

Erin Black, CDC DSEPD ADP (she/her/hers): Okay, great we have a minute after and it looks like our participants are starting to slow down a little bit, so why don't we get started.

Erin Black, CDC DSEPD ADP (she/her/hers): Hello everyone, my name is Erin Black. I'm the Associate Director for Policy, Partnerships, and Recruitment for our CDC Division of Scientific Education and Professional Development.

Erin Black, CDC DSEPD ADP (she/her/hers): Thank you for joining us. Reminder: this is an opportunity for you to hear about what it's like to be a real disease detective in CDC's Epidemic Intelligence Service.

Erin Black, CDC DSEPD ADP (she/her/hers): You'll hear a brief overview of our EIS program and then meet some of our current EIS fellows to hear about their personal experiences in the Program.

Erin Black, CDC DSEPD ADP (she/her/hers): And there'll be time at the end for you to ask questions. Our time is limited, so we ask that your questions tailored to our panels personal experiences in the Program.

Erin Black, CDC DSEPD ADP (she/her/hers): Questions about application requirements, eligibility, timelines, and other program specific questions can be answered by visiting our website,

Erin Black, CDC DSEPD ADP (she/her/hers): www.cdc.gov/eis or you can send program questions to our mailbox at EISapplication@cdc.gov.

Erin Black, CDC DSEPD ADP (she/her/hers): So now to get us started with a brief overview of the EIS program, I'll now hand it over to our moderator, Captain Eric Pevzner, Chief of Epidemiology Workforce Branch and the Epidemic Intelligence Service program. Kick us off, Eric.

Eric Pevzner: Thanks Erin. So I'm going to go ahead and share my screen and share some slides with you to get this started.

Eric Pevzner: All right, Erin, can you just confirm you can see the slides?

Erin Black: Yes we can!

Eric Pevzner: Thank you. Alright, so welcome everybody. Either good afternoon or good morning, possibly, wherever you are in the world. We're excited to talk to you about our CDC's disease detective training program,

Eric Pevzner: the Epidemic Intelligence Service. If you think about just about any major public health event,

Eric Pevzner: CDC and EIS were likely there, whether it's dating back to 1966 working on the initiation of smallpox eradication, jumping ahead to 1981 to the first reported case of HIV and AIDS,

Eric Pevzner: jump to 2014 and Ebola in West Africa or, most recently, the COVID-19 response, our officers are there and in many cases very heavily involved in the investigation, the analysis, response, and the public health actions that come from that work.

Eric Pevzner: So EIS is really about response and service, and response can take the form of like our officers here out in the field sitting at a desk analyzing data, can involve collecting samples,

Eric Pevzner: or can involve working on really complicated sometimes messy data and trying to answer really important questions, and these are the skills that we try and work with you to build as applied epidemiologists.

Eric Pevzner: So where can you work? It's a two-year training program and your placement is either at CDC headquarters in Atlanta, Georgia--that little gold star there in Georgia.

Eric Pevzner: We have other CDC regional locations in West Virginia; in Hyattsville, Maryland; in Colorado--Fort Collins; in San Juan, Puerto Rico; in Anchorage, Alaska. Those were all those little gold stars on the map.

Eric Pevzner: We also place officers at state or local health departments, and where we have officers in our 2022 and 2021 classes are in any of those states where you're seeing blue.

Eric Pevzner: We also have a combined local and federal position with that little blue circle out there in California.

Eric Pevzner: And you'll see that

Eric Pevzner: there's quite a range of options. So at the minimum for EIS training, you're going to start out with your one-month intensive course in Atlanta.

Eric Pevzner: And then you're going to report to where you end up matching to. We'll talk a little bit about that later how that happens, but again you're either at a CDC headquarters original location or at one of these state or local health departments.

Eric Pevzner: So, to be an EIS officer, we are looking for people that have a doctoral degree, unless you are in the nursing field, then you can still be eligible.

Eric Pevzner: And people are coming in from a variety of fields, whether it's as a physician, veterinarian, nurse microbiologist, PhD level epidemiologist. We're bringing in people with a diverse set of skills, because what's asked of us require diverse backgrounds and a variety of viewpoints.

Eric Pevzner: So, why would you want to do EIS? Well, it's a great opportunity to come and work at CDC or a state or local health department, where you are providing service while training on the job.

Eric Pevzner: And there's really nothing like it, because what's really special about this program is you're going to get assigned to extraordinary supervisors

Eric Pevzner: that have a range of opportunities lined up for you, some that we can anticipate, others that we cannot, that will just emerge during your training.

Eric Pevzner: Every single class always has some major public health event that we can't anticipate that ends up taking a lot of time and ends up really shaping that class.

Eric Pevzner: What we can assure you is you're getting subject matter experts as your supervisors that you're going to be working with and training under and learning on the job.

Eric Pevzner: So where could EIS take you? Well, it is truly a pathway to extraordinary futures. 95% of our graduates continue in public health related positions. Four of the last 11 CDC directors have been EIS alumni,

Eric Pevzner: and greater than 40% of the scientific executive leadership at CDC are EIS alumni.

Eric Pevzner: So we're really looking for people -- extraordinary people like the current officers that we have -- that want to apply the training they've already received,

Eric Pevzner: get additional training in applied epidemiology, and really come in and want to make a difference, because what this program is really about is service -- service to the American people, service at the state or local health department, and service to our international partners.

Eric Pevzner: And as Erin mentioned, if you want to learn more, there's a lot of information at cdc.gov/eis.

Eric Pevzner: And we also have a range of other fellowships in our division and at the agency, so you can always go to cdc.gov/fellowships to learn a lot more about the range of opportunities that we have available for you at CDC.

Eric Pevzner: So I'm going to stop sharing my screen now, and what's I think the most exciting part about this webinar for all of you today

Eric Pevzner: is the opportunity to hear from some of our current officers and we have three officers here for you today.

Eric Pevzner: They have a diverse set of skill sets as far as before they came to EIS and also what they gained while they've been at EIS.

Eric Pevzner: So I'm going to start. I'm going to ask Miriam to introduce herself. She's going to talk to you a little bit about her background, about her current assignment at CDC, and a little bit about some of the work that she's been doing. So Miriam, go ahead, please.

Miriam Van Dyke (she/her), EIS Officer: Hi everyone, welcome. My name is Miriam Van Dyke, I'm a second-year EIS officer. I am a scientist a CDC headquarters in the National Center for Injury Prevention and Control in the Division of Violence Prevention.

Miriam Van Dyke (she/her), EIS Officer: I came to public health through my initial experience doing research on racial disparities and cancer outcomes back when I was in undergrad.

Miriam Van Dyke (she/her), EIS Officer: I kept going, did my MPH in epidemiology, as well as my PhD in epidemiology at Emory, and decided I wanted some more applied experience and making data actionable.

Miriam Van Dyke (she/her), EIS Officer: And so, currently in my current assignment I work with two major surveillance systems looking at violent deaths and analyzing contextual factors that contribute to experiences of violence outcomes.

Eric Pevzner: Thanks Miriam. So you know, a lot of people think of EIS and what we've known historically for is outbreak investigations and infectious disease.

Eric Pevzner: But hopefully you've just heard and picked up from Miriam that we have a range of opportunities at CDC so Miriam's working on injury and violence, but we also have positions in environmental health,

Eric Pevzner: a number of chronic disease positions, occupational health. So we're a lot more than infectious disease. There's a range of opportunities with a much greater attention now on health equity

Eric Pevzner: and focusing on other issues, like racism as a public health issue is also something that's a big focus for EIS now as well, so thanks again, Miriam, for that brief introduction.

Eric Pevzner: Now let's go over to Ariella. And so you've heard a headquarters officer and now you're going to hear from one of our officers that's at a state and local health department.

Ariella Dale (she/her): Thanks, Eric. Good afternoon, everybody. It's so nice to have you all here and to get to talk a little bit more about the EIS program.

Ariella Dale (she/her): A little bit briefly about me, I am also a PhD epidemiologist. Years ago, maybe like you, I thought I was going to be a clinician. I left undergrad and worked for a year at a psychiatric clinic and decided that

Ariella Dale (she/her): I was better with population health, for my own personal mental health because I could not separate myself from the people I was caring for and not worrying about them, so I moved into public health.

Ariella Dale (she/her): Have my masters and PhD in epidemiology. Just a quick comment on that - you don't have to have a PhD in epidemiology to do EIS, I think the makeup of this panel maybe leans a little heavy towards that, but actually in general that's not the most common to have a PhD in epidemiology.

Ariella Dale (she/her): I worked for two years in a state health department before joining EIS, and the reason I wanted to do EIS was because

Ariella Dale (she/her): I wanted more applied experience. I was in a very niche area which typically when you have a job, of course, you work in a specific pathogen area, and I was working in healthcare associated infections.

Ariella Dale (she/her): And I decided that I would like to get more applied experience and kind of stretch myself outside of the normal bounds of a PhD epi.

Ariella Dale (she/her): And I'm very glad I did. I'm assigned out in Arizona, with a state and local health department. I'm actually a split position between Maricopa county, the largest county, and the state health department.

Ariella Dale (she/her): And that's where I currently sit and have had an incredible experience, mostly infectious disease, a little bit of health equity. It's been wonderful.

Eric Pevzner: Thanks Ariella. And now we're going to kick it over to Richard who's our last panelist who's also outside of CDC out at a health department. And Richard, why don't you go ahead and share your background, please.

Richard Teran: Hi everyone.

Richard Teran: Nice to see everyone.

Richard Teran: My name is Richard Teran. I'm

Richard Teran: an EIS officer and I'm assigned to the communicable disease program at the Chicago Department of Public Health.

Richard Teran: I am an infectious disease epidemiologist. I have a PhD and a masters in public health degree in epidemiology.

Richard Teran: Prior to joining CDC, my main kind of research and experience was mostly in clinical research.

Richard Teran: I oversaw several clinical trials on HIV medications and also oversaw a lot of clinical cohort studies and the reason I decided to do EIS was,

Richard Teran: for my dissertation, I worked with the DC Department of Public Health to merge some of my -- some of the clinical data that I was working on.

Richard Teran: And I merged it with the local public health data, and that really intrigued me and I decided that I wanted applied epidemiology experience

Richard Teran: in a local or state health department and that's why I decided to apply to the EIS program. And

Richard Teran: now that I am an officer in Chicago, my main role has been helping Chicago with their COVID-19 response, and my main kind of focus has been leading their outbreak investigations that --

Richard Teran: outbreak investigations of COVID-19 in congregate settings, so that includes skilled nursing facilities, schools,

Richard Teran: daycares, and also responses to like large public events like Lollapalooza or street festivals. So that's kind of what's been keeping me busy the last few years.

Eric Pevzner: Thanks, Richard. so when you're accepted into EIS,

Eric Pevzner: you're in the program and after that, as far as where you're assigned depends upon you going through-- there's two ways you can get assigned to your position. One is through the pre-match process,

Eric Pevzner: and the other is what we call our regular match. So we normally have a select number of positions

Eric Pevzner: that we make available each year for the pre-match. Some of those tend to be at state or local health departments,

Eric Pevzner: and sometimes hard to fill or a priority to fill in a given year, or some positions at the agency that also can be hard to fill or that are a real priority for the Agency to make sure we have an officer placed there.

Eric Pevzner: And so we have a select number of positions that you can go ahead and express your interest for.

Eric Pevzner: You go ahead and after you express your interest you may go ahead and interview for those. You interview, and then you go ahead and you rank them.

Eric Pevzner: And the positions rate you, and we have an algorithm that then matches things. So if you do the pre-match, that's often times sometime in November.

Eric Pevzner: Then you know where you're going and you're done. If you choose to wait, then you go into the regular match that normally happens that our in-person conference,

Eric Pevzner: when we have our in-person conferences that we hopefully will be resuming in 2023, and you come to that conference and during the conference or that week with all the other officers that are presenting

Eric Pevzner: the work that they've been doing, like a normal scientific conference, there's also matching and interviewing going on, so you'll spend the week

Eric Pevzner: getting to know positions, talking to people, and at the end of the week, you have to interview for some positions.

Eric Pevzner: And again you go ahead and rank your list of positions, they rate you, and we run an algorithm and match you to your position. Do that's how you either end up

Eric Pevzner: in the position that you -- that the officers are in today. So Miriam, why don't you talk a little bit about why is it -- how did you end up choosing the position that you're currently matched with?

Miriam Van Dyke (she/her), EIS Officer: Sure.

Miriam Van Dyke (she/her), EIS Officer: So, again, I'm in the Division of Violence Prevention in the Injury Center. I'm assigned with the surveillance branch.

Miriam Van Dyke (she/her), EIS Officer: Two main reasons for me -- and I pre-matched, so I knew in November, December, where I was going to be.

Miriam Van Dyke (she/her), EIS Officer: The supervisors, specifically, I felt that they would be very supportive and had an emphasis in supporting health equity and I think, also the topic matter of violence.

Miriam Van Dyke (she/her), EIS Officer: was different enough from what I had been doing, which is cardiovascular disease epi, but it had a lot of

Miriam Van Dyke (she/her), EIS Officer: overlap with a lot of exposures and policy that I am interested in. So, for example, one of the analyses I do now looks at homicides experienced by Black males.

Miriam Van Dyke (she/her), EIS Officer: And that work will actually be presented during the EIS conference -- little plug there --

Miriam Van Dyke (she/her), EIS Officer: on may 2, but there's an emphasis on yes, the individual risk factors that can lead someone to experience violence, but also the structural factors and policies,

Miriam Van Dyke (she/her), EIS Officer: history that have led people to live in certain areas, have certain experiences, and I knew my division had --

Miriam Van Dyke (she/her), EIS Officer: was very supportive of exploring that and had available data, surveillance systems, national violent death reporting system, that could support my analysis of things I wanted to look at. So, thanks.

Eric Pevzner: Thanks, and so you know Miriam just described the position that she became interested in, and you know, why she matched to a headquarters position. Ariella why don't you describe, why did you go ahead and end up at a position outside of CDC headquarters?

Ariella Dale (she/her): Sure, I'd be happy to.

Ariella Dale (she/her): So I mentioned previously that I worked in a state health department prior to joining

Ariella Dale (she/her): the EIS program and when I approached the match process that Eric described, I was very open minded looking at headquarters and.

Ariella Dale (she/her): field -- what do we call field sites, or state local health departments, and I ended up ranking pretty much only state and local health department sites, because I liked the idea of being a generalist so.

Ariella Dale (she/her): In the EIS program, you're afforded the opportunities to meet certain core activities of learning so we all are trying to gain the same skills, but there's different ways that we can do that, and by being seated in a state or local health department, or in my case both,

Ariella Dale (she/her): you get the opportunity to work across various pathogens and co-morbidities, etc. So I've been fortunate in that I've been able to work on COVID-19

Ariella Dale (she/her): alongside sexually transmitted infections. I've looked at health equity. I have worked on adverse childhood experiences. I've gotten to do

Ariella Dale (she/her): healthcare associated infections. So I chose to lean towards state and local health sites for the generalist experience of being able to work across various morbidities and mortalities, but also

Ariella Dale (she/her): for the fact that this is where a lot of public health work is done. Federal agencies are important, CDC is incredibly important, is a fantastic resource for state and local health departments.

Ariella Dale (she/her): But state and local health service have to execute a lot of the initiatives and recommendations and tailor it for their unique settings, and

Ariella Dale (she/her): I wanted that experience of learning how to tailor it to a state or local health department, how do you work with the public, how do you make sure that the needs are being met for your region.

Eric Pevzner: Great, thanks, Ariella. So you know, once you're in EIS, again sometimes that's the most difficult first decision you have to make is that

Eric Pevzner: do you want to take a position at CDC headquarters or one of our regional offices, where you're really going to become

Eric Pevzner: a subject matter expert, sometimes a limited very focused area?

Eric Pevzner: Or do you want a position like Ariella or Richard has where on any given day, whatever's walking in the door might be thrown at you, so you have to be really flexible and you're really

Eric Pevzner: working much closer in that much more applied sense often. So thank you very much, the questions are coming into the chat, that's great. I've got a lot of questions lined up, but if you've got important questions,

Eric Pevzner: we're glad to take those. Keep throwing them in the chat. So Richard, I'm going to throw this question at you, since you can answer. The-- some people are asking, if you already have a degree in epidemiology,

Eric Pevzner: what sort of additional training did you get as far as epidemiology in EIS and did you find it repetitive?

Richard Teran: Yeah sure. Um, so I have found EIS to be

Richard Teran: a vehicle in which it really not only gave me the ability to apply my experience in epidemiologic methods and the academic training I received in data analysis.

Richard Teran: It's -- it's really given me the opportunity to apply all of those skills, and I think that is one of the important kind of --

Richard Teran: The benefits of doing a program like EIS is that it's very different than the academic training that you get at a PhD program or even the type of experience that you have doing like a postdoctoral fellowship

Richard Teran: at a university doing -- doing that type of research. It's really different type of work. On a daily basis, I am working with surveillance data

Richard Teran: on a multitude of different diseases, similar to Ariella, I was really looking for an experience where I would be able to work on multiple diseases, multiple kind of topic areas.

Richard Teran: I have previously only kind of worked on like HIV/STI type of work, and I really wanted to kind of broaden my experience.

Richard Teran: So in my time as an EIS officer, I've been able to apply a lot of the same skill sets and the same type of kind of research experience that I did as an HIV researcher during my academic program to other diseases and that's, that's been very beneficial I feel.

Richard Teran: And I think it's made me a better epidemiologist, and I also have a better appreciation of how

Richard Teran: federal and state-level public health works.

Eric Pevzner: Great, thanks, Richard. We don't have a nurse on today's panel, so I apologize. So I'm going to channel my inner nurse to try and answer some of the nursing questions that are coming in here, and

Eric Pevzner: I can tell you that there is great appreciation for all the various professions we recruit into EIS, and we try and treat them all equally, so there's not any bias.

Eric Pevzner: Someone asked are there, are there different types of opportunities for nurses versus others.

Eric Pevzner: You know, sometimes there are certain opportunities that they need someone with clinical skills, so we may send someone that is trained as a physician, or a nurse,

Eric Pevzner: or in some cases a veterinarian because those clinical skills are needed. Other times there's some advanced analytic technique that's needed, so we might send

Eric Pevzner: a PhD in epidemiology. Other times they might need someone who's got a lot of experience with collecting samples, so someone that has trained as a microbiologist we might send. So a lot of times,

Eric Pevzner: what the needs of the response is will dictate who is sent, but nurses are valued equally, like everyone else that's recruited into the program, so

Eric Pevzner: you don't need to worry about any bias for or against nurses, and we really encourage them to apply. They add great value and have been very successful in our program.

Eric Pevzner: So, Miriam, one of the questions we're getting is, can you talk about what is a -- what is a typical day like for you working at CDC headquarters?

Miriam Van Dyke (she/her), EIS Officer: Yeah so I'm -- so I'm at CDC headquarters, which is different than Ariella and Richard um.

Miriam Van Dyke (she/her), EIS Officer: One thing to note that, when you are at the CDC headquarters, you are working closely with your home team, so I analyze data from surveillance systems, work on reports, writing reports, conducting evaluations of how

Miriam Van Dyke (she/her), EIS Officer: well the surveillance systems work to identify what we're trying to quantify, so, for example, evaluation of

Miriam Van Dyke (she/her), EIS Officer: one surveillance system to identify emergency department visits for firearm injuries, and I would say -- so that's my primary work, but at the same time we're also allowed to deploy to the field,

Miriam Van Dyke (she/her), EIS Officer: deploy to the remote Emergency Operations Center to help with COVID and so

Miriam Van Dyke (she/her), EIS Officer: those experiences look completely different than my day-to-day, where I'm behind a computer analyzing data. Those experiences might be more what Richard and Arielle are working on, going to the field, talking to people

Miriam Van Dyke (she/her), EIS Officer: in the community, collecting data with partners, doing community testing, whatever the needs might be. And those are unique experiences that you still can get while at the headquarters, but day to day could look like sitting behind a computer and analyzing and evaluating data.

Eric Pevzner: Thanks, Miriam. So to contrast that, Richard, why don't you share your day-to-day given you're out of the health department.

Richard Teran: Sure, yeah, I think --

Richard Teran: So as a field officer, I have a couple of different projects that I lead on a day-to-day basis, however,

Richard Teran: depending on what happens on that day, kind of my entire workday can be

Richard Teran: unpredictable. So one of the things as the officer in the communicable disease program, if there's a foodborne outbreak, if there's a

Richard Teran: outbreak of Legionnaires' disease, specifically with COVID if there was ever an outbreak that occurred in

Richard Teran: any type of congregate setting, I would receive an email or a phone call immediately and be asked to like drop everything and work on the outbreak and lead a team to investigate the outbreak.

Richard Teran: And that kind of really shapes your day-to-day is if you're working on an outbreak investigation, that is where you concentrate your time on, and then, once you have some downtime, once we're --

Richard Teran: once a wave of a specific variant starts-- starts to calm down, then it can go back to my regular day-to-day projects. But yeah, I think

Richard Teran: I was -- I wanted an unpredictable work day, and that's kind of why I wanted to be a field officer, and that's exactly what I've, I've --

Richard Teran: The situation I've gotten myself into, and I enjoy my day-to-day. It's unpredictable and I always like to tell a story that like my first Friday at the Chicago Department of Public Health was my first outbreak investigation. I got a phone call at 4pm and, and

Richard Teran: it was one of the most kind of exciting investigations I've had since being an EIS officer. It was examining the COVID outbreak that happened between two soccer teams, a male and a female soccer team, and that was my first kind of outbreak investigation, and

Richard Teran: they -- someone, one of the medical directors here told me, "Take the lead on this," and I ran with it, and I've been doing the same type of work, uh, for the last two years.

Eric Pevzner: That's great. Thank you, Richard.

Eric Pevzner: Does anyone want to comment on, someone's asking what are the advantages of the pre-match versus regular match? One of the officers want to take that?

Ariella Dale (she/her): I can take it. I'm happy to take a stab. So, I did not pre-match but I can give my point of view of what could be great about pre-matching versus regular matching.

Ariella Dale (she/her): So one of the wonderful things about pre-matching is you will know way before everybody else where you're moving and what you're -- who you're going to be working with and what you're going to be working on.

Ariella Dale (she/her): One of the great things about pre-match sites, as well, is that those are sites where there's a high—there are -- the program and the

Ariella Dale (she/her): supervisors have deemed there's a high need for an officer, so there's never a shortage of work in any EIS site, but particularly for pre-match sites, they need

Ariella Dale (she/her): the public health support and there's going to be a lot of opportunity there, so I think that's some of the advantages to consider.

Ariella Dale (she/her): It is an abbreviated list compared to the regular match process, but it is advantageous and particularly if you have a partner or family that you need to consider for relocation, and you are

Ariella Dale (she/her): interested in a specific area, that can kind of help you narrow it down a little bit sooner, as opposed to the regular match process. The regular match has more positions available,

Ariella Dale (she/her): and I want to make sure that I'm very clear in my message that every site's a great site, like the program has been a wonderful job, and there is a strong alumni network to help support these sites and most a lot of the EIS supervisors are former EIS alumni themselves.

Ariella Dale (she/her): But I think that, considering that pre-match sites are very much a high-need site, there's plenty to do, so your opportunities would kind of be endless in a way in terms of what they need support with depending on the scope of where you're assigned.

Eric Pevzner: Thanks, Ariella.

Eric Pevzner: You know, we've had a number of questions also about,

Eric Pevzner: you know, people are early in their career and are thinking about in advance of EIS and what can you do to get ready.

Eric Pevzner: Some people want CDC experience and again, if that's something you want, again, I encourage you to go check out the website cdc.gov

Eric Pevzner: /fellowships. We have a range of opportunities for you to get some CDC experience. My recommendations for anybody that wants to work at CDC one day,

Eric Pevzner: the best thing that you could be doing right now is gaining experience at a state or local health department. So find ways to get that public health experience there,

Eric Pevzner: because that is invaluable if you ever want to work at CDC one day, because if you don't have an understanding

Eric Pevzner: and an appreciation for how difficult public health is at the state or local level, you're going to have a real hard time being successful at CDC. So I'd encourage you to do that.

Eric Pevzner: Another, we have some additional questions about pre-match. Just to be clear, you're reviewing -- once you're accepted into EIS and you're reviewing these positions, the positions are either at headquarters,

Eric Pevzner: OR one of our regional locations OR a state or local health department, so you know where it's located and so you're choosing. If you choose to list

Eric Pevzner: all headquarters positions, then when we run the match, it's highly likely that you're going to, you're going to match to only the positions you interview with, so you're going to end up at a headquarters position.

Eric Pevzner: If you rank all state or local public health departments, you're going to end up with one of those.

Eric Pevzner: If you do a mix, then you could end up in Atlanta or a regional location or a state or local health department, so it really matters

Eric Pevzner: what position you're interested is how the match plays out. Again, you interview for the positions and you rank them from one to however many you interview for, usually between six and some people up to 10.

Eric Pevzner: And they're going to give you a rating, and we run that algorithm, and we try and give everybody their highest match as possible, and that's how you figure out where you end up.

Eric Pevzner: There was another question, let's see.

Eric Pevzner: There's a question about how many officers per class we have. Our current class size of the current officers are ranged from 60 to 65.

Eric Pevzner: And the incoming class we have for 2022 is going to be larger because some increased funds we got as a result of the pandemic.

Eric Pevzner: And so that class size is going to be 88. But generally our class size is in the 60s, but we're going to have larger class sizes for the next couple of years.

Eric Pevzner: So let's see. Does anybody want to comment on this question about what does career progression look like after EIS? So what have you observed as officers, anybody want to comment on that?

Miriam Van Dyke (she/her), EIS Officer: Well, I think it depends on the route that people decide to take. Um, I know at least for -- at headquarters, a lot of people who decide they want to stay at CDC

Miriam Van Dyke (she/her), EIS Officer: end up

Miriam Van Dyke (she/her), EIS Officer: working and becoming a team lead pretty quickly, um leading surveillance systems, leading other initiatives,

Miriam Van Dyke (she/her), EIS Officer: doing a lot of the work that you do in EIS doing, but as like your full-time job and very focused. And maybe Ariella or Richard know more about outside of CDC,

Miriam Van Dyke (she/her), EIS Officer: what the trajectory looks like. I know there are many state epidemiologists who lead the public health department in their state or jurisdictions and counties that are EIS alums.

Miriam Van Dyke (she/her), EIS Officer: Um, and so I think it really just depends on what path you would like to take, and the things that you value along the way, that can kind of choose where you go.

Richard Teran: I'm going to talk a little bit about the Chicago Department of Public Health and

Richard Teran: the, the different kind of positions that are available here. So here in Chicago our Commissioner, three of our medical directors -- actually four of our medical directors are all EIS alumni, so they've all done the EIS program, they chose to -- and they either were

Richard Teran: the officers at the Chicago Department of Public Health or the Illinois Department of Public Health, and they all chose to stay in the Chicago region and

Richard Teran: it's been very, it's been very helpful and exciting to work with former EIS officers and so that, that kind of gives a little bit of perspective of the type of jobs that, that some of our former officers have,

Richard Teran: have pursued after the program. Also I do want to mention that there's also what's called a "CEFO," a career epidemic field officer, which is

Richard Teran: a CDC employee who is assigned to a local or state health department and does very similar work to what an EIS officer does, but instead of a two-year assignment, it's more of a full-time position.

Eric Pevzner: Thank you, both. So yeah, a lot of our officers – Ariella, go ahead.

Ariella Dale (she/her): No, sorry, that's what I get for phone audio connection delay.

Ariella Dale (she/her): I just wanted to add that, you know, if you're assigned out in a state or local health department, Arizona has had EIS officers for many years and they've ended up on very many different tracks. Some have returned

Ariella Dale (she/her): to federal agencies, so they work now at CDC. Some have left the governmental sector all together, and do public health through other work such as NGOs or nonprofits.

Ariella Dale (she/her): Some even -- EIS officers, former EIS officers work for pharmaceutical companies, go into industry, etc. So I think,

Ariella Dale (she/her): you know, don't -- you're not limited by the position in which you choose within EIS for what track you take after. You can take those skills with you and really are very interoperable throughout government health at any level. Thanks, Eric, sorry.

Eric Pevzner: No, sure. Thank you. So, many of our graduates, as I said at the beginning of the presentation, the majority stay in public health after.

Eric Pevzner: And they either stay at CDC, they go to state or local public health departments, they may take international positions with the World Health Organization, PAHO, other places.

Eric Pevzner: Some may go to academic positions, some may go to nonprofits,

Eric Pevzner: pharmaceutical. So there are a variety of opportunities, but this is a launching pad, an accelerator for people's career in many ways, having done EIS, given

Eric Pevzner: the opportunities that you get during the program that really give you great experience and the extraordinary people we're able to recruit into the program.

Eric Pevzner: We're getting a number of questions about are you eligible. Please

Eric Pevzner: go to cdc.gov/eis. It's going to give you all the eligibility criteria, because there's a lot of caveats for different people so we're not going to be discussing that at all today, so check out the EIS

Eric Pevzner: website and you'll get all of your information about eligibility. There's also a question about someone having training in environmental science,

Eric Pevzner: policy and management, are people like that eligible for EIS? Absolutely, and again, you can check out all the eligibility criteria. We're looking for people from a diverse

Eric Pevzner: range of backgrounds that have a passion for service and for public health. Does that mean you have to have a lot of prior public health experience?

Eric Pevzner: No. We have a lot of people that come in with very little public health experience, but it's something that they're able to convince us, they have a passion for service,

Eric Pevzner: and they're able to be very articulate about how they're going to take our training and do something really meaningful with it.

Eric Pevzner: So this question is going to be for you, Miriam, because it's for those who are based at CDC headquarters. Do you get to choose to pursue deployments as they come up, or are they assigned to you?

Miriam Van Dyke (she/her), EIS Officer: So, um, at least with the COVID-19 response, they're all hands on deck situation and many people deployed, and through that you could inquire and be assigned to a deployment.

Miriam Van Dyke (she/her), EIS Officer: But also, depending on your skill set, sometimes people will reach out to you to request your assistance. I think, so one example,

Miriam Van Dyke (she/her), EIS Officer: through EIS I was deployed in November of 2020, early in the pandemic, where we validated Binax now

Miriam Van Dyke (she/her), EIS Officer: rapid antigen tests. That was through one of the task force working on the COVID-19 response, and I was deployed with a number of people -- lab scientists, as well fellow EIS officers.

Miriam Van Dyke (she/her), EIS Officer: For that I applied for it. My supervisors were supportive of me getting that experience, particularly field experience as an epidemiologist who has worked behind the computer often. Um, another experience, I

Miriam Van Dyke (she/her), EIS Officer: was requested just because I've been working alongside, um, many of the partners in Hawaii and work with their health department for a month on investigations, so it really just depends on the skills you're wanting to get as well as what you've been doing through your two years of EIS.

Eric Pevzner: Thanks Miriam.

Eric Pevzner: So Richard or Ariella, do you want to-- we have a question about what analytic skills you gain, you - the training you receive from EIS and what statistical package uses. Either one of you want to tackle that question?

Ariella Dale (she/her): Maybe we can tag team it, Richard, since we're both

Ariella Dale (she/her): smiling at each other.

Ariella Dale (she/her): So the

program--

Ariella Dale (she/her): I am a little biased, because I have a PhD in epidemiology, so writing, writing SAS code, for example, was something that I was very comfortable with coming into the program.

Ariella Dale (she/her): The program during a -- we have a month-long training that kind of kicks off your EIS experience and they did offer ample opportunity to help train persons without any statistical program experience.

Ariella Dale (she/her): We use at my state and local health department primarily SAS. R is also accepted, not as widely used.

Ariella Dale (she/her): So that there's opportunities for support, for training. CDC, from what I hear, also has opportunities for coursework to help support learning the statistical programs and softwares.

Ariella Dale (she/her): One of the great things about positions though during recruitment is they will clearly say to you who can help support you through that process, so say you come in without

Ariella Dale (she/her): a lot of statistical programming experience you can then speak with a person who will help support you through learning how to code appropriately, how to choose the right statistical

Ariella Dale (she/her): models, etc., for your project. Within my experience here, these last two years I've mostly worked on things

Ariella Dale (she/her): within kind of logistic regressions and modeling that I was comfortable with during my program.

Ariella Dale (she/her): And that was because I prioritized other experiences over a very like deep analytical experience into maybe like negative binomial modeling, which I haven't done before.

Ariella Dale (she/her): So the nice thing is that you can tailor the experience to kind of go deeper into some skills if you would, like, I chose for more practical outbreak investigations, kind of applied health and stayed more at kind of the low level of regression modeling. Richard do you have anything you want to add?

Richard Teran: No, I would just say my experience has been very similar to Ariella.

Richard Teran: As someone who has a PhD in epi,

Richard Teran: I had a lot of experience, both academic and applied, in using SAS, so that's kind of where, how, what skill set I came into the program with, and I, too,

Richard Teran: over the last two years, I've chosen to pursue

Richard Teran: more applied work versus trying to grow my analytic-- analytic skills, mostly because I felt like my academic training gave me that experience as well. However, I would say -- so Chicago also has another EIS officer, so Chicago has two.

Richard Teran: I'm the second year. There's a first year. The first-year officer does not have as much experience in SAS or R coding, and

Richard Teran: so she has chosen to build that skill set and works closely with our director of epidemiology in trying to build up that, that skill set that she did not have.

Richard Teran: She's an MD by training, so she did not have much experience in SAS, so I would say, I very much agree with Ariella in terms of the, the opportunities to pick and choose what type of training and -- you want and the type of opportunities you want to pursue while you're an EIS officer.

Eric Pevzner: Thank you, we have a number of questions about international work. So we have officers that are matched to international positions located at CDC. So we have a Center for Global Health.

Eric Pevzner: And so you could be matched to a position at CDC where you're focused on global work, you're doing it from Atlanta,

Eric Pevzner: and you're traveling overseas, some positions quite a bit. We do not have any positions where you are permanently assigned overseas. All of our positions are

Eric Pevzner: located in the United States or our territories, so we do not have any in other countries.

Eric Pevzner: And we welcome international applicants, there's a lot of questions about that every year. Yes, we do accept international applicants, they have to compete, like everybody else, and we select the best applicants. And so

Eric Pevzner: eligibility criteria, again, are on our website. There's also a question, if we can give some examples of how MDs, vets, RNs use clinical skills in their roles. Any of our current officers want to respond to that?

Miriam Van Dyke (she/her), EIS Officer: So I don't personally have an MD, I don't know if Richard or Ariella have one either, but in my recent deployment, I was

Miriam Van Dyke (she/her), EIS Officer: deployed with a first-year officer who does have a clinical background in emergency medicine, and we were deployed to the Republic of Palau to help them with

Miriam Van Dyke (she/her), EIS Officer: one of their first occurrences of community transmission of COVID and Palau is a Pacific island almost near Philippines. But while

Miriam Van Dyke (she/her), EIS Officer: myself and other EIS officer who had an epi background was helping with testing logistics, conducting testing, um helping analyze surveillance data,

Miriam Van Dyke (she/her), EIS Officer: that EIS officer with a clinical background was able to work with the hospital partners to look at the clinical records to evaluate

Miriam Van Dyke (she/her), EIS Officer: characteristics of patients who were admitted because of COVID and also vaccine-related outcomes, and just to – be able to provide recommendations

Miriam Van Dyke (she/her), EIS Officer: based on their first hospitalized cases of COVID, how to prepare for anything coming. So just her background with clinical

Miriam Van Dyke (she/her), EIS Officer: and just like medical chart abstraction review was completely valuable in that setting and we didn't even know it to begin with. So, yeah, um, very useful, especially on diverse teams.

Eric Pevzner: I'm a non-clinician, as well. I'm trained as a behavioral epidemiologist and I was -- did my EIS in global tuberculosis and focused on TB and HIV globally.

Eric Pevzner: And when I started EIS, I couldn't tell you anything about tuberculosis. I didn't know anything about drug resistance. I couldn't tell you about transmission,

Eric Pevzner: latent versus active disease. I didn't know any of these things. So I had to learn quite a bit and I relied quite heavily

Eric Pevzner: on my EIS colleagues who were clinicians, and what I can tell you is they were much more involved, while I would help more with analytic capacity with working with ministries of health,

Eric Pevzner: they were much more involved in things as far as helping doing trainings and assisting clinicians on

Eric Pevzner: how better to read chest radiographs, interpretation of laboratory tests, thinking about drug resistance profiles, things that I had no capacity

Eric Pevzner: for responding to. So there's a variety of positions where our clinicians are still applying their clinical training.

Eric Pevzner: Sometimes you also have to be involved in collecting specimens, including blood and other things that clinicians can do that I did not,

Eric Pevzner: and also some of our clinicians still do limited clinical practice while they're doing EIS, sometimes as part of their -- related to their positions, other times completely separate. So

Eric Pevzner: there's an opportunity to maintain those clinical skills, and we encourage that, but there's no shortage of opportunities. We have things where we have

Eric Pevzner: docs on call for clinical consultation teams. For example, early on in COVID, it even still -- they were -- clinicians are calling and getting guidance from CDC.

Eric Pevzner: And we have that for a variety of conditions where we have clinicians on call to provide guidance. So there's great opportunities for, for clinicians.

Eric Pevzner: There's also questions about are we virtual or in person. You need to report physically to whatever location you're assigned to.

Eric Pevzner: But a number of our officers do do a fair amount of telework from where they're working, and some people are going in every day. It really just depends on the position. Someone asked is there an age limit for EIS. There is not.

Eric Pevzner: And the other question was about our acceptance rate. So you know, we tend to have anywhere from 500 to the high 300s of applicants, and our class size, again, is from you know 60, or this next class is going to be 88. So that gives you a sense of the acceptance rate.

Eric Pevzner: Someone asked is -- how is inclusivity fostered, and are people with disabilities considered? Yes people --

Eric Pevzner: Again, we're accepting the most qualified candidates, and there aren't any disabilities that would exclude people from EIS. We encourage everyone to apply.

Eric Pevzner: And a way we're really fostering inclusivity, one perfect example is this. We started having a series of webinars like this. We have two, one which is like this, just a background about EIS, another has tips for applying

Eric Pevzner: and for completing your application. And we started that because we wanted to more level the playing field for applicants. In the past, you could only get this type of information if you knew a current officer or an alum.

Eric Pevzner: And we started having these webinar -- webinars really to foster

Eric Pevzner: more inclusivity. So we're doing a number of things. We also have a EIS DEIA Council that includes members of the current officer classes

Eric Pevzner: that guide the program in a number of areas as we look to infuse DEIA principles into everything we do, from how we recruit, select, train, and support even officers after they graduate.

Eric Pevzner: So, our officers, what recommendations do you have for people to be competitive for applying to EIS? What would you recommend to people looking to you?

Ariella Dale (she/her): I can give it a first shot here. So I have this conversation fairly regularly, whether it be somebody is a friend of a friend or someone reaching out via LinkedIn, etc.

Ariella Dale (she/her): And I think the best thing you can do to be competitive is think about

Ariella Dale (she/her): what can you bring to this program, and what can this program give to you. I think the biggest mistake I've seen when seeing folks apply and reading personal statements for some,

Ariella Dale (she/her): for people applying, is that they're talking a little too much either about one way or the other.

Ariella Dale (she/her): So they are either very trained and they aren't sure why they need the EIS program, or they're too almost humble about their experiences and look like they don't have the kind of skill sets needed to be a strong EIS officer.

Ariella Dale (she/her): I think showing adaptability is important and that you work well on a team. There is absolutely no solo sports in public health.

Ariella Dale (she/her): There's nothing that you're going to do solely by yourself and that you need to show that you are -- can be a member of a team and do well,

Ariella Dale (she/her): and that team can succeed some adversities you've overcome. So those are just some kind of off-the-cuff thoughts. I think understanding what you can gain from the program and the skills you're bringing forward and marrying that together well.

Eric Pevzner: Great. We have a question about what length of time are external assignments usually. I assume they're reviewing -- referring to an outbreak investigation or a deployment. So you --

Eric Pevzner: Officers, you want to share your experience of what have been your, your durations of your various deployments or investigations?

Richard Teran: I can share. Um, I would say that, as a field officer

Richard Teran: I, unlike a headquarters officers, where I have to do -- you would have to deploy to get the field experience, it -- it's, it's kind of you reverse that a little bit.

Richard Teran: As a field officer I, I typically work on all outbreak investigations within the city limits of Chicago.

Richard Teran: So it's a little bit of a different experience, but I would say that, in terms of like outbreak investigations, it -- the length of time varies depending on the nature of the investigation.

Richard Teran: Also, there could be additional kind of research questions that come up from an investigation that kind of prolong

Richard Teran: the work that you're doing in a specific topic area. I would say that

Richard Teran: as an EIS officer in 2020 and 2021, my entire time has been on the COVID response, so it's been a two-year kind of

Richard Teran: deployment, for me. However, there's been several projects within that, within that experience so.

Richard Teran: An outbreak investigation, the quickest one I've done is like two weeks.

Richard Teran: And actually from the start of the outbreak investigation to like publishing and MMWR, that was three weeks,

Richard Teran: which was insane, but then I've also had projects that have taken like six months. So just really depends on what's going on at the moment, and what the research and scientific priorities are at CDC, also kind of what's going on in the field at the moment.

Eric Pevzner: Thanks, Richard. So I'll, you know, I'll say that, generally, we have officers, that can deploy for sometimes as short as a week,

Eric Pevzner: and sometimes things can be up to six weeks, or in rare cases a little bit longer. But most field deployments, the officers tend to do, tend to be about three, two to three weeks if they're going from their position somewhere else.

Eric Pevzner: Who wants to comment on work life balance?

Ariella Dale (she/her): I can try and then I'm going to ask my fellow officers to tag in here.

Ariella Dale (she/her): So I think that work life balance, just like with any job, but particularly in this fellowship, is very much driven by you.

Ariella Dale (she/her): There is a culture within EIS -- we're all high achievers, also we really want to be involved, you've got two years to maximize.

Ariella Dale (she/her): And so I think that your supervisors will help guide you to having good work life balance, but that is very much within your decision making. I am someone,

Ariella Dale (she/her): to share, like I have children, I have animals, like I've got the whole shebang here with me in Arizona, and I'm able to have a life outside of work that's very full.

Ariella Dale (she/her): So I think that's where a lot of those questions often come from is, am I able to continue to have a life outside of work, outside of public health, and I am proof that yes, you can.

Ariella Dale (she/her): And I want to defer over to Richard and Miriam to add as well, but I think, you know, recognize that you're in control of that. People can have work life balance within this program.

Miriam Van Dyke (she/her), EIS Officer: Yeah I completely agree with Ariella, um, and it is up to you, and often -- well, sometimes I will say there are deadlines

Miriam Van Dyke (she/her), EIS Officer: that we have to, you know, you gotta push, push the gas and do it, but we, we do it in service for other people and for our communities.

Miriam Van Dyke (she/her), EIS Officer: And I think that, you know, during the times where there isn't potentially a work life balance, um, I think that makes it the

Miriam Van Dyke (she/her), EIS Officer: most worthwhile. Um so, but most of the time I work the normal hours from 8 to 5, 8 to 4:30 or whatnot. Field deployments, we do sometimes work on the weekends and evenings to get things done, but again that's like very isolated

Miriam Van Dyke (she/her), EIS Officer: instances.

Eric Pevzner: And obviously during COVID, it's been different. I think a lot of our officers have been increased demands, a lot of their supervisors have been working extraordinary hours and there's been this increased pressure

Eric Pevzner: that officers have felt that they had to work even more hours, and that work life balance has been challenged. You've heard from a couple officers here, they've done a great job, but there's no doubt

Eric Pevzner: this has been a challenge for a lot of our officers, as it is for everybody in public health.

Eric Pevzner: Work life balance has really been a challenge for everyone and continues to be right now, so I just want to be realistic. I'm glad we -- our officers are doing a good job with that, is, at least the ones we have here today. So,

Eric Pevzner: we've had some questions. What about how much do you guys -- there's a question about how much do you guys interact with each other? After you're matched with your position, is that it? Do you keep in touch is the other? What's life like as an officer?

Miriam Van Dyke (she/her), EIS Officer: Well, I say, I'll say as a person at headquarters at the CDC, um, in Atlanta, there is a good number of officers that are in the Atlanta area, and oftentimes we will try to meet up to go for a hike.

Miriam Van Dyke (she/her), EIS Officer: And we do keep in touch with our state and local and regional officers as well, via chat, and we'll see them in a couple weeks for EIS off -- EIS Conference. Um, of course we're mostly talking about work, fortunately and unfortunately, but we do try to find time to get together.

Miriam Van Dyke (she/her), EIS Officer: So there is opportunities for, for networking that way.

Eric Pevzner: So I'll just add to that. As an alum, one of the greatest gifts for me for having done EIS are my classmates. They can-- some of them continue to be, continue to be my closest friends.

Eric Pevzner: I just was at one of my classmates' husband's 50th birthday party this weekend, and so we have things like that. It's one of the greatest parts of

Eric Pevzner: being an officer is your interaction with your classmates. These officers, it's been more challenging because so much has been virtual.

Eric Pevzner: And as we return more to the workplace, I think we're going to get back to more of the officers really getting to physically

Eric Pevzner: be able to spend time with each other. But they have so many virtual ways of communicating, I don't even know all the apps that they're using, they know things before I do.

Eric Pevzner: And there's a lots of questions about US Public Health Service versus civil service. I'm purposely ignoring all that, because it has nothing to do with EIS, it doesn't matter. If you're accepted, then you'll have to make that decision and we'll discuss that with you later.

Eric Pevzner: Another thing is that if you're in -- some people are saying how do I get in touch with someone that's working in this area or that area.

Eric Pevzner: I encourage all of you, registration is free, our EIS conference is May 2 through 6.

Eric Pevzner: It is coming up, it is virtual, it's online, and there you'll be able to see the full range and spectrum of the work of our officers.

Eric Pevzner: And if you see someone that's interested in something, you'll be able to then identify them, and you can reach out and contact them, and they'd be glad to talk to you about their work.

Eric Pevzner: Alright we're about to run out of time, but I think one of the things people want to know is what are your plans for after EIS? So, Miriam, why don't we start with you.

Miriam Van Dyke (she/her), EIS Officer: Sure, um, so I recently accepted a position in the National Center for Disease and Health Promotion. I'll be working with an EIS alum, actually, in the physical activity and health branch, so looking forward to working in that area.

Eric Pevzner: Ariella?

Ariella Dale (she/her): Um, I will be staying on in the lo-- in the local health department, so at Maricopa County Department of Public Health, being their public health scientist working on non-COVID activities, which basically means I will be

Ariella Dale (she/her): their subject matter expert epidemiologist across all the comorbidities that

Ariella Dale (she/her): the office of epidemiology covers, which includes infectious diseases, drug use, etc., so staying local.

Eric Pevzner: Richard?

Richard Teran: Yeah, so um, similar to Ariella, I'm hoping to stay at a local or state health department. I'm currently in the application process, so applying to a variety of positions and trying to-- and going through the interviews and trying to make a decision at the moment about that.

Richard Teran: The -- one of the things I did want to kind of tie back to one of the comments that Eric made is one of the --

Richard Teran: One of the great things that I've learned over the last couple of weeks now that I've joined this, like, the jobs search process

Richard Teran: is there is an inherent network of EIS alumni at state and local health departments, and it doesn't matter if you've worked with them previously or they could have done EIS 10, 15 years ago.

Richard Teran: One of the great things while doing this job search is identifying those persons who have done EIS before,

Richard Teran: and being able to have a conversation with them and have this connection of a joint experience with them, and that's one of the things that I've really enjoyed over the last couple weeks of the job search, and I think that's one of the

many, many

Richard Teran: benefits of doing EIS.

Eric Pevzner: Thank you, Richard. Alright, so we're about to run out of time. I'm sorry, I tried to get to as many of your questions as possible, and I'm sorry we couldn't answer all of them.

Eric Pevzner: Again, some general tips are if you haven't worked at a state or local public health department, go do it.

Eric Pevzner: If you're interested in opportunities at CDC: [cdc.gov/fellowships](https://www.cdc.gov/fellowships). Anything about EIS: [cdc.gov/eis](https://www.cdc.gov/eis).

Eric Pevzner: And our conference is May 2 through 6. It's one of the best ways in addition to this webinar to really learning more about all the insides and outs of the great work that these officers do. So thank you, over to Erin.

Erin Black, CDC DSEPD ADP (she/her/hers): Thank you so much, Eric. So I hate that we ran out of time, I know you guys all have a lot of questions.

Erin Black, CDC DSEPD ADP (she/her/hers): Please visit the links that we shared in the chat. I want to thank

Erin Black, CDC DSEPD ADP (she/her/hers): Dr. Pevzner, our EIS lead, as well as all of our distinguished panelists for sharing their personal experiences. We do hope that you now have a significant interest in pursuing EIS. Um,

Erin Black, CDC DSEPD ADP (she/her/hers): reminder, if you have program questions, send them to eisapplications@cdc.gov. If you're interested in speaking

Erin Black, CDC DSEPD ADP (she/her/hers): more in depth with one of our alumni or fellows, you can create an account on Handshake and visit our CDC fellowships page and talk even in more depth with some of our alumni and fellows.

Erin Black, CDC DSEPD ADP (she/her/hers): Um, finally, before we adjourn, I really would appreciate it if you would fill out our feedback link that I shared in the chat. We'd really value your feedback and it will help us continuously improve

Erin Black, CDC DSEPD ADP (she/her/hers): these webinars to make sure they're meeting your needs. So that concludes our session, um, thank you everyone for joining, and we hope you have a fantastic day.