

Kingdom of Atlantia Air Quality Guidance for Marshals

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A. Purpose and Applicability

This Guidance serves as a resource for Marshals conducting martial Events and Activities where poor Air Quality 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 poor air quality due to air pollutants. 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) and Youth martial participants at Events and Activities. It does not apply to 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.

Risks Related to Ground Level Ozone

Ground-level ozone (O₃) is a product of nitrogen oxides (NO_x) and volatile organic compounds (VOCs) in the presence of heat and sunlight. Motor vehicle exhaust, industrial emissions, gasoline vapors, and chemical solvents are among the major sources of NO_x and VOCs responsible for harmful buildup of ground-level ozone. Even at low concentrations, [ozone](#) can trigger a variety of health problems such as lung irritation and inflammation, asthma attacks, wheezing, coughing, and increased susceptibility to respiratory illnesses.

Risks Related to Particulate Matter

Particulate matter (PM), or airborne particles, includes dust, dirt, soot, and smoke. Some particles are directly emitted into the air by cars, trucks, buses factories, construction sites and wood burning to name a few examples. Other particles are formed in the air when gases from burning fuels react with sunlight and water vapor. Such gases, from incomplete combustion in motor vehicles, at power plants and in other industrial processes, contribute indirectly to particulate pollution. This pollution can cause chronic bronchitis, asthma attacks, decreased lung function, coughing, painful breathing, cardiac problems, and heart attacks, as well as a variety of serious environmental impacts such as acidification of lakes and streams and nutrient depletion in soils and water bodies. (US National weather Service)

B. Planning and Set-Up

When martial Events or Activities are planned during times of the year likely to experience poor air quality, the Marshallate can use the following guidance to mitigate risk. As always, individual participants should use their own judgment, considering their personal health and fitness when considering whether to participate in a given activity.

1. Weather Review

EPA has established national air quality standards to protect public health. Ground-level ozone and airborne particles are the two pollutants that pose the greatest threat to human health in this country. (US National Weather Service)

- NWS main website ([Air Quality Index \(weather.gov\)](http://www.weather.gov))
- Air Now website displays local AQI by Zip code. (<https://www.airnow.gov/>)

2. Site Planning

- Work with Autocrats so that contingencies are planned 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. AQI Chart

Index Value	Name	Color	Advisory
0 to 50	Good	Green	None
51 to 100	Moderate	Yellow	Unusually sensitive individuals should consider limiting prolonged outdoor exertion
101 to 150	Unhealthy for Sensitive Groups	Orange	Children, active adults, and people with respiratory disease, such as asthma, should limit prolonged outdoor exertion
151 to 200	Unhealthy	Red	Children, active adults, and people with respiratory disease, such as asthma, should avoid prolonged outdoor exertion; everyone else should limit prolonged outdoor exertion
201 to 300	Very Unhealthy	Purple	Children, active adults, and people with respiratory disease, such as asthma, should avoid outdoor exertion; everyone else should limit outdoor exertion
301-500	Hazardous	Maroon	Everyone should avoid all physical activity outdoors.

(American Lung Association)

D. Recommendations for Martial Activities

- Green and Yellow – No change to outside activities.
- Orange – Sensitive group should be aware of concerns and the effects of AQI.

- Red - Treat like high heat levels, limited duration activities, and longer breaks. Sensitive groups should not participate.
- Purple and Maroon - NO outdoor martial activities.

E. Use of Indoor Spaces

- Activities held indoors in air conditioned or air filtered spaces are not affected by outdoor AQI.

F. Sources

- **Air Now** ([Air Quality Index \(AQI\) | AirNow.gov](#))
- **National Weather Service** ([Air Quality Index \(weather.gov\)](#))
- **EPA** ([Air Quality | US EPA](#))
- **American Lung Association** ([Air Quality Index | American Lung Association](#))