



ULTRA SPORTS SCIENCE

Sudden cardiac death

For athletes and coaches

It is recommended that athletes should undergo a medical screening before starting exercise or if participating in competitive sports, including a resting ECG. The actual recommendations may depend on each country but as a general guide we advise the following:

Medical check-up before resuming intense physical activity if over 35 years

Any medical assessment if there is chest pain, abnormal shortness of breath, heart palpitation unusual on exertion or at rest. In 50% of cases, symptoms detected beforehand make it possible to avoid sudden death from cardiac arrest during exercise.

Extreme outside temperatures ($<-5^{\circ}\text{C}$ or $>30^{\circ}\text{C}$) and during peaks of pollution may exacerbate cardiac symptoms.

Smoking, high blood pressure, high cholesterol, a family history of cardiac problems or sudden cardiac death in the family are all risk factors

Do not use doping substances or self-medicate. This can cause arrhythmia, digestive hemorrhage and kidney failure.

Do not exercise in case of fever or feeling unwell. Also caution should be taken after a viral illness as there may be an increased risk of myocarditis, a major causes of sudden cardiac death.

For race organizers

Diffusion of prevention message by the organizers, taking into consideration aforementioned points.

For race organizers, it is a question of respecting clear objectives:

- Have defibrillators available at the race

Medical staff need to be trained basic and advanced life support

Start a cardio-pulmonary resuscitation (CPR) immediately (ideally in less than a minute) at any point of the race

- Then quickly deliver an external electric shock

- Then practice vital first aid (chest compression and breathing) and advanced life support (e.g., intubation, ventilation, drugs, such as adrenaline, anti-arrhythmics, anti convulsants, sedation etc.)

- Carry out a medical transfer to a specialized center

For this it is necessary to set up:

- A good distribution of the first aid teams on the race to carry out first aid and inform the accident site medical team.

- Very good mobility of the emergency medical team with vehicles adapted to the terrain (motorbike, quad, etc.) to administer vital first aid on site.

- Having medical transfer vehicles.

- To have appropriate means of communication for the organization of relief for the various responders (organizers, rescuers, medical teams, hospital services, etc.)

It is therefore essential for race organizers to plan for the management of serious illnesses and sudden deaths of athletes in their overall health coverage of their sporting event.

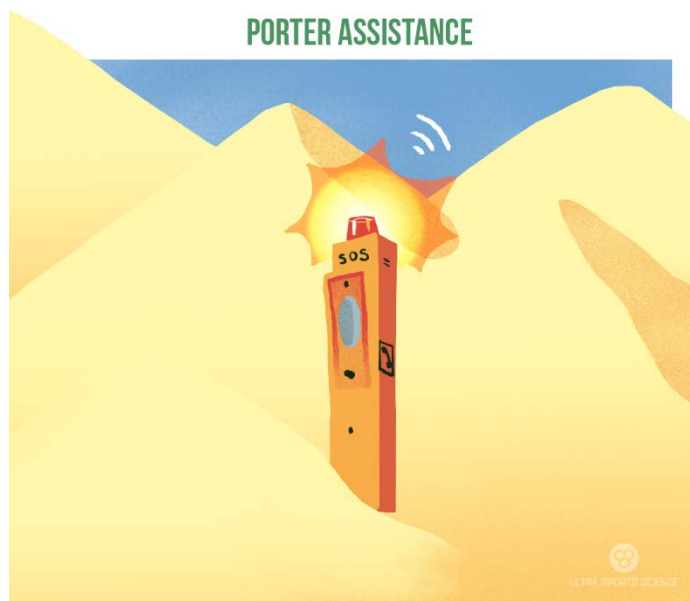
HIGHLY RECOMMENDED FOR ALL:

Having first aid training is an essential recommendation

Know how to prevent emergency services

Perform cardio-pulmonary resuscitation (CPR)

Implement defibrillators at race



*Je porte assistance à tout autre compétiteur en difficulté
qui aurait besoin de mon aide.*