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The Beat - Episode 4 Final Transcript

When a heart stops, you can help

[00:00:03] **Lauren** I wasn't in great shape. I'd hit my face and I was bleeding, and from the sounds that I had doing agonal breathing and everything else you picture with someone who's a cardiac arrest victim. So she was a bit traumatized by it, but was also, I think, impressed that what she had done had kept me alive.

[00:00:27] **Caroline** Chances are you or someone you know has been personally affected by heart disease and stroke. They can devastate lives, sometimes suddenly, but there's hope. I'm Caroline Lavallée and you're listening to The Beat, a podcast by Heart & Stroke with support from our generous donors. In each episode, we're joined by Canada's leading physicians and experts to discuss the most pressing issues related to heart and brain health, and you'll be inspired by the real stories from people living with heart disease and stroke. Thanks for listening.

Now let's get into the episode. In real life emergencies, most of us want to help. It's an instinct. A stranger, a family member, friend or colleague can step in and save a life, or at the very least increase the chances of survival. Each year, an estimated 35,000 cardiac arrests occur in Canada outside hospitals. Most happen in public places or at home. When minutes count, those closest to the victim need to act fast. But unfortunately less than half of people in cardiac arrest receive CPR and only 10% survive. We can do better.

In this episode, we'll hear from Dr. Katie Dainty about how bystanders are crucial to the survival of cardiac arrest victims. We'll also hear from someone who received lifesaving CPR and someone who saved her husband.

Lauren Carruthers was living in Ottawa with her husband. She was 28 years old and a registered nurse. Even though running wasn't her favorite form of exercise, she ran several times a week.

[00:02:23] **Lauren** I had actually just finished my run. I was very close to home, actually. And I thought, oh, I'm just hitting my little cool down walk — what I usually do, which was just a little lap around the neighborhood. I actually remember thinking after my run, I was like, that's a lot harder than it usually is, and it was my same run with my regular routine that I always did. So I was very familiar with how I usually felt after that run. I was having a hard time getting my breath afterwards, and I just felt kind of off.

So I was actually right in front of a school and there was a Canada Post employee to my right. I can remember I walked by him. I felt like my chest was fluttering. I remember looking at the time, being like, what's my heart rate? I don't remember what it was, but at that point I remember thinking, I'm going to turn around and go home because I'm just not feeling all that well. So I had just passed the Canada Post (employee) and I looked back around and I was going to go home, and I don't remember anything else until two or three days later.

[00:03:28] **Caroline** Lauren became unconscious before she could ask anyone for help. She collapsed on the sidewalk. She was in cardiac arrest.

[00:03:38] **Lauren** I'm not your picture of a cardiac arrest victim. When people think cardiac arrest, people... I think when they picture a cardiac problem, an older, overweight man is kind of what a lot of people see when they picture it.

[00:03:52] **Caroline** So what is cardiac arrest? To explain it, we asked Dr. Katie Dainty, a research chair in Patient-Centered Outcomes at North York General Hospital. She's also an associate professor at the University of Toronto and a co-chair of the Public Engagement Committee for the Canadian Resuscitation Outcomes Consortium.

[00:04:13] **Dr. Dainty** So cardiac arrest is actually the electrical problem, so that is when your heart goes out of rhythm. There's an electric current, so to speak, in your heart that keeps your heart beating at a normal pace. And when it jumps out of rhythm and it can't get itself back in, it arrests. It kind of panics and stops. And then there is no blood flow. There's no activity. There's no nothing, no oxygen to the brain. And so this is a super emergency. Without CPR or intervention, the victim will die. I always like to say a heart attack is the plumbing problem. So that's when you get a blockage and their blood flow isn't happening within your heart.

[00:04:50] **Caroline** Lauren had never experienced a problem with her heart before, and she had no family history of cardiac concerns. But an electrical problem can happen to any one's heart at any time.

[00:05:03] **Lauren** I never, ever, ever thought I'll be one to have it happen because I was an average person. I wasn't. I knew it could happen to anybody, but you never think it's going to happen to you.

[00:05:12] **Caroline** With her heart stopped, no oxygen was getting to her brain and her fate was in the hands of someone passing by.

[00:05:22] **Lauren** By some stroke of luck... miracle... I don't know whatever you want to call it, two Molly Maid employees were driving by at the time of my arrest. The Canada Post employee at the time was, I believe, attending to me, was not doing CPR yet, but was there. And one of the Molly Maid employees that was in the car had actually just completed the CPR course. And she said that a bystander and the Canada Post employee were trying to move me. And she said, "I remembered I did my CPR course and I remembered, you're not supposed to move somebody who's just had it down because you don't know what's happened." So they stopped the car and she got out of the car. Somebody had called 911 already, but she actually immediately started CPR, so she was the one who did CPR the entire time until the ambulance arrived. I was without a pulse, they estimate, for 19 minutes.

[00:06:19] **Caroline** Without the CPR performed by the Molly Maid employee, Lauren's story would have ended with her lying on that sidewalk.

[00:06:27] **Dr. Dainty** It can be really scary for someone to see someone collapse, so someone who's having a cardiac arrest will collapse and be not breathing. The person will die if you do nothing. You have a chance of saving that person's life.

[00:06:42] **Caroline** Although it was strangers that saved Lauren, it's often close family members or friends that come to the rescue. Like when Andrea Davis had to save her husband, Tim, after he collapsed at home. They were both in their early 50s and had four daughters. Tim was a teacher and coach who stayed active, averaging 30,000 steps a day.

[00:07:05] **Andrea** So that night, he had just returned home from his grade 8 graduation at his school. He changed and crawled into bed beside me and I was just watching TV and I would say maybe 30 to 30 seconds to a minute later, he said to me, "Oh gee, I really feel like I have heartburn. I don't feel very well." And I said, "Oh, really?" And then I thought he was just going to lay and relax, but he got up and went directly into the bathroom without saying a word to me, which just didn't sit right with me. Something... something was not right. Something was off. I knew he was hurting more than just regular heartburn, which he wasn't prone to. So which was a strange thing. And he said, "I don't know what it is. I can't. I can't shake this." And I said, "I think we need to go to the hospital". And so he agreed with me.

[00:07:52] **Caroline** As Andrea struggled to get Tim downstairs, his condition quickly got worse. Suddenly, he collapsed. He was lying on the stairs, unconscious.

[00:08:04] **Andrea** I knew it was probably a heart attack. I was pretty, pretty sure by that point. So I shouted for my daughter to come hold him on the stairs so I could grab the phone. Then I returned back to my husband and all the time talking to the 911 operator. So I gave our address. I told them what I thought was happening. I didn't say heart attack, I don't think, but I did say that he was unconscious and had stopped breathing.

[00:08:28] **Caroline** Was Tim having a heart attack or was he in cardiac arrest? Dr. Dainty explains.

[00:08:34] **Dr. Dainty** So sometimes when people have a massive heart attack where there's significant trauma to the heart muscle, it can put them into cardiac arrest. So they're very different things when they happen separately. But sometimes the heart attack can happen first and then the cardiac arrest. So your heart is so traumatized by the heart attack that it.. panics and stops beating.

[00:08:58] **Andrea** They asked me if I had an AED at home, and I said, no, we didn't.

[00:09:02] **Caroline** An AED is an automated external defibrillator, a device that can provide an electrical charge to the heart to shock it back into rhythm.

[00:09:11] **Andrea** So they said, you're going to have to start CPR. And I said, I realize that, but my daughter and I have to get him off the stairs first. So my daughter and I lift him off the stairs to bring down to the bottom of the stairs. So you're sort of in an open hallway, front foyer kind of area. I immediately started CPR, so again training just kicked in. I had practiced it so many times in my life, but it was great to hear the comfort of someone on the other end of the line. So I knew I was doing things the way I should be.

So they talked me through it even though I was doing it as they were talking. I kind of knew what to do, but it was really nice to (have) someone help me with my count because I remember one time the operator said to slow down. That can be very nerve racking because as I was doing all this, I can remember some of my thoughts are he's got to make it. I'm not ready for him to go. He has children that haven't married yet and all those things, so. So I did CPR until the first responders on deck were actually police officers and they took over for me. And then right behind them came the fire department and EMS, the paramedics.

[00:10:19] **Caroline** Andrea had been certified in first aid since she was 12. She was an early childhood educator, so she kept training every two or three years. But what if you don't have CPR training?

[00:10:31] **Dr. Dainty** The great thing about the 911 system in Canada and in a lot of places around the world is we have what's called dispatcher assisted CPR. So as soon as you call 911, the person who answers the phone will help you to do CPR. So even if you don't know anything about CPR, the dispatcher will coach you to do CPR so you don't even have to know what you're doing. They will tell you. You just have to stay on the phone with them, and they will stay on the phone with you until the paramedics arrive.

So that's an amazing system that we've developed around the world, and it really has increased people's willingness to do bystander CPR, I think. And so you and in partnership with the dispatcher really can save that person's life. Sometimes you can't. So sometimes the person will pass away anyway, because perhaps the trauma to their heart was too much or whatever it might be, or there was too much time between when you found them and when you started CPR for different reasons. But I highly encourage everybody to try because without trying, that person will die.

[00:11:35] **Caroline** At minimum, if you're a bystander or what Dr. Dainty calls a lay responder, you should call 911 when someone is unconscious or not breathing.

[00:11:44] **Dr. Dainty** Some people just can't bring themselves to do CPR, and that's OK. We would highly encourage everybody to do CPR, but we understand that not everybody is prepared to do that. But calling 911 is a major step. So anyone who witnesses it can at least call 911 and at best start CPR and see if there's an automated external defibrillator anywhere, if it's a public setting.

[00:12:07] **Caroline** You've probably seen an AED even if you didn't know what it was. There are many AEDs in public places in Canada.

[00:12:16] **Dr. Dainty** Many people have seen maybe in the movies or on TV or something, you know where they yell "Clear!" and they shock the person. So we actually have these in public settings now. They've been developed to the point where we can make them very user friendly. So you'll see them at malls, rinks, community centres, banks and restaurants. You know, you'll see the signs. They'll be in a box on a wall somewhere, usually somewhere where people can see.

If you see someone in cardiac arrest and if you're alone, then you may, may or may not have time to go get it yourself. But if you're with somebody, you can send that person to go and get that AED. When you open that box... you turn it on, it talks to you, it gives you instructions again. You're on the phone with the dispatchers so they can help you to use that device. You do not have to be medically trained to use that device. It's meant for the public and it gives an even better chance.

[00:13:07] **Caroline** Giving CPR to a family member or a stranger seriously increases their chance to survive. The use of an AED, and CPR doubles a person's chances of survival. These types of emergencies can feel like they go by in a blur. And once the patient is rushed to the hospital, the lay responder might never find out what happened. But Lauren was able to connect with the Molly Maid employee who saved her.

[00:13:36] **Lauren** I messaged back and forth with the bystander who did CPR for a little bit. This was while I was still in hospital, so it was it was pretty raw, still. Told her what had happened. I told her everything that we knew at the time and basically told her, you saved my life. Obviously, you know, paramedics did get there and whatever else but if she had not been doing that CPR for as long as she did, I wouldn't be alive to tell the story.

The vibe that I got from her, from talking to her, was that she too was a little traumatized by what had happened, and obviously that would be traumatizing to see somebody on the sidewalk. I wasn't in great shape. I'd hit my face and I was bleeding, and I was from the sounds of it doing agonal breathing and everything else you picture with someone who's a cardiac arrest victim, I guess. So she was a bit traumatized by it, but was also impressed that what she had done had kept me alive.

[00:14:36] **Caroline** For loved ones like Andrea and Tim, the emergency event is usually just the beginning of the emotional roller coaster.

[00:14:44] **Andrea** This was very traumatic. Three of the four children were home with me experiencing this. Only one was right beside me at the time. The other two were sort of at a distance. And then it got more traumatic as we entered the hospital, to be honest.

[00:14:57] **Caroline** Family members and strangers can struggle mentally and emotionally after going through this kind of experience.

[00:15:04] **Dr. Dainty** It's a very chaotic situation. The paramedics do what they need to do and then take the patient to the hospital. And the bystander lay responder, if they're not a family member, is kind of left standing there, like, what just happened? And we do know now from qualitative research and speaking to many lay responders that there is a psychological impact to that. Some people are fine and are actually quite empowered by having helped someone, and other people really struggle for a long time with sleeping disorders, recounting the event in their head, wondering if they did the right thing.

And unfortunately, with the privacy legislation in Canada and I think pretty much around the world, it's very difficult for bystanders who are not family members to find out what happened to the person that they helped, whether they lived or they died. But family members who have done CPR on a family member have psychological trauma as well, not just because their family member almost died, but because they have had to jump in and save them.

We do have something called the Bystander Support Network, which is a web resource. It's just information for folks who would like to access it related to, you know, "you did bystander CPR and now what?" kind of kind of thing. And a trusted source of information about exactly what cardiac arrest is and what happened and why bystander CPR is important. But I think we have to sort of build some infrastructure around this that maybe is, you know, linked to the paramedic or police system or people who are also at these events to be able to have a touchpoint for these people.

[00:16:37] **Caroline** Today, both Andrea and Lauren have come a long way since being on opposite ends of cardiac arrest emergencies.

[00:16:45] **Lauren** This experience, for sure, has given me a new perspective. I'm like, I live every moment to the fullest because you just don't know what's going to happen. And I mean, that's why you don't want to put plans on hold too much. And it's after recovering and after my mental health got better... it's been, it's been good. I haven't been afraid to do things anymore. I do what I need to do. I return to work. I'm pregnant with my first baby. Living life to the fullest as we can.

[00:17:16] **Caroline** After several difficult months in the hospital, Tim eventually returned home to Andrea and is well on his way to making a good recovery.

[00:17:26] **Andrea** So we've had a number of years of sort of being stressed about a lot of things, but we already had a strong relationship and if anything, it just deepened a little bit more, for sure. But he definitely appreciates what I did for sure. Whether it was that or we already had it, I don't know, but there definitely is an appreciation for life and that understanding that it can happen in seconds, that life changes for you.

[00:17:46] **Caroline** In a flash, you or even I could become someone's only chance to live. Here is Lauren's advice if you see someone collapse like she did.

[00:17:59] **Lauren** Don't be afraid to step in. If you see somebody who appears like they're in need of help, stop and help. You can't hurt; somebody who is in need of CPR cannot be injured by what you're doing to them. Yes, it might break ribs. It might do other things, but you cannot put them in a worse condition than they are currently in.

[00:21:06] **Heather** A friend of mine said to me after he passed, and you know, yes, you didn't have a long time, but the time you had with him, it was really special because it was just you and him. If he hadn't been sick, you would have been two people running around chasing career goals. Who knows, we might have had kids that, you know, all kinds of crazy schedules and that kind of thing. But the time you had was actually good quality time together.

[00:21:31] **Caroline** Quality time that allowed Heather to understand Jamie on a level nobody else could.

[00:21:38] **Heather** Towards the end of it, like, we could literally look at each other and know what the other person was thinking like. It just really kind of made us a cohesive unit and just so in sync and knowing that really we only had each other to rely on. I think it really made us very strong. Like two became one and we were very strong and could handle anything at that point in time.

[00:22:06] **Caroline** And through all the hardships, hospital visits and cheese grater moments, that strength helped to shape Heather's perspective.

[00:22:14] **Heather** There's a silver lining to everything, and I think when you're involved with someone with a chronic illness, what's the saying? Don't sweat the small stuff. A lot of those things that I think sometimes we get caught up in and we worry about really is not a big deal.

[00:22:33] **Caroline** Even after watching her mother change from the person she once knew, enduring the tearful drives and terrible winter weather and missing out on special occasions with family and friends, Debbie cherishes the time she cared for her aging parents.

[00:22:51] **Debbie** But I would say also, I looked at my caregiving years with my parents as my gift to them. This is something that I could do for them. That was in some ways giving back for all the years they had given to me. If I could help them to maintain their dignity and have the best quality of life they could under the circumstances. Then if I could do that, that was probably the most important part of my role. And I look back so often and those years, now, of course, I'm now almost five years past when my mother and my dad both passed away. I would say that's the one thing I feel best about. One of the things I feel best about in my life was that I was able to give that to them, and I would never take that back. I would never regret any of the years I gave to supporting them in their journey at the end of their lives.

[00:18:22] **Caroline** Dr. Dainty agrees.

[00:18:25] **Dr. Dainty** You're the only chance they have. You're there alone. Probably seems very scary, but you are the only chance they have to survive.

[00:18:40] **Caroline** Thank you, Andrea and Lauren, for sharing your stories. And thank you, Dr. Dainty, for providing your expertise. You can save a life. It takes four simple steps: Call 911, shout for someone to look for an AED, start CPR and use an AED if there is one.

If you want to learn the CPR basics, you can start by watching Heart and Stroke's video at heartandstroke.ca/cpr. It's only 90 seconds. And remember when you call 911, the dispatcher will talk you through everything you need to do. I still believe that the more people that have CPR training the better. Being prepared can help you keep calm if you ever faced an emergency. If you're lucky, you might never need to use it.

But Andrea and the Molly Maid employee that saved Lauren are both examples of how training gave them confidence and led to saving lives. To me, that makes them heroes.

I hope you enjoyed this episode. In upcoming episodes, we'll hear stories of COVID-19 and cardiovascular health, stroke and more. Thanks for listening to The Beat and a special thanks to our donors for making this podcast possible. Subscribe now to stay informed, get inspired and rediscover hope. Don't forget to read and review the podcast so we can reach even more listeners.

Stay tuned for our next episode! Until next time, I'm Caroline Lavallée.

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