



Rugby School  
THAILAND

# Rugby School Thailand

## Lightning Policy

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*The health, safety and well-being of young people are of paramount importance to all the adults who work at Rugby School Thailand. Children have the right to protection, regardless of age, gender, race, culture, sexual orientation, or disability. They have a right to be safe in our school. Members of staff in the school have a legal and moral obligation to safeguard and promote the welfare of the pupils, taking all reasonable steps to protect them from harm whether from physical injury, abuse, neglect, emotional harm or from anything that interferes with their general development*

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## **Preface**

Lightning is indiscriminate and potentially lethal.

85% of all victims are aged 10-35 years and are either working outdoors or engaged in some form of outdoor recreation.

About 20% of lightning strikes are fatal. Death is usually caused by cardiac or respiratory arrest. Survivors typically suffer from burns, kidney failure, injuries related to being thrown by the strike or falling after it, and psychiatric, visual or auditory disorders. About 70% of survivors of encounters with lightning will suffer from residual effects. These may not be immediately apparent, but develop over time, resulting in chronic neurological symptoms such as sleep disorders, memory loss, nerve pain, or personality changes. These symptoms are the result of damage to the nervous system by the intense electrical charge of a lightning strike.

*During a thunderstorm, each cloud to ground strike is potentially lethal. Although some victims are hit by the main strike, many are hit as current moves in or along the ground, or jumps sideways from other objects. This characteristic of lightning creates potential for groups of people to be hit at the same time.*

Lightning strikes result in large voltage gradients- around 300 kilovolts, but they are extremely fast, a few milliseconds at most. Most of the current will pass over the surface of the body, a phenomenon known as external flashover. By contrast, industrial electrocution delivers between 20 and 63 kilovolts, lasting around half a second (until a circuit breaker is tripped or the victim is thrown clear) and the majority of the current passes through the body, usually resulting in contact and deep tissue burns along the length of the current's path. Lightning burns tend to be concentrated at the entry and exit points. Metal objects, such as buckles or necklaces, may be superheated by the external flashover and cause severe localised burns.

This policy provides a guide for the suspension and resumption of outdoor activity when there is a risk of lightning.

### WeatherBug App for Phone and Laptop

This App has been very useful and uses a colour coded alarm system.



Green Alert: no lightning within 48km  
No risk. No action necessary.



Yellow Alert: lightning has been detected  
32-48 km away.  
Warning only. No risk or action  
necessary



Orange Alert: lightning has been  
detected 16-32 km away.  
Warning signal. Storm activity  
approaching. Monitor and prepare to  
move to safety.



Red alert: lightning has been detected  
0-16 km away. Move to safety  
immediately.

- Once the alert returns to orange normal activity may resume but monitor the situation as the storm may return.

### Visual/sensory indicators use the

#### The 30/30 Rule

- If you hear a thunder clap within 30 seconds of a visible bolt of lightning seek shelter immediately (lightning is within a 16km radius);

- To return to normal activities wait until it is 30 minutes since the last lightning strike was within the 16 km radius (as measured above)

- Storms move at between 25-45 mph (40-70 km/h), so don't delay.

- **NEVER USE UMBRELLAS IN THUNDER STORMS**

- **NEVER USE THE LIFTS IN THUNDER STORMS**

- The Directors of Sport for the Senior School and the Prep School will monitor the proximity of lightning. If a strike is within the 16km radius key staff will be notified via the Lightning and AQI WhatsApp group.
- Pupils/staff will not be allowed to be in the pool;

- Pupils/staff will not be allowed to remain in the open and will return to a safe structure;
- All substantial buildings are safe structures;
- A lightning protection system has been installed which allows for pupils/staff to quickly move through the covered walkways (not across open ground) but movement must not be delayed.

### **Identification of safe structures**

No place is absolutely safe from lightning strikes, but some places are much safer than others. Each activity must identify its safe areas and ensure that staff are aware of them.

#### **SAFER areas include:**

- Enclosed vehicles with windows closed (car, bus, tractor with cab). This does not include convertibles. Do not touch metal parts
- Substantial enclosed buildings
- Low ground, sheltering in clumps of low bushes
- Trees of uniform height - a forest.

#### **UNSAFE areas include:**

- High ground
- All swimming pools, lakes and open ground
- Water
- Isolated or tall trees
- Near outdoor metal structures such as fences, gates, poles, seating, ropes courses
- Insubstantial structures such as picnic sheds and shade shelters, tents, covered porches
- Machinery such as mowers or unenclosed tractors

*If you are caught outside during a storm and feel your hair stand on end or hear buzzing/crackling noise in the air, you are within the field of charge of a lightning strike. Remove metal objects (keys, badges, belts etc.), crouch down with feet together, head down and hands over your ears. It is safer to adopt this position if outdoors than to be in one of the unsafe situations listed above. Do not lie down.*

### **Safety Indoors**

- Do not handle electrical equipment, landline telephones or plumbing. These are all electrical conductors. Using a computer or wired video game system, taking a bath or touching a metal window frame all put you at risk of being struck by lightning.
- Only use battery-operated appliances such as mobile phones.
- Do not use the lift during lightning storms.

## **Pupil Safety**

- If a storm is imminent (check weather forecast and survey the sky), cancel any plans to take children outdoors
- If you are outdoors with children and storm approaches rapidly, cease all activities and move quickly indoors
- Check the WeatherBug App or contact the Directors of Sport. If you do not have the App apply the 30/30 rule. If uncertain, move inside.
- Keep children away from computers connected to mains (AC) power, etc. during an electrical storm

## **Dealing with a victim of a lightning strike**

- *Victims of lightning strikes do not carry an electrical charge. They are safe to touch.*
  1. **Call** for emergency help
  2. **Assess** the situation. If there is continuing lightning, both victim and rescuer remain at risk. Move the victim to a safer location
  3. **Respond** Lightning often causes a heart attack. Check for pulse and breathing
  4. **Resuscitate** If the victim is not breathing, immediately begin mouth-to-mouth resuscitation. If there is no pulse, begin CPR, or use An AED if one is at hand.

IMPORTANT: Lightning may also cause other injuries such as burns, shock, and sometimes blunt trauma. Treat each of these injuries with basic first aid until help arrives. Do not move victims who are bleeding or appear to have broken bones.