



Kingdom of Atlantia Extreme Heat Guidance for Marshals

August 31, 2021



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A. Purpose and Applicability

This Guidance serves as a resource for Marshals conducting martial Events and Activities where extreme heat may pose a risk for certain participants. This Guidance does not create new Kingdom Law, nor should it be considered mandatory. It is a tool for the Marshallate to utilize to make informed decisions on whether to continue, modify, suspend, or terminate certain martial activity due to high temperatures and heat index. This Guidance applies to all adult armored rattan, armored rebated steel, rapier (including cut and thrust), thrown weapons, target archery, siege, and equestrian (rider only) martial participants at Events and Activities. It does not apply to youth martial participants, animals, or non-combat participants.

Note: An "Event" is a registered official event on the Atlantia Kingdom Calendar. An "Activity" is an arts & sciences (A&S), business meeting, marshalled practices, etc. announced via any local official SCA medium whether Facebook, elist or newsletter. The terms Autocrat, Marshal, Martial in Charge (MIC), Marshallate, Earl Marshal and Deputies, and Minister/Mistress of the List (MOL) have the meanings contained in the Kingdom Governing Documents.

B. Planning and Set-Up

When martial Events or Activities are planned during times of the year likely to experience extreme heat, the Marshallate can use the following guidance to mitigate risk.

1. **Weather Review**

Heat Index combines ambient temperature and humidity for shaded areas. **Wet Bulb Globe Temperature (WBGT)** takes air temperature, humidity, cloud cover, light from the sun, and wind into account. Heat Index is easier to obtain and widely available, while WBGT (when available) is more accurate for heat stress risks.

Appendix A - Temperature Guidelines provides temperature-specific guidance for Heat Index and WBGT.

- Review National Weather Service (NWS) forecasts (1-week out, 3-days out, the day before, morning of)
 - **Heat Index**
 - NWS main website (<https://weather.gov>) or mobile site (<https://mobile.weather.gov>);
 - A mobile application from CDC that uses NWS data to determine the current heat index based on the user's location: www.cdc.gov/niosh/topics/heatstress/heatapp.html
 - **WBGT**
 - NWS website displays WBGT over a map interface (<https://digital.mdl.nws.noaa.gov>)
 - NOAA/CISA/SRCC's WBGT forecast: <https://convergence.unc.edu/tools/wbgt>

2. **Site Planning**

Consider heat abatement when choosing venues and sites for martial Events/Activities:

- Fighting fields and list areas that are naturally shaded, wooded, or have outdoor shelters
- Indoor venues that are air conditioned or have fans
- Events/Activity-provided pavilions.

3. **Communication & Publication**

Consider how and when planned and modified martial activities are communicated:

- Work with Autocrats so that contingencies are planned in advance and are communicated in the formal Event/Activity announcement;

- If the Event/Activity schedule must be changed **prior to** the Event/Activity start time, engage the Autocrat to notify participants of changes through all available official communications channels.

C. **Event/Activity Schedule & Format**

Consider heat abatement when planning martial Events/Activities. For example:

Schedule	Melees	Tournaments
<ul style="list-style-type: none"> ● Adjust Start Time: <ul style="list-style-type: none"> ○ Earlier in the day or later in the evening outside of peak heat risk hours ● Adjust Duration: <ul style="list-style-type: none"> ○ Provide additional recovery breaks ○ Extend recovery periods 	<ul style="list-style-type: none"> ● Use or re-locate to <u>existing naturally shaded or wooded areas</u> ● Create shaded areas ● Shorten the duration of <u>resurrection battles</u> (30 mins to 15 mins, etc.) ● Swap resurrection battles for <u>single death battles</u> or <u>limit the number of resurrections</u> (3 lives, 2 rezes, etc.) ● <u>Increase rest time</u> between scenarios ● Mandate time in resurrection through <u>scheduled releases</u> 	<ul style="list-style-type: none"> ● Use or re-locate to <u>existing naturally shaded or wooded areas</u> ● Create shaded areas ● Switch from bear pit to <u>double or single elimination tournaments</u> ● <u>Reduce the number of rounds</u> of tournament fighting ● <u>Increase rest time</u> between rounds

D. **Modifying Planned Martial Activities**

After the Event/Activity has commenced, the MIC should review [Appendix A - Temperature Guidelines](#). When the MIC reasonably believes that extreme heat may pose a risk **after** the Event/Activity has commenced, the MIC, working with the Autocrat, is encouraged to:

- **Consult with Officials.** Consult any present Kingdom Earl Marshal or discipline Deputies;
- **Adjust Activity Schedule/Format.** Consider adjusting the martial schedule pursuant to the [table above](#) and [Appendix A - Temperature Guidelines](#);
- **Communicate the Decision.** Consider how and when decisions regarding modified martial activities are communicated during the Event/Activity. For example:
 - Designate a Marshal to handle notifying individual participants one-on-one
 - Use a Herald to broadcast the decision to all Event/Activity attendees
 - Inform the Autocrat and any present Royalty and Barons/Baronesses
 - Note deviations from planned martial activity due to extreme heat in the MIC report

E. **Recognizing Heat Stress in Participants**

It is in the interest of Marshals, MOLs, and participants to be aware of the symptoms of heat-related illness. Heat-related illness conditions can present in a variety of ways that range from annoyance to a medical emergency.

General concerns to watch for:

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| ● Skin turning red, hot, dry, or appearing painful | ● Excessive sweating or noted lack of sweat |
| ● Weakness, difficulty holding onto objects, or problems with coordination | ● Pale, cool, moist skin |
| ● Failure to follow commands, acknowledge opponent actions, irritability, or confusion | ● Headache, nausea, or vomiting |
| | ● Fainting |

Resources with additional guidance:

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| ● www.cdc.gov/niosh/mining/UserFiles/works/pdfs/2017-128.pdf | ● www.weather.gov/grb/heat |
| ● www.cdc.gov/disasters/extremeheat/pdf/Heat_Related_Illness.pdf | ● www.nata.org/practice-patient-care/health-issues/heat-illness |

Appendix A - Temperature Guidelines

Heat Index OR WBGT	Activity & Rest Break Guidelines
Heat Index greater than or equal to 105°F OR WBGT greater than or equal to 90.0°F	<p>Reschedule Activities</p> <ul style="list-style-type: none"> • Recommend no outdoor martial Event or Activity while temperatures are in this zone
Heat Index 100°F-104°F OR WBGT 86.1°F-89.9°F	<p>Additional Precautions</p> <ul style="list-style-type: none"> • For all outdoor martial Events or Activities, ensure participants, marshals, and judges have access to shade & hydration for recovery periods • Watch participants carefully and evaluate rescheduling outdoor activities to a time when a cooler temperature occurs • Evaluate moving activities to an alternate area, keeping in mind safety zone and distancing requirements for spectators (e.g., shade, indoors) • Provide 15-minute rest breaks between rounds or for every 30 minutes of activity, whichever interval is shorter
Heat Index 95°F-99°F OR WBGT 82.1°F-86.0°F	<p>Implement Precautions and Heighten Awareness</p> <ul style="list-style-type: none"> • For all outdoor martial Events or Activities, ensure participants, marshals, and judges have access to shade & hydration for recovery periods. • Watch participants carefully and use discretion for intense or prolonged activities • Evaluate moving activities to an alternate area, keeping in mind safety zone and distancing requirements for spectators (e.g., shade, indoors) • Provide 10-minute rest breaks between rounds or for every 30 minutes of activity, whichever interval is shorter
Heat Index 88°F-94°F OR WBGT 78°F-82°F	<p>Basic Heat Safety Measures</p> <ul style="list-style-type: none"> • For all outdoor martial Events or Activities, ensure participants, marshals, and judges have access to shade & hydration for recovery periods • Provide 5-minute rest breaks between rounds or for every 30 minutes of activity, whichever interval is shorter

Appendix B - Works Referenced

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