Orienteering Queensland

PO Box 114
Spring Hill Qld 4004
Email:qoa@qoa.asn.au
Website: www.qoa.asn.au

HOT WEATHER SAFETY

In Queensland, especially at the beginning and end of our orienteering season, we can expect a few hot days at orienteering. This is a summary of the advice given by the Sports Medicine Association of Australia on *"Beating the Heat"*.(SMA Fact Sheet, 2002) Further info: www.sma.org.au

Exercising in hot weather conditions can place participants at risk of heat illness, and in extreme circumstance, even death. During exercise an athlete may produce 15-20 times the amount of heat produced at rest. The only way to lose this heat is by sweating. In humid conditions, or when a person is dehydrated, this cooling mechanism may not function well enough, and heat can build up in the body, causing heat injury or illness.

Even a slight state of dehydration will cause a marked drop in orienteering performance, preventing fast running, or concentrating well. Don't rely on feeling thirsty as an indicator of when to drink, as it is a fairly late indicator of dehydration.

Factors which can contribute to heat injury include:

- High air temperature
- Solar radiation
- Humidity
- Dehydration
- Heavy clothing
- Illness, age (young or old), low fitness levels, being overweight, poor acclimatization to hot weather.

HEAT EXHAUSTION

Dehydration can lead to heat exhaustion.

Symptoms include:

- High heart rate
- Dizziness
- Fatigue, Cramps
- Confusion
- Nausea
- Cool, pale skin
- Little urine passed, but highly concentrated

Action:

1. Lie victim down in a cool place
2. Give plenty of cool water
3. If confused or unable to drink, call medical help urgently.

HEAT STROKE

Severe dehydration may lead to heat stroke, which is potentially fatal and must be treated immediately by a medical practitioner. Athletes who keep participating when suffering from heat exhaustion may experience heat stroke, which can still occur even if the athlete has been drinking plenty of fluid. It is important to cool the athlete as quickly as possible.

Symptoms include:

- Dry skin
- Confusion
- Collapsing

Action:

1. Call ambulance/doctor immediately
2. Lay victim down in a cool place
3. Give cool water to drink if conscious
4. Cool person down by putting in a cool bath, shower or under a hose, applying wrapped ice packs to groin and armpits, or use wet towels.
5. Maximise airflow over the player through use of a fan, or fan them with towels.

PREVENTION OF HEAT INJURY AND ILLNESS

1. *Timing of training/events*
    - Postpone or cancel events/training when very hot. The SMA recommends children and adolescents do not compete in temperatures of 34 Degrees Celsius and above. Veterans are similarly vulnerable. In Brisbane, with its high humidity, there is a high risk of heat injury to all athletes when temperatures reach 28 degrees or above.
    - Early morning or late afternoon may be a safer time for exercise in summer.
2. *Drink plenty of fluids* before, during, and after exercise. It is much safer to *carry your own water* (preferably at least a litre) when orienteering in hot weather. Water bottles may be attached to a waist belt holder, put in a back pack, or worn as a "Camelbak". You may refill the bottle at water points around the course. Recommended amounts to consume are: About 500 ml no more than 2 hours before exercise; about 250 ml every 15-20 minutes during exercise; regular fluids after exercise, at least until urine is a light colour. *Sports drinks* provide energy and electrolytes, and are absorbed quickly. *Cool water* is better than very cold, or warm water.
3. In conditions of high risk, (expected daily maximum of 28 degrees or above) consider *reducing length of cou*rses, or allowing frequent *rest periods*. Avoid open areas, whether on your course, or in the assembly area. *Shade* makes conditions much cooler. If temperatures of 35 degrees or over are expected, the event should be cancelled or postponed.
4. *Clothing* should be loose, light weight, light colour, and allow free air circulation. Mesh nylon O suits are cooler than close weave materials. Avoid heavy collars, etc. Wear a well-ventilated, broad brimmed hat whenever practical. Sunscreen should be water-soluble.
5. *Acclimatisation* is important, if moving from cooler conditions to hotter ones (Eg interstate/international events; change of seasons). Some adaptation occurs in 3-5 days, but full acclimatisation may take two weeks.