



Sudden Death and Triathlon

In the 2011 New York City Triathlon there were, tragically, two deaths among the 3,000 or so athletes entered. They occurred during the swim, which is held in the Hudson River, going downstream on an outgoing tide. Each of the athletes who died was part of a relay team, and apparently participating in their first triathlon at any level. According to *The New York Times*, the risk of sudden death in a triathlon is about twice that of a marathon—1.5 deaths per 100,000 triathlon participants versus 0.8 deaths per 100,000 marathon participants (1). That is .0015 percent. The *Times* article also discussed a 2010 study published in the *Journal of the American Medical Association* where it showed 14 deaths overall in triathlons between 2006 and 2008. Thirteen took place during the swimming portion. Putting these figures, tragic as they are, in perspective, one observer pointed out that one is more likely to die in an automobile accident on the way to the race than participating in the race itself.

It can be considered that on the day following the race, Mr. Scott Stringer, the Manhattan Borough President (New York City has five Boroughs) did go a bit overboard (although not all the way into the Hudson River) when he stated, “New Yorkers signed up for a triathlon, not a game of Russian roulette” (1). On the other hand, when John Korff, the race’s owner and organizer, says that “Ultimately the responsibility for each athlete’s safety was a personal matter,” I think that that is true only in part. The race director is responsible for organizing the wave starts correctly and for having plenty of lifeguards on the course, as the New York City Triathlon always does. That race (which I have done three times) also requires attendance at a pre-race briefing the day before, in which a good deal of time is spent discussing the swim and how to do it safely.

At the same time, the personal aspects are surely important. It may well be that race directors and the mass communication organs of the sport could do a better job of advising entrants on the precautions to take to ensure a safe swim. One is responsible for one’s own training and the fitness level achieved with it. One is also responsible for making sure of their comfort level when swimming in open water, as contrasted with the pools in which most of us train. It is also helpful to have swimming experience in smaller triathlons, preferably in small lakes with calm waters, before tackling big, crowded races like the New York City Triathlon. And one should learn where to appropriately seed oneself in the wave at the start. I’m slow no matter what wave I’m in. Beginning with my first race in 1983, I have always made sure I start towards the back of my wave. I also always make sure to look over my shoulder during the swim to be able to get out of the way of fast swimmers coming along in the next wave (or two or three).

There are risks inherent in triathlon racing, however, from a public health perspective, we also need to look at the benefits of the sport and any other distance/endurance sports in terms of overall health. As readers of the *AMA Journal* know well, it happens that there are significant health benefits from being a regular exerciser, especially at the level that most multi-sport athletes are engaged. “The Physical Activity Guidelines” issued by the U.S. Department of Health and Human Services (2) recommend 150 minutes of moderate intensity per week (in bouts of at least 10 minutes). In addition, it states that 75 minutes of vigorous exercise/week is comparable to 150 minutes of moderate exercise. Of course, virtually every multi-sport athlete is going to train at a level that far exceeds those recommendations. Therefore, it is valid to say multi-sport athletic training carries all of the benefits of regular exercise, and provides additional health and mental benefits for the athlete.

Furthermore, and this is most important when considering the risk of triathloning, while

there is a .0015 percent increased risk of death, there is a 30 percent *reduction* of risk of death from all causes at any given age for regular exercisers (3). Also, the risk of sudden death during any one bout of physical activity is about three and a half times higher for sedentary people than it is for physically active people (4). I’m not saying one has to be a multi-sport athlete to achieve the physical and mental health benefits of exercising regularly, I’m just pointing out that living a sedentary lifestyle is far more risky than participating in triathlons (or any other endurance sport for that matter).

As one observer put it, a question that every health care professional should be asking every sedentary patient or client they see is, “Are you sure your body can withstand the risk of not exercising, regularly?”

Go well,
Dr. Steve Jonas

REFERENCES

1. Klein JZ. “Second Triathlon Swimmer Dies, Prompting Review of Race Protocol,” *The New York Times*, 2011/8/9.
2. *Physical Activity Guidelines for Americans 2008*. U.S. Dept. of Health and Human Services, Washington, DC: ODPHP Pub. No. U0036.
3. *Physical Activity Guidelines Advisory Committee Report 2008*. U.S. Dept. of Health and Human Services, Washington, DC: ODPHP Pub. No. U0049, G1-2.
4. *Physical Activity Guidelines Advisory Committee Report 2008*. U.S. Dept. of Health and Human Services, Washington, DC: ODPHP Pub. No. U0049, Fig. G10.5.