

Beyond the Test: Connecting Communities Through Pathology
Season 2 Episode 2: The Breaking Point: Pain and Burnout in Pathology

Joanna Cermak (00:00)

Hey everyone, I'm excited to share a bonus episode of Beyond the Test coming March 5 called Mindful Minutes.

This episode is brought to you by Elsa, a high school senior who has been volunteering with the CAP Foundation. In her first episode, she explores mental health with a particular focus on youth, reflecting on how giving back through service can create purpose, connection, and resilience in the next generation.

Don't miss Mindful Minutes — a short, grounding moment to pause, reflect, and reset.

Now, back to the episode.

Joanna Cermak (00:36)

Welcome back to Beyond the Test: Connecting Communities Through Pathology, a podcast from the CAP Foundation.

Today, we're kicking off part one of a two-part series exploring pathologist burnout — a conversation that is both timely and deeply important to the future of our specialty.

Let's welcome back Executive Director Maya to lead us through this important discussion. Maya?

Maya Ogden (00:58)

Thanks, Joanna. Today's episode focuses on something that affects not only individual physicians, but also the safety and quality of patient care itself: burnout in pathology.

Our guest, Dr. Julia Keith, led one of the most comprehensive national studies on pathologist burnout in Canada using the gold standard assessment tool, the Maslach Burnout Inventory. What she found was sobering — burnout prevalence rates were significantly higher than previously reported, with chronic pain and isolation emerging as key drivers within the field of pathology.

This conversation examines the human, structural, and cultural dimensions of burnout — and what departments can do to build meaningful, evidence-based wellness infrastructures.

Because beyond every test, there is also the well-being of the pathologist making that diagnosis.

Let's dive in.

Maya Ogden (01:57)

Hi, Dr. Keith. Thank you so much for joining us.

Dr. Julia Keith (02:01)

My pleasure. Thank you for having me.

Maya Ogden (02:03)

Of course. We're really excited about this conversation. I know your national Canadian pathology burnout initiative used the Maslach Burnout Inventory and found burnout prevalence rates that were significantly higher than previously reported in pathology. Can you walk us through what you found and why you believe pathology may be more vulnerable?

Dr. Julia Keith (02:14)

Sure, with pleasure. I think two major headlines emerged from this project.

The first is the prevalence of burnout within Canadian pathology, which I found to be 58%. That is indeed much higher than previously reported. So the scope of the pathologist burnout problem is likely worse than we previously realized.

However, I would argue that it hadn't been studied thoroughly before. So I'd like to briefly explain my study methods.

I used the gold standard psychological test for measuring burnout, the Maslach Burnout Inventory (MBI). A group of physician wellness experts at Mayo Clinic, in partnership with the American Medical Association, uses the MBI to study burnout prevalence among American physicians every three years. That group has reported physician burnout at around 44%, but they've consistently had a small cohort of pathologist respondents — usually fewer than 200.

So there's been a lack of strong data specific to our specialty.

In my study, I used the MBI and had 427 pathologist participants. That represents about half of the membership of the Canadian Association of Pathologists — the other CAP, if you will — and roughly a quarter of all pathologists practicing in Canada. So this was a sizable cohort.

It was an excellent survey response rate, likely due to timing and dissemination strategy. The survey was administered pre-COVID, in late 2019 and early 2020 — a time when conversations about physician well-being still felt relatively novel. I suspect Canadian pathologists saw this as an important phenomenon to study and took the time to respond.

The Canadian Association of Pathologists distributed the survey to members with reminders. I also partnered with chiefs of several large academic pathology departments and offered department-specific burnout reports comparing their data to national findings. That proved effective.

In addition to the MBI, I included questions probing drivers of burnout that may be relatively specific to pathology, along with qualitative, open-ended questions such as:

What is the most stressful aspect of your work?

Have you found anything that helps mitigate burnout, either individually or at the departmental level?

Maya Ogden (06:04)

In your study, workload was reported as the top stressor, which aligns with broader physician literature. But what stood out was the high prevalence of chronic work-related pain and physical strain.

How does that physical, ergonomic stress accelerate mental exhaustion in pathology? And are we underestimating the impact of microscope use and workstation design?

Dr. Julia Keith (06:37)

Yes, I think the pain component is the second major headline from this study. Nearly half of Canadian pathologists reported chronic work-related pain. We're a bit of a motley crew of bad backs, sore necks, and aching shoulders.

Importantly, chronic pain significantly correlated with worse scores across all burnout domains. So pain appears to be a driver of burnout that may be relatively specific to pathology.

Microscopy is likely a major contributor. As a community, I think we've underestimated the physical risks associated with constant microscope use.

Ergonomically designed microscopes and workspaces are part of the solution — but I suspect there's more to it. Pathology is likely one of the most sedentary medical specialties. Most offices are set up the same way: microscope and computer side by side, with pathologists seated all day.

I encourage introducing movement into the workflow. I've reconfigured my office so my computer is on a standing desk several steps away from my microscope. I naturally alternate positions throughout the day, and that has significantly improved my back pain.

Some colleagues use treadmill desks. Digital pathology may also offer benefit by allowing more varied body positioning.

And finally, we shouldn't underestimate the value of something simple and old-fashioned: taking breaks — ideally, moving breaks — during the workday.

Maya Ogden (08:53)

That's really interesting. It's also a great segue into the importance of community in pathology. The specialty can feel isolating — physically and professionally.

Can you speak to the importance of community and structural connection in pathology?

Dr. Julia Keith (09:33)

I'd love to. Isolation may be another specialty-specific driver of burnout. Pathologists lack direct patient relationships and often spend large portions of the day working alone.

In my study, worse burnout scores significantly correlated with both the amount of time spent alone and whether the department had a common space for colleagues to connect.

Community and social support are among the seven known drivers of burnout. There are important lessons here about intentional community-building. Shared spaces and social events matter.

Even more important, though, is having at least one colleague you feel safe being vulnerable with — someone who will notice if you're not okay.

And on a related note, reaching out to a colleague you're worried about matters too. "Are you okay?" is a powerful question.

Maya Ogden (11:16)

That's so true. It reminds me — going slightly off script — of an episode of *The Pitt* that just aired. A resident with poor bedside manner says she's going into pathology "so it doesn't matter."

But what you're describing is the opposite. Interpersonal connection still matters — even if it's with just one other person.

Another question: physician burnout is associated with increased medical errors, reduced work effort, and high turnover. From a pathology standpoint — where diagnostic accuracy is foundational to treatment — how should leaders think about burnout as a patient safety and quality measure?

Dr. Julia Keith (12:47)

Burnout affects physicians personally — including risks like substance use and suicidal ideation — but it also impacts patient safety.

In fact, in 2009, *The Lancet* formally called for physician burnout to be measured as a quality metric.

Burned-out physicians make more mistakes. There's a dose-dependent relationship between burnout severity and medical error rates. This has been demonstrated in multiple specialties.

In pathology, the stakes are high. Diagnostic errors can result in delayed diagnoses, inappropriate treatment, or worsened prognoses.

Burnout also reduces professional work effort and increases turnover — both of which carry significant financial costs.

You can make a business case for investing in well-being infrastructure. That matters because most operational decisions are driven by metrics and evidence.

Maya Ogden (14:48)

If you could give one evidence-based gift of wellness to pathology departments this February, what would it be?

Dr. Julia Keith (15:00)

We don't need to reinvent the wheel. There's strong literature identifying seven key drivers of physician burnout, described extensively by experts like Dr. Tait Shanafelt.

I'd encourage departmental chiefs to familiarize themselves with these drivers and with evidence-based mitigation strategies. For example, peer support programs — often implemented at the hospital level — have demonstrated effectiveness.

We've entered a new phase. COVID heightened awareness of physician burnout, and more institutions are investing in wellness. My hospital now has a Chief Wellness Officer, a peer support program, and even revived the doctors' lounge.

For pathology leaders specifically, I'd emphasize that well-being is a shared responsibility between individuals and systems. Chiefs can demonstrate this by building departmental wellness infrastructure — such as:

A standing well-being agenda item at meetings

Naming a physician well-being lead

Providing protected time for wellness initiatives

Conducting local needs assessments

Considering well-being in operational decisions

A departmental culture of well-being was the most frequent positive intervention cited in my study.

And importantly, wellness efforts must go beyond token gestures. They must be supported and operationalized to be meaningful.

Maya Ogden (19:00)

Thank you, Dr. Keith. One takeaway from this episode is that we could all benefit from prioritizing our health and well-being — both professionally and personally. That may include managing chronic pain, or, as you'll hear in our upcoming bonus episode, taking time to serve others.

Joanna Cermak (19:25)

This podcast is brought to you by the CAP Foundation, dedicated to expanding access to care through pathology.

You can learn more about today's guest, Dr. Julia Keith, in the show notes. To learn more about the CAP Foundation and the programs it supports, visit foundation.cap.org.

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Until next time, my friends — I'm Joanna. Thank you for listening.