

## THE BLOODLINE WITH LLS

Episode: 'Sound the Alarm: Firefighter Health, Cancer Risk, and Moving Forward'

## **Description:**

Firefighters risk their lives every day—but what happens when some dangers aren't in the flames, but in the long-term health risks they face on the job?

In this episode, we take a closer look at cancer in the fire service, especially the increased risk of blood cancer. Joining us are Dr. Sara Jahnke, Director and Senior Scientist at the Center for Fire, Rescue & EMS Health Research; Steve Fisher, a retired firefighter and cancer survivor; and Tommy Schroeder, a Portland Fire & Rescue Lieutenant and dedicated LLS volunteer. From occupational exposures to systemic change, this conversation dives deep into the science, personal experiences, and grassroots efforts to protect those who protect us. Whether you're in the firehouse or supporting from the outside, this is a must-listen for anyone who advocates for firefighter health and safety.

## **Transcript:**

**Elissa:** Welcome to *The Bloodline with LLS*. I'm Elissa. Thank you so much for joining us on this episode. Today, we are going to be talking about cancer in firefighters. Joining us today are Dr. Sara Jahnke, Steve Fisher, and Tommy Schroeder. Sara is the Director and a Senior Scientist with the Center for Fire, Rescue, and EMS Health Research with the National Development and Research Institutes, or NDRI-USA. With nearly two decades of research experience on firefighters, her work has focused on a range of health concerns, including cancer in firefighters.

Steve is a retired firefighter who was diagnosed with testicular cancer in 2009. During his treatment, he struggled to find support for firefighters with cancer and was finally able to find connection in the Firefighter Cancer Support Network or FCSN. However, he still felt like he wasn't getting support in his workplace and fought to make a change in the system. Tommy currently works as a lieutenant at Portland Fire & Rescue in Oregon. After seeing how firefighters have a higher risk of getting blood cancer, he decided to get involved with LLS and fundraise for research. He started with a



"Visionaries of the Year" fundraising campaign and continued his volunteer work with LLS to now serve on the Portland/Southwest Washington Board of Trustees. His hope is that finding a cure for blood cancer could save both his coworkers and possibly himself someday.

Welcome, Sara, Steve, and Tommy.

Steve Fisher: Thank you.

**Tommy Schroeder:** Hello.

Sara Jahnke, PhD: Happy to be here.

<u>Elissa</u>: Happy to have you here. So, Sara, let's start with you and get some background for this topic. Could you tell our listeners why firefighters are at a higher risk of being diagnosed with a blood cancer?

**Dr. Jahnke:** Yes, well, and some of it, I think, makes sense when you think about what firefighters are exposed to. So, if you think about any chemical that's in a building, any chemical that's in PVC pipe, when that burns, it's what you see in the smoke and then also ultrafine particulates. In fact, the evidence about, with the link between firefighting and cancer is so strong that in the International Agency for Research on Cancer, which is the world's experts on saying if something is a known carcinogen, recently reclassified firefighting as an occupation as a Group 1 carcinogen, so, a known carcinogen to humans.

And, the research that's gone on, about 80% of research on firefighter health has just happened in the last about 15 to 20 years; and so that, what we know about the changes are, and the link is significant now. I mean there's been some funding from FEMA to study this in a lot of groups internationally but a lot in the United States; and it looks like it's a number of things.

So, it's what they breath in. It used to be that when you were in overhaul, which is the time after a fire's out and you're in making sure that there are no hotspots and cleaning up and doing those types of things, everyone thought, oh, the air's clear. They used a 4-gas monitor. And once it looked clear, people would take their SCBAs or their self-contained breathing apparatus off and kind of go about their activities because, obviously, you don't want to have to wear more and heavier gear than you have to.



But what we know now from research that's gone on is when the air appears clear, first of all, there's way more than four chemicals. And even though one chemical like cyanide could be low, other chemicals could be really high. So, we know that that 4-chemical monitor's not enough. But, we also know that when the air appears clear, that means that it's ultrafine particulates. So, it's really small particulates that like to get really deep into your cells, basically. And so, there's the dermal absorption. There's the inhalation. Gear we know has PFAS (Per- and Polyfluoroalkyl substances) in it. There's the off-gassing of gear. How stable is the PFAS end gear for firefighters who have fought fires like at airports, the AFFF foam (Aqueous Film Forming Foam). And, I've heard so many stories. People are like, "We used to use it as like hand soap" when they were doing trainings because they didn't, you know, it cleaned stuff off very well. But who knew that at the time?

So, there's been a lot of progress. People will always ask me, "Well, don't they wear, wear gear to keep from that?" Gear's not designed to keep carcinogens out. In fact, there's been some really cool research by the IAFF (International Association of Firefighters), where they put a simulated carcinogen, about the same size particulates; and they spray someone who's properly outfitted in their gear. And what you see is they like light up like a Christmas tree around their neck where the hood is; but even the hoods in the past have not been particulate blocking. There's progress in all these areas, but also anywhere where there's an interface. And if you think about a firefighter on the fire ground, especially a long fire, if you're going to pick up and grab a granola bar to eat, you're not going to like run into the neighbor's bathroom and wash your hands. So, I think some of it's probably coming from ingestion too.

The other thing that I think is fascinating, that's getting more focus now is understanding how the impact of things like shift work. So, shift work is classified by IARC (International Agency for Research on Cancer) as a possible carcinogen. The interrupted circadian rhythm that comes with that and how your body wants to run on a 24-hour cycle. And if you are 10 days a month or, for volunteer firefighters, 24 hours a day, 7 days a week, 365 days a year, interrupting your rhythm, there's a growing body of literature about the carcinogenicity of that. So, that's another one. And then we look at the mechanisms, and it's things like epigenetic changes that you see occur. It's not that it changes the genes you have, but it's changed what's turned off and on.



So, it's, fortunately, getting a lot more attention; and there are a lot of shifts in the fire service around the way things are handled and prevention and decon (decontamination) on the fire ground and those types of things. But I think a lot more work is needed still.

<u>Elissa</u>: Yeah, so it sounds like there's quite a lot of factors that may affect their cancer risk. So, what are some steps that firefighters can take to reduce the risk of developing cancer?

**Dr. Jahnke:** It's a great question; and just like my answer to the first question, it's not easy and it's not straightforward because we've quantified some things. There's some great work out of University of Illinois, Gavin Horn and Denise Smith, where they looked at decontamination on the fire ground and doing skin wipes. Kenny Fent too with NIOSH. We know that using skin wipes, particularly on the neck area, anywhere where you have that thin, sensitive skin – hands, wrists – is important. That can decrease exposure. Staying on air, putting the SCBA on when you get off a firetruck and keeping it on until you get back on the firetruck, which, it sounds awful to me, and I understand especially in hot areas, no one wants to do that. But there's, a significant risk to not doing that.

So, I think those types of things, washing your gear, shower, there's a whole push to shower within the hour. Like your Halligan (tool) when you get back to the fire station is not going to get cancer, but you could, so take a shower as soon as soon as you get back to the station and can. Kind of all those health and wellness pieces; and then also with the shift work, this is never going to be a 9 to 5 job. Never, never, never. You couldn't put people off and be like, "We'll just get with you in the morning," and no. So, I think prioritizing sleep when you can, and then also paying attention to all the other health risks because, if you look at the relative risk of firefighting and its relationship to cancer, some other things like heavy alcohol use actually increases your risk for several cancers. Obviously, smoking. No one should be using tobacco but especially firefighters because it's just one more, hit against your system.

So, I really think it's harder for firefighters to be healthy than it is for average people on the street because of circadian rhythm disruption, because of all the other pieces. But I do think it makes it particularly, on the cancer side, more important that they concentrate on all those health behaviors.



<u>Elissa</u>: Yeah, absolutely. Now let's move to somebody who's been diagnosed with cancer. So, Steve, you were diagnosed with testicular cancer in 2009. Could you tell us about your personal experience in finding support and resources to navigate cancer and work?

Steve: I sure can. So, when I was diagnosed and treated, I felt like I was a firefighter on an island all by myself, trying to find others; and so I was scouring the internet, and back in 2009, the internet didn't have a whole lot of resources. But I did stumble upon an organization called the Firefighter Cancer Support Network, and back then the face of that organization looked a lot different than it does now. But we did have support forums. So, within the platform, we had forums; and you can go on there and you can connect with other firefighters dynamically one on one if you wanted to. And so I actually connected with a couple other firefighters from around the country just on my own; and then once I made it further into my treatment regimen and I felt like I was ready to come back to work shortly thereafter, I kind of dropped off the FCSN train and started becoming that person within my own department, so when people were diagnosed subsequently to my treatment, I would reach out to them, and I'd become their support mechanism.

And my union president took note, and about six months after, I was back online. He came to me and he goes, "Steve, I have a favor, I want you to take on this role." And I was like, "Okay, what is it?" He goes, "I want you to be the Oregon Director for the Firefighter Cancer Support Network." And I said, "Wow, full circle. Here we are."

So, I agreed, and it was a cascade of tasks and a cascade of new responsibility that I never knew I was going to have. But I was happy to do it. So, not only was I taking care of the firefighters from my department but throughout the whole State of Oregon. And as things progressed, I eventually took on a Western Vice President role. The problem is that a lot of states did not have state directors, so I was taking on their states as well. And it became overwhelming, to be honest. So, I asked to step down from that role as the Vice President because I wanted to concentrate on the State of Oregon and our firefighters closer to home.

In this role, we don't only just support other firefighters, but we do educate also. So, I pretty much can, not as eloquently, but I can almost regurgitate everything that Sara said earlier when it comes to the causation of firefighters and their cancer.



<u>Steve</u>: I'm not quite as good as she is with the statistics without a PowerPoint up in front of me. But I know that, from my experience, how more frequently firefighters are diagnosed with cancer.

<u>Elissa</u>: Yeah, and it's definitely good to be able to be there on that local level and have that knowledgebase and be able to make people aware that this is a risk and also the steps that they can take.

Now, before you got involved with, Firefighter Cancer Support Network and became that local support person, how was it going back to work? Were you finding support amongst your employer and your coworkers?

<u>Steve</u>: No. So, in Oregon, we have a law called the Presumptive Firefighter Cancer Law; and it identifies 12 different kinds of cancers that if one is diagnosed, your cancer is considered to be a Worker's Compensation claim or you have the ability to file Worker's Compensation claim. Testicular cancer is one of them, and so is the blood cancers, as well. There's plenty of firefighters that get diagnosed; but I was the very first one that made a claim under the new law because the law was passed in July of 2009.

Elissa: Oh.

**Steve:** And it went into effect on January 1<sup>st</sup>, but it accepted all the claims back to the time when the bill was actually signed into law in July. So, I'm the one who had to test the law; and it was really a tough experience going to the administrative law judge's courtroom and having to testify about my experience and having the HR manager from my fire department there sitting beside the work comp attorney, feeding him with information, and saying that she was there for me. And she wasn't, obviously.

They would go to caucus; they'd come back into the courtroom, and all of a sudden he had a whole bunch of new questions to ask. It just didn't feel good. The good part is there was lots of my coworkers that were there to support me. And we got through it and eventually they did accept my claim after two different court appearances; and it was just about to go to the Supreme Court of the state before they decided that they fought enough. So, that was tough.

I believe there was a hesitancy from some of the upper administration at the fire department to reach out to me, not because they didn't care, but I think they were kind of stuck in the middle. So, I don't want to say that they're bad people. They just had a



role to fill. They were doing their job. They didn't want to have controversy, I get it. The Benefits Coordinator from HR was the most amazing person in the world to me at my department. And then a lot of my coworkers at my level, they were also really great.

As far as going back to work goes, I wasn't certain. I remember one time I was at the Training Office, and that's when we were really hot and heavy about going in fighting simulated fires inside of cargo containers. And the products that we were burning were pressboard made with glue, and glue that we didn't know exactly what kind of chemical they were going to off-gas into the IDLH, the

immediately dangerous to life and health. I didn't feel good about that and one of my chiefs was there, and he asked me what it's going to feel like to go back to work. And I said, "It's going to be tough. I'll be honest with you. I don't know if I want to go and expose myself to more carcinogens." And he goes, "Well, you know that's part of your job. And if you're not willing to do that, then maybe you should think about a different career." And that was 15 years ago that I had to hear that; and from then on, I can be bull-headed and go back to work despite what he says or I can quit. And I'm not a quitter. So, I went back and I finished out strong.

**Elissa:** Yeah, I think that's something that a lot of people wouldn't necessarily think about is that when you do go back to work, you are exposing yourself to the same things that they suspect caused your cancer in the first place. And that would be very, very difficult to do.

**Steve:** It was. However, I was that guy at the department who got off the engine wearing an SCBA and wore my regulator on my mask connected all the way through till we were done rolling hose up at the end of the fire. And I was trying to set an example. I would be the one that would go and walk up to the recruits; and I'd say, "Hey, you guys, this is a really good time to practice your decon that you learned in the academy so that you can have a long healthy career and retire like I'm about to."

**<u>Dr. Jahnke</u>**: Hey, Steve, I have a question. How well was that received?

**Steve:** By some people, quite well, mostly the recruits. But to some of the people who were the ones who liked to have the crusty gear and look like they were the old salts of the fire department, some of them were like, "Hey, get out of here. These are my recruits." And, yeah, that was really tough to hear. But it didn't stop me.



<u>Elissa</u>: Yeah, it's always good to set a good example for other people and hopefully you'll start making a difference that way.

**Steve:** Yeah, it'd be interesting to go back to the job now and kind of see how things are going and seeing if they actually took things to heart and made the changes that we all pounded into their heads for the last ten years, and, hopefully, we saw progress.

**Elissa:** Well for that we have Tommy, who is still currently in the fire department. So, Tommy, let's move onto you. You have been involved with LLS now for several years; and, actually, you and I met in the local Portland chapter during your campaign for Man of the Year, which is now called Visionaries of the Year. So, what made you want to contribute to funding research and support for blood cancer?

**Tommy:** I was kind of tricked into it. A friend of mine, who owns a food truck service in Portland, I ran into him and his partner at a nightclub; and I started talking to his partner and we were talking about philanthropic work. And I think I met Steve first through working with and fundraising for another nonprofit, one that is pretty closed tied to the fire department.

And I took a lot of pride in that work. I poured quite a bit of time and effort into fundraising; and then that opportunity ended when a business closed, one that was supportive of our event space and stuff like that.

And the timing was pretty good, about six months after meeting her I got a call; and she said, "Hey, I'm, a Leadership Team member of The Leukemia & Lymphoma Society"; and I had heard those words before. Cancer was kind of a blip in the back of my mind of something that was a possibility for everyone. And this is, really, kind of before cancer became a hot topic in the fire service. This is only five or six years ago. So, for City of Portland, we knew it was there. There wasn't a lot of talk, whether it be lack of information or lack of funding, or lack of support.

So, when she asked me to participate in this competition or campaign, I had to do some thinking about it because it was quite a commitment. And after researching, I think at the time the statistic was firefighters were 9% more likely to get a cancer and 14% more likely to die of a cancer than the run-of-the-mill citizen out there. And that was kind of shocking to me. I had heard of a few firefighters that had gotten ill, one lieutenant that passed. I think it was non-Hodgkin's right before I got hired. And then some others that have gotten cancer and survived. I didn't really think about it. But that got my gears



turning, and really the only way I can contribute as a boots-on-the-ground kind of guy was to raise money. That's what I knew.

So I accepted her challenge, and in a ten-week period, I think we raised around \$80,000, me and a team of people that were so supportive, nonfirefighters, firefighters; and that's how I feel like I can contribute, besides spreading the word of decon, wearing your SCBA, not bringing your turnouts into the bunkhouses, all of those things.

<u>Elissa</u>: Yeah. It's good that you're also working on that local level, like Steve had kind of gotten started to try to get your coworkers and fellow firefighters to, take those steps to help prevent cancer.

Now, can you tell us a little bit more about what you've done to support LLS research and educational programs since that very successful campaign you had that raised an incredible \$80,000 because I know you've done guite a lot since then.

**Tommy:** Yeah, so after that campaign, I was asked to be a Leadership Team member. My role there was more to try to get other influential and important community members to participate in the campaign as well; and that is still something, even as a board member, I'm still looking for.

And now my focus as a trustee is looking for opportunity, looking for people who can help us with that mission, whether they're individually able to contribute financially or be support or work for a company that is generous in their charitable giving. And so, our team spends a lot of time brainstorming exactly how we can make all those pieces fit.

**Elissa:** So, let's talk about making change and what is being done on a national and local level to assist firefighters who have been diagnosed with cancer.

Sara, you also serve as the President of the Board of Science to the Station, a health and wellness alliance, an organization that bridges the gap between first responders and research scientists by interpreting data used to develop policies and best practices. How does your research regarding cancer risk translate to firefighters in the field?

<u>Dr. Jahnke</u>: So, traditionally, not well. I mean, to be honest, which is why we created the organization, I think in the past, on the science side of things, we've always thought our job is to do research and publish it. And the fire service is like, "Yeah, great, but



what's that got to do with?" You know, it just sits on a shelf, like literally on a shelf somewhere at a library.

And so, what we've been trying to do is take it and make it make more sense, right? Working with firefighters who are engaged in this issue in saying like, "Here's a result we found. What do you think about it?" Because sometimes we get results where it's like does that make sense? And then, we had one result, in particular, on miscarriage among women in the fire service; and it's double the risk for career firefighters and 42% higher for volunteers. Well, they don't run as many fires. How could that be?

And so we started talking to volunteer firefighters who are like, yeah, absolutely. Let me talk about the gear that I carry in my car or have next to my bed every night.

So, just a lot of things that, they're like, "We don't have two sets of gear. I don't have one set that fits." So, it's been a really cool opportunity to make the science make sense. But I think my side of it, it's even cooler to see the fire service able to ask questions and say, "Well, what about this?" or "How does this increase a risk?" or "What do we know about this type of approach?"

There's been a lot of focus on PFAS and concerns about PFAS exposure among firefighters. Jeff Bridges out in Arizona is finishing up a study, and it's a replication of what was done in Australia. But it looks like if you're concerned about your levels of PFAS, you can donate blood; and it will decrease it over time. Small enough amount that it's safe enough for the people receiving the blood but also can help you out. Every firefighter should know that; but they don't because it sits on a shelf. So, we try to make stuff interesting, put it into a clip on social media or do an infographic about it. One of my friends has an occ health clinic; and she does what she calls potty times. And she just sends flyers to put in the bathroom or over the urinals every month.

Just give people information and a snippet in a way that either motivates them or gives them a tangible thing to do with it. Everyone will say, "Oh, I'm just a firefighter." I'm like, "Well, I'm just a scientist." If you don't care about what I'm doing, then it's useless for me to be doing the work. So, it really is about doing this together and, working on these things together.

**Tommy:** As someone that's still working, I can say that I think we've reached the point where we know the data's there. I think fire crews and executive staff, admin, they all recognize and accept that there's a huge risk. And unfortunately, I think it takes a



tragedy to bring change, and I've seen other departments. I've talked to colleagues that work in other cities, in other states, and that's what it took. It took someone getting cancer and succumbing to it to really take it seriously.

Steve's been retired for a while, and I think it's great that he and I are both on here because he can speak to well before I started working in 2005.

Dr. Jahnke: I think he just called you old. I'm just kidding.

**Tommy:** I'm sure I've told him that in person, so-

Dr. Jahnke: And you're young.

**Steve:** I love you too, Tommy.

**Tommy:** You know, I've been-and, so I'm going in, into my 20<sup>th</sup> year, cancer was a blip. We used to do foam training with training foam; and I think, lucky for us as a metropolitan structural department, we didn't really have a ton of exposure to the AFFF that has the PFAS in it. We did carry it. It was an option as a class B foam for us to use, but never really had the opportunity. That was more for the airport folks.

But it was only recently that I realized that our turnouts had PFAS, and other things environmentally just naturally have it. They just don't tell you and that there's dozens and dozens of forms of PFAS. It doesn't have to be Teflon. It can be any of those forever chemicals.

But in that 20 years I've certainly seen a lot of change. I came in after the advent of non-legacy components like wood and cotton and all of those things that back in the day burned; and you could run into them with your mustache in your mouth and filter out that gunk. But it wasn't really bad for you because it was all organic. And now, I'm not saying that you had that experience, Steve, but you know, now everything's plastic. Furniture is polyester. Carpet. The vinyl floor in my home. I used to bring my bunker pants into my dorm room when I first started; and that's how we turned out in the morning. Now, they're not allowed in the public areas of the station at all. Now we decon. Now we wipe all of the soft tissue areas, like you talked about.

Back, it must be only seven years or something, but we didn't have turnout extractors at every station. We didn't have one at any stations. We went to a twice yearly send your turnouts in for cleaning. We didn't have second sets of turnouts, so you could have a



big fire on the first day of getting your turnouts clean back, and you sat with those and you used those for the next 5-1/2 months. And so, at least in Portland Fire, we've taken great strides and it just makes me so happy to see. And I hope that other departments can get beyond whatever constraints are limiting them from enacting those policies.

**Steve:** So, through my association with the Firefighter Cancer Support Network, a big component of what we do is we educate firefighters. So, we actually do onsite training. It's usually about an hour, a PowerPoint presentation that we give to firefighters. Mostly, it's for recruits. Some departments have embraced it so much that they've had me come in for every shift, so all three shifts, and had all the crews cycle through and get the education.

But really, for a long time, I thought, this needs to be a leadership thing. So, it needs to come from the chief down. So, the chief needs to tell his chiefs and his Deputy Chiefs and his Assistance Chiefs and his Battalion Chiefs, all the way down to the Captain and the Lieutenant level that they need to embrace all of the preventative measures we can take to reduce our exposure to carcinogens.

But, I also learned that by educating the recruits, there was a trickle up of the information where the recruits were setting the example for their company officers; and their engineers, which, the engineers, I was one of them, were some of the worst because, we're like, "Well, I drive the fire engine. I'm not going to get exposed." But, really, that's only if you're the first arriving company. The subsequent companies, the engineer's going into the fire just like the rest of everybody else.

So, the culture has definitely had a shift, and, like Tommy was saying all the different things that we've done to make change. I remember when we had shag carpet at the fire station. Now you can't even find any carpet at the fire station anymore because that stuff will get in there and live there forever. Same thing with the walls of the fire station. You used to be able to go in and take your fingers and drag them across the wall and take a look at them, and they'd be black from the soot from the exhaust. And sadly, we just lost a firefighter a couple years ago from a department in the east side of Portland whose city is not doing anything to reduce the diesel exhaust problem in the station.

And you can go in there today, and you could rub your hand on the wall; and you're going to find diesel exhaust. The other thing is fire engines are built with the clean diesel technology. What does clean diesel technology really mean? So, what it is is, it's



a diesel powertrain that's designed to roll up and down the highway with a White or a Freightliner or Peterbilt or Kenworth truck to haul our freight to Walmart and Costco. It's not designed to be parked inside of a building. There's just really no scientific data that says how clean that diesel is when it's parked within a building.

So, we've changed our culture to say, "Let's open up the bay doors, front and back when we drive in, and shut the engine off as soon as possible." Some departments have a diesel capture system where they connect to the exhaust and they collect the diesel and pump it out. But with these new fire engines, some of the mechanic associations are like, "Look, it's clean diesel. It doesn't matter. It comes out clean." Well, I've seen, personally, fire engines parked next to a snow bank where the exhaust pipe is right on the white snow, and the white snow is not white anymore. That indicates it's not clean.

Sorry I'm going down a little bit of a rant there, but we are changing. Change in the fire service takes a long time. And the more we work at it, the more we train our recruits, they'll be the next leadership of the fire service. And then the tides will change again, and the information will trickle on down instead of on up.

**Elissa:** Tommy, could you tell us then what has been done on the local level for you, for Portland Fire & Rescue, to bring that awareness of cancer and also bring awareness to the support and resources for the firefighters that have been diagnosed.

**Tommy:** Well, we have a really great Health & Wellness program. We do our annual NFPA physicals which does a limited screen for that. We're also testing for cardiac and other issues. But our pension board and Workers' Comp, I think Steve paved the way with being the first person to challenge the presumptive legislation for cancer.

Elissa: Yeah.

**Tommy:** And so that has made it easier, I think, to go forward and file these claims if they fall under one of those types of cancer. I think we're pretty lucky now with just how far we've come. I think there's still more work to do, but we're very, very proactive. In fact, our department just announced a cancer screening program that I'm going to participate in in July; and they sent us some video documenting a couple of guys in Phoenix that had gotten cancer, and one of them had succumbed to it. But I think it's really important. That's the number one thing, I think, firefighters right now, besides prevention, or I guess it's a component of prevention, is to get checked, all aspects.



<u>Elissa</u>: Now, Steve, you were talking a little bit about your role with the Firefighter Cancer Support Network, and you talked about both having those support forums as well as educating fire houses and fire departments around the country. Are those the primary things that FCSN does for firefighters?

**Steve:** Yes, so it goes state by state. Because I'm a survivor, I focused most of my work on supporting other firefighters or a family member if they're diagnosed with cancer. Some states, the state directors never had cancer themselves. Doesn't mean their heart's not in the right place, but they are really focused on the educational component of our positions.

Doesn't mean that I don't do it, but it means that I focus more on where it hits me the hardest, and that's when someone's diagnosed. That being said, a lot of the training divisions have embraced a firefighter cancer reduction program in the training. So, they accomplish that either in the recruit classes or also in their annual training.

I am trying to make as many contacts as I can at the state level and require firefighters in the State of Oregon, in order to obtain their certification as a Firefighter I or Firefighter II, to have a Firefighter Cancer Awareness Component to that training. So, they can't work online unless they have that training, and I think we're making headway.

I have contacts at the Department of Public Safety and Training who are on my side. I have friends at the Oregon State Fire Marshal's Office who are on my side. So, it's just a matter of time before it's required; and we're going to make it happen. Unfortunately, I don't have a crystal ball to see how that's going to affect our epidemiology in the future, but it can't hurt.

<u>Elissa</u>: Yeah, that's great that you're making so many connections and being able to get that information out to the field and that support to the field.

Now, Sara and Tommy, I'd love to hear from you what your thoughts are on what could be done to expand these resources to fire departments around the country.

**Tommy:** I think, the thing that plagues most fire departments around the country is funding. We're constantly battling to maintain our apparatus, to maintain our staffing. I do feel like we're over that hump of knowing that cancer is a huge risk. And as each subsequent cancer claim comes in, which impacts, you know someone has to pay for that, I think they're starting to see that that's an investment. It's paying it forward to



make sure that we survive, that we're healthy; and, pragmatically, they're not paying claims on that stuff. So, I think there's a lot of factors involved, just the work that Sara is doing to inform us and, at least in Portland, I've certainly noticed that we've seen a dramatic upward swing in support activities.

**Dr. Jahnke:** And just to build off that because I think 100% what you said and I'm optimistic about the future. I also think education around early detection, signs and symptoms, watching yourself. There's a great program FCSN's partnered with called DetecTogether, and they have developed an online program that they'll send to any department for free. And I highly recommend it, and it talks about the 3 Steps Detect. It's know you're great, use the two-week rule, so look for a small but persistent change in your own health. And then if it lasts longer than two weeks, go talk to your doctor. And it's around how to talk to your doctor about symptoms, what questions to ask, those kind of things.

I love hearing people say that they feel like people are aware because that is the first step. And I also think some people that were around for a long time, we can't waste our time and energy on trying to convince them. But there's a lot of firefighters that I think with enough, we can get them onboard.

And so, I think we just keep working through, and like Steve said, working with the recruits, helping them understand what they're coming in for and, how to live a long, healthy career. I'm cautiously optimistic; but I try to always be optimistic. I think good things are ahead; and we have groups like you that are like, "Hey, we want to highlight firefighters." Like the more that that stuff is happening, the more people understand what's going on, I mean that's, this is exactly what we need to, to change the world.

<u>Elissa</u>: That's wonderful. And so, our final question today is for all of you. What advice would you give to firefighters who have been diagnosed with cancer?

**Tommy:** Boy, as a representative of LLS, I think it certainly depends on what kind of cancer they're diagnosed with. If it's one of the blood cancers, I can certainly play a liaison role to try to connect them with the services and the support that they need. Outside of that, and in addition to, I'd probably send them Steve's number. Put 'em on a group text. I mean just, it's a hypothetical, and it's still like gives me chills to think of, you know, Cully getting cancer, so.



**Steve:** When I take that call and I get the inquiry for someone requesting support, I don't let that thing sit. I don't care what I'm doing. If I'm out on the river kiteboarding or up on the mountain skiing or riding my motorcycle, I'll pull over and I'll take that call. And I want them to know that they're not in this fight alone, and that's the biggest message I want to tell them is we've got you covered. And the things that the Firefighter Cancer Support [Network] offers to them is, there's a couple really cool services.

One is, we have a mentorship program; and the mentors are firefighters, and they match them by the type of diagnosis that they have. So, if we have a blood cancer patient who's been just diagnosed as a firefighter, we match them up with another firefighter with preferably the same kind of blood cancer.

And then number two, we have what we call a toolbox, which is a plastic file box, and it has a bunch of resources inside of it in order for them to stay organized. So, when you're diagnosed with cancer, your brain is going to go sideways. You're going to start stacking up the papers on your desk, and then your insurance company's going to call and ask or your employer's going to come and ask for what you did on a specific date. And you're going to try to go to MyChart®, and you're not going to remember your password. And you're not going to be able to come up with the right information.

But if you go to that file box that we give you, you're going to be able to pull out the right piece of paper and the right, on any given day, and give them the information they want. We also have a guidebook inside there that was made by our Wellness Coordinator. It is absolutely wonderful. We have blankets inside there. We have pencils, highlighters. We have plastic envelopes, so that you don't bring your paperwork home in a crumbled-up ball.

And then personally, I have said in my phone reminders to call these people weekly, every other week, every third week, depending on what their needs are and check in on them. And I feel that makes a difference. I really hope it does. I hope it's received the way I hope it is. But I'm there for them, and we can relate to each other. The next thing is these people have a new friend they never knew they were going to have and really didn't want.

<u>Dr. Jahnke</u>: I think you just have to take it a day at a time; and I think what Steve says about you're not alone and we've actually quantified the benefit of the comradery and



the fire service. You never have to be alone, but you have to be willing to ask for the help. But there are a lot of people out there that are 100% onboard with having your back if and when that happens.

**Elissa:** That's great. Now, I will say that we decided to do this podcast episode in the first place because I was connected with a firefighter who'd been diagnosed with leukemia. And he had struggled to find any support, and so I am so thankful to all of you for coming on here and sharing all this wonderful information and support and resources that are out there for firefighters who have been diagnosed with cancer so they don't feel alone, and they can navigate through this with somebody who has been through similar things.

And so, for our listeners who are firefighters or their families, we will have a lot of these things that we talked about linked in the show notes, so the Firefighter Cancer Support Network and also additional resources. So be sure to check that out.

And so again, thank you, Sara, Steve, Tommy for joining us today. We really appreciate you talking about this really important subject.

**Tommy:** Thank you.

Dr. Jahnke: Thanks for doing it.

Steve: Thank you.

**Elissa:** And thank you to everyone listening today. *The Bloodline with LLS* is one part of the mission of The Leukemia & Lymphoma Society to improve the quality of lives of patients and their families.

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In addition to the Lounge, we could use your feedback to help us continue to provideengaging content for all people affected by cancer. We would like to ask you to complete a brief survey that can be found in the show notes or at TheBloodline.org.



This is your opportunity to provide feedback and suggested topics that will help so many people.

We would also like to know about you, and how we can serve you better. The survey is completely anonymous, and no identifying information will be taken. However, if you would like to contact LLS staff, please email TheBloodline@LLS.org.

We hope this podcast helped you today. Stay tuned for more information on the resources that LLS has for you or your loved ones who have been affected by cancer.

Have you or a loved one been affected by a blood cancer? LLS has many resources available to you – financial support, peer-to-peer connection, nutritional support, and more. We encourage patients and caregivers to contact our Information Specialists at 1-800-955-4572 or go to LLS.org/PatientSupport. For more information on firefighters and cancer risk, you can visit LLS.org/Firefighters. These links and more will be found in the show notes or at TheBloodline.org.

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