



# CROSSFIT IS NOT DANGEROUS 3

By **Stephane Rochet (CF-L3)** | January 8, 2024

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As I wedged myself into my seat for the three-hour flight home, I couldn't help but notice the quizzical look I was getting from the guy sitting next to me.

"How's it going?" I offered.

He replied, "Good, man."

Then, pointing at my chest, he said "You a CrossFitter?"

I looked down and saw I was wearing my "CrossFit – No Shirt No Problem" T-shirt.

"Yes I am," I responded.

He reached over, shook my hand, and introduced himself as Bob. Then he said, "I love you CrossFitters. You guys keep me in business!"

"Oh yeah?" I asked. "What do you do?"

"I'm a physical therapist, and I treat a lot of CrossFitters."

It was Bob's turn to get a quizzical look from me.

"What? You don't believe me?" he said.

"I've heard that statement before. I think it's just a catchy little phrase some anti-CrossFit person made up and people who don't like CrossFit keep repeating it, even though there's no truth to it."

"You think I'm lying?" he bristled.

I chuckled to ease the tension. "No, Bob. I don't. But let me ask you this. If I come to your office to watch you work for a week, you're saying I'll see that the bulk of your clients are CrossFitters, and not football or basketball players or sedentary, obese individuals who are breaking down? Because the research I've seen doesn't really support what you're saying."

Bob looked away for a moment, then looked back at me and admitted, "Well, I do treat people from all types of backgrounds. Football players for sure, hockey, wrestling too. And yes I treat people who are out of shape or aging poorly. But I do treat a lot of CrossFitters. Why? What does your 'research' say?" he challenged, showing his skepticism with air quotes around the word "research."

"Bob, I'm just an old coach. I rely on people much smarter than me to dig into these matters. One such person is Dr. Amy West. She's a specialist in sports medicine, a graduate of Harvard Medical

School and a team physician for the Hofstra University athletic department. How's that for a resume? She's also very active in the CrossFit community. She made a great video called '**Is CrossFit Dangerous?**' where she did a literature review on injury rates for different types of exercise methods."

"Oh yeah? So what did she find?" Bob asked.

"After combing through the research data on CrossFit and high-intensity functional training (a term researchers often use in place of 'CrossFit'), Dr. West concluded CrossFit is not dangerous. In fact, contrary to what our critics will tell you, injury rates in CrossFit are relatively low. If you want to talk specific numbers, we're looking at between 0.27 and 3.4 injuries per 1,000 training hours. That puts CrossFit on par with activities like weightlifting and gymnastics, both components of CrossFit, and with a far lower injury rate than contact sports. The numbers don't lie, Doc." (1, 2, 3, 4, 5, 6)

Bob squinted at me as he formulated his response. "You're saying CrossFit is safe when compared to competitive sports. But it's a fitness program, so shouldn't it be much safer than these sports?"

"That's a good point, Doc. Let me answer with a question of my own. You look like you're in good shape, so what does your fitness program look like?"

"I'm a runner. I'll do a marathon and a couple half-marathons every year. I run at least 5 miles four days a week. And I know what you're thinking, but I'm not just a weak endurance athlete. I do three full body lifting sessions every week."

"That's awesome, Doc. Good for you! You're a great role model for your patients. So when you run your marathon and half-marathons, are you trying to beat your previous time?"

Bob nodded eagerly, "Oh for sure. I think if I train hard enough this year, I can meet the qualifying time for the Boston Marathon."

"Dang, you're a machine, Doc! You're definitely going to have to push that pace for a lot of miles to make it to Boston. So do you ever get any knee, foot, or back pain running that much?"

"Oh for sure," Bob exclaimed. "After a high-volume week of running as I get closer to a race, my knees throb when I'm sitting and my low back is killing me—" his voice trailed off.

I smiled at Bob. "Doc, I get it. Trust me, we've all been there. I've pushed too hard in my workouts and my knees and back have let me know it. In CrossFit, we're always competing with ourselves to increase our work capacity because that's what we need to do to build a hedge against disease and decrepitude and live our best life. So, because we're always chasing better results, like you with your running, I guess CrossFit is like a sport. The thing is, though, while you'll dissuade people from doing CrossFit because you've heard it's dangerous, I'm sure you'll support them if they want to take up running for fitness. But the research tells us that running can have an injury rate that is over 3.5 times higher than CrossFit's." (7)

I could see Bob wasn't convinced. So I continued, "A wise old coach once told me, when we were discussing safety and training, if a program was 100% safe, it would by necessity be 100% ineffective because you wouldn't be able to push hard enough to drive any kind of adaptation. So in the real world of fitness and health, not the social-media keyboard expert world, any fitness program we pursue needs to address both safety and the ability to generate results. And CrossFit does this better than anyone, meaning we produce the best results for the least risk."

"Humph," Bob retorted. "Tell that to my patients."

"I hear you, Doc. You're preaching to the choir. I would never make light of any athlete's injury. These stats are meaningless if you're the one who's injured. I'm the first to agree that having

limiting pain totally sucks. That's why CrossFit's emphasis on ingraining proper technique and a base level of capacity before slowly ratcheting up the intensity makes so much sense to me. It's how I've coached my athletes for years, with amazing results and a stellar safety record."

"That makes sense in theory, but then why am I seeing pain in backs, knees, and shoulders across my CrossFit athletes?" Bob asked.

"Good question. Some of it may come from "too much, too soon," where the athlete ramps up intensity before they're ready. I'm sure you've seen the same thing with people who decide to take up running. They buy sneakers and go out for a 5-mile run on Day 1. And then they're hobbled with shin splints for weeks. In her video, Dr. West listed the main risk factors contributing to injuries in CrossFit, and just like properly dosing intensity, these factors are things we can control."

"Oh yeah? Like what?" said Bob, genuinely interested.

"Well, this might come as a surprise, but those who compete in CrossFit at high levels like the Games are more susceptible to injury. (8) These athletes push the intensity, movement complexity, and volume of work far more than your average CrossFitter, with safety taking a back seat to competition results."

"That makes sense," Bob nodded in agreement. "I guess when I think CrossFit, I think everyone is doing the stuff they do at the Games in their affiliate. Just one of those workouts would break me!"



"Me too!" I said. "The training required to compete in CrossFit at the Games level is definitely different from the training we do to maximize our fitness and health. Just like the mileage required to compete in the marathon at the Olympics would hobble the vast majority of us. That said, you do have to put in the work learning and practicing movements and pushing outside your comfort zone a bit to get results and to become more resilient to injury. So those who perform CrossFit

workouts less than three times per week tend to be more prone to injury. (9) These athletes simply aren't putting in adequate time to refine their technical skills or build sufficient capacity to become more resistant to injury."

"So less isn't always more, huh?" Bob mused. "I've noticed with my own workouts that I'm more likely to get tweaks in my back and joints if I don't hit the gym enough. Especially if I keep running during that time. It's why I'm religious about getting my lifts in three days per week. So are there any other risk factors I can help my CrossFitters avoid?"

"There's a few, Doc. Those who play other sports on top of their CrossFit workouts are more susceptible to injury. (10) This is probably due to the fact that these athletes aren't recovering properly from all the physical work they are doing. Some programming adjustments could definitely help them. There's also a greater risk of injury when performing CrossFit unsupervised. (11, 12, 13) Our coaches do an amazing job of programming, scaling, and coaching CrossFit safely — they're such a critical resource in our community."

"I'm a huge fan of good coaching," Bob proclaimed. "I have a track coach who helps me immensely and a trainer at the gym who pushes me while making sure I do things correctly. Without them, I'm sure I'd have hurt myself many times over. What else should I look out for?"

Well, the last risk factor we can't do much about," I laughed. "Men are more susceptible to injury (14, 15, 16, 17), probably because we're not as good at checking our ego at the door as women."

Bob laughed and said, "Agreed!"

"Doc," I asked, "all the while we've been talking, I've neglected to ask you how severe the injuries are you're seeing in CrossFit athletes. I have a son who plays football. He tore his ACL last year, several of his teammates broke their collarbones, and there were numerous concussions throughout the season. I know what the research says about the severity of injuries in CrossFit, but you aren't personally seeing this type of carnage with your CrossFitters are you?"

"No, no, no. Not at all," Bob stated emphatically. "For the most part, I see strained back muscles, pain in the muscles surrounding the shoulders and various forms of knee tendonitis. Is this corroborated by the research?"

"Absolutely," I responded. "Speaking to the severity of injuries in CrossFit, statistically, CrossFitters who sustain an injury are averaging a little less than three days of missed training. The research also shows that only 24% of CrossFit injuries result in the athlete seeking out physician care, and only a very small percentage of those under physician care require a significant intervention such as surgery. (18) Again, I'm not downplaying any individual's injury or pain, but for the most part, CrossFit has a low injury rate, those who do sustain an injury miss very little training time, and very few actually require any medical attention."

"But my CrossFitters love me!" Bob quipped. "They all tell me how much better they feel just walking around and in their workouts after a visit with me. They stay with me for maintenance sessions even after they've gotten rid of the issues they originally came to me to resolve."

"I'm sure they love you, Doc! You're an indispensable tool in their quest for elite fitness. I know a ton of CrossFitters who use weekly body care — massage, acupuncture, scraping, or whatever — to help them recover better so they can keep attacking their workouts. I love that you provide this service to our community. You're helping keep people in the fight. And that is absolutely critical, because when we're having the discussion about CrossFit and fitness and injuries, the most dangerous thing is NOT doing CrossFit. And that is something our critics will never admit to."

Bob looked at me, perplexed. "NOT doing CrossFit is dangerous? What do you mean?"



I nodded and replied, "Absolutely. CrossFit is the best strength and conditioning program for developing the broad work capacity we use to define fitness. CrossFit improves aerobic capacity, strength, power, flexibility, body composition, and so much more. Our fitness makes us resilient, and especially during these times, as COVID continues to take a toll on those who are less fit, doing CrossFit and building your work capacity is one of the best things you can do for your health and survival." (19, 20, 21)

"I totally get that," Bob agreed. "I mean, I've seen it firsthand in my practice. My sedentary, obese, unfit patients were hit hard by COVID. I'm sad to say a couple didn't survive. I guess my question would be how can someone who is sedentary break into CrossFit to reap all these benefits? Isn't it too dangerous for them to start? Won't they get injured right away trying to suddenly lift weights and do all those pull-ups and burpees?"

"That's another great question, Doc. The great thing about CrossFit is that it is scalable to all fitness levels and rehabilitation needs. We have athletes who started doing CrossFit in their 90s, or hundreds of pounds overweight, or missing limbs. Anyone can do CrossFit and a good coach will show them how. The most important thing is to get started. That's the only way to experience all the benefits of CrossFit. Just show up. The rest will take care of itself."

"What do you tell someone who is sedentary and is concerned about getting hurt?" Doc asked.

"The first thing they need to realize is that they are not safer by not being active. In her video, Dr. West cited a paper looking at how injuries were sustained in a group of almost 4,000 people.

The highest absolute number of injuries in this group occurred in low-intensity activities such as gardening, walking, home repair, or cycling. Sedentary people get hurt being sedentary. So it's not safe to do nothing. And when we factor in chronic disease, pandemics, and basic demands of life, the only safe option is to build up your work capacity." (22)

Without taking a breath, I continued, "Greg Glassman, the founder of CrossFit, said it best when he said: 'The needs of the elderly and professional athletes vary by degree, not kind.' What he was saying was that while elite athletes need functional mastery to dominate their sport, everyone else needs functional competence to maintain independence and quality of life. That's why it's such a critical piece of our culture that CrossFit is accessible to anyone and everyone. Once someone commits to doing CrossFit, they will be astounded by the progress they make when they put in the work. Instead of worrying about getting hurt, they're going to marvel at how great they feel and all the wonderful new opportunities they can suddenly enjoy."

Doc smiled and winked. "You should work for the company. You're a darn good spokesperson. I'm even tempted to try CrossFit out and see what it does for me. It might even help me qualify for Boston."

"It sure will!" I exclaimed. "Let me know if you need help finding an affiliate. I know you're going to get hooked when you see your results!"

"I really appreciate that. Thank you." Doc said. He paused and added "You know, I'm really glad we had this talk. Besides my own fitness, I think my patients are also going to benefit from me learning about CrossFit."

"Doc, the pleasure is all mine. I'm so happy we had the opportunity to talk. The best part is that while we started with different opinions, now we're allies. We're both on the same mission to help people build the fitness that allows them to lead the lives they dream about. I'm excited to see where this journey takes us."

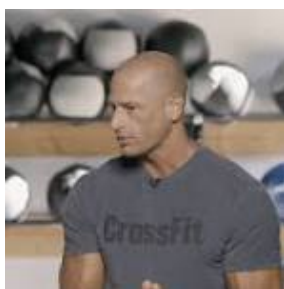
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## ABOUT THE AUTHOR



Stephane Rochet is a Senior Content Writer for CrossFit's Education Department. He has worked as a Flowmaster on the CrossFit Seminar Staff and has more than 15 years of experience as a collegiate/tactical strength and conditioning coach. He is a Certified CrossFit Trainer (CF-L3) and enjoys training athletes in his garage gym.

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