



EQUESTRIAN SPORTS NEW ZEALAND

Policy for Extreme Weather Events During Equestrian Sports New Zealand Competition

Effective from 1 August 2024

This policy is also accessible on the ESNZ website – www.nzequestrian.org.nz

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From time-to-time extreme weather events may occur during organised competition. It is the responsibility of the Organising Committee (OC) to be aware of pending weather conditions and in conjunction with the Technical Delegate (TD) and Ground Jury (GJ), consider the provision of facilities to mitigate the effects and/or alter the format of the competition to ensure safe competition.

It is ultimately the responsibility of the rider to care for the welfare of the horse.

Extreme conditions may be:

- Heat/Humidity
- Rain/Flooding
- Wind
- Cold

Consideration needs to be given to:

- The Horse
- People – Riders, Support team, Officials, Volunteers and the Public.
- The Venue

Heat/Humidity

Horses and humans cool themselves mostly by evaporation. This becomes less effective when ambient temperatures and/or humidity is high. High humidity is likely to create more issues than just high ambient temperature.

The FEI uses the Wet Bulb Globe Temperature Index (WBGT)¹ to make recommendations as to the facilities and actions needed. This gives a reading based on combined air temperature and relative humidity*.

		Wet Bulb Globe Temperature (WBGT) from Temperature and Relative Humidity																														
		Temperature (°C)																														
Relative Humidity (%)	0	15	16	16	17	18	18	19	19	20	20	21	22	22	23	23	24	24	25	25	26	27	27	28	28	29	29	30	31	31	32	32
	5	16	16	17	18	18	19	19	20	21	21	22	22	23	24	24	25	26	26	27	27	28	29	29	30	31	31	32	33	33	34	35
	10	16	17	17	18	19	19	20	21	21	22	23	23	24	25	25	26	27	27	28	29	30	30	31	32	32	33	34	35	36	36	37
	15	17	17	18	19	19	20	21	21	22	23	23	24	25	26	26	27	28	29	29	30	31	32	33	33	34	35	36	37	38	39	
	20	17	18	18	19	20	21	21	22	23	24	24	25	26	27	27	28	29	30	31	32	32	33	34	35	36	37	38	39			
	25	18	18	19	20	20	21	22	23	24	24	25	26	27	28	28	29	30	31	32	33	34	35	36	37	38	39					
	30	18	19	20	20	21	22	23	23	24	25	26	27	28	29	29	30	31	32	33	34	35	36	37	39							
	35	18	19	20	21	22	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39								
	40	19	20	21	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39									
	45	19	20	21	22	23	24	25	26	27	27	28	29	30	32	33	34	35	36	37	38											
	50	20	21	22	23	23	24	25	26	27	28	29	30	31	33	34	35	36	37	39												
	55	20	21	22	23	24	25	26	27	28	29	30	31	32	34	35	36	37	38													
	60	21	22	23	24	25	26	27	28	29	30	31	32	33	35	36	37	38														
	65	21	22	23	24	25	26	27	28	29	31	32	33	34	36	37	38															
	70	22	23	24	25	26	27	28	29	30	31	33	34	35	36	38	39															
	75	22	23	24	25	26	27	29	30	31	32	33	35	36	37	39																
80	23	24	25	26	27	28	29	30	32	33	34	36	37	38																		
85	23	24	25	26	28	29	30	31	32	34	35	37	38	39																		
90	24	25	26	27	28	29	31	32	33	35	36	37	39																			
95	24	25	26	27	29	30	31	33	34	35	37	38																				
100	24	26	27	28	29	31	32	33	35	36	38	39																				

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

*Air Temperature and relative humidity can be measured by most weather apps found on smartphones.

A WBGT of less than **28** is considered normal conditions and the usual facilities and wash-down areas should be adequate.

At **28 – 30** considerations should be given to have shade available to horses and personnel. The overall effort of the competition should be reviewed, and the OC should frequently remind all people at the event to take precautions against the conditions (shade, shelter, water intake).

At **30 – 33** aggressive cooling facilities must be available for horses (Appendix A). Consideration should be given to the timing of the event (earlier/later in the day) and the duration and effort of the event.

It is well recognised that exercise over 6 minutes is more likely to result in heat stress in horses when working in high WBGT conditions. This includes warm-up and is most relevant in Eventing, Dressage and Endurance.

When WBGT is above **33** the conditions would be considered high risk and are probably not compatible with safe competition.

OCs need to consider workers/volunteers who may be required to be stationed in one place for long periods of time. Rotating roles and providing shade and ad-lib water should be considered.

Heavy rain/Flooding

Heavy rain is usually forecast in advance and OCs should have an understanding as to the likely local effects on their event.

Consideration should be given to access to, from and around the event, especially with reference to emergency services. Safe stabling and footing for horses should also be considered.

The effects on the ground condition of the venue after the event should also be taken into account so future competition is welcome back.

Wind

High wind conditions can cause hazards such as falling trees and flying objects as well as challenging the integrity of temporary structures such as tents. OCs should monitor local conditions and remove/secure at-risk structure items.

Cold

Cold, and especially windchill factor, can have serious effects on horses and riders during and immediately after exercise. This is most likely to be an issue at Endurance Rides where competitors are in the field of play for extended times. It is especially important to provide shelter from the elements immediately after exercise.

Appendix A - Aggressive Cooling.

The most effective way to rapidly cool a horse is to apply large volumes of cold water all over the horse and replace it as soon as the water warms. The colder the water is the faster the horse will cool.

- Aggressive cooling will **not** cause muscle damage.
- Aggressive cooling should continue until the horse stops panting, its heart rate falls below 100 bpm and its rectal temperature falls below 40c.
- Shade, fans, misting fans and hose spray nozzles assist in cooling.
- Wet towels draped over necks and rumps **do not** assist cooling and will actually trap heat in.

¹ FEI PREPARATION FOR AND MANAGEMENT OF HORSES AND ATHLETES DURING EQUESTRIAN EVENTS HELD IN THERMALLY CHALLENGING ENVIRONMENTS. March 2018