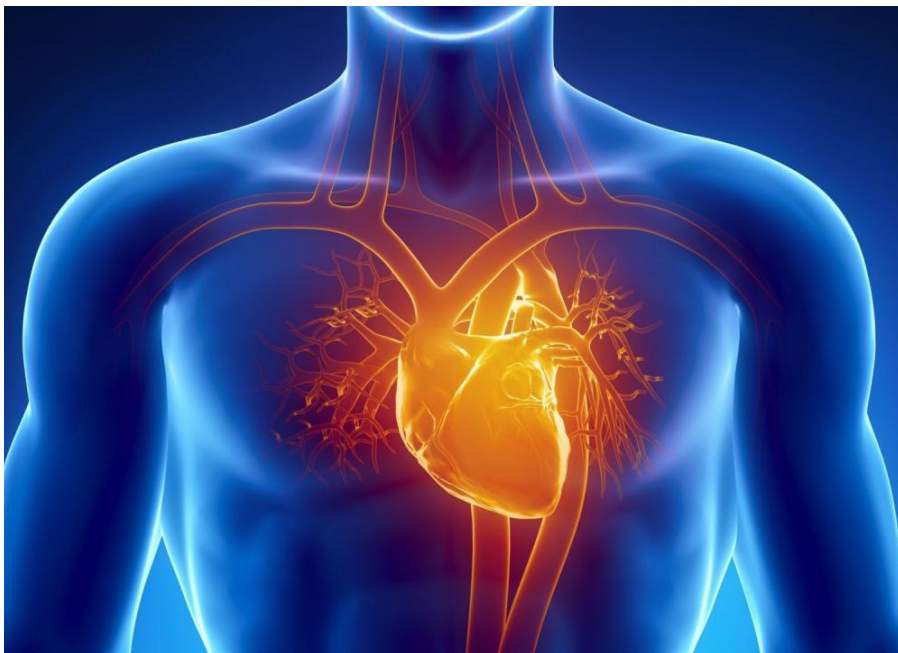

WFI NEWSLETTER

The Importance of Establishing Your Baseline



DYK: Sudden cardiac death represents the most common cause of on-duty firefighter fatalities.

- NIOSH

I had the rug pulled out from under me when my cardiologist suggested that I may need to consider a new profession. My head was spinning upon receiving that information after a busy 24-hour shift.

I've been on the job for close to 20 years. I was hired when I was 26 and I still love being a fire fighter. I was a personal trainer while I attended Humber's fire program, and continued to be a trainer early in my career. I have been involved in our Wellness Fitness Initiative (WFI) committee since it started in 2008 as a Peer Fitness Trainer (PFT) and now co-chair. I haven't always been perfect, but I do my best to live a healthy lifestyle.

In 2005, I started getting medical testing. Nothing out of the ordinary -- some blood work and cardiovascular testing and images. I knew the demands of our job and how hard it can be on your body. I wanted to establish my baselines. I had these done every 5 years or so along with an annual physical. My last echocardiogram before last year was in 2012. Things had changed and I'm glad someone caught it.



The [aorta](#) is your largest artery out of the heart, it carries blood away from the heart to the rest of the body. Your [aortic root](#) is the section of the aorta closest and attached to the heart. From the 2012 echocardiogram to the 2017 image, for whatever reason, my aortic root grew 5 mm. Why? I didn't feel any different. Did it grow 1 mm a year for 5 years, or did it grow 5 mm all at once? Where or what is the stressor impacting my heart's physiology? If it grows 5 more millimetres, my cardiologist and I will need to have a serious talk. In the meantime, we are still trying to figure it out.

I have tried to eliminate possibilities by taking tests for hypertension, sleep apnea, and stress. I've overhauled my diet and lowered my alcohol intake (thank you to my Jenn for changing her diet with me!). My dad had his aorta rupture and my doctor believes it is most likely hereditary, but we need to rule out a lot before we get there.

The key to all this is that there were two results to compare and see the changes. If my last echocardiogram was all we had – it isn't too alarming. Throw in the first one, and my doctor is better equipped to help me avoid a heart event.



Starting my stress test at KMH Labs, April 2017.

“Probably the greatest stress ever imposed on the human cardiovascular system is the combination of exercise and hyperthermia. Together these stresses can present life-threatening challenges.”

L. Rowell, In Human Cardiovascular Physiology Heart health

My dad's aortic rupture was not predicted – he didn't have any prior knowledge to anything coming (he's still ticking btw). These two echocardiograms have probably saved my life. I have a cardiologist looking out for me, and I'm due for another echocardiogram this spring.

We'll see if its changed again but I am prepared as best I can. I have amazing support at home, the knowledge that change has happened, and have taken steps to reduce or find the source of the change. All because I had a baseline for the cardiologist to compare to.

We know that [47% of fire fighter on-duty deaths are cardiac related](#). I urge you to take control of your cardiac health. Visit your physician and schedule your baseline testing.

Ryan Coburn, WFI Committee co-Chair

