

This policy ensures a secure and comfortable environment by addressing risks associated with elevated Heat Indexes. It delineates specific measures to be enacted at varying levels of heat conditions to safeguard the health of students, staff, and visitors.

The Senior Leadership Team will review this policy annually, incorporating the latest best practices and feedback to ensure ongoing efficacy in managing heat-related risks.

The Office Manager will monitor the Heat Index daily through our air quality dashboard during periods of high temperatures. Activity levels and protective measures will align with the following reference and triage system:

		Temperature (°C)																
		27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43
Relative Humidity (%)	40	27	28	29	30	31	32	34	35	37	39	41	43	46	48	51	54	57
	45	27	28	29	30	32	33	35	37	39	41	43	46	49	51	54	57	
	50	27	28	30	31	33	34	36	38	41	43	46	49	52	55	58		
	55	28	29	30	32	34	36	38	40	43	46	48	52	55	59			
	60	28	29	31	33	35	37	40	42	45	48	51	55	59				
	65	28	30	32	34	36	39	41	44	48	51	55	59					
	70	29	31	33	35	38	40	43	47	50	54	58						
	75	29	31	34	36	39	42	46	49	53	58							
	80	30	32	35	38	41	44	48	52	57								
	85	30	33	36	39	43	47	51	55									
	90	31	34	37	41	45	49	54										
	95	31	35	38	42	47	51	57										
	100	32	36	40	44	49	54											

Heat Plan - ELC International Schools

Level 1: Caution	Heat Index: 27°C - 32°C	- Promote hydration with accessible water sources. - Outdoor activities to be scheduled in cooler times of the day. - Educate on the signs of heat-related stress.
Level 2: Extreme Caution	Heat Index: 33°C - 40°C	- Outdoor activities to be limited in intensity and duration. - Rest areas should be shaded or cooled. - Recommended water breaks every 15 - 20 minutes when students are outdoors - Active monitoring for heat-related symptoms.
Level 3: High Risk	Heat Index: 41°C - 44°C	- Advise on extreme risk of heat illness; exclude dehydrated students from activities. - Scheduled Physical Education and ASA lessons will proceed with lower-stress activities and mandatory water breaks every 15 minutes in cooled locations. - Outdoor playtimes are limited to 15 minutes. - Move high-exertion activities to shaded or indoor areas.
Level 4: Extreme Danger	Heat Index above 45°C	- Implement immediate cessation of all non-air-conditioned activities. - Recognize imminent risk of heat stroke and take emergency actions as necessary.

BACKGROUND

Heat-Related Illnesses

When the body heats too quickly to cool itself safely, or when too much fluid or salt is lost through dehydration or sweating, body temperature rises, and heat-related illness may develop. There are three stages of Heat-related illness that all staff teaching at ELC need to be aware of:

1. Heat Cramps are experienced from fluid loss due to heavy sweating and usually occur in the abdomen or legs.
2. Heat Exhaustion derives from prolonged exposure to hot conditions with high fluid loss due to heavy sweating and an elevated body temperature below 40 degrees Celsius (104 Fahrenheit)
3. Heat Stroke is a condition when the core body temperature is higher than 40 degrees Celsius (104 Fahrenheit) and is potentially fatal.

Heat Stroke is a serious condition with complications involving the central nervous system that occurs after prolonged exposure to high temperatures. Heat cramps and Heat Exhaustion can quickly turn to heat stroke if signs and symptoms are not recognized and treatment is not administered quickly.

Thailand has a hot and humid climate for most of the year, with the temperature and humidity combining to make the temperature feel considerably hotter. At ELC, we monitor weather conditions via our on-campus weather station, which allows us to gauge actual temperatures and humidity on campus.

Some sporting activities can continue in high temperatures if risk factors are identified and managed. Those at risk of suffering from heat-related illnesses are the very young, elderly, obese, diabetics, persons recovering from illness and diarrhea, or suffering from chronic conditions. Other risk factors include poor hydration, high temperatures, and humidity, excessive physical exertion, insufficient recovery time, and inappropriate PE uniforms and clothes. Students new to the country and environment are particularly vulnerable. A combination of these risk factors elevates the chance of someone suffering from a heat-related illness.

Ambient Temperature

<u>Temperature</u>	<u>Medical Conditions</u>
26-32C 80-90F	Fatigue is possible with prolonged exposure and activity. Continuing activity could result in heat cramps.
33-40C 90-105F	Heat cramps and heat exhaustion are possible. Continuing activity could result in heatstroke
40-54C 105-130 F	Heat cramps, and heat exhaustion is likely. heatstroke is probable with continued activity
Over 54 C Over 130 F	Extreme danger — heat stroke is imminent

SIGNS AND SYMPTOMS OF THE THREE STAGES OF HEAT-RELATED ILLNESS

1. Signs and Symptoms of Heat Cramps

- Profuse Sweating
- Fatigue
- Thirst
- Muscle Cramps
- Treatment:
 - Move to a cool environment
 - Sip a drink containing electrolyte solution (or water if electrolyte not available)
 - Massage the area that has cramped
 - When the cramp resolves may continue exercise as long as drinking plenty of fluids and all symptoms have resolved
 - Call Nurse if not improving with the above measures

2. Signs and Symptoms of Heat Exhaustion

- The signs and symptoms of Heat Cramps and...
- Headache
- Dizziness and Lightheadedness
- Weakness
- Nausea and Vomiting
- Cool, Moist Skin
- Dark Urine
- Treatment:
 - Call Nurse
 - Move to a cool environment
 - Apply cool, wet cloths to the patient's skin rotating them regularly. Fan the patient
 - Sip a drink containing electrolyte solution (or water if electrolyte is not available). Do not drink too quickly
 - Encourage them to rest in a comfortable position
 - Inform parents and parents must pick students up from school
 - Ensure they do not return to physical activity for several hours
 - Call for an ambulance if their condition does not improve or any deterioration and Nurse not available

3. Signs and Symptoms of Heat Stroke

- Throbbing headache
- Dizziness and lightheadedness
- Lack of sweating despite the heat
- Red, hot, and dry skin
- Muscle weakness or cramps
- Nausea and vomiting
- Seizures
- Rapid, shallow breathing
- Unconsciousness
- Rapid heartbeat-strong or weak
- Confusion, disorientation, or staggering
- Treatment:
 - Call Nurse immediately (if Nurse is unavailable to call an ambulance). Transfer to hospital
 - Rapid cooling with the use of iced towels or ice packs over the entire body, frequently rotating for 20 minutes or until the condition improves

EDUCATION & PREVENTION

Provide Staff Training (Yearly)

- Sun Protection Guidelines
- Signs, symptoms and treatment of heat related illnesses and Hyponatremia
- Risk factors associated with the onset of heat related illnesses
- First Aid -All teachers to be certified
- Reminders from staff to students about hydrating all day

Educate students and parents regarding sun and heat exposure (Yearly)

- Sun Protection Awareness through PE/Health
- Education through the curriculum
- Make parents aware of our Heat guidelines
- Reminder in class to hydrate throughout the day

Ensure students are protecting themselves (Daily)

- Students are recommended to wear sun hats
- Spare hats and water bottles made available
- Have a set of clothes and PE kit that is appropriate for hot conditions
- Encourage the daily application of sunscreen in physical activity

Encourage students to avoid dehydration (Daily)

- Students to have water bottles in class, PE, activities and trips
- Students engaging in physical activity should be encouraged to drink 100 to 250ml of water every 20 minutes

Ensure this Policy is reflected in the planning of outdoor classes, activities, events and capital development projects (Yearly)

- Tree planting for shade is actively considered and encouraged
- Current and future projects consider use of shading
- Physically energetic sports, competitive games during the cooler periods of the day/months sporting events, trips planned for cooler months

Monitor the weather and issue advice

- Outdoor sensors to monitor temperature and humidity on a real time basis
- Auto generated warnings of extreme temperatures issued to key staff
- Temperature, humidity and measurements displayed

Adhere to standard operating procedure

- Ensure all staff are aware of procedure
- Display standard operating procedure
- Ensure activity providers and external companies adhere to standard operating procedures

HEAT MANAGEMENT GUIDELINES FOR OUTDOOR ACTIVITIES & SPORTS

le. PE & Playtime

- The Heat Index is automatically calculated from the ELC outdoor monitors and guidelines based on a 15-minute running average. Staff involved in outside activities need to check readings before engaging in these activities to be aware of the zone they are currently in.
- The PE Coordinator and Office Manager will check the Heat Index throughout the day.
- Physical Education staff should monitor the temperature regularly and adjust activities based on the zone they are in
- Staff who are on duty should make themselves aware of the Heat Index