1. INTRODUCTION

1.1 This document, AERA Inc. Rulebook Section 3 Veterinary Rules, constitutes part of the Australian Endurance Riders Association Incorporated Rulebook.

1.2 This document will be amended from time to time in a manner determined by the Constitution of the Australian Endurance Riders Association Incorporated (hereinafter ‘AERA’).

1.3 This document shall be interpreted as an independent and autonomous text and not by reference to existing law or statutes and shall take precedence over other clauses in the AERA Rulebook should there be a conflict or contradiction. If this document is silent on a particular matter, then other relevant clauses in the AERA Rulebook relating to that matter shall prevail subject however, to the application of the legal principle of lex specialis derogat legi generali which provides that a specific provision should govern over a general provision.

1.4 The headings used for the various parts and Clauses of these Rules are for convenience only and shall not be deemed part of the substance of these Rules or to affect in any way the language of the provisions to which they refer.

1.5 Unless the contrary intention appears in this document:
   a) words importing a gender include every other gender and
   b) words in the singular include the plural and words in the plural include the singular and
   c) Words appearing in italics in this document require the italicised word to be interpreted for that sentence with reference to the definition for the italicised word as provided in Table 2 of the AERA General Rules.

2. ENGAGEMENT

2.1 The Sport of Endurance appoints veterinarians to officiate at every ride affiliated directly or indirectly with the AERA or a Division Association (hereinafter ‘DA’). The veterinarians are the independent advocates for the horse and their primary purpose at an Endurance event is to protect the welfare of each horse participating in the event.

2.2 Members of the veterinary team are appointed by the Ride Organising Committee (hereinafter ‘ROC’) pursuant to Clause 14 of the AERA General Rules which requires the ROC to appoint:
   a) A head veterinarian who must be an accredited AERA veterinarian and who is the most senior member of the veterinary team and controls all aspects of horse welfare.
   b) At least one treatment veterinarian experienced in the treatment of performance horses and who will provide first aid treatment for injured or compromised horses providing fluids, drugs and consumables for such treatment.
   c) Sufficient other veterinarians pursuant to Clause 15 of the AERA General Rules to satisfy the vet to horse ratio.

2.3 Fees charged by a veterinarian to the ROC are a private negotiation between the 2 parties. As a guide, the AERA publishes an annual recommended schedule of Veterinary fees (excluding GST). Veterinarians and ROC should ensure that all fees and costs are agreed in writing before the ride to ensure there are no surprises for either party. Veterinarians who wish to charge GST shall provide the ROC with a formal Tax Invoice.

3. VETERINARY CONTROL

3.1 Veterinarians have jurisdiction over the welfare of a horse when the horse is under veterinary control as defined in Table 2 of the AERA General Rules.
3.2 Veterinarians should familiarise themselves with Clauses 42 of the AERA General Rules regarding the 'Code of Conduct Ensuring the Welfare of the Horse'.

**AVOIDING TREATMENT**

3.3 Should a *person responsible* for a horse infringe Clause 42.2 of the AERA General Rules, that person shall be subject to a penalty as provided by Table 3 of the AERA General Rules.

**REFUSAL OF TREATMENT**

3.4 Whilst a person may *prima facie* refuse veterinary treatment for a horse, all persons are subject to common law statutes regarding cruelty to animals. Should any person refuse treatment for a horse pursuant to clause 42.2(c), that person may be reported to the RSPCA by a veterinarian, chief steward or any member of the public for cruelty to an animal. Successful prosecution by the RSPCA would be dependent on the nature, severity and circumstances of the refusal.

**4. VETERINARY ASSESSMENT**

4.1 All veterinarians must be familiar with the AERA Rulebook and in particular Chapter 7 of the AERA General Rules and this document.

4.2 Veterinarians, being both ride officials and professionals, shall place particular emphasis on the Code of Conduct for ride officials as notated in Clause 22 of the AERA General Rules and in particular the potential for a real or perceived conflict of interest.

4.3 Veterinarians are to assess every horse without fear or bias, ensuring that any horse that fails to satisfy the veterinary inspection parameters are protected, by being eliminated from the ride. Only healthy, unimpaired horses, free of pain are to be permitted to commence, continue in, or successfully complete a ride. Should a veterinarian suspect that a horse has been temporarily or permanently de-nerved or de-sensitised, the veterinarian shall eliminate that horse immediately from the ride and advise the chief steward.

4.4 Each veterinary inspection shall ensure that each horse satisfactory passes each of the following 4 key indicators.

   a) Heart Rate
   b) Metabolic status
   c) Gait
   d) Soreness, lacerations & wounds

**HEART RATE**

4.5 The heart rate must be taken before any other measurement or observation. Heart rate is the major essential criterion to accurately assess the horse’s recovery and fitness to continue and every effort should be directed towards its accurate determination. Always attempt to identify the cause of a high heart rate. At endurance events an increased heart rate may be due to a number of factors.

- Nervous disposition at an event due to inexperience on behalf of the horse and the rider.
- Pain may cause elevated heart rates and may be associated with lameness, muscle injuries or colic.
- Persistently high heart rates are due to metabolic causes such as dehydration, electrolyte imbalance, or exhaustion.
- Increased body temperature from heat stroke or muscle activity associated with intense exercise will cause elevated heart rates.

**METABOLIC STATUS**

4.6 The Metabolic status of the horse is a key indicator as to whether the horse should be eliminated. Parameters taken to assess the metabolic status include, but are not limited to, mucous membranes, capillary refill time, hydration, intestinal activity, demeanour and the Cardiac Recovery Index (CRI).

4.7 The CRI is a useful parameter in the assessment of the metabolic status of a horse. The CRI is optional and may be used on an ad-hoc basis by any veterinarian at any time when assessing the metabolic status of a horse. The CRI is a mandatory assessment for the VGIH ride control but is optional for the Standard ride control.

4.8 The CRI involves the examination and recording of the heart rate at the start of the inspection and one minute later after the horse has completed the 80m trot-up for gait assessment. At this examination the heart rate is
recorded for 15 seconds (and extrapolated to one minute) and the cardiac cycle is examined for any pathological signs that may indicate that the horse is unfit to continue. The CRI is the numerical difference between the first and second heart rates recorded and can be used as part of the metabolic examination.

An elevated second heart rate (positive CRI) is an indication of concern regarding recovery, and should be correlated with other signs of recovery to determine its significance. An elevated CRI alone is not grounds for elimination.

4.9 To confirm a metabolic elimination, look for multiple abnormal parameters such as mucous membranes, capillary refill and the absence of gut sounds, depressed demeanour and CRI.

For example; B for MM, 3 for CR, D for gut sounds; B for gait, + 10 CRI, 20 minutes to present; poor demeanour.

GAIT

4.10 A horse shall be eliminated which displays an irregularity of gait exhibited as, but not limited to, a consistent head bob, hip hike or shortened stride or, an irregularity of gait that threatens the immediate ability of the horse to safely perform athletically.

4.11 Any unusual feature about a horse’s gait that does not remove a horse from the ride should be noted on the logbook or vet card, especially when detected at the pre-ride inspection. This allows veterinarians at subsequent inspections to be informed of the horse's earlier gait and thus be in a better position to make a judgement on the current gait, as any action taken in respect to a gait abnormality and/ or injury is determined by any deterioration or improvement that has occurred since the previous inspection. If any noted gait abnormality or injury has not deteriorated, the horse will be deemed fit to continue in the ride.

SORENESS, LACERATIONS & WOUNDS

4.12 Any evidence of soreness lacerations or wounds, in the mouth, on the limbs or on the body, including girth and saddle galls, must be recorded. If participation or continuation in the ride is bound to seriously aggravate any such soreness, lacerations or wounds, the horse must be eliminated.

5. ASSESSING & SCORING THE PARAMETERS IN THE LOGBOOK OR VET CARD

5.1 The AERA logbook and vet card provides a framework for the assessment of the 4 key indicators of (a) heart rate (b) metabolic status (c) gait and (d) soreness, lacerations & wounds by providing specific parameters for assessment and scoring.

5.2 An individual veterinary inspection should (on average) take no longer than 2.5 minutes from the start of the stop watch to the completion of the trot up and the metabolic examination.

THE LOGBOOK PARAMETERS ARE (IN ORDER):

5.3 BODY SCORE

The body score is recorded only once at the pre-ride veterinary inspection pursuant to Table 1. Half scores permitted.
Table 1 Horse body condition scores (adapted from Huntington 1991)

<table>
<thead>
<tr>
<th>Score</th>
<th>Condition Description</th>
<th>Score Description</th>
<th>Body Description</th>
<th>Tail Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Very poor: 'ewe' neck which is narrow and slack at the base</td>
<td>Bone structure</td>
<td>Tissue either</td>
<td>Rump is sunken</td>
</tr>
<tr>
<td></td>
<td></td>
<td>clearly visible</td>
<td>side of backbone</td>
<td>angular pelvis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>and vertebrae visible</td>
<td>sunken</td>
<td>and tight skin</td>
</tr>
<tr>
<td></td>
<td></td>
<td>and easily felt</td>
<td>deep cavity</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Poor: 'Ewe' neck still narrow and slack</td>
<td>Well defined</td>
<td>Ribs and vertebrae</td>
<td>Rump sunken but</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>clearly visible</td>
<td>skin supple</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>and tissue either</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>side of backbone</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>sunken</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Moderate: Narrow and firm, blending smoothly into the body</td>
<td>Withers rounded</td>
<td>Ribs just visible</td>
<td>Fat around tail</td>
</tr>
<tr>
<td></td>
<td></td>
<td>over the top</td>
<td>backbone well</td>
<td>head – rump flat</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>covered –</td>
<td>either side of</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>vertebrae still</td>
<td>backbone – slight</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>felt</td>
<td>cavity under tail</td>
</tr>
<tr>
<td>3</td>
<td>Good: Firm neck with some fat deposits – no crest</td>
<td>Some fat behind</td>
<td>Ribs covered but</td>
<td>Fat round the tail</td>
</tr>
<tr>
<td></td>
<td></td>
<td>the shoulder</td>
<td>still felt –</td>
<td>– rump round</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>no ‘gutter’ along</td>
<td>shape – no ‘gutter’</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>the back</td>
<td>along backbone</td>
</tr>
<tr>
<td>4</td>
<td>Fat: Wide firm neck with a slight crest</td>
<td>Along withers and</td>
<td>Need firm pressure</td>
<td>Pelvis only felt</td>
</tr>
<tr>
<td></td>
<td></td>
<td>behind shoulder filled</td>
<td>to feel ribs –</td>
<td>with firm pressure</td>
</tr>
<tr>
<td></td>
<td></td>
<td>with fat</td>
<td>‘gutter’ along</td>
<td>– ‘gutter’ along</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>the back to the</td>
<td>backbone to the</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>tail</td>
<td>tail head</td>
</tr>
<tr>
<td>5</td>
<td>Very fat: Very wide and firm – obvious crest</td>
<td>Bulging fat</td>
<td>Cannot feel the</td>
<td>Cannot feel the</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ribs – deep ‘gutter’</td>
<td>pelvis – deep</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>along the back</td>
<td>’gutter’ along</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>backbone</td>
</tr>
</tbody>
</table>

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5.4 HEART RATE

The maximum heart rate(s) permissible for each ride type are pursuant to Table 7 and Table 10 of the AERA General Rules and dependent upon the ride control being used. The stop watch is started when the heart beat is audible and the count starts on the next heartbeat.

Maximum of 55 bpm
The stop watch can be stopped at 15 seconds if the count is 13 or less, at 30 seconds if the count is 26 or less. In both cases the heart rate can be recorded at 52 bpm or less.

Maximum of 60 bpm
The stop watch can be stopped at 15 seconds if the count is 15 or less, at 30 seconds if the count is 30 or less. In both cases the heart rate can be recorded at 60 bpm or less.

Maximum of 64 bpm (FEI dual event if invoked)
The stop watch can be stopped at 15 seconds if the count is 16 or less, at 30 seconds if the count is 32 or less. In both cases the heart rate can be recorded at 64 bpm or less.

In all cases above, if the heart rate is above the stated maximum at 15 or 30 seconds respectively, or if the heart beat is irregular, difficult to hear or demonstrates murmurs, the count must be continued for the full minute.

Should the examination of the heart rate be disrupted due to movement or excitement of the horse due to a disturbance which renders the examination impossible or inaccurate, the examination shall be stopped and recommenced when the horse is settled.

5.5 RESPIRATION

Although highly variable depending on the environment, nature of the horse and stage of the ride - it can be an indicator of distress. A respiratory rate - heart rate inversion may be an early clinical indicator of heat stroke / impending metabolic collapse. In this case other metabolic parameters need careful examination. Up to 25% of body heat is dissipated via respiration, this becomes very important once evaporative cooling limits are reached.
5.6 TEMPERATURE

This cardinal sign has significance related to infection, heart rate, respiratory rate, ambient temperature, recent physical exertion including floating and humidity and needs to be interpreted in this context. Normal range is from 37.0°C - 38.5°C.

An elevated rectal temperature above 38.5°C should be related to the condition of the horse. At the pre-ride examination a high temperature may indicate a febrile response to infection and therefore be evidence leading to elimination of the horse. During the ride, rectal temperature may be significantly elevated above 40°C, depending upon the exertion and environmental conditions.

The temperature should always be taken at the pre-ride inspection to detect any febrile response indicative of infection. The temperature may be taken during the ride if other metabolic signs are deteriorating, but even then the relationship between core and rectal temperature may be tenuous, especially if the anus is dilated. In hot humid climatic conditions it is useful to take it at every inspection to ensure adequate heat loss is occurring.

5.7 MUCOUS MEMBRANE

A = Clear pink and moist
B = Moist pink, fawn
C = Injected, pallid, tacky, dry
D = Muddy, blue, purple, toxic line - elimination

Clinical significance.
• Assessment of dehydration - moist or dry
• Assessment of colour -
  o Pale - anaemia or low blood pressure
  o Salmon pink and moist – normal
  o Injected or dark reflects poor tissue perfusion due to dehydration, poor oxygen supply and/or onset of toxaemia

5.8 CAPILLARY REFILL (CR)

Critical parameter for assessment of metabolic status.

1 = Less than 1 second
2 = 1-2 seconds
3 = 2-3 seconds
4 = Greater than 3 seconds - elimination

Clinical significance of prolonged CR reflects:
• Poor blood pressure
• Poor tissue perfusion
• Dehydration
• Toxaemia

5.9 SKIN RECOIL

Additional parameter to assess metabolic status.
Always taken at the point of the shoulder. No half scores.

1 = Less than 1 second
2 = between 1-2 seconds
3 = between 3-4 seconds
4 = Greater than 4 seconds

Clinical significance:
• Unreliable
• Dehydration
• Differing response depending on site of test & wetness of skin
• Can be prolonged in normal horses

5.10 HEART SOUNDS
A = Normal rhythm
B = Variable rhythm
C = Pronounced rhythm
D = Extreme rhythm – elimination

Second degree AV block is acceptable.
Atrial fibrillation; pathological murmurs (pan systolic); ventricular extra systoles are unacceptable.

5.11 **GUT SOUNDS**

When assessing gut sounds, all 4 quadrants should be auscultated.

A = Normal and active
B = Slight change
C = Marked change
D = Absent – elimination

Clinical significance.
- Complete absence of gut sounds that fail to recover is very significant. Ileus can progress to displacement and torsion.
- Decreased sounds:
  - may be normal with strenuous activity and early presentation off course (flight or fight reflex); should have recovered some motility before returning to the course.
  - may be due to decrease in motility with loss of intra- and extracellular fluid and electrolytes; can proceed to ileus.
  - may be due to loss of water content in colon (impaction).
- Interest in eating is useful in assessing the clinical significance of diminished gut sounds.
- Faecal passage may indicate some hind gut movement but horses may still have compromised intestinal motility.
- Increased activity may be due to gas production or diarrhoea.

5.12 **MUSCLE TONE**

Critical part of musculo-skeletal examination to assess tie-up.

A = Supple, elastic, fluid wave
B = Firm, doughy
C = Fasciculation/ altered tone
D = Cramped, flaccid, twitching, swollen - elimination

5.13 **Girth, Withers & Back**

This is in relation to the current ride being undertaken. Previous healed galls or injuries should be noted.

Skin is the major organ in contact with tack so looking for the effects of ill-fitting tack or of the weight of saddle & rider on the horse. When the horse resents examination to such an extent that it is dangerous for the examiner, it should be eliminated!

A = No pain / no lesions
B = Tenderness
C = Chafe, scald
D = Open lesion, marked pain – elimination

5.14 **LEG INJURIES**

This is in relation to the current ride being undertaken. Previous healed leg injuries should be ignored.

It is not necessary to pick up or palpate the limbs as a visual examination is all that is required.

A = None
B = Superficial cuts, swelling
C = Skin wounds, open cuts
D = Exuding wound, full depth cuts over joints - elimination

5.15 **GAIT**
The most contentious elimination subject to more questioning by the riders than a metabolic elimination. Consistency within the veterinary team and throughout the event is necessary. Veterinarians are not required to provide a diagnosis of an irregular gait. Observe the hind quarters for hip hike first then the head for head bob.

Suggested criteria for elimination:
- Consistent irregularity to and from observer
- Able to identify limb i.e. LF or RH (although not necessary)

A = Willing, strong, normal
B = Subtle reluctance
C = Reluctance, tired, not consistently lame
D = Unwilling, no animation, consistently lame - elimination

5.16 OVERALL RESULT

If the horse passes the veterinary examination, the ‘Overall Result’ must be scored with either an A, B or C where

A = No issues - OK
B = Minor Issues - be aware
C = Major Issues - caution

If the horse fails the veterinary examination, the ‘Overall Result’ must be scored a D where D = Eliminated

5.17 VETERINARY COMMENTS

This section is used to notate comments such as ‘FTC’ [Fit to continue] or ‘V/O ‘reason’ [Vetted out – HR (heart rate)]. It should also be used to notate any unusual or worrying aspects of the inspection parameters including gait.

6. INVASIVE TREATMENT

6.1 The definition of Invasive Treatment is provided in Table 2 of the AERA General Rules. The rules relating to Invasive Treatment are provided in Clause 51 of the AERA General Rules.

7. REST ORDERS

7.1 The use of a Rest Order is a valuable tool to ensure that an injured or compromised horse does not attend a future event until the horse has had sufficient time to recover and recommence training and regain fitness. Clause 52 of the AERA General Rules provides the process and guidelines for issuing a Rest Order.