



# Hay Al-Sharooq International School

## Environmental Hazard Protocols

The School's Health and Safety policies aim to reduce the chances of an emergency occurring. However no amount of planning can totally prevent accidents or emergencies; therefore this document sets out the procedures for dealing with a number of identified environmental events which pose a potential threat to our students and colleagues.

### Extreme Heat and Humidity

During extremely high temperatures, people may not be able to produce enough sweat to aid cooling. With the addition of high humidity this prevents evaporation of sweat. In times when such conditions prevail, the following control measures may be employed.

- Wear loose fitting, light weight, light coloured clothing. Dark or tight clothing holds heat and does not allow the body to cool properly, because it inhibits evaporation.
- Avoid getting sunburned, as sunburn reduces the body's ability to cool down.
- Being in an air-conditioned building is one of the ways to avoid heat exhaustion. Fans alone are not adequate to counter high humidity or temperature.
- To protect people from and limit the exposure to ultraviolet light. Exposure to intense ultraviolet light increases the risk of cataracts in later life.
- To encourage sensible behaviour in adverse conditions. Break times for students are at the hottest times of the day, between 11:00 and 15:00 hours.
- To reduce intense activity such as football and basketball to avoid over heating the body.
- Drink plenty of fluids - staying hydrated helps the body sweat therefore maintaining body temperature.

If the temperature is over 45°C and/or high humidity, the Operations Manager will inform SLT by 11:15 (or earlier if necessary) of the outdoor temperature and humidity. The Principal will inform all staff at HASIS of the arrangements for the remainder of the day, which may include restricting time outdoors or closing the School. Travel during times of peak temperature should also be avoided. In outdoor play is restricted, students must stay in designated areas such as the MPH and Sports Hall if available. They must show respect for supervising staff and ensure the areas are tidied at end of break.

### Severe Atmospheric Disturbance

In the event of severe weather which could damage the school building, infrastructure or threaten the wellbeing of staff and students, special action is required to mitigate harm. Severe weather phenomena which could affect TIS Miri are:

- Lightning Strike
- High Winds/Cyclones
- Intense rainfall leading to localised flooding

The general impacts of such hazards are listed below:

- Road access to the School may become impassable due to floodwater or debris distribution in local wadis.



- The building may become damaged and its internal integrity threatened.
- Outdoor activities may be risky due to direct impact by the hazard, being pushed or thrown by the wind or impact by flying debris. Following structural failure, this may also apply to regions within the building.
- Power, water and gas supplies may be disrupted for an indefinite time period.

A number of common issues are explored below, and advice is given to staff regarding taking refuge in the School and the protocol surrounding the times students should remain in the school.

In the event of such weather affecting the School, warnings may vary considerably in terms of quality of information provided and the time period between warning and impact, if any. Each issue carries their own specific risks and potential hazards, and so specific plans are not appropriate; the response of all staff must be flexible to the changing conditions.

Following warning of a severe weather event, it is the responsibility of the Principal, Operations Manager and SLT to gather as much information as possible about the type of weather hazard, its expected time of arrival, and gauge its potential impact on the School. For potentially severe storms or when information from local meteorological sources is limited, spotters may be posted to watch the approach of the storm and provide warning and updates to the Principal by mobile phone.

Following news of an approaching weather hazard, any outdoor lessons or play should be postponed; such locations are the most susceptible to harm caused by severe weather, with lightning the greatest threat. If thunder is heard or lightning is seen, outdoor activities should be delayed with students and spectators moved to safety immediately. Staff should not wait for rain. The delay in activities should last until the event has safely passed, which can be defined as no audible thunder or visible lightening for at least fifteen minutes.

As the weather hazard approaches, staff should begin preparations to move students from the most susceptible areas of the School areas of safe refuge. Staff must ensure all windows and exterior doors are closed and secured if a severe storm is approaching. The large windows common in most of the corridors of the School could shatter from wind pressure or being struck by airborne debris. Windows on the side of the School facing to windward are most susceptible, but as the storm passes, other windows can shatter. Once high winds enter a building, additional damage is far more likely.

The upper floors of the School should be evacuated: students should take shelter in classrooms on the ground floor. Small interior rooms and interior hallways away from exterior doors offer the best protection. Large rooms with wide ceilings such as the Sports Hall, Library, Atria or Multi-Purpose Hall are relatively vulnerable areas. The collapse of a room's outer wall can lead to failure of the roof. Roofs can also fail from strong upward wind pressures that they were not designed to resist. In addition to strong damaging winds, severe thunderstorms or cyclones may contain large hailstones, even at this latitude, and students should be moved out of classrooms with skylights, light-wells and large exterior windows. Classroom storage areas, changing rooms, interior medical rooms and lavatories are particularly safe rooms.

If there is no warning and staff and students are in their classrooms, the class should take shelter beneath their desks and cover their heads. Visitors and parents should congregate in the Leadership Suite and corridor. Once the storm has passed, stay alert for the possibility of additional storms. It may be necessary to hold classes in place during or just after a hazard event, and possibly hold them in school after normal departure time until the Principal has deemed the weather threat to have passed by.

If the warning period is considerable, the Principal may advise that the school day may be altered; a delayed start or early departure from school, or full cancellation of teaching for the day. Such action is at the Principal's discretion and staff will be informed appropriately in the event of such a decision being taken. For example, in the event of severe storm or localised flooding leading to treacherous driving conditions, the



start time of school may be delayed to allow time for the waters to subside. Likewise, it may be wise to send children home early to prevent them becoming caught in cars during a severe weather event. Parents will be contacted directly by email and/or telephone from the School Reception. Times will be provided for arrival, pick-up, or notice of full closure. Parents should be dissuaded from collecting and removing their children from school arbitrarily.

## Dust and Sandstorms

Dust comprises of tiny particulates suspended in the atmosphere, which scatter and absorb sunlight when present in high concentration, reducing visibility. Prolonged exposure to high concentrations of particulates can be harmful to health. Associated with previous haze episodes, there have been reports of increases in incidences of eye and throat irritations and respiratory difficulties among sensitive groups.

The Omani Meteorological Department routinely monitors atmospheric conditions and the ambient air quality. One of the parameters measured is total suspended particulate (TSP) concentration in air which is directly related to haze intensity. Other meteorological parameters such as horizontal visibility, relative humidity and wind velocity are useful indicators in understanding the haze phenomenon and forecasting its occurrence and likely rate of dispersal. Using data provided by the OMD is the best way of informing the correct School Response to Haze. The Operations Manager will inform the Principal or Deputy Principal in his absence of the readings and act according to the following guidelines.

**Below 90 ppm:** School activities continue as normal.

**Between 90 and 120 ppm:** Outdoor activities cease, and movement between buildings will be limited to necessary journeys only. Lessons will continue as normal, and children will remain in their classrooms during breaks. In all other ways, the School will operate as normal.

**Above 120 ppm:** The School will be told to close in accordance with State and National Guidelines. Parents will be informed by telephone and email via the School Reception. At this point, the staff and students will collect in the MPH. The air conditioning units will be switched off to prevent particulate matter being drawn in to the room, but the independent cooling units will be switched on to keep the temperature at a tolerable level whilst the children wait for their parents to collect them. Parents will be kept informed of subsequent developments by telephone, email and national radio. Staff will remain on duty until all children have been collected or at the discretion of the Principal depending on requirement.

## Animal Attack

A number of species are found in Oman which live in close proximity to the School, and could present a risk to the wellbeing of staff and students. Such risks can be managed to reduce the likelihood of an animal attack, whereas the severity of such an event is harder to reduce. Thus, it is important to consider the methods by which harm can occur and what the School can do to limit or prevent this.

**Insect bites:** Ants and Bees are may encountered on the School Campus. Some children are hyper-allergic to the venom of such insects. Death is caused by suffocation as the windpipe swells and chokes the victim. Warning of such a reaction is usually provided by related swelling and itching in other parts of the body, in addition of dizziness and laboured breathing. A rapid medical response and appropriate treatment is crucial. This normally takes the form of an adrenaline injection into the thigh, although an asthma inhaler can be used to aid breathing on the way to the hospital. A shot of adrenaline is usually administered. A steroid injection may be required too. In serious cases, an emergency tracheotomy may be necessary.



Prior experience is not a guarantee of safety in this instance, as a previous bite may result in sensitisation. Subsequent reactions become progressively more severe. On average, 50% of victims of stings have an entirely normal response on one occasion but suffer a serious reaction the next, and children are particularly sensitive in this fashion. Observation and attention is extremely important.

**Snake bite:** The small size of a child increases their vulnerability to the bite of a venomous snake. All snake bites should be treated as if they were venomous, and the victim must be taken to hospital as quickly as possible, especially if you are unsure of the exact type of snake responsible for the bite. With the correct treatment, severe illness and/or death can usually be prevented.

In the first instance, the victim should be moved to a nearby safe area, away from the snake. While waiting for emergency assistance:

- Encourage the victim to lie down, rest, and keep calm.
- Wash the bite with soap and water.
- Keep warm and avoid cooling the area to prevent further tissue damage.
- Remove all rings, watches, and constrictive clothing in case of swelling.
- Loosely immobilize the bitten area and keep it lower than the heart.
- Do not give the victim anything to eat or drink.
- Monitor heart rate and breathing.
- Note the time of the bite, and appearance, size and type of snake in order to inform EMS staff.
- Draw a circle around the affected area and mark the time of the bite and the initial reaction.
- Do not apply a tourniquet.

It is important for adults to teach the children to leave snakes alone. People are often bitten because they try to kill a snake or get too close to it.

**Stray dogs:** the numbers of canine strays in the Sur locality is not high, but the presence of food scraps will attract stray animals to the School site. Young children are often bitten by dogs; particularly boys aged five to nine years old. Male dogs are usually responsible. Bites from stray dogs are thankfully rarer than pets because strays are often wary of humans and usually keep their distance. Pet dogs are not allowed on Campus. A child must not be left unsupervised in the presence of a dog, regardless of what type of dog it is or its previous behaviour.

If the wound from an animal bite is small, it can be cleaned using tap water before seeking medical advice. If the wound is bleeding heavily, a clean pad or sterile dressing should be placed over it and pressure applied. Large, deep or dirty wounds should be assessed and treated by a healthcare professional, who will assess, clean and dress the wound. An open wound that is bleeding excessively may be stitched up straight away to prevent blood loss, despite the risk of infection and subsequent serious complications.

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