

Nursing beyond borders: Climate change and health equity with Raluca Radu

TEASER:

Raluca Radu: One of the most important things to work on is the climate crisis, because it's the only shot we have at making sure that us and the next generations also have a shot at enjoying our life as we have growing up.

INTRO:

David Acuna: Climate change calls on us to evolve and embrace the unknown with curiosity. Today, we'll hear from someone who started out on the frontlines of healthcare. When she realized the impact of climate change on health, she decided to bring awareness to this issue by becoming an educator. Embracing this path has led her to tackle climate change from a global health perspective.

Lana Voracek: Welcome to the Pulse of Change podcast, where we explore the connection between climate change and health by sharing stories about taking action. I'm Lana Voracek.

David Acuna: And I am David Acuna.

Lana Voracek: Our guest today is Raluca Radu. She's a registered nurse, an adjunct professor at the University of British Columbia, and a climate and health educator at Doctors Without Borders, also known as Médecins Sans Frontières, or MSF.

David Acuna: In the first part of this episode, we'll hear Raluca's story about her journey from graduate student to educator. Next, we'll sit down for an interview about her work with MSF, and the challenges that are faced by such a large global organization. Finally, Raluca will share what she's learned along the way, and what keeps her feeling hopeful.

Story teaser:

Raluca Radu: I learned that climate change had health effects. I remember getting so curious and looking for more opportunities to learn about these topics because I felt that I, as a nurse, should know about how people's health is affected.

RALUCA'S STORY:

Lana Voracek: Raluca's story began when she took a step back from her three year medical surgical nursing career to pursue her graduate degree in nursing at UBC.

At first, her introduction to climate change didn't come through her nursing education.

Raluca Radu: It was through the BBC Earth documentaries that I was religiously watching, and I was learning about various animal species and how certain species were becoming extinct. You know, these terms around weather and extreme events, whether it was natural disasters or actually extreme weather disasters related to climate change, was terminology that started to kind of introduce me to the concept.

Lana Voracek: As a graduate student, Raluca started attending some webinars and seminars. where she first heard about the impact of climate change on health.

Raluca Radu: I recall joining one of those sessions and I learned that climate change had health effects. And that was something that, beforehand, I wasn't really able to wrap my head around because, like I said, when I was watching the Earth documentaries, I thought those kind of effects were specific to animal species, to actual ecosystems. I learned in these webinars about how, for instance, climate can affect the air you breathe and essentially if you're exposed to bad air quality, you can have long term health effects.[1,2]

Lana Voracek: She didn't understand why she was hearing this information for the first time.

Raluca Radu: I started asking these questions that I had as a student at the time, as well, where is this content in the curricula in schools? Something I couldn't quite recall from my Bachelor's of Science in Nursing training. I remember getting so curious and looking for more opportunities to network and to go to events and to learn about these topics because I felt that I, as a nurse, should know about how people's health is affected.

Lana Voracek: Looking back on the work she had done as a nurse, Raluca realized the healthcare sector was having a major environmental impact.[3]

Raluca Radu: In my nursing practice, when I was working in the hospitals in the lower mainland in Vancouver, one thing that stood out for me, but I wasn't making the link at the time to climate change, was the amount of plastic and waste and the way that we weren't really sorting through different types of equipment or different types of tools we are using, especially working as a surgical nurse.

You do dressing changes, you're putting IVs in, changing IV bags. So I remember at the time that depending on the units I was on, I would ask, is there any policy around like how we're sorting things that are not necessarily contaminated by blood or things that may pose a hazard if we were putting them in the wrong bins?

And I recall that the answer was always no, just everything kind of goes in the same place.

Lana Voracek: She realized that, in turn, the waste produced by the healthcare sector could be worsening climate change and negatively impacting people's health.[4]

Raluca Radu: I wanted to send a message to the next generation of nurses who are coming in, and so I started volunteering to essentially present, whether it was my colleagues' classes or it was in other universities as a student, the things that I was learning about.

Lana Voracek: In 2019, Raluca attended an event where she met someone who made the issue even more real for her.

Raluca Radu: She was a young female who, I recall, she was in her early 30s, so kind of a similar age I'm at today. And she was in a wheelchair, and that was because of chronic pain. And other symptoms she was exhibiting, but the way that she talked about how her quality of life changed from being a very active person, very involved, doing a lot of, you know, fun activities and then having all of that change because of Lyme disease.

Lana Voracek: Lyme disease can be transmitted to humans from animals by ticks.^[5] Because of climate change, the habitat of the ticks that carry Lyme disease is expanding into Canada, leading to an epidemic.¹ Lyme disease is among many other climate sensitive infectious diseases whose spread will increase due to climate change.^[8] Without early treatment, it can lead to serious long term neurological effects and disability.²

Raluca Radu: That condition for her, although it's disempowered her physically, it actually empowered her to become a patient advocate for other people who may be in a similar condition and to also use her personal story to educate physicians, nurses on her condition so that it can be earlier recognized among potential individuals we consider to be at risk.

I remember her telling everybody in the room, you know, I don't want you to feel sorry for me. What I want you to do is use this information and make a change in your practice. And so I think that we as health professionals have a duty to carry those voices forward. I think that we have a moral responsibility to make sure that we lift those stories in a way that is accurate and in a way that is truth telling of the reality of what the patient is going through on a regular basis.

Lana Voracek: Later that year, Raluca was able to delve even deeper into the concept of climate change and health when she became a teaching assistant for the course Nursing 290, Health Impacts of Climate Change, at the University of British Columbia School of Nursing. At the time, the class was online and asynchronous.

¹ An epidemic occurs when there is a sudden, widespread increase in the frequency of a disease across a geographic region.^[6] Although Lyme disease in Canada has been referred to as an "epidemic", with the changes in climate, we expect that it is here to stay.^[7,8] In that sense, it's more accurate to say that Lyme disease is becoming endemic in Canada, meaning that it is consistently present.^[6]

² If untreated, Lyme disease can progress and produce severe symptoms in the joints, heart, and central nervous system.^[9] Lyme disease can be treated with a course of antibiotics, after which time symptoms are expected to resolve. A small percentage of people experience post-treatment Lyme disease syndrome, meaning that they have chronic symptoms after treatment, even though they have no evidence of continued infection.^[10]

Raluca Radu: I recall being very immersed in the conversations that students were having online and sharing their perspectives and stories on climate change. And interestingly enough, I graduated and then in the summer of 2020, I was hired as lecturer and one of the courses that I was assigned to was the same course that I was a teaching assistant in.

Lana Voracek: Her new role came with a new challenge. She was told she had to redesign the course to be live and engaging. It was difficult at first, but it got better over time.

Raluca Radu: By the time I was in my second year of teaching, I felt quite confident in that the structure of the course I created was more engaging and more open to inviting students to feel safe, to become vulnerable enough, to share how they felt about climate change, how it affected their lives.

Lana Voracek: Many students shared that the course had resonated with them. And for some, it even changed their career choices.

Raluca Radu: I had one student say, you know, I was supposed to go down this path, but I decided to actually pursue an environmental based graduate degree because I felt compelled from what I learned in your course.

I think at the time I was about a year and a half into my role and I didn't think that somebody as young as me could have such influence. And I had a teaching assistant in the course who. Came in from a mental health background in nursing, specifically, like, no, no experience with, with climate change, and then by the end of her, uh, master's degree, she wanted to do her master's project on using, uh, mental health, her background there, in a way that engaged youth and voices of youth from the course into a mental health toolkit on how to overcome impacts of climate change from that perspective.^[11] I thought that was very powerful because, again, it was somebody who came in with a whole other approach to what they hoped to get out of their education, and then they pivoted towards somewhere where they felt they could have more impact.

So, Those were some of the standout moments for me as an educator.

Lana Voracek: But she wanted to know how these issues applied outside of academia. So in late 2022, she began working as a climate change educator with Doctors Without Borders, also known as Médecins Sans Frontières, or MSF.

Raluca Radu: The transition has not been easy, but it's been fun. It's been very eye opening in that you're learning about the raw, real elements that are interplay in the field for our staff. What I hear from the field is very different than what, you know, you read in textbooks. So it's been a very interesting professional journey to say the least.

David Acuna: Coming up next, we'll interview Raluca about her experience working at MSF and some of the challenges she faces.

Work teaser:

Raluca Radu: It's quite an interesting contrast between like my lived reality here in Vancouver versus that of somebody who's across oceans where you have conflict and other factors affecting your ability to work as a health provider.

INTERVIEW ABOUT RALUCA'S WORK

Lana Voracek: Okay. So first of all, for those who might not be aware, MSF is a humanitarian organization that provides emergency medical care to people in need all over the world.[\[12\]](#) So to begin, what's it like to work at MSF?

Raluca Radu: We're definitely in every single corner of the world. And as an NGO, it's got a lot of different structures, as you can imagine, and governance levels that need to take into account different responsibilities.

And I think we have around 60,000 staff, and they're normally present in the most underserved communities in areas where there's significant conflict that takes place. Oftentimes MSF tends to be one of few organizations that responds in those areas. And then on top of that, you're adding this ambitious goal of lowering its environmental footprint by 50 percent by 2030.[\[13\]](#) And so they're using 2019 as a baseline to target how they're going to decarbonize. And that's where I come in. So I'm on the mitigation team.

Lana Voracek: What are some of the challenges you've encountered in this transition?

Raluca Radu: The question is always, how do we decrease our carbon footprint, but we still keep the high quality patient care?

In textbooks, you say, well, you'll go from point A to B and you just follow this process. But then you have in the real kind of situation, the real world, you're at step two, and then suddenly you have to jump maybe two steps back, or you have to jump three steps forward because there's constant variables coming at play that impact your ability to make progress, or sometimes they push you to fast track.

So the aspect that I think still to this day is a challenge for me is how do we reach the field, the staff who are actually at the front lines. Seeing and witnessing patients coming in with rising cases of malaria, for example, in certain parts of Africa,[\[14\]](#) or patients who are at the forefront of being displaced, like in Libya, for instance, because of the recent floods.[\[15\]](#)

You know, I could come into a room full of people like doing a webinar on here's the introduction to climate and health. And then somebody in that room who's been at

the front line shares a story from the field. And now I just want to throw this webinar out because now I just want to learn about the community, the patient story, the full field raw reality and how I can tailor my education to meet that reality.

And so it's probably one of the most challenging roles I've had because doing it remotely from a computer almost seems a bit surreal in that you don't really feel fully connected to the reality.

Lana Voracek: Can you talk more about that experience of giving a webinar and wanting to throw it out because of something that someone said?

Raluca Radu: I remember this very clearly. I was giving a webinar to a working group of health care providers who have been to the field, they kind of go back and forth between the offices at the operational centers and then they get deployed in different parts of the world where MSF needs them and I remember I asked a question, and then one answer came back exactly with a question for me. And this was very early on in my role, I think I was three months in so I was still very new and I asked a question like, "you know, how do you see yourself as a physician, as a healthcare provider, in a way that you're practicing more responsibly with respect to the environment and with respect to the patients?"

And one of the participants in that webinar actually turned around and said, "you know, I'm not going to answer this question because I want to turn around and ask you, like, How would you expect me as a healthcare provider to work and be more aware of the environment when I have a patient in my operating room or in a community clinic who has experienced a traumatic event, whether it was related to conflict or whether it was related to being displaced from their home as a result of a climate event, like, how Can I worry about the environment when I'm worried about the patient's state?"

So I think it was just one of those scenarios where I guess I wasn't expecting, you know, an audience member to respond, not with an answer, but actually to respond back with a question. Because not having the field reality, not having been there to actually see things for how, uh, having no proper infrastructure in place, having no access to medications that are essential and life saving, having the possibility to be left without a home because essentially it's been washed away by a flood, I think it's very difficult to wrap your head around in the context that I'm currently living in where all I can be speaking to is, well, I was once affected by a heat dome in 2021, or I'm affected by wildfire smoke every year, where I feel it's just not the same magnitude or impact, right?

Lana Voracek: Right. And how did you respond when they asked you that question?

Raluca Radu: The reality is that I froze and I acknowledged that. First of all, I said, "I'm really sorry that, you know, I'm not able to really understand how difficult that must be because I haven't been in that situation."

And I think that empathy is really critical in climate work. I think, empathizing with what people are going through and really doing a lot of active listening is so critical to self growth. But it was also about just trying for me to get to know that group and see how maybe there's other ways through which I can provide that support.

I think the overall takeaway has been that people want to see, for instance, me going out into the field and actually seeing the reality and then taking that experience and using it to shape the work that I do. So, yeah, it's, it's quite an interesting contrast between my lived reality here in Vancouver versus that of somebody who's, you know, across oceans like in, in Bangladesh or Pakistan or in South Sudan, where you also have conflict and other factors affecting your ability to work as a health provider.

Lana Voracek: Yeah, absolutely. And recognizing that whether or not you are sent to the field is not within your control, how do you do the best job you can?

Raluca Radu: I'm trying to be very sensitive. I think I'm also being very diligent in terms of how to provide the information in a way that doesn't diminish or minimize the experiences that these people are going through.

And then I provide support for people who want to be ambassadors. Some of the staff from MSF are very keen and already involved with taking climate change action, whether it's adaptation through different education of local staff or whether it is mitigation by, you know, installing solar panels, for instance, in their hospitals, moving away from diesel generators.[\[16,17\]](#)

And it's just so humbling to see when people who are the least contributors to the climate crisis are the ones who actually want to do so much. And They really just want the information on how do I get started and how will you help me. And so I really think that we are going to see some pretty significant stories of inspiration

Lana Voracek: I think in your story, you touch on a lot of really interesting things that we could dig deeply into if we had the time. But just to summarize some of the things that you said, you mentioned how in these countries, there's less resources, there's conflict, there's climate events. So there's an intersection where all these factors are happening in contrast to where we are here in a high income country like Canada.

There's definitely an equity issue there in terms of like, what is really just? And it's really interesting as well, thinking about the scope of a healthcare provider like a physician. Historically, the scope has been about that one patient, and in the context of the care of that patient, patient safety is the only thing that matters.

But when we think about planetary health care, we have to think about the broader scope as well, and the question becomes, whose responsibility is it, in which countries, amidst these unfair distribution of factors, to implement those things and consider the planetary health perspective? And how do we balance those things?

And that's a lot of really difficult questions that we don't have the answer to. But thank you for the work that you're doing. Thank you for sharing. That's really interesting. Can you give some examples of the mitigation strategies that you're working on at MSF?

Raluca Radu: Right now, for instance, I'm working on how to change behaviour around reducing the overuse of gloves, uh, in clinical settings.[\[18\]](#)

And so it was preparing a survey first to go out to staff, and then that later got translated by the leading, uh, nurse on the ground who was able to relay the results. It may sound small scale, but the idea is that if these projects work, we are hoping to extrapolate them and kind of spread them across the movement because we think it can have a significant impact from an environmental perspective.

David Acuna: Stay tuned for the last part of our episode where Raluca reflects on her journey so far and shares some key lessons she's learned.

Takeaways teaser:

Raluca Radu: Once you start engaging in action, you're more than likely to overcome that eco anxiety that's caused by climate change.

RALUCA'S TAKEAWAYS

Lana Voracek: So the planetary health space is growing so fast, and you've been in it for a few years now. What are some of the biggest achievements you've seen throughout your time in this field?

Raluca Radu: First of all, I am just amazed and so inspired to see the amount of healthcare professionals worldwide who are starting to hop on this journey of embedding sustainability in their practice, or focusing their studies on sustainability, or on planetary health, because planetary health has been an emerging discipline, and it's still emerging, I think, but it's much more well known than it was when I started.

The other aspect is also seeing the community of nurses in Canada growing who are actually partaking in this work. So, for instance, the Canadian Association of Nurses for the Environment has definitely grown its membership since I was on the board and here in British Columbia as well.[\[19\]](#) We have a working group that is tackling various provincial issues.

It gives me hope because I know that people who are health professionals are very, very well positioned to start being in policy decision making spaces and to have that ability to provide influence. Because they're trusted by the public, there's a lot more trust in that type of role than in a generic politician, per se.[\[20\]](#)

The fact that I know physically, I know people who are doctors, nurses, who are tackling these issues as we're speaking right now, and they're, you know, advocating, and they're pressing politicians, and they're participating at COP, and they're going, even if maybe they're not necessarily supposed³ to be part of those conversations, and they're speaking to media, I think it's really moving for me as a nurse, because again, it just kind of reinforces that one of the most important things to work on is the climate crisis because it's the only shot we have at making sure that us and the next generations also have a shot at enjoying life as we have growing up.

Lana Voracek: One really interesting thing you mentioned that I want to highlight was the idea of doctors and nurses going to climate forums like COP, even if they aren't supposed to be part of those conversations. I think that's a really interesting thing to say because it's like, maybe we need to push the boundaries of who is "supposed" to be part of those conversations and question whether those people are really able to speak about the health impacts of climate change and how those impacts are a concern for everyone's well being.

What else do you think we need to focus on as we move forward with this issue?

Raluca Radu: I do still think that we have yet a long ways to go, I think, in where we need to be today. And I don't want to just speak to Canada alone, because I know that Canada is way behind its targets compared to other parts.[\[24\]](#) But I also think it's like thinking about what do we have access to that could provide support to those who are facing the most difficult effects of climate change?

How can we help, especially we, I mean, those who have the power, the resources, the knowledge. How can we provide that support to communities who are more underserved and don't have the infrastructure, don't have the funds? How can we make sure we distribute resources such that they're equitably distributed and that they're accessible for people who experience vulnerabilities?

As a side note, I mentioned inequities in low and middle income countries, but we know for a fact that there's serious inequities here in our own backyard. Uh, from, you know, communities like in the Downtown Eastside who are experiencing marginalization and experiencing homelessness who are predisposed to significant health effects.[\[25\]](#)

Lana Voracek: Absolutely. That's important to highlight too because as you mentioned earlier, people who experience vulnerabilities likely won't be represented at these decision making tables. What makes you feel inspired and hopeful as you continue to engage in this work?

Raluca Radu: If I know that I've gotten, like, one person to start changing one small behavior or to start engaging with these topics by, Hey, I really like what you said in this talk and I've joined another talk because you piqued my interest.

³ COP is a yearly international meeting where member countries of the United Nations Framework on Climate Change discuss ongoing and future climate action.[\[21\]](#) In 2023, for the first time ever, COP28 had a day dedicated to the health impacts of climate change.[\[22,23\]](#)

I think that, to me, keeps me inspired because I know that continuing to talk about these issues works and it works well when we do it such that it leaves people with a positive note.[26] And I think the other aspect is actually, once you start engaging in action, you're more than likely to overcome that eco anxiety that's caused by climate change.[27]

The other aspect is I think when we see, for instance, healthcare systems, so for instance, the NHS in England, their mode to operate has shifted towards being fully sustainable as a healthcare system with really strong targets to reach in the next 5 to 10 years.[28] And they are actually serving as a significant role model for many other health care systems around the world.

And so, that to me is inspirational because it's showing to me that health care systems can also adapt and change to meet with the times we're in right now. And I know that's happening locally as well, for instance, with the new St. Paul's Hospital that's being built. They've taken into account emissions.[29]

And there's also positions across the lower mainland that our climate change health leads recently hired over the last year or two. So, these opportunities for people who have a lot of experience and passion to come in, where they're not only working with government, but they're working with communities. And they really are pushing more for models of community based approaches and partnerships, because they know that those are the ones that work the best.

Lana Voracek: That's great to hear. Thanks for sharing that. We're nearing the end of our time together for today, but we're wondering if you can share with our listeners, what are some of the key lessons that you've learned on your journey?

Raluca Radu: In this space, I think you're constantly reading the latest news and updates and the latest forecast and how things are going to change. And so it can often be very distressing, of course. So I've learned how important self care is. And all of us have gone through so much with the pandemic. And I think we're still trying to heal the wounds we've all accrued, whether they're physical or psychological. And I think that probably many of us have experienced burnout in one way or another. So I think that's very prevalent as well in this climate change space. What self care looks like for me may be different for you, but I can't emphasize this enough. It's just finding that outlet, whatever that is, that extracts you from the space you're in to get that energy back.

And I think another thing has been to welcome the unknown with curiosity. Because as you've learned earlier in our discussion, I came into a role that was completely different than what I had been. And so oftentimes it means that you have to get super uncomfortable learning things that you may feel like, how do I belong here?

It's very technical, or I'm a nurse, like, how does this relate? But then really finding, you Ways to connect the dots through maybe activities you've done in the past. So it's just getting comfortable with being uncomfortable.

Lana Voracek: I think those are great points, especially since, as you mentioned, the space is evolving as new information emerges, which means we all need to get comfortable with being uncomfortable.

What would you say to our listeners who might be feeling worried about climate change or might want to engage in climate work? Do you have a call to action that you would share?

Raluca Radu: Every and any level of activity or action that is addressing the climate crisis is better than not doing anything at all. If you start engaging in any level of activities that first bring you joy and that you can share with those you love or those whose company you enjoy, you will feel more drawn to keep doing it because it feels good and then in that process you will see that you're not fearing what you've learned about climate change and what you're learning about it because you know you're doing something about it in your own ways. Try it once and try it with someone because there's more power in community when tackling this difficult crisis that we're in.

If I look back at my childhood growing up in Romania, I've had the privilege to have like all the different seasons. And to experience winter at its fullest as a kid playing in the snow to like having normal summers in the sense like temperatures that weren't making you feel like you will pass out because of the heat to having beautiful spring.

So I think the more we go towards reducing or eliminating fossil fuel dependency as much as possible, the more we give nature a chance to actually replenish again, as we've seen in the early stages of the pandemic when the world shut down and then we were seeing, like, wildlife come into spaces where they, they weren't present before. You could hear the birds chirping.

I really keep going back to this concept that as humans, we are guests on this planet. We should be taking care of our only home. There's no planet B. We have to safeguard it if we want a chance to see it thrive.

Lana Voracek: We first interviewed Raluca in September 2023. Since then, she's had an opportunity to apply her experiences in academia and global health and bring them back to her local BC context.

In April of 2024, she joined Providence Healthcare as their first ever Planetary Health Lead, a newly created position to support the organization's transition towards more sustainable and resilient care amidst the climate crisis. Looking back on her journey, she has one last piece of advice to share with you.

Raluca Radu: I would highly recommend to anyone to be a bit disruptive, to take a leap of faith and to not be afraid to change your context. Because when you change your context, you also open yourself up to new ways of doing things. Any opportunity you have to learn from someone who's outside your context, I think is an opportunity that should never be passed upon.

CREDITS:

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References

1. World Health Organization. Climate impacts of air pollution [Internet]. [cited 2024 Sep 26]. Available from: <https://www.who.int/teams/environment-climate-change-and-health/air-quality-energy-and-health/health-impacts/climate-impacts-of-air-pollution>
2. United States Environmental Protection Agency. Climate change impacts on air quality [Internet]. 2024 [cited 2024 Sep 26]. Available from: <https://www.epa.gov/climateimpacts/climate-change-impacts-air-quality>
3. Health Declares. Healthcare's environmental footprint [Internet]. [cited 2024 Sep 26]. Available from: <https://healthdeclares.org/the-science/healthcaresenvironmental-footprint/>
4. Eckelman MJ, Sherman JD, MacNeill AJ. Life cycle environmental emissions and health damages from the Canadian healthcare system: An economic-environmental-epidemiological analysis. Patz JA, editor. PLoS Med [Internet]. 2018 Jul 31 [cited 2024 Sep 26];15(7):e1002623. Available from: <https://dx.plos.org/10.1371/journal.pmed.1002623>
5. Canadian Public Health Association [Internet]. Climate sensitive infectious diseases. Available from: https://www.cpha.ca/sites/default/files/uploads/resources/idcc/Website23_CSID_Primer_EN.pdf
6. Public Health Ontario [Internet]. [cited 2024 Sep 26]. Tell Me More: Epidemic, Endemic, and Pandemic, what do they really mean? Available from: <https://www.publichealthontario.ca/en/About/News/2022/Endemic>
7. Climate Atlas of Canada [Internet]. [cited 2024 Sep 26]. Lyme disease under climate change. Available from: <https://climateatlas.ca/lyme-disease-under-climate-change>
8. Ogden NH, Bouchard C, Brankston G, et al. [Infectious diseases](#). In: Berry P, Schnitter R, eds. Health of Canadians in a Changing Climate: Advancing Our Knowledge for Action. Ottawa, ON: Government of Canada; 2022
9. CDC. Lyme Disease. 2024 [cited 2024 Sep 26]. Signs and symptoms of untreated Lyme disease. Available from: <https://www.cdc.gov/lyme/signs-symptoms/index.html>
10. CDC. Lyme Disease. 2024 [cited 2024 Sep 26]. Chronic symptoms and lyme disease. Available from: <https://www.cdc.gov/lyme/signs-symptoms/chronic-symptoms-and-lyme-disease.html>

11. Abebe N. Exploring climate change and mental health [Internet]. 2022. Available from: https://pressbooks.bccampus.ca/eccmh/wp-content/uploads/sites/1644/2022/04/2April2022_TOOLKIT_Exploring-Mental-Health-and-Climate-Change_compressed-1.pdf
12. Doctors Without Borders / Médecins Sans Frontières [Internet]. [cited 2024 Sep 26]. About MSF. Available from: <https://www.doctorswithoutborders.ca/about-msf/>
13. Doctors Without Borders / Médecins Sans Frontières [Internet]. [cited 2024 Sep 26]. The climate emergency: MSF commits to reduce carbon emissions to help safeguard the most vulnerable | MSF. Available from: <https://www.msf.org/climate-emergency-msf-commits-reduce-carbon-emissions-help-safeguard-most-vulnerable>
14. MSF. Epicentre. 2024 [cited 2024 Sep 26]. Malaria. Available from: <https://epicentre.msf.org/en/portfolio/malaria>
15. Doctors Without Borders / Médecins Sans Frontières [Internet]. 2023 [cited 2024 Sep 26]. Floods in libya. Available from: <https://www.doctorswithoutborders.ca/floods-in-libya>
16. Adapt [Internet]. MSF Climate Hub. [cited 2024 Sep 27]. Available from: <http://climatehub.msf.org/adapt/>
17. MSF Climate Hub [Internet]. [cited 2024 Sep 27]. Energy transition vision. Available from: <https://climatehub.msf.org/mitigate/energy-transition-vision/>
18. World Health Organization [Internet]. 2009. Glove use information leaflet. Available from: [https://cdn.who.int/media/docs/default-source/integrated-health-services-\(ihs\)/infection-prevention-and-control/hand-hygiene/tools/glove-use-information-leaflet.pdf?sfvrsn=13670aa_10](https://cdn.who.int/media/docs/default-source/integrated-health-services-(ihs)/infection-prevention-and-control/hand-hygiene/tools/glove-use-information-leaflet.pdf?sfvrsn=13670aa_10)
19. CANE-ACIIE [Internet]. 2021 [cited 2024 Sep 27]. Who we are. Available from: <https://cane-aiie.ca/who-we-are/>
20. Clemence M, King L. Ipsos. 2022. Ipsos Veracity Index 2022. Available from: <https://www.ipsos.com/en-uk/ipsos-veracity-index-2022>
21. UBC Sustainability [Internet]. 2022 [cited 2024 Sep 27]. What is COP? Available from: <https://sustain.ubc.ca/what-cop-0>
22. World Health Organization [Internet]. [cited 2024 Sep 27]. Health at COP28. Available from:

<https://www.who.int/teams/environment-climate-change-and-health/climate-change-and-health/advocacy-partnerships/talks/health-at-cop28>

23. Young doctors are at COP28, and they've got a message for world leaders [Internet]. All Things Considered. NPR; 2023 [cited 2024 Sep 27]. Available from: <https://www.npr.org/2023/12/11/1218635776/young-doctors-are-at-cop28-and-theyve-got-a-message-for-world-leaders>
24. Climate Action Tracker [Internet]. [cited 2024 Sep 27]. Canada. Available from: <https://climateactiontracker.org/countries/canada/>
25. Nowlan L, Linsell T. The Conversation. 2023 [cited 2024 Sep 27]. Extreme heat, extreme inequality: Addressing climate justice in Vancouver's Downtown Eastside. Available from: <http://theconversation.com/extreme-heat-extreme-inequality-addressing-climate-justice-in-vancouvers-downtown-eastside-211724>
26. Eight principles for effective and inviting climate communication [Internet]. Rare. [cited 2024 Sep 27]. Available from: <https://rare.org/research-reports/eight-principles-for-effective-and-inviting-climate-communication/>
27. Schwartz SEO, Benoit L, Clayton S, Parnes MF, Swenson L, Lowe SR. Climate change anxiety and mental health: Environmental activism as buffer. *Curr Psychol* [Internet]. 2023 Jul [cited 2024 Sep 27];42(20):16708–21. Available from: <https://link.springer.com/10.1007/s12144-022-02735-6>
28. National Health Service. Delivering a “net-zero” National Health Service [Internet]. NHS England and NHS Improvement; 2020. Available from: <https://www.england.nhs.uk/greenernhs/wpcontent/uploads/sites/51/2020/10/delivering-a-net-zero-national-healthservice.pdf>
29. Energy and Environmental Sustainability Team. GreenCare. [cited 2024 Sep 27]. New St. Paul's Hospital: leading the way in more sustainable health care. Available from: <https://bcgreencare.ca/new-st-pauls-hospital-leading-the-way-in-more-sustainable-health-care/>

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