

In view of Ed's recent accident Chris (CSC CSO) has asked me to provide advice on looking after yourself and your mates. I completely agree with Peter that the hydration aspect of Ed's issues is just one of many to consider. I am not making a diagnosis but having treated many patients with similar explanations of their condition, Ed's description fits the general picture of Heat Illness. Heat Illness is a nebulous condition having the unfortunate characteristic of rendering the sufferer the person least likely to recognise the problem.

Situation

On the 14 May Ed suffered a serious accident at Murton Pike following what it would seem, in his words, was a prolonged period of exertion, lack of sleep, minimal water intake, sporadic nutritional intake and social drinking. Along with a candid report on his attitude to hydration he recalls feeling weird, light headed and dislocated from his surroundings prior to and during the flight. Following the accident and treatment of his initial injuries, he was noted, in hospital, to have a significant dehydration, and was treated appropriately. Medicine is not an exact science and sometimes some signs and symptoms can be overlooked in critical emergencies. Heat Illness is insidious, it is a slow immersion into a physical and mental state that removes one's self-awareness and leads, in extreme cases, to death in a matter of hours.

Main Issue

I'd like you to take a look at the table below:

Table One. Heat Illness Risk Factors

Lifestyle	Health	Work Constraints
Individual Volition	Previous Heat Illness	Inexperienced Personnel
Lack of Physical Fitness	Mild illness, cold, diarrhoea, flu	Air Travel in past 24 hrs
Smoking	Sun Burn	Lack of Sleep
Alcohol in last 48 hrs	Prescription painkillers	Acclimatisation
Illicit Drugs	Dehydration	Poor Nutrition – Missed Meal in last 24 Hrs
Use of supplements		

I've highlighted the issues noted by Ed in his description of the days leading up to and the day of the accident. The table is taken from a pamphlet issued to the military to identify the major risk factors involved in Heat Illness. Heat illness is a serious problem for the Armed Forces and I quote:

"The incidence of heat illness depends on numbers exposed to the risk and how well that risk is managed. The overall incidence rate of heat illness cases has not changed over the past five years and 3 soldiers died from heat illness on exercise in the UK in 2013. There were 333 UK Armed Forces personnel who were identified as having a heat illness during the period October 2015 – September 2016 (86 of which were in the UK winter). Exertional heat illness is frequently diagnosed in temperate climates outside of summer months. The severity of cases can be reduced with good management, effective first aid measures and evacuation to medical care, however, prevention is the main aim."

What Is It?

Heat illness is a spectrum of illness which includes heat exhaustion and heat stroke. In practice it is difficult to distinguish between the conditions and they may coexist. For the purposes of this article the term heat illness refers to those individuals who become incapacitated (in varying degrees) as a result of a rise in core body temperature. In the paragliding environment the vast majority of cases of heat illness or injury are exertional in nature but can be the classical heat illness or injury seen in the general population. Heat

illness may present with mild signs and symptoms, such as muscular weakness, headache, lethargy, confusion and fatigue through to more severe signs and symptoms, such as collapse, coma and death.

So, What Does Someone With Heat Illness Look Like?

An individual should be presumed to have heat illness if they experience any of the signs or symptoms of heat illness as detailed:

Table Two: Signs and Symptoms of Heat Illness

Collapse or loss of consciousness	Dizziness	Cramps or muscle pain
Inappropriate or unusual behaviour	Vomiting	Hyperventilation (rapid breathing)
Disturbed vision	Confusion	Pins and needles
Seizure(s) (fitting)	Weakness or fatigue	Nausea (feeling sick)
Anxiety and/or agitation	Diarrhoea	Impaired judgement
Headache	Staggering or loss of coordination	Thirst

Once again, I've highlighted the descriptions from Ed's narrative. These symptoms can occur singly, in any combination, and in any order. Not all heat illness will present typically; in some cases, **casualties may display seemingly normal function interspersed with more typical signs and symptoms.**

How Is It Treated?

Self Help

First of all, before you set off for a day's paragliding THINK about Table One. THINK ABOUT THE PERSON YOU'RE FLYING WITH AND RELATE TO TABLE ONE. ARE YOU SAFE TO FLY?

Treatment

If you do suspect something remember the signs and symptoms in Table Two and I'll say again: *'These symptoms can occur singly, in any combination, and in any order. Not all heat illness will present typically; in some cases, casualties may display seemingly normal function interspersed with more typical signs and symptoms.'*

Actions On

- Lie the casualty down in the shade.
- Elevate feet if conscious.
- Strip casualty to underwear.
- Sponge or spray casualty with cool water and fan the skin.

Then, assess the casualty:

Is the casualty conscious?

YES

Give them water to drink.

Rest and monitor, continue cooling

Has the casualty's symptoms fully resolved? ➡ NO

YES

NO

Place the casualty in the recovery position

Contact 999 and ask for Air Ambulance to evacuate the patient immediately

**Do not fly - go home and discuss issue
with GP as one incident can precipitate
further bouts of Heat Illness**