

## [The Barefoot Running Injury Epidemic](#)

*Business is booming at America's running injury clinics.*

**Written by: Matt Fitzgerald**

Darwin Fogt, PT, owner of [Evolution Physical Therapy](#) in Culver City, CA, is alarmed by a stark new trend at his facility: runners with injuries caused by barefoot (or virtually barefoot) running. Fogt says he has four or five current patients with heel injuries clearly resulting from a switch to barefoot running and has recently treated another 12 to 15 others.

"That's up from zero a year ago," says Fogt.

Other physical therapists and sports medicine doctors across the country are seeing the same sudden rise in barefoot running injuries.

"We've seen a fair amount of injuries from barefoot running already, or from just running in the [Vibrams](#)," says [Nathan Koch](#), PT, Director of Rehabilitation at Endurance Rehab in Phoenix, AZ. Vibrams are the barely-there "foot gloves" that have become popular among barefoot running devotees.

[Steve Pribut](#), a Washington, DC podiatrist and one of America's most respected running injury specialists, says he has experienced a recent influx of barefoot runners at his office as well. And, asked by email whether he could confirm a barefoot running injury trend in his clinical experience, Lewis Maharam, a.k.a. "[Running Doc](#)," replied with two words: "Oh, yeah!"

### **The Thing To Do**

The developing barefoot running injury epidemic is plainly a secondary effect of the rise in popularity of barefoot running. "Everyone is reading [Born to Run](#) and wanting to run barefoot," says Pribut, referring to the bestselling book by Christopher McDougall that is widely credited with



starting the barefoot running trend.

What is not known is whether barefoot runners are now disproportionately represented in physical therapy and sports medicine facilities—in other words, whether barefoot runners are more likely to develop overuse injuries than shod runners. Koch and Pribut are not ready to say that this is the case. "The more barefoot runners there are, the more injured barefoot runners there will be," says Pribut, who attributes the spike primarily to the burgeoning number of barefoot runners.

But Maharam and Fogt see evidence that switching to barefoot running is causing injuries that would not otherwise happen. "I see one injury over and over in the barefoot runners who come to me," says Fogt: "plantar fasciitis." A painful and difficult-to-overcome heel injury, plantar fasciitis accounts for less than 15 percent of all running injuries. The fact that it accounts for more than 90 percent of injuries in the barefoot runners Fogt sees suggests that it is barefoot running

specifically, not overuse generally, that is causing these injuries. Thus, unless barefoot running is concurrently drastically reducing the likelihood of knee pain and other common running overuse injuries, then its overall impact on running injury risk is probably an increasing effect. If this is indeed the case, then the barefoot running injury epidemic is an ironic reality, as barefoot running is overtly promoted as a way to *reduce* injury risk.

Koch points out that the apparent injury risk associated with barefoot running may actually be artificially low. "There are a fair amount of people who have tried it but have stopped pretty quick, just because they realized that it was not going to work for them," he says.



I am one such case. I began running in Vibrams in 2006. Despite easing into virtual barefoot running very slowly, I developed calf, ankle extensor and achilles strains immediately and could not quickly overcome them, so I went back to running full-time in running shoes.

Defenders of barefoot running contend that such injuries are easily avoided by a gradual adoption of the practice, but that wasn't my experience (my first "barefoot" run was one minute). Moreover, I think that this contention that every barefoot running injury is an exception to the rule is a classic fallacy of faith-based versus evidence-based belief. As Koch puts it, "It's totally misleading to tell people that when they get injured running in shoes, it's the shoe's fault, and when they get injured running barefoot, it's the athlete's fault. It makes no sense. You're going to have injuries either way. It's running."

One thing all of the medical professionals I interviewed for this article agree on is that many runners have no business even trying to run barefoot. "Runners who have what I call biomechanically disadvantaged feet need shoes, and often orthotics too," says Maharam.

What's a biomechanically disadvantaged foot? "People with poor forefoot stability, overpronators, and even supinators are asking for trouble if they ditch their shoes, or even wear the wrong shoes," says Fogt.

It doesn't stop at the feet, though. According to the experts, other biostructural factors predispose runners to injury, and going barefoot could exacerbate some of these structurally based predispositions to injury. "When we look at a runner and consider whether running is even appropriate for a person, we're looking from the spine all the way down to the foot," says Koch.

### **Not Born to Run**

Wait: Did Koch just say "whether running is even appropriate for a person"? Is he suggesting that



not all humans are, in fact, born to run?

Here we arrive at the heart of the matter. Fascinating recent research by Daniel Lieberman and other evolutionary biologists has popularized the notion that our species is specially designed for distance running. While the point that human beings are better suited to distance running than the hominid and ape species preceding us in the descent of man is difficult to contradict, it is quite obviously not the case that every human individual is meant to run.

Consider this: Every cheetah is a world-class sprinter. No exceptions. By contrast, the degree of interindividual variation in distance running ability in the human population is incredibly vast. There are no Jim Hogarty's in the Cheetah world. Jim Hogarty (real name disguised to protect his dignity) was a kid I went to elementary school with who effectively couldn't run a step. There was nothing really wrong with him. He was just giant and knock-kneed and flatfooted and running was terribly uncomfortable for him. There are millions of Jim Fogarty's out there, and millions of others who have the same trouble with running to lesser degrees.

That's because humans really are not born for distance running in the same way that cheetahs are born for sprinting. Evolutionary biologists other than Daniel Lieberman will tell you that humans are born generalists more than we are born specialists in endurance running or anything else. A natural consequence of this "jack of all trades, master of none" design is that there are different types of individual specialists within the total human population. Some of us are strong, others weak. Some of us have great hand-eye coordination, others don't. Some of us can be great marathon runners, others can't run a step.

The romantic vision of an Edenic primitive humanity in which everyone ran like Kenenisa Bekele is complete hokum. Endurance running was very likely only ever a specialization of the few, exactly as it is today.

Hence, "If we can say that everyone is built to run barefoot we can say that everyone is built to fly a fighter jet without glasses," says Pribut. "We don't all have 20/20 vision."

But most of us do have 20/20 vision with glasses. Similarly, says Pribut, "There are more people who can run because of shoes than can't run because of shoes."

In other words, the right shoe can help some of those who were not born to run, run anyway, and those who were born to run a little, run a little more.

### **Reason and Irony**

None of the medical professionals interviewed for this article is an anti-barefoot running partisan. All concede that the wrong shoes contribute to injuries and are willing to help patients whom they deem structurally capable of running barefoot do so successfully. "If a patient says they want to run barefoot, if they have a neutral or a high arch, I'll tell them to go ahead gently," says Pribut. "If they badly overpronate and I feel that their injuries came about because of that, I'm going to steer them toward shoes that I think are more correct for them."

When Pribut spoke these words to me I next asked him if those individuals who are best suited to barefoot running are not also those who will tend to have the fewest injuries in shoes. "That is probably true generally," he said.

So, if you don't get injured often in shoes, there's no need to switch to barefoot running, but you probably could get away with it. And if you do get injured in shoes, switching to barefoot running might be tempting, but it will probably only make matters worse.

If nothing else, the barefoot running injury epidemic is a story of many ironies.



**About the Author:**

Matt Fitzgerald is a senior editor at Competitor Group, with regular contributions to RunNow.com, *Triathlete*, *Inside Triathlon* and *Competitor*. Matt has written 17 books, and counting, including *Brain Training For Runners* and *Racing Weight*.