1. PURPOSE

Seasonally Dubai reaches extreme temperatures. Children absorb more heat in hot days and are less capable to dissipate it and cooling their bodies. The purpose of the hot and severe weather policy is to provide the guidelines for outdoor activities and to ensure the health and safety of Swiss International Scientific School of Dubai community, especially students, during hot weather and sandstorm conditions and avoid heat-related illness.

2. APPLICABILITY

To ensure effective management of children & adults during severe weather conditions and outdoors activities at Swiss International Scientific School of Dubai all the members of the school community play a vital role.

3. DEFINITIONS/ABBREVIATIONS

3.1. SISD:
Swiss International Scientific School of Dubai.

3.2. Sandstorm:
During summer season it is common strong north-westerly winds to blow from Saudi Arabia. These winds (Shamal (north) in Arabic) increase the desert sand and reduce visibility and the sandstorms may last for several days.

3.3. Relative Humidity:
The percent of moisture in the air.

3.4. Temperature:
The temperature of the air in degrees Celsius.

3.5. Heat Index - HI:
Heat Index is an index that combines air temperature and relative humidity that determines the human - perceived equivalent temperature – how hot it feels to the person (also known as “feels like temperature”).

3.6. Severe weather:
Severe weather is any dangerous meteorological phenomenon with the potential to cause damage, serious social disruption, or loss of human life.
Severe weather can include strong winds, sandstorms, heavy rain, floods, hailstorms, downburst, wildfire, cyclones among others.

3.7. Heat-related illness:

- Heat Cramps:
  Caused by heavy exertion after prolonged or excessive exercise during extreme heat (affecting both children and adolescents). Cramps are an early sign that the body is having difficulty to deal with the heat.
    - Symptoms: profuse sweating, severe muscular pain, and spasms (usually stomach, arms, and legs), normal or slightly elevated temperature.
    - Immediate First Aid: rest in a cool place, provide fluids, do gentle stretching and massage to relieve spasms, and apply firm pressure to cramping muscles. If cramps persist for more than an hour, seek for further care.

- Heat Exhaustion:
  Caused by heat exposure and excessive sweating without necessary fluid replacement.
    - Symptoms: heavy sweating, paleness, muscle cramps, tiredness, weakness, dizziness, headache, nausea or vomiting and fainting.
    - Immediate First Aid: rest in a cool, shaded, and well-ventilated area, loosen clothing, have the person lie down with feet elevated, apply cool wet clothes or spray with water; give sips of water. Seek for further care if vomiting occurs and persists.
- Heatstroke:
  Is the most serious heat-related illness. It occurs when the body becomes unable to control its temperature: the body's temperature rises rapidly, the sweating mechanism fails, and the body is unable to cool down.
    - Symptoms: high body temperature (40oC/104F or higher); hot, red, and dry skin; no sweating, headache, or fatigue; nausea and vomiting; rapid and strong pulse, confusion, and disorientation. Can progress to coma and seizures.
    - Immediate First Aid: move to a cool room indoors, reduce body temperature by wrapping in wet and cold cloths and sponge with cool water. Seek for medical attention immediately.
- Sunburn:
  Caused by overexposure to the ultraviolet rays of the sun.
    - Symptoms: painful, red and warmth skin, skin blisters.
    - Immediate First Aid: Apply cool cloths on sunburned area or take a cool bath, apply moisturizing lotion, stay out of the sun until it heals, and do not break the blisters.
- Heat rash:
  Is an irritation of the skin that results from excessive sweating during hot and humid weather.
    - Symptoms: red clusters of small blisters that look like pimples, usually on the neck, chest, groin, or elbow.
    - Immediate First Aid: move to a cool and dry place, take a cool shower, and keep the rash dry.

4. RESPONSIBILITIES

4.1. It is the responsibility of the SISD Operations and Clinic Teams to develop and update the severe weather policy.

4.2. It is the responsibility of the HSE Committee and the Clinic Team to send out relevant prompts to the teachers regarding hot or severe weather.

4.3. It is the responsibility of the HSE Committee to share the policy for severe weather conditions and guidelines to outdoor activities with the Academic Team and the SISD community and make it available in the public folder and on the Parents Portal.

4.4. It is the responsibility of the Academic Leadership Team to implement the policy and ensure that the teachers follow the guidelines to keep the children safe.

4.5. It is the responsibility of the SISD Facilities Team to install and calibrate the outdoor thermometers (their location can be seen on the appendixes).

4.6. It is the responsibility of the SISD Facilities Team to set up the HI chart and the Guidelines for Outdoor Activities near the outdoor thermometers for easier access.

4.7. It is the responsibility of all SISD staff, parents, and students to follow this policy.

5. PROCEDURE AND DUTIES

SISD has the responsibility to ensure the health and safety of their students, staff, and parents always, and this includes outdoor activities during hot and severe weather conditions.

5.1. It is the expectation of SISD that the parents:

- Apply sunscreen to their children before coming to school.
- Remind their children to wear their hat during outdoor activities.
- Remind their children to regularly drink water.

5.2. Additionally, the SISD expects from all the students that they:

- Apply sunscreen before coming to school.
- Wear their hats and drink water regularly during outdoors activities.
- Inform the person on duty if experiencing any symptoms of heat-related illness or asthma.
- Take regular rest periods while playing outdoor.

5.3. The Academic Leadership Team should:

- Read the temperature and humidity on the outdoor thermometer.
- Use the HI (appendix A) to allow or not allow the outdoor activity/break.
- Look out for other severe weather such as thunderstorms, downbursts, high winds, strong rainstorms, sandstorms/dust storms, etc.

5.4. The members of the Physical Education/Sports Department should:

- Read the temperature and humidity on the outdoor thermometer.
- Use the HI (appendix A) to calculate and report to the Head of P.E/Sports Section, who would then allow or not allow the outdoor activity/break.
- Remind students to drink plenty of water during outdoor activities and always wear their hats.
- Remind students to take regular rest periods while playing outside.
- Observe closely for symptoms of heat-related illness and provide the immediate first aid and/or take the children to the school clinic.
- Do not allow children to play outdoors during a sandstorm or other forms of severe weather.
- Observe closely asthmatic children when the weather conditions are dusty.

5.5. The SISD teachers, teaching assistants, classroom assistants should:

- Remind students to drink plenty of water during outdoor activities and always wear their hats.
- Remind students to take regular rest periods while playing outside.
- Observe closely for symptoms of heat-related illness and provide the immediate first aid and/or take the children to the school clinic.
- Do not allow children to play outdoors during a sandstorm or other forms of severe weather.
- Observe closely asthmatic children when the weather conditions are dusty.

5.6. SISD has taken the following measures to maintain health and safety in whole community:

- We are equipped with shaded playgrounds/outdoor areas.
- We always ensure the accessibility to water fountains/cool water.
- We re-schedule/reduce outdoor activities during hot months.
- We cancel outdoor activities during severe weather as per the updates from the authorities.

6. APPENDIXES

- **Appendix A:** Heat Index Chart
- **Appendix B:** Heat Index Guidelines for Outdoor Activities

Appendix A - Heat Index Chart (HI Chart)

Air Temperature °C	21°	24°	26°	27°	28°	29°	30°	31°	32°	33°	34°	35°	36°	37°	38°	39°	40°	41°	42°	43°	44°	45°
Relative Humidity %	Heat Index = Apparent Temperature / What it Feels Like (°Celsius)																					
0%	19	22	25	26	26	27	27	28	29	29	30	31	32	32	33	34	35	36	36	37	38	39
10%	19	23	25	26	26	27	28	29	29	30	31	32	33	34	35	36	37	38	39	40	41	42
20%	20	23	25	26	27	27	28	29	30	31	32	33	34	35	37	38	39	41	42	44	46	47
30%	20	23	25	26	27	28	29	30	31	32	33	35	36	38	39	41	43	45	47	49	52	54
40%	20	24	26	27	28	29	30	31	32	34	35	37	39	41	43	46	48	51	54	57	60	63
45%	20	24	26	27	28	29	30	32	33	35	37	39	41	43	46	49	51	54	58	61	64	68
50%	20	24	26	27	28	30	31	33	34	36	38	41	43	46	49	52	55	58	62	65	69	73
55%	21	24	26	28	29	30	32	34	36	38	40	43	46	49	52	55	59	62	66	70	75	79
60%	21	24	27	28	29	31	33	35	37	40	42	45	48	51	55	59	63	67	71	76	81	
65%	21	24	27	28	30	32	34	36	39	41	44	48	51	55	59	63	67	72	77	82		
70%	21	24	27	29	31	33	35	38	40	44	47	50	54	58	63	67	72	77	82			
75%	21	24	28	29	31	34	36	39	42	46	49	53	58	62	67	72	77	83				
80%	21	25	28	30	32	35	38	41	44	48	52	57	61	66	71	77	83					
85%	21	25	28	30	33	36	39	43	47	51	55	60	65	70	76	82						
90%	22	25	28	31	34	37	41	45	49	54	58	64	69	75	81							
95%	22	25	28	32	35	39	43	47	52	57	62	68	74	80								
100%	22	25	28	33	36	40	44	49	54	60	66	72	78									

- NOTE: To find the Heat Index it is necessary to correlate the temperature and humidity. (Example: for an outdoor temperature of 32°C and humidity of 60%, the HI is 48, which is in the orange/warning category).
- The HI chart and the Guidelines for Outdoor Activities are to be placed near the outdoor thermometers.

Appendix B – Heat Index Guidelines for Outdoor Activities

Heat Index	Action
>31	**SAFE**
	Establish basic heat safety and planning
	Children may play outdoors.
	Watch signs of children feeling uncomfortable (discomfort and fatigue). Watch out for other severe weather (heavy rain, thunderstorms, high wind, dust storms).
	Remind children to wear their hats, put on sunscreen and drink water.

Heat Index	Action
32-40	**CAUTION**
	Heighten Awareness and keep a lookout
	Children can play outdoors but should be monitored for signs of heat-related illnesses.
	Increase the number of rest periods and water intake. Remind children to wear hats and sunscreen.
	Reschedule outdoor activities to a cooler time (early morning or evening). Limit heavy physical activities.

Heat Index	Action
41-51	**WARNING**
	Implement precautions and continue raising awareness
	Extensive outdoor activities should be avoided. Children cannot spend the whole break outside.
	Increase the number of rest periods and water intake. Remind children to wear hats and sunscreen.
	Practice extreme caution for heat-related illnesses.

Heat Index	Action
>52	**DANGER**
	Implement aggressive protective measures
	NO OUTDOOR ACTIVITIES. Provide indoor areas to play.
	Increase water intake, even while playing indoors.
	Practice extreme caution for heat-related illnesses, even while indoors.