

## Medical Director Notes for the Athletes

Congratulations on being a triathlete, new or experienced! Your competitive sport is truly one of the best tests of overall fitness and represents an accomplishment of dedicated training and personal discipline. As medical director for this event, I wish you the very best experience and hope not to see you in the medical tent! Remember, do not try anything on race day that you have not already tested in your training. Knowledge, adequate training and preparation are your best friends on race day. Triathlons test your limits physically and mentally and are often in less than ideal environments. However, in spite of that the SC Half has an over 95% race completion rate.

That being said, the medical staff is here to serve you and your race related medical needs. These may be minor such as insect bites, blisters, road rash and other abrasions or they may be major including hyperthermia, hyponatremia, dehydration, musculoskeletal injury or collapse. We have taken care of hundreds of athletes in dozens of triathlons and have prepared for months to provide your care. If we are unable to manage your race-related medical issues, we will supervise your transport to our regional medical center for further evaluation and treatment. All medical care and supplies prior to transfer will be provided free of charge and thanks to dozens of volunteers and organizations.

Many athletes forget to mention current illnesses or medications on their applications. Please do not do this. If you have diabetes, heart disease, lung disease or other chronic illness, you will need clearance from your personal physician prior to this race and you need to inform us of your medical conditions. If you become unresponsive during the race, such information could be potentially life-saving; we want to be prepared to care for your needs should they arise.

As a triathlete, familiarize yourself with some of the medical issues pertinent to endurance events:

**Hyperthermia:** triathletes may burn up to 10,000 kcal of energy during an Ironman and over 5000 kcal in a half. This generates a lot of heat. Add to that the usual ambient warmth of this event and you get a formula for heat illness. It is essential that you train in the heat to acclimate for this event. In addition, you need to know the common warning signs of heat related illness: nausea, vomiting, confusion, muscle cramping, fatigue, lack of sweating, fever (duh), and collapse. These are signs that you are already seriously compromised. Hydration with cool fluids, walking, spraying yourself with water, loose fitting or breathable white clothing all assist in reducing heat gain. If you have had prior heat illness (cramps, collapse, exhaustion or stroke) you are likely to have recurrent problems unless you have made major changes in your training, hydration or venue. If you are suspected of having hyperthermia in the medical tent, a core body temperature (bummer: rectal temp) is essential and will be taken. If your temperature is severely elevated, you may be transported to the regional medical center.

**Exercise Associated Hyponatremia (EAH):** it is becoming clearer that athletes who do endurance events that last longer than four hours are at greater risk of losing sodium with exercise. This can be life-threatening. Those at greater risk are athletes who are over hydrated (i.e. they weigh more at the end of the race than the beginning), poorer conditioned, female, inexperienced, unaccustomed to hot and cold environments, and using of non-steroidal anti-inflammatory medications. The symptoms of EAH are similar to Hyperthermia but also include seizures, abnormal behavior and coma. Obviously you need to hydrate before and during this race but avoid NSAIDs (ibuprofen, naproxen etc) and drinking large amounts fluid during the race. If your urine is clear during the race or you

are urinating every hour, most likely you are over-hydrating. Your hydration requirements need to be worked out during your training on an individual basis. Researchers now recommend that you re-hydrate with solutions containing electrolytes and not just water. If you experience difficulty thinking during the race, nausea, vomiting, confusion or weakness, you need to seek medical attention. EAH is one reason we weigh you just prior to the race. If your post race weight is identical or elevated, you are at increased risk for hyponatremia.

**Dehydration:** trained triathletes may sweat up to 3 liters (6.6 pounds) per hour. If this occurs during a long race without replenishing losses, profound dehydration and shock can occur (another reason why we weigh all athletes prior to the race and upon arrival to the medical tent). If you arrive at the medical tent dehydrated and are not vomiting, we will first attempt to re-hydrate you with oral fluids. Research has shown significant benefit to oral rather than IV replenishment of fluids. Many athletes are used to being “bagged” at the end of the race. That is now known to not be in your best interest. If you do not respond after reasonable oral re-hydration, you may need IV fluids or transport to the hospital for further evaluation.

**Minor Ailments:** Blisters, insect bites, road rash and other injuries often occur during the race. We have a portion of the medical tent set aside for self help and assisted help at no cost to you.

**Musculoskeletal injury:** these will be evaluated at the medical tent. If you experience an injury that can be managed on site, we will do so. Fractures or suspected serious musculoskeletal injuries will be cleaned, dressed and splinted. If there is a significant injury or fracture present, you will be referred or transported to the hospital as there are no x-ray facilities at the race site.

Final notes of caution: It is now known that the swim portion of the triathlon is the site where the majority of deaths occur (approximately  $\frac{3}{4}$  of all triathlon deaths). There will be many trained swim course monitors on the course. If you are having trouble such as chest pain, shortness of breath, swallowing water, STOP and raise your hand. Do not wait until you are ready to go under water. Recent deaths at triathlons have occurred with swimmers seeking help too late.

The medical director and staff are here to assist you in all ways possible. Most athletes realize that when they are impaired physically, they are performing poorly and should not compete. Medical personnel may assess you during the race and help analyze your condition. If you are competing while experiencing a serious condition and do not choose to stop voluntarily, we have the authority to disqualify you from the race and remove you from the course. Be smart, and have a great race.