

Extreme Weather - Policy

Document Number: FAC A 001.01

Approval Authority: Facilities Manager

Last Approval Date: 30th March 2015

Review date: 30th March 2017

Audience: All Staff, Clubs, College sport, Social Sport, External hirers of UQ Sport facilities

1. Purpose and Objectives

UQ Sport Ltd (UQSL) recognises the dangers of extreme weather in Queensland and the need to ensure that all staff and users of UQ Sport facilities take the correct precautions to minimise the likelihood of injury or death due to extreme weather. This policy is intended to cover all types of extreme weather.

The objectives of this policy are to ensure:

- UQSL managers, employees, hirers and sporting representatives are aware of the appropriate action in case of extreme weather; and
- the promotion of a safe and healthy workplace and facilities at UQSL

2. Definitions

UQSL Staff – means:

- Any member of UQ Sport staff, regardless of full time, part time or casual status; or
- A practicum student or volunteer under the guidance of UQ Sport.

College Sport Staff – means:

A person engaged to deliver, facilitate or support the delivery of the UQ Sport College sport programs including referees and contracted first aid providers.

Affiliated Club Staff – means:

A club affiliated to UQ Sport including:

- Employees of the club;
- Elected representatives of the club;
- Volunteers and coaches of the club.

External Hirer – means:

Any person or group, other than those included above, who books any UQ Sport facility, venue or space.

User – means:

Any of the patrons or staff defined above who are engaged in an activity at a UQ Sport facility.

Weather Watcher

A person who is nominated by the **User** to monitor the weather and take action should they feel it necessary:

- Should be clear on their responsibilities and supported in the event that the activity is stopped or postponed;
- Can be someone engaged in another activity such as ref, convenor, club official.

3. Policy Scope/Coverage

This policy applies to all users of UQ Sport facilities.

4. Policy Statement

All **Users** of UQ Sport facilities must at all times place the safety and welfare of themselves and other **users** ahead of the game, match, competition or sporting activity that they are engaged in, irrespective of deadlines, cost, inconvenience or other considerations.

All **Users** should have a nominated '**weather watcher**' who is responsible for both the monitoring of the weather before and during an activity and possesses the authority to stop, postpone and restart an activity should a weather event present any risk.

Living in Queensland means that heat and storms are a reality and need to be planned for. As high as 25% of all lightning deaths happen to people playing sport and all **users** should not let the desire to start or complete an activity hinder their judgement when safety of other **users** is in jeopardy.

There is very good information available that can be used, such as BOM¹, and all **Users** should monitor the weather in the lead up to, and during, the period of use. If there is any doubt as to whether there is a danger presented by the extreme weather conditions, it is the responsibility of the **user** to exercise caution and take action to prevent injury or harm.

4.1. Lightning storm

Definition

A storm where either lightning can be seen and/or thunder can be heard.

- Any storm that produces thunder means that lightning is present. It may be obscured by cloud but it is the lightning that produces the thunder.
- Lightning can be present up to 15 km away from rain so do not think that "if it is not raining, I am safe".

Guidelines

When a lightning strike is within 10km of an activity, it is recommended that players are removed from the area to a safe place. The simplest effective way to assess this distance is the 30 second rule. If there is less than 30 seconds between the lightning and the following thunder then the lightning is within 10km of the listener. (30 sec at the speed of sound is 10.2km).

All players and spectators should be alerted to the coming danger and advised to retreat to a safe place of refuge.

- **Safer locations** include –
 - Large substantial buildings (preferably with lightning protection or significant plumbing and wiring to ground the lightning)
 - Fully enclosed metal vehicles such as buses which are earthed to guide current to the ground around the occupants.
- **Unsafe locations** include –
 - Open spaces, especially where large numbers are congregated
 - Close vicinity to large structures or trees
 - Small permanent and temporary structures and shelters, especially metal ones
 - Close to a large body of water
 - Near a single tree or small group of trees
 - Close to antenna towers
 - Use of any type of telephone or anything that increases a person's height (umbrella, golf club)

Commencement of play

The activity should not continue until it is safe to do so. The 30-second rule should apply with a fifteen minute delay. E.g. the Weather Watcher would monitor the storm until such time as the strike to thunder delay is more than 30 seconds. Once this has happened users should wait an additional 15 minutes before being allowed to commence play. Storms can often turn and even reverse direction. The delay should be monitored and if the delay drops again below 30 seconds then the process starts again.

4.2. Rain Storm, Flooding and Hail

Definition

A significant rain event whereby the facility in use is compromised or the safe use, access or egress is in doubt:

- Very heavy rainfall leading to overflowing gutters, drains and significant build-up of surface water on hardscapes and landscapes that would make the continuation of play/exercise unsafe or unwise.
- Very heavy rainfall accompanied by hail leading to overflowing gutters, drains and significant build-up of surface water on hardscapes and landscapes that would make the continuation of play/exercise unsafe or unwise.
- Prolonged rainfall leading to flooding on roads, gutters, storm drains and rivers.
- Rain on any surface that is slippery when wet i.e. netball courts, tennis courts.
- Rain falling at a significant rate, or driven by wind, that impedes vision sufficient that the **user** is at risk i.e. rowing, cycling, canoeing etc.

Guidelines

In the event of a rain storm presenting any of the scenarios above, any activity that is exposed to the weather should cease immediately and not commence again until the event has passed or lessened to an extent that play is no longer dangerous. It is especially important not to continue an activity in reduced visibility when the area is shared with other traffic such as roads and rivers.

If a storm is likely to have significant hail it is often accompanied by a warning from the Brisbane early warning alert service. We recommend all **users** sign up to this service². If hail is present then shelter should be sought immediately, even if the hail is initially small. The size can change dramatically in seconds and can cause serious injury. Ensure that the safe refuge is also safe from lightning as in 4.1 as hail storms are often accompanied by lightning.

Transport to and from venues and facilities or events is also a risk and we advise all Users to remember the mantra "If it's flooded, forget it". I.e. do not cross or drive on any flooded roads at any time.

In the case of surfaces that are slippery when wet, no play should reconvene until the surface has been dried sufficiently that there is no danger of injury.

Even if the rain has stopped or lessened significantly, care must be taken when undertaking activities with significant ground water present. What might seem like relatively shallow water might hide holes or hazards that are unseen like displaced drainage grates and surface water can also present a risk of sporting injuries like sprains and strains.

4.3. High Winds and Cyclones

Definition

A significant wind event, often accompanied by rain, whereby;

- the facility in use is compromised or the safe use, access or egress is in doubt; and
- the activity in question is rendered pointless by the inability to play

Guidelines

High winds have the potential to create dangerous conditions for players, spectators and officials. When this is the case, or if the wind is sufficient to render play pointless, play should be suspended or postponed until the weather event has passed.

Dangers can include but are not limited to;

- Trees and branches falling and causing damage or injury;
- Debris being blown into players' eyes or bodies (leaves, dust, chairs, litter etc.);
- Balls and equipment being displaced by the high winds;
- In extreme cases people being unable to walk or stand; and
- Wind mixed with colder weather and, or rain can create a chill factor that can lead to exposure or in some cases hyperthermia.

In all instances, users should stop play and seek shelter if winds get to a point that any players or spectators might be at risk.

4.4. Sand/Dust or Smoke (Contaminants)

Definition

A situation whereby the air quality is compromised presenting danger through visual impairment or inhalation:

- Sand storms are typically winds driven in from arid regions and contain high levels of particles (sand) that can be abrasive to the skin, affect good respiration and impair players visually.
- Dust can become an issue in a similar manner to sand storms except they are usually a local phenomenon from construction work or refuse etc.
- Smoke is resultant from fire and can travel significant distances dependant on weather conditions. Smoke inhalation is exacerbated by sport as respiration rates are often elevated. It is also accompanied by visual difficulties and dependant on the nature of the fire, chemicals may be present that are toxic.

Guidelines

Any levels of airborne contaminants that are present at the facility, and that are sufficient to cause a significant reduction of visibility, should lead to a suspension of play and evacuation to a safe area until the area has cleared and is again safe to play.

If smoke is present it is recommended that the source of the fire be ascertained to ensure that the smoke is not toxic in nature, not likely to worsen, or is not due to a fire in the vicinity. Again if the smoke presents any danger through reduction in visibility or ability to breathe clearly then play should cease and all patrons be removed to a safe area.

4.5. Heat

Definition

A significantly hot day, possibly accompanied by high humidity that could present a danger to participants or spectators of a sport or facility.

Human thermal comfort depends on environmental and personal factors. The four environmental factors are airflow (wind), air temperature, air humidity, and radiation from the sun and nearby hot surfaces. The personal factors are the clothing being worn and the person's level of physical activity. Thermal sensation is also significantly affected by acclimatisation/adaptation: people living in hot climates have been shown to be comfortable at higher temperatures than those living in cooler climates.

In hotter conditions the body must shed heat to maintain thermal equilibrium. The cooling effect of evaporation of sweat from the skin becomes an important factor. The efficiency of this cooling depends on the humidity of the air. A high humidity reduces the effectiveness of evaporative cooling significantly. The amount of clothing will also affect this cooling efficiency due to its restriction of the air flow over the skin. Fabrics with low vapour permeability (those that don't "breathe") will increase the humidity of air near the skin.

Guidelines

No clear guidelines can be made as there are many determining factors at play that are individual to each location, sport, player and weather conditions and as such **users** need to exercise good judgement and caution in such conditions.

Considerations should be made to the following;

- Any day with an ambient temperature of 30 degrees Celsius or over is considered an extreme heat event and precautions should be put in place to prevent heat stress, dehydration or heat stroke.
- Any day where the ambient temperature is above 34 degrees Celsius is considered conditions whereby consideration should be made for cancellation or postponement of an event until the temperature reduces to playable levels.
- Avoid playing in the hottest part of the day (typically 12pm till 4pm) and in summer training and match schedules should be made in consideration of this.
- Provide more drink breaks than usual to allow good hydration, i.e. instead of 2 x 40 min halves, change to 4 x 20min qtrs.
- Seek regular shade
- What to wear:
 - Light and loose fitting clothing to allow the body to breathe
 - A cap or sun visor, preferably broad brimmed where possible
 - 30+ sunscreen to prevent damage to skin
 - Sunglasses for eye protection
- Drinking guidelines
 - Ensure access to free and unrestricted, cool drinking water
 - Allow players to decide how often to drink and make allowances in play for this. Encourage young players to drink regularly
 - If play is extended (more than an hour) consider supplementing with a sports drink that provides carbohydrates and electrolytes
- Watch out for symptoms of heat stress
 - Fatigue
 - Nausea
 - Headache
 - Confusion
 - Light-headedness
- If a player or spectator presents with such symptoms, take the individual out of the heat, lie them down with their legs elevated. If symptoms do not improve in 5-10 minutes or if you are in any way concerned seek immediate medical assistance.

4.6. Other considerations

Playing surfaces

Whilst UQ Sports highest priority is safety and welfare of players and spectators we ask that all **Users** consider the combined effects of play and weather and the longer impacts that can be felt on the playing surfaces.

Playing matches on a natural surface that is very wet due to prolonged wet weather can lead to damage to the surface. This can lead to;

- Closure of fields for repair and rejuvenation leading to lost playing time and revenue
- Damaged pitches that can present a danger to **users**

4.7. Notes and References

Notes

1. Bureau of Meteorology (BOM) website – <http://www.bom.gov.au>
2. Brisbane Early Warning Alert Service - <http://www.brisbane.qld.gov.au/community/community-safety/disasters-emergencies/severe-weather-alerts/brisbane-early-warning-alert-service>

References

- World Rugby Lightning Safety Guideline
- NRL Electrical Storm Safety Guidelines
- Little Athletics Lightning Guidelines
- National Weather Service Lightning Safety
- Commonwealth Bureau of Meteorology
- National Athletic Trainers Association
- NSW Swimming
- Soccer NSW Policy – Lightning Safety
- National Lightning Safety Institute
- Tennis Australia – Extreme Weather Policy
- Bureau of Meteorology – Thermal Comfort Observations