



**Northwest and Alaska Learning Collaborative
Unperfected Transcript**

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00:00:41.600 --> 00:00:47.489

Arianne Teherani, PhD: Hi, everybody welcome! We're going to start in a few seconds, as people are pouring in.

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00:01:18.100 --> 00:01:26.099

Arianne Teherani, PhD: All right. Well, welcome everybody. I am Arianne Tirani, a professor of medicine at the University of California, San Francisco.

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00:01:26.707 --> 00:01:33.420

Arianne Teherani, PhD: And the founding co-director of the 10 Campus, 5 Healthcare System University of California center

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00:01:33.620 --> 00:01:35.410

Arianne Teherani, PhD: for climate, health and equity.

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00:01:35.985 --> 00:01:45.229

Arianne Teherani, PhD: Welcome to all of you today, joining us a quick overview of our session and and the purpose of it, you know. Recognizing the critical need

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00:01:45.490 --> 00:01:49.190

Arianne Teherani, PhD: to address climate change through health sector leadership.

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00:01:49.360 --> 00:01:56.879

Arianne Teherani, PhD: The National Academy of Medicine launched the Climate Collaborative, which is a public-private partnership of leaders across the

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00:01:57.170 --> 00:02:06.600

Arianne Teherani, PhD: health systems committed to addressing the healthcare sector's environmental impact and strengthening its sustainability and resilience

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00:02:06.760 --> 00:02:12.879

Arianne Teherani, PhD: as one of its many initiatives. The National Academy of medicine, climate, collaborative is hosting.



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00:02:13.090 --> 00:02:42.799

Arianne Teherani, PhD: virtual learning, collaborative sessions that are open to the public and to the community. The learning, collaborative aims to disseminate and showcase innovative climate and health educational resources training programs to accelerate the connection of health professionals, communities and other stakeholders within and across the regions in the United States. The goals of the learning collaborative are really threefold. To raise awareness, to connect and equip.

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00:02:42.870 --> 00:02:49.940

Arianne Teherani, PhD: raising awareness to an increased visibility of existing resources within various regions.

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00:02:50.130 --> 00:02:56.750

Arianne Teherani, PhD: fostering connections and peer-to-peer learning among Academia, clinicians, community leaders.

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00:02:56.860 --> 00:03:12.540

Arianne Teherani, PhD: associations, departments of health, state, clinician networks, so on and so forth, and then equipping health professionals with the resources, the knowledge and skills that they need to begin and or advance their work at the intersection of climate change and health.

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00:03:13.178 --> 00:03:20.499

Arianne Teherani, PhD: Each of these sessions will have a regional approach similar to the region's layout in the 4th Us. National climate assessment.

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00:03:20.880 --> 00:03:32.479

Arianne Teherani, PhD: and each presenter will be sharing their educational approaches and resources to build capacity among health professionals and community members that target really regional climate and health concerns.

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00:03:33.721 --> 00:03:40.060

Arianne Teherani, PhD: So with that, I'm going to hand it over to our moderator and overseer for the session today. Dr. Beth Schenk

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Beth Schenk, PhD, RN, FAAN: Thank you, Ariana, and nice to be with you all today, we're really excited to launch this 1st episode of the series that you just heard about

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00:03:49.960 --> 00:04:06.810

Beth Schenk, PhD, RN, FAAN: focusing on regional realities that we're facing with climate and health and also regional resources. So this is for the Northwest and Alaska. I am the chief environmental stewardship officer for Providence, a large health system that is headquartered in the Northwest region in Seattle area

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00:04:06.840 --> 00:04:27.610

Beth Schenk, PhD, RN, FAAN: and have the honor to work with these 4 fine speakers who you will hear from as Arianna described the nom collaborative. We have multiple work groups. This series is put on by the Education work group. I serve on the healthcare delivery work group. So we're demonstrating interaction and ways of sharing together across.

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00:04:27.860 --> 00:04:51.110

Beth Schenk, PhD, RN, FAAN: So what we hope you'll join all of these in the upcoming months, and we're excited to get started today. So as we look to our speakers, you can see that they include Dr. Ethan Sims, who is you can read there with the Idaho Clinicians, Medical Director of Sustainability at St. Luke's, and also an er physician, Dr. Micah Hahn, Associate Professor of Environmental Health at the University of Alaska.

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00:04:51.210 --> 00:05:21.139

Beth Schenk, PhD, RN, FAAN: Dr. Eric, the Director of the Uw. Center for disaster, resilient communities, and Dr. Leah Werner, assistant professor in family medicine at Ohsu, and has been involved with a lot of work, with resilience and Medicaid. So we have extensively interesting folks to listen to, and we will just what we plan to do is to go through a few minutes from each 5 to 7, and then come back together with some prepared questions for them, and then open to audience questions. So we hope to get to as many as we can.

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00:05:21.140 --> 00:05:27.149

Beth Schenk, PhD, RN, FAAN: And please be dropping your questions, comments, or concerns into the chat, and we'll get to what we can.

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00:05:27.170 --> 00:05:29.950

Beth Schenk, PhD, RN, FAAN: So with that I'll hand off to Dr. Sims. Thank you.



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00:05:31.170 --> 00:05:36.499

Ethan Sims, MD: Thank you so much, Beth. If you could take the next slide, there we go and just go ahead and get started with the next slide.

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00:05:37.295 --> 00:05:38.450

Ethan Sims, MD: So I think

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00:05:38.700 --> 00:05:53.660

Ethan Sims, MD: one thing I've learned in my climate journey mostly from the Cambridge Health Alliance, Chia Climate Health Organizing Fellowship, which I would strongly encourage anyone who's interested in beginning their climate and health journey to consider participating in.

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00:05:53.760 --> 00:06:15.289

Ethan Sims, MD: And I'll drop the link for it in the chat is storytelling and sort of embracing the idea that people learn better from stories than they do from data you have to weave data in. And I think most of us as physicians or clinicians or people in the scientific space are really interested in data informing our decisions. But it's the stories that are really most impactful.

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00:06:15.656 --> 00:06:36.539

Ethan Sims, MD: So I always start talks off by sharing my sort of origin in a climate and health sphere story. So in the summer of 2021, I live in Boise, Idaho, and we were sort of in a lull from Covid. Our hospitals were pretty quiet and empty, and the area around us in early summer

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Ethan Sims, MD: kind of mid June to mid July is usually a really nice time of year in Boise. There's this event called the Boise Trails Challenge, where we have the opportunity to ride about 185 miles of the foothills trails that you can see in that upper right corner. That's not actually me. That's just some other stock photo of the Boise foothills. But that's what it usually looks like in June is clear skies, beautiful trails, really nice weather, a great time to be outdoors.

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00:07:03.250 --> 00:07:30.079

Ethan Sims, MD: and the outdoors is my escape from kind of the pressures and stress of work and life like it is for so many others, and that summer you can see in the bottom right corner instead of it being a really nice time to be outside. It was terrible. The wildfire season



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here, which is an official season in Idaho, is usually sort of August, September, but that year it came early and pretty intense, and so the upper left

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00:07:30.280 --> 00:07:59.109

Ethan Sims, MD: picture is what Boise actually looked like in that summer. Really murky skies, terrible air quality. And then you can see the temperatures were insane that summer, so usually we have about a week of 100 degree days, and that summer we had more than a month of 100 degree days. We have a high desert climate, so usually the late evenings, it really cools off and gives you a chance to get outside, even if it's hot during the day, but that summer it was staying hot all throughout the night.

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00:07:59.110 --> 00:08:23.869

Ethan Sims, MD: so it made it really tough for me to do the trails challenge that I've really come to love doing. And so one night, when I was out riding in the dark, trying to escape the heat, but still puffing away in the smoke. I started thinking, you know, is this even healthy for me to be out here doing this? And then I started thinking about my kids who were spending the entire summer outdoors at camps

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00:08:23.880 --> 00:08:27.089

Ethan Sims, MD: and wondering if this was a healthy environment for them to be in

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00:08:27.585 --> 00:08:40.739

Ethan Sims, MD: and we had just moved my parents to be closer to us after the isolation of covid and started worrying, you know. Is this a safe environment to have my 70 plus year parents exposed to.

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00:08:40.770 --> 00:08:57.969

Ethan Sims, MD: And so I went on this sort of long journey to try to figure out, what do I need to do to make an impact in the world around me to help kind of cope with the stress of Covid and find a way to reconnect with medicine and healthcare. Next slide, please.

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Ethan Sims, MD: And as I looked more around me, I started realizing that Idaho was already being impacted by climate change in many ways in many ways that I really love, and that most people who live in Idaho are here because of a desire to be outdoors. So if you look at the picture on the



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left, you can see Lake Cascade, which is a big reservoir about 2 h north of Boise, where my family has a cabin

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00:09:26.390 --> 00:09:37.960

Ethan Sims, MD: that summer of 2022. The water levels were really low because of a persistent drought. The water temperature was really high because of extreme heat.

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Ethan Sims, MD: and we started seeing toxic algal blooms which we'd never seen in a lake before that made it unsafe for humans and animals to swim in the lake from August to October, so sort of peak late summer fall times when families are vacationing. All the fish in the lake were being killed by these toxic algal blooms.

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Ethan Sims, MD: and it made it so that it was unsafe for our family to go up and enjoy the cabin and and get in the lake and go swim cool off.

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00:10:06.910 --> 00:10:26.919

Ethan Sims, MD: We also saw that bogus basin. Our local ski hill has had decreasing snowpack year on year, and a really concerning downward trend. And now some studies have suggested that areas less than 6,000 feet. Elevation will not get any snowpack by 2035.

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Ethan Sims, MD: So that is a big concern for the many, many skiers in the Treasure Valley area, who rely on Bogus Basin to provide us with enjoyment. And you know the river that is fed by the bogus basin. Snow melt that runs through the middle of town, and is a big source of

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00:10:46.790 --> 00:10:52.660

Ethan Sims, MD: water for drinking water for irrigation, but also water for recreation. In the summers. Next slide, please

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00:10:54.280 --> 00:11:18.829

Ethan Sims, MD: a local corollary that brings me a lot of concern, is our neighbor to the South Salt Lake City, which you can see from September of 1987 to May, of 2021 has decreased in size by about 3,000 square miles, and this has led to desertification of the lake bed, which has exposed these big areas of



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00:11:20.530 --> 00:11:36.970

Ethan Sims, MD: toxic metal laden crust that sit on the surface. So this is a big way that drought is impacting our regional health. We've seen examples of something like this in the past. Outside of Los Angeles, in a town called Owens Lake.

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Ethan Sims, MD: where there was a big lake in the 19 teens, and as La was running out of drinking water, they diverted the river that was feeding into Owens Lake to Los Angeles, to give it drinking water, and that led to desertification of the Owens Lake bed which led to these toxic dust storms that basically made Owens Lake uninhabitable

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00:11:59.070 --> 00:12:08.950

Ethan Sims, MD: and with more than 2 billion dollars of investment with multiple different ways. To try to stop this toxic dust cloud from forming

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00:12:09.390 --> 00:12:20.949

Ethan Sims, MD: Owens Lake has actually been regenerated relatively recently, but at great cost and with significant environmental and human health impact.

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Ethan Sims, MD: In the 60 to 70 years. It took to finally figure out how to regenerate this lake without this toxic dust in the air. And Salt Lake is a growing city with a million people, a million and a half people expected to grow to 3 million over the next 10 years. And this is an area that has a lot of wind.

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00:12:43.400 --> 00:13:04.659

Ethan Sims, MD: and as the snow melt, decreases and drought worsens. And this growing population continues to sap the area for irrigation, for their grass and lawns. We're going to see this problem accelerate and I worry that it's going to make Salt Lake have a lot of health issues related to this toxic dust that can blow into the city

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00:13:04.750 --> 00:13:05.949

Ethan Sims, MD: next slide, please.

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00:13:07.995 --> 00:13:15.309



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Ethan Sims, MD: This is the great study from the University of Montana back in 2017, I believe, that showed that

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Ethan Sims, MD: 4 to 6 months after a bad wildfire season, the rates of influenza were significantly higher. And you can see that we are having one of our worst flu seasons in recent memory. I think anyone who's working in healthcare right now can definitely feel

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00:13:32.950 --> 00:13:45.360

Ethan Sims, MD: that the flu season has been really terrible this year, and this comes on the heels of one of our worst wildfire seasons in decades where all summer long the air quality index was

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00:13:45.360 --> 00:14:03.790

Ethan Sims, MD: above 150, probably creeping above 200 at many times. And now here we are a little bit more than 6 months after that, having just ridden through the worst flu season in my recent memory, since really, since h. 1 n. 1 1st came on scene.

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00:14:03.960 --> 00:14:12.419

Ethan Sims, MD: So I worry that this study that was done in Montana is being replicated in front of our eyes. Next slide, please.

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00:14:15.010 --> 00:14:34.559

Ethan Sims, MD: This is the Polish artist named Maria Kocchik, who was a breast cancer sufferer, and when she went through her treatment she realized all the waste that was being generated around her from her treatment. And this is a recreation of the virturvian man.

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00:14:35.036 --> 00:14:40.589

Ethan Sims, MD: With the trash that was generated from one surgical procedure. She went through

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00:14:40.948 --> 00:15:07.759

Ethan Sims, MD: showing the incredible amount of waste it takes to provide care in our current system. We know that 8 and a half percent of us. Carbon emissions come from healthcare, and the Us. Healthcare system would be the 5, th largest emitter as a country in the world. With the Us. Healthcare system accounting for more than a quarter of the global emissions from healthcare, despite not caring for more than a quarter of



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the world's population. So all these things have led to the next slide, please.

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Ethan Sims, MD: This

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Ethan Sims, MD: philosophy from Japanese culture called ikigai. Finding that Venn diagram that intersects what you love with what you're good at what you can do for a living and what the world needs. And so, as I went on this journey, this is really where I went, and this is where I would encourage you all to go.

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00:15:31.840 --> 00:15:58.229

Ethan Sims, MD: And in speaking with a bunch of people from across the healthcare spectrum from across the country from across the globe. I formed the Idaho clinicians for climate and health, a nonprofit that's affiliated with the Medical Society consortium for Climate and Health, a great national organization that focuses on emphasizing and educating about the climate impacts on health and really making this issue depoliticized as much as we can.

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00:15:58.230 --> 00:16:19.700

Ethan Sims, MD: And then I started working on sustainability in my healthcare system and in working with the St. Luke's health system. The largest employer in the State of Idaho. Outside of the Federal Government. We've created a sustainability program committed that organization to the Hhs decarbonization pledge which has been supported by the National Academy of Medicine.

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00:16:19.710 --> 00:16:28.109

Ethan Sims, MD: and I've started working on making an impact in my community that is going to have global ramifications. Next slide, please.

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00:16:29.410 --> 00:16:50.849

Ethan Sims, MD: This is sort of how the St. Luke sustainability program is approaching our pillars of work through focusing on energy management, green building, sustainable purchasing, environmental compliance and climate and its health impacts through community health, through education and partnerships with the municipalities we work in.

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Ethan Sims, MD: Some of the initiatives we've undertaken already include transitioning from dust fluorine to sivo fluorine to reduce our costs and carbon emissions. We are in the process of decentralizing nitrous oxide, using playbooks developed by our partners in the Pacific Northwest, including peace, health in Providence

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00:17:08.470 --> 00:17:22.630

Ethan Sims, MD: we are transitioning from printing the after visit summaries for all of our patients to delivering them electronically, which is going to save about 2.5 million pages of paper per year. Just from doing this, in the er alone.

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00:17:22.630 --> 00:17:39.390

Ethan Sims, MD: we are partnering with our local utility the Idaho power to participate in strategic energy management initiatives, looking at low cost or no cost, initiatives and with really almost no cost invested. We saved \$850,000 in energy costs last year alone.

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00:17:39.530 --> 00:17:51.079

Ethan Sims, MD: We're looking to expand and improve our telemedicine, to reduce the carbon emissions associated with transportation and improve access to subspecialty care throughout the state of Idaho.

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Ethan Sims, MD: We are looking at reducing plastic waste through eliminating or transitioning from plastics to reusable materials, or to recyclable materials like aluminum where possible.

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00:18:03.330 --> 00:18:31.250

Ethan Sims, MD: and we're partnering with Stryker to reprocess clinical devices where available. We're also working with practice, green health to develop a greening the or team. We're working with our rehab facility to initiate a Mediterranean or dash diet project to reduce the carbon emissions associated with our food, but also improve the quality and healthfulness of the food. We're serving our cardiac and neurovascular rehab patients.

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00:18:31.430 --> 00:18:49.870

Ethan Sims, MD: And we have worked with local tree campus organizations called the Treasure Valley Canopy network to become an arbor Day tree campus, healthcare designation partner, and as part of that are developing a rooftop garden on our new construction next slide, please.



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00:18:50.800 --> 00:19:16.399

Ethan Sims, MD: So all this is to say, what what can you do to begin your own journey? Because that's really what I want to see. Come out of these sessions is, take the 192 attendees that are on this, and give you a way to activate your own climate and health journey. So if you are a partner of Saint Luke's. I'm not sure if there's anyone else from Saint Luke's on the call. But we have a green team, and I would bet many of your hospitals. That you work in. Have a green team that you can become a part of.

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00:19:16.440 --> 00:19:27.620

Ethan Sims, MD: You can join the Idaho clinicians for climate and health. One of the 1st trainings I did in my journey was this Eco America training, which I think is really great, and it's a very short, condensed

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00:19:28.570 --> 00:19:32.890

Ethan Sims, MD: explainer about climate change, how it's happening and how it's impacting health.

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Ethan Sims, MD: You know, if you're in a state that doesn't have a medical society consortium partner organization. Consider starting one. But there are more than 20 of these organizations across the country, and we're looking to expand those as well.

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00:19:45.670 --> 00:19:49.639

Ethan Sims, MD: See if your organization is a practice practice greenhouse partner.

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00:19:50.088 --> 00:19:57.449

Ethan Sims, MD: or look into healthcare without harm, and how they're able to help activate sustainability. In your organization

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00:19:57.490 --> 00:20:24.630

Ethan Sims, MD: and a few things I really want to highlight. The 1st QR code at the top is a link to a flyer about an upcoming climate health symposium that we are hosting here in Idaho on May 16, th from 8 to 4 30, and it's a partnership between St. Luke's and St. Al's, which are the 2 biggest healthcare organizations in Idaho and the Idaho clinicians for climate and health. It's going to be a half day focusing on climate and its impacts on health.



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Ethan Sims, MD: followed by a half day with operational and clinical breakout sessions. To look at how sustainable initiatives in healthcare can drive cost savings and improve patient care.

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Ethan Sims, MD: The middle QR. Code is a link to our monthly Climate and Health Learning series, and the last QR. Code is for the Unm. Project echo program which had Dr. Stefan Wheat.

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00:20:51.690 --> 00:21:10.280

Ethan Sims, MD: an active member in the Northwest community, really put together an outstanding, years-long series that did a deep dive into climate change and human health and sustainability. So with that I'll pass things over to our next speaker and be happy to answer questions as we go forward

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00:21:11.400 --> 00:21:17.640

Beth Schenk, PhD, RN, FAAN: Thank you so much, Ethan. That was loaded and really interesting with with good tactical advice. So thank you so much.

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00:21:17.780 --> 00:21:20.760

Beth Schenk, PhD, RN, FAAN: And now we'll proceed to Dr. Hahn from Alaska.

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Micah Hahn, PhD, MPH: Thanks, Beth, and thanks, Ethan. I'm so glad you went first, st because actually, you set some good context for what I'm going to talk about. So Hi, everyone. My name is Micah Hahn. I'm a professor of environmental health. I'm calling in from Anchorage, Alaska.

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00:21:35.890 --> 00:21:59.400

Micah Hahn, PhD, MPH: I'm going to tell you guys a little bit about a tool that we've been expanding up here called the Alaska Wildfire Explorer, and the goal of this tool is to provide Alaska residents with a mechanism to be able to make daily decisions during the wildfire season. So you saw Ethan's slides about, you know, wanting to go outside biking, but sort of being worried. If this is a healthy environment and something that he should be doing.

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00:21:59.450 --> 00:22:22.070



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Micah Hahn, PhD, MPH: and also by that, by end of the presentation, I hope you'll see, we also are hoping this will be a tool that clinicians can refer their patients to. So when you're meeting with folks in the summertime, and you want to be able to give people some tangible actions that they can do, referring them here so they can make informed decisions about their their daily activities could be one strategy next, please.

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00:22:24.060 --> 00:22:30.690

Micah Hahn, PhD, MPH: So, like Ethan, I sort of want to start with a story and tell you a little bit about what people are doing in Alaska in the summertime.

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Micah Hahn, PhD, MPH: So you know, we're coming off of a long, dark winter. It's a really important time for people to be able to recreate and get outside. But also it's an important time for collecting food. In that top left hand corner is a family harvesting blueberries at a ski hill in anchorage. A lot of folks are trying to catch those salmon runs and fill our freezers for the whole winter. Moose season comes at the very tail end of wildfire season in the fall.

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00:22:58.920 --> 00:23:24.250

Micah Hahn, PhD, MPH: and then that picture in the middle, on the bottom is a culture camp, which are camps that generally happen in the summertime. And it's a chance for people to pass on knowledge about how to harvest these species, how to process them. Other cultural activities that are a really important part of sort of life in Alaska. And so, as we're facing this reality where we are having wildfire seasons that are happening every summer.

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Micah Hahn, PhD, MPH: we need tools to be able to make informed decisions about when it's safe to go outside to do these really important activities, and make sure that we can continue on with our lives despite sort of the changes that are going on outside

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00:23:37.500 --> 00:23:38.770

Micah Hahn, PhD, MPH: next slide, please.

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00:23:40.370 --> 00:24:00.160

Micah Hahn, PhD, MPH: So when we started this project, we we knew we wanted to develop some kind of online tool. But we kind of started at the end. We began with this question, what decisions do we want to be able to



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make with these tools. And then we worked backwards to create a platform that pulled together locally relevant curated data sets to answer these real world questions

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Micah Hahn, PhD, MPH: next slide, please.

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00:24:03.240 --> 00:24:25.769

Micah Hahn, PhD, MPH: you know. And we were able to do that, not through sitting around with a bunch of academics, but actually through a really big project team, you know, and so on. That top left hand corner are the folks like me? I'm at a university. And so we had other faculty members, graduate students, research professionals who have been key to facilitating the project. But around the outside, on the right and the bottom.

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00:24:25.770 --> 00:24:35.469

Micah Hahn, PhD, MPH: These are our project team members, and they were key to being able to create a really useful tool. And so these folks are practitioners. So we we partnered with

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00:24:35.470 --> 00:24:56.779

Micah Hahn, PhD, MPH: folks from the State and local health departments, folks from our tribal health consortium from the Alaska Fire science consortium. And then several folks who are working in tribal and rural communities across Alaska. Because the whole point, if we're trying to make decision trying to make a tool that's really useful for folks on the ground we need to work with folks on the ground to be able to make a useful tool.

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00:24:56.940 --> 00:24:58.470

Micah Hahn, PhD, MPH: All right next slide, please.

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00:24:59.230 --> 00:25:16.429

Micah Hahn, PhD, MPH: And before I jump into what the Alaska wildfire explorer is. I just wanted to give you kind of like a sneak peek behind the curtain at like how we got there. What was our process? So that if you're thinking about developing something like this in your region, this could potentially give you some ideas for how to do that.

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00:25:16.430 --> 00:25:39.220



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Micah Hahn, PhD, MPH: So we we kicked off this whole thing with one on one meetings with each of our project team members to really understand what their expectations were and what decisions they would like to make with the tool. And then we basically worked with our project team through a series of workshops to co-develop this tool. So we looked at different data sets. We talked about the functionality of the tools. We did a lot of beta testing and clicking around and talking about what we liked, and we didn't like

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00:25:39.300 --> 00:25:56.219

Micah Hahn, PhD, MPH: didn't like. And then I'll tell you a bit about. I'll end by telling you where we are now, which is thinking about developing some really fun and interactive dissemination strategies. So some some user guides that will help residents learn how to use these tools.

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00:25:56.600 --> 00:25:58.199

Micah Hahn, PhD, MPH: All right. Next slide, please.

102

00:25:58.860 --> 00:26:06.290

Micah Hahn, PhD, MPH: Okay, so getting to Alaska. Wildfire explorer. This is the the landing page. Next slide, please.

103

00:26:06.810 --> 00:26:35.319

Micah Hahn, PhD, MPH: and sort of the original purpose of Alaska. Wildfire explorer was a place for people to go to see real time fire locations, and you can click on any fire that's happening in Alaska and get some stats and to see what the sort of the current status of that fire is. You can also look at things like hotspots. Recent lightning strikes, which are a really important important ignition source up here in Alaska. And then you can see today's fire rated fire danger rating across the State

104

00:26:35.710 --> 00:26:36.940

Micah Hahn, PhD, MPH: next, please.

105

00:26:37.810 --> 00:27:02.100

Micah Hahn, PhD, MPH: We have contributed to this tool. And what we're continuing to work on is pulling in air quality information to go along with that fire data. So when you go to the tool, you'll be able to see real time air quality we've pulled in. There are multiple sensor networks across Alaska, and one of the issues is that they were dispersed across



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lots of different websites. And so we pulled all those together so that you can see all of the current monitors in the State.

106

00:27:02.150 --> 00:27:16.629

Micah Hahn, PhD, MPH: and just like some of the other tools that exist like the purple air map or the Apa fire and smoke map. You can click on any of the sensors, and you can pull up what the real time air quality index is, or the 24 h air Quality index.

107

00:27:17.290 --> 00:27:18.650

Micah Hahn, PhD, MPH: Next slide, please.

108

00:27:19.540 --> 00:27:43.099

Micah Hahn, PhD, MPH: A really important feature that we've brought in at the request of our project. Team. Is an air quality forecast. So not only can you see what the air quality is right now, but you can see what it's projected to be in the next 6 to 48 h, which was told told to us. This is a really important feature to be able to make decisions about when you're going to be doing some of these activities or planning ahead for an event that was that was proposed to occur

109

00:27:43.830 --> 00:27:45.080

Micah Hahn, PhD, MPH: next, please.

110

00:27:46.200 --> 00:28:11.079

Micah Hahn, PhD, MPH: Another piece of feedback that we got from our project team is that you know it's really cool to be able to see the whole state and sort of get a big picture of wildfire smoke in Alaska. But really we care about what the air quality is where we are. And so they wanted to be able to see localized data. So we added this option to do a community name search. So when you go to the tool you can put in any community in Alaska you can put in both the English name as well as the indigenous language name.

111

00:28:11.080 --> 00:28:19.589

Micah Hahn, PhD, MPH: and it will zoom to your location, and you can see sort of a report for the fire conditions. The the air quality forecast

112

00:28:19.710 --> 00:28:21.260

Micah Hahn, PhD, MPH: next slide, please.

113



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00:28:21.920 --> 00:28:29.210

Micah Hahn, PhD, MPH: and also all of the fires that are within your in your region. So you can sort of get a sense of what's what's happening

114

00:28:31.300 --> 00:28:39.969

Micah Hahn, PhD, MPH: next? Slide, please. Perfect. Okay? And so then I just wanted to close out by telling you a little bit about our dissemination strategy and what we're working on right now.

115

00:28:40.340 --> 00:28:58.749

Micah Hahn, PhD, MPH: So we came quickly to the realization that just because you build a tool doesn't mean that anyone knows it exists or that anyone is going to use it. And so we wanted to be really strategic about how we were getting the word out about Alaska Wildfire explorer and doing what we could to make sure that it was really useful for people in different contexts across the State.

116

00:28:58.820 --> 00:29:17.559

Micah Hahn, PhD, MPH: So what we've been working on is with our again, with our project team coming up with stories and scenarios for how people might be using the Alaska wildfire explorer to make decisions. And we're working. We've teamed up with some comic artists who are helping illustrate these stories in a comic book form of a user guide

117

00:29:17.790 --> 00:29:19.519

Micah Hahn, PhD, MPH: next slide, please.

118

00:29:20.360 --> 00:29:32.570

Micah Hahn, PhD, MPH: And I just wanted to give you a sense of sort of what we've tried to capture with these comic books. So this is a very, very early draft, but it will serve our purposes for telling you about sort of our our thinking behind these.

119

00:29:32.680 --> 00:29:55.779

Micah Hahn, PhD, MPH: So we started off by using some very Alaska specific scenarios that we knew would resonate with folks across the State, and each of the stories has sort of a different target population. So, for example, we have a story about berry picking that's really set in rural communities in Alaska culture camp is about caretakers of young children.

120

00:29:55.970 --> 00:30:13.359



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Micah Hahn, PhD, MPH: Fishing trip is about planning a recreational activity, which I said, is that something that people are doing a lot in Alaska in the summer, and then the work party is about folks like planning a planning a volunteer trail building activity, and also sort of getting in some of those issues around occupational exposure.

121

00:30:13.580 --> 00:30:21.820

Micah Hahn, PhD, MPH: In each of the comic strips we have a public health and safety call to action. We really wanted to give people things that you could do through these stories.

122

00:30:21.920 --> 00:30:38.800

Micah Hahn, PhD, MPH: Each one focuses on a different sensitive population. So elders, young people, people with preexisting conditions. For example, there's also one about a healthy population to sort of demonstrate the fact that even if you don't have a pre-existing condition, it's important to know what the air quality is and think about how that might be impacting your health.

123

00:30:39.000 --> 00:30:47.040

Micah Hahn, PhD, MPH: Each of the stories focuses on a different air quality index level. So you can see how the characters are making decisions at different air quality levels.

124

00:30:47.330 --> 00:30:59.049

Micah Hahn, PhD, MPH: And you know, the point of these comic stories is to explain how to use the tool. So each one focuses on a different tool feature and shows how the characters are using the tool to actually reduce their smoke exposure.

125

00:30:59.060 --> 00:31:21.519

Micah Hahn, PhD, MPH: And then, of course, you know, working with our project team, we made sure that all of these stories are culturally relevant and appropriate. I love this example in this story. The young child was the one who knew about the Alaska wildfire explorer, but ultimately the grandmother is the one who made the decision for the family, which we were assured was the only way that would be appropriate, and that would be accepted across Alaska communities.

126

00:31:21.700 --> 00:31:25.420

Micah Hahn, PhD, MPH: So yeah, I think with that, if you want to next slide, please.



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00:31:26.330 --> 00:31:48.909

Micah Hahn, PhD, MPH: Yeah. As I said, these tools are, this tool is planned to be coming out this summer, but when we're really excited to have some hard copies of these comic books, and we envision them as something that could be sitting in a waiting room at a clinical office, or something that a doctor could hand an asthmatic patient to say, Hey, did you know this tool existed? This is as you're thinking about your summer and planning out your activities. Maybe you should check the Aqi.

128

00:31:49.471 --> 00:31:55.750

Micah Hahn, PhD, MPH: So yeah, with that, thanks to our project team, I think my final slide and then I will. I'll pass it on to our next speaker.

129

00:31:57.230 --> 00:32:19.400

Beth Schenk, PhD, RN, FAAN: Thank you, Micah. What a rich set of resources, especially thinking of the breadth and the variety of geographies that you have in Alaska. I was also thinking, I don't know if we have Canadian partners joining us today, but this could be relevant for all Arctic, subarctic, and even temporal forest zones. So fabulous work, especially your translational approach. Thank you.

130

00:32:19.610 --> 00:32:27.579

Beth Schenk, PhD, RN, FAAN: Okay. Now, we're going to move on to Washington and Dr. Nicole Errett will speak to us about disaster, resilience out of the University of Washington. Nicole

131

00:32:27.810 --> 00:32:52.240

Nicole Errett, PhD, MSPH: Thank you so much, Beth, and it was so great to hear from others about the fabulous work that is happening across the region. My name is Nicole Errett, and I am the director of the University of Washington Center for Disaster resilient communities, and wanted to tell you a little bit about your hometown disaster center for those of you who are in Region 10. So the University of Washington established the center for disaster. Resilient communities in 2023

132

00:32:52.240 --> 00:33:16.069

Nicole Errett, PhD, MSPH: to bring together over a hundred faculty across the university, who work on hazards and disaster research. And we do research so things that help to advance scientific knowledge. But we also do things that are here to support the workforce and the work that's happening relevant to climate and disasters here in the Northwest. So we



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00:33:16.070 --> 00:33:41.069

Nicole Errett, PhD, MSPH: have a training and education portfolio. We have a listserv that folks can sign up for to be part of our hear about our seminars and other events, and we also offer on the right a summer training institute for folks that are interested in learning about how to do research in the context of disasters and emergencies. And this is called our ideal fellowship, investigations and disasters and emergencies, advancing applied learning and disaster, research

134

00:33:41.070 --> 00:34:04.999

Nicole Errett, PhD, MSPH: response. And this is a 1 week short course here in Seattle on the University of Washington campus, and there is a pre activities, including online modules and work. And then the following year we bring people together in a series of monthly seminars to facilitate activities related to ongoing research projects and to provide continuous mentoring and support.

135

00:34:05.240 --> 00:34:32.569

Nicole Errett, PhD, MSPH: This year the course is going to be offered on our campus from August 4th through 8, th and applications are due at the end of this month. So March 31.st And there are some need based travel stipends for folks based in in the Us. And so we encourage you all to apply and to check out more on our website.

136

00:34:32.600 --> 00:34:35.093

Nicole Errett, PhD, MSPH: If we go to the next slide

137

00:34:36.820 --> 00:34:59.240

Nicole Errett, PhD, MSPH: within our center. We also house the Northwest center for evidence-based public health emergency preparedness and response. And this is a Cdc funded center that is one of 10 centers. Nationally, there's 1 in each of the Department of Health and Human Services Regions. And so our center is to serve all of Region 10, Alaska, Idaho, Washington, and Oregon.

138

00:34:59.240 --> 00:35:18.379

Nicole Errett, PhD, MSPH: and the point of the center is to help get evidence-based practices into practice. So there was a report in 2020 by the National Academies that essentially said that there's limited evidence to guide the public health emergency preparedness and response workforce

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00:35:18.380 --> 00:35:43.330

Nicole Errett, PhD, MSPH: and that evidence-based practices. There's lots of challenges to getting them into health departments and other organizations that are working on public health, emergency preparedness and response. And so our job as a center is to support practitioners to be aware of and to implement practices that are known to work. And we have 3 areas of focus that we're

140

00:35:43.330 --> 00:36:02.099

Nicole Errett, PhD, MSPH: developed with a number of leaders across the region who came together last year for a year long process to help shape and guide the center. And our focus areas are workforce capacity and leadership communications and assessing and addressing current capabilities and future hazards

141

00:36:02.100 --> 00:36:27.079

Nicole Errett, PhD, MSPH: and the goals of our center, as I mentioned, are to promote coordination and collaboration among Region 10, tribal state and local health departments and their partners to support evidence-based public health emergency preparedness and response practice. That's that fepr acronym to improve the availability and uptake of culturally and community appropriate fepr evidence-based strategies and interventions in Region 10 and to enhance the capabilities

142

00:36:27.080 --> 00:36:33.580

Nicole Errett, PhD, MSPH: capacities of region 10 practitioners to implement evidence-based public health emergency preparedness and response practice.

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00:36:33.770 --> 00:36:58.759

Nicole Errett, PhD, MSPH: And so we're just getting started. So I don't have a lot of results to report like Micah did. But what I wanted to do is to invite you to participate in our center's activities. So we will be launching projects in partnership with health departments and other folks that work on preparedness and response across region 10. So that's again Alaska, Idaho, Oregon, and Washington State

144

00:36:58.760 --> 00:37:23.720

Nicole Errett, PhD, MSPH: in the United States, and we will be partnering with them to do activities related to each of these focus areas to promote evidence-based practice uptake. So if you're interested in partnering with us, we're going to be hosting communities of practice. We're going to be having a region 10 conference in late summer. We're anticipating here at the University of Washington again to bring together



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00:37:23.720 --> 00:37:46.410

Nicole Errett, PhD, MSPH: all folks that are working on preparedness and response from a public health and healthcare lens across our region, and we'll be doing those partnership projects with state, local and tribal health departments and other partners. So we welcome you to join us if we can go to the next slide. The final thing I wanted to highlight

146

00:37:46.710 --> 00:38:11.549

Nicole Errett, PhD, MSPH: it's actually related to another center on campus. This is an Nih funded center called reach. And it's about enhancing climate adaptation, implementation. Again, this is in the Northwest, but in what's called our whammy region. So a slightly different geographic footprint, Washington, Wyoming, Alaska, Montana, and Idaho. And what we're going to be doing is providing training to teams of early career professionals

147

00:38:11.710 --> 00:38:36.560

Nicole Errett, PhD, MSPH: that want to get involved in climate adaptation. So we're looking for someone who is in a practice-based setting. So this could be a healthcare person. So a clinician or someone else who works in a healthcare setting, someone who works in public health, emergency, preparedness and response. Someone who works in state or local government, in some capacity or for a community-based organization or non

148

00:38:36.560 --> 00:38:46.089

Nicole Errett, PhD, MSPH: who has the responsibility for implementing some sort of intervention related to climate and health.

149

00:38:46.190 --> 00:38:53.890

Nicole Errett, PhD, MSPH: And we want you to partner with an academic partner. So someone from a university who does research.

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00:38:53.890 --> 00:39:18.189

Nicole Errett, PhD, MSPH: and you could have another partner on your team. So 2 to 3 people on one team and you'll receive \$60,000 as a team. You'll get mentorship from faculty at the University of Washington, and you'll get training at a University of Washington Summer Institute to use what's called implementation science to support implementation of those climate and health adaptation.

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00:39:18.640 --> 00:39:43.629

Nicole Errett, PhD, MSPH: climate and health adaptation strategies. So implementation, science is this field of knowledge that improves implementation. So it's a scientific study of how to get evidence-based innovations into practice. So we'll teach you about implementation science. If you don't already know about it, provide you with some mentorship and support and help. You use that scientific approach to get those climate and health adaptation strategies that we also

152

00:39:43.630 --> 00:40:07.239

Nicole Errett, PhD, MSPH: need in practice into practice. To make this a little bit tangible. We have some example projects. These are not meant to be restrictive, but just to help guide your thinking. You could be using an electronic medical record to identify patients at risk for heat, related illness and develop a targeted or early warning system so that could be your intervention, and you could partner with someone to help you either evaluate it or use a different

153

00:40:07.240 --> 00:40:32.220

Nicole Errett, PhD, MSPH: evidence-based strategies called implementation strategies. Essentially to get these into practice. Or maybe you're in a practice based setting. And you are trying to establish a cooling center network for extreme heat events. And you want to know how to get more people there using implementation science, or you want to know how to get your leadership on board for doing it, and you want it to be successful. And we can

154

00:40:32.220 --> 00:40:46.420

Nicole Errett, PhD, MSPH: you use some implementation science strategies to do that? So it needs to be at least one practitioner or implementer. So someone who is responsible for implementing and an academic partner who can help do some of the research using implementation science.

155

00:40:46.420 --> 00:41:06.000

Nicole Errett, PhD, MSPH: our application will be open over the summer, and our program is going to start in February of 2026. And so at this point, we're not accepting applications. But you can submit an interest form on our website, and then you'll be you will receive an application, a link to the application once it is open and available. So

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00:41:06.120 --> 00:41:31.059

Nicole Errett, PhD, MSPH: these are just some resources here at the University of Washington for those of you here in the Northwest area, trying to get more involved in disasters and climate and health. We have



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faculty that are here to help and support you, and a lot of interesting programs and opportunities on campus to get involved. And so we look forward to meeting you and working with you in a variety

157

00:41:31.060 --> 00:41:38.549

Nicole Errett, PhD, MSPH: of different capacities, and hope that we can do some great work together so over. Thank you.

158

00:41:39.460 --> 00:42:07.710

Beth Schenk, PhD, RN, FAAN: Thank you, Nicole. Wow! What a what a rich list of resources! And you all heard Nicole. That's an invitation to get involved to check it out. It's really terrific to see the application again, of really working to get these resources into the field, into the hands of health professionals. Yes, but also to really alleviate some of the challenges, some of the many challenges we're up against with climate and health. Thank you, Nicole, and last, but not least we have Dr. Leah Werner from Oshu and Dr. Werner. Take it away

159

00:42:11.500 --> 00:42:12.880

Leah Werner, MD, MPH, FAAFP: Hi, there!

160

00:42:13.980 --> 00:42:23.189

Leah Werner, MD, MPH, FAAFP: I am an assistant professor in the Department of Family Medicine at Oregon, Health and Science University, and the director of our Ohsu primary care, climate change and health program.

161

00:42:24.126 --> 00:42:25.480

Leah Werner, MD, MPH, FAAFP: Next slide.

162

00:42:28.404 --> 00:42:33.119

Leah Werner, MD, MPH, FAAFP: So my involvement in climate change and health

163

00:42:33.620 --> 00:42:39.629

Leah Werner, MD, MPH, FAAFP: goes all the way back to the 19 nineties. But I'll say that the inspiration for really starting the program

164

00:42:39.870 --> 00:42:54.850

Leah Werner, MD, MPH, FAAFP: was in what I consider to be a pretty apocalyptic year in the Pacific Northwest, which was 2020 to 2021 with



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the onset of Covid. And then 3 extreme climate change induced weather events

165

00:42:55.080 --> 00:43:03.610

Leah Werner, MD, MPH, FAAFP: that made it very, very challenging to take care of patients. Particularly while a global pandemic was happening

166

00:43:03.750 --> 00:43:05.740

Leah Werner, MD, MPH, FAAFP: as a frontline Covid Doc.

167

00:43:05.920 --> 00:43:22.300

Leah Werner, MD, MPH, FAAFP: and trying to keep Portland Metro area safe during the Beachy Creek wildfires of September 2,020, which kind of nearly burned up the whole city, but also left us with the worst air quality in the world for about 8 days. We couldn't

168

00:43:22.530 --> 00:43:48.060

Leah Werner, MD, MPH, FAAFP: help people as much as we would have liked to, because of the pandemic. No one was vaccinated, so we couldn't gather people together into safe spaces to protect them from the poor air quality, or from even fires, because of the pandemic. So we were relying extensively on telehealth. And that left a lot of our rural communities in a breach, because a lot of rural areas don't have access to broadband or telehealth.

169

00:43:48.420 --> 00:43:58.119

Leah Werner, MD, MPH, FAAFP: We had an ice storm that winter that knocked Power out for a week and kept people in frigid temperatures. And then the heat dome happened in 2,021

170

00:43:58.300 --> 00:44:08.050

Leah Werner, MD, MPH, FAAFP: which brought Pacific Northwest temperatures up to 116 degrees, and in the urban Heat Islands of Portland some of those neighborhoods went up to 130 degrees.

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00:44:08.250 --> 00:44:22.090

Leah Werner, MD, MPH, FAAFP: and I lost a myriad of patients that year. And so a huge part of this for me was action to help with my grief over what we were experiencing and what I was experiencing as a primary care physician.

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00:44:22.210 --> 00:44:38.360

Leah Werner, MD, MPH, FAAFP: So naturally, we look at physicians for social responsibility which started in the 19 eighties as a movement against nuclear war, and they have rightfully embraced climate change, which is now one of the greatest threats to humankind that we are facing today.

173

00:44:38.410 --> 00:44:53.550

Leah Werner, MD, MPH, FAAFP: So with that birth to the primary care, climate change and health program. Recognizing that primary care physicians and emergency medicine physicians are on the front lines of climate change. With our patients. We often live and play and work in the same communities that are frontline patients

174

00:44:53.670 --> 00:44:58.339

Leah Werner, MD, MPH, FAAFP: live. And we're experiencing those events with them. Next slide, please.

175

00:45:01.090 --> 00:45:17.220

Leah Werner, MD, MPH, FAAFP: So part of my imagining of this program was creating a program that could facilitate transitional adaptation which is educating healthcare workers about the threats of climate change and recognizing how that manifests in the healthcare setting

176

00:45:17.931 --> 00:45:30.128

Leah Werner, MD, MPH, FAAFP: changing minds and attitudes. It's a traditional adaptation or transitional adaptation to climate change. The second part is transformational adaptation, which is changing healthcare systems to

177

00:45:30.720 --> 00:45:36.550

Leah Werner, MD, MPH, FAAFP: to be able to respond efficaciously and acknowledge the threat that climate change has on all of us.

178

00:45:36.750 --> 00:45:59.459

Leah Werner, MD, MPH, FAAFP: I relied on the Oregon health authority's surveillance to map out what are the greatest climate change threats to the Pacific Northwest. And how do we start collaborating with others who are already doing educational programs to teach our healthcare providers, students how to understand what climate change is doing to the human body, and who is at the most risk next slide, please.

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00:46:01.406 --> 00:46:09.270

Leah Werner, MD, MPH, FAAFP: So we're looking at. This is a prioritization matrix. So this is not extensive, but this constitutes

180

00:46:10.090 --> 00:46:13.510

Leah Werner, MD, MPH, FAAFP: what are the greatest threats here, and who's at risk?

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00:46:13.700 --> 00:46:27.560

Leah Werner, MD, MPH, FAAFP: Sp stands for special priority. P. Stands for priority, and Lp stands for low priority. And you're thinking, why would death be a low priority? Well, because at that point we have failed. So we're thinking about where we're going to pool our resources. We want to

182

00:46:27.650 --> 00:46:57.479

Leah Werner, MD, MPH, FAAFP: just like with all public health mantras. We want to keep people from falling into the river and drowning. To begin with, when we're pulling people out of the river, we're really exhausting ourselves. We got to go upstream and keep people from falling into the river to begin with. So when we're thinking about, where should we pool our limited resources? And frankly, a lot of us doing this climate change work or a volunteer brigade. We've got to be very strategic about what we're doing and really hit those special priority groups and conditions to prevent them from even occurring. To begin with

183

00:46:57.550 --> 00:46:58.939

Leah Werner, MD, MPH, FAAFP: next slide, please.

184

00:47:01.903 --> 00:47:02.450

Leah Werner, MD, MPH, FAAFP: So

185

00:47:02.820 --> 00:47:29.370

Leah Werner, MD, MPH, FAAFP: I work on education at the School of Medicine. I'm also the Ohsu Integrated Delivery System Medical director. So I oversee Medicaid implementation programs for Ohsu health network. And this is where transformational adaptation really comes to play. And this is people who across the State who've been doing work on this for years. Probably the birth of this started in the 19 eighties. To be to be honest like this is

186

00:47:29.370 --> 00:47:34.010



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Leah Werner, MD, MPH, FAAFP: many, many people over many decades working to help.

187

00:47:34.759 --> 00:47:44.240

Leah Werner, MD, MPH, FAAFP: The State intervene with our most vulnerable frontline populations for climate weather events that hurt people.

188

00:47:44.400 --> 00:48:14.129

Leah Werner, MD, MPH, FAAFP: So with Medicaid expansion we were able to create the health related social needs benefits where we are trying to address social determinants of health, and it took a lift. But we can argue that climate change can be considered a social determinant of health, and so we cover climate benefits to help our most vulnerable populations in Oregon to get them durable medical equipment to keep them safe during extreme weather events.

189

00:48:15.054 --> 00:48:16.910

Leah Werner, MD, MPH, FAAFP: So next slide, please,

190

00:48:21.010 --> 00:48:39.480

Leah Werner, MD, MPH, FAAFP: part of what we do is we try to get these out in the spring, and we're disseminating air conditioners, air purifiers. Of course, in the winter there will be space heaters for heating. We offer power and refrigeration services for people who have medications that are sensitive to temperature.

191

00:48:39.924 --> 00:48:53.245

Leah Werner, MD, MPH, FAAFP: So portable power supplies mini refrigerators. The Oregon health authority has a separate program from Medicaid, where they also offer air conditioners and air filter deployment. But that funding is

192

00:48:54.290 --> 00:48:55.065

Leah Werner, MD, MPH, FAAFP: is

193

00:48:56.190 --> 00:49:07.169

Leah Werner, MD, MPH, FAAFP: changes every year. So it's some years we can get out a lot of supplies other years. We can't. So we rely on the 2 programs across the State to try to help as many people as we can next slide, please.

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00:49:09.750 --> 00:49:11.280

Leah Werner, MD, MPH, FAAFP: We have a unique

195

00:49:11.770 --> 00:49:25.770

Leah Werner, MD, MPH, FAAFP: medicaid dissemination system within the State of Oregon. We've created what are called coordinated care organizations where they get pools of medicaid funds and disseminate those programs out to certain networks. And so

196

00:49:25.860 --> 00:49:49.580

Leah Werner, MD, MPH, FAAFP: what we do is we have nurse care manager programs with the Ccos that work with our primary care, clinics to help identify patients who would qualify for these health related social needs, benefits, and just to be clear, those benefits include housing, transportation, nutrition as well as the climate benefit. And so those Ccos have

197

00:49:49.690 --> 00:50:13.719

Leah Werner, MD, MPH, FAAFP: team set up to help our primary care clinicians to identify and help patients and then track them to make sure that they have received the equipment. They know how to use it, and that they have the electricity to be able to use it, especially during extreme weather events. And then there's also follow up with patients during extreme weather events to make sure that they're safe and that they're using the equipment, and they understand how to use the equipment next slide, please.

198

00:50:15.830 --> 00:50:43.490

Leah Werner, MD, MPH, FAAFP: We don't have a ton of money, so we've got to be very careful and strategic about who gets these this equipment, and I wish we could give it out more broadly, but it really relies on the funds with the State of the Federal Government right now, this is potentially a program in transition. So we'll see. But I have a lot of slides, by the way, and there's a lot of information on the slides, so I'm going to go through them pretty quickly, and I may skip over some of the information, but

199

00:50:43.600 --> 00:50:55.840

Leah Werner, MD, MPH, FAAFP: who qualifies for the climate benefit are life. A person who has a is in a particular life transition. Which I've listed right here, and then there's also the medical

200

00:50:55.970 --> 00:51:09.430



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Leah Werner, MD, MPH, FAAFP: requirement. So it's a combination of a life transition and a medical requirement. And with, I would say, with my 55,000 Medicaid patients, we probably had about 3,200 that qualified for a climate benefit. Next slide, please.

201

00:51:11.180 --> 00:51:29.529

Leah Werner, MD, MPH, FAAFP: So here I have listed out on the medical side who qualify. So it's folks who have severe chronic illnesses, sensitive to heat, such as heart disease, kidney disease, multiple sclerosis, respiratory conditions, such as asthma or copd diabetes.

202

00:51:29.810 --> 00:51:39.056

Leah Werner, MD, MPH, FAAFP: people with obstructive sleep apnea and other. You know, cardiovascular diseases that require basically electricity and

203

00:51:39.790 --> 00:51:57.669

Leah Werner, MD, MPH, FAAFP: and cooling that puts them at increased rest during during wildfire seasons or extreme heat events. The other thing, I'll say with extreme heat events is the air quality during extreme heat events is also pretty terrible. So they're not just hit by heat. They're also hit by particulate matter that accumulates in the air during heat. Next slide, please.

204

00:51:59.722 --> 00:52:11.900

Leah Werner, MD, MPH, FAAFP: I did address some of the barriers in our rural setting. We are. We have rural and frontier areas in in in Oregon, and we've got a massive healthcare shortage

205

00:52:11.900 --> 00:52:37.509

Leah Werner, MD, MPH, FAAFP: there, and so getting to our rural populations and making sure they're safe is quite a challenge. There's issues with infrastructure and connectivity during extreme weather events when roads are washed away, or there's electrical power lines down. We end up with Disaster Islands, which I'm sure Ethan, out in Idaho understands, because our eastern Oregon is very similar to the Idaho landscape

206

00:52:37.560 --> 00:52:38.889

Leah Werner, MD, MPH, FAAFP: next slide, please.

207

00:52:40.850 --> 00:52:54.340



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Leah Werner, MD, MPH, FAAFP: And then we've got strategies to improve rural integration. So we're trying to increase our broadband are working very hard to populate our rural areas with healthcare providers, telehealth and mobile services.

208

00:52:54.788 --> 00:53:05.960

Leah Werner, MD, MPH, FAAFP: Getting direct distribution of our climate aids directly to our patients and then creating community resilience networks, which is really important with our 9 confederated tribes and the State of Oregon next slide, please.

209

00:53:08.102 --> 00:53:16.240

Leah Werner, MD, MPH, FAAFP: So our tribal communities are often living in areas that are on the front lines of climate change.

210

00:53:16.550 --> 00:53:42.260

Leah Werner, MD, MPH, FAAFP: They live in rural and ecologically fragile zones. They also receive the climate benefit, but from a different fund of Medicaid dollars. So it's separate from the rest of the population of Oregon. But in addition, what's fascinating about what the tribal communities are doing is they're really leading the way in adaptation and conceptualizing mitigation. Strategies for climate next slide, please.

211

00:53:43.940 --> 00:54:04.989

Leah Werner, MD, MPH, FAAFP: So they have already initiated community-based resilience projects within their within the tribes and exploring green energy options and traditional ecological knowledge practices to help mitigate extreme weather events in their area, such as controlled burns or habitat restoration.

212

00:54:05.090 --> 00:54:06.439

Leah Werner, MD, MPH, FAAFP: Next slide please.

213

00:54:08.450 --> 00:54:32.869

Leah Werner, MD, MPH, FAAFP: Their traditional knowledge is also being included within our policy and our Medicaid practices. There is a lot of distrust and lack of psychological safety, I would say, with Confederate tribes and State governments. And so a lot of this is still in relationship building. And I won't get into that a lot. But we all benefit tremendously from the traditional ecological practices.

214

00:54:33.440 --> 00:54:34.729



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Leah Werner, MD, MPH, FAAFP: Next slide, please.

215

00:54:36.130 --> 00:54:59.599

Leah Werner, MD, MPH, FAAFP: And then I have more information here on my program, including our mission statement and our vision and our statement of values. But I think I'm running out of time, and I've put it all extensively on slides that can be read, and I think that they'll be shared. So I'm going to end now and then. Leave. I think we've just got a few minutes left for questions, and I'm so grateful for everybody's time. Thank you.

216

00:55:00.460 --> 00:55:22.509

Beth Schenk, PhD, RN, FAAN: Thank you, Leah, that that was really great. I mean, all of these talks are so amazing because of the rich resources that are regionally specific. But you can see that they have some shared issues in including rurality, which is a big one. So you're right. We don't have a lot of time for questions. I appreciate that people have been asking and answering questions in the chat, so please check out the chat.

217

00:55:22.510 --> 00:55:34.210

Beth Schenk, PhD, RN, FAAN: all of you who are are on, and I'm going to try and ask a question of each of you. 1 1 question. That is the same question that I think if you take about 45 seconds. We'll we'll get through.

218

00:55:34.250 --> 00:55:45.589

Beth Schenk, PhD, RN, FAAN: And it's really the one about what keeps you energized and hopeful. I think that's important. Right now I know that a lot of people who have been asking about well, what do we do? Where do we start? How do I talk to people?

219

00:55:45.730 --> 00:56:03.920

Beth Schenk, PhD, RN, FAAN: And you all are experts. You've pulled, pulled together, and I've shared multiple resources. So there's lots of knowledge out there. But I think sometimes the personal application is important. So could you each just give that a little bit of a response about keeping yourselves engaged in this work so that you can help relieve suffering for others.

220

00:56:04.180 --> 00:56:06.270

Beth Schenk, PhD, RN, FAAN: Whatever order you would like. Go ahead



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221

00:56:09.600 --> 00:56:31.090

Ethan Sims, MD: Alright. So I think. It's really important to give yourself and give others around you a bit of grace and realize that no one person is gonna fix this whole problem. And I think a lot of us come into this with this helper mindset that we need to fix everything and do everything ourselves, and that's just not possible. So what I try to do is have

222

00:56:31.200 --> 00:56:56.269

Ethan Sims, MD: pendulum approach where I swing into my climate and health space, and I do some work there for a few days, and then I swing out and go to my clinical work for a few days, and each of them sort of balances the other out, and gives me a chance to stay energized in both spheres without burning out neither one of them so, having something else to turn to, and giving yourself grace along the way that no one person is going to solve this problem.

223

00:56:56.595 --> 00:57:01.490

Ethan Sims, MD: Yeah, the last thing I would say, is going to events like our planet or Health

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00:57:01.680 --> 00:57:07.349

Ethan Sims, MD: Conference that we just went to in DC. Where you really got to meet a lot of like minded people, and get

225

00:57:09.290 --> 00:57:11.950

Beth Schenk, PhD, RN, FAAN: Thanks, Ethan Great! Who's next?

226

00:57:18.450 --> 00:57:19.739

Beth Schenk, PhD, RN, FAAN: Micah? You go ahead if you want

227

00:57:19.740 --> 00:57:47.590

Micah Hahn, PhD, MPH: Sure. Yeah, I can jump in well, for me as a researcher, I spent a lot of time, I think, behind a computer often and often on zoom, and I think that a lot of maybe it doesn't resonate for clinicians who get a lot of face to face time. But I think kind of like, Ethan said, making sure that I give myself space to connect with other people in person actually has been surprisingly regenerative, I think, especially out of Covid. We all sort of

228

00:57:47.919 --> 00:58:14.640



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Micah Hahn, PhD, MPH: let that part of our lives sort of wane a little bit, and so, making sure that you're getting together with people, and that I think, for me to seeing some of our work come to fruition, and having just even seeing people in the chat being like, Oh, this is something I would use, or this is really cool, or I could see how it's applied like. So look for those positive affirmations. Save them somewhere, for on those rainy days, and you can go back to them. And I it really, that's what keeps me going, I would say

229

00:58:15.490 --> 00:58:17.410

Beth Schenk, PhD, RN, FAAN: Great being effective. That's super cool.

230

00:58:17.770 --> 00:58:19.410

Beth Schenk, PhD, RN, FAAN: Nicole. You want to go next

231

00:58:20.380 --> 00:58:37.529

Nicole Errett, PhD, MSPH: Sure, you know, I think some of this is almost self evident in some of the resources that I shared is in this stage of my career. I'm really excited to help advance the abilities of others, to start to tackle these really large problems. And I'm so inspired by

232

00:58:37.530 --> 00:58:53.999

Nicole Errett, PhD, MSPH: the next generation of people who really want to do this work, and who are passionate and and have the skills and abilities that that can really drive this work forward. I think you know, when I started doing disaster work, I remember

233

00:58:54.000 --> 00:59:22.049

Nicole Errett, PhD, MSPH: there weren't many opportunities to do it, and it wasn't the in vogue thing to do. And now there are so many people who are excited and passionate, and trying to find ways to use their talents and expertise to to help folks deal with the increasing health challenges. And so just being able to to help uplift others. To be able to contribute to this problem is something that keeps me going

234

00:59:22.830 --> 00:59:24.659

Beth Schenk, PhD, RN, FAAN: That's great. Thank you. And Leah

235

00:59:25.840 --> 00:59:40.749

Leah Werner, MD, MPH, FAAFP: Yeah, I really love my kids and my patients. I'm trying to be a good ancestor. And that's, you know, I think the



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opportunity to be here and see so many people doing this work gives me hope, because this is such can be such an overwhelming

236

00:59:41.350 --> 00:59:55.283

Leah Werner, MD, MPH, FAAFP: crisis that we're all facing. But we're all in it together, and the more people that we can inspire to jump in and join us, I feel like I've I've done what I can. And so we are a volunteer brigade, but it is our planet and

237

00:59:55.730 --> 01:00:00.410

Leah Werner, MD, MPH, FAAFP: And so you all are very inspiring. I feel very honored to be here. Thank you.

238

01:00:01.270 --> 01:00:04.759

Beth Schenk, PhD, RN, FAAN: Well, said, Nice, nice cap working together.

239

01:00:04.910 --> 01:00:18.760

Beth Schenk, PhD, RN, FAAN: knowing that none of us are ultimately responsible. But all of us can contribute which you all have been fabulous models, for I think we have just a couple of announcements. If we go back to those slides about the movement in that nam is supporting

240

01:00:20.410 --> 01:00:40.539

Beth Schenk, PhD, RN, FAAN: really trying to accelerate this across all of the all of healthcare in the United States. So if you're involved in that at all, please check it out and learn how you could get involved. We want to be able to just like this practical skills and tools that we can bring to others who are not yet involved, and on the next slide there is

241

01:00:40.860 --> 01:00:59.469

Beth Schenk, PhD, RN, FAAN: a code you can scan a QR code. So please take that into account. Please attend the upcoming regional sessions for the other 7 regions, that we will be taking a look at through the year, and thank you again to our speakers and to nom staff for this really terrific morning together.

242

01:00:59.650 --> 01:01:00.430

Beth Schenk, PhD, RN, FAAN: Thank you.