

HOT WEATHER POLICY

Policy Title:	Hot Weather Policy
Effective Date:	21 September 2022
Scheduled Review Date:	15 December 2024
Version number:	Version 3.0
Approved By:	Head of Health, Safety and Environment

1. Purpose

- 1.1. This policy intends to reduce the risk of illness, injury or fatality to staff, students, volunteers and contractors under direct school supervision from heat related disorders.

2. Scope

- 2.1. This policy applies to all GEMS MENASA schools and is applicable to School Staff, Students & Contractors.

3. Policy Statement

- 3.1. The Hot Weather policy is in place to guide staff when making decisions about what is appropriate and safe for students and staff, when conducting outdoor activities or partaking in any recreational time involving outdoor play, throughout the year.
- 3.2. Four environmental factors affect experiences in a hot environment: temperature, humidity, air velocity and radiant heat. Examples of radiant heat include direct heat from the sun. Job-related factors that affect heat stress include work rate and physical effort required, type of clothing and protective equipment used, and duration of activity. All of these factors need to be evaluated in order to minimise their impact on staff and students. Personal characteristics such as age, weight, physical fitness, and acclimatisation to the heat also need to be factored in, to determine those people and areas at high risk.

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4. Responsibilities

HSE Department

- 4.1. The HSE Department is responsible for ensuring that the policy is available, reviewed at regular intervals and communicated to all relevant stakeholders.
- 4.2. The HSE Department is responsible for providing advice, training and guidance to comply with requirements of this policy, this advice may be given directly or through the appointment of competent persons.
- 4.3. The HSE Department is responsible for checking compliance with regards to this policy.

Principal

- 4.4. The Principal is responsible for ensuring this policy is communicated to all staff.
- 4.5. The Principal is responsible for ensuring staff are in compliance with the requirements outlined in this policy.
- 4.6. The Principal is responsible for ensuring communication and advice from the school clinic is adhered to.

MSO

- 4.7. MSOs are responsible for notifying school staff of any changes or modifications to GEMS policy or best practice guidelines.

Class Teacher

- 4.8. Review the Heat Index sent by the MSO or School Clinic Staff and plan lessons in line with the Heat Index recommendations of this policy.

PE Coordinator

- 4.9. To plan and coordinate outdoor activity to minimise moderate to high intensity sports to cooler months. To facilitate training on how to use the 'hot weather guidelines' and to assist teachers, if required, in using them. To ensure that non-PE teachers who take physically active enrichments outside are using the guidelines to support decision-making.

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School Clinic Team or School Operations Teams

- 4.10. Checks the Heat Index on a daily basis using the following website:
<https://www.wunderground.com/ae/dubai> from May – September and communicate the Heat Index to all staff via email. The Heat Index must be determined by applying the temperature and humidity from Wunderground to the Heat and Discomfort Index in Figure 1. Where the humidity falls between the 5% option, anything below halfway would attract the lower value and anything above halfway would attract the higher value. No on-site temperature measurements are permitted due to the variable nature of such equipment.

5. Definitions

- 5.1. **Fainting:** loss of consciousness due to insufficient blood flow to the brain; frequently caused by some emotional or sensory stimulus.
- 5.2. **Heat cramps:** painful muscle spasms, usually of the leg muscles, that occur after vigorous exercise; can also occur in the arms and stomach. No long-term problems should arise from heat cramps.
- 5.3. **Heat exhaustion:** mild hypovolemic shock arising when the body loses water and electrolytes from excessive sweating after exposure to heat.
- 5.4. **Heat stroke:** breakdown of the body's cooling mechanisms causing core body temperature to exceed 41C; a life-threatening emergency causing unconsciousness and death if not promptly treated in hospital.
- 5.5. **Heat Index:** The Heat Index, sometimes referred to as the apparent temperature, is a measure of how hot it really feels when relative humidity is factored with the actual air temperature.
- 5.6. **Relative humidity:** the moisture content of air expressed as a percentage of the maximum it can hold at a given temperature, (% RH). Optimum relative humidity for comfort is between 30% and 60%.

6. References

- 6.1. Safety in the heat – HAAD (Health Authority Abu Dhabi)
- 6.2. Facility Guidelines – DHA Dubai Health Authority
- 6.3. American Society of Heating, Refrigerating and Air Conditioning Engineers Manual

7. Procedure

7.1. Depending on the Heat Index reading, the steps below must be followed:

a. **Heat Index between 35 and 40**

Outdoor Physical Activity: Students who do not have a hat and water bottle will forfeit participating in physical activity and will be provided with alternative work. Teachers are to use discretion in modifying activities so that students participate in moderate-lower intensity activities. Regular water breaks will be offered.

Breaks & Lunchtime: Students are advised to stay under shade during breaks and lunchtimes. Discretion advised.

Swimming: Swimming may continue as normal.

b. **Heat Index between 40 and 45**

Outdoor Physical Activity: Lower intensity activities are to be included only and for a short period. 5-minute water breaks should be taken between activities.

Breaks & Lunchtime: Students must remain within shaded areas during breaks and lunchtime or preferably indoors.

c. Swimming: Swimming may continue as normal provided sufficient shaded areas are available. 5-minute water breaks should be taken between activities.

Consideration must be given to those outside of the water on poolside, such as students not participating, swim teachers and lifeguards.

d. **Heat Index above 45**

Outdoor Physical Activity: If the temperature and humidity moves into 'serious danger' and 'death danger' according to the heat index, any physical activity outside must be stopped.

Breaks & Lunchtime: Students should be moved into an indoor space with air conditioning. Where this not possible, students are permitted to use fully shaded outdoor areas with additional risk mitigation measures for example, misting fans. No physical activity can take place.

Swimming:

Where the swimming pool is outdoors and not shaded or only partially shaded, swimming must be stopped.

Where the swimming pool is outdoors and fully shaded, hourly checks of the temperature at the nearest weather station, as identified by using Wunderground, must be recorded. No on-site temperature measurements are permitted due to the variable nature of such equipment.

Swimming may continue, in this instance, for a heat index up to, but not exceeding a heat index of 47. A risk assessment must be completed for this additional access to swimming and shared with all relevant stakeholders. The risk assessment should be completed by the Head of PE or Aquatics and approved by the School Principal. When swimming at a heat index between 45 and 47, teachers must ensure students have their water bottles and are pre-hydrated prior to the activity and regular 5-minute water breaks are taken during the activity. Special considerations should be made for students that are not acclimatised and are new to the region. Considerations must be made for any

staff member outside of the water such as the swimming teacher and life guard. There must be no instances of students standing or waiting on the poolside – alternative arrangements must be made for them.

Where the heat index is reading 47.1 and above, swimming must be stopped.

This policy is in force during the school day and should the heat index be above 47 after 3pm, the school can initiate a prior agreed SOP that covers all the risks and control measures.

Heat and discomfort index

Additional guidance must be sought with reference to Figure 1 below. Activities must be modified to reflect student and teacher discomfort.

Figure 1

EuroWEATHER - Heat and discomfort index

HEAT AND DISCOMFORT INDEX

HUMIDEX INDEX OF APPARENT TEMPERATURE (degree C)

	25%	30%	35%	40%	45%	50%	55%	60%	65%	70%	75%	80%	85%	90%	95%	100%
42°	48	50	52	55	57	59	62	64	66	68	71	73	75	77	80	82
41°	46	48	51	53	55	57	59	61	64	66	68	70	72	74	76	79
40°	45	47	49	51	53	55	57	59	61	63	65	67	69	71	73	75
39°	43	45	47	49	51	53	55	57	59	61	63	65	66	68	70	72
38°	42	44	45	47	49	51	53	55	56	58	60	62	64	66	67	69
37°	40	42	44	45	47	49	51	52	54	55	58	59	61	63	65	66
36°	39	40	42	44	45	47	49	50	52	54	55	57	59	60	62	63
35°	37	39	40	42	44	45	47	48	50	51	53	54	56	58	59	61
34°	36	37	39	40	42	43	45	46	48	49	51	52	54	55	57	58
33°	34	36	37	39	40	41	43	44	46	47	48	50	51	53	54	55
32°	33	34	36	37	38	40	41	42	44	45	46	48	49	50	52	53
31°	32	33	34	35	37	38	39	40	42	43	44	45	47	48	49	50
30°	30	32	33	34	35	36	37	39	40	41	42	43	45	46	47	48
29°	29	30	31	32	33	35	36	37	38	39	40	41	42	43	45	46
28°	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43
27°	27	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
26°	26	26	27	28	29	30	31	32	33	34	34	35	36	37	38	39
25°	25	25	26	27	27	28	29	30	31	32	33	34	34	35	36	37
24°	24	24	24	25	26	27	28	28	29	30	31	32	33	33	34	35
23°	23	23	23	24	25	25	26	27	28	29	30	31	32	32	33	33
22°	22	22	22	22	23	24	25	25	26	27	27	28	29	30	30	31

- Up to 29 C° No discomfort
- From 30 to 34 C° Slight discomfort sensation
- From 35 to 39 C° Strong discomfort. Caution: limit the heaviest physical activities
- From 40 to 45 C° Strong indisposition sensation. Danger: avoid efforts
- From 46 to 53 C° Serious danger: stop all physical activities
- Over 54 C° Death danger: imminent heatstroke

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