

Endurance events not all fun and games

By Luna Shyr, National Geographic News

The first fatality in a Tough Mudder endurance event this past weekend raises a dire prospect that's typically far from the minds of participants or buried in the fine print of contracts.

Such extreme activities, with names like Rugged Maniac and Warrior Dash, have surged in popularity. Their novelty challenges include crawling under live wires, plunging into an icy dumpster, and dangling from monkey bars coated with butter and mud.

At best, such obstacle courses push mental and physical stamina and build teamwork; at worst, people get injured or even die.



Tough Mudder may want to reconsider using signs like this one that was on the Northstar course in September. The event returns to the Truckee ski resort July 13-14 and Sept. 28-29. Photo/Jessie Marchesseau

After the Tough Mudder in Gerrardstown, W. Va., this past weekend, 20 participants were treated at the local hospital, including two people with heart attacks and several people with hypothermia, head injuries, and orthopedic injuries. Avishek Sengupta, a 28-year-old from Maryland, drowned. His death has been ruled an accident after he jumped from a plank into a pool of muddy water during the race.

In April 2012, a 30-year-old man died in Texas after a similar event called the Warrior Dash. Two men died in another Warrior Dash in Missouri later that summer.

Tough Mudder is a nine- to 12-mile (14- to 19-kilometer) endurance challenge that bills itself as “probably the toughest event on the planet.” An estimated 750,000 people have participated in Tough Mudder courses since 2010, running through mud and over obstacles. There are more than 50 Tough Mudder events planned for the rest of this year in the U.S., Australia, Japan, South Africa, and Europe. The company that puts on the events says that its courses are designed with safety experts, and that emergency personnel are present.

To reduce risk of competing in such events, sport psychologists and physicians emphasize preparation and awareness. We asked two experts—Justin Anderson of Premier Sport Psychology in Minneapolis/St. Paul and Dave Olson, a team physician for the Minnesota Vikings – to share their insights on extreme activities.

Justin Anderson, a sport psychologist, on extreme endurance events:

The term “extreme” has been applied to everything from Tough Mudder to Ironman to things like heli-skiing or BASE jumping. What makes a sport extreme?

It depends on whom you ask, but I think “extreme sports” include anything that’s on the fringe of the mainstream and can be incredibly grueling or incredibly dangerous. All of

those activities fit those categories.

Why do you think endurance events like Tough Mudder have become so popular?

Humans always want to continue to push the envelope. People tend to feel most content when they're growing and hitting or exceeding goals. Then there are additional gains like triggering dopamine in the brain—it acts as a natural high, and we can feel euphoric once we've completed one of these things.

There's also this identity factor of being someone who's tough and a go-getter. Finally there's the community; we get to interact with folks like ourselves who are high achievers, and that can be a really attractive thing.

What should anyone who participates in an extreme activity consider before they go out there?

It's important to be mindful of why we're getting into these activities and see if it's really worth it. When our dopamine levels get triggered, it becomes a natural high. What tends to happen is it takes more and more to get that psychological and biochemical effect, so we push and say we can go to this next level.

Also be careful not to be too caught up in the "rah rah" of the event. Once you jump into these things, it can be really seductive – that social persuasion of "let's go," even though your body and mind might be saying to slow down or take it back a notch.

Do people tend to overestimate their ability to do these endurance events? Underestimate the risks?

It depends on the person. Certainly a lot of people overestimate their ability. Ask yourself what you're doing to get your body prepared. Pay attention to your body and mind,

especially when it's telling you to stop. That's the beauty of endurance sports like Ironman – the athletes are incredibly tough and they've learned in training how to focus on other things when they're running through cramps or their body wants to stop.

But the key is knowing which signals to pay attention to and which ones not to, and that comes from years of experience of knowing your body and its limits.

When you talk about the difference between pros and amateurs, we say pros practice far, far more than they play, and amateurs play far more than they practice. In the case of high-level athletes, they do a lot of training and understand what the extremes are. They know they have to build up to them. I recommend getting to know the process because these things are much more challenging than they appear, both mentally and physically.

Dave Olson, a team physician for the Minnesota Vikings, on preparedness:

What's the minimum training you would recommend for an event like Tough Mudder?

These events are tricky for sports medicine doctors. With sports teams we really get to see the athletes and review their histories. With mass events like Tough Mudder or a marathon, pretty much the only requirement is to sign up and think you're ready to do it.

Train smart for an event, ideally over a series of months to ramp up your activity, and get a medical checkup to make sure it's safe for you to do so. Tough Mudder events can be tricky because with, say, marathons, people go online and can read about how to train. But with events like Tough Mudder being new and different, a lot of times we see people going because friends say, "You should come do this." They may do some runs but often they don't end up doing the training they need to

prepare. People have to be realistic and look at their medical background.

How do you best avoid injury on the day of the event?

Hydration is big, and equipment – making sure you're dressed properly and have good shoes that have been worn before so you don't get blisters, that kind of thing. If it's 100°F (38°C) out, have the proper shirt. And have an extra set of clothes for when you're done – something warm to put on in case you've been through an icy stretch. Dress smartly, look at the weather, and plan ahead.

To Justin's point about knowing which body signals to pay attention to and which to plow through, how do you know when you should stop?

It can be really tricky. I think it's hard for an athlete who hasn't been doing a lot of training – the first signal like chest pain might already be too late. You have to really listen to early signals like dizziness, cramping, and listen to them as warning signs. It's hard in those events because it's a group event – there's a lot of cheering and pushing through – but you really have to be smart about it, especially if you're not well trained.