MASS CASUALTY COMMISSION
COMMISSION DES PERTES MASSIVES

The Joint Federal/Provincial Commission into the April 2020 Nova Scotia Mass Casualty
MassCasualtyCommission.ca

Commission fédérale-provinciale sur les événements d'avril 2020 en Nouvelle-Écosse
CommissionDesPertesMassives.ca

Public Hearing

Audience publique

Commissioners / Commissaires

The Honourable / L'honorable J. Michael MacDonald,
Chair / Président

Leanne J. Fitch (Ret. Police Chief, M.O.M)

Dr. Kim Stanton

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Appearances / Comparutions

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Halifax, Nova Scotia

--- Upon commencing on Wednesday, June 1, 2022 at 9:35 a.m.

REGISTRAR DARLENE SUTHERLAND: Good morning. The proceedings of the Mass Casualty Commission are now in session, with Commissioner Michael MacDonald, Commissioner Leanne Fitch and Commissioner Kim Stanton presiding.

COMMISSIONER FITCH: Good morning. Bonjour et bienvenue. Hello, and welcome.

We join you from Mi'kma'ki, the ancestral and unceded territory of the Mi'kmaq.

Let us begin by remembering those whose lives were taken, those who were harmed, their families and all those affected by the April 2020 mass casualty in Nova Scotia.

We are here to learn everything we can from the mass casualty so that, together, we can help to make our communities safer, to make Canada safer.

This week we have been continuing the work of investigating what happened and trying to understand how and why it happened. As always, we are moving forward with care, rigour and respect, making sure we hear from many different voices and perspectives along the way.

To do this properly, we need to look back at what happened. We are doing that work. We need to look deep and wide at the decisions and systems that enabled it to happen. We are doing that, too.

We also need to look forward to the safe future we could build for all our communities based on what we learn. That is where we are headed. We remain grateful to the many people stepping up day after day as part of our investigations and proceedings to contribute in a constructive and collaborative way. We thank you for that.

On Monday and Tuesday of this week, we heard from two more

senior RCMP officers who helped build our understanding of how command decisions were made during the mass casualty. You can watch the testimony of Staff Sergeant Brian Rehill and Sergeant Andy O'Brien on the Commission website.

Over recent weeks, we have heard from many RCMP witnesses and we will hear from more officers and civilian witnesses in the weeks and months ahead. Each of these witnesses is adding to our knowledge of what happened, how and why. What they have to say will continue to be shared with the public.

As you know, there are many ways we are advancing our work. Late last week we shared another five Commissioned Reports prepared by independent writers exploring relevant research, policies and lessons learned. These reports cover a range of issues including community supports, rural policing and police decision-making. They are available for you to read on the Commission's website.

Another way we are learning about how and why things happened as they did is through roundtable discussions.

The Orders in Council require us to examine issues as they relate to the mass casualty, including police actions, operational tactics, response, decision-making and supervision, and police policies, procedures and training in respect of active shooter incidents. We are required to set out lessons learned as well as recommendations that could help prevent and respond to similar incidents in future.

Today and tomorrow we will hear from first responders and academics taking part in four more roundtables. Through these conversations, we are exploring the issues included in the Orders in Council.

These are critical areas for us to explore in greater depth. By learning how things worked at the time of the mass casualty and, in some cases, continue to work today, we can make better findings and recommendations that can help to strengthen community safety.

Today's roundtables include preeminent experts in their fields who are engaged in important research and policy work. For example, this afternoon we had

planned to hear from Dr. Pete Blair from Texas State University as part of a roundtable, but Dr. Blair has been asked to take part in the response to the recent school shooting in Uvalde, Texas, and so is unable to join us today. We are fortunate to be joined by his colleague, Dr. Hunter Martaindale, who we understand is also involved in the response to that shooting, just as we are fortunate to be joined by all the members on our roundtables.

I will now ask Krista Smith from the Commission's Research and Policy Team to introduce today's roundtables and the people taking part this morning.

Ms. Smith.

--- ROUNDTABLE 1: CRITICAL INCIDENT PREPAREDNESS:

MS. KRISTA SMITH: Thank you, Commissioner Fitch.

I'll be facilitating this roundtable today. I'll be directing the questions and asking follow-ups and moderating the dialogue.

The Commissioners may choose to pose a question or ask for clarification at any point and, as you know, roundtable discussions form part of the Commission record and are being live streamed and will be publicly available on the Commission's website.

I'd ask each of you when responding to questions today to speak slowly enough for our ASL interpreters to do the interpretation.

And this morning's roundtable, we'll be discussing aspects of critical incident preparedness, so this is the first of four, as Commissioner Fitch indicated.

So for this roundtable, the core themes are planning for critical incident response, including emergency preparedness, coordination and resources, second, the role of organizational learning and adaptation, and third, lessons from past reviews of critical incident responses.

And as with every roundtable discussion, the intention is to provide the Commissioners and public with a deeper understanding of the core themes so that

everyone is well positioned to engage in conversations about -- in Phase 3 about lessons learned and potential recommendations.

So I'm ready for each of the roundtable participants to introduce themselves now. And I see our virtual participants or members just joined us. Welcome.

And we're just going to go around the table now and have each of you introduce yourselves and explain a little bit about your work and how it relates to critical incidence response.

So maybe we will start with those who are far away.

Kimmo, can you start us off?

DR. KIMMO HIMBERG: Thank you very much, Krista. Yes, I can do that.

Hello, everybody. My name is Kimmo Himberg. I retired at the beginning of this year from the position of director at the Finnish National Police University College. I believe not many of you are closely familiar with my native Finland, so I'll give you a brief introduction.

This is a northern country basically in the northeastern corner of Europe, thinly populated, 340,000 square kilometres with a population of 5.5 million. We have a very small police service in the country. Currently approximately 7,500 police officers. And the Police University College is the college education institution in the country. So all police officers are educated and trained there, both when it comes to get the education, but also most of police continuous training is given by the university college or Polamk, as we colloquially call it, abbreviate it from the Finnish name.

I served as director for 11 years. I've served the Finnish police all in all for more than 30 years in various management and leadership positions.

My background is originally natural sciences, but my academic background also contains studies in criminal justice management.

Finland is one of the so-called Nordic countries, together with

Sweden, Norway, Denmark, and Iceland. And these Nordic countries are socially -- have socially been, I would say, relatively successful in many ways. Policing is an example. In Finland, according to international measurements, public trust, citizen's trust to the police is the highest in the world, according to the latest police barometer, 91 percent of Finnish citizens trust the police a lot or close to that.

Why is that? Our understanding is that one of the reasons is that we educate officers extensively. Basic police education leads to a bachelor degree in policing and takes three years. There is a lot of -- more theoretical and practical content in the program and we put a special emphasis on values and attitudes in the education.

I believe that we will be touching these details later on during this occasion. Maybe I will stop here. Thank you very much, Krista.

MS. KRISTA SMITH: Thank you very much.

Martin -- Hunter -- Hunter Martaindale? Sorry. We just met yesterday.

DR. HUNTER MARTAINDALE: No worries. Yes, so Hunter Martaindale. I work for an organization called ALERRT, which is an acronym for the Advanced Law Enforcement Rapid Response Training Program. We're located at Texas State University in Central Texas. The Commissioner mentioned Uvalde. We're a couple hours away from that location.

So Texas DPS, which is our state agency, asked us to come down and help with an After-Action Report. So we sent a film crew and they're down interviewing and doing things today. So if anybody is attending all four sessions, you're going to see me a lot over the next two days. Pete was taking today. I was taking tomorrow. So I'll be here both days.

So ALERT was founded in 2002, just to give you a quick background, after Columbine happened in 1999. It was founded by local SWAT officers from a joint team in this area. So the two PDs, police departments, and one sheriff's office. Some of the SWAT officers from that joint team joined the training centre purely

to try to teach officers better ways to get in and try to stop a shooter in that type of incident.

And over the years, our training has evolved and built as we've gathered more and more data on these events as they've happened. And we'll talk about that more throughout the next two days.

We started off as a straight law enforcement training centre and we have evolved to the point where we now include medical classes, civilian classes, classes with fire, EMS, integration, dispatch. There's a whole gamut of courses that we've developed based off of what we see happening in the actual events.

So my role here is I'm the director of research. I take apart our classes and test the tactics and the things that we're teaching to make sure they're empirically based. And so our instructors will come up with new techniques that they're seeing in the field, stuff that's coming over from other countries, the military, or just something that somebody in law enforcement thinks up. And we'll test it against the current gold standards and we'll see what's best. And we take this options-based approach.

In the United States, there's 18,000 different agencies, and so it's impossible to get everybody on the exact same page, and so we do take an options-based approached. So we tell agencies, "We're training X because this is what we see, but here are a couple of other things based off your policies and do what you want to do."

And I can stop there, I guess. That's us in a nutshell. I'm happy to talk about our training and how it impacts things. And if Uvalde comes up, I can share some information about that as well as it happens.

But happy to be here. Thanks for the initiation. And I'll see you several times over the next two days.

MS. KRISTA SMITH: Thank you so much, Hunter.

Bjørn?

DR. BJØRN IVAR KRUKE: Well thank you for being invited to this session. My name is Bjørn Ivar Kruke. I come from the west coast of Norway, the University of Stavanger, where I do research, lecture, and supervise within the Risk Management and Societal Safety.

I have a part time position at the University Centre at Longyearbyen Svalbard on Arctic Safety.

And in addition, I have a small position at Norwegian Police University College this spring due to being part of the evaluation committee after a mass casualty event at Kongsberg, Norway, last year.

I am particularly interested in emergency preparedness and crisis response. Most of my milieu, they focus on how to prevent incidents and accidents from happening. My focus today will be the residual risk, the risk it could not prevent. And that means that even though countries like Canada and Norway, we are fairly robust and we are successful in prevention in a lot of ways in our everyday life, and we don't hear about these events because they are successful, but we hear about the incidents, accidents we cannot prevent.

When it comes to crisis response, I have a lot of colleagues working at the university with conceptual understanding of concepts like risk and preparedness, and crisis response. I do that, but I'm also very interested in hands-on experience.

In that case, I appreciate the value of direct experience. When it comes to crisis response, then I'm extremely interested in how is it to be there when it is going on with a threat and uncertainty, and the urgency of the event, important values at stake, how is to make decisions in such situations. And that means that with that interest, I've been in a few crisis areas.

My fieldwork for my PhD was in Darfur in the Sudan during the civil work. There I've been doing assessment of crisis response in Ache following the tsunami. I have sent students to -- Master's students to crisis areas on all continents so

that they can get that direct experience.

I started my career in the army, army officer, 16 years in the army, including NATO. I've been working with a lot of good colleagues in NATO, even -- well, also the Canadians in Kosovo during the campaign there.

After leaving the army, I've been a part of the European Union Civil Protection Mechanism, so I'm a so-called European Union Civil Protection expert for deployment to, well, disaster assessment and coordination in crisis areas.

So my primary interest is crisis response, crisis preparedness field level type of understanding of what is going on.

MS. KRISTA SMITH: Thank you, Bjørn.

I'll go across over to Kerry

MS. KERRY MURRAY-BATES: Good morning. My name is Kerry Murray-Bates. Currently, I am the manager of the communications -- Toronto Police Communications Centre. That is the 9-1-1 public safety answering point for the City of Toronto.

In my role currently, I oversee pretty much everything that happens at the 9-1-1 centre, so everything from recruiting, testing, hiring, training to the daily operations, staffing, performance, and then the support side of that with the technology, radio, computer-aided dispatch, emergency services telephones, the 9-1-1 centre, the transition to next-gen 9-1-1. And then, of course, all the disclosure pieces to support the officers in the field for their court proceedings.

I started my career almost 32 years ago as a call-taker/dispatcher and was that for the first 15 years of my career. I have experience, as I moved through the ranks, in not only planning from a communications perspective for large-scale events, but also as being an operational OIC in the Communications Centre in responding to critical incidents, so incidents like the G20 and the Danforth shooting and the van attack, the Yonge Street van attack.

I just -- I just want to say that this is important work and thank you

for the invitation. It's an honour to be here.

MS. KRISTA SMITH: Thank you so much.

Wallace?

MR. WALLACE GOSSEN: Good morning, everybody. My name is Wallace Gossen. I'm a Superintendent with York Regional Police, and I have 32 years' policing experience.

For those of you not familiar with York Region, it really picks up where Toronto leaves off at Steeles Avenue. We've got a population of about 1.2 million, and our agency has 2,100 members, 1,600 sworn and 600 civilian.

I am the Superintendent in charge of our operational command. My career has been spent, the majority of it, in the Emergency Response Unit, our tactical team. In that position, I have held the distinction of being use of force instructor, firearms instructor, an explosive technician. I made my way through the ranks as a Sergeant and became the Tactical Commander for the region and ultimately have gone on to become one of our Critical Incident Commanders.

I'm also an instructor at the Canadian Police College for the Critical Incident Command. I am the Vice-President of the Association of Canadian Critical Incident Commanders, and I'm also the chair of the Ontario Provincial -- or sorry, Ontario Association of Chiefs of Police Emergency Preparedness Committee.

I thank you very much for the opportunity to be here and participate in this. I think the ability and the capacity for police agencies to respond to these types of events and any other types of major events is critical in maintaining public trust and the openness and the transparency that we're showing here about the struggles that are very real in regards to these events, I think, will help everybody understand future events and hopefully help us understand this past event.

Thank you.

MS. KRISTA SMITH: Thank you.

Stephen?

MR. STEPHEN MacKINNON: Good morning, everyone, Commissioners. My name is Stephen MacKinnon. I'm presently Deputy Chief of Police with the Cape Breton Regional Police Service, approximately 200 members.

Over my career, I've taken on roles as a tactical operator with our Emergency Response Team, approximately 12 years, team leader in that capacity, and gone on to be a Critical Incident Commander, stopping in around 2019.

So basically, my role now is the tactical side of the house for ERT administration in terms of needs, I guess the deployment -- overall deployment in that capacity plus equipment and training needs that arise.

Over my career, I've assumed roles as Criminal Operations Inspector, Ethics Committees, Inspectors of divisions and Staff Sergeant roles.

I appreciate the invitation to represent Nova Scotia Chiefs here today, being in our province, and to be that resource for the Commissioners and others should you need that local municipal perspective on any events concerning tactical operations for the smaller townships or medium-size police services.

Thank you.

MS. KRISTA SMITH: That's wonderful. Thank you so much.

So I think it's evident that we have quite a panel here today. I'm always very excited to see a mix of conceptual, theoretical and hands-on, and I think that getting from the theoretical to on the ground seeing it implemented is key. And I'm really excited to explore some of that today.

As I said before, this is the first of four roundtables on critical incident response, so this morning will be a bit of a primer, a bit of sort of basic concepts and just so that we all understand what we're talking about. So we're going to start off with just the very simple concept of critical incident preparedness.

And Wallace, I'd like to ask you if you can tell us at York Regional Police, what does critical incident preparedness entail and what measures can an organization put in place to ensure that its people are well prepared for an incident

when it happens.

MR. WALLACE GOSSEN: Thank you, Krista. That's a very broad question.

Critical incidents, I mean, it can be everything from an armed, barricaded suspect up through to a mass casualty event to, you know, feast, fire, famine, those types of things.

So as far as York Region goes, if you want me to speak specifically in terms of that, you know, we have what's called a Public Safety Unit that is dedicated to ensuring that our organization is prepared for those events, and that goes all the way through for public order, search and rescue.

The -- ultimately, the main goal is to position us so that it's really more of a philosophy of an approach to events and applying a systematic approach as far as answering the very first question, who's in charge of these events, and clearly defining the roles of individuals as we go down through that -- the different teams that will be involved. Again, if we stick with the idea of not being specific to an event but a philosophy of getting a hold of the individuals that have the subject matter expertise to be able to manage the situation and then coordinating them.

And really, that is the first question that we identify through any of this, is who's in charge, and then everything cascades downward from that.

Then, of course, it comes down to the nuts and bolts of things as far as equipment goes, proper equipment, and then ultimately the training. Now, for us, the training, on a personal note, I'd rather have better training than better equipment sometimes. We mandate that we have four major events scenarios that we run, that the Public Safety Unit puts on, that have -- the scenarios are created such that they try to involve as many of the groups as possible that we might need, so those are our regional partners as well, so fire, EMS, and, you know, typically an attack on a mall, things like that -- a lot of this is post-9/11 type scenarios things that have happened -- and replicate some of the events that have happened around the world, and then respond to it. And I

think, again, going back to the better training, the training isn't necessarily set up for success in the true sense of the word, that everybody comes away feeling great about everything that they did. The scenarios are designed to be very challenging, so that mistakes are made, so that we can go back and analyze them, and make a more robust system in the future.

So without getting into the exact details of each units and how the structure is, that's kind of the philosophy that we apply for a critical incident management in York. And again, it's scalable, and sticking with those principles, you can deal with a single arm barricade event all the way up through to mass casualty events.

MS. KRISTA SMITH: That's helpful to set the scene for us, I think. And I'd like to turn now to Kerry to tell us a little bit about critical incident preparedness at the Communication Centre in Toronto, and especially what role policies and procedures can play in assisting with people being prepared when a critical incident arises.

MS. KERRY MURRAY-BATES: Thank you, Krista. I think the point that Wallace made about the training being -- is so important, but the process being scalable, so for us in communications, I mean, Communication Services, we have policies for everything. So and we train our people, our COs, communications operator, COs, they have to know the policies verbatim in their training. So they're very well versed on what the steps are for each role, for a call taker and a dispatcher. But the key really is to put in place training that is scalable, so it's the same thing every time, it may just be on a larger scale. And then, of course, for us, depending on what's happening, of course, that can shape what happens next, the questioning that the call takers do, the actions that dispatchers take based on the size of the event. But our policies and procedures are quite clear, and they are very scalable. So they -- if an event is larger, it does outline what we do next.

MS. KRISTA SMITH: I'm trying to imagine maybe an example

where a policy gets scaled, or a practice gets scaled. Can you think of an example?

MS. KERRY MURRAY-BATES: So it will depend on the size of the response required; right? So I'll talk about from a communication's perspective, I'll just briefly touch on the Danforth shooting. And I can only speak from a communication's perspective, not from the police perspective. So initially, the event came in as a person with a gun, right, and a shooting call. And then as we received more and more calls, it was quite evident that it was more than just something that the local division could handle themselves; right? So for us, there is a process of notification, and then notifications grow as the event grows. So we have a series of events where a notification from a dispatcher to a supervisor is mandatory, so that there's an extra set of eyes and an extra set of hands looking at the event. And then the supervisor has a list of notifications that they have to perform as well, so again, there is more oversight. There's our Duty Operations Centre, and then depending on the size of the event, there's our Command Team.

So in the case of the Danforth shooting, we realized quite quickly that the response was going to be quite significant. So at the communication's level, we are able to expand the resource deployment based on the way the policies are laid out. So our response is the division, then it's neighbouring divisions, but we also have a process where there has to be a site commander get on scene. So normally, in the initial stages of an emergency response like this, it's the road sergeant. And then as the event grows, it becomes the duty inspector, and then, of course, the command will appoint a incident commander, and they'll have an on-site incident commander, and they will also more than likely stand up our Major Incident Command Centre, which will also have an incident commander in it.

Is that ---

MS. KRISTA SMITH: Yes.

MS. KERRY MURRAY-BATES: Okay.

MS. KRISTA SMITH: That's helpful. Thank you so much.

Stephen, I'd like to turn to you now and sort of have a similar kind of conversation but in the more the rural context, given that you've been policing in Cape Breton for over 30 years.

MR. STEPHEN MacKINNON: Thanks, Krista. I think when we look at tactical response in -- not only in Cape Breton, and I can loosely say in Nova Scotia, we always adjust to our needs, so knowing your environment, knowing your community first, taking it back a step. You know, we have a university, we have, you know, the school systems, our downtown business community and what their needs are. So that's something that we look back, you know, several years, unfortunately, because of these types of incidents, and built those relationships with the leaders in those areas, primarily is to introduce ourselves, because that whole world of tactical approach is somewhat scary for civilian people. When they see big guns, and helmets, and vests, and those types of things, it's immediately that unnerving feeling. So what we recognized over the years is that relationship piece first. So now, what we have done is gone into the school systems, done educational pieces, find out their logistics of their schools, because knowing high schools and universities, the corridors, the hallways, those types of things, are multi-complex, especially if you're not used to that environment. So we build training plans to support those. We engage with those leaders in those areas to find out firstly their needs, break down those barriers of when we come, and we do it in a place -- a plain clothes setting to further reduce that stress on people when they see. And then we take it to that next step of actually doing training scenarios loosely in and around those areas, so when that actual event comes, as we all know, the more you practice, the better you're at what you do. So knowing that environment primarily in the preparedness piece, I think that's largely our approach over the last 10 years or so.

And to echo Wallace's themes on training, building training logs, recording our scenarios, and actively staying up to date with research, research and development in terms of what are current themes, training themes, the technology that's

out there, try to be current. And some of our struggles are the part-time component to tactical operations. You'll see full-time tactical teams and you'll see part-time tactical teams that officers go to work, do their duties, but as we talk about go-bags, or, you know, have certain position, you have tactical officers throughout the divisions and platoons. So when you talk about rapid response if we do get that call, then we don't have to wait several hours for a full team to muster up and get going, that we can have that, you know, in an active attacker type situation that we can have that immediate response, and then the rest of the teams can back it to support with, whether it's armoured vehicles, or drones, or dogs, or whatever we need to support that event. But I think that's where we've kind of -- the concept in Cape Breton that we've tried to lead over the last 10 years.

MS. KRISTA SMITH: That's really helpful. It's very interesting to me to hear that you spend some time working with the public to prepare for critical incidents, so that it's less scary when the moment actually arrives.

The other thing I wondered about for more of the rural context is knowing that some of the police, municipal police services are -- tend to be smaller, how does that impact preparedness and training for critical incident response?

MR. STEPHEN MacKINNON: Yeah, that's a great question, and I didn't get into the budget aspect and where those monies fall to. When you talk about some of the smaller departments, you know, some have $400,000 operational budgets. So when you talk about tactical response, I'll give you a perspective of night vision for officers to work to their full capacity at night, you could be talking in around the $300,000 buy-in for a tactical team, besides helmets and vests and all those things. So those struggles are real for small town chiefs to be able to expect to provide that service. So it’s usually with MOUs. In the Province of Nova Scotia, they work closely with the RCMP, with Halifax Regional Police, who has tactical response, and ourselves as Cape Breton. So should an event happen and it’s closer, but outside of our jurisdiction, you know, that request can come in, and we’ve had that happen in the past,

several different incidences, where we've worked together on certain events.

So that builds into Wallace's theme of training, that everyone's on the same platform in training and the interoperability piece, as well as communications. When you solve those components, I think that's where the lean from the other departments to help those smaller townships fill that hole, that gap, in community need.

MS. KRISTA SMITH: Thank you very much. So we started off hearing from some of the experiences of critical incident preparedness, so that I'd like to turn now to sort of the more theoretical. And what you're seeing here, and what's coming up for you, I have a series of questions for you, but I have a feeling you'll also have your own comments.

So you provided the Commission with a report. And so kind of starting from that, you have a few great quotes in that report. One is that, "The next crisis never happened before." And so critical incidents, by definition, can be hard to predict and involves some degree of chaos. And it's very common to hear people say that something was unprecedented, or unforeseeable. But are there aspects of critical incident response that can be predicted and planned for?

DR. BJØRN IVAR KRUKE: That's a tough question. I think we will not be -- we shouldn't be surprised when the next event happens. We don't know where, we don't know when it will happen. And that means that our goal will be to prepare for that moment.

And it's interesting to listen to Wallace and Stephen with what kind of expectations do we have in a police response in urban areas, in rural areas? Do we have the same expectations? Is it fair to have the same expectations?

Related to your question, it -- the next one has never happened before. It's a new event. But that doesn't mean that there are -- that they can't see some patterns, that they cannot see some kind of recognition.

I interviewed one of the incident commanders in the government bunkers after the bombing in Oslo in 2011 and I asked him, "Have you ever seen

anything like this or experienced anything like this?" No; he's never seen a bomb like this in the middle of Oslo in the government quarters. But do you have any recognition then? A lot. I've been an incident commander for 10 years. So I had to, you know, use my experience as an incident commander. The event was new, but my experiences as incident commander was what I had to build on doing the incident command in this situation.

But is it possible for me to go back to the question about ---

MS. KRISTA SMITH: M'hm.

DR. BJØRN IVAR KRUKE: --- critical incident preparedness?

MS. KRISTA SMITH: M'hm.

DR. BJØRN IVAR KRUKE: Because if it is so that the event is new, how can they prepare for that?

Well, it's fairly easy to be at a university looking at this in a normative way. If I do that, stating that we should have a risk-based approach to what we do, not an event approach, so if you have a risk-based approach, that means that we do some risk analysis. What kind of risks are we expected to face in the future? And that is -- this kind of analysis has been conducted in all the blue light agencies, in schools, in communities, and cities all over.

So they do the risk analysis and they come up with a certain number of risks that they need to prepare for.

After that, they should do a kind of preparedness analysis. Given these risks, what kind of preparedness do we have -- do we need to be able to handle these risks if they turn into a real event? What kind of dimensioning of the preparedness structures do we need to have to be able to handle these risks?

And that counts for a hotel like this, how many fire extinguishers do we need? How many people with reflective vests that can arrange for the evacuation do we need to be able to make sure that we have that kind of capacity if we have a fire at this hotel?

Related to mass casualty events, what kind of preparedness structure do we need to have in place to be able to respond in a reliable way? Let us say that we have a response in an urban area of 10 to 15 minutes and we'll be on site. If that is the requirement, what kind of number of police cars do we need out there to be able to respond in that time frame?

And when we have done these calculations for all the risks that I mentioned, at the preparedness level we need to be able to handle these risks, then we go to, well, the schools, then they go to the training facilities, because then we know what kind of training we need, we know what kind of equipment we need, the amount of equipment, and then we make the plan, the preparedness plan. And we test the plan in relevant exercises because if we test the plan in relevant exercises with the relevant actors, then we know, does it actually work?

And then revaluate. That's the way we do it. That's -- at the university, this is fairly easy. When it comes to real life, of course when it comes to the decision about what's the level of preparedness we will go for, that's a political decision. That's an issue of our prioritization of our resources. And of course, we need to deal with that in all levels, in all organizations, every day. These kinds of discussions about priorities, giving priorities to certain important activities, including preparedness.

So if -- and of course, the risk that this picture, this dynamic is changing, that means that we need to have a constant focus on what is actually the risk and we need the discussion about do we have the relevant preparedness to be able to handle this risk?

So that is, you know, the university, if you will, type of understanding of a normative understanding of dimensioning of preparedness level. And in addition, it is a link over to what kind of decisions do we need from the politicians related to the dimensioning of the preparedness? And it's also an issue about how do we exercise? Do we include the relevant equipment, the relevant people, the relevant actors, for organizational exercises so that they actually are able to test if it works?

Now, ---

MS. KRISTA SMITH: That's helpful. That's helpful. And just a note that in our afternoon roundtable tomorrow, we'll be talking about that prioritization of, say, politicians and civil society, what should we be depending our finite resources on? Yeah. Because it can be a tough decision.

Kimmo, I'd like to take it to you now, and, of course, please comment on anything you've heard so far, but as well, we're very interested to hear how the model in Finland works for critical incident preparedness. So, you know, you can tell us, but my understanding is that the model for police education in Finland is research based, and so that you provide police recruits with opportunities to actually participate in research. So I'm hoping you can talk to us a little bit about that important component that both Wallace and Kerry mentioned of training.

DR. KIMMO HIMBERG: Thank you, Krista. You are right, yes, of course, in such a long education program. And as a matter of fact, I'd like to emphasize that we don't like talking about police training. We prefer calling it police education, exactly for the reasons that you mentioned. We are in a lucky situation. There is a national police. The whole country is divided into only 11 regional police units, which are led centrally by the National Police Board. So basically, the policies and procedures that the police uses, they are harmonized throughout the country.

Just like you said, Krista, the Finnish police education is research based, and indeed, we -- as curious as it may sound, but we are involving our police students in the research projects of the University College. The Police University College is -- has in a way an ambivalent role because it is simultaneously a university of applied sciences and a police unit. Myself as director, I was a senior police officer at the same time. But this is important because this way, we can ensure an extremely close cooperation between operative units and educational research. So we are provided by research project teams by the operational units, and thereby, the Police University College is deeply involved in developing policing in this country.

I think Wallace mentioned earlier that the concept of critical incident is extremely broad. And, yes, so it seems. Maybe I should provide a disclaimer, everything I say has to be understood through the fact that I come from another country, from a different kind of tradition. And when there are differences in the policies, it doesn't in any way indicate that the Canadian procedures are somehow problematic.

But, yes, critical incident, a broad concept. It can be a violent type person equipped with a knife or a firearm, it can be a mass casualty, it can be anything in between. The -- here, as a matter of fact, is an important aspect. It is not possible to train the police to respond to particular types of incidents. I mean, we cannot build up a selection of critical incidents and then train the police officers to respond to each and every of them. We rely on this in-depth police education, which leaves a lot of initiative and a lot of responsibility to the individual officers, because in this kind of a thinly populated country, the police density, if I may call it that way, is also very low. In Finnish countryside, it is quite normal that the distant between two police patrols is several tens of kilometres, or a hundred of -- or a hundred kilometres. So, basically, it's two constables in a car who need to be able to respond to any kind of incident in the first place, before several patrols will arrive sometimes from, well, very long distances. This again means that the officers need to be educated to be generalist police officers, capable to responding to a variety of cases and to a variety of critical incidents, if you wish to use that term. Meaning that they need to be -- they need to have the professional competence to be flexible, to find the best way to respond, depending on the nature of the case.

Then I would like to raise another important aspect that which I'm afraid may not have been mentioned. It's the proactive role of the police. I mean, the traditional view into policing is that it is -- that policing is a reactive activity. Something bad happens, police arrives, and responds to the situation. I will give an example. Finland is admittedly a relatively peaceful country. We had our first major school shooting in a small country town called Jokela, 67 kilometres from Helsinki, in 2007.

Eight school pupils killed plus the shooter who committed suicide. This had never happened in Finland before and came as a shock to the citizens. It took less than one year, and we had another school shooting in another country town called Kauhajoki, 2008, 10 killed, shooter himself committed suicide. So we had a phenomenon there, a new phenomenon. As we all know, these kinds of -- often mentally disturbed young people, they seek for models. They found them in the news and now there's increasingly of course in the net. But now the interesting part, we have not had one single school shooting after 2008. Why? We believe that it is because the police thought close cooperation with school authorities and social authorities, and we created an early alert system, so that, basically, we built up a risk assessment system where pupils of various ages in various kinds of schools and education institutions could be identified and brought to receive psychological support as early as possible. Unfortunately, because nothing has happened, we cannot prove this through research, but we strongly believe that this proactive initiative taken by the police and this inter-authority cooperation has been a key to success.

So two key words, flexibility, cooperation. Thank you, Krista.

MS. KRISTA SMITH: Thank you very much. The other word that stands out for me is proactivity, for sure, to be proactive.

DR. KIMMO HIMBERG: Sure.

MS. KRISTA SMITH: And I think I want to take it over to Hunter now to continue that piece of the conversation. What have been the learnings at the ALERRT Centre around being proactive as a way to improve critical incident responses?

DR. HUNTER MARTAINDALE: Sure. So obviously before active shooter training was a concept that was readily accepted, it was purely reactive. People didn't go through these sort of training ahead of time and try to prepare for what this looks like. One is the initial officers on scene, but then what do you do, is the scene still ongoing from a command point of view? What is the immediate, intermediate, and long-

term effects look like for your community, for your agency and all that.

So probably put it in a little bit of context and -- region, the different agencies we touch, because it's very different in the States with the sheer number of agencies and their size differences. So we have some agencies that have a single officer as the only officer at their agency, all the way up to NYPD which has 36,000 officers or so. And so you have this wide swath of different types of agencies, and they're all going to have to prepare differently. Some agencies will be like Kimmo's and Stephen are talking about where you can have miles and miles, or kilometres, between people and how long are they going to take to get there in response. And sometimes preparation means that that single unit, single officer or double officer unit, is the only responding unit for a long time, or he could be somewhere like NYPD or Los Angeles where you will more than likely have backup within seconds, if not the exact same time. So they're going to prepare very differently.

So, for us, when we started it was only in State of Texas, it was all Texas funding, and we very quickly built up the interest in seeing that this is something that officers wanted and they were hungry for, and we were able to get federal funding. And over the years, we trained all 50 states; it's about 180,000 officers and 9,000 of the 18,000 agencies, so we've been spreading out.

But we can only do so many touches and direct classes, and there's only so many trainings that can happen. So to be proactive and to help these officers practice in their own settings, we don't do very many trainings in our facility. We have a really nice training facility in central Texas but we're not travelling officers in to go through this one sterilized type of environment. So what we do is we go to the agencies; 95 percent of all the training is out on the -- at their locations. We send the equipment, we send the instructors, and we don't just train a single agency for the most part. Because there are so many different agencies of different sizes, they intermingle when these events happen. And so we usually have a host agency, so (indiscernible) I don't know -- Denver, Colorado, and then a lot of the suburban departments around

Denver will send officers to come in and train with them.

So now they're integrated with each other; they're learning common language, how to communicate, so in that proactive sense, if -- when things happen, they now know how to speak to each other. They're all going to be showing up with the exact same time. We're very close to each other in a city like Denver, and they're going to be forming teams and having to work together to try and solve the problem.

The actual incident itself, on average, is over less than five minutes. Something like 70 -- at least in the States, 70, 75, 80 percent of these are over in less minutes. And so that initial rush is there, you still have this deluge of officers showing up, so how do they need to communicate and solve the problem? How do they hand off command; how do they build up the necessary resources to contain that situation and then buildout for all the recovery phases going on? And that's all just preparation and being proactive and pushing that out.

So that's the approach that we take. It's a very different system from what Kimmo experiences, and even in Canada, just because of the sheer volume and difference in agencies.

As I mentioned in the introduction, we definitely take an options-based approach to how these events can unfold. As both Wallace and Stephen both talked about, these are complex events, there's a lot of different things that can happen. Kimmo said it as well. You don't know -- you can't train for every possibility, so the officers have to have some sort of understanding of different options that could happen.

Uvalde is a good example of how that broke down a little bit. The officers were not able to get into the flash room because it was locked, and the commanding officer, the Chief, came in and basically halted it and said it was a hostage situation; they couldn't get in, there was still some gunfire happening. But there are more options to get into that classroom. There are what we have is Knox boxes, so they're boxes with keys, you know, universal keys, at the school. Breaching equipment, if you don't have it, you can get it from the fire department, which is going to be right

across the street from you because they're all showing up at the same time. There are windows. There are ways to get into -- in a room in that situation.

Now, they were hamstrung because the Chief held them back and didn't let them in, but we try to instill this options-based approach on all of our trainees, that you're going to run into a problem; you may have not seen it. We're teaching you a way of doing it but be prepared, be proactive and know that there are other ways to solve the problem and figure it out.

And we'll probably talk about the response more in a little while, so I don't want to take up too much time on this, but that's the approach that we take. It's very much a proactive, be as prepared as you can possibly be, in an integrated kind of fashion, just because of the landscape of how the US is structured with our law enforcement agencies.

MS. KRISTA SMITH: And I think, given what you're talking about now, I'd like to pose a question to you that I'd planned to pose to you later in the morning, but the idea that you're running trainings that involve multiple agencies where people haven't necessarily met before, how do you -- how do you build trust quickly in that kind of a situation and create enough certainty and stability within the responding team when they all may be speaking different languages and not really know each other?

DR. HUNTER MARTAINDALE: That's really the question. It's a fine line to walk because you do get a lot of really strong personalities in these rooms. People are coming from their agencies, and they've been taught a way of doing something. Their policies lay out a certain path, the trainings lay out a certain path, and then they come into a room with maybe 10 different agencies in it and everybody has their own ways, and our trainers have to go in and find a common language to get them to work together.

One benefit we have is that everybody's mission-focused, and this is meant to solve a particular type of issue. And we go in with the mindset that we're

not telling you that what you're doing is wrong, or that you need to change everything you've learned over your career, or tactics; these are some options. We go through and we have the data that we've tested these actual things through different experiments, and we can tell them from our data these appear best in these situations, but that doesn't mean they're always the best. If your agency is more comfortable doing tactic A versus tactic B, we're not telling you to switch it, just know there are other options, how to solve the problem.

We also mix the officers up so they're not all grouped together, so you didn't have a situation where you have four officers from six different departments that make a point for the officers, and they'll always try to be together. It's like a classroom in high school; friends grew up together and they're always in the group together. We break those up so they're having to work in different teams.

And it's rough the first day when they run scenarios, because we usually give them scenarios pretty quick so they'll make mistakes and we'll kind of coach them through those issues that they make and help them see how other things can play out and help. And so they make those mistakes early on, they get that feedback as a group, and they're all trying to work towards the same common goal.

And so I won't say that every single training that we do everybody comes out and they're all doing barbeques on the weekends together, but they do form a really good working relationship in that. And we've had incidents that have happened, and we've gotten feedback after the fact, whether they've told us, you know, "We responded to this, we knew somebody from the sheriff's office that we had met in a class and we were instantly able to hook up and stand up a rescue task force with the local fire department, who was also in a class. And so we all understood exactly what was going on; we knew the technique of a rescue tax force and we had no issues standing that unit up and we were able to enter the scene and help somebody that was wounded."

So we've had success stories where that integration has played

out. But, yeah, it's always a challenge when you have this many different types of organizations mixing together.

MS. KRISTA SMITH: So, yeah, what I'm hearing you saying is that training together can create a common ground for people.

And I think, too, I'm interested in sort of the underlying cultural aspects of different agencies and how that can come together in a critical incident. So I'm thinking about that, but I know also you have a follow-up.

DR. BJØRN IVAR KRUKE: Well, I think it is -- well, Kimmo mentioned that there are differences from countries to countries, but there are also differences from urban areas to rural areas, and in -- and maybe in particular in the rural areas, they know each other, so they have met at school, or at the shopping mall, or at football training and different kinds of exercises. And I would assume that it's a comforting thought when you see a familiar face in the accident scene, and you know that you can trust this person because you have been -- you have experience with this person before. And that's -- back to my comment about you need to train the plan, so that you train the right people, in the right positions, with the right people. And if you do that, you will have some kind of relationship building up, so and you can build-out -- you can use that in the event. So this is an important part of the preparations.

I have one more comment, if you wish. Stephen, you mentioned that you visit schools to do some -- to create some kind of a common ground, or some expectations maybe, and that is part of the issue. You need to train where there are people. And the staff at school, they need the guidance from the police because they have the first shift in a school shooting scenario. They are the first dealing with the issue, and they need to know what to do. And in addition, it might be that the police need some information from the school when they approach the scene. So -- and, of course, this is an important part of preparations that we have agreed upon, some expectations about who's doing what at the scene of the event.

And a final issue, if you look at the report after that 22nd of July

2011, bombing in Oslo and the Utoya shooting, you would see that 30, 40 percent of the report related to prevention. Could we have prevented this from happening? Could we have seen this? I've now been a part of a commission studying the police response at the Kongsberg mass casualty event. It was a bow and arrow event, a guy killing five people. And close to 50 percent of that report would be related to prevention. And the issue is the surveillance, the police surveillance department, could they have seen it coming? Is it a terrorist issue? The police, have they got the history with this? The healthcare system, he was psychotic, are they good at talking to each other to prevent it? And in quite many cases, you will hear that, well, the sore sides of something, so people not -- were not feeling -- well, they felt maybe that something is wrong, but they didn't tell. So the science of are we good at, you know, looking for the signs of a kind of change, or a kind of escalation, or something like that. That's part of the prevention.

MS. KRISTA SMITH: Thank you. And I think that is a topic that we'll be looking at later in the summer, yeah.

Following up on your point to Stephen, and as well, I was thinking about how you were saying it's back to relationships, and how the dynamic of a critical incident response, especially when it's multi-agency, in a rural setting can be -- you know, really goes back to that relationship. I just wanted to check in with you, Stephen, if what your experiences have been with multi-agency critical incident responses.

MR. STEPHEN MacKINNON: Thanks, Krista. Again, going back to 1996, when we started to realize in our area that we needed some type of a containment or a tactical response in situations, and that was just from other officers coming from I believe it was Toronto Police Service with that skillset that wanted to bring it back, because it was new to our area back in the late '80s and early '90s. So what we've done is consistent with that in terms of we've attended other agencies, we've reached out. We make it a plan each year to contact and work with to keep the -- those communication lines open, more so than ever now in the events that have recently occurred. So it's something that it's top of mind.

Going to -- well, as I said, about training, training standards is usually one of the setbacks in what we've heard from our other colleague. When you have two or three different disciplines, no one really wants to give up their way to form a path. I know within Canada now and a lot of the tactical teams, they're on the same training platform. So when you look at that piece, that's solved, so you look at fixing problems, so we can train together when we do a joint operations, that those things are out of the way. The interoperability piece of I know Bjørn from our last training experience, and next year we'll do it again, and next year do it again. So we're not learning from each other every year over and over. It's -- we've already, you know, kind of had those experiences to get us to that, just doing the event.

So that combined with communications, so when you look at portable radio systems, that's always one of the factors that, you know, my team can't talk to the other team on joint events. So within Nova Scotia, an interoperability with TMR system radios that we've had since I believe 2015 or earlier, you know, that's one of the mutual aid channels that we can work to, so another solving factor to no restrictions for teams that are on the same training platforms with the communication piece, and all we have to do now is, and which we have been, is train together, get to know each other, so when these events happen -- and up to recently when we talk about examples, in 2020, we had an event of a missing person. And it turned into something that spun off to be larger, but we worked fantastic with that project and that -- and the successful outcome. So it reinforces our decision making to keep those channels open, to continue that training, to continue the dialogue.

So if it's working, keep it working. One of the flaws that we've noticed is the change in the guard. So I might do this practice or the predecessor before me and continue it on, but if that's not continued on with the new, somebody retires, somebody changes their position and goes to a different role, to ensuring that that training piece continues on, those relationships continue on, because the platform is solved, the communications piece is solved. Now it's the last two pieces to continue

to have those relationships.

MS. KRISTA SMITH: So I was going to take it to Wallace next. I know that you teach at the Canadian Police College, and I'm wondering if you can speak a little bit about the platform that is taught and whether, to your knowledge, whether that platform varies much across Canada?

MR. WALLACE GOSSEN: So I will answer that question. I'd just like to go back for a second.

MS. KRISTA SMITH: No problem.

MR. WALLACE GOSSEN: Because I find a lot of times when we have these conversations about emergency preparedness, we really do tend to boil it down and focus on the tactical piece, meaning the officers that are there, looking at the problem, what their tactics are, how they're going to breach the door, what firearms do they have. And, you know, those -- at that level, that is a whole other conversation versus the command, control and communication piece that takes place once the chaos starts to get reigned in a little bit and things are slowing down. When the men and women first show up to those events, they're going to respond to the way that they're trained and they're going to do those things. But as those events increase in scope and complexity and command starts coming in, typically, we find that that is where it begins to break down. And when you look at large events -- I'm also a public order unit commander, so we have the benefit there of every public order deployment we go on is multi-jurisdictional. Who's in charge; right? Where does the decision making lie, and do we all agree that that's the person who is in charge to make those decisions?

So many times, when we walk away from these events and you ask the question, "Who is in charge?" three people put their hands up; right? That's always a problem. And so we focus an awful lot of the training on the tactical piece, and the operational piece even, even the team leader that's on ground. But as we scale up the event and more pieces come into play, that is, historically I think, where a lot of the problems have hit. And so we spend a lot of time focusing down; right? But we haven't

focused a whole lot of time focusing up.

And to your point, Stephen, that's where you see an awful lot of the change of command. A lot of the officers on the ground will maintain that skill set and move through their careers with that, but their bosses change; right? And that boss wasn't at the last scenario and they don't have a background in it.

So those are all things that are a very real struggle, and I'm going to suggest probably well if not across North America, across the world.

But one of the things that's happened in Canada that I think is very good is at the Canadian Police College, we have the Critical Incident Command Program. And from a high-level overview of it, what that means is that every Incident Commander that's trained at the college can go anywhere in the country and run a call with another Incident Commander and they'd be speaking the same language, you know, the same methodology, they use the same terms.

So really, what is taught at the police college is every crisis is defined through SMEAC; right? So SMEAC is an acronym for Situation Mission Execution Administration and Authorities and Command and Control and Communication; right? So that is the initial framework that they use on. All their decision-making is based on NRA, is it necessary? Is it risk affective? Is it acceptable?

And when you're examining those three points, is it necessary, it goes back to your priorities of life. And what we teach the priorities of life for a commander is the exact same for the priorities of life of a frontline officer. It's the public, the officers, and the subject. So when they make those decisions, right, everything is contextualized within that framework; right?

They're also taught within the execution phase, constantly coming up with plans. You've got your deliberate action plan, you've got your immediate action plan, meaning if something goes bad right now, what do we do while we're making a bigger plan? And then whatever other contingency plans that you may need based on the situation that you're following; right?

So within that as well, if we go back to that acronym, SMEAC, that command, control, communication piece at the end, the C, that is what we call the Command Triangle. So the Command Triangle is composed of one person at the top, the Incident Commander for the event. And then the two branches of that are the negotiation team. And again, most of this is framed around the idea it's armed barricaded suspect, the hostage taking. So you've got the negotiation team and then you've got your tactical commander. Those are the two subject matter experts that inform up to the Incident commander, who then bases their decision on what they think they should be doing, going back to is it necessary, is it risk affective, is it acceptable, based on the priorities of life and what you've sent as your mission.

So the mission is set by the Incident Commander. It's one of the first things they teach them to do. They're also told to take command as soon as they have the recommended situational awareness; right? And then they begin gathering whatever resources they need and start tasking out things.

Now, that's a very rapid overview of the program, but maybe I'll just leave it at that and if there's further questions.

But that is what every Incident Commander that comes through the Canadian Police College gets. And it's finalized with an hour/hour and a half long scenario where they have to -- it's like an oral exam where they have to demonstrate that in a realistic scenario.

So again, covering all those components, SMEAC, NRA, priorities of life.

I can get into what's ICLEAR, but that's more the acronym for the on-ground officers. But it is something that they have to go through. Because one of the things that we found under stress, you know, people can't remember things; right? Their brains shut down. So Stephen referenced to-go bags. You know, within my go bag, which is right around the corner from me here, I've got those things written down, as much as they teach it, right, as much as I've experienced and lived it. I don't trust

myself to remember everything that I need to remember in a high-risk event. So I pull out my card and I go through that checklist to make sure that I haven't missed anything.

That goes back to the importance of that training; right? Those components of the command, control, communication, and having commanders experience that, having them work through the process under stress, right, and not getting focused in on all the things that we know can happen to them under stress, which I understand we're going to talk about later, is really the key -- separated from the tactical operational side, but that movement up from the chain of command, that is where the training takes places for, in Canada, our Incident Commanders. And so far, it has worked quite well.

But all of this -- any training is dated; right? That repetition, that constantly doing it, all of these things are perishable skills. Even just remembering what SMEAC is a perishable skill over time and under stress is sometimes very difficult. That has to be trained constantly, not just how do we breach a door; right? How do we make a hostage shot? Those critical decisions moving upwards, and again, going back to who is in charge. When you're multi-jurisdictional and there's three or four agencies in that room and they all think that they're the ones in charge, that's a problem and that needs to get sorted out in training before a real event.

So again, I'll leave it there.

MS. KRISTA SMITH: Okay. I have just a couple of follow up questions from what you've just said. Can you tell us what SMEAC stands for again? That went quickly.

MR. WALLACE GOSSEN: Certainly. So SMEAC, S is situation.

MS. KRISTA SMITH: Yeah.

MR. WALLACE GOSSEN: What is the situation that you're dealing with? It really ties into situational awareness.

MS. KRISTA SMITH: M'hm.

MR. WALLACE GOSSEN: What is the -- M is the mission. What

is it that you're trying to accomplish?

E is the execution phase. Now, execution is made up of another acronym, which is clear, ICLEAR, isolation, containment, lethal and less lethal options, evacuation, your authorities, and then your react plans. And I already described what the react plans are, but we can go into that again if somebody needs to.

The A is administrative and authorities. So administratively, what resources do you need to solve this problem and what are your authorities to do that?

MS. KRISTA SMITH: M'hm.

MR. WALLACE GOSSEN: And then C is the command. So that's literally put on the board, your Command Triangle, who those individuals are, and the communication that you have, radio channels and things like that.

In that quick framework to reign in, again, that chaotic piece of, "What do I do right now?" just start that process and you're already moving towards resolution; right?

So that -- and I can get into, as well, the importance of scribes and boards, but again, we'll leave that, Krista.

MS. KRISTA SMITH: Yeah, for now. That's really helpful.

And then the other follow up question I have is I -- the way I heard you talking about it just now, it was -- it's training for commanders, Critical Incident Command, but is there -- is the Incident Command System taught to all levels of responders?

MR. WALLACE GOSSEN: Yes and no.

MS. KRISTA SMITH: Okay.

MR. WALLACE GOSSEN: Depending on where you are. Right now, -- and I can only speak from the Ontario perspective. The Ontario Police College has done a fantastic job of implementing a scaled incident command program. So there's the Incident Command 100, 200, 300, 400 level. And I've been involved in the development of the 300 and we're trying to finalize the 400-level command.

So that is -- really, the Incident Commander is whoever shows up on scene first. So if four constables show up on scene, one of them is in charge; right? They need to understand, for them, that on an operational tactical level, the ICLEAR concept, how do we isolate this? How do we contain it? What less lethal options do we have? Do we need to evacuate? What are our authorities and what are our reactionary plans?

Right? So that is, starting as of two years ago, being taught to every front-line constable, because again, if two constables show up and they've both got six months experience, somebody has to take charge. So we give them that framework.

Then at the 200 level, we dive a little bit deeper into the instruction of command and control because that's for the patrol sergeant that shows up; right? So again now they're introduced, -- again, they're really just reinforcing ICLEAR, NRA, and priorities of life at this point. So the goal is to get to a position in Ontario where, you know, we'll have a generation of officers that have come up with this vernacular and are just very comfortable using it, the NRA, all their decisions. We're not there yet, but it's begun.

So then the next level is the 300 level. So that is for -- typically most organizations have a duty officer on duty, a staff sergeant or a duty inspector. They then show up and relieve the sergeant who happened to be in charge at that time. They also use ICLEAR, NRA, priorities of life, for sorting out their decisions and process. But that's when we also start to introduce SMEAC, because now you're getting into the into the strategic level of organization and, if it's going in that direction it's going to require a higher level of organization.

Then we call it they set the table for the Incident Commander because, typically, the Incident Commander's the last person to show up. Sometimes they aren't, but -- so when the Incident Commander comes in, they're briefed by the duty Inspector and it's done on a format. Here's my ICLEAR, here's my SMEAC, here's

the plans, here's what I've approved, here's still what's outstanding. And then at that point, the Incident Commander would say they've got enough situational awareness, "I'll take command".

I think that answered it.

MS. KRISTA SMITH: Yeah, that's helpful. Lays the groundwork.

So Kerry, I was wondering if you can talk about response -- critical incident response in the communication centre. It may look a little same or a little bit different from what we've just heard.

MS. KERRY MURRAY-BATES: So critical incident response, for us, like we talked about before, communications operators do the job the same way every time, right. Their actual call-taking and their actual dispatch, those skill sets are set and they don't change. They're scalable, but they don't really change.

Incident -- critical incident response for us is more about what we facilitate for the officers on the road, so we have a number of technologies within the centre that augment the communications.

So initially, we have our call take and our dispatch policies. We have a system of notification that I checked on -- that I spoke about earlier that really highlights or provides the flow of communication all the way up to the command level, depending on the event.

So a supervisor within the communication centre would be advised of the event so now there's another set of eyes looking. There's another set of notifications, depending on what type of event is transpiring. And that's for additional resources as well as additional oversight.

So for example, ETF, our Emergency Task Force, or our dogs or our Emergency Management or our bomb squad or whatever it might be that is transpiring, that notification goes in early in the process so that there's some sort of awareness created if the unit is needed to deploy.

The other thing that it does is that it allows that those additional

resources to start listening to the calls so that there's -- they're getting that information right from the beginning of the event.

We have a duty operations centre, so that is our -- we call it out TPOC, Toronto Police Operations Centre. That's the duty Staff Sergeant.

There's also a communications operator embedded in the duty operations centre, and the reason being is they facilitate the flow of information.

The purpose of that is business continuity, so it's situational awareness for the entire city. They look at resources available, they look at competing priorities within the city, if there's major events -- multiple major events happening.

And then there -- the next level would be the Major Incident Command Centre if they decide to stand that up, and that would be the Incident Commander for the police side, but we also deploy a communications operator in the Major Incident Command Centre. And again, it's all about the flow of communication.

So the role of that person is to ensure that the Incident Commander has all of the information that is in the CAD event or in -- within the CAD system that is for the event that's happening so everyone is getting the same information at the same time.

Now, the technology that we have to support this is obviously we have multiple radio channels and then we have radio channels that are designated. So for instance, we have a designated command channel, so if Incident Commanders or even unit commanders across the city for whatever the event might be need to communicate or need to have updates, situational or operational awareness, that is the designated command channel and they know they can dial into that channel and they will get operational updates.

We also have our Joint Emergency Services channels. So those channels can be implemented to facilitate communication between our ambulance, our fire and our police resources. And I believe we have 10 of those -- nine or 10 of those.

Then there's also the ability -- our interoperability piece. So we

have the ability to patch channels with our GTA partners so we can patch other services, so the OPP or York Region or Peel, and so that we can establish a common channel so that everyone can speak to each other and everyone can hear the same information.

And we also have the capability with our ambulance and our fire.

So a lot of times, what will happen is, as our role within the emergency -- the response to an emergency event, our -- we will offer those opportunities or those resources to the Incident Commander or the road Sergeant or whoever is in charge at the time and then they advise us if they want to utilize those resources.

MS. KRISTA SMITH: So one of my follow-up questions was going to be how the communication centre -- just to get a better sense of how the communication centre is working in tandem or in cooperation with the duty operations centre, but that might have been -- that might be the answer.

Is there more to it?

MS. KERRY MURRAY-BATES: So the duty operations centre, as I said, it has a communications operator deployed there. They have the same CAD that the communications operators at the communications centre use.

MS. KRISTA SMITH: What's a CAD?

MS. KERRY MURRAY-BATES: Sorry. CAD is Computer Aided Dispatch, and essentially that is just the system we use to facilitate the flow of information. We process calls. It's how we log everything.

So it's the same system across the board, right, so the call-taker that initiates the call for service initiates the CAD event, and that CAD event is consistent through every level of notification on every CAD system. So the information from the very first phone call is available throughout to everyone who has access to the CAD.

MS. KRISTA SMITH: Are other agencies on CAD or is that ---

MS. KERRY MURRAY-BATES: Absolutely.

MR. KRISTA SMITH: --- strictly a policing -- okay.

MS. KERRY MURRAY-BATES: Absolutely. Yeah.

And there's multiple vendors. You know, it's just like buying a car, right. A car is a car, but you can have Hexagon, you can have Mark 43, you can have Motorola. Like there's a number of different CAD providers, but they all have the same function. It's just different options, if you will.

MS. KRISTA SMITH: Okay. That's helpful. Thank you.

It kind of gives us a picture of how operations roll during a critical incident.

I'd like to turn now to Kimmo and hear a little bit about how operations to a critical incident response work in Finland and, as well, if you can comment on multi-agency responses, that would be -- that would be of interest.

DR. KIMMO HIMBERG: Thank you. Thank you, Krista.

Yes. As a matter of fact, I almost asked for the floor already earlier because I think the discussion starting with Wallace's presentation were touching some very essential questions.

It is, of course, enormously important to ask who's in charge, who's leading, who's leading the response, who's leading the situation. And I have a good answer, a little bit bluntly. There may not be situations where the answer to this question is unclear. The system, the procedures have to be built in such a way that always, from the start, it is crystal clear who is leading.

Of course, the -- on a level of individuals, the responsibility of leading the situation may change from -- for example, if the situation escalates and more patrols have to be involved.

From the Finnish viewpoint, I'm relieved when I can say that we don't have situation where the answer to the who's in charge question is unclear because of multi-agency involvement. As I mentioned earlier, we have a national police

and authorities divided to regional units, but all those units operate according to the same rules and same procedures. There is no such situation when -- when we -- well, I will put it simply. We don't have multi-agency situations at all.

In the Finnish police procedures, even a patrol of two constables has a leader. One of the two constables is leading the patrol. It doesn't necessarily -- the leader role does not necessarily become very visible in the normal, everyday police work. But in a critical incident, it certainly has a meaning.

Also, as an example, it is required by our police procedure that, for example, always when it is possible, I mean, when time allows, even a patrol to -- has to agree among themselves which one of the two constables would be the primary user of firearm. So this role is given to one of the two members of the patrol.

When the incident is larger, or escalates to become larger, so that it becomes a multi-patrol situation, then typically, the leadership is transferred to a field sergeant. If I translate the word that we use for this role in the Finnish language, it would be something like a field leader, basically, a sergeant who is a member in one of the patrols involved, but she or he will take the responsibility of leading the situation.

If it escalates further, or if it's an even larger, even broader incident, then the leadership responsibility is transferred to a command centre. And here perhaps I should emphasize that despite Finland being such a large country, but we have only a few command centres in the country. And the senior police officer who becomes the responsible leader does not typically work from on site, but she or he works from the command centre. We have a highly developed computer and communication system, so that the commanding officer has a lot of information available. And, of course, the communication systems, the radio systems allow, for example, to very rapidly to create a communication group which involves all the officers who work in and with that particular incident. So information is distributed among all officers who are involved in the case.

Many things that were said by previous speakers sounded quite

familiar to me, I have to say. But as we see, there are differences -- there are organizational differences, the question of multi-agency situations is one of them, as I indicated earlier. There are plenty of technological opportunities, technological differences. ICT provides excellent opportunities to support operative work in these kinds of incidents. And it is beneficial to invest a lot in modern ICT systems.

That perhaps shortly, Krista, did I somehow respond to what you were looking for?

MS. KRISTA SMITH: Yes, you did. One question I have is what is ICT?

DR. KIMMO HIMBERG: Information and communication technology ---

MS. KRISTA SMITH: Okay.

DR. KIMMO HIMBERG: --- simply.

MS. KRISTA SMITH: Thank you very much.

DR. KIMMO HIMBERG: Data systems and communication systems ---

MS. KRISTA SMITH: M'hm.

DR. KIMMO HIMBER: --- combined.

MS. KRISTA SMITH: Okay. Yeah, that is helpful.

I want to ask the same question of Hunter and to hear a bit about how it works with the -- at the ALERRT centre and within the U.S., bringing that perspective, but I note it's 11:15. So shall we take a little break and then come back to Hunter? Okay. All right. So, Hunter, we will take a little break and we'll come back to you when we return in 15 minutes. We'll come back at 11:30. Thanks very much.

--- Upon breaking at 11:16 a.m.

--- Upon resuming at 11:38 a.m.

MS. KRISTA SMITH: Welcome back, everyone. And as promised, we are going to pick up with Hunter. It would be helpful if you could tell us a little bit

about how the ALERRT Centre's system -- what do you teach when it comes to the response system for critical incident response?

DR. HUNTER MARTAINDALE: Sure. This is -- I'm glad this topic came up in this -- in this conversation. This is something that we've started addressing the last few years. Again, every response is multi-jurisdictional, so it's -- it's an issue.

We started taking cues away from the fire service, initially. So in the U.S., at least, probably everywhere, fire service is going to respond as well to basically every one of these events, and the fire service here uses a -- an ICS, and it's a command system very similar to what Wallace is describing. There is a commander -- at least a lieutenant if not a commander, and even sometimes up to a battalion chief, on an apparatus that is responding.

So they'll send multiple apparatus/apparatis to a -- to an incident. And so they instantly have a command structure built-in, and they stage away from the actual location so they're out of harms way, they're able to allocate resources where they need to go, people that are responding go to that staging area, they're not flooding the building.

Historically, law enforcement does the polar opposite of that. It's everybody's tail is on fire and they are flying to that scene. And it's not just the people that get dispatched, they hear it on the radio and everybody is showing up.

There was a case in Ft. Lauderdale Airport, I think, a few years ago, and something like 2,000 officers responded to a shooting that had, a little off memory now, four or five victims, I think. So you ended up having 2,000 officers flood an airport, and the officers historically aren't very good stewards of parking spots, and so they flood the very front of the location. And so now, if you have to get ambulances in, how do you get them past just the, you know, the blocked arteries of the roads to get there?

So seeing this play out in a few incidents, it was noted in several after action reports of larger incidents, and you don't fault the law enforcement officers,

everybody wants to help. They know this is a bad situation and they're trying to help, and all they know how to do, because how they're dispatched in the U.S., is you're going to go help, not realising that there is going to be just thousands of people responding to the exact same event, and it's actually not a good allocation of resources.

So what we've done in our -- in our courses, we -- we've been pushing out a class called, acronyms, AAIR, A-A-I-R, After, or Active Attack Integrated Response, and it's a class that we integrate to dispatch personnel, half fire/EMS and half law enforcement. And so we wanted to get those groups together so they're getting real information from the dispatchers as they would -- as they would actually give it. The dispatchers are trained in doing it, the fire and law enforcement personnel work together, they form rescue task forces and they -- and they work through that process.

Knowing that the law enforcement are more likely going to arrive for a fire in most instances, not in every instance, we teach a system to the line officers, very similar to Wallace is talking about, where that first officer is in command. It doesn't matter who it is, it can be a brand new officer, if they're by themselves, they're instantly in command, they are the only person that's there at that point. We teach them to do, another acronym, LCAN, L-C-A-N, stands for Location, Condition, Actions and Needs. So we teach the officers, when they show up, you're constantly pushing out information. The dispatchers have been receiving information from victims, and the victims were trying to help and give out the best information and they're able to give out a lot of good information in a lot of instances, but that officer's going to hopefully have more training than the civilians have had and be able to try to dissect what's going on. And so they're supplementing the information that's coming in from the civilians, and so they start off just saying, Where are they? Right? What's my location? I'm at the main entrance to the school, if it's at a school. What's the condition? What do you hear? What do you see? What's going on? Do you see victims? Do you hear gunshots? Do you smell spent ammunition? What's going on? What's the condition? And then what action are you taking? If you hear gunfire, I'm entering the building. I'm going through the front

door. And then what do you need; right? So if you're hearing gunfire, I need officers now. If you don't hear gunfire and you see victims, you know, my condition is I see six victims. My action is I've got two tourniquets on me, and I need ambulances. I need backup. I need medical equipment. You know, do we need additional officers to help, you know, secure the area and clear the space? Even though I don't hear anything, that doesn't mean it's not done or that it's over. So I need that as well, my immediate need is these victims at this point. And so that first officer instantly has command of what's going on and they're constantly pushing out what's happening, so people can respond.

In some of these locations, you may not have a real commander show up for a really long time. It just depends on how close they are. And sometimes you get -- I won't say lucky, but sometimes you get to where one of the high level commanders happens to be the first responder, the very first person that happened at a factory here several years ago were the chief of police, who was a big proponent of active shooter training, was the first responder, and he went in, and he whacked the bad guy, and he instantly had command, and it was a very clean situation, but that's a very rare event.

So as additional officers start to show up, they need to form a group to -- say there's still an active shooting going on, and they need to go through and find that individual, they do that. The terminology gets kind of wonky at this point. Some people call it a fifth officer, even though it doesn't have to be a fifth officer. Some people call it that person. Whoever it is, at some point, the bad guy's either taken care of, is neutralized, or whatever's going on there. At some point, somebody has to not rush inside the scene. You're getting -- you can get too many people inside of the scene, and at that point, nobody's really helping. You're clogging arteries and you need to start getting victims out. There's other things that need to happen. So at some point, an individual is taking one step back and have -- has a bigger picture of what's going on. That might be a sergeant. That might be somebody that has a leadership role. It could just be another patrol officer that is now starting to try to move resources around, so as

other officers arrive, they're staging where that officer is, and he's telling them, "Okay, we have this side of the building covered. You three go to this side of the building." And they start moving those resources around. And then eventually, fire, if they aren't already there, they will arrive, and we start training them how to integrate and just communicate with each other. Get in the same location. Have your police department, your law enforcement personnel in the same location with your fire personnel.

The Aurora shooting at the movie theatre was a really good example of how that did not work very well. You had fire stage across the parking lot from law enforcement. They weren't communicating very well. You ended up having a lot of law enforcement officers taking the victims to hospitals. The officers didn't -- or aren't aware of staffing and load issues at the hospitals, the same way that the fire and EMS personnel are, or they're not communicating in the same way, so they overloaded the closest hospital instead of triaging and moving them around, because they're just trying to do good stuff. And so we're teaching officers and fire to get together, be at the same location, so you're hearing the exact same information, you're communicating that information, and you're not wasting resources.

And there eventually -- like Wallace said, eventually, your higher level commanders are going to get there, and sometimes they're the very last ones there. At that point, the chaos part of it's over, and they're -- if it stood up well, the group is -- has gotten all the victims out. They've gotten to definitive care, to where they can get to a surgical ward if they need, wherever they need to try to save the lives. But they still have to control the scene. They still have to start the investigation. They still have to clear all the rooms, if it's a big space. There's still a lot to do. So eventually, as they all arrive, they can take over those parts of the command structure.

And we teach them to hand off the information. So as officers of higher level come in, and if they are going to take over command, there's a process to hand off that information, so they get every piece of information that they need, or it could be that, you know, that lieutenant shows up, the sergeant was before them, and

the sergeant, maybe she has the best grasp of everything. She is the best person, she understands the situation better than anybody else at this point, and that lieutenant may take a step back; right? At this point, that sergeant, she's the best one. And I'm not just going to grab command from her because I don't know what's going on and I'm not helping the situation. So, we try to break through some of those barriers that are the normal hierarchal kind of approach to law enforcement where there's a structure involved if whoever's that best person is there. Now, eventually, that's going to get handed off to the higher and higher levels as it goes, but in the chaos of some of these events, sometimes that junior member is going to have a better situational picture of what's actually going on, so we're working on that as far as our training as well.

And in a nutshell, that's what we're doing for that. It's -- these events are so chaotic, even whenever it's over, there's so many people showing up. It's not just allocation of resources. We've had issues with officers going inside the space, and they don't need to be in there. Sandy Hook's a really good example of that. You had a lot of officers with mental health issues. They went inside when they shouldn't have gone inside, and they saw a bunch of deceased children; right? And they -- there was no reason for there to be all those officers inside of that space. But the curiosity of them got them in there, and then if they'd had somebody stopping them and saying, you know, we have this part covered, that part of the building's cleared, and it kept some people out, you could alleviate some of those issues as well.

But it's an ongoing process in the States. It's something we've been pushing out. There's a couple of other training organizations that are also doing something similar to what this is, as far as trying to get fire and law enforcement combined and getting law enforcement getting into some sort of structured command situation, starting with the very first arriving officer on scene, whoever that is, because you have no idea who it's going to be.

MS. KRISTA SMITH: So I'm interested in your discussion of what you called scene flooding, or the scene gets flooded with police officers, responding

officers, and the fact that the commander may not assume command until much later. So my understanding is that command posts are often set up not at the scene, but perhaps a little away from the scene. Could you talk to me a little bit about what goes into deciding where a command post should be, and am I right in thinking that that would also be where fire might stage, so that you do have that communication happening at the command post?

DR. HUNTER MARTAINDALE: So this is a really interesting question. So with -- depending on how fast they stand up command, they could be there before fire arrives, and this is what happened in Aurora. So fire is very good at setting up command posts because that's what they do, they stage. And so they're good at finding locations out of harm's way, where they're not clogging the arteries of the road, and setting up a place that's beneficial to their apparatus. Like I said, police don't do that, for the most part. They flood the scene and they're trying to get in.

When we run big, large-scale scenarios, which we don't do as part of our normal training, but we help coordinate them locally for agencies from Austin and San Antonio region, we always have big, multi-jurisdictional scenarios. And there may be a hundred officers and firefighters. There's a lot of people flooding the scene. They always want to stage in different places, and it's always interesting to get them to realize that's a big fire truck. That's probably where the fire people are. And then realizing I need to talk to those people. So even though they know they need to communicate, they're so focussed on what they're doing, and usually, at that point, they're still hunting the bad guy, depending how fast the fire apparatus gets there, that they -- they're tunnel-visioned down and they're not seeing the big, giant fire truck. And the fire, they don't realize that that's the command post for the law enforcement because it's just a squad car; all right? It's not a big, giant truck that you can easily see, you know, it's a command post. So it -- there's that communication part. As soon as they link up, they usually go to the fire location, just because it's much easier to move over to where the fire are located at, but then the law enforcement are -- depending on where they're

staged at, are having to consider safety issues. So not knowing if it's still an ongoing scene, does the individual have, you know, a weapon capable of reaching out and touching somebody? Where do you set up your command post? I mean, ideally it's not in line of site of what's happening, so you're not, you know, a target. I think back to Columbine. You know, you had those attackers that were shooting out at the officers in the parking lot. So if you see a big firetruck and a bunch of people around it on clipboards and you happen to be at a window, that's just a target to shoot at. So being cognizant of where to park.

One thing that we definitely train is trying to keep people from being right on the scene. Officers want to get there as fast as possible and they're rushing to that scene. In a recent project we put together -- you know, we always train officers on the internal tactics. "You're inside the building. This is how you move through the halls. This is how you know the rooms. This is how all these things happen." But we found that most of the officers were shot outside of the building; right? So they're shot on the approach, and that's partly because they're pulling right up to the building. That shooter may happen to be right in that foyer, and then you're instantly the target; right? So being cognizant of where you're parking, giving yourself the best situation to bound up to the building so you can have a better sense of what's actually happening.

MS. KRISTA SMITH: Thank you very much. I'm just going to take this conversation over to you folks.

And Wallace, I wanted to ask if that is, especially with this question of Command Posts, are the same considerations at play, from your experience?

MR. WALLACE GOSSEN: Oh, absolutely. And I mean, you know, quite frankly, the system that we've developed in Ontario is from the lessons learned in the U.S. And you referenced the Aurora shooting. You know, that self-deployment piece of officers showing up just wanting to help, but actually increasing the level of chaos was something that we realized had to be addressed. And both Toronto and York have what's called a clearance stage protocol. So if something bad happens,

there's obviously going to be the immediate group of officers that are going to go and respond, but it would be up to communications at that point to declare a clearance stage, which means that anybody that's not on a priority call, clear that call, go to a critical infrastructure area, and wait for deployment instructions.

Then further down the chain, for those on ground, we've implemented the idea of the unified command, where fire, EMS, and police link up right away. So going back to the big scenarios that we run, we're teaching them right now, as soon as you get there, find your counterpart, right, of authority level within the fire or EMS service, and then you guys are now the command group; right?

And whenever that should happen, right, obviously they've got to deal with some things, they can start communicating with each other and then communicating out to each group.

And then we've got -- their job is to set up warm/hot -- sorry, hot/warm/cold zones; right? Once they've established the hot zone, which is where the individual, the active shooter, or wherever the problem might be is, establish what is the warm zone, where they can now go with fire, EMS, and police, and get in there and start triaging individuals that may need assistance.

So did you want to add anything to that, Kerry, as far as the clearance stage piece goes?

MS. KERRY MURRAY-BATES: I was just going to say that the clearance stage order, the determination to declare that or give that order is not made by Communications. It's implemented by Communications. So in Toronto, the clearance stage will come from our Duty Operations Centre, from our TPOC. And that usually comes from the duty staff or the duty inspector, whether or not they're one scene at the event.

DR. HUNTER MARTAINDALE: Then -- oh, sorry, go ahead.

MR. WALLACE GOSSEN: You wanted me to address the Command Post issue. Yeah, same thing. Command Post location is always difficult.

It's either too close or too far away. It's never in the right spot.

However, you know -- and absolutely we certainly teach wherever you are, you are the Command Post. If you're the commander, and again, depending on whatever level you happen to be at, whether it's, you know, front-line constable, sergeant, staff sergeant, inspector, you need to realize that if you're in command, wherever you move to, you are the Command Post. So that could be standing at the back of a car or that could be in a separate room. Could be in a dedicated vehicle.

For us, we've pushed to identify what are police, fire, and EMS led events.

So the idea for us is, you know, we go to an active shooter, it's a police-led event. So the police -- so the fire and EMS come to us, wherever our Command Post is. If it's a train derailment with chemicals on it, it's going to be a fire-led event, so we'll go to the fire Command Post. And then EMS, whatever situation happens to be.

So that's how we go through the Command Posts for us. Certainly within the Canadian Police College, we teach you to set it up in what's called the frozen zone. So you've got a crisis point, your inner perimeter, and your outer permitter, between the outer permitter and the inner perimeter is the frozen zone, and that's where you should be setting up your Command Post. And that's in a safe location, given whatever the threat is that you're facing.

MS. KRISTA SMITH: So if I'm hearing you correctly, that would be safe, but still near?

MR. WALLACE GOSSEN: Yes.

MS. KRISTA SMITH: Maybe?

MR. WALLACE GOSSEN: A strong maybe.

MS. KRISTA SMITH: Okay.

MR. WALLACE GOSSEN: Yes, absolutely. Right? I mean, because safe could be around the corner. But then again, safe might be two kilometres

down the road.

MS. KRISTA SMITH: So this was the follow up question I've been holding in my mind, is Kerry, you had mentioned that as an incident escalates to the critical level, it might be that a Major Incident Command Centre is set up. Am I right in thinking that is like a Command Post? And is that in a centralized far away location? Or is that ---

MS. KERRY MURRAY-BATES: So there's two; right?

MS. KRISTA SMITH: Okay.

MS. KERRY MURRAY-BATES: So the Command Post is at the actual scene of the event. Again, safe but nearby. And the Command Post is where the additional resources will be deployed so that the actual on the ground Incident Commander, whoever is in charge of that event on the ground, is located at the Command Post.

So as the dispatcher is getting additional resources, they're telling those resources to attend the Command Post. And once they get there, they're given their details by whoever is in charge of the event on the ground.

The Major Incident Command Centre is in one location. It's in our headquarters. And it's a standard set up with all the technology and it's -- yeah, it's off site.

MR. WALLACE GOSSEN: So ---

MS. KERRY MURRAY-BATES: And that -- sorry. That will have the Incident Commander who is part of the command cadre; right? So that will have the higher-ranking officer that will be taking charge of that event over the long term.

MR. WALLACE GOSSEN: The only thing that I'll add to that is so what we'll have -- it can be the Command Post on ground that is the dedicated Incident Commander who has overall command of the event and carries point. The Major Incident Command Centre is really acting in support of that.

MS. KERRY MURRAY-BATES: M'hm.

MR. WALLACE GOSSEN: Right? Because there's so much going on once you have to set up a Major Incident Command Centre. They're going to look after a lot of things that normally an Incident Commander would look after, but they just don't have the time because of the scope and complexity of the event. So they take a piece of that off of that commander's plate and deal with that. and they're in constant communication with each other so there's no overlap or duplication of process.

The next thing though that would happen is if it has become an event where you have more than one Command Post, that Major Incident Command Centre then actually would contain the individual that has -- who is in charge of the overall event; right? So you've got either multiple geological -- geographical locations, or multi-jurisdictional. Right? Things like that. Then it has to scale up to the actual person in charge is in the Major Incident Command Post; right? But it's a distinction I think that sometimes gets missed. Sometimes the MECC, as we call it, is in charge.

MS. KRISTA SMITH: M'hm.

MR. WALLACE GOSSEN: Sometimes it's just operating in support of the commander on ground.

MS. KRISTA SMITH: Okay. That's helpful. One last piece that I wanted to pick up on before we move on to a different topic is when you're looking at management of information within a critical incident response, what is the role of the scribe in that? You had mentioned that earlier.

DR. HUNTER MARTAINDALE: So really, there's two critical pieces for an Incident Commander. One is the scribe and one is the boards. So the boards person is there to write out the headings of SMEAC on the boards in the Command Post, or on sheets of paper, or wherever they happen to have writing space, but most of our Command Posts are set up with boards, white boards that they can write on.

And then it's really -- they create a large visualization of what's going on with the situational update so that you can look into the situation, the mission,

all of those things.

And then the scribe is actually the individual who takes the notes for the commander. So as police officers, obviously we have to take notes on everything, but as soon -- that's -- that takes away from you actually doing your job, especially in the chaos of the moment. So especially trained scribes that come in and will scribe your notes for you; right? So when you make a critical decision, you'll turn to them and say, "Okay, I've made this decision, and here is why. It was necessary, it was risk effective, it was acceptable", and you explain it, and they write that down for the -- for the commander.

They're so important that -- on all kinds of levels. Number 1, they document everything because we don't want the commander getting focussed on trying to get everything right when they've got multiple things that they have to be focussed on; and it also, for a prolonged event, when a commander comes in, they can talk to the boards person, they can go through the SMEAC, briefing themselves, having a look at everything that's going on; they can review the scribe notes, right, talk to the scribe. Meanwhile, that incident commander who's currently there, is just going about their business, doing their thing. They don't have to step back, put somebody else in charge while they brief the incident commander.

So that documentation of the process is fantastic for post, you know, inquest situations. It tracks all of the decisions that were made and the rationale for them, and it also assists in prolonged events for the briefing process for people to get situational awareness who are coming into relieve somebody else. And it's not just the incident commander. The tactical commander can come in and do all of that.

So there -- and that is -- the scribe -- scribes and boards take a one-week course at the community police college for -- to learn -- to learn that skill.

MS. KRISTA SMITH: So am I right in thinking that's a fairly common -- those are common roles to have?

MR. WALLACE GOSSEN: Very.

MS. KRISTA SMITH: Yeah.

MR. WALLACE GOSSEN: But if you don't have them, you have to make do with what you've got.

MS. KRISTA SMITH: Yeah.

MR. WALLACE GOSSEN: I have been my own scribe a number of times.

MS. KRISTA SMITH: Okay. I feel like we could continue talking about this area all day, but I want to move on now to one last major topic before we close this roundtable, and that is sort of the sensemaking that's done and the learning that's done after a critical incident. So it's sometimes referred to as operational debriefs or after event reviews.

So Bjørn, I'd like to turn it over to you on this one. If you could discuss, first help us to understand, you explain it in your report, the crisis cycle, and then we'll get into a bit how the -- the sensemaking piece after.

DR. BJØRN IVAR KRUKE: Yes. Thank you. I look at the different faces of a incident or a crisis that they kind of are interlinked. That means that if you -- in broad speaking and break down a crisis into three basic phase, the pre-crisis phase and the acute crisis phase, and the post crisis phase, your biggest activities in the pre-crisis phase would be the preparedness and prevention. In the west societies, they are successful in prevention in our everyday life, but not always. And so we need to prepare for the events we could not prevent.

And all the activities we do there in the pre-crisis phase will be of help to us when we end up in the acute phase in the response. So that's more or less the exam, the test of the training, the test of equipment, the test of response structures that we have prepared in the pre-crisis phase.

When it comes -- when the acute phase is over, we move on to then a post-crisis phase, and in many respects that's an extremely important phase, and it's important because of the learning aspects. You have the recovery, of course, very

important, but you have the learning aspects. And the learning aspects, they need to map what kind of experience did we have at all levels of response, and we need to take that, all these learning issues on equipment and tactics and communication and everything, and look deeply into what do we need extra to put into our structures for the next pre-crisis phase?

And that means we need to have a structure in the organisation that take all the learning points and transform them into a change in the organisational structure. This is related to the bigger events, of course, the events with a evaluation committee or assessment committee or inquiry. And in the -- in the -- in the package we have received, for instance, it's a report by Dr. Kevin Pollock providing an overview of 32 events, and he chose these events because of public inquiry, all the significant impact on public consciousness.

It might be that we, in addition to using these bigger events as learning opportunities, also should focus on the minor issues, the minor, where it went well. It could have been a coincidence, it didn't end up as a -- in a mass casualty event because it was handled by the first responders or the population. But it -- still there might be very good learning opportunities.

So -- and I'm quite sure if you talk to field officers in all the blue light agencies, they have a lot of good learning experiences, and -- that they would like to share if they are asked. That's more like ordinary daily type of activities. So talking to these field officers or talking to response personnel on all levels of response about their experiences, that's a good strategy for learning of their evidence. And debriefing, operational debriefing, and the critical incidents, just the debriefing, that's also learning opportunities.

MS. KRISTA SMITH: So when you're doing operational debriefing, I'm interested in where the focus should centre. It's possible that it could be on individual decisions made, but maybe it's on something else.

DR. BJØRN IVAR KRUKE: Well, that's a good question. It's a

trap there, looking at it in retrospect because we have all the answers, we know exactly what happened. But for the people they then interview or talk to, they didn't have that kind of knowledge, and they were struggling to find out what was going on. And to be able to understand that uncertainty, they feel them making critical decisions that is -- we need -- we need to have a kind of deep understanding of that when talking to people that has been making difficult decisions in a mass casualty event.

That is -- that is one issue. Another issue is that they make decisions and they implement action based on what they have, what they have available, and of course it might be that what they have available is not sufficient to handle the situation at hand. And I believe we should be careful in criticizing people for not having the equipment they should have to handle the situation at hand, and also criticizing people for making decisions based on -- well, afterwards. We know exactly what was going on, so we have all the answers, and they didn't have.

So it's a delicate type of interview process talking to people, trying to make the best out of the situation in which they find themselves.

MS. KRISTA SMITH: And I think the other piece that I'm interested in exploring a little bit is the individual and very unique circumstances that any one person finds themself in at a point in time. The point of operational debriefing is to extrapolate from that experience into something that you can learn from and perhaps have an impact for the future. So is there anything more to say about that process, how you can have an interview one-on-one with someone and hear about their experience, and then what's the process to get to, okay, this is what we learned, and this is how we implement it?

DR. BJØRN IVAR KRUKE: That's a tricky question. I ended my report with a statement related to that. It's concerning -- let me see here -- yeah. In change, we see that learning is a priority. If we have some good experiences based on a critical incident management, if you have some good experiences, and we'd take that kind of experience, and we would like to see what will -- what can happen then to these

experiences. This is so that we focus on them, and we use them to change maybe equipment, organizational structure, there may be communicate, there may be a cooperate, and in the end, it is in the change that we see that we have learned.

And in that respect, it's an organizational, it's a system issue, not an individual issue. We tend to focus on the frontline people and the quietest. But behind the frontline people, you have a huge organizational structure making, well, decisions, priorities all the way, giving the frontline people some -- well, training and equipment to deal with certain scenarios. If it is so that the equipment is not sufficient to handle the situation at hand, it might not be the frontline people that need to take the blame for that. That's an organizational system issue.

MS. KRISTA SMITH: And then when it comes to implementing learnings after an operational debriefing, what are some of the factors that can get in the way of implementing learnings?

DR. BJØRN IVAR KRUKE: A lot. One issue could be fear of blame. It could be that -- well, you have a lot of values to learning, and you have some incentives not to provide all the information that is available. It might be that the information you have is incomplete and you don't understand. So -- and in the organizational you've got the priorities. Of course, there are different interests in a huge system with all the levels of the response system. So you have different agendas. You have different mandates and different priorities, and you have -- well, it was mentioned earlier today that we have people working on prevention, very important. And we need also to focus on response. That's also important. Some decisions needs to be made based on how much effort should we use on prevention and how much should we use on response.

So different priorities. And in the end, it boils down to -- back to the risk analysis, the risk-based approach, what kind of dimensioning of preparedness structures do we need to handle certain scenarios and certain situations.

MS. KRISTA SMITH: Okay. Thank you very much, Bjørn. I'm

going to take it over to Kimmo now, and still on this topic of operational debriefing, and given the model that's used in Finland, where research is just part and parcel of developing good practice, how does operational debriefing fit into that picture?

DR. KIMMO HIMBERG: Thank you, Krista.

I have to say that I feel a bit uncomfortable with the term "operational debriefing". I'm not sure if you are referring to a kind of evaluation of the success of the operation with that. We have built in since 1990s a debriefing system for various psychologically complex situations, and the process starts with what we call "defusing," which is a fast, a rapid debriefing which is done as soon as possible after the incident, among colleagues. I mean, there are -- there is a number of police officers in Finland who have been trained to lead defusing, and that phase, which is, if possible, performed before the end of the shift, so as soon as possible after the incident. That's often enough in many cases. The simple discussion about what has been experienced between colleagues may be enough.

In the major incidents, the process continues with what we call "debriefing", which is then a longer approaches where very often Occupational Health Services is involved, so we have medical doctors and psychologists taking part in the process. There is no fixed scheme for that because it depends on the situation, and it depends on the people involved. Some may need, depending on the type of the incident, some may need more support than others. And this psychological support to officers needs to be clearly separated from an evaluational phase of -- or an evaluation of the operation itself. There is often no hurry with that. So, when necessary, the debriefing needs to be done first, before all those involved are ready to enter a phase where actions are being assessed, and decisions that were made are being evaluated, et cetera.

MS. KRISTA SMITH: So ---

DR. KIMMO HIMBERG: But as I said in the beginning, for me at least, operative or operational debriefing sounds a bit confusing.

MS. KRISTA SMITH: So, yes, to clarify, which I should have done in the beginning, I was using that term to distinguish it from what we might call or what I've heard called psychological debriefing.

DR. KIMMO HIMBERG: M'hm.

MS. KRISTA SMITH: So I think that the evaluation piece is what I was referring to. But it's ---

DR. KIMMO HIMBERG: Right.

MS. KRISTA SMITH: --- helpful to hear you say, really, to summarize that there would be your immediate debrief, the defuse piece, and then ---

DR. KIMMO HIMBERG: Yeah.

MS. KRISTA SMITH: --- it's necessary really to do some processing psychologically around what's happened before you then have kind of the space to talk about, okay, what went well, what didn't, what can we learn.

DR. KIMMO HIMBERG: Yes, yes. And indeed, we wouldn't call that debriefing at all, to avoid confusion.

MS. KRISTA SMITH: You would call it evaluation?

DR. KIMMO HIMBERG: Evaluation, assessment, yes.

MS. KRISTA SMITH: Okay. Yeah, and Bjørn's just going to jump in for a second.

DR. BJØRN IVAR KRUKE: Yes, I fully understand what you're talking about. When it comes to the diffusing directly after an event, especially with the people directly involved with the team or the group, that's -- well, you have several reasons to do that, and one will be to alleviate some stress.

But in addition, you will be able to bring certain issues on the table that might be important for -- well, it's a learning opportunity. And, in addition, you have -- in certain organizations you have, at the end of the shift, you have a few minutes where you are able, then, to talk about it, "Okay, well, what happened today, and how did we perform?" And that is also a good learning opportunity.

So the team learns; it's a lot of good learning in the team. Do we bring that one up on the organizational level so that -- also, the rest of the organization will be able to learn from what this team did experience on this shift?

So good learning is happening on field level in teams. I believe that it is a challenge to lift that kind of learning up to the organizational level.

MS. KRISTA SMITH: So if we could pick up on that piece of it, lifting the learnings up to the organizational level.

I'm thinking, Kimmo, in the work that you've done at the college, that's precisely what you're involved in.

DR. KIMMO HIMBERG: It is indeed, yes. Exactly -- exactly this. So for example, examining carefully how the police operates or operated in a major incident. Well, first of all, of course, there cannot be strict guidelines on how to manage such a situation. So I would be careful in -- for example, in using the word, "mistake" in this context. But whether the decisions concerning, for example, operational -- operative aspects, whether they were correct; whether they were made at the right time spot, et cetera, those can and should be examined carefully, and then those experiences transferred again to training, and also, perhaps, to new guidelines. That's what we try to do, at least.

MS. KRISTA SMITH: So there's two aspects of that that I'd like to explore. One is that at times, sometimes learnings are more cultural in nature, and how do you -- especially being at the college, how do you help to shape shifts in culture that might be -- that might come out of an evaluation?

DR. KIMMO HIMBERG: Yes, indeed. Yes, indeed. There is a great benefit here -- once again, I'm sorry, I'm repeating this. It's a great benefit that we have a national police, and the Police University College also, it is a regular university of applied sciences, and follows all the guidelines that the univers -- sorry; Minister of Education, for example, sets for universities. But it is simultaneously inside the police organization and cooperates closely with the police units. It gives us a great opportunity

nation-wide to collect experiences.

And it goes without saying that that's not only done in the context of major or critical incident, but we continuously perform research projects where practices -- police practices and police experience is collected and evaluated, and then on the basis of the analysis, we are able to -- either to immediately influence and make changes in the training procedures, in the education degree programs, but we are -- we also cooperate so closely with the National Police Board that we are able to influence the orders and guidelines that the National Police Board will give for the police nationwide. So there is a very direct connection between collecting research data and then utilizing it in developing policing.

MS. KRISTA SMITH: Okay, that's helpful.

So I want to take that thought about you're in the context of a more centralized and coordinated system.

If we could take it to Hunter now; where the system isn't necessarily centralized or closely coordinated, how do you work some of the learnings of evaluation or operational debriefs into the training that your centre does?

DR. HUNTER MARTAINDALE: Yeah. It's -- I'd almost venture to say it's the backbone of every change that we make going forward. Like I say, we started off as a straight law enforcement, quick response type of programme. We learned from after action reports that there are incidents that single or double officers were able to get in and stop this. So we started shifting training away from having a five-person team, which was the SWAT model at the time, and bring it down to smaller units. We see civilians responded in stopping some of these events; we adjust training to give civilians some tools, some options of what you can do: Avoid Deny Defend system, which got turned into Run Hide Fight, which most people know.

We see issues with the command and control part of it; we adjust and build out systems to try to push those best practices that are identified in after actions out to our people. Dispatchers have -- came to us with ideas about how we

could better incorporate that part of the training in, so we developed some dispatch training. Everything we do is based off of learning from events and running research projects and figuring out what works and how best to incorporate that to just give people options, basically.

The US is very interesting and very different from Finland in this way, in that there are so many different agencies. And every now and then you will have officers that they go through and get a research-based degree, and they study police, for the most part. Not all of them but a lot of them study police, and they have the ability to get into police departments and have police officers as participants in their studies. They're able to get in and do surveys, which is the police here are really hard to survey overall; they're very protective.

So it's -- the US is interesting in that you do have pockets of researchers spread around that have access and are able to learn -- learn things from officers and have them as participants. And so you get this just large pot of research.

It's interesting in that you now have to try to extrapolate those findings to 18,000 different departments and training practices because every department is so different, is that -- is that unit generalizable outside of, you know, wherever PD it is.

And so there's -- it's interesting that there's a lot of people doing it, and you have the ability to run a lot of research. But then you have to take a lot of those projects and really evaluate them and see if -- you know, think about the validity as larger than just that single department that they could have done.

And alerts, we do maintain a large sampling frame of everybody that's ever gone through our training. And so we send surveys out and we try to get at information with those roots. And people retire and they come and go so we don't always have great response rates, but we try to hit as many agencies as we can because they are so very different, and we try to figure out, you know, are y'all incorporating whatever policy or procedure; how has this worked for you, kind of thing.

We take that information back and see what's working for them. If they're doing things, what -- if it's a tactical question, you know, what tactic are incorporating in your training? And we can get a picture of this is what people are doing and we should test this idea. So we use it to try to lay a foundation for what we're currently doing and what we're planning to do with new courses going forward. So huge part of what we do.

We've been pushing to try to establish -- so NTSB is an organization for flight accidents. When a plane crashes, NTSB goes out and investigates that plane crash. And there's always an After-Action Report and it's structured and it follows the same thing. The same organization does the After-Action Report.

We've been applying for funding for the last few years trying to get an agency to bite that will help us establish essentially that for these types of events. So if there's some sort of, it doesn't have to be an active shooter. It can be anything hat has these types of outcomes, mass casualty type of events, where if it's us, or if it's us partnering with other people, are able to go out and have access to do those After-Actions.

If you've read through the After-Actions, and I assume most people here have read through the After-Actions from these events, they take a long time to come out because they're doing a thorough investigation, but the quality varies a lot because the individual jurisdiction is doing it, or somebody close to them, and they're not all the same.

So we've been trying to kind of influence and push that way so we could have a standardized After-Action Report with the sole purpose of trying to get that data out and help ourselves, but agencies across the board see what's happening in these events and incorporate what they can to get themselves an edge, if they can.

MS. KRISTA SMITH: Thank you. I'm going to take it back to Canada now that we've heard a bit about operational debriefs and evaluations in other places.

We're in our sort of home stretch of time here, so I'm hoping that we can -- maybe Wallace and Kerry can speak a little bit about what they know of operational debriefs in Ontario, and then we can bring it back to Nova Scotia. So that's the plan.

So Wallace, maybe can we start with you?

And I have a couple practical questions too. I mean, we heard how, you know, Kimmo talked about defuse the immediate and then the psychological, and then the evaluation. Like, does it follow the same structure, generally, in Canada?

MR. WALLACE GOSSEN: Oh, absolutely. And I think everything that they've said is very much in keeping with the experience, certainly that I've had, with debriefs.

And, you know, the -- we call that, the immediate debrief afterwards, the hot wash. Right? And it's literally before everybody packs up and goes home. Again, these are, you know, depending on the event. But certainly, you know, from back from, you know, the tactical or the bomb side of things, anytime we had a call, you are going to debrief it at least to identify what did we do good and what can we improve on; right? In the event that this turns around and happens 24 hours later, right, what can we fix, right, so that we're in a better position the next time it comes around?

And it almost always boils down to equipment and communication for the most part.

And it's also very beneficial for individuals to fill in the knowledge gap. I mean, I may be looking at you thinking, "Why did you do that?" And then in the debrief, I find out, I'm like, "Oh, that makes sense."

And that's, I think, psychologically very important, especially when you're trying to build trust in the team.

You know, the other piece is the debrief for your scenarios, where you exercise all of these components, because it's -- my experience has been people have to practice admitting they made a mistake or being honest and you need to

generate trust and be non-judgemental, which unfortunately with a lot of these situations, you can't help but be.

And that's why I think it's very important who does the debrief; right? I can't -- I think it was Kimmo. I can't remember who said it, but it's a very good point. You know, if it's a situation where there's going to be criticism and we know there's going to be, it needs to be done by somebody who has been there, done it, and is going to be sympathetic to somebody who is in that situation.

And you know, again, debriefing is a very complex thing. And, you know, the worst debriefs you can do, in my experience, are you throw everybody in a room together and say, "Okay. Let's go through what happened." It really needs to get broken down into trusted groups, where those individuals can go and talk amongst themselves. One individual is tasked with bringing forward, you know, the issues, shall we say, the good and the bad issues that arose in that little group, and then those spokespeople get together and have a discussion, because I've found, psychologically, it can be very difficult for people in a large group that they don't know, being, shall we say, not challenged, but sometimes it feels like you're being interrogated, especially if you don't know that person, and trust that person, or at least have an understanding of where they're coming from. Your debriefs can almost be to the point where you may as well not even do them, because you're not going to get the honest feedback that you need.

So again I think, you know, everybody here has hit on it. debriefing is a skill. Right? It's a skill for the person that's conducting it. It's also a skill for the individual that's being debriefed. And the only way that you get those skills is through experience, and it doesn't have to be -- I think, you know, that practice of doing the debrief at the end, just even for minor things, let's just have a quick conversation about what happened, has a long way towards debriefs in the future going better for you when you do hit a major event. So.

MS. KRISTA SMITH: So from a good debrief, one that is more

evaluative in nature, ---

MR. WALLACE GOSSEN: M'hm.

MS. KRISTA SMITH: --- how do you see the insights from those operational debriefs carrying forward? How do you implement it?

MR. WALLACE GOSSEN: So everything from, depending on the team, they'll have their own SOPs, Standard Operating Procedures, that they may update as a result of a debrief that they did. Now, that's much easier to do with smaller units. But all the way through to -- and at that point, it's the leadership of that team or that unit to recognize this is an organizational issue that we need to go back and address in our procedures, and then they take that up through the chain of command.

And I think what you'll find for the most part is when you go back and you look at SOPs and you look at procedures, the strange things that seem weird in there typically did come from a debrief with a real-life experience. It's just that it's been lost, you know, corporate knowledge wise, because those people have moved on.

MS. KRISTA SMITH: So that is a question I've had in the back of my mind, is it seems like, you know, when memories are fresh, you remember those learnings. So how can -- how do you ensure that learnings don't fade from institutional memory over time?

And you mentioned, you know, you amended the Standard Operating Procedures. There's another step though of getting people to embody ---

MR. WALLACE GOSSEN: Yes.

MS. KRISTA SMITH: --- Standard Operating Procedures.

MR. WALLACE GOSSEN: Yes. I -- the quick answer is you train it. Right? You know, and I mean, that comes down to your trainers recognizing the lessons that were learned from the last call that you were on and, "We need to reinforce that, so you know what we're going to do? We're going to incorporate that into the next training that we do." Because you're right. Nobody is opening the book in the middle of a call and saying, "What's our, you know, Standard Operating Procedure for this?"

They have to have -- they have to experience it, either operationally or in training, to embed that in them and to be able to transfer that knowledge then on to the next people that they are training.

MS. KRISTA SMITH: So Kerry, what does operational debriefing look like in the Communications world?

MS. KERRY MURRAY-BATES: So I'm going to add to what Wallace said about operational debriefs.

I just want to add in that in the Province of Ontario, we have the Special Investigations Unit. So in events where a citizen is injured, it could be critically, it just depends on the injury, there's a level of injury that qualifies for the SIU, invoke their mandate, we will not have operational debriefs in those instances. So -- and we will not have them until the SIU has done their work because they're investigating the actions of the officers. So we will not have those.

And that can be -- they can be delayed, but it can be months. So we wouldn't have a formal operational debrief then, which adds a level of complexity to the debrief because we can carry on and have a critical incident stress debrief, but a lot of times, it's events that happened operationally that create the feelings that you want to talk about in the critical incident stress debrief; right? Or the defusing, as Kimmo called it.

In Communications, we -- two things. We do our own internal debriefs. And then our Communications operators are included in the debriefs with the operational teams. So the officers that attended whatever response was formed.

Inside the unit, I have found in my experience with my people that our Communications operators want to know that they followed the policy and procedure, and they want to know that they did everything they could to make sure that the response was what it should have been. Did they do their part?

So often, our debriefs will be very informal and very quick, like a hot wash, like Wallace suggested, where a supervisor will sit down with that person and

they'll review the call, and they'll review the procedure, and they'll perform some reassurance. If there's mentoring or guidance to be performed, it'll be performed in that moment. And this helps the communicator not just professionally, but emotionally as well; right? Because it offers that reassurance and support, and I find that that's very important.

We also have debriefs for unit events. So it's not on the caliber of, you know, an extreme event where people are injured, but certainly, recently, we had a failure in our 9-1-1 centre where our phones went down. Well, for us, that means there's no 9-1-1 service for the City of Toronto. That's a big deal. So once we went through our evacuation procedure, then we put all the leaders in the room together and say, "Let's review what happened, what we did about it, and then what's the -- where do we want to be? What's the perfect option? What could we do better at? And are there things that we can do where we can mitigate? How do we ensure business continuity? How do we overcome failures?" Right? The technology is always going to fail. It's what we're going to do about it. So, you know, to speak to that point about communication and technology or equipment, you know, there's things that we can fix right away that are -- the scope is maybe a little bit differently in that we can have immediate impact, and then there's things that you identify that maybe are going to take a little longer, like, technologies. And then, you know, we do the proper after-action reports, and then we start to action where we want to go from lessons learned.

MS. KRISTA SMITH: Bjørn?

DR. BJØRN IVAR KRUKE: I think it is also important to realize that this is not the perfect scenario. It's not the perfect situation to be in. There will be decisions that is not perfect. You will have equipment that fail. So these things happen, and, of course, we need to make sure that we are more robust for the next one, but going into an accident investigation with the idea that we are looking for the perfect solution, it's not a perfect situation. So and Kimmo mentioned, was it failure or mistake? Mistake. It might be a decision at the time that is understood that this is a good decision

for the situation at hand. Later on, you will realize that, no, it wasn't a good decision, but you need to make a decision. So to realize that when we do these accident or incident investigations afterwards, in quietus afterwards, realizing that it's difficult to be in this situation, if not for the uncertainty and the urgency of the response, and to realize that if we -- if it is one good learning issue, that will be that to make decisions under a high degree of uncertainty is difficult. And when you take that one to training, how can we actually train decision makers in making these difficult decisions in a training scenario that is relevant.

MS. KRISTA SMITH: You're giving us a teaser for tomorrow morning. We'll be looking at critical incident decision making.

Wallace? You're okay?

MR. WALLACE GOSSEN: Sorry, I was going to jump on that, but if we're talking about it tomorrow, I'll wait until them. I -- but I do want to reinforce Bjørn's point about you'll never see a perfect run. That idea of you didn't do it perfectly, so we're going to criticize. No, it never happens. Nothing ever goes perfectly; right? And then, yes, we'll talk more about the quality of decision making at the time next -- tomorrow. Thanks.

MS. KRISTA SMITH: So just one last question before we close, Stephen, let's bring it back home to Nova Scotia and talk about maybe operational debriefing norms and how lessons get incorporated into practice among municipal police agencies.

MR. STEPHEN MacKINNON: Yeah, I think we -- thanks, Krista. You know, operational, tactical, psychological debriefings, we do them all. That's based out of failures and that's where we recognize back in the late '90s that we didn't really do debriefings a lot. So those training scars, if you will, or situations that happened that didn't go well, and they were kind of overlooked. So it's mandatory where we're at. Everybody has a voice, and that's from the -- every containment traffic officer who experienced being left there for six hours and somebody forgot about them, and it was a

hot day, and so -- because your next experience with that individual, no matter what part they are of that plan, has a direct effect on the successful outcome of the following, the continuing. So we treat everybody as -- you know, sometimes we put tactics up here, and -- or containment here, but it's all part of the success of that plan, so everybody has a voice in that.

If you don't evaluate performance after each and every event -- and we do. We do the hot washes with the operational right afterwards, knowing full well the people that we're with, some people don't want to disclose anything at that moment, so that's why we wait and kind of observe, and if we feel that there's people that need maybe a touch from our wellness or our clinical therapist afterwards to check in, to say why you didn't attend, or is there something that we need to talk about privately, because everyone processes differently. So that's in place. So there's been some successes for us there. But I think going back to the learning piece and training, that's where you learn.

So we even -- when things are successful, like Wallace said, there will be a piece that we didn't do something properly. Maybe we did get that person out of the house successfully, there were no injuries, but there would have been something inside of that event that we could have changed for the next event. So it's mandatory. We constantly evaluate that and try to -- I know even in other units, from K9 Units to situations where calls happened and they didn't locate somebody, and they'll go back and do that in their training to say, you know, what could have happened better, what could we have done different, and evaluate that within their own units. So we apply that in several different facets within the police department to get a better look at what we're doing and try to -- each individual try and make it better. So operational, psychologically and tactically. The tactical officers usually do that, they'll do their own wash alone, because of just the -- I think it's that world. The -- you know, some of the things that maybe the patrol officers or somebody outside of, like, tactics is actually all about maybe wouldn't understand it, or maybe they don't want to err what those things are in a

public forum, so they'll deal with it in-house with their team commander, with their team sergeant, and the rest of the team to make those changes for next time. And that could be just anything from decision making to who was in line-ups, whatever that is.

So that's we found, we usually do tactical debriefings off the side, but those officers will be part of the all -- the over-encompassing operational debrief.

MS. KRISTA SMITH: And do you ever -- you know, this could be for anyone, but, Stephen, I'll direct it to you. Do you ever see operational debriefs happen among multiple agencies when it's a multi-agency response? So how could coordination have been better here?

MR. STEPHEN MacKINNON: Yeah, I'm just trying to reflect back on past incidents myself. I know the recent one a couple years ago in '19, I believe, there was an operational debrief on that. I don't -- like, I can't give you that personal experience of what the outcomes, but it is part of our process in terms of that evaluation, whether it's with our own teams, our own units in our police service, or outside agencies and partners and stakeholders to say what could we have made better. But I don't have enough experience in that area, like, it only happened to myself once or twice. It did happen, and but no real past experience maybe because of our geographical location in Cape Breton where we're on that island where we do our business. And unless it's a significant event that happens every couple of years, and thankful for that, that joint piece, besides the, you know, a parallel incident of a fatality motor vehicle accident where you have some other agencies and go back and do debriefs on that, so that does happen. On the critical side of the house, maybe not so much.

MS. KRISTA SMITH: Thank you.

I'm quite conscious of the time. I'm going to resist the temptation to ask for more and just check in with each of the Commissioners to see if you have some follow-up questions.

COMMISSIONER FITCH: Thank you very much, Krista. I have

thoroughly enjoyed this panel and the sharing of the panelists, and I know that we could spend at least a couple of days on some of these topics.

I'm going to start my first question, actually, with the last topic, and that is around the after-action reports. And it seems to me that there is, you know, great training place for Critical Incident Commanders, various tactical training.

We know that we have training for how to run a proper critical incident stress management debriefing. Is there anywhere in the training that shows how to do a proper after-action analysis, something that can be standardized? And I think one of our speakers talked about that -- that need, I think, down in Texas, that there's actually -- the burden oftentimes falls to the people within the organization that were directly involved and impacted and they're trying to process that. And really, to have somebody step back and do a proper analysis to help draw out some of those critical learnings.

Any thought on that from the Canadian front? Because I know we heard a little bit from the U.S., so.

MR. STEPHEN MacKINNON: I know just from our own personal experience -- and that's a great point. I don't think that's something that's been covered in that way.

I think we do our own as a group. We usually appoint someone who's a scribe after an event to take notes, the good and the bad, and go back and apply that in our training piece. But as an overall, you know, entity just to do that piece, that's not my recollection from my experience.

MR. WALLACE GOSSEN: No. The only thing, really, that we teach in Critical Incident Commanders is to make sure they do one, but there's no specific instructions on how to do one.

MS. KERRY MURRAY-BATES: I'm just going to add, in our service, it's done internally. Normally it's done by a senior officer that was not involved in the event.

COMMISSIONER FITCH: Thank you for that.

Perhaps an area of recommendation to follow up on.

And I'm not sure who might want to speak to this, so Krista, you might be able to help stick-handle this a bit, but it's -- has to do with the flooding of police officers to a scene, and that was a really good point that was raised here.

If somebody could speak to how we can help to train or rewire thinking about the rapid response into a scene and having somebody who is taking command before officers arrive on scene to start to orient the resources as they go.

And the reason I'm asking somebody to speak to this is that there is -- there seems to be a hardwiring of rush, rush to the incident and not enough sober second thought to say, okay, we need people starting to think about the outer perimeter on the way in because, quite often, somebody's fleeing a situation when we're rushing in and we miss opportunity.

If anybody could speak to that on how we can start to rethink of not only when an individual officer arrives on scene who is the lead officer, whether it's a Constable or a Sergeant or a Corporal, but who takes control on the way there to start to orient people, to slow down and think rationally through as they go.

MS. KRISTA SMITH: And I'm happy to say that our afternoon roundtable will definitely be addressing that, so in the meantime, do we have any volunteers?

Wallace? Oh, Kerry.

MS. KERRY MURRAY-BATES: So in the process of starting to -- the event comes in and the dispatcher is usually kind of the control in the beginning in that they're giving out as much information as they can. We have procedures that tell us, depending on what type of event it is, how many officers are recommended for dispatch. They will do the initial dispatch and then there's always the direction of the first unit on scene to advise, right.

And so there's that preliminary response and then once those units

get on scene and those officers start to provide information about what they're seeing and what their needs are, then the dispatcher can then act further on deploying more resources and making further notifications.

Again, part of our procedures with certain events, and it usually involves, you know, something that is in progress, something that has to do with a weapon, imminent threat to life, the notifications in the background are already happening, so we run on a policy of we would rather over-notify than under-notify, so we'll tell everyone, and 85 percent of the time, all of those other resources are not required, but when they are, what it does is it provides the officers opportunity to start listening right from the onset.

So prior to officers responding, prior to a road Sergeant being assigned, that's pretty much how it looks, is that we wait for the first officers on scene to give us their first interpretation of what they're encountering and then we react from there.

COMMISSIONER FITCH: Thank you.

And unless anybody else wanted to jump in, Krista, that's all the questions that I have.

COMMISSIONER STANTON: Thanks. I have a number of questions, but I think some of them may be better placed this afternoon, so I'll hold on some of the ones that I have.

I'm interested in -- because this is the preparedness session, in a couple of points that you made in your paper, Bjørn. One with respect to you -- I know you said you can't -- that you can't train everyone for every scenario, obviously, but you did make a point of noting that there is a need for specific training in open terrain, that most training is for an indoor scenario.

And I wondered if you could say more, please, about the need for open terrain training.

DR. BJØRN IVAR KRUKE: That comment is based on the

understanding of these kind of trainings in Norway. The police academy there normally use an old school or a type of school shooting scenario, and that means that they're good at establishing zones. So they're actually good at training for a response in a building.

What -- one of the learning opportunities after the Kongsberg mass casualty event was that it happened in the terrain. It started in a -- in a building, in a shop, but it ended out in the terrain. And then it was some issues about how can we -- a dynamic unit, how can we -- how can we establish zones in such a scenario.

And then we've had other experiences, other incidents as well where the incident takes place in a street or at the Utoeya, the island there, so it's an increasing discussion now in the -- in Norway and the police, why do they train for school shootings now? We haven't had experience with school shooting in Norway, so why do we do that?

And -- but even though we train in a building, it's possible, in addition to that training, to have some discussion about, okay, we have now a training scenario like this. Typically, if you'll experience a mass shooting event, it may not look like this, but it's okay because the way we train now, you will be able to utilize that kind of training in various settings.

And that's for -- well, it's mostly true, but again, when you have your training experience, you would like to implement that one in a given situation, but it might be that you miss out in your training on certain issues and you will feel that when you're in the middle of a situation where you have not that much recognition.

COMMISSIONER STANTON: Thank you. And then along the lines as well of preparedness, we heard from Stephen about the relationship-building in community, and Bjørn, you talk about bystander training in your report, and that whole idea of the first shift is often civilians or -- and/or EHS or fire that are there.

I wondered if anyone has any insights with respect to, or any models or anything that they want to point us to with respect to bystander training or the

idea of that for shift kind of recognition, how to gather information, local knowledge from people, and how to ensure that sort of community-building? It was really helpful to hear that from Stephen. I wonder if others have any insights or experience on that aspect?

MR. STEPHEN MacKINNON: So one of the things that we've done in York really taken the Run, Hide, Fight model from the U.S., adapted it a little bit more to our environment in York, we called it Run, Hide, Defend, and produced a video, and it's for schools, it's for anybody who really wants to have it. There's printed pamphlets that you can print off and have in your business, your school, whatever it happens to be, and it's all free on our website. So our school resource officers point that out to any of the schools that they're involved with, as well as our community services people will, anytime that a business.

And you know, typically when we have something like what happened in the States, this comes up again. It's a standing thing that we have on our website. They can go there. It's a well-produced video, shows them what to do in the event of an active shooter, gives them resources, encourages them to place things in their work or school that, you know, just like we have fire exits on doors and things like that in businesses, encourage people to put these pamphlets and to have things available to people so they're seeing it constantly so that when something does happen they can fall back on that little bit of learning that they have.

So that program has worked very well in our community, and it's gone over very well. It's always a sensitive topic to bring into schools, however, it needs to be done. We don't have a problem talking about fires and things that can go bad in schools for children in that case, so certainly moving the needle into having those discussions and having those plans in place and the resources, whether they choose to use them or not, but the resources available to the schools and your local businesses as a police service I think is very important.

MS. KRISTA SMITH: Hunter?

DR. HUNTER MARTAINDALE: Yeah, I'll just go off of Wallace

there. We have the Avoid, Deny, Defend Program, which is what Run, Hide, Fight was built from, and we push it out through a course called CRASE, so -- everything's an acronym, Civilian Response, Active Shooter Events. And it -- we have it set up one for businesses, they can -- they can request courses and we go out and train their organisation, but we recently moved over to an e-learning platform. So it's free, you can go on and take a course, I think they give you a certificate at the end of it even.

And Wallace mentioned schools. With the Uvalde events, so that we've been working on it for a couple of years but haven't had anybody bite, given us the funding for it, is an age-appropriate civilian response class. So obviously, if you're going to go into schools and teach kids, it needs to be in a way that it's not going to be traumatising to them, but they can learn skills and have that -- which orally you have to have that ability, but it's something that is moving that way.

In the States, there's a few different programs, I'm sure you've all seen them, A.L.I.C.E and different ones. Run, Hide, Fight is probably the most well known one, but those are -- those are resources that we keep to give out. Because you see several events that the civilian reaction stops the event. Almost half of them are over before law enforcement arrives. So it's a huge impact on what -- how these events unfold in the end.

COMMISSIONER STANTON: Thanks very much. Given the time, I'll reserve the rest of my questions for later. Thank you.

COMMISSIONER MacDONALD: Thank you.

Krista.

MS. KRISTA SMITH: Okay. Well, thank you so much for coming this morning and for sharing your knowledge, and we look forward to further conversations with several of you over the next day-and-a-half. As we've said to you in our prep meetings, we just so appreciate the generosity that you bring in sharing your time and expertise with us. It's -- it really helps us to bring what we're hearing of the evidence into context, it really helps. Thank you so much.

COMMISSIONER MacDONALD: And allow me to take this opportunity to thank you, Krista, for your wonderful facilitation. It was very helpful. And I repeat what you said, Krista, on behalf of the Commissioners, how grateful we are to all of you for sharing your very important insights, which is directly related to our mandate. And you know, we're doing very difficult work, very challenging work, and it's very inspiring to hear all of you with your forward-thinking focus.

In particular, thanks because I think everyone but you, Deputy MacKinnon, will be back at a later panel. So Deputy, thank you so much for sharing of your time. I've mentioned this several times now, but one of the gratifying things about the work we're doing is, is that when we ask people to step up and help there is never a hesitation, and that applies to you, and we really, really appreciate it. I know you've obviously given a lot of thought to your remarks before you came today, and they were very pragmatic and thought-provoking and helpful, so thank you. And thank all of you.

And we'll break I guess until 2:08? Yeah, we have some -- we have some -- a meeting over the next hour, so I think we're going to need the hour, and -- 2:15 we'll call it, yeah. Thank you.

--- Upon recessing at 1:09 p.m.

--- Upon resuming at 2:18 p.m.

--- ROUNDTABLE 2: CRITICAL INCIDENT RESPONSE: CIVILIANS 9-1-1 AND FIRST RESPONDERS:

MS. EMMA CUNLIFFE: Good afternoon, all. My name is Emma Cunliffe and I'm the director of Research and Policy for the Mass Casualty Commission. As facilitator of this afternoon's round table, I will be directing the questions, asking follow ups, and moderating dialogue. The Commissioners may choose to pose a question or ask for clarification at any point.

As you know, round table discussions will form part of the Commission record. They're being live streamed now and will be publicly available on

the Commission's website.

I would like to begin by thanking our round table members, and I'll ask them to introduce themselves in a moment and reminding all please to speak slowly for our accessibility partners.

So to begin, I will ask each of the round table members to introduce themselves. And while we had introductions this morning, I will ask you to remind audience members of your institutional affiliations and your role, the reasons that bring you here today, in particular for those who may have joined us this afternoon but that may not have heard from you this morning.

So, Professor Kruke, if we could please begin with you?

DR. BJØRN IVAR KRUKE: Yes, thank you. Once again, thank you for being enlightened. I work at the University in Stavanger, west coast of Norway, within the risk management and crisis societal safety, special within emergency preparedness and crisis response. And I have a research interest in that area, and I'm also interested in what's actually going on in a crisis area while the crisis is unfolding. So that's kind of my angle within this.

MS. EMMA CUNLIFFE: Thank you very much indeed.

Ms. Murray-Bates, if I may ask you to go next, please?

MS. KERRY MURRAY-BATES: Hi, I'm Kerry Murray-Bates. I'm the manager of the Toronto Police Communications Centre. The Communications Centre is the 9-1-1 Public Safety Answering Point for the City of Toronto. It's the largest municipal PSAP in the country. I -- my current role, I'm responsible for pretty much overseeing all operations, recruiting, testing, hiring, performance, operational standards, policy and procedure, as well as all the support functions, so the technology, the computer-aided dispatch system, the phone system, the transition to NG 9-1-1, radio and then disclosure to support court proceedings.

I'm 32 years with the service. I started as a call-taker dispatcher for the first 15 years. I've had some experience in not only planning large-scale events

from a Communications Centre perspective, but also as an operational supervisor in responding to critical incidents and large-scale events.

MS. EMMA CUNLIFFE: Many thanks indeed.

Professor Martaindale, if I can turn to you next?

MR. HUNTER MARTAINDALE: Sure, yes. I'm Hunter Martaindale. I'm with the Advanced Law Enforcement Rapid Response Training Centre at Texas State University, also known as the ALERRT Centre, our acronyms. So we are a law enforcement first responder and civilian training centre on topics related to active shooter events and response. My role is I'm the director of research and so I work with the FBI to maintain the descriptive data over all the events that we find, and then we test key aspects of our training just to make sure it's all empirically based and we have a reason for what we're training. And that's me.

MS. EMMA CUNLIFFE: Many thanks.

And, Professor Taylor, if you could please introduce yourself?

DR. PAUL TAYLOR: Sure. My name is Paul Taylor. I'm an assistant professor at the University of Colorado Denver School of Public Affairs. My research is on decision-making, human factors, and system safety in the context of police interactions with the public. I'm also a former law enforcement officer. I have about 10 years of practical law enforcement experience, including time as a field training officer, a use of force instructor, a patrol sergeant, and a training manager for a department.

DR. EMMA CUNLIFFE: Many thanks, and welcome all.

This afternoon's roundtable will address the following core themes: civilians as first responders and key informants during a mass casualty incident; the role of 9-1-1 call-takers and dispatch; and general duty members, training and techniques for immediate response to mass casualties. It will build on many of the themes that we heard discussed in this morning's roundtable, which focussed more on critical incident preparedness and after event reviews.

Really, this roundtable focusses on what Professor Kruke calls the "Golden Hour" in his -- in his report, although it frequently lasts considerably less than an hour. It's the early period of time in a -- in a critical incident before the Command Post is fully established, while civilians, 9-1-1 call-takers and dispatchers and the first police to arrive on scene are still seeking to make sense of what's happening, and in the very early stages of their response.

It's frequently the case that the first notification to official authorities of -- that a mass casualty incident is unfolding comes from the general public via the 9-1-1 call service, and it's to that first notification that we will turn now.

And so Kerry, I'm going to start today's roundtable with you. Long before a call comes into the Communications Centre, you're recruiting and training communications operators. What are the skills and the personal qualities that you look for when selecting personnel to do this difficult work?

MS. KERRY MURRAY-BATES: There's a lot. We ask a lot of our people. Routinely, or traditionally, when we do a recruit and hire, we will get a class of about 20 people out of about 1,200 applicants.

We start out our testing with basic skills. Candidates will submit resumés. We have a basic kind of evaluation of the resumé, you know, your basic stuff. Have they ever been charged with a criminal offence? Things that will preclude them from working for a police service. Then we have some basic testing. We have a typing test, vocabulary testing, and we advance then to a system that is called CritiCall that we use. And basically that measures their intuitiveness and their ability to navigate computer systems with multiple windows, multiple screens, and then also to an extent a multi-tasking capability. Because we have components of the testing where they have to be able to be completing a task, something like following direction and completing a chart, but then there will be prompts that will interrupt that that will ask them a question. So -- and then they have to complete the question, answer the question on the computer, and then accept it, and then go back to their task within a certain time period.

So we're measuring the ability for the mind to focus on two different things within a specific time period.

If the candidate is successful there, then they'll move on to what we call a Perfects Test, and it's antiquated but it's an excellent test in that it measures the person's ability to work under pressure. So it really -- it's -- when I say antiquated, it's a cassette tape and a rotary phone and a pencil, and a lot of our candidates come in and go, "You want me to write on paper with a pencil?", and we're like, "Yes, we do." Right? Because it is, believe it or not, something that you will revert back to when you're busy.

So there's a tape that plays, and it starts out very slow and very methodical, but it gets louder and it gets faster, and it has things like, you know, yelling and dogs barking, and just things that initiate an anxiety response. And so it really gauges that fight or flight response in a person, and then their ability to work through that and continue working. So the goal is to get all of the information that we're giving them within the test, and they have to record all of that information. So that's kind of whether or not we gauge whether they have passed or failed.

And then after that, we have an interview process, where candidates are asked a series of questions. It gauges analytical thinking, past ability to work on a team, the ability to prioritise instinctively life over property and other situations. And so it gauges their ability to really kind of think and function within our environment.

After that, there is a background check, there is a medical check to make sure there is not a medical condition that will preclude them from the work. And just recently our service has instituted a psychological assessment, which really is a suitability, the same as a police officer would go through.

If -- normally we lose about 50-percent at every level of testing, so it really does narrow down the field quite quickly. When candidates are deemed to be suitable, they then go into the training program. We run classes between 20 and 28; 28's been the maximum. It's -- the training is long and it's very involved, and -- so it has

an impact on our operational floor because a portion of that training is done live. So we have to keep the numbers down for our classes.

So class looks like -- call-take class starts, there is nine weeks in class. They learn about the service, they learn call-taking skills, they learn all of our policies and procedures, basically everything they need to start taking a call, as well as the technology and the phone system.

Some of the things that we teach in our call-taking, we teach general call-taking, general guidelines for call-taking, five W's, it's actually six for us, because it's Who?, What?, When?, Where?, Why?, and weapons; effective call-taking; methods of communication; customer service; PTSD and stress; liability; domestic violence; victims services; persons in crisis; understanding mental illness; dealing with emotional callers; call-handling of traffic-related events; LGBTQ2 presentations; ethics; online crisis intervention with suicide callers and de-escalation. It's part of it.

After the nine weeks in class, if they graduate from the class portion, they then move on to their on-desk training. So each candidate will be given a coach officer, and they will be seven weeks with their coach officer. They're evaluated every 80-hours of work time, and they must be successful in 15 different components.

Once they're complete that, they have -- the coach officer leaves them alone. The supervisor then monitors for two weeks to ensure that the skillsets are solid, and then they will take calls on their own for probably three to four months before we start all over again and put them into dispatch class.

Dispatch class lasts six weeks, and it's the same thing. They have classroom policy and procedure surrounding dispatching, technology, there's a lot of hands-on. With call-taking, the call-taker pretty much controls the pace of the call. Dispatch is very different. The air traffic controls the pace that the dispatcher works at. So it is a harder skillset. It's -- as much as the dispatchers try and have the control, it's very difficult to have that control. So like I said, it is a different skillset.

They will spend six weeks in class. They will do all the book

learning, and then again they will be assigned a coach officer, and they'll have eight weeks with their coach officer, again evaluated every 80-hours, and they must be successful in all 15 criteria.

That takes us about a year to fully train a communications operator. In Toronto, we do not have single skillsets, you must have both skillsets to be a communications operator and continue to work with us. It's important with the size of our organisation and the fluidity of our work, we really need to have all of our members fully trained.

DR. EMMA CUNLIFFE: Thank you very much for that. If I can loop you back to some of those modules that you described for the -- for the call-taker training in particular, topics such as responding to callers with respect to mental illness, emotional callers, PTSD. Would I be right to infer from that that there's a fairly considerable focus on emotional literacy, communication skills with people with a range of experiences? I'd love to hear you talk a bit more about that.

MS. KERRY MURRAY-BATES: Absolutely. I mean, our call takers really try and -- first of all, they have to make sense of what's coming in. They have to try and understand what the caller is telling them. But there's care here as well; right? So if a person is calling 9-1-1, there's a level of care that needs to happen as well. So we teach call-taking skills, but we also teach customer service but more respect, and really trying to offer that care over the telephone to the caller, because ultimately, that's what they're calling you for. The caller is in crisis, and the 9-1-1 operators, the call takers are not only your first investigators because they're getting the information of what the caller is experiencing, but they're also the first kind of response to deal with the crisis the person is experiencing.

So we spend a great deal of time training people, you know, how to respond to mental illness, how to kind of get the information that you need from someone, how to de-escalate feelings, how to understand different cultural aspects and make sure that that respect is present during the call taking. I mean, we have a job to

do. We have to find out what's happening, but part of that is the care of the caller.

MS. EMMA CUNLIFFE: Thank you. So I'm going to walk you through a scenario and make it slightly more complicated as we move along, Kerry, if that's okay.

MS. KERRY MURRAY-BATES: Yeah.

MS. EMMA CUNLIFFE: So let's start with something that's serious, but I imagine happens relatively routinely. A call comes into the Communications Centre, or as some would call it the 9-1-1 Call Centre. The caller advises that -- one of your call takers that they're watching someone being threatened with what looks like a knife on the street outside their house. What would your call takers be trained to do next?

MS. KERRY MURRAY-BATES: So the call taker would first -- the most important thing is location; right? So we would identify a location, and then a call would start to be created in our computerated *[sic]* dispatch system. The good thing about this technology is it allows us to alert the dispatcher to the event prior to the -- all of the information being in the event. So we have the capability of what we call is a hot shot, but we have the capability of sending the partial event, even though it's not complete, to the dispatcher, and then continue with the call taker. So in the call -- the caller -- to the caller, it's seamless; right? So the call taker stays on the phone with the caller, but the initial situation that the caller is calling about already is at the dispatcher as more information is coming in.

So the call taker would ask what's the location. They would ask who the caller is, what their phone number is, so that if the connection was broken, that we would be able to get the person back. And then we ask what it is that they're seeing. So what kind of interaction do you see? Can you give us descriptions? And we -- we're very methodical. We train our dispatchers and our call takers to be methodical in that we have patterns that we do things. So we won't say tell us -- describe the suspect or describe the person with the knife. We'll say, "Okay, we're going to get descriptions.

The person with the knife, male or female? White, black, Caucasian -- or white, black or Asian? How tall are they?" Right? So we have a process, so that we can keep the caller guided and focussed.

We will record everything that the caller tells us. And we do it in a way that the caller advises. This is what the caller is seeing. We have to remember that our call takers aren't seeing this. They're basing everything on what is being told to them on the telephone. So they will report everything, and it will go into the text of the event. So as the call taker is getting more and more information, the dispatcher is able to see that information in real time and continue to broadcast that for the responding officers.

In this situation, the call taker would stay on the phone with the caller until the officers arrived because that would allow the opportunity for up-to-the-minute information as to what is happening, to prepare the officers for when they arrive.

MS. EMMA CUNLIFFE: Thank you. And if I can loop back to a follow-up question I asked a little while ago, imagine that the caller is very scared, and emotional, and perhaps having some difficulty answering the questions from the call taker, how are your call takers trained to help that person to get to the point where the helpful information can be shared?

MS. KERRY MURRAY-BATES: So that's the part about the care. And it's really about reassuring the caller that they're doing the right thing. It's a telephone call, but it's still the connection that you make with the caller. So there's things -- there's -- you know, as a call taker, I would say things, like, "I know this is scary, but we can get through this together." And you make that connection, so that you can encourage the person. You say, "I'm not going to leave you. I'm going to stay right with you and we're going to get through this." And you make that connection with the person, so that you allow them to feel the confidence and the security to continue on in the call.

MS. EMMA CUNLIFFE: Thank you very much. So now let's step

that process up in scale to a mass casualty incident. And this morning, in response to a question that my colleague Krista asked you, you mentioned that all of your processes and procedures are designed to be scalable. So the Call Centre, the Communications Centre has, for the first few minutes, started to receive notifications of an active shooter or some other means of attack, such as the Toronto van attack. How do things look different in your Communications Centre when an attack of that scale begins?

MS. KERRY MURRAY-BATES: The first thing that you see is -- in our centre, we have what we call key-watch boards, and essentially, it's a board that provides us situational awareness as to our 9-1-1 lines and how many calls are coming in at one time. So the first thing that you will see that we notice with both the Yonge Street and the Danforth shooting was that our 9-1-1 lines went from 0 to maxed immediately. So that's the first indicator. Then the calls will start to come in.

All of our call takers are in one room. It's a large room, but they're all together. And so you can hear what people are working on. And when it's that busy, the volume increases in the room very quickly. So organically, you can -- you could start to put together what is happening. In an event that scale, I mean, our 9-1-1 lines were inundated. I believe in Yonge Street, we had just over 900 calls in about 17 minutes, and then in Danforth, I think it was just slightly less, with about 800 and change. So that's impactful for a centre.

You realize very quickly the scope of the event. We don't draw any conclusions as to what's happening because there's that period of kind of making sense as to what's happening, and we, as I said, we operate the same way every time. But depending on what's happening, it allows us to kind of shape our questioning.

So we talked this morning about how civilians become the first responders. And in the case of the Danforth shooting, the 9-1-1 calls were coming from people on the Danforth that were impacted, and we saw that. Those people were pulling injured people into their stores. And so as that was being reported and the situation was being reported, our call takers were asking questions like, which direction

was the suspect walking, were they by themselves, to give the officers more information as they were responding, right, as well as the descriptions and stuff. But we were also giving citizens -- asking citizens, are you able to barricade yourself in? Can you be unseen? Can you hide; right? Are you able to lock yourself in? How many people are in your store? How many people are injured? Can they walk? Are they mobile? So all of that information is important for not only engaging what's happening and dealing with the, in this case, the shooter, but also for the afterwards where we're finding injured people and officers are following up, doing checks on properties, et cetera, and the ambulance and the fire response.

MS. EMMA CUNLIFFE: And so last question and then you get a break.

MS. KERRY MURRAY-BATES: That's fine.

MS. EMMA CUNLIFFE: Do you open a new case for each of those 8 or 900 callers, or how do you piece it together?

MS. KERRY MURRAY-BATES: So within our computerated *[sic]* dispatch, we have the capability of we call it a dupe and cancel, but essentially, it's a repeat call. So each caller, when you realize it's the same event, because it will be at the same location, we can just put that information into the original call, so we're able to have one event. Now there are challenges with that as well because the one event gets very large very quickly and that has an impact on the technology.

So we can create separate events, CAD tickets, if you will, for the same event, but we also have the ability to link them together. We call it a cross-reference. And then the technology, what the technology does for us is it allows any cross-referenced events, the event number to show, so that we can access those event -- we don't have to go looking. It's right there for you.

MS. EMMA CUNLIFFE: Thanks so much, Kerry. You do get a break now. Well earned.

Paul, if I may turn to you, one of the things that you've studied in

your research is how the information that's shared by call dispatch, at least experimentally, can influence first responders for sections and responses. I'm wondering if you could please describe your research and that of others who have been -- looked at call dispatchers and their influence on the behaviour of first responders, and tell us about how that information can influence what happens next.

DR. PAUL TAYLOR: Certainly. One of the things that I noticed as a training manager for a department, when I was running officers through kind of high fidelity simulations or using a simulator, I could drastically change their decision-making process based on the information I provided them at the beginning. And that's -- so that kind of ignited my curiosity into, well, what role is this information really having and how aware are officers of that -- of the impact of that information. And so I designed a study in which we brought in over 300 law enforcement officers from multiple agencies, multiple states here in the United States, and we gave them one of three what we call dispatch treatments. For one of them, they just got a -- for our control group, we'd just give them a standard dispatch. It basically was, you know, some people called in. They're away on vacation. Their neighbours are away on vacation. They see somebody walking around the house. And they provide a description of that person, and those officers were dispatched to that call. The next group got the same dispatch, and they got an update that said the person appears to be holding a gun. And then the third group got the original dispatch, with an update that -- that just said the person appears to be talking on a cell phone.

The officers were then randomly assigned to one of two video scenarios in which they encountered a person who matched the description from the call, and the person either, after a short interaction, produced a cell phone from their pocket and pointed it at the officers, or produced a firearm from their pocket and pointed it at the officers, and looked at responses. For the control group, around 28 percent shot the person with the cell phone. And you have to remember, this is a shoot/no shoot simulator. The officers started from a weapon drawn position. So it's likely

elevated, and we really didn't give officers a lot of options as far as moving or other things. So we're strictly trying to control down to just to shoot/no shoot decision process.

When the officers had the information that the person appeared to be holding a gun, that the shooting the cell phone went up more than a hundred percent. It went up to -- from 28 percent to 62 percent. And interestingly, when the officers had information the person appeared to be talking on a cell phone, that error rate dropped dramatically down to only six percent. Only three officers out of that sample shot the person that produced a cell phone.

What was interesting is none of the officers identified the importance of the information in their decision-making process after the fact. All of the officers said that the reason they made the decision to either shoot or not to shoot was based on either the recognition that it was a cell phone, or the fact that an object was rapidly produced from their waistband. And so really, the officers didn't identify the information at all, but we saw a dramatic impact in an experimental environment on their decision-making process.

MS. EMMA CUNLIFFE: Thank you very much. And for the record, the article that Paul's discussing is titled "Dispatch Priming and the Police Decision to Use Deadly Force," and it was filed as Exhibit P-001902.

Hunter, if I may turn to you. When the 9-1-1 dispatcher has shared information about a possible critical incident or active shooter incident, professional responders will start to head towards the scene. You touched on this morning, and I understand from your research that arriving at the scene can be a particularly dangerous moment for first responders. What does ALERRT teach police and other first responders to do by way of preparation before they arrive at the scene?

MR. HUNTER MARTAINDALE: Yeah, good question. So we teach officers if they are dispatched to a call, again, it's, you know, whatever information they're getting. If it's just somebody with a gun they may not go to all these steps, but if

there's shots being fired, and they're -- especially if they're getting information about the individual has a rifle or something like that, we teach officers to stop. If they have the kit -- again, it's not very law by the department, but stop your car quickly, get out, put on your equipment, so have a plate carrier that can stop rifle rounds. A lot of departments have their rifles in a cage in their car, so get your rifle out, if they have that ability, if they have one, and get prepared. And take that one minute or less to get equipped before you get on that scene. We went through the active shooter data with the FBI and found that most of the officers were being shot as they're approaching the building. It's not even going into -- doing the room entries like we train officers to do a lot of. It's that approach and getting to that building. So take a couple -- a few seconds and get prepared, just in case that's what happens, so you're not fumbling out in the car, or not getting your gear at all and running in with less protection than you have available to you.

MS. EMMA CUNLIFFE: Thank you. Next question for you, Hunter, again, what can call dispatchers do to help police understand what they might encounter when they do arrive at the scene?

MR. HUNTER MARTIANDALE: Kerry was doing exactly what we would hope people were doing out there. They're giving them every piece of information as the civilians are giving it to them. So the caller reports whatever it is, they're not giving them there is an active shooter or there is this. No, the caller reports the presence of a gun. We teach the officers to take all that data that they're receiving, and then when they arrive, to assess it; right? So as you arrive on the scene, what's your driving force? So what is needed? You arrive on that scene, do you hear gunfire, yes or no? And if you don't hear gunfire, are there victims that you can see? Well, at that point, your driving force is taking care of the victims. You're not giving up the fact there could still be a shooter out there, but you don't know where they are, if they're even still there, but you do have victims on the ground that need some help.

Now, if you're attending to some sort of victim and then you hear

gunfire start, you may have to leave that victim and take off and go to that gunfire because now that's your driving force. We teach officers to first stop the kill and then stop the dying and start recovery. So priority, they have to stop people from killing individuals first. So that always takes the precedent.

We also teach officers to do what we call an LCAN, L-C-A-N. So as they arrive, they are now the eyes of that scene, and now they can describe first what's their location, where are they, what is the condition, what actions are they taking, and what do they need. So you arrive on the scene. I am in the foyer of the -- this is Encino Hall. I'm in the foyer of Encino Hall. I don't hear gunfire. I do see somebody in the foyer. I'm going to apply a tourniquet. It appears there's three more victims. I need ambulances coming now and people with medical equipment; right? And you're pushing that data out, so the following responders know exactly what you need, where you are, and then you keep updating that as things change. If gunfire starts, hey, I hear gunfire. I'm heading down corridor A. I need additional units. I need whatever it is.

So that's, in a nutshell, what we're teaching the officers.

MS. EMMA CUNLIFFE: And just to make sure that I understand, Hunter, when you say pushing that information out, or teach them to push that information out, you mean by the radio, or whatever other means of communication that they have back to some central ---

DR. HUNTER MARTAINDALE: Yeah.

MS. EMMA CUNLIFFE: --- and other responders?

DR. HUNTER MARTAINDALE: And I'm not a hundred percent -- Kerry probably knows way more than I do about this, but I would assume that as they're pushing it out to dispatch, that's going over the radio, and everybody's hearing that. If not, the dispatch can then push that back. I shouldn't use terms like "push back", but could send that information to the other officers and fire, ambulance.

MS. EMMA CUNLIFFE: Thank you. I'll just -- I'll actually just surface that. So what I heard you saying is if it's not -- if for some reason it's not being

directly and immediately shared with others who might be pushing towards the scene, you would be looking to call dispatchers to make sure that it's -- that it is shared with those who may not have heard it; is that -- Kerry, do you want to remark on that?

MS. KERRY MURRAY-BATES: So absolutely, that is, you know, 50 percent of the dispatcher's job is to give out information but also to receive information, and make sure that everyone else that needs to hear it hears it. So often, our dispatchers will repeat what the officers have said, and make sure that everyone -- so it actually gets broadcast twice.

The other thing that they do is they prompt officers. So as I said, normally officers will get dispatched to an event regardless of the scale, our routine, our dispatchers will say, "First unit on scene to advise", and then they will prompt. They will say, "Is there any update? Is there any update? Is there..." So it prompts officers to share the information and to vocalise what it is they're seeing and experiencing, so then we can gauge and other officers can gauge what's happening and the need for further response, additional response.

DR. EMMA CUNLIFFE: Many thanks.

Bjørn, if I may turn to you. You have described the initial call as the beginning of a process of sensemaking with respect to the critical incident. And the phrase, sensemaking, arose this morning, but I'm not sure we took the opportunity to define it. I wonder if you could please explain for our benefit what you mean by that term, sensemaking?

DR. BJØRN IVAR KRUKE: Well, if you look into the literature, you will find a lot of research on sensemaking, and defining the term differently. But I guess that a basic understanding, when an incident occurs is that what -- you can ask yourself, "What is going on? What is actually going on?" You try to make sense of the situation in which you find yourself, something unexpected had happened.

In their study of -- on crisis leadership, The Politics of Crisis Management, Boin and colleagues, they have -- they call this sensemaking phase for

"What the hell is going on?" phase, and -- so it's trying to grasp what's going on. You have Sandra Schneider calling this phase the "milling phase", so to try to grasp what's going on. And that might be extremely difficult. At least for people with no prior experience within these particular incidents that's complicated to get a clear a understanding of what's going on.

And it just struck me also that you have -- you have a caller calling information, the information is broadcasted, and units are deployed to the scene, and the scene is not static. It's dynamic, so it's an ongoing changing reality.

DR. EMMA CUNLIFFE: Thank you. And I think we -- I hope I may be about to take you to an example of that. This morning, you and I were discussing the early 9-1-1 calls equivalent in the Kongsberg mass casualty incident, and I know that you've been studying that incident closely. I wonder if you would please share how the early reports of that perpetrator's actions came to the attention of the emergency call-takers, and how that unfolded.

DR. BJØRN IVAR KRUKE: Well, you mentioned that it's a lot of calls coming in. And the different callers, they have a different view of what's going on, and they behave differently. What I learned from experience is a commander is not be too calm because if you are too calm you will play down what's going on. So you need -- you need that fresh input of reality.

And in a situation, and you refer to Kongsberg, it was two callers. One called from an office inside a shop. It was calm in that office. So he had more like a rational explanation of what was going on, the textbook type of explanation. And then you had a caller from inside the shop, and you could feel the stress over the phone, and you had people screaming in the background. The two call-takers, they had a completely different picture of what was going on.

And that brings me to another point there, is that the call-takers' experience, that's very important. To be able to realise "What do I actually hear from this person?", the significance of the information from either.

DR. EMMA CUNLIFFE: Indeed. Thank you.

And Kerry, I'm going to turn back to you, and Paul's study demonstrates the dangers associated with wrong information reaching a first responder and potentially affecting their decision-making. And of course, wrong information can come from many sources, not least civilian eyewitnesses. But there is also an important role to be played by the Communications operator in terms of accurately capturing and making sure that that information that is received is accurately shared with those who are tasked with first response.

What processes do you have in place to make sure that that case, which is opened and textually is accurate and complete, and picked up in some accurate and appropriate way by the call-taker -- by the dispatchers, my apologies?

MS. KERRY MURRAY-BATES: So you have to remember it's a phone call, so our call-takers are very reliant on what they're being told on the phone. But we do -- first of all, we report exactly what the caller tells us. We report what we hear in the background. We report how the caller presents. If the caller makes a statement and says they're at a specific location, but we can see from their wireless GPS they are not, we report inconsistencies, and we use language that speaks to that. We don't make statements. We don't say, "The person has a gun." We say, "The caller believes the person has a gun." If the caller was to say something like, "They have a gun. It looks like a rifle, but I think it's a pellet gun", then we would say, "The caller says, the caller believes it's a pellet gun, but that is unconfirmed." Right?

So we try to provide the information to officers without making blanket statements that would -- that would say, like, this is the determination; right? Because we're providing them with the information that's provided to us, but truly in their response that's part of their response is it's for them to make the determination. So it's a lot about reporting exactly what is provided to us and then the language that we use when we create that.

We have event types, like for example, we have an event type

"person with a gun", we have an event type "shooting", but when our dispatchers dispatch them they say, "A possible shooting. A possible person with a gun", because that's what's being reported to us, but the situation is unconfirmed until an officer actually responds.

DR. EMMA CUNLIFFE: What about the circumstances where you're receiving inconsistent information from two callers about the same event? How do your dispatchers communicate that?

MS. KERRY MURRAY-BATES: We identify that. We will point that out. So if you get maybe conflicting descriptions; right? And it's my experience that witnesses are terrible with descriptions, so that's -- it's not unusual. But that will happen where what -- the dispatcher will say, "The original description was this. We now have a second caller and the description is different, and this is what the second description is." And again, it's about providing information to officers so that they can make assessments in their response and take that information into consideration as they decide what action they're going to take.

DR. EMMA CUNLIFFE: Thank you.

Bjørn, if I may turn to you and to the 22 July report on the Utøya incident. In that report, Commissioner Gjørv decided or concluded that important information which had been shared by civilians in the first few minutes after the bombing outside of the government area, that important information had not made its way to the Critical Incident Commander. Why and how did information get lost in those early minutes, and what measures did she recommend to ensure better information management in future responses?

DR. BJØRN IVAR KRUKE: One of the biggest learning issues after the 2nd of July was the manning of the Police Operation Room, and that's also the dispatch centre. And when -- with the bomb explosion in Downtown Oslo, thousands of calls came in, and a few of them made it through into the Operation Room. It wasn't like capacity to handle all these phones on -- you know, on -- according to the regulations.

That meant that they had some information to rely on, and that was the calls. And then people, when they realized that they couldn't get through to the operation room, they called the switchboard, and the switchboard operator took down notes -- that's not normally the way things would be handled -- and these notes were delivered to the operation room and in -- well, Wallace here, prior to lunch, talked about the chaos, and I did talk about the organized chaos. But I think that they had a lot going on in the operation room.

So to be able to understand the significance of certain information, it's extremely difficult. And in that respect, they had too little information and they had too much information. It was a huge amount of information, and it was, on a real-time basis, not possible to assess all that kind of information. That meant that information management, to be able to present a situation, that picture to the chief of the operation room was very difficult. Was very difficult.

And the switchboard operator, she would not normally go into the operation room with a piece of paper, and I guess that is what you refer to? So this is not according to standard procedures. And so that's what happened. It wasn't enough capacity to handle all the information coming in.

And what has happened afterwards is that it has been a huge police reform in Norway. The number of police districts have been reduced; they are bigger, but we have more robust operations rooms.

MS. EMMA CUNLIFFE: Thank you. That was, indeed, what I was seeking to elicit.

I think a second dimension that Commissioner Gjørv identified was the relationship between the Operations Manager and the Incident Commander, and the passage of information between those two key figures. I wonder if you're able to share some of Commissioner Gjørv's conclusions in that regard.

DR. BJØRN IVAR KRUKE: The main Incident Commander in the government quarters, he was the most experienced Incident Commander, I guess, in

Norway. So that was the right person. And he felt immediately it wasn't, you know, difficult to see what had happened. So he had a pretty clear view of what was going on.

So he made some comments or communicated his understanding to the operation room, and he talked about, you know, that we need a huge response. But he used not the standard terms. So it wasn't clear to the operation room what was actually going on because they didn't see. And it took a few minutes for the pictures to come on television, so they didn't see what was going on in the government quarters.

And, also, later in this process, the Incident Commander he had also problems coming through to the operation room. But he made it to that staff level because the police district, they had called in the staff of -- well, it's not that often that you call in the staff for a full-staff operation where we're all the state's -- or officers in, and staff, but they did.

It was possible to get through to the staff over the phone and that is not the big issue, but you need to update the operation room according to the -- well, the line of command.

Afterwards, you could state that this did not have any impact on the situation as it unfolded. But, nevertheless, this is also a sign the manning of the operation room was not adequate to deal with such a situation.

MS. EMMA CUNLIFFE: Thank you very much.

I'm now going to move us from the Communications Centre to the scene of the critical incident.

And, Hunter, if I may start with you. In fact, it arose to a certain extent in an answer you gave earlier in today's roundtable.

One of the skills that you teach in the ALERRT programme is that first responders should engage their physical senses to help them assess the accuracy of the reports that they are receiving from -- through call dispatch. So you alluded to some of the things that you teach first responders to look for, to listen for, to smell for, when they first arrive on scene. Why is it important to teach first responders to take that

time to do the kind of assessment that you're teaching?

DR. HUNTER MARTAINDALE: I think it's probably prudent to start with a real event. We talked about it yesterday when we were chatting, this was -- actually said the individual was 14; it was 2014, he was actually 22 years old. But there was a man, Jim Crawford -- John Crawford, in a Walmart walking around with a BB gun he got off a shelf. And he was just walking around, talking on the phone with somebody and a couple of people called in and said that he was pointing the gun and he was waving the gun. And so that's what -- the only information the officers had.

They arrived on scene, and you can watch the video through the CCTV, they quickly approached where they know he is. They turned the corner on the aisle. On the audio you can hear them very quickly say, "Drop the gun," and before they even finished the word, "Gun" they shoot him.

There was no audible gunfire; there wasn't the smell of discharged rounds -- imagine if you've ever been around a gun that's been shot. And there was no victims, nobody was screaming, nobody was outside waiting on the police. It was just a regular shopping experience, if you were looking for that.

And I obviously can't speak to what that officer experienced, but I can imagine, based on the literature, that they were at a very high level physiologically, through their stress process; they were probably tunnelled down, and they thought they had an active shooter. And so they went in and didn't pay attention to all the other senses of what was happening. So we teach our officers to use those senses.

And very much like I was speaking earlier about the LCAN Report, you have to have a driving force to know what you're doing and what is most important at that moment, so you really have to be paying attention on what is going on around you because it can change very quickly. In a lot of these events, officers are told that there's more than one shooter, even though we know that 98 percent of the time it's a single attacker, and that's not the fault of the citizens that are calling in 9-1-1 because think about their perspective, well, for one they're from different angles, Bjørn was

speaking; they have different experiences. So somebody's calling in, "I saw a shooter outside this door," somebody calls in 30 seconds later, "I saw a shooter outside this door"; those are two separate locations, that might be two shooters.

But then in the US at least, I can't speak for other countries, but in the US you have a lot of off-duty officers and plainclothes officers, and they're responding to these scenes, and so from a citizen point of view, you see somebody running with a gun, potentially, you may not see a badge on their hip or on their neck; they may have a plate carrier on so they look tactical and they may think that's somebody that was prepared to go have an actual event. And so they're reporting that information and so the officers have to respond to that; they have to go in knowing that it could be somebody else, I don't currently hear anybody else. We see the shooter, maybe he's already taken care of. I'm going to deal with these victims, but at the same time, I have to be cognizant there could be somebody else and if that driving force changes, I've got to leave this victim and go take care of that shooter.

So, yeah, we're constantly pushing to assess what's going on around them and use that data and share that data.

MS. EMMA CUNLIFFE: Thank you.

Bjørn, I took us to the scene, but of course in some instances getting to the scene may not be straightforward. That presented a challenge for the first responders in Utøya. I wonder if you could please explain the features of the Utøya incident that presented challenges for the police who responded at Utøya as opposed to Oslo, and how that impacted the police response, according to Commissioner Gjørv?

DR. BJØRN IVAR KRUKE: Well, that's a big question.

Well, first of all, we had that bomb explosion and that meant that all available police in the area, they were mobilized, doing the special police unit at that -- police, they were doing search through the ruins of the government quarters. And the Oslo police district staff were in the staffroom. Well, walking into the staffroom, one of the liaisons, his daughter called, and she's at Utoya. So she said that this policeman

shooting people, it's a guy shooting people at Utoya. And this father then handed the phone over to the special police unit, and they were able to scramble an operation. And they went by car up to a site they thought were the ideal site, but they were not familiar with the area, so they chose a site that -- it wasn't the best site. And in addition, it was a local police district response in a boat, and they were heading for Utoya in 20 knots, but then out of the corner of his eye, he saw that the -- the guy in charge, the policeman in charge, he saw blue lights at a nearby place where there shouldn't be blue lights, and it struck him that this is the Delta Force. And in this situation, they will be in front of the response. So he left his initial plan, went over to that place to collect the Delta Force, and they lost some 15 minutes. Maybe that decision from -- in -- from that period in this history, it was the wise decision. Later, it was discussed that was it the wise decision.

Anyway, they had -- when they -- it's a small boat, and the Delta Force, they had a lot of people with a lot of equipment, so too much weight in the boat, and they had some problems with the boat, and that also resulted in a delay. When they landed on Utoya Island, they saw a lot of young people shot. Some were in the water, some were on the beach, but the primary goal was then to neutralize the perpetrator. And when they approached him, he was then arrested in a standard type of arrest. He wasn't a threat.

But the point here is that they experienced communication problems. We were changing communication systems, so they were not compatible, and we had problems with the local knowledge, the local geography, so some basic problems really.

MS. EMMA CUNLIFFE: Thank you.

Paul, I'm going to turn to you because I know that you've also taught advanced active shooter courses to police. What would you add to what Hunter and Bjørn have already shared about what first responders need to understand and what they should bear in mind when they first arrive at that scene?

DR. PAUL TAYLOR: I think there's a couple important points, and

I'm just going to back up just a little bit and I'll come -- I'll catch right back up again. But I'd just like to say that dispatch does pass on all of the information that comes in. There's no doubt about it and the intention is always to do that. But it's important to note that that -- there is a translation process in there, and I think multiple people have kind of noted that, but the dispatcher has to find words that are meaningful to the officer. They have to make -- there's some sense making that occurs in the dispatch room as well, and that's important to note that that information coming out is -- it's always a translation of what the call taker has received, has passed on to the dispatcher, and then is coming to the officer.

From the officer's perspective, I think it's important to understand that our tendency as human beings is to kind of latch on to the first plausible interpretation about what's happening in front of us. And what makes it plausible to us is typically our training, our prior experiences in life, but we tend to latch onto that, and then we tend to seek information to confirm what it is that we already believe, and this really -- it occurs not at a conscious level. We're not seeking out information consciously to confirm what we believe is happening. It's at a subconscious level. And, in fact, in many cases, we're filtering out information that doesn't confirm or align with what we already believe is happening.

And so I think what Dr. Martaindale is talking about is critically important that officers are actually getting some exposure to the call itself, to the information and the data that's coming in from the call itself. And it takes us time when things don't align, when, in fact, we're coming into a situation with information that's incorrect, it takes some processing time for us to realign on that new information. And so engineering or building that into our responses I think is critical, building that into our training, and reminding officers, you know, it's important that you get exposure to the data itself.

And the other point that I'd really like to add is officers, after a very short period of time on the street, develop relationships with their dispatchers. If it's a

large dispatch centre and a large agency and they're not constantly working together, they develop a relationship with dispatch itself, right, maybe not the individual dispatcher. If it's a smaller agency and they're dealing with the same dispatchers on a day-in or night-in basis, they're going to have a relationship with that dispatcher in that they're going to come to either trust the information that's provided to them, it's reliable information, they've had good experiences with this dispatcher and the information that's provided, or their dispatch centre and the information that's provided, or the opposite. They're going to come to find I can't trust this information.

Scharf and Binder wrote a fascinating book called *The Badge and the Bullet*. And they looked at police responses, and in particular, they did a series of ride-alongs over the summer in the -- I think it was in 1980, Newark, New Jersey. And one of the things that they noted is that call volume was going up during that time period for police officers and so the response times were delayed. And pretty soon, people started actually kind of manipulating that and actually providing false information to dispatchers. They would say things like, "He's armed with a gun," or they would kind of gin up the level of what was happening. Officers very quickly learned that they couldn't trust that information. And so their response to that was that they slowed down their responses. They started to take their time in making approaches, not by a lot, just by enough, so that they could get their eyes on, they could get their ears on what was actually happening. And that, according to Scharf and Binder, had a dramatic impact on the decision-making process. And I think where we can build that in, both in the training side and interactional responses, the more that the human being can actually take in information for themselves, and not just second, third-hand information that's come through kind of interpreted sources, typically, the better the decision-making process will be.

The caveat to that is, when we do have accurate information and that information aligns very, very well with what's happening in front of us, it does improve our responses. It does certainly improve our decision making. And so there's

a trade-off there. And based on the available research, sometimes it's just fractions of a second in pausing and getting enough information to really improve decision making. Excuse me.

MS. EMMA CUNLIFFE: Thank you for that, very much.

Hunter, I'm going to turn it back to you now. You've mentioned a couple of times some of the key principles that you train, for example, identifying the driving force and the fact that the driving force may change over time. The core of your training work is to teach first responders how to respond to active shooter incidents, of course. I'm wondering -- I'm going to give you an opportunity, that I don't think you've had so far today, to talk a little bit more about the methodologies you use to teach the skills that you're teaching and how the training programs kind of work.

MR. HUNTER MARTAINDALE: Sure. So that's also evolved over the years as we've changed things, and it's currently in flux. We're currently changing modalities to try to improve officer performance.

So like many courses, there's going to be some PowerPoints involved, and that's not always the most fun thing for anybody. But there is a base knowledge that we get out there for them.

We'll have a class of no more than usually 30 people because we want to keep it manageable but have enough that they can exchange roles during the scenarios because there's only so much time and you can only run so many scenarios in the amount of time. So we cap it at about 30 -- 30 first responders and we'll have four to six trainers, and those trainers put in for the class -- I'll just back up a second.

A class gets requested at wherever it is, you know, in Washington. They get selected for a class. It's all grant funded, so it's all free. And so all we do is send all the equipment, we send trainers and then they put on the class in their location. So there could be -- if it's a school, an empty school, an empty officer building, wherever they're going to want to do the training, we do it on location.

So we have a handful of instructors that are there and we build that

cadre based off of, one, their experience. There's a lead instructor who's taught a lot of classes for us and is really, really good. They're all really good.

But then we have some junior trainers that are getting more experience and they may really be focused on just a couple of the modules. That might really be their bread and butter at that time, so they'll move instructors around based off of their technical abilities from what they do for their job, what they've learned in our courses, how they've been trained up, if they're really good at teaching, so we make sure we're delivering that information that way.

And then we go through a series of practicals. So if we're teaching them the proper way to assess a door threshold, right, so you don't want to just run into a room but you want to kind of assess it from the outside and see as much as you could see, gather more data before you go into the room. We start at baby steps.

It's very much a deliberate practice model where it starts off very, very simple. They'll just kind of walk around the door and there's nothing in the room. Explain what you saw.

And then, you know, they'll all kind of go through it and talk about the angles from the door, what you can see, what you can't see, and then we'll add a little complexity.

There will be something in the -- in the room and there may just be a foot sticking out behind the couch and now they all go through it. And it's a little more complex. It sounds really simple, but it's a little more complex and they're having to scan that area and try to find the person, if there is somebody there.

It could be a victim that's hiding, could be, you know, the foot of an attacker.

And so we use this deliberate practice model to slowly build them up.

The classes are different depending on what the class is. The main class is we call our Level 1, which is just our active shooter class, has eight scenarios

built into it. So over the two-day period, we'll go through eight full-blown scenarios. Every scenario is based off of a real event, so we're not making up pie in the sky so complex events that nobody could pass it, right. They're based off real events.

They're going to adjust based off of location because they're not all in our facility, so the instructors will, you know, tour the facility on the first day and they'll figure out how they'll adjust the -- or the scenario to fit within the confines of where they're at, but the principles are the same. And they're hitting at very key aspects of our actual training.

And so as this has evolved, we've -- I talked about earlier, we've brought in dispatchers and now that dispatch component is built in so they're getting real dispatch traffic. We've brought in other first responders, fire and EMS. We've involved that.

One thing that we're currently researching and have put a couple of papers out on is using VR as a mode to help retain these skills. So one issue is, we are grant funded. We have X number of dollars to spend, and we have X amount of capacity. So we put on a lot of classes that go from city to city.

We've got 140, 150 different kits that are all out, so they're all around the country and there's classes going non-stop all summer long, most of the year, but that only hits X number of officers. And so you may not touch an agency for years between requests, and some places may only have a single officer, so we do train the trainers, try to get people that can teach our class and they can go out and train their agency, but the main thing for the VR is we want to use it for skill retention.

So we've had a company build out -- we call them the alert modules, but they're components of our class that are based off this concept of deliberate practice, so you can do movement down a hall, threshold evaluation, room entries. And we could park this equipment at a facility wherever, Denver PD, and their officers can go through it and they can get these reps.

There's something like 1,500 permutations of the different options,

different placements of victims, of shooters, no shooters at all, furniture, no furniture, sirens. There's all these things try to do. Start off very simple, build up to the point where they're doing a lot of other activities.

So that's kind of where we've evolving. The delivery is mostly hands-on.

I guess one other evolution is we're starting to do eLearning, also, to give some prep materials so we could have less PowerPoints, more scenarios, so students get that prep material before they show up to the class and then we also can use that for follow-on, you know, here's an update to our class, we added a new module and some new technique and we can have an eLearning component to distribute that way.

So we're constantly evolving and trying to reach these officers.

MS. EMMA CUNLIFFE: That's really helpful. Thank you.

And I understand from an article which, again, has been filed before you, Commissioners, "The Evolution of Active Shooter Training Response: Critical Since Columbine", which is P001891, Hunter, that, in part, the evolution in your training has been -- has been driven by the research that your research arm is doing.

I wonder if you can talk about the relationship between the research and how you update or change your training in response to what you find in your research.

DR. HUNTER MARTAINDALE: Yes. We hit a little bit this morning on after-action reports, so we -- and part of this FBI partnership that we have, we put out reports on the ongoing active shooter events.

We're constantly looking at these things as they happen and so from the very beginning, we were simply an active shooter class. It was based off of SWAT tactics. It was you have four to five officers, you don't go inside until you have those four or five officers. Here are these movement patterns and you get into this particular pattern, you move down the hall this way. It was very much like a mini-SWAT

school because that's who knew these tactics at the time.

This is post-Columbine. SWAT officers built the program for us. It was very much a mini-SWAT school.

And it had a very good response. People would report, you know, higher levels of confidence in their ability to respond to these things and that's good. It was very focused, and that was good.

We quickly realized that the skills we're teaching these officers could go well beyond that. One, we saw cases in after-actions that solo officers because of whatever their circumstances, were able to enter a scene and stop it.

So there's one that always comes to mind. This is probably 2006 or '07. An officer happened to be close to a nursing home where somebody went in and started -- started firing in the nursing home and he was just right down the street. And he was able to get in and stop that person who was going around shooting -- shooting people in the nursing home completely by himself. He had no back-up for quite a while, so he took that opportunity to go in.

I think he technically -- I have to refresh my memory. I think he technically broke protocol. That wasn't supposed to be allowed at the time, but it was I do this or more people die, so he took the initiative to do that.

And over time, more and more of those type of events would happen and so agencies just started kind of coming around like, you know, we could -- we could low down this requirement of having five people because for some locations, that could be 30 minutes until five people show up, right. Not everywhere is Los Angeles or New York.

So we started developing some classes that would teach -- it's called -- everything's an acronym, SWORD. Solo Officer Response and something. I forget the D. But it's a solo officer class.

So we now teach officers techniques to do by yourself, how do identify yourself so you're not misidentified so there's no blue-on-blue shootings and all

those other concepts.

But then we see other events where civilians are interdicted and they're stopping nearly half of these events before law enforcement arrive, either by shooting themselves or the civilians physically subduing them. There's a few where they shoot the attacker or physically subduing them.

And so we developed a class on civilian response. Here's some techniques, something that could help save your life. Not necessarily how to fight. That's not what we're talking about. How to do that.

We do a -- it's called ADD, Avoid, Deny, Defend. So we teach everybody if you can get away, get away. You're not -- you don't have to be a hero. We're not asking anybody to storm Normandy Beach and do that.

If you can't get away, deny entry to your location. And I can't remember if it was this session or the previous session, but talking about get behind a door, lock a door, can you -- can you do something like that.

And if they are unable to do that, defend yourself, right. And you have a right to defend yourself and if you can't get away and you can't deny entry some way, do whatever you can to survive. And you definitely see events that that becomes the only option.

And you see events where those things bleed over, so Reilly, the student in North Carolina, a shooter came into that university and there was no other option for him. So he tried to defend and because of that he saved a lot of lives, he stopped that guy. He knocked him down and stopped -- he didn't die in the process, but he was the hero that day; right? He stopped that event because that was the only option to him. You can't just lay down and let it happen to you.

So anyway, so as more and more things come out, we keep shifting and evolving. So Aurora was a big turning point for us. We were already kind of working toward integrated response training, but that was a very big we need fire and EMS and law enforcement working together. So we developed that class and they were

working together and try to bridge some of the gaps from that. So we're always learning from events and using those to push our training forward.

DR. EMMA CUNLIFFE: Thank you very much. And Hunter, one more question, then you're off the hook for a little while. I want to pick up on the question that Commissioner Fitch asked at the end of the last roundtable, this morning's roundtable, about that judgement involved in whether it is more helpful to have more first responders into the hot zone and run towards the threat or assist victims, versus assisting with perimeter control.

I'm wondering what principles you teach, particularly given, I mean, the challenges of the potential that the -- many of the police involved in the response may not have pre-existing working relationships or shared protocols? How do you navigate that piece?

DR. HUNTER MARTAINDALE: That can be difficult. I mean, with -- in some of these locations where you have so many -- so many jurisdictions all respond at the same time, they're not going to be on the same channels necessarily, they're not all going to know each other. That can be very difficult.

In a -- in a ideal situation, which again ideal, those first responders who have shown up, the very first person on scene takes command, gives that LCAN report, locations, conditions, actions and needs, they send that information out. As the next few officers arriver, they're there to help assist that first officer, so maybe they're trying to find the perpetrator or maybe they're already treating people. And very soon after another officer should arrive, we call it the -- let's call it the fifth man, which is not a very good name for it, it's not really the fifth person. But at some point somebody shows up and they realise we don't need more people flooding the scene, we need to start organising, and they kind of take on that command role, where now they're setting the staging area. And it could be they're with -- the fire department has already shown up, or -- however they're going to organise that part of it, and they start staging people and pushing those resources where they're needed.

They're still in communication with the team. So say the first three people were able to link up and they're -- they find the shooter, they stop it. At that point, they could radio out, "The shooter's down in Room 104. We have casualties in 104, 105, 106. We need people to come here to set up a casualty collection point." And now that outside officer would say, "Okay. We need four officers, and you six, fire/EMS, to go with them." They form a rescue taskforce, they get inside the building, because again, there could be a second shooter, those reports are probably there, so now you're getting the medical personnel into that what would be the hot or very, very warm zones, (inaudible), they're getting into that location where now they can provide that medical care that officers may not have the ability to do because they're just not trained on some of the stuff outside of tourniquets and pressure bandages, and they can start ferrying those victims out as the other officers are now forming up more contact team, is one the phrases, right. So putting a few officers together, and if they're clearing the building, trying to make sure there's not a second shooter.

But at some point, that outside person takes control and starts sending those resources around, and eventually, like we talked this morning, the Command staff starts to show up and they can start handing off or keep that person in charge, but they're there to help oversee what that individual is doing, and build up that response beyond just get the shooter. At some point, all the victims are out, hopefully within 30 or so minutes, and now they have to start doing the -- start the recovery phase; right? So we got to get the -- we got to finish clearing the building, we got to preserve the crime scene.

I don't want too many officers on the scene because they don't need to see this. Think about Sandy Hook and -- or Uvalde, and you don't want officers going in and just seeing something horrendous that's going to be very detrimental to mental health. What else do they need? We need -- we need blood products. We need these things, and start pushing out that information. What are we going to do with all the donations? What are we going to do with all these other things that are coming

in? And so that slowly builds up as you get further away from that, you know, five minutes of chaos or whatever it is. That's the longwinded response, I guess.

DR. EMMA CUNLIFFE: That's a very helpful response, thank you.

Commissioners, I would estimate that I have probably close to an hour left. Does it make sense for us to take a break at this time?

COMMISSIONER MacDONALD: How do our panelists feel? Let's take -- yeah, let's maybe take just 10 minutes, stretch our legs, if nothing else. Thank you.

DR. EMMA CUNLIFFE: So that would have us returning at 3:50. Thank you.

--- Upon recessing at 3:40 p.m.

--- Upon resuming at 3:52 p.m.

MS. EMMA CUNLIFFE: All right. I'm going to pick up again more or less where we left off. So we're at the point where first responders have arrived on the scene, somewhere in the hot zone. Some may be travelling towards it. Kerry, Communications operators will remain in close contact with first responders, and presumably, often with civilians as the first responders begin to enter the hot zone and begin to do their work. What are the functions that your Communications Centre will be performing in this phase, both those working as call takers and dispatchers and others while police are doing their work in the hot zone?

MS. KERRY MURRAY-BATES: So in this time, there's a number of things that are happening. First, our call takers are continuing to take calls from the public, so they're continuing to update the dispatcher with new information that's coming in. The dispatcher is continuing to broadcast that information to officers as it comes into our centre. But also, to take information that officers are giving and make suring *[sic]* that that is being broadcast, so that all responding officers, and even perhaps neighbouring divisions, if we feel that that additional response is going to be needed, so that there's an awareness. Also, our supervisors, our operation supervisors are

involved.

So what happens is there's a series of notifications that need to be made, depending on the event type. So we look to other resources that may be required in the response. So we would be looking towards our emergency task force. We would be looking towards our K9 unit. We also make a notification to the local division where the event is occurring, to make sure that the staff sergeant is aware of what's happening. We also make a notification to our Duty Operations Centre. We have a Communications operator in our Duty Operations Centre, so that facilitates the flow of information to the duty staff sergeant and also to the duty inspector. So that, depending on the event, facilitates the flow of information then to the command level.

So all of this is happening simultaneously, and all of the information in real time is able to travel up to the command level where it's needed for the decision-making processes.

MS. EMMA CUNLIFFE: Thank you very much indeed.

Paul, if I may turn back to you, in your work, you apply some of the principles of resilience engineering to police training and response. One of the things that we've heard today is that there's really no such thing as a perfect response to a critical incident on a large scale, nothing ever goes exactly as you would hope. How can the principles of resilience engineering help to facilitate an effective response, if not a perfect one?

DR. PAUL TAYLOR: I think the idea behind resilience engineering is that we can't design a perfect response or we -- well, we can think about a perfect response, and particularly in hindsight, we can look at what could have been, or should have been, and how this could have been resolved better. But unfortunately, even our best-laid plans, we have to insert the human element into that. And as human beings, we're not perfect. We -- you know, we come to work tired sometimes. We pay attention to what's important to us in the moment. Maybe it's not what we should have been paying attention to. Maybe it's not what we -- what would have been the best thing to

be paying attention to to resolve the situation, but whatever is important to us in the moment, and typically, that's driven by our experiences, our training, that's what we tend to focus on and pay attention to. And so really, when we're designing our tactics, where we're thinking about the tools that we're going to use, we really should be -- we really should be thinking about and designing around the expectation for human failure, that people aren't going to get it right, that the information is likely not going to be right, that officers are going to misdiagnose the situation that's unfolding in front of them. They're going to find themselves too close to a situation, too far away. And so how can we kind of design tactics around that? And really, the idea should be as -- you know, what we're looking at is complexity. The idea should be, where we can, reduce complexity as much as possible.

And really, there are four things in the professional workspace that really drive complexity. One is time compression; right? If we put time on anything, performance tends to be greyed. And so where we can engineer a little more time into a circumstance, we can typically improve decision making.

The next one is goal conflict. Where we have goals, and they could be legitimate goals, that come into conflict, the tendency is going to be for the individual to kind of select the concrete goal over the abstract goal. And oftentimes, things like safety, things like -- well, the safety is a great example, tends to be kind of an abstract goal. And so the concrete goal may be I need to get to the individual who's doing the harming, or we need to hold out and make a perimeter. Those are concrete goals. And sometimes, those more abstract goals kind of get pushed aside and we focus on what's concrete to us.

The next thing is visibility of the problem. Can we actually see what's happening in front of us? And the more that we can make a problem visible, the better people are at solving the problem.

And the fourth is the novelty of the problem. Is this something we've faced before? If so, there's some liabilities associated with that; right? So I've

seen this before. I have some pattern recognition going on. And the hope is that I'm accurately kind of diagnosing what's happening and that I have the correct pattern. But if I don't, that can lead to issues. On the other hand, if this is brand new, if it's not something that I've faced before, there are risks to that as well.

And so anywhere along that line, if we can increase the amount of time we have for decision making, if we can deconflict goals along the way, if we can make problems more visible, and if we can give some experience or some exposure to this type of event to the teams that are going to be responding at different levels, we can typically improve decision making and reduce some of that complexity along the way.

As I've looked at responses to active shooter events across the country, I'm reminded very much of my son's first experiences on a soccer field. And the tendency for somebody who's on the soccer field, you can coach them -- and I was a coach for a little while -- you can coach them all day long. We can talk about what we need to do. But as soon as that ball is in play, everybody runs to it. And, you know, it doesn't matter what your assignment is, everybody's trying to get to the ball, and you end up with this mass of people around the ball, try to figure out what to do. If you want a team response that's effective, it takes training and coordination. And I think Dr. Martaindale laid out beautifully the ideal response, but the ideal response doesn't come together out of thin air. The ideal response really has to be coordinated, put into place, and practiced between all of the entities that are going to be involved; otherwise, you get a rush to the ball, and in some cases, actually increase the complexity of the event through the response itself.

MS. EMMA CUNLIFFE: Thank you. If I may pick up on one of those four elements of complexity, and that's the element of time, or giving -- Hunter, earlier today you mentioned the idea of giving one self a little extra space, a little extra time to respond, to ensure that threats are accurately identified, to avoid errors in threat identification, to respond to a threat more effectively. You conducted a really interesting

experiment that suggested that some -- even something as subtle as how first responders carry their firearms might impact the accuracy of response to apparent threat. So I'm wondering if you could please describe how you designed that study and what you concluded?

DR. PAUL TAYLOR: Sure. That study was a follow-up to the Dispatch Priming study, and in that study, I had just over 300 officers from multiple agencies, multiple states again. And I primed all of those officers, so they got the exact same call that my dispatch priming study used, and then all of them got the update that the person they were going to encounter was holding a gun. The thing that I varied in this study is the starting position for the officers. So this was randomly assigned, and one group of officers started encountering the subject with their gun pointed directly at the subject they were dealing with. And the subject they were dealing with had his hands in his pockets, what -- he was what I would call ambiguously armed, so they came into the call with information that the subject was armed, but there was no visual stimuli to indicate one way or another. There was somebody with their hands in their pockets.

And so one group of the officers started the encounter with the person with aiming directly at them. Another group of officers started at a high-ready position, which we kind of defined as at the sternum. We allowed the officers to take this because some of them like to hold it close, and some of them kind of out, but it was lowered from an aimed position, and the third group of officers took a low-ready position, which we defined as at the naval area. So they -- again, they -- some of them held it close, some of them kind of farther out, but we let -- we wanted it down at the naval area.

And then they encountered either, again, this is randomly assigned, a subject who, after a short period of time, produced a firearm and pointed it at the officers. And we were very concerned about response times, so we weren't going to ask officers to take a low-ready position if they couldn't respond in an adequate amount

of time to a threat. And so that was -- that was a aspect of it.

And then we -- another video scenario, the same person rapidly produced a cell phone from his pocket and pointed it at the officers. And we looked at decision-making for that case. And so on the decision-making side, what we found was interesting. From the aims position and the high-ready position it was very similar to what we saw in the Dispatch Priming Study for the primed -- for the gun primed officers, and so we saw a 64-percent error rate from the aims position and a 57-percent error rate from the high-ready position. Statistically, no difference between the two.

But we saw a dramatic change in decision-making for the low-ready position. That dropped down to 30-percent, which is very reflective of the -- of the group of officers who weren't primed at all in the Dispatch Priming Study, at 28-percent. So very, very similar response.

And so basically, the effect of the prime disappeared almost all together when the officers went to a low-ready position. The timeframe differences, so from an aimed position, it was 51/100ths of a second, just over half-a-second; high-ready was 55/100ths of a second, again, very similar and statistically the same; but the low-ready position was 62/100ths of a second. So it was 11/100ths of a second difference between the low-ready position and the aimed position.

To put that into context, 11/100ths of a second is less than half the time it takes an officer to pull the trigger as fast as they can on a semi-automatic handgun if they're pulling it repetitively. So for the cost of less than half a trigger pull, officers could dramatically improve their decision-making.

Now, there's some caveats. This is a -- an experimental study that was conducted in a -- in a simulated environment. And we didn't measure for shot accuracy for the officers that were participating in this, and so that -- there could be an impact from movement on first shot accuracy and things like that, but I think what we do see in this is that we can dramatically improve decision-making with only fractions of a second. By opening up that visual workspace and just a little bit of additional decision

time, officers were making significantly better decisions.

Other places where we would engineer that into the response, and in fact, things like movement in response to a threat being produced, can have the same effect. And so I think -- I think that's the -- that's the biggest takeaway from that study.

DR. EMMA CUNLIFFE: Thank you. And I just want to make sure that we understand and also that we don't ever interpret what is, as you quite fairly say, is experimental data. What's your hypothesis about why having the low-ready position? Was it just the extra 11 milliseconds or is there something more going on with that?

DR. PAUL TAYLOR: I think there's something more going on. We do have data from a follow-up study in which we were looking at taser and firearm positioning. People were holding their firearms up, and they were dealing with a subject that was rapidly producing -- approaching them with a knife. And it was actually multiple subjects coming in. So in one instance, the person would start with the knife and then approach with the knife. In one instance, the person would start with the knife and then drop the knife in approach. In one instance, the person would have no knife and then produce a knife. And then a fourth instance, they would have no knife and they would just approach with no knife.

What we noticed in that study, and there are about 100 officers participated in that study, and we were really looking at decision-making and air rates and transitioning between tools and what happens to intentional resources when somebody transitions, but one of the things that we saw out of a hundred officers, ten officers either missed the knife being dropped or they missed a knife being produced, and all of them had their hands up in a high-ready position. And it -- and it resulted in situations in which officers didn't shoot a subject that rapidly produced them and could have -- could have harmed them when the knife was produced, and they missed other situations in which the knife was dropped . And so it has officer safety and decision-making implications in it.

And so that, in conjunction with the muzzle position study, I think that visual workspace where I'm not just now interpreting upper body movements, I can actually see what's happening, it gives a little bit more time for the officer to recognise the changes. And other researchers have thought that movement time is an important aspect of that, and I don't think that's the case. I think decision time eats movement time up. And the officers are moving during that timeframe, and that little extra time from that low-ready position as they're moving up and making that decision and the open visual workspace allows them to see, recognise the threat when it's being produced and/or recognise the object that's being produced from whatever pocket, and it provides enough time for them to inhibit that response.

DR. EMMA CUNLIFFE: That's really helpful, thank you.

I'm going to turn -- I'm going to switch gears again now, and turn to the third core theme for this roundtable, which is the role of civilians in the early stages of critical incident response. And it's something we've touched on along the way today, I know, but I'd like to draw some of the core themes out.

And Bjørn, I'll begin with you on this one. I think from memory it was the first time that you and I met that you said to me that civilians are the true first responders in a critical incident. You addressed the role of civilians in emergency preparedness and response in your report, and you've also written a very interesting paper specifically about the civilian role in a chapter called Planning for Crisis Response: The Case of the Population Contribution, which, Commissioners, has been filed at Exhibit P001914.

Bjørn, could you please explain what your research and experience reveals about the roles that civilians play in the early stages of critical incident?

DR. BJØRN IVAR KRUKE: Well, it's an understanding that has come out of numerous discussions with incident commanders, civilian officers where I ask them to explain "How does it look like, you know, when you enter the scene?" And many of them, they talked about, "Well, it's a lot of activity going on when we arrive."

And that kind of activity will be first aid, people are hiding and trying to find out what's going on, assisting each other.

So -- and then it struck me that, okay, even though we can't expect citizens to be professional first responders, they are first responders if they want it or not. That's just the way it is.

And -- well, if you -- if you -- the paper you refer to, I have -- that was a huge road traffic accident, and in addition, it was Utøya. And in the road traffic accident, the first car arriving, one of the persons in that car turned out to be more or less the Incident Commander. And it took 30, sorry, 30 minutes for the (inaudible) agencies to arrive and he was more or less in control of what's going on there for that period of time. And more people came, and of course they were dive into the response.

At Utøya, a lot of these youths, they were trying to find out what was going on. It was a lot of, well, you started this session with sensemaking, what is actually going on? And rumours were that "It's a police officer shooting at us. He is wearing a uniform." It wasn't a uniform, but you need to -- a professional eye to see that this is not a uniform. So they did not know what to do. They tried to hide, they tried to run away, and some went -- well, tried to evacuate the island swimming. But the point is that these are not professionals.

And it's fascinating with dispatch or the call-taker you had talked about level of care. We've also -- these people need guidance on how to cope with the situation, and with the correct guidance, they can do a lot.

When it comes to one other criticism or the issues criticized after the 22nd of July, was that they were on the island with the shooter for a period of time, and they were not giving – given guidance on how to behave or how to take care of themselves. And so they were looking for information. Rumours were circulating. They called their parents, and their parents didn't know, of course. The parents told – or called their own 9-1-1, and we are talking about parents from all over the country. So all operations groups were mobilized, and it was a lot of people engaged in information

processing, but this information did not reach the youths on the island, so they did not know what – how to handle the situation.

So basically, my research is that if we have a situation, I can have a heart attack, and you won't be saving me. So that when the ambulance arrives, they will take care of a person that has been saved. That's a heart attack. It could be the same with the road traffic accident, or a house on fire, or a mass shooting. So – and this is not a normative theory. This is descriptive theory. This is how it actually is. And you could also argue that now, yeah, but people tend to panic, and that's true. Some people panic. But many people do not panic.

During lunch, we had a discussion about risk management. These people are not good at doing sophisticated risk management. They don't know that they are in a danger zone themselves maybe, so they need guidance on how to deal with the situation in which they find themselves. And the guidance will, of course, be provided by professionals, and then they need guidance.

MS. EMMA CUNLIFFE: Thank you. One of the things you mention in your chapter about what you -- what you describe also in the chapter is the myth of civilian panic, is you suggest that if we think about it in those terms, we miss planning for civilian assistance and for civilian involvement in preparing for critical incident response. I wonder if you can speak a little bit to that.

DR. BJØRN IVAR KRUKE: It's a tricky one, because we need to -- if you are talking about our preparedness planning, we need to plan with the resources that will be available. We don't know that people will be there and provide assistance, so to plan the event could be difficult. But I've talked to a lot of incident commanders, and particularly in the rural areas. I ask them what do you do then with the civilians when you approach the scene and you take command? Well, I need to use them because I haven't got resources. They are the resources.

In urban areas, it's a little bit more different, because there you have a lot of resources in a short period of time. So the basic idea for the incident

commanders is that, okay, I will use the resources I have. If that's the civilians on scene, then that's my resources. If I have more professional resources, I will, of course, use that.

But it comes to -- that's -- it's difficult to plan that these resources will be there, but then it comes to training. We seldom train using, you know, civilians, but they actually provide some assistance, or some guidance, some equipment. And these civilians, who are they? Retired police officers, they could be working in health services, army veterans, they could have a lot to offer in a initial phase or crisis. They are then when it happens.

MS. EMMA CUNLIFFE: One of the distinctions I've heard you draw in the course of our conversations is between the direct engagement with an active shooter and a search for a shooter, for example, in Utoya, in an unfamiliar environment. And so what might the role of civilians be if police find themselves responding in an environment where they're unfamiliar with the terrain or unfamiliar with where somebody might be?

DR. BJØRN IVAR KRUKE: Well, if they're unfamiliar with the terrain, or if they lack equipment, could be boats, or tractors, or it could be a lot of equipment, then, of course, it's possible to ask. And it might be that it's not that easy to ask civilians, but you have your emergency medical services, they will be there, and the fire brigade they'll be there. Quite often they are local, locals, so they will be aware of a lot of things. So they might know the terrain. They might know the geography. They might know people with the right knowledge. So it might be that the knowledge you do not have, that that knowledge will be available in the responsive, yeah.

MS. EMMA CUNLIFFE: Thank you.

Kerry, I'm going to turn to you, as Bjørn says, call takers in particular have a crucial role with respect to the civilian response, keeping civilians safe, and also making sure that the best information possible is captured. Your Communications operators are working with civilians on a constant basis. What can

you tell me, on the basis of your experience, about how civilians can help police and first responders in the very difficult circumstances of a critical incident?

MS. KERRY MURRAY-BATES: I think as Bjørn says, I think it's about providing that information that's going to help the -- help facilitate the response. As you were speaking, I was thinking about questions that we ask, for example, inside of a building, what's the best access points? You know, if they're in -- if you're telling me that the subject is in this room or this hallway, where does that lead? Where will it come out? Which side of the building? Which side of the building does the apartment face? Where does the balcony come out? Things like that that really provide insights for the officers as they're responding, to how to get to the location. So, I mean, our call takers, like, I said, they really try and engage the callers with that care and with that respect, but the goal is always to get as much information, as much good information that aids the response.

MS. EMMA CUNLIFFE: Thank you. I'm now going to move to a concluding round of questions after which the Commissioners may have some questions for the round table members.

Kerry, back to you. The work that you've described Communications operators performing must be incredibly stressful and emotionally difficult to be engaging directly, for example, with civilians whose safety is at risk, who may be emotionally overwhelmed. I understand that a study was recently conducted by a University of Toronto based researcher on the stress that Communications operators experience in the course of their work. I'm wondering if you could describe that study a little bit, and if you could also talk about how you safeguard the welfare and the effectiveness of your personnel, both over the course of a career as a Communications officer, but also during a particularly challenging shift.

MS. KERRY MURRAY-BATES: The study is "The "Managed" or Damaged Heart," and it's Dr. Arija Birze. I met Arija probably in 2015. She approached me working on her PhD, wanted to look at this area of study, and that is the impact of

stressful situations on the physiology and the mental health of Communications operators. There's a ton of work done on police officers and paramedics and firefighters, but very little done on emergency communicators. So she spent a year in my centre, a very extensive study. We had probably 50 percent participation from our members.

It was all voluntary. She did -- there were blood tests, there was diet diaries, if you will, exercise, sleep diaries, observation. She and her research people, they were swabbing cheeks while dispatchers were dealing with emergency situations. I mean, it was very -- they were wearing heart monitors. It was very...

And essentially, it was -- the study eventually -- it was published in 2020, and it spoke to a couple of things, but one of the -- one of the big things was the impacts of how Communications operators go from incredible, heightened stress down to nothing, where they're just, you know, putting cream in their coffee, and then they're back up very quickly, and it's that rollercoaster ride. And the impact's not only on their physical health, but on their mental health, and then how they perceive future emergency situations and how they deal with them.

Sorry. The second part of your question. Sorry about that.

DR. EMMA CUNLIFFE: Not, it was a -- it was a big compound question. Commissioners, there -- I only became aware of the study that Kerry's describing this morning, but we will have it tendered in front of you.

The second part of the question was how do you safeguard the welfare and the ---

MS. KERRY MURRAY-BATES: Right.

DR. EMMA CUNLIFFE: --- effectiveness of your -- of your staff, either in a really difficult shift, perhaps even more importantly over time?

MS. KERRY MURRAY-BATES: So wellness is huge for us. As Communications operators, we work shifts and we work in big teams and we spend a ton of time together, probably too much, and we probably know way too much about

each other. But we really are a family and we look after each other quite well.

So we have a number of service initiatives. The first one is just the team and the supervisors on the team at the platoon level. Everybody knows each other very well, and they know when someone is maybe struggling.

The second thing is our Communications operators in our service are one of the units that have a mandatory wellness check-in with a psychologist. So one a year, each member spends an hour-and-a-half with a psychologist and just does a wellness check-in.

The other thing we have is our service benefits, which allows us all of the benefits for psychologist services and all of those things, but it also -- we have an incredible program, it's very robust, in that you can connect with someone via text immediately, or you can make an appointment for next week. So the services are very accessible.

We have a well-being team within our unit, and they are representatives from every platoon that work together to create a healthy work environment to make sure that all members feel included. Members that are off on long-term stress, that they are -- still feel like they're included in the team and that they're part of the organisation, and that they're supported.

We also have peer support volunteers, and they are people that have extra training in critical incident response that provide support to members in the moment when they're experiencing or after they've experienced a critical incident event at work.

And then we have members of Communications that are part of the services' CIRT Team, which is the Critical Incident Response Team, and they work on critical incident trauma debriefing, not only within our unit but throughout the service.

So we really do focus on member wellness and spend a great deal of time, not only supporting, but trying to come up with better, more robust ways to really meet everyone's needs.

DR. EMMA CUNLIFFE: Thank you for sharing that. We'll be talking more about stress with respect to first responders in tomorrow morning's session, but we won't have a representative of Communication operators, or that world, and so I figured I'd take the opportunity to elicit that information.

Kerry, is there anything else that you'd like Commissioners to understand about the world you inhabit in the Communications Centre and the work that you and your team do?

MS. KERRY MURRAY-BATES: I -- I don't know. I mean, we've covered a great deal. Communications operators, and like I said, I spent the first 15 years of my career, it's incredible work, they really give of themselves every day. They never know what's going to be on the other end of that phone when they pick it up, and they pick it up every time. And they do their very best. I've watched my people over the last 30 years, and they do their very best to start that component of care that I talked about right as soon as they answer the phone. And they feel, in my experience, they feel an ownership of their caller, they feel a responsibility towards that caller. So like I said, they'll stay on the phone until the police arrive if someone is frightened.

And I mean, the goal is always to get the most information that you can for the police response, that's the goal, but the care of the caller is also the goal; right? So the crisis response starts as soon as the call-taker answers the phone, and they take that seriously. And it's -- it is incredibly stressful because it's a phone call. We don't get the luxury of the visual, the closure, the actual scene, what's happening. We rely on all of the other information we can gather, but we never really get to see.

It's complex.

DR. EMMA CUNLIFFE: Thank you very much indeed.

Hunter, I'll turn now to you. Is there anything else that you'd like the Commissioners to understand about the initial phases of a critical incident response that we haven't had a chance to talk about today?

DR. HUNTER MARTAINDALE: I don't think so. Yeah, I feel like

we've covered a lot in the last -- last two sessions. A little hesitant to repeat too much.

I think the one thing I thought about when Kerry was talking earlier about couching people -- civilians through the process and they can do a lot, one thing we haven't talked about, we talked about day-to-day and getting away from the shooter and blocking him out and defending yourself.

We've even had cases here in the States where citizens were able to provide medical care. So they've gone through some sort of Stop the Bleed program and they were able to apply, you know, a tourniquet, and before a first responder, you know, they are the first responders, as you all were saying, and they were able to save some lives. But there are other programs beyond the normal, Run, Hide, Fight; ADD programs that citizens are able to be better prepared for that... I don't know how prevalent that is in Canada, but there -- it's getting more and more traction down here.

DR. EMMA CUNLIFFE: Thank you very much.

Paul, I'll tend to you next. Is there anything else that you'd like the Commissioners to know about your research or insights that you can share from your experience as a trainer about how best to set first responders up for success in the early stages of a critical incident response?

DR. PAUL TAYLOR: I don't think there's a whole lot that we haven't discussed as far as the front end, but I would just like to add, you know, the term "complexity" has come up quite a bit. And I think what we understand from the research is that there is -- there is not one person who can understand complexity in and of themselves, or one narrative that can describe complexity in and of itself. And so I'd just like to applaud the Commission on the approach that you're taking to this tragedy, the approach that you're taking to understanding of these types of tragedies.

The tendency when we have a bad outcome is to find blame. That is -- that is the tendency. We see that over and over again in these -- with these incidents as they occur in the United States and other parts of the world, our first instinct is to try and find the culprit that caused this incident and how we can improve. And I

think Sidney Dekker says it best when he says, "You know, when we look at these events, you can -- you can either blame or you can learn. You can't do both, you have to choose."

And I just want to applaud the Commission for the approach you're taking to this event, to understanding this event, and to improving outcomes going forward. I think it is a healthy approach, I think it is the right approach to actually learning and improving your systems going forward.

DR. EMMA CUNLIFFE: Thank you very much.

Bjørn, if I can turn now to you. Based on your research, the report that you've prepared for the Commission, and your experience with after action reviews of mass casualty incidents in Norway, is there anything else that you'd like to share with the Commissioners that we haven't had an opportunity to address today?

DR. BJØRN IVAR KRUKE: Many issues. I think we have been talking about communication. And -- well, in Norway, it's -- the active shooter scenario is a procedure for how to handle this type of situation, and it's actually a procedure of cooperation. It's a lot of focus on law enforcement personnel or police officers, but it's actually about cooperation, cross-organisation cooperation between the three blue light agencies, cooperation with citizens, and that means that when we talk about communication, we need to talk about communication across organizational boundaries at field level, at operational room level, at strategic level. And in addition, we need to make sure that we have robust vertical communication in each and every response organization. And this is not the issue. This is extremely complicated. But if we are not successful in establishing this good communication system, then that means that we will not have a collective situational awareness. It will be a fragmented situational awareness.

So to make sure that we actually make good decisions on all levels of response, that communication system, horizontally and vertically, that that one is in place and that we have good communicators being able, that have that capacity, that

knowledge, that training to communicate, extremely important.

MS. EMMA CUNLIFFE: Thank you.

Commissioners, do you have any follow-up questions or new questions, for that matter?

COMMISSIONER FITCH: So I'm first up to bat. I'm going to actually use your final comments, Bjørn, as a springboard to a question that I actually highlighted in the first session, but I think is also applicable in this session. We hear a lot about interoperability and integration. And when I think of the times that I've heard people use that almost interchangeably, to me, they're very different things. When we talk about, you know, shared training platforms, for example, are we talking about integrating teams together as a permanent ongoing basis, or are we talking about making sure that all of the partners that are at the table are able to operate jointly on a mission at a place in time? So I think that those are very different things, so I'm not sure which of you might want to answer that, but it speaks to everything from shared training platforms, to understanding the standard operating procedures, to speaking in common language, and above all, collaboration and being cooperative. All of those things that you have all talked about are so important, if you are to bring various partners together to operate on a mission in a place and time. So if one of you would like to speak to the difference between integration and interoperability and why that's an important distinction. Whoever hits the buzzer first.

DR. BJØRN IVAR KRUKE: That's me. Well, after the 22nd of July, we have some principles for our preparedness and response. And the principles, they are principle of similarity, and they are principle of proximity or subsidiarity. And in addition, we had a new principle after the 22nd of July, the principle of cooperation. And so we experience silo thinking during the 22nd of July. And there could be many reasons for that, but I would raise one. We do not train, you know, the relevant actors together. Because if we do that, then we will communicate across organizational boundaries. And this will be -- it will still be standalone organizations, but it will be

bonds at all levels of response between these organizations, and that is not something that you will end up with in a real situation if you do not plan and train for that.

COMMISSIONER FITCH: Hunter, please go ahead.

DR. HUNTER MARTAINDALE: So you're question made me think about some local jurisdictions here. So at OR, we're more of a common language type of training program. We just want -- we don't know who's going to show up, has a common language and learn how to work together. Austin, Texas recently started a program this last year where they do a true integrated team. So Austin has a lot of festivals and big events where they'll have hundreds of thousands of people spread across the downtown area, and so they have developed integrated rescue task force. So they have small vehicles with a couple of officers, a few fire, EMS personnel. And so if something as simple as, you know, somebody falls down and breaks their arm -- that's probably the low end of it -- but all the way up to fights and bad incidents, they can respond as a true integrated unit that trains together, and that unit knows each other, they're always on shift together when these events happen. And we had a few of our trainers, they were involved in an incident where somebody got shot at a festival. They got there within a minute. They had tourniquets on. They saved this guy's life, and that was because they were prepared. They knew each other. I mean, everything was -- worked as well as you could possibly hoped it would work. Now, would that happen in a situation with nobody knew each other? It could. And you could get some men and women together and they just -- they click and it's just as smooth as that, but that team is -- has seen the need and has a true integrated focus now, beyond just interoperability.

COMMISSIONER FITCH: I just have -- as always, I have more than one in my book written down, and being mindful of the time as well, these last two questions are really linked together and is related to some of the information that you've shared with us today, Kerry, from the Communications side of the house. I'm wondering, a couple of questions, you had made comment that dispatch passes on

information basically word-for-word, but you choose your language around how you were sharing that word-for-word information. So you'll talk about, you know, a gun possibly being present because it's not present until it's confirmed by an officer arriving on scene. And so where I'm going with that is the officers who are receiving that information, have they had exposure to how COMM Ops works, the language that they're choosing to use? Do they have a full understanding and appreciation of how that information is relayed? Do they have any training? Do they get exposed to kind of the culture of the COMM Ops?

MS. KERRY MURRAY-BATES: That's an excellent question. Our recruits spend some -- a day with us when they're -- it's part of their 13 weeks at -- or when they come back from Aylmer at our Police College. Our Communications operators provide their radio training for them. And then they spend time with their coach officer. But from the training they get, other than that, I'm not aware of anything else that would give them the reasoning behind the language that we use, the psychology behind it, I guess, is what you're looking for. I wouldn't -- I'm not aware of anything like that.

COMMISSIONER FITCH: Thank you. And just one other piece related to your work, in your experience, when you have -- I believe you said that you have a senior officer available to COMM Ops working in the Communications Centre?

MS. KERRY MURRAY-BATES: There's a senior officer. The duty staff sergeant is at the Duty Operations Centre.

COMMISSIONER FITCH: Okay. Do they have the ability to tap in and listen real time to a 9-1-1 call that's coming in?

MS. KERRY MURRAY-BATES: So they have access. Our supervisors, upon request, can play a 9-1-1 call within, you know, less than a minute, 30 seconds.

COMMISSIONER FITCH: Okay. Great. Thank you very much. That's all my questions.

COMMISSIONER MacDONALD: Thanks so much. If we could use first names, Paul, I have a question for you. I found it particularly relevant your observation that often a first responder will resort to an initial conclusion about what's happening and then analyze the facts towards that conclusion. And I think that's a really important concept. So is this a time dynamic or is this a psychology dynamic? In other words, is it a rush to judgment? Because we heard about for analysis paralysis where you take too much time. Or is it kind of a psychological dynamic? Because I think how you would train to avoid that would vary depending upon whether it's a time concern you have or just a predisposition psychological concern you have. If you can elaborate on that?

DR. PAUL TAYLOR: Yeah, and I would term it a human limitation. I think that our tendency as human beings is to seek out the first plausible explanation for what's happening in front of us, and we start interpreting ahead. And part of the reason that we do that is there's a delay in our mental processing. It's an appreciable delay. And we have to start predicting what's going to happen next. And this can happen in a conversation. You know, you and I could be engaged in a conversation, and you're telling me a story, and I believe that story's going in one direction, and I'm starting to interpret ahead about what you're saying, and then suddenly, I realise mid-story, you're talking about something else entirely. And if you've ever experienced something like that, it takes a moment for you to re-adjust, to kind of realign yourself to the new direction of -- that things are going. And I think that happens to human beings as well -- or to police officers, to first responders as well. They tend to take the available information, if it's plausible to them, if it makes sense to them, and they start getting clues about what's happening in front of them, they start interpreting additional information that's coming in through that lens. They start interpreting behaviour through that lens.

You know, one of the things with the Dispatch Priming Study, like I said, the officers kind of identified the behaviour as the problem; right? So they said

somebody rapidly produced something from their waistband, so I responded, or I was able to identify the object and so I didn't respond. When in fact, this pre-event information was having an impact, it was providing the lens through which they were interpreting that behaviour, and that's true for all of us. It's a liability for all of us. The -- you know, the great Wayne Gretzky said that "I don't go to where the puck is. I go to where the puck will be." Well, how does he do that? He does that because he's able to shortcut the information he's bringing in. He's able to take mental shortcuts and predict ahead. Now, that's kind of the definition of expertise, and we all start to develop that over a period of time. It's how we develop efficiencies in our life. And police officers or first responders are no different. They start to learn what information is important and they start to predict and interpret the information that they're receiving through that lens. And so, again, there's liabilities to that.

Where we can have more exposure to a scene, where we can start collecting more information, and one of the things we talked about during the -- our preparatory session is, you know, the idea of live 9-1-1 and actually having officers being exposed to the information that's coming in directly because it is different than when it's being presented by the dispatcher. It may be word-for-word, but you're not collecting the background information, at least not hearing the actual background information. You're not actually being exposed to that. So the more we can be exposed to that, the more the officers can actually start collecting data from the scene itself, the more likely they are to catch discrepancies between the information that they walk in with and what's actually happening.

COMMISSIONER MacDONALD: Thank you so much.

COMMISSIONER STANTON: Kerry, I was really interested in what you said in the previous session about -- I think you said that a Communications operator is in the Major Incident Command Centre to ensure that the incident commander has all the information in the CAD log for the event; is that right?

MS. KERRY MURRAY-BATES: That's right. We -- when they

stand up the Major Incident Command Centre, a Communications operator is part of the deployment team, and it's just to make sure that the incident commander has all of the information that is available in the CAD system. It's a specialized skill, and so we want to make sure they have access to all of that information.

COMMISSIONER STANTON: And so how is the information actually provided to the incident commander?

MS. KERRY MURRAY-BATES: The Communications operator that's assigned to him will update him as the information is coming in. So in our Major Incident Command Centre, the dispatcher sits across from the incident commander, and as information is coming in that is important, they relay that information to the incident commander so that he's aware -- he/she is aware.

COMMISSIONER STANTON: So it's a person who is not actively taking or dispatching calls. It's a ---

MS. KERRY MURRAY-BATES: No.

COMMISSIONER STANTON: --- person who's monitoring the CAD ---

MS. KERRY MURRAY-BATES: Actively monitoring.

COMMISSIONER STANTON: --- and briefing as they go.

MS. KERRY MURRAY-BATES: That's correct.

COMMISSIONER STANTON: Okay. And in terms of before it gets to -- before you stand up a Command Centre, do you know how that kind of information is provided to whoever is the scene commander or whoever's in command prior to a Command Centre being set up?

MS. KERRY MURRAY-BATES: So there's two levels. One, the dispatcher, is relaying all of that information that's coming in from the call takers to whoever is the incident commander on scene, if it's just at that level. But at the same time, we have a Communications operator permanently embedded in our Duty Operations Centre, and they provide that same information, because they all work off

the same system, real time, so they're able to provide that same information to the duty staff sergeant and the duty inspector. So we have two levels of response there.

COMMISSIONER STANTON: Okay. Great. Because in -- Bjørn, in your paper, you talk about -- and this has come through in so many of the materials, the importance of situational awareness for critical incident decision making, and it seems to me that the information that is going into the CAD directly from the call takers is the most up-to-date on-scene information. So the challenge is how does that information get transferred in real time, but also -- and I wonder if this might be a question for you, Paul, how is that information analyzed in real time? And so it's one -- so it sounds like the dispatcher is being helpful in your case, Kerry, by broadcasting it over the radio, so that others can hear that. But how do we go about then ensuring that that information is absorbed and analyzed? And I wonder, Paul, from the work that you've done, if you have any thoughts on that, please?

DR. PAUL TAYLOR: Yeah, and I think we throw the term situational awareness around quite a bit. So the idea of global situational awareness would be ideal, right, that we kind of have this global understanding of what's happening. But the truth of the matter is, individuals pay attention to what's important to them in the moment, and again, they start -- the information that assists them, particularly under time compressed situations, or where there's pressure to make a decision, I try and take in the information that's most important to me really in that moment. And so people don't ever lose situational awareness. They may not have global situational awareness or the situational awareness that we would want them to have after the fact, but they always have a situational awareness, and they're actively selecting the information that's most important to them. And that's not necessarily happening at a conscious level. It can be happening at a subconscious level, and we're filtering information that's less important. And so that can happen at multiple levels. That can happen at the dispatch level where Kerry was mentioning that they're selecting the important information. Well, that's the important information given their

understanding of the event as it's unfolding. And then the same thing happens for the commander who's making decisions on the scene, as information's being fed to him or her, they're -- they are taking that information that they believe is most relevant to their decision-making processes and moving forward to it. And so there are some -- there's some fallibility there.

Where we can improve some of those decision-making processes, or where the research has shown us we can improve those decision-making processes is having people who aren't necessarily directly caught up in those decision -- those direct decision-making roles, being exposed to the same type of information as well, and having a more global perspective of things. As we get caught up in those processes, whether I'm a frontline operator and I'm engaged in what's happening in front of me directly, or as I move back and I have a perimeter role, or I have an incident command role, the more I get caught up in any one of those processes, the more likely it is that I'm going to be seeking information that's relevant to me and my understanding of the event. There's a saying that what you see is all there is and that's very, very true for different roles, and different roles are going to be selecting information, and the same information can have different meaning for different people. And so the higher up you can get and having people with a more global perspective who aren't actively engaged in decision processes, the more likely you are to kind of capture the bigger meaning beyond that individual decision process.

I don't know if I made sense there.

COMMISSIONER STANTON: You did. Thank you.

Emma, do you have anything further?

MS. EMMA CUNLIFFE: I was just wondering, Commissioners, I think the structure of the communications centre and the deputy operations centre in Toronto is somewhat unlike evidence that you've heard about about other systems in other places, and I was wondering if we might just give Kerry a moment to articulate who's in -- who's in your communications centre and who's -- what the kind of hierarchy

there is and then what its relationship with the duty operation centre is and what the role of the duty operation centre is.

MS. KERRY MURRAY-BATES: Sure. So the communications centre, the 9-1-1 centre itself, has our call-takers and our dispatchers. It's just one big room. We have supervisors assigned to call take -- to the call-take duties and then we have supervisors assigned to the dispatch duties. And then we have an operational person in charge that looks after the whole operation.

The duty operation centre is located in our headquarters and there is a communications operator in the duty operations centre, but there, there is the duty Staff Sergeant, the duty Sergeant. The duty Inspector uses that as their home base, although they're mobile a lot. There's a media officer and there's a PC assigned there to do a myriad of tasks, Versadex checks and follow-ups and stuff like that. So they're located separately.

The duty operations centre's role is business continuity for the entire city, so we are -- the communications centre, the dispatchers, are divided up into divisional boundaries and they focus on their division specifically, but the duty operations centre focuses on the entire city and the resource allotment for the entire city, so they're able to facilitate maybe longer-term movement of resources depending on what's happening, where in the city, and we have -- yeah. That's what they do.

They look at the big picture. Yeah.

MS. EMMA CUNLIFFE: Thank you.

And just to clarify one point, my understanding is that there are no longer any police situated in the communications centre, that the police as such are in the duty operations centre and elsewhere. Is that correct?

MS. KERRY MURRAY-BATES: That's correct. Yeah.

MS. EMMA CUNLIFFE: Okay. I just wanted to make sure that was clear on the record. Thank you.

COMMISSIONER STANTON: Okay. Thank you so much.

Thanks, Emma and your team. You've obviously done a tremendous amount of research to find all of these incredible resources for us to hear from today, and it's really been enormously helpful to us to have the benefit of their experience and their research and their insights from many years of work in this area.

We have gone over time on both sessions today, and so I do appreciate everybody bearing with us as we ask the questions while we have the folks with us who can give us the information. It's really important.

So thanks so much, Dr. Himberg, from earlier today, Superintendent Gossen, Dr. Kruke, Deputy Chief MacKinnon from earlier today, Dr. Martaindale, who's here, Ms. Murray-Bates and Dr. Taylor for taking part today. It's very much appreciated.

Today we learned more about critical incident preparedness and responses, including the roles that civilians, 9-1-1 and call-takers and first responders have to play. And for those of you who just joined for this session, these sessions today and tomorrow relate directly to the mandate in our Orders in Council that require us to examine issues as they relate to the mass casualty, including police actions, operational tactics, response, decision-making and supervision, and police policies, procedures and training in respect of active shooter incidents, so we're required to set out lessons learned as well as recommendations that could help prevent and respond to similar incidents in the future.

And so these conversations are really important because they allow us to explore in greater depth the issues that are directly connected to the mass casualty and help us understand better how the systems and processes work and how they can be improved.

If you'd like to learn more about these issues, we encourage you to read the Commissioned Reports on our website, which include a study of police and first responder decision-making during mass casualty events along with many other important topics, many of which we touched upon today.

A reminder, we also want to hear from you about research you think could help our work or recommendations you have to improve community safety. You can share your thoughts through the public submissions survey on the website.

Tomorrow we'll have two more roundtable discussions focusing on critical incident training and decision-making, and many of the folks that we had on panels today will join us again tomorrow. And for those that won't, we thank you again and wish you well. And we'll see the rest of you here again tomorrow at 9:30.

Thanks so much.

--- Upon adjourning at 4:56 p.m.

C E R T I F I C A T I O N

I, Mathieu Bastien-Marcil, a certified court reporter, hereby certify the foregoing pages to be an accurate transcription of my notes/records to the best of my skill and ability, and I so swear.

Je, Mathieu Bastien-Marcil, un sténographe officiel, certifie que les pages ci-hautes sont une transcription conforme de mes notes/enregistrements au meilleur de mes capacités, et je le jure.

Mathieu Bastien-Marcil