

The Australian Carriage Driving Society Inc.

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TPR STEWARD Guidelines

Please use this manual in conjunction with the current:

ACDS Rules for Combined Driving Events

ACDS Pleasure and Endurance Carriage Driving Guide

“The main responsibility of the TPR Steward is to ensure the welfare of the horses. If horses are not fit to continue, the only thought should be for the horse’s welfare.”

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ALWAYS THINK ABOUT YOUR SAFETY AND THE SAFETY OF THE OTHER STEWARDS, DRIVERS AND GROOMS – DO NOT RISK INJURY IN THE COURSE OF PERFORMING YOUR DUTIES

IF AT AN OFFICIAL EVENT, REVIEW RISK ASSESSMENT UNDERTAKEN BY EVENT ORGANISERS PRIOR TO STARTING TPR INSPECTIONS

TPR Stewards Responsibilities

- To perform a basic clinical examination of all horses at various stages through a competition either independently or in collaboration with a veterinary surgeon and report any clinical findings outside the published normal range to the Ground Jury (+/- veterinary surgeon) for consideration and further action.
- Clinical exams will always include a general assessment of the horse(s) for appearance and obvious lameness, a heart rate, a respiration rate and may include a rectal temperature reading if an attending vet requests one.
- At Combined Driving Events the Ground Jury may request examinations at the following times:
 - Pre marathon/arrival at competition;
 - End of Transfer Section (after 10 minutes rest); and
 - End of section B (within 30 minutes of finish)
- At Pleasure/Endurance Drives the Ground Jury or a nominated person will advise TPR Stewards of the required examination regime which may include:
 - Pre start / arrival of event or drive;
 - Mid-point of Drive (Optional subject to distance); or
 - Completion of Drive and nominated time specified.
- Each inspection has slightly different critical parameters (see below) outside of which you should notify the Ground Jury.
- Perhaps if you are in doubt you should check again as there will often not be a second official at hand to check.
- If still in doubt you should notify the Ground Jury/attending vet and seek a second opinion.
- You are not expected to eliminate competitors yourself – you just need to raise concerns with the Ground Jury who will make that decision or request a further examination.
- A general observation of the horse coming in for the check is worthwhile.
- Note: Many events will not have a Vet in attendance – if this is the case, you should confirm with the organisers in advance the contact details for Emergency Veterinary services.

Basic Equipment Required



Digital Thermometer



Petroleum Jelly



Stethoscope

It is recommended that all TPR Stewards are accredited using Digital Thermometer and Sprague-type Stethoscope (shown above) as it has been demonstrated that there can be a variance in digital heart rate monitoring equipment that is currently available. Like all things digital/electrical they can sometimes breakdown leaving the Steward no option but to utilise these basic aids.

Eligibility

To perform the role of TPR Steward at an ACDS event (CDE or Endurance) a person must be either:

- currently accredited as an ACDS TPR Steward (in accordance with ACDS Officials accreditation requirements); **or**
- Hold recognised qualifications as a Veterinary Technician or Veterinary Nurse, with equine experience.

The TPR Steward will be under the guidance of the Event Ground Jury.

It is not necessary to be an ACDS Member (though it is preferred).

The following persons may not be Judges, members of a Ground Jury, members of an Appeal Committee, be officials or TPR stewards at an event:

A consultant, practical coach, instructor or trainer of a competitor or Horse cannot serve as a judge within 30 days of the last tutorial in either an individual or group lesson and excluding casual conversations; a person with a financial interest in a competing Horse or competitor; or a close relative of a competitor. (ACDS CDE Rule 984.3)

TPR Parameters

Heart Rate

1. Always take care when taking a heart rate. Introduce yourself to the driver and the horse and ensure you are aware of the location of tack/shafts etc and try not to put your hand between anything that may move or trap you when reaching to place the stethoscope.



Figure 1 – Checking heart rate with a stethoscope

2. The heart rate should be taken with a stethoscope (Figure 1 above). The heart is located fairly far forward under the forelimb so to make it easier to hear the heart ensure the limb is as far forward as possible and push the stethoscope up and under the elbow as far as the horse will easily tolerate.
3. Typically described as a 'lub-dub' sound. The lub-dub is one beat of the heart and counts as "1". Examples of horse heart sounds and locations can be found online.
4. Easiest on the left side of the chest but in pairs/team you will sometimes need to take on the right side – the location remains the same.
5. Normal heart rates (especially in a resting horse) can be very variable in their speed (and may miss beats occasionally) so count the number of beats for at least 30 seconds and multiply up appropriately (x2 for a 30 second reading) to give the number of beats per minute (bpm).
6. If the beat pattern is variable then it is best to count for longer or repeat measurements and average them.
7. A murmur (a whoosh or a click outside; or extra sound within the normal 'lub-dub' sounds) may be heard. These are usually not a problem but should be commented on to the competitor and if you are concerned ask for a second opinion from the vet (if present) or another steward. As well as mentioning to the competitor and if confirmed by an attending veterinarian, this finding should be noted on the record sheets.

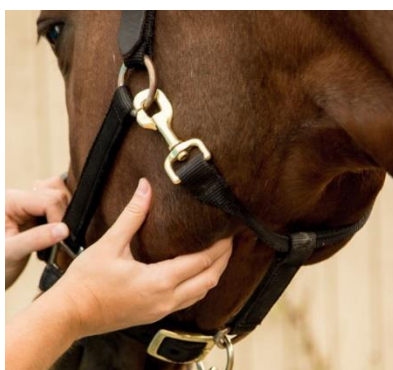


Figure 2 – Checking horse's heart rate under the jaw line

8. If the horse won't let you listen, feel under the jaw line (the mandibular artery) as shown in Figure 2 above.

Critical Values

Combined Driving Events

| | |
|---|-------------------------|
| Pre-start (guide only) | 28 – 44 bpm |
| End of Transfer Section (after 10 minutes) | Not greater than 75 bpm |
| After Finish (not > 30 minutes) | Not greater than 70 bpm |
| If any value is outside the critical ranges stated above for the correct time point, the TPR Steward should notify the Ground Jury; who will make a decision whether to give the horse a short additional rest or to eliminate them. This is not the TPR Stewards decision. | |

Table 1 – CDE Critical Values

Critical Values for heart rates at a CDE are shown in Table 1 above.

Pleasure & Endurance Drives

| | |
|---|-------------------------|
| Pre-start (guide only) | 28 – 44 bpm |
| Mid Point (after 30 minutes) | Not greater than 55 bpm |
| After Finish (not > 30 minutes) | Not greater than 60 bpm |
| If any value is outside the critical ranges stated above for the correct time point, the TPR Steward should notify the Ground Jury or Nominated person advising them of the findings. All Endurance / Pleasure Drivers have the right to a further review and testing at that point of time, but no additional time will be granted and readings outside the above will result in Elimination. Note – this is not the TPR Steward's decision. | |

Table 2 – Pleasure and Endurance Critical Values

Critical Values for hearts rates at Pleasure and Endurance events are shown in Table 2 above.

Respiration Rate

1. Recording the actual respiration rate is not a specific requirement however the critical value is that the respiration rate should be lower than the recorded heart rate.
2. Assess the general appearance of the breathing from a distance. Is it laboured? Does the horse appear to be struggling? If so then you should take a respiration rate and consider alerting the vet/Ground Jury.
3. If the horse appears normal it should be satisfactory to simply compare the respiration rate to the heart rate while you are listening to the heart to ensure the respiration rate is lower.
4. Can be taken either by listening to the lungs on the sides of the horse or by watching the chest rise/fall from a distance. (This may be difficult in a resting horse as the chest doesn't move much in many cases.)



Figure 3 – Checking horse’s respiration rate

5. Respiration can also be assessed by holding your hand in front of the horse’s nostrils, as shown in Figure 3 above.
6. Count the breaths for approximately 30 seconds and multiply x 2 to give breaths per minute.
7. If you are concerned you can look for other signs of excessive stress, for example:
 - flared nostrils,
 - an excessive movement of the chest,
 - audible and excessive breathing sounds,
 - significant or bloody discharge from the nostrils, or
 - heave line – obvious step on muscles on the horse’s side

Critical Values – CDE and P&E

| | CDE | P & E |
|--|--|---|
| Pre-start (guide only) | 8 – 16 breaths pm | 8 – 16 breaths pm |
| End Transfer Section or Mid-Point | Not greater than the recorded heart rate | Not greater than <u>half</u> of the recorded heart rate |
| After Finish (not > 30 minutes) | Not greater than the recorded heart rate | Not greater than <u>half</u> of the recorded heart rate |
| If any value is outside the critical ranges stated above for the correct time point, the TPR Steward should notify the ground jury; who will make a decision whether to give the horse a short additional rest or to eliminate them. This is not the TPR Steward’s decision. | | |

Table 3 – Respiration Critical Values

Critical respiration values for CDE and P&E are shown in Table 3 above.

Temperature

1. Rules for both CDE and Endurance / Pleasure Driving currently state that only a vet present can request that you take a temperature, however it is important to know the relevant requirements.
2. Care should always be taken when attempting to take a rectal temperature, and the procedure should not be performed when the horse is harnessed to a carriage.

- Do not put yourself or others in danger when attempting to take a temperature.



Figure 4 – Checking a horse's temperature

- A digital thermometer should be inserted gently into the rectum of the horse (Figure 4 above) and held against the side to ensure an accurate temperature reading.

Digital thermometers will usually beep to indicate when they have recorded an accurate temperature.

Note: Apply Petroleum Jelly to lubricate thermometer prior to insertion. Wipe clean once completed.

Analogue thermometers (normally glass mercury) will have a set time period that they have to be in situ to ensure a reliable reading.

Note: It is recommended that glass mercury thermometers NOT be used, due to potential mercury contamination if the glass breaks.

- If the reading is lower than expected there may be faeces present and you should retry.

Critical Values – CDE and P & E

| | |
|--|---|
| Pre-start (at rest) | Normal range (guide only) 37.2 – 38.3°C 39°C or above – isolate the horse and advise Ground Jury. Horse may not start the competition. A 'high' fever in a horse is considered to be above 40°C |
| End A / Mid Point | Not likely to be reliable unless other clinical signs suggest illness / heat stress – consult Vet |
| After Finish (not > 30 minutes) | While there are no hard and fast rules, a rectal temperature above 41°C generally indicates the need for aggressive cooling procedures, while a horse with a rectal temperature of 42°C or more can be at serious risk for heat stroke. |
| If any value is outside the critical ranges stated above for the correct time point you should notify the ground jury who will make a decision whether to give the horse a short additional rest or to eliminate them. This is not a TPR Steward's decision. | |

Table 4 – Critical temperature values for CDE and P&E

Critical Values for temperature ranges in CDE and P&E are shown in Table 4 above

Other Issue to Consider / Review During TPR Inspection

For all Sections:

1. Outward Appearance

- Bright and alert
- Not apparently exhausted or stressed
- Comfortable

2. Injuries

- Graze / Minor Injuries
 - Inform the competitor
 - Record any injuries
 - Record any grazes
- Bleeding / Major Injuries
 - Inform Ground Jury or nominated person
 - Record that Ground Jury or nominated person has been notified

3. Lameness

- TPR Stewards are not qualified or required to eliminate any horses that appear to be lame, however the TPR Steward can notify the Ground Jury or Event Organisers if they have a concern about an animal's condition. Any signs of significant lameness or if you are concerned you should inform the Ground Jury/vet.

Other Factors

Heat Stress

Be aware that in the Australian climate horses may be subject to high heat stress. Make a basic assessment of all horses and examine those you are concerned about more closely. Certain breeds / colours and animals with heavy coats may be predisposed to heat stress and should be monitored more closely.

Heat stress is more likely to occur in conditions of moderate to high temperature combined with high humidity. In these conditions provision for aggressive cooling (large volumes water) must be available. The Ground Jury must also assess the level of risk to horse welfare posed by weather conditions and implement appropriate controls accordingly.

Indicators of heat-stress can include (but are not limited to):

1. Dry / discoloured / muddy / blue / purple mucous membranes (nose & mouth).
2. Slow (over 3-4 secs) capillary refill time.
3. Slow (over 3-4 secs) skin recoil (point of shoulder).
4. Irregular heart rhythm.
5. Marked decrease or absent gut sounds.

6. Anal tone (recoil) delayed or absent.
7. Twitching, cramped or flaccid muscle tone.
8. Obvious reluctance or unwillingness to move forward.

The organisers should provide water at the TPR check at the end of relevant Sections. If there isn't any, you should find out where the nearest available water is located and ask organisers to make arrangements for its immediate availability to the TPR area.

You can suggest that to grooms that they provide water to horses and cool them off at the stops.

Harness, Boots and Shoes

It is worth having a quick look at harness and horse shoes / boots as you look over the horse.

Any loose or missing shoes, boots etc should be pointed out to the driver.

Loose or poorly fitted harness should be reviewed to ensure it is not causing rubs and pointed out to the driver.

Any Other concerns

If you have any concerns about any aspect of the welfare of the horse you should seek a second opinion and notify the ground jury, and record all observations and findings.

You Tube Videos Recommended

Heart & Respiratory Rate: pathways.bhs.org.uk/resource-hub/video-library/how-to-take-a-horse-s-pulse-and-respiratory-rate/

Temperature: pathways.bhs.org.uk/resource-hub/video-library/how-to-take-a-horse-s-temperature/