

KIS Heat Management Policy and Guidelines

Policy Statement

At KIS we encourage students to actively participate in outdoor play and activities as a part of a balanced lifestyle. PE lessons, recess on playgrounds and sports programmes are all an integral part of being active and healthy, helping students to stay focused, reduce stress and increase immunity. High temperatures can present dangerous situations for students and staff but with precautions, situations can be minimized and controlled. KIS has developed guidelines to ensure students are safe when active outside and in non-air conditioned indoor spaces.

Monitoring the Outdoor Temperature and Heat Index

KIS has installed heat sensors and temperature reading devices on campus. Display screens on the Upper Grade School playground and in the Aquatics Centre measure and display the heat index in real time. Staff who are leading/supervising outdoor activities should regularly monitor these readings on the screen outside the canteen and on KISNET and follow the related guidelines set in this policy.

Communication

The administration will monitor the Heat Index at all times and will relay information to staff relating to level 4 and 5 procedures

Action Plan

Teachers and support staff who are responsible for students whilst outdoor will be aware of an alarm on the playing field and UGS playground signaling a red light with the heat index reading. (Temp vs HI reading). When the red light shows and the 50° C plus, staff must follow the below recommendations and follow the Heat Management Guidelines.

For the purpose of monitoring student outdoor time a Five (5) level plan has been developed to ensure student and staff safety.

25° -34° C	Level 1	<ul style="list-style-type: none"> ● Normal outdoor conditions
35° - 44° C	Level 2	<ul style="list-style-type: none"> ● Caution increased heat index (HI)
45°-49° C	Level 3	<ul style="list-style-type: none"> ● Amber Alert - High heat index (HI)
50°-54°C	Level 4	<ul style="list-style-type: none"> ● Red Alert - Extreme heat index (HI)
Above 54°C	Level 5	<ul style="list-style-type: none"> ● Extreme Danger

Please follow the recommendations on the accompanying chart to ensure the safety and wellbeing of students and staff.

Heat Management Guidelines (Levels 1-Levels 5)

Heat Index (HI)	Risk Level	Response
25° -34° C	Normal Level 1	<ul style="list-style-type: none"> Provide water breaks as required. Students should be reminded to bring a water bottle from home Hats should be worn outdoors to protect against the sun/heat Sports coaching and PE lessons continue as normal with rest periods.
35°- 44° C	Caution Level 2	<p>Sunstroke, heat cramps or heat exhaustion are possible with prolonged exposure and physical activities.</p> <ul style="list-style-type: none"> Students should be reminded to bring water bottle from home. Frequent water breaks are required Take frequent rest breaks during activities Find shady areas in which to play EY should monitor outdoor activities and students - exposure should be limited to 15/20 minutes Decrease exertion and provide less active alternatives Modify training and games to allow hydration and rest
45°-49° C	Amber Alert Level 3	<p>Sunstroke, heat cramps or heat exhaustion are very likely with prolonged exposure and physical activities. Follow Level 3 protocol</p> <p>Activate relocation/shade strategies:</p> <ul style="list-style-type: none"> More /constant water breaks required All outdoor activities for students should be in shaded areas with maximum exposure of less than 15 minutes Students should NOT be involved in active play or strenuous activities Duty persons have the authority to call indoor recess if they feel it is too hot Students with signs and symptoms of heat related illnesses should be sent to the school nurse immediately EY all activities are moved inside at the discretion of the duty teacher Should it “feel too hot” play/PE may be cancelled by the PE staff and/or administration Sport coaching, sports fixtures and tournaments can be modified at the discretion of the Athletics Manager and/or SEA Director.
50°-54°C	Red Alert Level 4	All decisions regarding outdoor activities will be communicated by the administration who will take into consideration all weather variables.
Above 54°C	Extreme Alert Level 5	All non air conditioned activities are cancelled

Additional information

It is important in the tropics that a close eye is kept on students at all times, especially younger students who are less likely to self-monitor their body heat and levels of exertion. To ensure students stay safe and well during times of high temperatures and soaring heat index it is important that teachers/responsible adults:

- Ensure students are well hydrated, offering water breaks throughout and at the end of activities
- Observe students for signs of heat related conditions
- Encourage less strenuous play/activities
- Provide activities in the shade if students appear tired, lethargic overly sweaty or irritated
- Monitor the temperature and heat index and follow the KIS guidelines

Dehydration

Children get dehydrated if they do not replace body fluids lost by sweating. Being even a little dehydrated can make a child feel unwell and play less effectively. Dehydration also puts children at risk for more dangerous heat illnesses.

Signs and Symptoms of dehydration:

- Dry mouth
- Thirst
- Being irritable or cranky
- Headache
- Seeming bored or disinterested
- Dizziness
- Cramps
- Excessive fatigue
- Child not able to run as fast or play as well as usual

Heat Cramps

Heat cramps are a mild heat illness that can be easily treated. These intense muscle spasms usually develop after a child has been exercising for a while and has lost large amounts of fluid and salt from sweating. Children who sweat a lot or have a high concentration of salt in their sweat may be more likely to get heat cramps. Heat cramps can largely be avoided by being adequately conditioned, getting used to the heat and humidity slowly, and being sure a child eats and drinks properly.

Signs and Symptoms of heat cramps:

- Intense pain (not associated with pulling or straining a muscle)
- Persistent muscle contractions that continue during and after exercise

Heat Exhaustion

Heat exhaustion is a moderate heat illness that occurs when a child continues to be physically active even after he or she starts suffering from ill effects of the heat, like dehydration. The child's body struggles to keep up with the demands, leading to heat exhaustion.

Signs and Symptoms of heat exhaustion:

- Child finds it hard or impossible to keep playing
- Loss of coordination, dizziness or fainting
- Severe dehydration
- Profuse sweating or pale skin
- Headache, nausea, vomiting or diarrhea
- Stomach/intestinal cramps or persistent muscle cramps

Heat Stroke

Heat stroke is a severe heat illness that occurs when a child's body creates more heat than it can release, due to the strain of exercising and activity in the heat. This results in a rapid increase in core body temperature, which can lead to permanent disability or even death if left untreated.

Signs and Symptoms of heat stroke:

- Increase in core body temperature, usually above 104°F/40°C when the child falls ill
- Central nervous system dysfunction, such as altered consciousness, seizures, confusion, emotional instability, irrational behavior or decreased mental acuity

Other possible indicators include:

- Nausea, vomiting or diarrhea
- Headache, dizziness or weakness
- Hot and wet or dry skin
- Increased heart rate, decreased blood pressure or fast breathing
- Severe dehydration
- Irritation/lack of patience

It is important to act on any of the above symptoms quickly as students can move from dehydration to heat stroke rapidly if left unattended.

Adopted: April 2019