



Hot Weather Policy – Pony Club Australia

Purpose

This policy is to assist in safeguarding the welfare of horses and riders in Pony Club activities. The Policy sets out the relevant and appropriate risk factors to be considered when determining if and how an event should be conducted on days of high thermal load.

Principles

Hot weather affects both horses and people - Pony Club is committed to the welfare of both. Spectators, officials, coaches and strappers should be considered, along with riders.

Assessing Risk Factors

Environmental conditions

A day with high temperature, low humidity and reasonable wind is well tolerated by most horses. The combination of high ambient temperature, high relative humidity and low wind greatly increases the risk.

Horses and people cool themselves by evaporation of sweat. The effectiveness of this process is reduced on days of high thermal load (high temperature, high relative humidity, low wind).

Measurement of thermal load

The air temperature in degrees only measures dry bulb temperature and does not take account of other environmental factors.

The temperature included in weather reports does not provide a basis for assessing risks of heat exposure.

The best available measure is the Wet Bulb Globe Temperature. The WBGT considers air temperature, relative humidity, wind speed and cloud cover. The Australian Bureau of Meteorology publishes daily WBGT for regional locations.

New South Wales	Queensland	
Northern Territory	Tasmania	
South Australia	Victoria	Western Australia

The following table from the Bureau of Meteorology provides an **indication** of WBGT on a sunny day with light wind.

Relative Humidity (%)	Temperature (°C)																																																	
	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50																			
0	15	16	16	17	18	18	19	19	20	20	21	21	22	22	23	23	24	24	25	25	26	26	27	27	28	28	29	29	30	31	31	32	32	33	33	34	34	35	35	36	36	37	37	38	38	39	39	40	40	
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40	19	20	21	21	22	22	23	23	24	24	25	25	26	26	27	27	28	28	29	29	30	31	31	32	32	33	33	34	34	35	35	36	36	37	37	38	38	39	39	40	40	41	41	42	42					
45	19	20	21	22	23	23	24	24	25	25	26	26	27	27	28	28	29	29	30	31	31	32	32	33	33	34	34	35	35	36	36	37	37	38	38	39	39	40	40	41	41	42	42	43	43					
50	20	21	22	23	23	24	24	25	25	26	26	27	27	28	28	29	29	30	31	31	32	32	33	33	34	34	35	35	36	36	37	37	38	38	39	39	40	40	41	41	42	42	43	43	44	44				
55	20	21	22	23	24	24	25	25	26	26	27	27	28	28	29	29	30	31	31	32	32	33	33	34	34	35	35	36	36	37	37	38	38	39	39	40	40	41	41	42	42	43	43	44	44					
60	21	22	23	24	24	25	25	26	26	27	27	28	28	29	29	30	31	31	32	32	33	33	34	34	35	35	36	36	37	37	38	38	39	39	40	40	41	41	42	42	43	43	44	44						
65	21	22	23	24	24	25	25	26	26	27	27	28	28	29	29	30	31	31	32	32	33	33	34	34	35	35	36	36	37	37	38	38	39	39	40	40	41	41	42	42	43	43	44	44						
70	22	23	24	24	25	25	26	26	27	27	28	28	29	29	30	31	31	32	32	33	33	34	34	35	35	36	36	37	37	38	38	39	39	40	40	41	41	42	42	43	43	44	44	45	45					
75	22	23	24	24	25	25	26	26	27	27	28	28	29	29	30	31	31	32	32	33	33	34	34	35	35	36	36	37	37	38	38	39	39	40	40	41	41	42	42	43	43	44	44	45	45					
80	23	24	24	25	25	26	26	27	27	28	28	29	29	30	31	31	32	32	33	33	34	34	35	35	36	36	37	37	38	38	39	39	40	40	41	41	42	42	43	43	44	44	45	45						
85	23	24	24	25	25	26	26	27	27	28	28	29	29	30	31	31	32	32	33	33	34	34	35	35	36	36	37	37	38	38	39	39	40	40	41	41	42	42	43	43	44	44	45	45						
90	24	24	25	25	26	26	27	27	28	28	29	29	30	31	31	32	32	33	33	34	34	35	35	36	36	37	37	38	38	39	39	40	40	41	41	42	42	43	43	44	44	45	45							
95	24	24	25	25	26	26	27	27	28	28	29	29	30	31	31	32	32	33	33	34	34	35	35	36	36	37	37	38	38	39	39	40	40	41	41	42	42	43	43	44	44	45	45							
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Note: This table is compiled from an approximate formula which only depends on temperature and humidity. The formula is valid for full sunshine and a light wind

Individual factors

The following can affect a horse’s ability to cope with hot weather;

- Travel in a float without adequate ventilation
- Horses that are unable to sweat freely - “dry coated”
- Excitable temperament
- Not acclimatised to local conditions
- Lack of fitness, overweight

- Age – sweating mechanisms are poorly developed in young children
- High exercise intensity
- Illness
- Previous history of heat intolerance
- Lack of fitness, overweight
- Heavy clothing and protective equipment

Hot Weather Procedures (adapted from Australian Horse Welfare and Wellbeing Toolkit)

The following can increase the risk of heat illness in humans;

WBGT	Temperature Relative Humidity**	Alert Level	Actions
>33	e.g. >32 ^o C, 60% RH >35 ^o C, 40% RH	EXTREME	Very high risk. Event must be cancelled.
30-33	e.g. 30 ^o C, 65% RH	HIGH Seek veterinary advice.	Competition should be held in the cooler part of the day – prior to 11am or after 4pm. Horses and riders involved in high intensity events will require aggressive cooling measures. Avoid non-grassed riding surfaces. Reduce competition stress, such as by modifying the course/competition. Ensure sufficient cooling equipment and facilities are available. PA announcements remind riders to rehydrate and cool their horses, and for people to seek shade and water.

28-30	29 ^o C, 60%	MODERATE	<p>Use shaded areas where possible. Avoid non-grassed riding surfaces. Reduce competition stress, such as by modifying the course/competition. Ensure sufficient cooling equipment and facilities are available. PA announcements remind riders to rehydrate and cool their horses, and for people to seek shade and water.</p>
<28	30 ^o C, 45%	LOW	Practice good animal welfare and go ahead.

** These are examples – check the BOM website for your **nearest** location on the day.

Ground and Facilities on Hot Days

- Stable horses out of the sun in well ventilated areas
- Ensure adequate (at least two) wash bays and hoses are available
- Water supply should be immediately available and sufficient (supply and pressure) to thoroughly and repeatedly wet horses in order to maximise evaporative cooling
- Ensure adequate ice, scrapers, sponges and towels are available
- Reduce horse participation in presentation ceremonies
- Provide shade for participants – horses, riders, officials and spectators

Managing Participants

On days of high WBGT, strenuous exercise lasting more than 6 minutes is high risk for horses. Organisers should modify events and take into account both warm-up and competition times.

Signs of heat stress in horses

- Horse's temperature remains elevated 30 minutes after exercise.

- Increased respiratory rate and poor recovery after exercise. Rapid shallow breathing with flared nostrils.
- Dehydration – check for skin elasticity (pinch skin on the shoulder and see how quickly it retracts back into place), mucous membrane colour, urine colour
- Agitated, distressed, striking/kicking
- Excessive sweating, or absence of sweating

Horse management

Horses can be assisted to cool down after exercise by maximising the efficiency of evaporative cooling;

- 'Wet and Walk' – hosing and then walking in a shaded area. As water evaporates it cools the horse, so air flow is important.
- 'Hose and scrape' – to prevent water acting as an insulating barrier and aids evaporation
- Bucket and sponge with iced water if horse is heat affected
- Permitted to drink as much water (at ambient temperature) as it wants
- Horse should be cool and comfortable before being loaded onto a well-ventilated float

Signs of heat stress in humans

- Dizziness, confusion, lack of coordination
- Headache
- Collapse, fainting
- Ashen, pale skin
- These symptoms may indicate heat stroke, which is a medical emergency.

People management

- Participants and spectators should maintain regular fluid intake. Avoid sugar, caffeine and alcohol.
- Additional electrolytes may be needed if sweating excessively.
- Adequate shade and ventilation

Policy Review

PCA will review and update this policy from time to time and ensure that it complies with current practice for junior sport and horse welfare. The revised policy will be posted on the PCA website.

For further information please contact

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