarrhea, blood in urine, more rarely blindness and convulsions. Death can follow if large quantities are ingested.



Ragwort
Senecio jacobaea

Poisoning can be acute if large quantities are ingested or if ingestion is chronic, causing irreversible liver failure leading to death. Repeated ingestion of small quantities causes fever, and increased heart rate and respiratory rate.



Narrow-leaved ragwort

Senecio inaequidens

It is toxic even in hay. Regular ingestion causes lesions primarily in the liver that are irreversible and often fatal.

TREES TOXIC TO HORSES



Oak

Quercus sp.

Excessive ingestion of acorns causes colic, constipation and bloody diarrhea.



Sycamore or sycamore maple

Acer pseudoplatanus

The toxin in the helicopter seeds can cause atypical myopathy, muscle damage with a very high mortality rate.



Walnut

Juglans regia

Walnut pollen can cause respiratory allergies. Ingestion of leaves and nuts can cause laminitis.

This list is, of course, not exhaustive.

APPENDIX D

CONSTRUCTING A NEW BUILDING FOR HORSES

Keeping horses in an appropriate, properly maintained field or paddock that has natural or artificial shelters and feeding and watering facilities is undoubtedly a good solution for horse welfare. However, many activities involving proximity to people, as well as local constraints, can lead to the decision to house them in a building.

The construction of infrastructure to accommodate horses is a major task for project managers, the challenge being to combine practicality, functionality, and horse welfare, all at reasonable cost. Chamber of Agriculture advisors, and professionals in the construction of accommodation infrastructures for horses, can help you in this task.

A number of questions come to mind when deciding what type of infrastructure would be the most appropriate in the circumstances:

- > Activities in the building: breeding, rearing, boarding, welcoming the public...;
- > Practicality and functionality of the premises: saddlery / tack room, storage...;
- > Type of horses boarded;
- > Number of horses boarded;
- > Accommodations indoors or outdoors;
- > Collective or individual accommodations: open stable, field, active stable, individual boxes, individual paddocks, ...

WHERE SHOULD I SITE THE NEW BUILDING?

The siting of a new building, even if only a shelter, must **comply with planning rules and documents and with departmental health regulations (RSD)**, which specify, in particular, minimum distances from human habitations, water resources and bathing areas. Each department has its own RSD. It can be useful to approach the municipal or local authority to check these requirements. The orientation and location of the building in its natural environment (distance from hedges, topography...) have an impact on its natural ventilation and exposure to sun. Air renewal, temperature, humidity and light – four important parameters for horse welfare – will in part be conditioned by this siting decision and it is recommended that professional advice be sought at this stage. Better natural ventilation is obtained when buildings are sited to take advantage of prevailing winds. In the case of boxes that open onto outdoors, or artificial shelters, it is prudent to avoid exposing the openings to winds that can bring in rain. If that is compatible with the preceding recommendation, provide openings to the east or south that are conducive to better thermal balance during the day (to be adjusted depending on the region and exposure).

HORSES BOARDED INDIVIDUALLY

Given the many different types of horses and activities, it is difficult to specify a direct relationship between size of living space and the horse's welfare. Individual indoor living spaces, including boxes and stables, should be regarded as places to rest between activities. The scientific community agrees that horse welfare depends on the following considerations:

- the horse's measurements;
- the quality of the living space: appropriate bedding properly maintained, appropriate air quality;
- appropriate fodder: hay, straw...;
- possibility of social contact with peers;
- frequency, regularity and type of activities by the horse;

In its living area, a horse has to have sufficient space to stand up, move around, lie down and sleep, and get up easily. In France, there are no specific regulations on this subject. Covered living areas offered by builders generally vary between 9m² and 16m² per horse, which corresponds to stalls with 3 to 4 m sides.

Foaling stalls can be incorporated into the building design. In general, a larger floor area is recommended for this type of accommodation. As a rule of thumb, builders offer approximately 25m² of floor area.

The ceiling height must be calculated to allow horses to stand in a natural position and to minimise the risk of injury. As a rule of thumb, 1m clearance above the head of a standing horse, or approximately 3m ceiling height, will guarantee the comfort and safety of most horses.

HORSES BOARDED IN GROUPS

Collective accommodations encourage social contact and can thereby enhance horse welfare. However, you have to pay attention to the composition of the groups and the affinities between the horses boarded together (see factsheet for measure 4) or certain health-related or physiological conditions (proximity to foaling areas, for example).

The spatial structure, ie., the arrangement of the various activity zones, is generally the key factor in the success of collective accommodations. There are a variety of solutions possible among the main categories of group accommodations, which are stalls/stabling, "*active stables*", and "*paddock paradise*". In general, if they are in larger groups (more than 5 animals), each animal's space requirements are less than when boarded individually.

Regardless of the system adopted, it is essential to provide possibilities for isolating horses that present special risks (health, new arrival, etc.), in individual accommodations or in paddocks separated into zones by health, so as not to allow contact between the horses.

HITCHING POSTS AS A SPECIAL CASE

Hitching posts are not regarded as a boarding method but rather as a way of temporarily, safely managing horses. It should therefore be for short periods only and closely monitored.

WHAT BUILDING MATERIALS DO I NEED TO USE FOR LIVING AREAS?

It is very important to choose the right materials to ensure the horses' health and safety. It is therefore essential from the outset to seek advice from a professional.

The materials used for infrastructures to board horses must have high insulation ratings and be able to withstand horses.

There are numerous materials, but some are preferable: lime-rendered brick or stone, and wood. These materials have a buffering effect on climatic variations. Wood allows air to flow in, and helps to integrate the building architecturally into its landscape. However, be careful when using such materials at the bottom of buildings, as horses' kicks can put holes in them. Wood is recommended as external cladding on poured concrete or concrete blockwork, which are more resistant to kicks. It is also better to avoid using wood indoors, as it is difficult to disinfect. Builders generally used shuttered concrete or blockwork up to 1.40m height. Windows and open walls allow horses boarded in individual boxes to communicate with each other. It is recommended that horses who know each other and get along well with each other be put in such stalls. However, a horse in an adjoining stall to which it has no affinity can have a negative effect on the welfare of both horses (see factsheets for measures 4 and 5).

These days there are many possible types of stalls and stabling with sliding or hinged partitions to facilitate cleaning: a tractor with a front blade can drive through all the stalls and push the manure out of the stable.



Examples of open-wall systems that allow horses in neighbouring stalls to communicate.



Sliding-partition system whereby the partitions between the stalls can be retracted to allow a tractor to pass through easily.

The materials used for the floor should have the following characteristics:

- the subfloor must be impermeable to urine and damp (to minimise the risk of percolating to the water table);
- uric-acid proof;
- easily disinfectable;
- crumble-proof if the horses are shod;
- non-slip, particularly for shod horses, in the stalls as well as aisles.

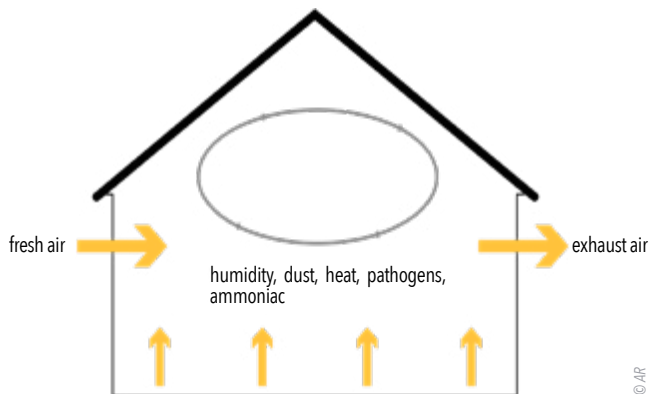
Floors should have a slight slope of 1:10 to facilitate the runoff/removal of cleaning water.

These days, the preferred material for floors in equestrian facilities is concrete, as it is easy to maintain and disinfect, and is crumble-proof and acid-proof. However, it is also possible to use stone or well-packed clay, cleaned regularly and scraped once a year.

HOW DO I ENSURE INDOOR AIR QUALITY?

AIR CIRCULATION

The openings in indoor living areas – windows, doors – provide natural ventilation. Openings should allow clean, cooler air to flow in at the bottom and foul, warmer air to flow out at the top (ideally through the roof). Be careful not to create draughts. Ideally, doors and windows should not open onto a field or corral that has other horses in it, to avoid creating frustration.



A good air circulation system expels excess heat and humidity and minimises contaminants and draughts.



Open space between the partitions and roof allows good natural ventilation.

Horses are particularly sensitive to humidity, dust, and excessive noxious gases. The type and method of fodder management, and frequent cleaning should be able to minimise airborne dust. The smell of ammonia or the frequent occurrence of respiratory disorders can be signs of insufficient air circulation.

LIGHTING

Lighting should match the diurnal cycle and be sufficient to illuminate the insides of the buildings. Poorly designed lighting can have repercussions on the health, welfare and performance of the horses as well on the working conditions of professionals. Natural lighting depends on the design of the building: the number, size and arrangement of openings affect the light intensity inside the building.

The level and arrangement of the lighting should, with causing glare, be appropriate for the purpose: activity, comfort, safety, and energy saving. You should seek advice from a lighting professional when designing artificial lighting for livestock buildings where the safety of both animals and people need to be taken into account (breakers, conduits, etc.).

TEMPERATURE

Scientific studies into the thermal adaptation of horses show that they adapt very well to hot and to cold temperatures. The indoor climate should as much as possible follow outdoor climatic variations without amplifying them, particularly by adjusting openings and volumes. In particular, you should watch out for "overheating" and excess humidity. You have to use common sense and observe the horses in the building. If they are showing signs of thermal discomfort, you should put appropriate corrective measures in place (see factsheet for measure 3).

WHAT TYPE OF BEDDING SHOULD I CHOOSE?

Traditionally, bedding consists of wheat straw, which is preferable to straw from other cereals such as barley or oats. Good straw is straw that:

- is dry and mould-free;
- does not create too much dust or allergens;
- comes from plants that are not diseased in order to ensure good absorption capacity;
- does not introduce health risks for the horses. You should avoid straw from unknown sources or that pose a health risk (fungal infections, colic).

These days, bedding is available that can be used instead of straw, such as hemp, miscanthus, flax shives, shavings, shredded paper, or dedusted sawdust... even rubber mattresses designed for cattle farming. These types of bedding can be used to improve absorption capacity or minimise dust. As these alternative types of bedding are not normally edible for horses, their diet should be adjusted to include more fibre intake.

A deep-litter system allows the material to accumulate from weeks to several months until cleaned out. However, it requires close monitoring of the horses' feet, as there is a risk of rot and ant colonies.

SOME EXAMPLES OF INFRASTRUCTURES FOR HOUSING HORSES

INDIVIDUAL BOXES IN A BARN



© AR

The following tables show a detailed breakdown of the cost of the building, excluding manure pit, based on 2013 estimates by the Clavados Chamber of Agriculture and updated for inflation.

item	landscaping	masonry	carpentry & joinery	indoor equipment	total	cost per stall	cost per m ²
cost excl. VAT	€15,615	€61,163	€30,683	€31,915	€139,375	€8,106	€330

INDIVIDUAL STALLS IN A SEMI-OPEN DUAL-SLOPE BUILDING



© ecurie de brottone.com

item	landscaping	masonry	carpentry & joinery	indoor equipment	total	cost per stall	cost per m ²
cost excl. VAT	€17,524	€65,920	€25,910	€42,044	€151,944	€8,938	€339

SINGLE-SLOPE FIELD SHELTER WITH 1M OPENINGS FOR 2 HORSES



© 2ememain.be

Before building an artificial shelter, you should make sure that there is no natural shelter available in the pasture or paddock. Trees, rocks, terrain shape, etc., can provide adequate shelter for horses and avoid heavy investment spending.

item	landscaping	masonry	carpentry & joinery	total	cost per stall	cost per m ²
cost excl. VAT	€755	€1,048	€2,304	€3,490	€2,053	€161

THE OPEN-STABLE SYSTEM

An open-stable system allows several horses to be boarded as a group. This type of boarding makes it easier to manage outings and feeding.

Open stabling offers horses the ability to move around regularly, to access feeding points, watering points, rest areas, indoors and outdoors. This type of boarding facilitates group cohabitation.

The size of the stabling is adjusted to the size of the group and the relationships in it: it allows space for horses to avoid each other, so that dominants do not bump into dominated. The place is big enough to allow all horses to lie down and sleep at the same time (see factsheet for measure 4).



Example of open stables.

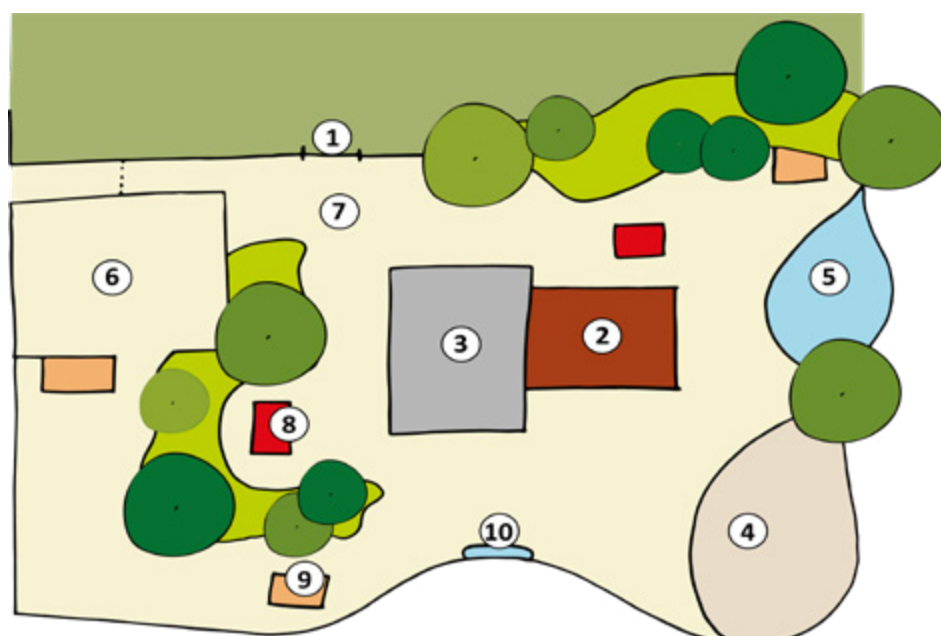
item	landscaping	masonry	carpentry & joinery	indoor equipment	total	cost per place	cost per m ²
cost excl. VAT	€13,106	€17,083	€20,907	€6,269	€57,365	€2,401	€180

ACTIVE STABLE

Active stables are a German concept, aimed at offering horses boarded in groups living conditions that respect their natural behaviour while alleviating workload. The arrangement of the space allows a large number of horses to be kept in a relatively small area (1 horse = 100m² living space + 10m² sleeping space) The do not always have access to grazing.

An active stable is equipped with automatic food distribution systems that enable each horse to be managed individually, with the ability to split the daily ration into smaller quantities available as and when the horse wants to eat. The system also immediately reports if a horse has changed its feeding habits.

The horse's points of interest are distributed around the site to make it have to walk to access resources. The facilities are quite technical and require regular maintenance: stabilised soil or rubber surfacing, sand relaxation areas, artificial shelters, digital nosebags for individualised ration management...



- 1 - selective access to pastures
- 2 - sleeping areas
- 3 - storage area and integration box
- 4 - rolling up area
- 5 - water
- 6 - stabilised material arena
- 7 - free walking area
- 8 - automated concentrate feeding station
- 9 - automated hayrack
- 10 - trough

Sheltered automatic concentrate distributor:
€18,000

Sheltered group hayrack: €7000

Soil stabilisation: €10-18/m²

(Price source: LA REF no. 187, March 2017, p15)

Paddock Paradise

The brainchild of Jaime Jackson, paddock paradise is an outdoor living arrangement for horses that has a track connecting dedicated spaces for resources (shelter, rest, feeding, watering...). Horses walk from one resource space to another, on large tracks several metres wide. The idea is to artificially recreate the life of a herd on heaths or grasslands, encouraging the horses to move more than they do in a traditional paddock.

The paddock paradise concept is intended to mimic natural grazing, with soil conditions changing from gullies and open spaces to hills and dales, all artificially created... to help improve the overall quality of the horses' hooves. It is also combined with slow feeding, by the use of haynets.

In practical terms, the paddock paradise trail forms one of many loops to ensure that a horse never has to turn around because it has arrived at a cul-de-sac. A track like this can be created on any type of surface, although consideration must be given to how to manage the space and the tasks it creates such as collecting dung in small spaces.



TO GO FURTHER

- Lesimple C. et al., 2016. How to keep your horse safe? An epidemiological study about management practices. Applied Animal Behaviour Science, Volume 181, August 2016, pp. 105-114.
- Guérin S. et al, 2013. Référentiel des prix de construction des bâtiments équins. Edition octobre 2013, 8p.
- Guérin S., 2014. Des repères pour concevoir des bâtiments équestres. www.webagri14.com.
- LA REF n°187, mars 2017, p15.

APPENDIX E

IDENTIFICATION & TRACEABILITY OF HORSES: OWNER'S OBLIGATIONS

Since January 2015, horse keepers can be audited for compliance with their obligations by agents of the French Horse and Riding Institute (Institut Français du Cheval et de l'Équitation / IFCE). Owners must be able to present the regulatory documents.

These health-related documents focus on 5 points: identification of the horse, keeper's declaration, public health veterinarian's declaration, livestock register, transportation register.

Failure to comply with these obligations may incur penalties from €450 to €1,500 per failure to comply with the applicable regulations.

IDENTIFICATION OF HORSES

OBLIGATIONS THROUGHOUT THE LIFETIME OF THE HORSE

In France, a unique ID, the SIRE No., is given to every horse declared and registered in the database managed by the IFCE. A subcutaneous transponder inserted by a certified veterinarian (veterinarian of IFCE agent) allows the identity of the horse to be confirmed.

Warning: identifying a horse without the authorisation to do so carries a class 3 fine (€450).

In summary, all horse owners/keepers must:

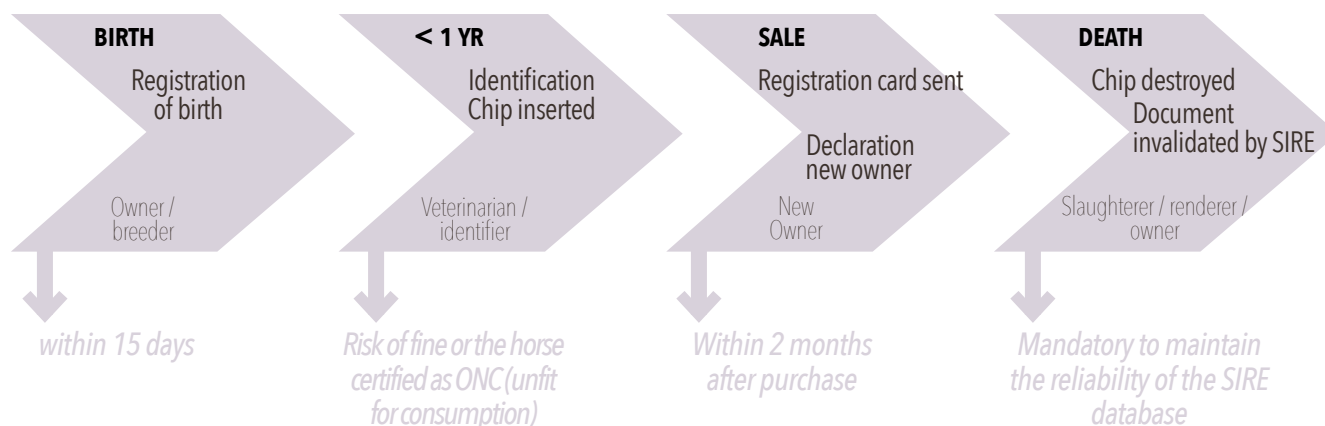
1. register the birth of a foal with SIRE, within 15 days via Internet or post;
2. within 8 months of birth and no later than 31 December of the year of birth:
 - a. have the horse identified by a certified person (veterinarian or IFCE agent),
 - b. have an electronic chip inserted,
 - c. file the declaration with SIRE which will then issue the horse's identity document.

THE IDENTITY DOCUMENT

The identity document follows the animal wherever it goes throughout its life. It serves as its passport, certificate of origin and/or certificate of registration in a studbook, and its health record.

Horses imported with a European passport keep the passport of their country of origin when registered in France, with a descriptive notice inserted in French along with the graphic and a label with the SIRE No. For horses imported without a European passport, a new identity document is issued.

Breach of the identification rules carries a class 3 fine (€450) payable by the recognised owner at the time of inspection. Keepers must check the IDs of horses likely to be boarded at their facility before they accept them. No horse without an ID can should be accepted, regardless of the length of the boarding arrangement.



The regulatory steps throughout the life of a horse – source: Normandy Chambers of Agriculture 2015

THE REGISTRATION CARD

To be able to identify the horse's owner, a registration card is issued every time the horse changes ownership. It is the official document indicating that the horse's owner is listed in the SIRE database. If a card needs to be changed, it must be done within 2 months following the sale of horse (Article R215-14 of the Rural Code) Failure to return the registration card endorsed by the seller within 8 days following change of ownership carries a class 3 fine (€450). Sale transactions can be by post or electronically by Internet.

The registration card shows the following information:

- horse's name and SIRE No.
- names and addresses of the last reported owner(s).

Although the identity of keeper is known to the IFCE, since 27 July 2010 the keeper is nonetheless required to submit a horse keeper's declaration.

KEEPER'S DECLARATION

WHY DOES THE KEEPER HAVE TO SUBMIT A DECLARATION?

All horse keepers, whether professionals or private individuals, must register as such with SIRE. This registration is for health reasons: it means that the SIRE database will contain the location of every establishment that has horses.

Thus, in the event of an epidemic, industry health bodies such as RESPE will be able to determine the health measures to be put in place and to notify all keepers.

Examples of keepers: equestrian centres, riding clubs, a breeder with mares, a farmer who boards horses, someone with a horse at home, the manager of a waystation on a hacking circuit.

Warning: just because you may have interacted with or submitted information to SIRE in the past, does not mean that you are the registered keeper.

Failure to declare where a horse is kept, carries a class 3 fine (€450).

HOW DO I DECLARE?

The simplest way is to do so via the internet at the SIRE website (<http://www.ifce.fr/sire-demarches/sanitaire-detention/lieu-de-detention/>) once you have created a web account at IFCE. The form can also be downloaded from the website in the "démarches" section or obtained by phoning 0811 9021 31.

All registrations by internet or paper will be acknowledged by a receipt confirmation indicating the keeper's ID. Keep it in a safe place as it may need to be presented in the event of an audit.

PUBLIC HEALTH VETERINARIAN'S DECLARATION

A public health veterinarian's declaration is mandatory when 3 or more horses are kept in the same location. If the public health veterinarian is accredited by the DD(CS)PP, the vet can also be the attending veterinarian.

WHO CAN BE A PUBLIC HEALTH VETERINARIAN?

Usually, the attending veterinarian or the nearest vet can be designated as a public health veterinarian. The prefecture has a list of the veterinarians accredited for the *département* (administrative region).

The public health veterinarian must be specifically certified for veterinary services. It is valid for a limited geographic region: maximum 5 *départements* around his/her base of practice.

A keeper can declare any number of veterinarians belonging to the same practice as "public health veterinarian".

Warning: the public health veterinarian cannot own the horses or have a financial interest in the facility at which they have been reported kept.

HOW DO I DECLARE A PUBLIC HEALTH VETERINARIAN?

Fill in the form (at the end of the Appendix) and have it signed by the keeper and the designated veterinarian(s). Return it to the DD(CS)PP for your *département*.

LIVESTOCK REGISTER

EVERY HORSE KEEPER IS REQUIRED TO KEEP A REGISTER

"Every owner or keeper of an animal belonging to a species whose meat or meat products are intended to be sold for human consumption must keep a regularly updated livestock register which chronologically records health, zootechnical and medical data relating to the livestock."

As horses come under this requirement, a livestock register must be made available wherever horses are kept. The keeper is subject to a class 4 fine (€750-€1500).

Examples of places where horses are kept: farms, equestrian centres, training centres, stables, boarding centres, or at home by a private individual.

WHAT DOES THE LIVESTOCK REGISTER HAVE TO CONTAIN?

The livestock register must be kept for 5 years and updated in a comprehensive and easy way. It has three parts:

- > a summary description of the characteristics of the farm or operation, including the name of the public health veterinarian.
- > a chronological record of the animals' maintenance, the treatments given and veterinary interventions.

Every veterinary treatment of a horse must be referenced with the prescription no. connected with the treatment. The waiting period before return to competition or to be sent to an abattoir may be stated if a product contains prohibited drugs. No special mention is required on the medications sheet. However, essential substances that exclude the animal from the food chain for six months must be reported on it (name of the substance and date administered).

Prescriptions and test results must be kept for five years at the farm or operation.

- > chronological records of animals arriving/leaving: the keeper must indicate every arrival and departure of each horse, as well as its destination and provenance.

IN WHAT FORM DOES THE LIVESTOCK REGISTER HAVE TO BE KEPT?

The register can be in paper or electronic form. If in electronic form, all the data must be printed out on a quarterly basis and archived, as well as whenever the attending veterinarian visits an animal listed in the register.

A template of a livestock register appears at the end of this Appendix, in line with the one that FIVAL uses, compliant with regulations. Other electronic templates are also available (GHN, Chambers of Agriculture, etc.).

WHO IS AFFECTED?

Entry in a transportation register is mandatory for any transportation of more than 65km as part of an economic activity.

Examples of transportation as part of an economic activity: transportation by equestrian centres for any equestrian activity (whether transportation is paid or free), transportation of race horses to racing tracks, transportation of "show" horses (circuses, bullfights), public or private transportation by a professional carrier.

For transportation not exceeding 65km or for "personal use", only the regulation governing animal protection is applicable (transporter's authorisation), while making sure to be able to provide the animals' accompanying documents.

WHAT DOES THE TRANSPORTATION REGISTER HAVE TO CONTAIN?

The transportation register must state:

- the place, date and time of loading and delivery of the animals
- the name or company name and address of the departure point and of the destination point
- the species and the number of animals transported,
- the date and place of disinfection,
- the anticipated duration of each trip.

The register must be kept onboard the vehicle and archived for at least three years.

To log the movements of horses and contacts with other horses at a competition, it is possible to keep the itinerary record (fiche de route) used by the French Equestrian Federation (Fédération Française d'Equitation).

WHAT THE RULES SAY

- Règlement CE n° 504/2008 du 6 juin 2008 portant application des directives 90/426/CEE et 90/427/CEE du Conseil en ce qui concerne les méthodes d'identification des équidés
- Arrêté du 24 Avril 2009 relatif à l'établissement des modèles du document d'identification des équidés
- Article D 212-49 du Code Rural : modalités de délivrance du document d'identification et de la carte d'immatriculation
- Décret n°2010-865 du 23/07/10 fixant les conditions de déclaration des détenteurs d'équidés et des lieux de stationnement
- Arrêté du 26 juillet 2010, fixant les conditions de déclaration des détenteurs d'équidés et des lieux de stationnement
- Décret n° 2012-843 du 30 juin 2012 relatif à la modernisation des missions des vétérinaires titulaires d'un mandat sanitaire
- Article L 234-1 du code rural
- Arrêté du 5 juin 2000 relatif au registre d'élevage équin
- Règlement (CE) n°1/2005 du 22 décembre 2004 relatif au transport des animaux vivants (CAPTAV - certificat d'aptitude professionnelle pour le transport d'animaux vivants)

MINISTÈRE DE L'AGRICULTURE, DE L'AGROALIMENTAIRE ET DE LA FORÊT
A renvoyer à la Direction Départementale de la (Cohésion Sociale) Protection des Populations
(DD(CS)PP)
du département où est enregistré votre établissement

Désignation du vétérinaire sanitaire par le détenteur d'animaux
ou par le responsable d'un rassemblement temporaire ou permanent d'animaux
 (articles L.203-1, L.203-2, L.203-3, R.203-1, R. 203-2 du code rural et de la pêche maritime)

I. IDENTIFICATION DU DETENTEUR DES ANIMAUX :

Nom :
 Prénom(s) :
 Raison sociale de l'établissement :
 Adresse :
 Code postal : Commune :
 N° SIRET/ N° de détenteur à défaut de SIRET :
 Adresse électronique :
 Téléphone fixe :
 Téléphone mobile :
 Télécopie :

II. ACTIVITE DE L'ETABLISSEMENT :

TYPE D'ETABLISSEMENT :

- ☐ Elevage
☐ Centre de rassemblement d'animaux
☐ Etablissement de vente d'animaux
☐ Etablissement de présentation au public d'animaux
☐ Etablissement de fourniture ou d'élevage d'animaux destinés à l'expérimentation animale
☐ Etablissement d'utilisation d'animaux d'expérimentation animale
☐ Centre de collecte de sperme ou d'embryons
☐ Etablissement de monte naturelle
☐ Fourrière

ESPECES CONCERNEES :

- ☐ Animaux de compagnie
☐ Ruminants
☐ Equins
☐ Porcins
☐ Volailles
☐ Lagomorphes
☐ Apiculture
☐ Aquaculture
☐ Faune sauvage captive

III. COORDONNEES DU VETERINAIRE SANITAIRE DESIGNÉ (possibilité de désigner plusieurs vétérinaires sanitaire disposant d'un même domicile professionnel d'exercice dans la mesure où l'aire géographique d'exercice de leur habilitation comprend le département du lieu de détention des animaux) :

Date de prise de fonctions du (ou des) vétérinaire(s) :
 Domicile professionnel d'exercice :
 Adresse :
 CP : Commune :
 Téléphone fixe :
 Téléphone mobile :
 Adresse électronique :

• Désignation de l'ensemble des vétérinaires sanitaires du DPE, sous réserve que les conditions d'exercice des vétérinaires respectent les dispositions de l'article R. 203-9 du code rural et de la pêche maritime.

OU

• Désignation d'un ou plusieurs vétérinaires sanitaires d'un même DPE :

Nom :	Nom :
Prénom(s) :	Prénom(s) :
N°Ordre :	N°Ordre :
Nom :	Nom :
Prénom(s) :	Prénom(s) :
N°Ordre :	N°Ordre :

Si votre désignation concerne plus de quatre vétérinaires, merci de fournir leurs coordonnées sur papier libre.

IV. ENGAGEMENT DU VÉTÉRINAIRE SANITAIRE/ DU VÉTÉRINAIRE RESPONSABLE DU DPE POUR CETTE DESIGNATION :

Si votre désignation concerne plus de quatre vétérinaires, merci de fournir leur engagement sur papier libre.

Je soussigné(e) ,

....., Docteur Vétérinaire, né(e) le...../...../..... à.....,
domicilié(e) à titre professionnel au (1)

....., Docteur Vétérinaire, né(e) le...../...../..... à.....,
domicilié(e) à titre professionnel au (1)

....., Docteur Vétérinaire, né(e) le...../...../..... à.....,
domicilié(e) à titre professionnel au (1)

....., Docteur Vétérinaire, né(e) le...../...../..... à.....,
domicilié(e) à titre professionnel au (1)

déclare accepter d'être désigné vétérinaire sanitaire de l'établissement mentionné au II/.

Je déclare :

- être déclaré vétérinaire sanitaire pour le département concerné par cette désignation ;
- que cette désignation, en s'ajoutant aux responsabilités que j'ai déjà acceptées me permet de garantir le bon exercice de mes missions dans des conditions techniques et des délais satisfaisants, y compris en cas d'urgence sanitaire ;
- que cette désignation me permet de respecter le nombre maximal d'animaux que je suis autorisé à suivre et déterminé par l'arrêté du 24 avril 2007 (2) ;
- ne pas être propriétaire des animaux, ni détenir de participation financière, dans l'établissement de détention des animaux ou la manifestation dans lesquels j'interviens en qualité de vétérinaire sanitaire.

Date : Date :
Nom : Nom :
Signature : Signature :

Date : Date :
Nom : Nom :
Signature : Signature :

(1) Indiquer les coordonnées du domicile professionnel administratif.

(2) Arrêté du 24 avril 2007 relatif à la surveillance sanitaire et aux soins régulièrement confiés au vétérinaire pris en application de l'article L. 5143-2 du code de la santé publique.

V. ENGAGEMENT ET SIGNATURE DU DETENTEUR DES ANIMAUX

Je m'engage à informer la DD(SC)PP destinataire de ce formulaire de tout changement de vétérinaire sanitaire et m'engage à ce que ce changement intervienne en dehors des périodes d'exécution et de contrôle des mesures de surveillance ou de prévention ou de lutte prescrites par l'autorité administrative, lorsque ces mesures sont prescrites pour une durée déterminée (le changement de vétérinaire sanitaire ne peut donc intervenir qu'entre deux campagnes de prophylaxie).

Je reconnais être informé que conformément aux dispositions de l'arrêté ministériel du 7 novembre 2001 modifié, pris après avis de la Commission nationale de l'informatique et des libertés (CNIL), toute information détenue dans le système d'information de la Direction générale de l'alimentation (SIGAL) et relative à la généalogie, aux mouvements et à l'état de santé des animaux entretenus dans mon élevage ainsi qu'à la situation de mon élevage lui-même au regard des maladies réglementées et non réglementées, pourra être communiquée par les services de l'Etat au(x) vétérinaire(s) sanitaire(s) ci-dessus désigné(s).

Date : le / / 20

Nom-prénom-signature :

VII. DECISION DU SERVICE INSTRUCTEUR (cadre réservé à l'administration)

La désignation est :

- ☐ accordée
- ☐ refusée pour le motif suivant :
- ☐ votre demande doit être complétée car le dossier ne comprend pas la (les) pièce(s) suivante(s) :

Cachet / Signature du responsable du service instructeur : Date :

La présente décision peut faire l'objet d'un recours administratif devant le tribunal administratif du ressort duquel dépend le domicile professionnel administratif du vétérinaire dans un délai de deux mois à compter de sa notification.

REGISTRE D'ÉLEVAGE // SITUATION DU DÉTENTEUR

VOTRE EXPLOITATION

Nom de votre exploitation :

Adresse de votre exploitation :

N° d'exploitation (EDE) :

Autre n° d'identification (si n°EDE inexistant) :

n° d'entreprise MSA :

Et/ou n° RC :

Et/ou n° d'association :

RESPONSABLE LÉGAL DE L'EXPLOITATION

Nom :

Adresse *(si différente de celle de l'exploitation)* :

PERSONNE(S) ASSURANT LA TENUE DU REGISTRE

Nom et fonction	Période concernée
.....
.....
.....
.....

VÉTÉRINAIRE TRAITANT

Nom :

N° de téléphone :

TYPE D'UTILISATION DES ÉQUIDÉS

☐ équitation ☐ élevage ☐ dressage d'équidés ☐ autre :

ADHÉSION À DES ORGANISMES SANITAIRES

☐ groupement de défense sanitaire ☐ autre groupement sanitaire :

ESPÈCES DÉTENUES

☐ équidés ☐ autres :

REGISTRE D'ÉLEVAGE // FICHE DE L'ÉQUIDÉ

NUMÉRO

(n° d'ordre chronologique d'arrivée)

NOM DE L'ÉQUIDÉ

NOM DE L'EXPLOITATION

ou cachet, tampon,...

N° de transpondeur :

N° SIRE :

Le cheval peut être destiné à la consommation humaine*

**barrer cette mention selon le choix du propriétaire ou en cas d'utilisation de médicaments qui l'exigent.*

Voir avec votre vétérinaire

PROPRIÉTAIRE DE L'ÉQUIDÉ (SI DIFFÉRENT DU DÉTENTEUR)

Nom :

Adresse :

N° de téléphone :

VÉTÉRINAIRE DE L'ÉQUIDÉ

Nom :

Adresse :

N° de téléphone :

<u>DATE DE 1^{ÈRE} ENTRÉE</u> -- / -- / ----	<u>LIEU DE PROVENANCE</u>	<u>OBSERVATIONS</u> <i>Ex : naissance, achat, prise de pension, prêt, accueil temporaire...</i>
<u>DATE DE SORTIE DÉFINITIVE</u> -- / -- / ----	<u>LIEU DE DESTINATION</u>	<u>OBSERVATIONS</u> <i>Ex : vente, abattage, décès, équarrissage...</i>

REGISTRE D'ÉLEVAGE // FICHE SANITAIRE

À copier en autant d'exemplaires que nécessaire

Nom de l'équidé :

Page n° :

N° SIRE :

Chaque ligne correspond à un traitement effectué par l'exploitant ou à une intervention vétérinaire sur un équidé. En parallèle de cet enregistrement des traitements et des interventions sanitaires sur cette fiche, les différents documents sont à archiver (ordonnances délivrées, résultats d'analyses, factures des médicaments non soumis à prescription...)

<u>DATE DÉBUT TRAITEMENT</u>	<u>DATE FIN TRAITEMENT</u>	<u>N°ORDONNANCE</u> <small>+voie d'administration et dose quotidienne</small>	<u>MOTIF DU TRAITEMENT</u> <small>Ex : coliques, vaccinations...</small>	<u>INTERVENANT</u> <small>Nom et signature</small>
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REGISTRE D'ÉLEVAGE // FICHE MOUVEMENTS

À copier en autant d'exemplaires que nécessaire

Nom de l'équidé :

Page n° :

N° SIRE :

Cette fiche ne concerne ni la 1^{re} entrée ni la sortie définitive. Pour une compétition, il est possible de conserver la fiche de route de la Fédération Française d'Équitation.

<u>DATE DE DÉPART</u>	<u>DATE DE RETOUR</u>	<u>OBSERVATIONS</u> <i>Nature et lieu de l'évènement</i>
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APPENDIX F

EQUURES LABEL AND THE FNC ARE STARTING A NEW COOPERATION TO GUIDE YOU BETTER

Why this cooperation?

In a ramping up social expectation context regarding animal welfare, it is a responsible act to organize a national collaboration between approaches sharing commune values regarding equine welfare.

The EquuRES Label and the Equine Welfare Charter decided to articulate their contents to communicate about the know-how of the equine professionals regarding animal welfare and environment conservation and to support you better in the evolution of your customs.

A COMMITMENT HEADING TOWARDS PROGRESS

I AM COMMITTED IN AN IMPROVEMENT PROCESS THROUGH THE CHARTER, WHAT ADVANTAGE DOES THAT GIVE ME?



The EquuRES label is the only quality process in favor of the environment and animal welfare, dedicated to equine structures, certified by an external organization. 3 commitment levels and steps of improvement exist for all kind of structures, whatever are their location, size, or activities.

You filled a self-assessment with the help of an adviser and set up your progress plan about animal welfare? You are concerned about biodiversity preservation and the environment for the development of your structure?

You can benefit from the gateway with EquuRES first level on the equine welfare aspect and candidate to the environmental aspect of the label.

The 9 commitments of the EquuRES label:

1. Preserve natural resources
2. Favor local supply
3. Provide appropriate care and ensure animal welfare
4. Limit the use of agricultural machines and the impact of transportation
5. Control energy consumption
6. Preserve biodiversity and landscapes
7. Reduce, manage and valorize manure and waste
8. Maintain buildings and equipment
9. Raise employees' awareness

I AM CERTIFIED EQUURES, WHAT ADVANTAGE DOES THAT GIVE ME?

The Equine Welfare Charter allows professionals to set up on their structures an internal and voluntary process to considerate the equine welfare in a cycle of continual improvement. Each professional, whatever his start level is, can fill a self-assessment of his practices and set up a progress plan with the help of an adviser.

By committing to the EquuRES level, you already chose to integrate an improvement process regarding animal welfare. From now, you can display your commitment to the Charter with the badge "here we work in the respect of the Charter for the equine welfare".

You can go further on the equine welfare subject with the Charter's help, on a voluntary base.



THE LABEL : 10 THEMES EVALUATED

- Alimentation and litter
- Animal welfare and veterinary care
- Travel, transport, and agricultural machines
- Water
- Energy (heating system, lighting, equipment...)
- Landscapes
- Manure and waste management
- Building management
- Team and communication management
- Environmental certification of agricultural structures

To get a precise evaluation and to allow room for improvement, 3 levels of environmental performance exist with an approach of a continual improvement.



SUSTAINABLE DEVELOPMENT AND ANIMAL WELFARE, A CHALLENGE OF OUR TIME



Make sure to turn off the light and the heating system when it is not necessary



Prevent water wasting by using only what you need



Contribute to the cleanliness of the place

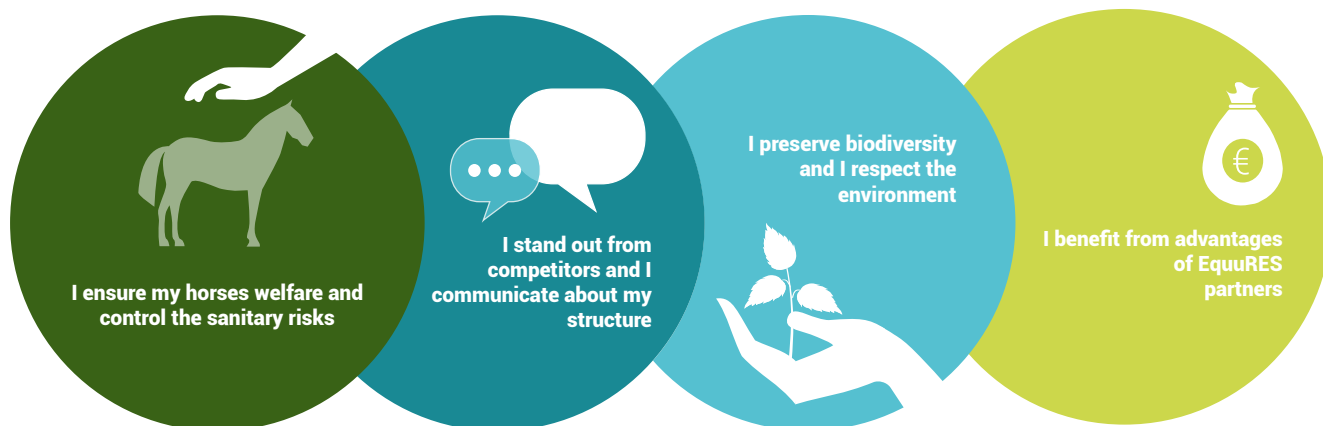


Do not smoke near the facilities



Preserve biodiversity by respecting plants and animal welfare

4 GOOD REASONS TO COMMIT IN THE PROCESS



Information and contact:

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