



Lightning Safety Policy

This policy encompasses every situation where pupils are outdoors.

Risk Information

On average 1 person is killed by lightning each year in the UK and 9 people are injured. Those most at risk are those who are outdoors, exposed in vulnerable, unsheltered locations, for example: team sports on a pitch, golfing or working on grounds maintenance/gardening. Research has shown that proximity to water increases the risk of being struck by lightning. The time at which one is most at danger is when there is underestimation of the likelihood of being hit, for example, before the storm or when you think a storm is over.

“Flash to Bang”: is the storm coming towards you?

To check if a storm is coming or going from where you are standing apply the flash to bang principle, counting as soon as the lightning flash is seen until the thunder is heard. ‘Flash to bang’ is based on the following facts:

1. Sound travels at 330 meters per second or at 1 km in 3 seconds (approximately 1 mile every 5 seconds).
2. Light travels at 300,000 km per second.
3. Lightning will always be seen before thunder.

To calculate the distance between yourself and the storm divide the number of seconds by 3 to find the distance in kilometres. If the distance between the thunder and lightning increases over a couple of strikes, the storm is moving away from you. If it decreases, it is coming towards you.

Research shows that people struck by lightning are predominantly hit before and after the peak of the storm. This means that you should be thinking about the proximity of the lightning, not the occurrence of rain. The 30/30 rule provides a good way of ensuring one is sheltering during the most risky parts of the storm. It proposes that if the flash to bang is 30 seconds in length or less you should seek shelter. Staying inside this shelter is advised until 30 minutes past the last clap of thunder. This ensures that any distant strikes at the beginning of the storm (lightning can travel up to 10 miles), or trailing storm clouds at the back of the storm do not take anyone by surprise.

Policy Guidance for staff

During any incidence of thunder, a member of staff together with any pupils, must immediately seek shelter indoors.

Pre-emptive Safety

Outdoor events and sport practice will be risk assessed by Epsom College staff and if it is determined there is a risk of harm, the College shall have the absolute authority and discretion whether to proceed or otherwise. Epsom College will assess this carefully and if a decision is made to proceed, control measures may be put in place in accordance with this Lightning Safety Policy.

The safety information described in this document will be disseminated to all organisers in order for them to be aware of potential dangers and to minimise the risk of injury. In case of an event or outdoors sport practice, the local weather for the day, from before the activity to the end of play, will be monitored online by the event organisers.

Seeking shelter

- Upon seeing lightning, staff must immediately clear the area;
- Ideally, all staff, spectators and students seek shelter inside a large building. If on College grounds, return immediately to a school building;
- The inside of a car or bus is a safe place to be in a storm, lightning will spread over the metal of the vehicle before earthing to the ground through the tyres. If possible move the vehicle to less exposed ground;
- Do not shelter beneath tall or isolated trees;
- Do not shelter under sunshades or awning – go into a solid building;
- If you are on water, take staff and students to the shore and off wide, open beaches as quickly as possible as water will transmit strikes from further away;
- If you are exposed to the elements with nowhere to shelter, make yourself as small a target as possible by crouching down with your feet together, hands on knees and your head tucked in. This technique keeps as much of you off the ground as possible but is a last resort.

Individual safety

- Before you set off for your day/trip, check the weather forecast. If there are storms predicted think about alternative options or being somewhere that provides appropriate shelter nearby.
- Be aware of objects that can conduct or attract lightning, for example, golf clubs, hockey sticks, paddles, umbrellas, bicycles, wire fencing and rails.
- Seek shelter quickly if your hair begins to stand on end and nearby appliances begin buzzing - it may mean lightning is about to strike.
- Inside a building lightning can be conducted through television aerials, piping or other wires. Except in cases of emergency, do not use a landline telephone until the storm is over.

Event organisers

Events must be risk assessed, and if it is determined that there is a risk of harm, the event organizer must assess this carefully and if a decision is made to proceed, control measures may be put in place in accordance with this Lightning Safety Policy.

Consider/implement the following recommendations:

- Communicate to everyone on site, the procedure upon seeing lightning and when outdoor activities can be resumed;
- Define and list safe structures and locations. Safe structures can include a large/substantial building with plumbing and wiring that will conduct lightning to the ground such as a clubhouse, or fully enclosed metal vehicles including buses;
- If lightning is seen then shelter immediately and use the 30/30 rule (see below) as the criteria for the resumption

of the activity;

- Ensure the dissemination of information – students, officials, spectators, and staff must be aware of potential dangers and how to minimise the risk of injury.

Resumption of the activity

Once activities or events have been suspended, the event organisers or staff will use discretion in declaring return to participation. The guidance is that staff are recommended to wait at least 30 minutes after the last visible strike before resuming activity.