

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

VOLUME 31

Held at :

Best Western Truro Glengarry
150 Willow Street
Truro, Nova Scotia
B2N 4Z6

Thursday, June 2, 2022

Tenue à:

Best Western Truro Glengarry
150, rue Willow
Truro, Nouvelle-Écosse
B2N 4Z6

Jeudi, le 2 juin 2022

INTERNATIONAL REPORTING INC.

www.irri.net
(800)899-0006

II Appearances / Comparutions

Ms. Krista Smith

Senior Legal Advisor / Conseillère
juridique principal

Dr Emma Cunliffe

Director of Research and Policy for the
Mass Casualty Commission / Directrice de
recherches et politiques pour la
Commission des pertes massives

III
Table of Content / Table des matières

	PAGE
ROUNDTABLE 1: CRITICAL INCIDENT DECISION-MAKING INCLUDING STRESS MANAGEMENT	2
ROUNDTABLE 2: CONTEXTUALIZING CRITICAL INCIDENT RESPONSE: RISKS AND TRADE-OFFS	85

IV
Exhibit List / Liste des pièces

No	DESCRIPTION	PAGE
-----------	--------------------	-------------

Halifax, Nova Scotia

--- Upon commencing on Thursday, June 2, 2022 at 9:35 a.m.

COMMISSIONER FITCH: Bonjour. Bienvenue. Hello, and welcome.

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

Once again, please join us in 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.

As we have said, we are required by the Orders in Council to explore a number of issues, including police actions, operational tactics, response, decision-making and supervision, police policies, procedures and training in respect of active shooter incidents. Based on this and all our work, we are required to share lessons learned as well as recommendations that could help prevent and respond to similar incidents in the future.

Today we will continue to hear from experts and others with helpful knowledge through two more roundtables that are exploring issues related to the mass casualty. This important work helps to build our understanding of what things work well and what could be improved, learning lessons from here in Nova Scotia, Canada and other countries.

The responders and academics taking part in the morning roundtable will focus on the common psychological factors in critical incident decision-making, how we train critical incident decision-makers and the impact of stress on the performance of responders and critical incident decision-makers.

This afternoon, we will discuss the potential risks arising from an increased focus on critical incident training and preparedness, competing training priorities and the role that civil society can play in making decisions about police training and resources.

1 I will now ask Krista Smith from our Commission's Research and
2 Policy Team to introduce this morning's roundtable members.

3 Krista?

4 **--- ROUNDTABLE 1: CRITICAL INCIDENT DECISION-MAKING INCLUDING STRESS**
5 **MANAGEMENT**

6 **MS. KRISTA SMITH:** Thanks, Commissioner Fitch. Good
7 morning.

8 As facilitator of this roundtable this morning, I will be directing the
9 questions and asking follow-ups and moderating the dialogue. We would ask each of
10 our participants to please speak slowly for the benefit of our accessibility partners.

11 As you know, roundtable discussions form part of the Commission
12 record and are being livestreamed and are publicly available on the Commission's
13 website.

14 At any point in our discussion, the Commissioners may have a
15 question or comment to follow up, so there will be space for them to participate as well.

16 As Commissioner Fitch indicated, this morning's roundtable is on
17 critical incident decision-making, and she reviewed the core themes with us. And we're
18 going to approach that in a certain order this morning.

19 So we will start with the process of critical incident decision-making,
20 followed by how physiological stressors can impact decision-making, and then we will
21 look at some of the common pitfalls in -- or difficulties or struggles in critical incident-
22 making. And then we'll take a bit of a break and, after that, we'll come back and talk
23 about how training can mitigate some of those stressors and talk about implications for
24 the future.

25 So that's the plan, and the intention of this conversation is to
26 provide the Commissioners and the public with a deeper understanding of the core
27 themes so that everyone is well positioned to engage in a conversation in Phase 3
28 about lessons learned and potential recommendations.

1 So I'd just like to get us started off this morning by having each of
2 you introduce yourselves and speak a little bit about your work and how it relates to
3 critical incident decision-making.

4 Judith, I'd like to start with you.

5 **DR. JUDITH ANDERSEN:** Hi. I'm Judith Andersen. I'm Associate
6 Professor at the University of Toronto Mississauga.

7 I have spent the last over a decade now working with first
8 responders from a psychophysiological perspective, so we actually hook up first
9 responders with different equipment measuring their physical signals during high-stress
10 training and real-life encounters, so we're able to have a window into their bodies to
11 understand better what is impacting their critical decision-making. And more recently,
12 we've been working on ways to prevent some of the challenges that come up with --
13 when physiological responding is very high and how we can apply that to police training
14 specifically.

15 **MS. KRISTA SMITH:** That's great. Thank you, Judith.

16 Can I ask you maybe to pull that microphone a little closer to you
17 when you're speaking? Thanks.

18 Wallace, we met you yesterday.

19 **MR. WALLACE GOSSEN:** Good morning, everybody. For those
20 of you that weren't here yesterday, my name is Wallace Gossen. I'm a Superintendent
21 with York Regional Police.

22 For those of you not familiar with York Region, it picks up where
23 Toronto leaves off at Steeles Avenue just to the north. It's a population of about 1.2
24 million and our agency has approximately 2,100 officers -- or sorry, 2,100 members,
25 1,600 sworn and about 600 civilian.

26 I'm the Superintendent in charge of Operational Command, and I've
27 been with the department for 32 years.

28 My background is primarily in the tactical world where I was a team

1 leader, Tactical Commander, explosive technician and a use of force instructor. I am
2 currently the Chair of the Emergency Preparedness Committee for the Ontario
3 Association of Chiefs of Police, and I'm also the Vice-President of the Association of
4 Canadian Critical Incident Commanders. And as such, I am one of the instructors that
5 teaches on the Critical Incident Commander program at the Canadian Police College.

6 **MS. KRISTA SMITH:** Thank you very much, Wallace.

7 We'll take it over to our virtual friends. Lauren Alison, you
8 commissioned a report for us. Can you tell us -- or we commissioned a report from you,
9 and Dr. Shortland. Can you tell us a little bit about your background?

10 **DR. LAURENCE ALISON:** Sure. Thank you, Krista. Do you want
11 to just give me the thumbs up to check that I am being heard?

12 Excellent. Okay. Thank you.

13 **PROF. LAURENCE ALISON:** I'm Professor of Investigative and
14 Forensic Psychology at the University of Liverpool.

15 The last 30 years or so, I've been working on field-based studies of
16 critical and major incidents. I've done a lot of operational debriefs of everything from the
17 7/7 bombings, the Buncefield fire, poisoning of Alexander Litvinenko, pre-briefing and
18 debriefing of the London and Beijing Olympics, and I've worked closely with my
19 colleague, Neil Shortland, who will introduce himself in a minute, in looking at how real
20 decision-makers struggle with complex decisions that they may never have faced
21 before.

22 In particular, I've been interested in the last 10, 15 years in a
23 process of what we call decision inertia, which often arises under conditions of high
24 uncertainty and high risk when decision-makers haven't come across those sorts of
25 problems before and we've started to unpack and understand the architecture of that
26 process, what happens and what can be done to mitigate against it.

27 Thank you so much for having me.

28 **MS. KRISTA SMITH:** Thank you very much.

1 Dr. Shortland?

2 **DR. NEIL SHORTLAND:** Thank you very much.

3 Also thumbs up we can be heard okay? Fantastic.

4 Good morning, everyone. Again, thank you very much for having
5 me here. My name is Neil Shortland. I'm an Associate Professor in Criminology at the
6 University of Massachusetts.

7 And for about the last 10 years, I've been largely studying the
8 process through which people make decisions under conditions of high uncertainty. So
9 largely that started with members of the U.S. Armed Forces, United Kingdom Armed
10 Forces and then more recently with United States and United Kingdom police officers.

11 In addition to working with Laurence on understanding the process
12 and the psychological components that are required to navigate high uncertainty, we've
13 also done a series of studies to look at the individual differences and personality
14 characteristics that play a role in how people make these decisions and may explain
15 variants in performance, so when 100 people face, you know, difficult decisions, can we
16 identify factors that may explain the performance of 50 percent versus the other 50
17 percent.

18 And so Laurence and I have been working on those experimental
19 works together in partnership with some of the real-world debriefs that we've been
20 doing.

21 **MS. KRISTA SMITH:** Thank you very much.

22 Matt McAllister?

23 **MR. MATTHEW McALLISTER:** Good morning, everyone.

24 Can you hear me okay?

25 Thank you for having me. I'm currently working in the Department
26 of Health and Human Performance at Texas State University, and I'm the Director of the
27 Metabolic and Applied Physiology Lab in our department, where we specialize in
28 analyzing various biomarkers of stress and cardiometabolic health, especially among

1 high-stress occupations, not only law enforcement officers but we've done a lot of work
2 with firefighters and military personnel as well.

3 Specifically what we do is we have, over the last several years,
4 been studying various interventions that we can implement that can reduce some of the
5 adverse effects of occupational stressors in high-stress occupations. We have
6 introduced dietary, as well as training interventions, and that's -- most of our work is in
7 those areas.

8 **MS. KRISTA SMITH:** Great, thank you. I think we're set up well to
9 have a great conversation this morning.

10 So I just want to start us off with some of the basics. The report
11 that we commissioned from Laurence and Neil is about critical incident decision-making,
12 and in that report, which is Exhibit P-001872, at page 4, Laurence, you state:

13 "We have often found it useful to frame the process of
14 critical incident decision-making not as a process of
15 selecting the best outcome, but as a process of
16 calculating the least-bad outcome. Most options are
17 high risk, most will carry negative consequences, and
18 many will be immutable and irreversible once
19 committed to." (As read)

20 So I'd just like to invite you to speak about this a little bit and what
21 you mean by the least-worst outcome.

22 **DR. LAURENCE ALISON:** It might be helpful to give a sort of
23 visual metaphor that's been used in the past that I've found helpful to describe when I'm
24 talking about this with students. There's a philosophical paradigm called Buridan's
25 donkey, which is a donkey which is both starving and dehydrated. And it comes upon a
26 bale of hay and a pail of water and doesn't know which to choose between because it
27 knows that it's both starving and also needs water. And in trying to calculate which it
28 should do first, it both starves and dies from lack of hydration.

1 So what you tend to find when you have two options which are hard
2 to calculate the difference between them -- and in this case, in critical instances, there
3 often isn't a best outcome, there is a least-worst outcome -- decision-makers can get
4 caught in the trap of calculating which bad outcome they are most content with.

5 Obviously, no decision-maker wants something bad to happen and
6 therefore what can happen with the less experienced decision-makers is that they will
7 project into the future what it will look like if they calculate path A, which looks bad; they
8 will think about path B, which also looks bad, and if finding both of those intolerable they
9 will end doing nothing. So the risk becomes, if you are not used to having outcomes
10 which are less than desirable, and you are not used to having to think about calculating
11 the least-worst option, you can spend all your time thinking about the outcome and what
12 you might do, and that often becomes the problem.

13 And in my research over the last 30 years, where we've seen the
14 wheel fall off is not in people making erroneous judgments, but actually failing to act,
15 and that is a hard place for that decision-maker to be, but that is the place where we
16 expect our critical incident decision-makers to be.

17 **MS. KRISTA SMITH:** Thank you very much.

18 I'm going to take it over to Neil now to follow up on that a little bit.

19 Given that it's often a choice between one bad outcome or another,
20 can you speak a little bit more about why it is so difficult to make a decision when these
21 are your options?

22 **DR. NEIL SHORTLAND:** Yeah, of course. So one thing I'll start
23 with that I think it's important to understand the difficulty that these least-worst decisions
24 pose, is there's a theory of decision-making called the trimodal model, which basically
25 says there are three ways that people make decisions, and one of the things that we've
26 said quite often in our work and in our trainings and our academic work is that we very
27 much focus on the first two of those forms, and we often don't put enough emphasis on
28 the third one, which is where a least-worst decision would be.

1 The first of those forms is reassessment and matching, which is the
2 idea of using experience to make the decision in front of you. This is something that's
3 often used, you know, recognition, prime decision-making is big in the field and uses
4 part of our training, using experience to -- using experience to make the decision again.
5 So, basically, you know, "I've faced this before. I know what to do. I'll use my
6 experience."

7 The other is matching, which is matching the decision to policy,
8 rules, social norms, and guidelines. You know, we obviously have a policy that allow
9 people to make decisions in certain situations.

10 The third form of decision-making is this idea of choice, which starts
11 from a position of being equally attracted, or as Laurence said, unattracted to two or
12 three options in front of you. And now what this often means is that process requires
13 you to weigh the pros and the cons and to justify choosing one option versus the other
14 option.

15 The issue with a least-worst decision and a least-worst choice is
16 that if you're thinking of decision-making in a rational format, so I have option A and
17 option B, I can weigh the pros of A and weigh the pros of B and come up to the best
18 decision. Something like buying a car, buying a house; all of the information is known,
19 and I can look at my two options.

20 With least-worst decision-making, what it structurally looks like is
21 option A often offers you two options. Option A, outcome 1 is a good outcome; option
22 A, outcome B is a bad outcome. Option B, outcome A is a good outcome, and option B,
23 outcome B is a bad outcome. And we don't know which of those two outcomes we will
24 have if we choose our options. So in a least-worst decision it's often the case that both
25 options offer us good and equally both choices offer us bad.

26 Now, because these situations are often novel and because they
27 often have elements of them that may deviate or violate the policy norms, what we are
28 used to dealing with, we can't make least-worst decisions with reassessment and

1 matching and RPD, but it's also very different to rationally make that decision because
2 you can't, on the face of it, identify the best and/or the worst. And so from a cognitive
3 standpoint it makes navigating that moment incredibly difficult because it violates so
4 many of the ways or the tactics that we cognitively, traditionally use to make our
5 decisions.

6 **MS. KRISTA SMITH:** That's extremely helpful. Thank you for that
7 explanation.

8 I'm going to take it back to Laurence now to have us understand a
9 little bit about what is the difference between an expert decision-maker and a novice
10 decision-maker. And in your report, you mention -- or you talk about this in terms of the
11 pillars of decision-making.

12 **DR. LAURENCE ALISON:** Sure, yeah. I mean, over the last 10
13 years when we've been involved in looking at actual field-based decisions, you know,
14 dissecting them by speaking to the decision-makers that have been there or looking at
15 the sort of scenarios that we build with live exercises, there seem to be four things that
16 our elite decision-makers do that our less successful ones do not.

17 I think we have to be a bit cautious, perhaps, about describing them
18 necessarily as experts, if expert is defined as someone who's been doing it for a long
19 time because by our own sort of standards, critical incidents are often events where
20 individuals have not repeatedly come across the same decision.

21 Nonetheless, with that in mind, the four things that seem to
22 generate success as opposed to failure are as follows:

23 The first thing is elite decision-makers are very good at conducting
24 what we call situation assessment. And, actually, all these four are about moderate
25 actions rather than extreme ones. So moderate situation assessment occurs when a
26 decision-maker is able to hold in their mind three or four possible scenarios to explain
27 what it is they are dealing with.

28 What our less successful decision-makers do is one of two extreme

1 things; they either generate 50 different possibilities and therefore working memory
2 can't hold them all in mind, or they alight on one explanation to help them -- to assist
3 them in formulating what they should do, and then they focus all their attention on that
4 one form of situation and assessment.

5 The more successful decision-makers, and this is a bit of a process
6 of a gross simplification, what they will do is generate two or three possible, plausible
7 explanations. They'll look at the scenario that they're dealing with and think, it could be
8 really bad, it could be moderately bad, or it could be quite good. That's a bit of a
9 simplification, but they'll hold those three options in mind. Then they will start
10 interrogating the situation to establish which of those three plausible options it is.

11 So, first thing, elite decision makers have to proportionate moderate
12 numbers of scenarios in mind to assist them in moving forward. That's the first marker.
13 The second marker is that our elite decision makers are very acutely aware of time, and
14 they think about whether they have the time to generate more information to assist them
15 in firming up which of those three scenarios it is. They also will think about whether it is
16 not worth the investment of time to firm that up, or whether in fact they should move
17 forward at a pace because there simply isn't the time to make that calculation. What
18 less successful decision makers will do is either think they have all the time in the world,
19 think they have absolutely no time, or won't think about time at all. So in a nutshell, elite
20 decision makers have a proportionate consideration of the importance and criticality of
21 time. In basic times, an elite decision maker will get scenario and say do I have time to
22 ask for more, and if I don't, I won't, I'll move forward. So that's the second thing.

23 The third thing is, our elite decision makers are very good at
24 interrogating information to look for gaps, to look for inconsistencies, to seek more
25 information, and to punch through the ambiguity so that they can firm up what it is that
26 they think they are dealing with. The less successful decision makers will either commit
27 the sin of what we call confirmation bias and sticking to the status quo of what they think
28 they know and looking for all available information to confirm it, or they just won't do any

1 interrogation processes at all. They won't know what's missing. They won't know what
2 to ask for, and they get stuck in what we call entrainment.

3 And the fourth and final thing is that our elite decision makers are
4 much more able to revise a plan. If they've gone down an unsuccessful path, they're
5 quite happy to calculate and actually understand that their situation assessment was
6 wrong, and then get off that disastrous track, put their brakes on, look around them to
7 establish that what they thought they saw wasn't what they thought they saw, and
8 actually move to a different track. Our less successful decision makers are either
9 unwilling or unable to conduct that revision process.

10 As Neil said and as the literature tells us, by and large, individuals
11 that have been involved in difficult situations tend to fair better than those that don't. But
12 as we may talk about later, there do seem to be some individual differences and
13 personality characteristics that make certain people more amenable or able to take
14 those proportionate measures around situation assessment time, reassessment of
15 information and revision. But those are the markers that seem to discriminate.

16 **MS. KRISTA SMITH:** Thank you very much, Laurence.

17 I'm going to take it over to Wallace now. And as we learned
18 yesterday, you can talk to us a little bit about the -- how this plays out when you're
19 working with incident commanders and on -- well, your -- the Canadian Police College is
20 in Ontario but I think you work with incident commanders across the country, most
21 likely, and can you tell us a little bit how some of these concepts show up in what you
22 teach?

23 **MR. WALLACE GOSSEN:** Yes, I can. Effectively, everything he
24 said is absolutely what we see. And I think maybe the -- we can get into a discussion
25 perhaps on how we try to manage that when we train our incident commanders
26 because, as I said, everything that he discussed is exactly what we try to replicate in
27 training because we know that in the field and operationally that's exactly what's going
28 to happen to them. You know, that least worst decision is absolutely the piece that we

1 try to get them comfortable with. Now, some people are far more comfortable working --
2 making decisions with ambiguous information under time constraints without the
3 resources that they need to do what they need to do to get the situation resolved, but
4 we really try to focus on the -- developing their mental models, right, for reference,
5 absolutely the experience matters. We see that; right? And I think experience also
6 goes towards the -- them being comfortable, right, with their decisions, and the
7 confidence to make them. So if they have experience doing that and been successful in
8 the past, it builds on itself and they become better decision makers in those
9 environments.

10 We -- because we see their -- the cognitive decline as their stress
11 goes up, we very much focus on providing them the aid to memories that we instill on
12 them. And for the Panel, those are -- primarily, when it -- as it relates to decision
13 making, when what's important now, right, the priorities of life, so public, officers,
14 subject, and NRA. Is it necessary, is it risk effective, and is it acceptable to do whatever
15 it is you're about to do right now? And the necessary reflects back to is it necessary to
16 help you accomplish your mission, which was something that they are taught to do right
17 out of the gate when they first come on the scene, once they've got their situational
18 awareness, set your mission statement. What is it that you're trying to accomplish?

19 The other piece that we also do that I haven't heard talked about
20 but I'm sure we will coming up, we teach them decision making is a team process. It's
21 not all just you; right? You have to seek input. When we teach them to build their
22 command triangle, it's with the subject matter experts of tactical command and
23 negotiators, again, in the context of hostage, barricade type calls, and really, it's not
24 necessarily up to you to come up with all of the solutions. It's your decision, absolutely,
25 to sort through which options you think you should have to have, or you should take, but
26 we very much emphasize it is a collaborative effort. You can't think of everything. What
27 you forget, others will remember, and if you're not engaging your team, you're going to
28 struggle to resolve a high-risk situation because of the stress that you're under.

1 So really, that's -- those are the comments I have out of the gate on
2 this, but absolutely, everything that we see is -- or, sorry, the doctors have talked about,
3 we see it in training, and we see it operationally. And I'm by myself. I've suffered them
4 as well so.

5 **MS. KRISTA SMITH:** Yeah, it's useful just to hear that the
6 approach in Canada is similar to what the work that -- the approach in other countries.
7 And then I want to take you down a slightly different path right now and talk about the
8 early moments of taking command. So we heard yesterday that -- and the afternoon
9 round table focussed on the very initial response during a critical incident, and then
10 some time later it can vary quite a bit, as we know. Eventually, the incident commander
11 arrives and takes command of the scene. And so you mentioned that NRA, that
12 acronym, is a useful way of thinking about what factors an incident commander will be
13 thinking about as they take command. I'm just wondering, is there more -- what else are
14 they thinking about, and then I've got a couple more specific follow-up questions.

15 **MR. WALLACE GOSSEN:** Do you mean specific to decision
16 making or just in ---

17 **MR. KRISTA SMITH:** Specific to decision making.

18 **MR. WALLACE GOSSEN:** So really, that piece of developing their
19 situational awareness has to be the first thing out of the gate. So the acronym that we
20 teach them to approach the situation is SMEAC. S is situation, M is for the mission, E is
21 for the execution phase, A is the administration authority component, and C the
22 command control communication. So we got -- but the first one out of -- that we teach
23 them is establish the situation, get your situational awareness. Because especially in
24 the first few moments or the first hour -- I understand you probably talked about the
25 golden hour yesterday -- the information that you're going to get, you have to accept the
26 fact that it's probably going to be wrong as the event unfolds. Some of it will be right.
27 But in those first few moments where you have to make a decision, you have to make it
28 based on the information that you've got; right? And you have to understand that

1 perhaps that decision, in hindsight, might be wrong, but in the end, because if you've
2 gone through priorities of life, if we need to save a life, lives are hanging in the balance,
3 what's important right now; right? Your NRA it based on the information that you've got,
4 and you have to make a decision, and you make that decision. Because experience
5 has shown, not making a decision is usually far worse. However, that is that ambiguous
6 piece where we see commanders struggle the most because they're very
7 uncomfortable, because they don't have all the information that they want. There's a big
8 difference in decision making, right, when you're comfortable and warm and you got all
9 the time in the world versus trying to make a decision when you do not have all the
10 information that you need to make the decision, but you still know you have to make it.

11 That is a difficult thing to train. I think emotional disposition plays a
12 big piece in that. But again, building on their mental models, we want them to have
13 experience coming in to the program, and then we give them scenarios and we have
14 them have conversations and build that database in their mind that they can draw on in
15 those instances and get them comfortable in that position.

16 And again, you're not alone. Seek input from people and then
17 ultimately, it's up to you to make a decision, especially if there's two competing priorities
18 that need to be taken care of at that time, so ---

19 **MS. KRISTA SMITH:** So continuing with this line of thought and
20 tying it back to yesterday, we heard about, you know, the impulse for police officers to
21 rush to a scene, kind of scene flooding, right? And when you're the Incident
22 Commander, how do you know, how do you know when it's time for people to stop
23 going in and instead, what we heard yesterday was to move those resources to do other
24 things, say, to create a perimeter?

25 **MR. WALLACE GOSSEN:** So again, we go back to a systematic
26 approach, and they're taught, as well as in line with the frontline officers are taught, you
27 have your crisis point which has to be contained which we call the inner perimeter.

28 Containment, without getting into all of the specifics of it, really just

1 means that nobody can get in, nobody can get out. And you've got enough resources in
2 that inner perimeter to deal with the crisis point.

3 So again, depending on what you're faced with, that is going to be
4 an ambiguous decision and you're going to have to make a decision, that's enough. But
5 at the same time, these two things have to happen at the same time, congruently, the
6 outer perimeter is you have to start controlling that outer space and create what we call
7 the "frozen zone" between the crisis point and the outer perimeter, which is where
8 police operations can happen, staging areas can -- without necessarily having public
9 interference.

10 So really, depending on what you're looking at, depending on the
11 information that you've got, it's going to be very contextual on how you set that up.

12 And -- but absolutely, there's that danger of too many people in the
13 crisis point can create bigger problems for you.

14 So again, these are the things that we have discussions with them
15 to consider, and unfortunately, depending on your level of experience, you may get a
16 little bit right, a little bit wrong, right? But that idea -- and you'll never see a perfect run.
17 It'll never be perfectly done, but that, we tell them, just go back to those things. We drill
18 it into them, that when you don't know what else to do, start working your process, go
19 through the checks and -- check your SMEAC or you're paying attention to priorities of
20 life, or you're applying N.R.A. to your decisions, on all your decisions in that case.

21 **MS. KRISTA SMITH:** Thanks very much.

22 I want to take it now to Judith to speak a little bit about -- we've
23 heard Wallace mentioned a couple of times how when the stress goes up, the ability to
24 make good decisions goes down, and when you're warm and comfortable, it's easier to
25 make a good decision.

26 Can you speak a little bit about your work on determining this?

27 **DR. JUDITH ANDERSEN:** Sure. Absolutely. And our work is --
28 like I said, based on measuring hundreds of officers from recruit training all the way to

1 federal tactical teams in North America and Europe. But what I want to make clear is,
2 this -- stress response is a natural human response. It's not a weakness of any kind, it's
3 not a character flaw, it happens to everybody, and it's to maximize our survival. It's
4 happening to officers, and it's also happening to the civilians that they're working with.

5 It's very complex, but I will just -- you break it down, but
6 understanding, appreciating the complexity of this process.

7 The stress response begins in the brain when the brain detects
8 threat. And this can be a conscious awareness or it can be under conscious awareness
9 where the hairs on the back of your neck stand up and you know something's wrong but
10 you can't identify it yet. That brain triggers a powerful chemical cascade of different
11 chemicals such as adrenaline, cortisol, and so forth. That triggers your autonomic
12 nervous system and some of these automatic processes within your body to take over.

13 Now, if this is activated to an optimal level, you do need activation
14 to handle a situation. You could see if somebody's too relaxed or they're not engaged
15 in the situation, they would miss threat cues and they would not be situationally aware.
16 So we need activation.

17 In fact, a certain level of activation improves sensory awareness.
18 You can hear better, you can see better, you can think very clearly. You've all
19 experienced it when you're just in the flow and you're making these decisions really well
20 and you're prepared.

21 Of course, as activation becomes higher and higher and higher,
22 what it does is, the sympathetic nervous system -- and I'm sure you've all heard of fight,
23 flight, or freeze -- that is when your body is, again, trying to maximize survival. You're
24 not -- the higher order parts of your brain is shut off where your thinking, planning,
25 logical processes are, and it's just your body is pumped full of glucose and your brain is
26 kind of shut down.

27 And an example of this is -- yeah, I've seen this operationally with a
28 federal tactical team. We had a scenario where there was a shooter on a bus and they

1 -- it was in a fake town, let's say, so it was very highly realistic. They did their
2 surrounding of the bus. All of the teams were acting in accordance, and then the team
3 leader who approached the bus came up and began prying the bus door open with his
4 gun.

5 And after the scenario was done, you know, the instructor came
6 over and said, "What were you doing? We never use our guns as tools to open the bus
7 door."

8 And his stress level was so high -- so this activation chemicals in
9 his body were so high that it shut down these kind of thinking skills and just, he had this
10 in his hand and that's what he was going to do, right?

11 And so -- but a phenomenon is also that he had no memory of
12 doing that at all.

13 And that's another thing that our bodies do sometimes to protect
14 ourselves, right, from -- so that we can act and survive instead of be thinking about
15 thinking or be thinking about our heart needs to beat or breathe, so kind of going into
16 that overactivated state, the blackout zone. When that happens, your vision narrows,
17 you get tunnel vision, you can't hear. There's a time perception, time can feel very
18 extended or very short. If you've ever experienced, you know, you have to give a
19 speech or you have to do something and your heart's just pounding and you hear it in
20 your ears, so you can't -- and you can't even just tell yourself, "Calm down, calm down,"
21 because this physiological process, again, has taken over.

22 And when we've seen officers get to that level of activation, the only
23 thing that kind of works is to pull them out and let somebody else take over.

24 So I know as well as with SING, the team aspect is so important
25 because somebody, when they have that level of chemicals in their body, they need to
26 metabolize it, like, they need to process that.

27 Now, obviously, the goal of training and the goal of working
28 together as a team is not to have people get to that point, right? And we'll talk about

1 that later.

2 Another reaction is freezing, and sometimes people think, well,
3 they're just not doing anything, but actually, internally, is this chemical cascade is
4 happening to an intense amount so they freeze and can't make a decision, similar thing,
5 you would want to, like, exchange them for another person if possible at that point.

6 And yeah, obviously that affects decision making.

7 And rushing to the scene, so I wanted to -- it's our natural kind of
8 human instinct for many to actually, you know, we hear yelling or we hear voices, and
9 so we're drawn in, and that survival mechanism again is just kind of fight, flee, help,
10 without thinking through the kind of logistics of it.

11 And there's huge individual differences. I know some of the other
12 speakers have spoken to that before, and we see this triggered by different kinds of
13 scenarios. So we can have high-level operators that have really, a lot of training, but a
14 certain type of scenario will trigger this very high level stress response, and then -- so
15 even in experts. And you can't always tell that by looking at their faces.

16 So the first time I went to Finland and hooked all the federal tactical
17 team up, I -- and they were performing, I thought, "What am I doing here? There's no
18 one" -- I couldn't tell they were even having a stress response. But then I looked at the
19 data and there was high individual differences in what was going inside their bodies.
20 And so that gives us a window into helping the different individuals and then reducing
21 that so they can learn this type of training and they can apply it in that way.

22 **MS. KRISTA SMITH:** It's such a fascinating area. I want to keep
23 asking you all day, but we'll going to come back to you and follow up on more.

24 I want to take us over to Matt's work now because my
25 understanding is that you're also looking at stress in the body but in a different way.
26 Can you -- and over a different time period -- can you tell us a little about that?

27 **DR. MATTHEW McALLISTER:** Yeah. I wanted to, well, first, say
28 that Judith's point -- one of her points was a really a great point, and it's the one that I

1 think people have commonly a misconception of the stress response where we
2 associate it with a bad thing but, in fact, the chemicals that she was talking about that
3 are secreted when you're under stress serve very beneficial functions. It's just that
4 when you have too much stress is when it becomes problematic. And it's like anything
5 else in life where too much of anything can become a bad thing.

6 So -- but my work, though -- in order to answer that question, I
7 wanted to give some context and share some thoughts such as when we think of stress
8 -- when most people think of stress, I think most people associate that with being
9 psychological stress but, in fact, there are many different sources of stressors that the
10 body can be exposed to, especially with high-stress occupations.

11 We have things like shiftwork, irregular sleep, irregular or poor
12 dietary habits, intense physical stress or exercise, environmental, as well as
13 psychological stress. But we also have things such as obesity, being a cigarette
14 smoker; those are also stressors. And then when you take individuals that have those -
15 - you know, obesity or cigarette smoke exposure, those long-term stress-inducing
16 factors, you take those people and then expose them to stress, you get much different
17 responses.

18 It's clear that when you combine multiple stressors in one scenario,
19 you get a -- you get a pronounced effect in terms of the increase in stress hormones.
20 For example, if you just expose a healthy individual to a certain amount of psychological
21 stress, you get the traditional stress response. But if you add a different stressor of a
22 different origin, you get a much more pronounced physiological effect.

23 And then, when you think about people that are long-term under
24 different forms of stress -- obesity, poor dietary habits, et cetera -- the problem with that
25 is that it leads to this chronic, long-term state of inflammation and what's called
26 oxidative stress. And oxidative stress is a term that refers to excessive free radical
27 production. And I think most people have heard of free radicals because most people
28 have heard of antioxidants.

1 You know, what are antioxidants? I'm sure many have heard that
2 they're -- you know, sources of antioxidants are like vitamins, vitamin A, vitamin C.
3 Most people have heard about the benefits of red wine consumption because it contains
4 an antioxidant called resveratrol. So most people are familiar with these antioxidants, at
5 least to some extent. But what I'm getting at, and what our work is trying to achieve, is
6 looking at the long-term effects of stress in relation to the free radical accumulation.

7 If you have excessive stress, it does lead to free radical
8 accumulation, which can actually damage the body in different ways. So that
9 phenomenon is called oxidative stress. And everybody has actually visually seen the
10 impact of oxidative stress, anybody. If you have seen metals that have rusted, or fruits
11 or vegetables that have spoiled, that's the result of what's called oxidative damage from
12 -- the simplification is from excessive production of oxygen. That's a very broad
13 simplification. But the same thing can happen inside the body.

14 So think about if you've seen metals that have rusted, or fruits or
15 foods that have spoiled. The same thing can happen inside the body to the cells and to
16 important, imperative proteins in the body, DNA. Various aspects of the body can start
17 to be broken down or degraded from this free radical damage which can be the result of
18 chronic-stress exposure.

19 So, then, what are the implications of that? There are actually
20 major implications of that. If you have people that are chronically exposed to high
21 amounts of stress through that inflammatory and oxidative process, it actually can lead
22 to numerous chronic diseases. Actually, several chronic diseases are actually linked
23 and, in fact, likely caused by this process, things like Parkinson's disease, Alzheimer's
24 disease, Cancer, rheumatoid arthritis, especially cardiovascular and cardiometabolic
25 disease.

26 So if you have officers that, number one, have stress because of,
27 let's say, lack of sleep; number two, have added stress because of maybe poor dietary
28 habits, increased body percentages. And then now you take those people and expose

1 them to high-stress environments from their occupation, you have much greater
2 chances of having adverse cardiovascular effects as well as other cardiometabolic and
3 neurological diseases as well.

4 **MS. KRISTA SMITH:** Thank you. I think I want to take that
5 information back to Judith now, if I could, and think about how -- how this may apply
6 with critical incident commanders and also the other piece of it. So there's the long-
7 term stressors. There's occupational stressors. The other thing I wanted to tease out
8 with you a little bit is that incident commanders often aren't on scene so that they're
9 having those responses, those physical -- perhaps. So I wanted you to speak a little bit
10 to that piece. Like, what stress responses might you expect to see in an incident
11 commander?

12 **DR. JUDITH ANDERSON:** Great question.

13 And thanks, Matt, for this -- for an excellently detailed
14 understanding of the mechanisms underlying this.

15 And we talk about it in several ways. You have your activation.
16 You have modulation, which I haven't talked about it yet; that's how to modify that
17 activation. And then we have something called reserves. And there are all these
18 chemical reactions. But we can all identify with that feeling of burnout.

19 So let's say you're healthy, normal, functioning, but then you have a
20 stressor in your life, your home life, finances, your kid at school, this and that, or job.
21 There's other things -- the promotion, this -- everything's on the line. All of those
22 competing stressors use some of this metabolic measure -- measurable resource that
23 you have draining your reserves. Then you come to your job, and you're making
24 decisions there, and you have added acute stress, or the stress in the moment.

25 So somebody who's working with lower reserves -- and I'll just call
26 it -- you know, again, it's those chemical processes -- they are -- your body, in order to
27 then make the decisions in the critical incident will actually overreact. It's a
28 phenomenon where it's like you're going to make the decision. You're going to activate

1 that sympathetic nervous system but your body's more likely to overshoot, right,
2 because it has to mobilize.

3 Think about at the end of the day when we're stressed out and
4 we're like, "Ugh," we have to do that one last thing. So you, you know, "Oh, I'm going to
5 get through it," and then you feel so fried at the end of the day, or you feel so burnt out,
6 or you might make a -- have a conversation that you wish you didn't have, or you might
7 make a -- you know, be a little more aggressive with somebody in talking to them, and
8 so forth. And you wouldn't usually have acted in that way if you felt great in the morning
9 and so forth.

10 So we have to think about all of the other things that critical incident
11 commanders are also managing on their plate at the same time. And this is why
12 wellness, and health, and addressing burnout is absolutely critical throughout policing.
13 We can't just all say that it's all at the critical incident because your critical incident
14 commanders are coming and having to make the acute-stress decisions and that they
15 might, yeah, have these other health risks or other, you know, situations that are
16 draining their reserves.

17 So I know there's a lot of wellness, and stress reduction, and some
18 exciting new kinds of trainings to recover in that way, but that's such an important thing
19 that we also need to remember we need to be taking care of our Critical Incident
20 Commanders and police officers even before they get into that situation.

21 And there's good news. There are some ways to do that.

22 **MS. KRISTA SMITH:** That's great. So we'll get into some of that
23 good news after the break.

24 **DR. JUDITH ANDERSEN:** Yes.

25 **MS. KRISTA SMITH:** And the one piece that I wish I'd asked you
26 earlier is just is there -- is there a difference for an Incident Commander's stress
27 response, like what have you seen in their stress responses when they first enter --
28 when they first take command, say, if you have that information?

1 **DR. JUDITH ANDERSEN:** Well, I was talking to Wallace, actually,
2 a little while ago and an Incident Commander may, you know, be a very high-level
3 operator and they're coming in with different kinds of things on the line either their -- you
4 know, their job or their status or -- they're thought to be able to make these decisions,
5 so there's that kind of pressure as well that they're coming in with, not just the
6 operational decisions.

7 And that can kind of get in the way sometimes. If I don't make this
8 correct decision, it's going to have catastrophic consequences for everybody involved,
9 including, you know, work and family and everything. And so that can trigger the over-
10 activation.

11 We all have -- it's not that we have different bodies. We all have
12 the same chemical and brain processes. But like I said, individual differences can
13 contribute to what contributes to the over-activation and putting somebody in that kind of
14 blackout phase where they can't make a decision, where they freeze or they maybe
15 think of too many options and, like these other panel members were saying.

16 So it's not that their body acts differently, but what would trigger
17 their responses, is something to be considered, for sure.

18 **MS. KRISTA SMITH:** Okay. Thank you.

19 I'm going to move us topics a little bit right now and look -- and
20 we're going to talk about some of the common difficulties in making decisions.

21 So Laurence, this brings you to the area you said you've been
22 looking at for the last 10 years or so, decision inertia. So maybe you could just start by
23 telling us what that is and what are the common psychological factors that play a role in
24 the decision -- in decision-makers' ability to make decisions during critical incidents.

25 **DR. LAURENCE ALISON:** Okay. So I mean, in broad terms,
26 again, a bit of a simplification, but the three things that can go wrong, three types of
27 decision inertia, are, first of all, decision avoidance where, actually, this is a kind of
28 cognitively lazy process whereby the decision-maker decides to either put off making

1 the decision, pass it someone else or worry about it later. So it's actually kind of what
2 we call cognitively miserly.

3 You know, for example, in our daily lives we might be thinking
4 about whether to change our job because we're relatively unhappy in it and the grass is
5 greener, et cetera, et cetera. If you're undergoing decision avoidance, you think about
6 that for a while but then you decide to cast aside, think about it later, ask someone else
7 their opinion.

8 The second one is redundant deliberation, and this is what we most
9 commonly see in critical incidents. Redundant deliberation is actually when you're in
10 the maelstrom of a critical incident and you have recognized that it is bad and you have
11 recognized that you haven't dealt with it before and you probably are thinking, "I've
12 never dealt with this. I don't know what to do. There seems to be no policy and
13 procedure for it. This is going to look bad for me if I do X or Y. This is going to end up
14 in the newspapers for the next 15 years. I might be in a public inquiry". And then what
15 can happen is that decision-maker shifts from decision avoidance, which is it's okay, I
16 don't need to worry about it, to, oh, my God, this is really unpleasant, I've got no idea
17 what to do.

18 And redundant deliberation is this process that I alluded to before
19 with the donkey, which is calculating which of these bad outcomes am I prepared to
20 own and take responsibility for, you know, and that might be a firefighter deciding
21 whether to go into a building and risk his fire officers being deployed, which would be an
22 approach decision but would be risky because you're deploying resources into a zone
23 that may be catastrophic for those fire officers, or thinking, "Well, actually, if I don't go
24 for that approach attack process, I'm going to leave people to die".

25 So two bad options, I deploy fire officers in and they might all die if
26 they go in as well as all the other people in there or avoidance, which would be I'm not
27 going to deploy those fire officers to that zone and I will also have a bad outcome
28 because the people will inevitably die.

1 The one that Neal and I have seen most often is not avoidance, it
2 does happen where people are underestimating what it is that they are about to deal
3 with, but more frequently where the wheel falls off is this process of redundant
4 deliberation, constant rumination over what I should do the point where the incident has
5 passed by the decision-maker's opportunity to deal with it.

6 It's almost like the events are running ahead of you on the track and
7 you never, ever get ahead of it. You're never able to get past that incident and
8 understand what it is that's just run by you.

9 So that's the most frequent one.

10 And the final one, just for completeness, is what we call
11 implementation failure whereby the individual has not committed the error of decision
12 avoidance but has recognized that "I need to deal with it", has gone through the process
13 of redundant deliberation and punched through that now, has committed to a decision
14 and has, say, at a strategic level passed the information down to tactical in order to
15 enable the operational decision-makers to do what they're going to do, but actually, that
16 decision-maker has not checked up on whether those officers further down that
17 decision-making chain have done what they've been asked to do.

18 Now, little segue into what I call strategic drift. What you should
19 have is a system where you've got a clear strategic vision that you pass down to a
20 tactical level and that tactical officer would then make decisions for operational officers
21 that should then deploy. Sometimes we see poor decision-makers commit the sin of
22 strategic tactical drift, but the counter argument to that is for it to be a good strategic
23 decision-maker, you need to check on whether what you have asked to be done has
24 actually been done and ensure that that strategic vision has been deployed down to
25 tactical and operational.

26 So decision avoidance, which is miserly and cognitively lazy,
27 redundant deliberation, which, paradoxically, is cognitively extremely demanding but
28 results in inertia, and implementation failure. We've got through the avoidance bit,

1 we've got through the inertia bit, we've got a plan and we know what to do. Have I
2 checked on whether it's been done? No, I haven't, therefore, don't know that it has
3 been done.

4 So those are the -- those are the three problematic areas that
5 decision-makers have to pass through in order to, you know, what we call grip that
6 incident and be able to start dealing with it.

7 **MS. KRISTA SMITH:** So you said that most of your -- what you've
8 seen and most of your focus has been on that second type of decision inertia.

9 What are -- you know, just we're staying at the basic level, but what
10 are -- what are some of the ways that people can get around that or deal with that when
11 it's coming up for them?

12 **DR. LAURENCE ALAN:** Well, I mean, I think the speakers have
13 sort of alluded to perhaps the conditions that make that process easier, and Judith very
14 helpfully talked about the kind of, you know, physical wellness that could assist in that
15 process, and I think that's important, can't be underestimated.

16 The second thing is -- and again, it's back in history. It can't be
17 changed overnight. You need to have a culture which is amenable to recognizing what
18 the core value systems over that operating environment. I mean, we did some research
19 on fire, ambulance and police and we asked them what their core values were and we
20 also asked them to identify what the core values were, they thought, of the other
21 agencies, and we also asked them to rate how confident they were in accurately
22 assessing what the core values of the other agencies were.

23 Now, they all had different core values. They all assumed each
24 other's agency have the same core values that they had and they were all confident in
25 that so that another problem is that in order to make sure that you've got interagency
26 operability is each agency must know what each other agency's core values are.
27 Otherwise, they'll be working at cross-purposes.

28 Again, in very simple terms, are we all agencies that are all about

1 approach rather than avoid or are we all agencies that are very risk averse? And you
2 know, we found certainly in the UK that that has varied over time between police being
3 perhaps more approach oriented than fire at various times in the UK's history.

4 So wellness, physiological capability, cognizance, awareness of the
5 culture and value system within the organization.

6 And then I think the third things, and I don't want to sort of jump the
7 gun here, but what I have seen time and time again is huge economic investment in all
8 singing, all dancing scenarios that are very realistic, but that are done once per year.

9 Yeah, let's train for a pandemic that looks a bit like this, and we'll
10 have -- we'll invest, I don't know, 1.5 million in training everyone in this single version of
11 this -- of what a pandemic looks like. That is completely inadequate, and that would be
12 akin to saying to a student, "I'm going to teach you how to play the violin. I'm going to
13 spend eight hours with you, and you're not allowed to practice for another year."

14 So it's incredibly important, the -- okay, these incidents are rare.
15 You might never deal with a CBRN incident. You might never deal with a mass
16 shooting incident. You might never deal with a white powder incident. But if you only
17 train one version of that incident, you can't expect your decision makers to, you know,
18 developed a repository of cognitive knowledge, to have enough flexibility within their
19 mind to know how to pivot different versions of it.

20 So you know, I'm a big fan of this a little bit of training every day
21 rather than spend tons of money once a year on an incident which has got a very
22 narrow set of constraints.

23 And then the final thing before I witter on for too long, lots of people
24 focus on what the decision is, but actually, we find it's much more powerful to orient
25 people towards what the goal should be. So in other words, people start getting into the
26 weeds of should I do A or B or C? Actually, there's another option. I thought it was D,
27 but maybe E is better, and actually, someone else has suggested F. Hang on, what's
28 the goal? What do you want this to look like by the time we've finished with it? And that

1 quite often orients people, the person that is, you know, going to bear key responsibility
2 at a command level towards a specific goal rather than teasing apart multi-variant
3 decisions.

4 I'll leave it at that, and Neil may have other things to add that clarify
5 what I've said.

6 **MS. KRISTA SMITH:** Okay. Thank you.

7 There was -- actually, I wanted to follow up on -- in one of the
8 articles we've included in the exhibit package, there was a -- you talked about an
9 exercise that was done in one of the smaller detachments called "Seven and Sevens"?

10 **DR. LAURENCE ALISON:** M'hm.

11 **MS. KRISTA SMITH:** Can you tell us about that?

12 **DR. LAURENCE ALISON:** Sure. So we did a trial run with
13 Merseyside Police, ran a process that we called "Seven and Seven", very simple, no
14 technology, no kit required, and all it was, was at the end of the shift, three times a
15 week, officers would gather together and they would have seven minutes to ask each
16 other, "What's the most difficult scenario you dealt with today?"

17 It might be a dog attack, it might be a domestic violence case, or
18 whatever. So they would spend seven minutes just unpacking a complex event of that
19 day.

20 They'd spend the next seven minutes using their imagination to
21 think, well, what would have tipped this from difficult to critical? Yeah, if that dog attack
22 had involved X, Y, and Z, or led to a fatality that had been miscribed [sic], whatever.

23 So seven minutes to discuss the incident, seven minutes to use
24 their imagination to think about what may have tilted it into very difficult, and then seven
25 minutes to calculate what we've learned. And they did that three times a week.

26 Now, what was interesting about it is, you start to learn about how
27 other people in your team think about a problem, what values they have around a
28 problem, how active their imagination is in imagining worst-case scenarios, and it also

1 identifies fault lines in the system that can be unpacked and repaired before they
2 happen in reality rather than waiting a year for one incident that we're going to plan for.

3 So that commitment to a repetition of essentially 21 minutes 3 times
4 a week, just about an hour, I mean, what we found was they really enjoyed it, it was a
5 team bonding exercise, it got their imagination juices flowing, and quite often, asked
6 about Seven and Seven thing, they would discuss other incidents. And it was, you
7 know, it was cheap, it was effective, and it wasn't a huge commitment of time.

8 **MS. KRISTA SMITH:** Thank you.

9 I actually want to take it over to Wallace right now and ask you
10 about how some of this applies in the Canadian context, and how you help critical
11 incident decision makers when they are in a state of overwhelm with so many factors
12 coming at them at one time?

13 **MR. WALLACE GOSSEN:** Sure. And I think, you know, if I can
14 just go back to the idea of the physiological response they're experiencing because of
15 the threat -- and to make it perfectly clear, there's no physical threat to them, but
16 certainly, there's personal risks, there's professional risk, there's professional risk,
17 there's reputational risk -- that -- and especially, the bigger the event, the more aware
18 you are of the threat to you -- ultimately, you know, there's risk involved to that
19 commander. It may not be physical, but I don't necessarily think that their brain can
20 distinguish between physical threat versus reputational character threat.

21 So one of the things that we try to instill in the commanders, that
22 decision avoidance, you know, we stress to them, you cannot predict the future.
23 Anecdotally, you know, 8 out of 10 times, when you choose not to do something when
24 you have the opportunity to do it, what you're actually doing is assuming that the future
25 will be better than it is right now, but when you're making that decision, you also have to
26 look at the fact, if you don't do something right now, what could be the negative
27 consequence of that?

28 So we really try to change their attitude towards not making

1 decisions because we recognize that is one of the first things that we see is, well, I'm
2 not going to worry about that right now.

3 Well, actually, no, you do need to focus on if you don't do
4 something right now, if you have the opportunity, right, what potentially could go wrong
5 in the future, because you're assuming right now that things will get better, and they
6 may not.

7 It -- I think there's also -- there's a certain police cultural aspect to
8 that. Maybe it's not specific to just police, but we typically don't deal -- we typically don't
9 hold people accountable for decisions they didn't make. Accountability is usually based
10 on, you made this decision and it went wrong.

11 So within policing, you know, there's a natural tendency -- decision
12 makers don't necessarily get rewarded, and you can go through your career quite
13 simply not making a lot of real tough decisions, just avoiding those decisions, waiting for
14 things to change, and not necessarily develop the skills of decision making.

15 So back to what Laurence was talking about, one of the things that
16 we stress to them is pay attention to your decisions, pay attention to the quality of your
17 decisions in non-stressful environments. When you have the opportunity, you know,
18 when you're sitting comfortably behind your desk or wherever you happen to be, work
19 through the process of okay, I've got the time. I'm going to N.R.A. this decision, right?
20 Getting used to using that system approach to your decision making when you're calm
21 and comfortable, we feel will help you recall it in the moment under stress the more that
22 you exercise it.

23 And that, we think, helps, right, establishing that process of
24 decision making, and again, the -- not necessarily the quality of the decision is based,
25 did you use the process? The outcome may be bad, right? It may, in the end, have not
26 been the right thing to do, but given the information that you had, that you worked
27 through your priorities of life, you were looking at what's important now, you applied
28 N.R.A., you applied the process. You may have come to the wrong conclusion, but you

1 did the best that you possibly could in that situation.

2 So we try to reduce their stress by, you know, identifying, saying
3 right out of the gate, not every decision you make is going to be right, but as long as the
4 quality of your decision is based on did you apply these principles, it's going to be
5 difficult to criticize you on the ultimate decision that you made.

6 So really, for us, it's about recognizing that decision making under
7 stress is completely different than decision making when we're comfortable. Practice
8 the type of decision making in the process you're going to use under stress when you're
9 calm so that you can recall it, and make them aware of that avoidance type behaviour
10 and not predict the future, right? You only have the information you have right now. If
11 something needs to be done, don't think that, well, I'll wait a little bit longer and things
12 will get better and then I can make the decision. It will be easier.

13 No, you have to give serious consideration to taking action at that
14 point in time.

15 And then the next piece that we have is in the moment, right, and in
16 every crisis, there is a little bit of a gap where there's not a lot of action happening right
17 at that second. You and your team -- again, going back to the idea that, you know, and
18 that whole other conversation about developing that strong team for yourself as a
19 commander; however, start coming up with contingency plans, if this, then that, right, in
20 the moment, so that when something suddenly happens that was predictable, you're not
21 scrambling to figure out what to do.

22 So really, within that group, we express there should be, and it's
23 part of the process that we teach them with their -- with the clear -- are being
24 reactionary plans. That's where they're developing their contingency plans so that
25 when the decision needs to be made, you've already thought it through. You've already
26 at least come up with the conceptual framework of, "If they do this, I'm pretty sure this is
27 what we're going to have to do." At that point, you're not scrambling to make that
28 decision and you've neither made a command-authorized decision or a reactionary

1 decision. So I hope that answers your question, Krista.

2 **MS. KRISTA SMITH:** Yeah, that's great. And then I would like to
3 complicate the scenario a little bit and take it over to Neil.

4 There was an article that you and Laurence published in the last
5 year -- actually, it was in 2020 -- called "The Role of Information Sharing on Decision
6 Delay During Multi-Team Disaster Response". That's Exhibit P-001904. And I'm
7 interested in looking -- in exploring with you what mechanisms are -- underpin decision
8 delay where you have multiple teams, multiple agencies responding to a critical
9 incident.

10 **DR. NEIL SHORTLAND:** Thank you very much. Just the one
11 thing I'll add, I think, just to bring some of the points together, is a lot of the cognitive
12 elements we're talking about and, specifically, some of the cognitive elements Laurence
13 talked about earlier are cognitively heavy, and so, you know, we're asking a lot of our
14 decision-makers in terms of, you know, as we just mentioned, working through the
15 multiple options, working up enough situational awareness. All of this is in this
16 impoverished physiological state. So we're kind of clashing two things here of asking a
17 lot cognitively while being in a relatively deprived cognitive and physiological state
18 stemming from the stress.

19 In terms of some of the elements that delay or cause issues -- or
20 cause decision delay in some of the team-based decision making, a lot of it really stems
21 from many of the issues that Laurence talked about in that where there is greater -- a
22 greater number of decision-makers, you have these two forms of uncertainty, both of
23 which form decision delay and manifest in any of the forms of decision inertia that
24 Laurence mentioned earlier.

25 A lot of the uncertainty we often talk about is uncertainty about the
26 situation, so not knowing what's going on, just as the superintendent mentioned, getting
27 that situational awareness, building a picture, unfolding the events in front of us, and
28 being able to use that to pick the best or, as we mentioned earlier, least worst outcome.

1 When it comes to team-based decision making, and decision
2 making that involves communication across teams, communication across diverse
3 geographical locations, you have this second form of uncertainty that emerges which
4 brings in a lot of these issues around role confusion, not knowing what other people are
5 doing, elements of trust, trusting the other team. And that actually can increase
6 cognitive load because not only are you thinking about the situation that you're dealing
7 with, but you also have to think about what the other teams are doing and if they are
8 doing what you think they're doing, and, again, what Laurence mentioned earlier,
9 knowing what their values or priorities may be.

10 So in the overall decision-making package, when you bring a team
11 into the decision-making process, it adds this entirely second form of uncertainty that
12 stems from what those other teams are doing, and your relationship with them, your
13 communication with them, what their tasks are versus your tasks are, what their
14 priorities are versus your priorities. And all of that comes together to just create even
15 more uncertainty that can lead to or kind of, I guess, create openings for different either
16 forms of decision inertia, a tendency for avoidance, or just an inability to get that clear
17 situational assessment.

18 **MS. KRISTA SMITH:** And can you speak a little bit more about
19 how trust, or lack of trust, can contribute to decision inertia in this kind of a multi-team
20 situation?

21 **DR. NEIL SHORTLAND:** Of course. And so -- I mean one of the
22 ways that we -- we studied this several ways. And some of the work that Laurence has
23 done, you know, historically, over the past several decades has been to observe these
24 exercises in action. Some of the more recent work that we did was interviewing soldiers
25 who had made, you know, very high-uncertainty decisions in Afghanistan and over the
26 past, you know, two decades, and one of the ways that trust manifests itself in those
27 decisions, and the complexity it adds there, was that now the individuals could not trust
28 that other individuals -- what other individuals would be doing, right?

1 And so this is something that we often see, and it came out in a lot
2 of our interviewees, of -- there's a lot of ad hoc teaming sometimes in critical incidents
3 where people are put together often with different agencies or different individuals that
4 they've never worked with. And when they don't have that trust between individuals,
5 they can't offload tasks as effectively sometimes, and they can't delegate while being
6 fully confident that those tasks may or may not be doing.

7 So it's just another cognitive layer of stress here. And I think a lot
8 of these -- when we think about critical-incident decision making, you know, we're all
9 thinking about different layers of stress, and different layers of complexity that are all
10 coalescing in this process in which someone is trying to work out what the best course
11 of action for them is. And so you have high uncertainty around what's going on. You
12 may have high physiological stress.

13 And then when you add a team into that, that brings in another
14 layer of complexity. What are other people doing? Where are other people moving?
15 What are their responsibilities and my responsibilities? And then when you add lack of
16 trust in, that's just one more layer because now, even when you're offloading a task,
17 you have those secondary questions of, "Is that task going to be completed? Are they
18 going to do it? Do I need to check up on them?" and all of these kind of things.

19 So it just -- from a cognitive standpoint, it just adds another layer of
20 complexity and another degree, or another level, or element of workload on someone
21 who, as Drs. Anderson and McAllister already mentioned, is already suffering from a
22 lack of physiological and cognitive resources.

23 **DR. LAURENCE ALISON:** Can I just maybe add one point as
24 well? Obviously, you don't want your decision-makers to have anonymity. You know,
25 they need to be accountable for the decisions that they're making, so accountability
26 generally is a good thing. However, there's a -- there is a sort of finite level at which
27 that accountability can become paralyzing. And, you know, I think we've had this
28 referenced before. One of the command-level thoughts can be, you know, as was

1 mentioned, a feeling of threat about a career-ending decision that's about to be made.
2 And if that level of accountability is so high that you are paralyzed by that, that's a
3 problem.

4 Now, what we do know in relation to trust is if there is diminished
5 trust, that is positively correlated with this kind of perverse form of accountability. If I
6 don't trust that my tactical level can do their job, or my tactical level doesn't trust me as
7 a strategic commander, people start reverting to this perverse and unhelpful form of
8 accountability which we know to be paralyzing. So distrust increases perverse
9 accountability, which we know is paralyzing in terms of moving forward with a decision.

10 I mean we haven't touched on this, really, and it's certainly not my
11 level of expertise, but because it is somewhat to do with it -- there are issues of
12 leadership here. You know, there's nothing worse than your tactical guys and girls on
13 the ground to keep passing up the food chain, "There isn't anymore information, sir," or
14 ma'am, "to make this decision on. I've giving you everything that I know. What do you
15 want us to do?" and be constantly -- the message come back down from strategic,
16 "Well, I need more information." You know, you'll often find, you know, those officers on
17 the ground preferring a decision-maker that will grip an incident and move forward
18 irrespective of a lack of information rather than, you know, that command level that
19 keeps asking for more when they've been told there isn't any more.

20 **DR. NEIL SHORTLAND:** If I -- sorry, Krista, if I could just have one
21 more point on trust -- and this is just one of the points we made in the report -- one of
22 the elements of trust that's important is with the organizational research has shown that
23 when it comes to dealing with difficult problems, difficult problems -- and the
24 superintendent mentioned this -- often involve working within a team, challenging
25 different opinions, navigating differences of opinions within a team. And from the
26 organizational research, that is a process that is heavily reliant on trust.

27 Trust allows task conflict to occur. So everyone knows that they're
28 all working towards a shared goal because they trust each other which allows them to

1 work through, deal with a complex problem, hear differences of opinion, and navigate
2 that process. Low trust, on the other hand, is shown to kind of prevent that problem-
3 solving activity from happening within a team. So it's kind of just one more element of
4 the trust side that we've cited in our work and I know we mentioned in the report we
5 provided.

6 **MS. KRISTA SMITH:** Thank you. And I don't want to spend too
7 much time on it because we have other concepts to discuss before the break, but just
8 quickly, can you talk to us a little bit about what are ways to decrease -- to decrease
9 some of that decision delay when you're working with multiple -- the multiteam
10 response? Neil, sorry. I was thinking...

11 **DR. NEIL SHORTLAND:** No, of course.

12 So one of the things that I think our work is focused on; at least, the
13 work I've done with Laurence has focused on, in terms of decreasing the decision delay,
14 is around establishing a very clear value or goal hierarchy. And as Laurence
15 mentioned, I think that's one of the issues you have when looking at interoperability and
16 different teams having different goals that may or may not align.

17 Some of the work we did, I remember doing the -- this decision-
18 making work with soldiers, trying to understand, you know, the emergent of decision
19 delay in a military context, given a lot of the early work that the Professor had done had
20 looked at law enforcement, emergency services. And I remember very vividly thinking
21 that my entire PhD was going to fail because there was an absence of decision delay in
22 our military sample. And so, you know, we worked through what that was.

23 And one of the things that emerged that Laurence and I had written
24 up in papers afterwards, and it goes to Laurence's point, was the idea that they had a
25 very, very clear hierarchy of what they wanted to achieve; goal 1, goal 2, goal 3.

26 Those goals often differed between individuals and between levels
27 of command but at the decision-maker level, they could clearly articulate, "This is my
28 first goal, this is my second, and this is my third."

1 And so I think when it comes to teams with multiple different goals
2 and agency that's around -- aligning around a clear number one goal or priority, and that
3 allows or at least minimizes some of the issues that may emerge because, as we often
4 talk about, inertia or delay often stems from competing goals where two things are clear
5 priorities, and they are antagonistic to each other. So just when you're working in teams
6 it's almost even more important to align around a singular, clear goal that will allow you
7 to act in line with that.

8 **MS. KRISTA SMITH:** Would it be right of me to think about goals
9 and values -- values of an organization as somewhat analogous concepts?

10 **DR. NEIL SHORTLAND:** I -- yes. I mean, I think that -- I mean, so
11 Dr. Nicola Power did a lot of work with Laurence and talked about goal conflict, and I
12 often talked about value conflict. And the reason I often spoke about value conflict is I --
13 my research predominantly focused at the individual level, but I think the values of the
14 organization manifest in their goals. So I do think that you can use those two
15 simultaneously.

16 By using it at the individual level, you can sometimes look at the
17 situation in which individual values may un-align with the organizations; you have now
18 levels of values. But I think the language is relatively comparable, both in terms of its
19 function and what it means to a decision-maker.

20 **MS. KRISTA SMITH:** Okay. So given that, I'd like to take it over to
21 Laurence now to -- we're going to explore another concept that comes up quite a bit.

22 One of the articles we included in the roundtable package is called,
23 "Colliding Sacred Values: A Psychological Theory of Least-Worst Option Selection";
24 that's Exhibit P-001900.

25 And, Laurence, I'm just hoping you can talk to us about this concept
26 of colliding sacred values and how it impacts decision-making.

27 **DR. LAURENCE ALISON:** Sure. One thing I wanted to add
28 before we get into that, perhaps it might be helpful to discriminate goals from values by

1 giving an example.

2 If you think about the Thai cave rescue; I don't know how many
3 people are familiar with the Thai cave rescue, which were the -- there was a football
4 team of lads that were trapped in a cave in Thailand. And it was a classic critical
5 incident in that sort of thing hadn't been dealt with before. The monsoon season was
6 coming in; the cave was going to flood. None of the boys could swim. And, you know,
7 a very difficult decision was made to deploy a diver to go and pull them out, basically.
8 Go into the cave, not knowing where exactly they were going to be going or whether
9 that was too risky. And, very tragically, that diver died.

10 So it would have been very easy for that commander to say, "Well,
11 we're not going to risk that again." But, basically, he did risk it again because he knew
12 that if he didn't try it again, all the boys would die. So your option was only to, "Deploy
13 again and one of my divers will die, or if I don't do anything, then everyone in that cave's
14 going to die." So that orientation around the goal and having a complete clarity about
15 what the options were of approaching or avoiding is the goal that is specific to that
16 incident.

17 So goals are often very specific and precise. And I found it quite
18 effective when we're doing roundtable scenarios and police officers, or whoever it is is
19 dithering and delaying and not making a decision about what to do, and they're -- in the
20 weeds of the decision say, "What is the goal here? Are we about protecting this person,
21 this missing person? Are we about retrieving these lads from this cave?" That's the
22 goal.

23 A value, which is what Neil was talking about there, is much
24 broader, much more macro, much more, dare I say it, emotional. I mean, this is one of
25 the things we have not touched on here. We're talked about cognitions and so on, but
26 actually, critical incident decision-making, when you're sat in that hotseat, can be a very
27 emotional and quite lonely place.

28 So values are about recognizing what the values are of yourself;

1 what matters to you, what you prioritize; how you feel about the world, and what your
2 organization is there to do. So that's one point of clarification.

3 I don't know if that's helpful or if you want to ask me anything else
4 about that, but I think it's an important discrimination. Goals I'd see as specific to the
5 incident, values I see as underpinning an organizational or personal structure that can
6 assist you in orienting towards the goal.

7 **MS. KRISTA SMITH:** No, that's helpful. Thank you. And then can
8 you take us ---

9 **DR. LAURENCE ALISON:** I'm sorry; you asked me about this
10 paper, but I can't remember what your question was.

11 **MS. KRISTA SMITH:** Yeah, so then if you can take us into
12 discussing the concept of colliding sacred values?

13 **DR. LAURENCE ALISON:** Sure.

14 **MS. KRISTA SMITH:** M'hm.

15 **DR. LAURENCE ALISON:** Sure. So, I mean, in simple terms the
16 problem emerges where you -- well, let me describe what I mean by this.

17 You can have what we call secular or sacred values. A secular
18 value might be something that you think is important, but it might be negotiable. A
19 sacred value is something which is completely non-negotiable. And the sample that
20 might be prudent to give here, you might be speaking to military personnel and, say,
21 identify in that group that one of their absolutely sacred values is, "Leave no man
22 behind. That is a non-negotiable thing; we never leave our people behind."

23 You might also be able to identify another sacred value which is,
24 "Complete the mission. One of the things that we do, we're soldiers, we complete the
25 missions. We don't leave missions; we complete missions."

26 However, here's the problem: If you have a secular value traded
27 off against a sacred value, the sacred value will always trump the secular value
28 because the secular value can be negotiable. However, if you have two sacred values

1 colliding, that's where you have a problem.

2 In other words, "The only way we can complete this mission is to
3 leave this person behind," or, "We have to leave this person behind in order to complete
4 the mission." That's when you get decision inertia because -- going back to the donkey
5 -- both of these things are almost impossible to calculate. "Well, what do I want to
6 forego? Well, I don't want to forego either of them because they're both completely
7 non-negotiable."

8 So that was what that paper was about. And, you know, it goes
9 back to Tetlock's work and Goldwich's work around goal orientation and so on.

10 So we have designed in the past specific scenarios where we've
11 gone into an agency, and the first phase is to calculate what their secular and sacred
12 values are; to do some training where they -- where they, you know, negotiate around a
13 scenario where we put those two things together in a secular way, and then a secular
14 against the sacred and then the two sacreds. And that's where they experience, you
15 know, this process of decision inertia.

16 And, actually, I mean, one of the things that we've alluded to
17 throughout, I think is important around training -- we may come to this as we, you know,
18 sort of get towards the end, you have to make training immersive [sic]; you have to
19 make people feel things; you have to stress them; it has to feel real even when they
20 know it isn't real. That's a very important feature of it.

21 And so, you know, one of the tips here around that process of
22 constructing scenarios is figure out what your organization's sacred values are and
23 design some scenarios where they have to calculate which of those they're prepared to
24 give up in favour of the other one. If that makes sense?

25 But Neil may have more to say on this. I mean, the value-based
26 system was entirely his thesis, really.

27 So Neil, I'm going to throw you in front of me and allow you to
28 comment a little bit further on that specific paper.

1 **DR. NEIL SHORTLAND:** No, only that -- I mean, Laurence's, his
2 explanation is absolutely correct. As I mentioned earlier, you know, there are multiple
3 forms of -- multiple processes of making decisions, and the most difficult one of those is
4 choice, and the reason choice is difficult is because it requires argumentation and
5 sacrifice. You have to argue why you want to do A and not B, and by doing A, you have
6 to sacrifice the benefits of B.

7 And so the reason that a decision involving two sacred values is so
8 difficult for the individual is because they have to argue why one value is more important
9 than another value that is truly important to them, and they have to sacrifice something
10 on a value that is truly important to them in order to choose in line with the other value.
11 And I think that -- and not only does this play out at the individual choice level, but one
12 of the things I know we've talked about, and the superintendent mentioned it, and Dr.
13 Andersen mentioned it, is the idea of individual differences. Some of the individual
14 differences that we have identified that impact decision making in these critical incidents
15 is the individual's tendency to be able to identify what is really important and be able to
16 sacrifice things that are nice but not truly important. And so a lot of decision inertia is it
17 stems from this inability to not to sacrifice things that are important in pursuit of
18 something that is much more important. And I think that kind of frames the sacred
19 values paper, but it also kind of explains a slightly wider trend in this -- in the decision
20 making in general.

21 **MS. KRISTA SMITH:** Thank you. There are a couple of other
22 concepts I'd like to have each of you explain before we head off into break. They are
23 both mentioned in the report that's been commissioned from you. I'll just state what
24 they both are now and maybe you can each speak to it. One is over-reliance on
25 analogies. So I think we started to touch on that in some of your earlier comments.
26 And then there's another concept called the avoidance of grim stories, and it'd be
27 helpful if we could understand a little more about that. So I don't know, maybe
28 Laurence?

1 **DR. LAURENCE ALISON:** Which one would you like to do, Neil?

2 **MS. KRISTA SMITH:** Yeah, we'll start ---

3 **DR. LAURENCE ALISON:** Which one do you want to do? I'll give
4 you the ---

5 **DR. NEIL SHORTLAND:** I'll take ---

6 **DR. LAURENCE ALISON:** --- analogies or grim stories?

7 **DR. NEIL SHORTLAND:** I'll take analogies, Professor; you can
8 take grim stories.

9 So over-reliance on analogies, it stems from the point I made
10 earlier about recognition prime decision making. And so -- and also, it links to Dr.
11 Andersen, to Dr. McAllister's points around the state -- when we're stressed and making
12 decisions and under uncertainty, the common tendency is to use our past to inform our
13 present and inform us about the future, or that is recognition prime decision making.
14 And often, that is very, very, very effective and it is shown in a lot of research to be a
15 huge asset to decision making.

16 In novel environments, and critical incidents often do present with
17 novel environments, relying on analogies can be problematic if the analogy does not
18 actually match the situation that you are dealing with, and it can lead to an over-
19 confidence or over-commitment to a situation that you think you are facing the same
20 situation you have faced before; whereas, actually, you are facing a situation that has
21 significant and important differences. Now the problem is, we know with the human
22 mind, especially the human mind under, you know, under stress is once we think we
23 know something, we look for confirmatory information to convince us that we're right, so
24 we don't have to worry about re-evaluating and possibly being wrong, and that links to
25 one of Laurence's points earlier. So an over-reliance on analogies is almost the deferral
26 of the question of what am I dealing with now to a -- and is what I'm dealing with
27 something I've dealt with before and assuming yes. So it's over-assuming that you're
28 facing something that you've faced before, and then not interrogating the situation

1 enough to see if there are key differences that may tell you that you are actually dealing
2 with a quantitatively and qualitatively different situation.

3 To go to a point very quickly on decision errors that we cited in our
4 report, a lot of decision errors -- and this is Orasanu's research on aviation, was that a
5 lot of the errors stemmed from failing to re-assess the situation when new information
6 was emerging. And that I think links very nicely to the first of the detrimental tendencies
7 we identified, which is just to over-rely on your past, over-rely on your previous
8 experiences, draw an analogy to a current event, and commit to it under the assumption
9 that it is the same event or a very, very, very similar event happening again, while not
10 looking for key pieces of information, or potentially not paying attention to or
11 appreciating the importance of key pieces of information that may tell you that this is
12 actually a different event, that you have not faced this event before, and that you --
13 critically, that you can't rely on your past analogy and your past experience to tell you
14 what is going to happen next. And because when that happens, you should re-engage
15 in a decision-making process, just like the superintendent mentioned, that is far more
16 elaborate and detailed and active, rather than adopting that analogy. So that is kind of
17 what we mean by an over-reliance on analogies.

18 **MS. KRISTA SMITH:** Thanks.

19 And, Laurence, can you explain grim stories to us?

20 **DR. LAURENCE ALISON:** Sure. So if I can just remind everybody
21 listening to the trimodal theory of decision making that Neil mentioned before, you know,
22 first version is I make a decision based on the policy. So here's the set of events, I
23 know the policy's this, and therefore, in a way, it's not really a decision because I'm just
24 doing what policy tells me. Second version is I've come across multiple instances of
25 this before, I have dealt with domestic violence cases before, this worked the last time,
26 and because of my experience of seven years of doing this, I'm an experienced DV
27 officer and I base my decision on a repository of knowledge in my mind, and that's the
28 kind of recognition prime decision-making thing.

1 However, critical incidents, I've never seen a white powder incident
2 before. I've never dealt with a roving mass casualty incident before. I've never had to
3 save a football team from a cave, et cetera, et cetera, so what do you have to rely on
4 then. Well, what you have to rely on, I would argue, is an active imagination. You
5 know, if you look at the 9/11 Commission, one of the failings that they identified was a
6 failure of imagination to think that terrorists would be capable of doing what they did,
7 essentially, with box cutters and training to fly planes. Similarly, you know, I had the
8 privilege of listening to one of the officers that dealt with the Mumbai attacks, and he
9 said what we did not have were foretellers of doom. We didn't imagine what the
10 terrorists had imagined was possible. So we've come up with this concept of what we
11 call grim story-telling, which sounds rather morbid but I think is critical. You have to
12 have officers imagine the worst-case scenario.

13 And just one final story just to exemplify this, Neil and I have been
14 working on mass casualty triage, and we had the pleasure of speaking to a guy called
15 Kevin Menes. He was one of the emergency room doctors that dealt with the 217, I
16 think it was, individuals that came into his hospital with gunshot wounds. He was known
17 by his other staff to be a bit of a sort of morbid thinker, and had regularly thought
18 through, oh, I wonder what it would happen -- what it would look like, and feel like, and
19 what I would do if we had a shooter that was in an elevated position on a -- you know, on
20 a 50-storey building with a semi-automatic weapon and shooting at people in a crowd.
21 Oh, well, that's a bit morbid. Why are you thinking about that kind of thing, Kevin? And
22 he would ruminate, not in a sinister sort of depressive way, you know, what does it look
23 like if I have to deal with that. And if you read his article about that process of him
24 thinking about the worst-case scenario, he will tell you that that's what enabled him to
25 very quickly click on to how to manage that incident for the very simple reason that he
26 thought about it beforehand.

27 And so, you know, this act of grim storytelling I think is a powerful
28 way of not just requiring officers to know the policy and the procedure, not just requiring

1 them to develop a repository in knowledge and experience, but to at least occasionally
2 manage, you know -- imagine the worst-case scenario, and actually think like a terrorist
3 or think like a criminal and take that position of what it would look like if -- and I'm not
4 suggesting that you'd want officers to be morbidly constantly ruminating about these
5 problems, but if it doesn't happen occasionally, you don't want that failure of imagination
6 to happen when you're dealing with the incident. You want -- you know, as a colleague
7 of mine used to say, 10 minutes before the ball is not the time to learn to dance. You
8 know, it's about being prepared. It's must more difficult having to think on your feet and
9 use that active imagination when all this other stuff is going on.

10 So this process of occasional grim storytelling, it is a tool, and
11 again, it's not a technologically sophisticated tool or the most expensive tool. It's a
12 cognitive tool. It's actually an affect-laden emotional tool to encourage officers to have
13 this other ability to use an active imagination to imagine the worst, that if it does happen,
14 they've got more ability to adapt and reflect.

15 **MS. KRISTA SMITH:** Thank you, Laurence.

16 Wallace, when we were doing prep with you, we noticed that you
17 said every day that a critical incident doesn't happen is a day closer to when it does,
18 something to that effect. And ---

19 **MR. WALLACE GOSSEN:** That is pretty much it, yes.

20 **MS. KRISTA SMITH:** --- we felt like that was an instance you were
21 demonstrating a grim story there ---

22 **MR. WALLACE GOSSEN:** M'hm.

23 **MS. KRISTA SMITH:** --- that -- how do you -- do you do anything
24 to inculcate that sensibility when you're teaching incident commanders?

25 **MR. WALLACE GOSSEN:** Well, absolutely. And I mean, at the
26 higher organizational levels, you need a group of individuals that are constantly
27 worrying about your worst-case scenarios, and they're dedicated to it, and they have
28 longevity in that area, and they have experience at it, and they're creative. I love that

1 term, failure of imagination.

2 And in the training that we give the incident commanders, I think
3 that failure of imagination piece is -- it's encompassed in the reactionary plans that we're
4 constantly asking them to do, right, so that -- their immediate action plan. Really, that
5 immediate action plan that they have to develop right away is what's the worst thing that
6 could happen right now, and what are you going to do about it, right?

7 So again, on a smaller scale, specific to a crisis, but that
8 preparatory phase where you're in between critical incidents, that having within the
9 organization individuals that are looking -- and I think, to a certain extent, it's intelligence
10 based, right, that -- like, if the failure of imagination, I think, when you go back to that 9-
11 11 report is, they had that information, right? The intelligence was there that potentially,
12 they were talking about that, just nobody stepped up and decided, well, maybe we
13 should, you know, train for that.

14 So you know, there's a bit of a network that has to take place in
15 order for that imagination to be realized, and it's, I think, something that is a blend
16 between your emergency preparedness group and your intelligence group.

17 If I could just go back, though, we spoke about values and goals. I
18 think where it's captured in the Critical Incident Commander program is the goal, I think,
19 really is the mission that we teach them to establish right away. And that mission is
20 based on the overarching priorities of life or the values of life, right?

21 The value is again, officer -- and we stress this throughout the
22 entire course -- as an incident commander, your worst day is going to be when you
23 have to potentially sacrifice officers' lives to save somebody else's, but that is the job,
24 right? That is, at the end of the day, your decisions, right, if it comes down to that, it's
25 not an easy decision, but the decision is basically already made for you that you will do
26 that.

27 So that is the value we try to instill in every incident commander
28 that comes through. Now, obviously, there's organizational issues, there's -- you know,

1 the values that play into that, but at the national level, trying to keep that consistent
2 across the board is paramount, because it is such a critical piece when it comes time.
3 And you know, it's also the matter of the values where that may require you to take a life
4 to save a life. And that's something that's very, you know, specific in policing in general,
5 but an incident commander is also faced with the idea that they may have to tell
6 somebody else to kill somebody, right?

7 That's a different psychological effect sometimes than you actually
8 being the one that pulls the trigger, but again, going back to the mental models that you
9 have to have in place, you role play that before, your -- I think that -- you know, that grim
10 analogy piece that you're talking about, that -- you know, that should be -- unfortunately,
11 it's a very standard grim analogy that you're painting for yourself and understanding
12 what your reaction that's going to be.

13 I think the -- one of the things that we have -- and I don't want to
14 give the impression that the Incident Command Program focuses on large mass
15 casualty events, because it doesn't, right? My personal opinion is we need another
16 level to the course where people go out, have experience at incident command. These
17 types of decision makers show a high propensity for being able to perform in that
18 environment, and then they come back and they go through the next level of command.

19 However, lacking that course, what we try to instill in the incident
20 commanders is you -- going back to Neil's about the analogies can be misleading,
21 absolutely. We see it. That's why we try to focus on the decision-making process, so
22 that when you are faced with -- we call them "wicked problems", they're multi-faceted
23 with no precedent, right -- that's a wicked problem for me.

24 So what we teach them is, you're faced with something like that, fall
25 back on the decision making. Remember the values, set your mission, right? And you
26 know, that, N.R.A. your decisions, start going down the path of organizing your
27 thoughts, seek input, and apply those principles to whatever situation you happen to be
28 in, you're at least going to be ahead of the game than just walking in and thinking, I

1 have no idea what to do, so ---

2 **MS. KRISTA SMITH:** Thank you.

3 Just before we take a break, we'll get there in a moment, but I'd like
4 to just check in with Matt and Judith, because we've been talking about the cognitive
5 and the psychological aspects of decision making, and haven't checked in so much on
6 the physiological side, we'll be turning to that piece after the break when we start talking
7 about training and research.

8 But just before we go on our break, I'm wondering, Matt, you know,
9 in listening to all of this, what comes up for you from your perspective?

10 **DR. MATTHEW McALLISTER:** In terms of training?

11 **MS. KRISTA SMITH:** No, sorry, in terms of the discussion we have
12 been having around sort of the psychological phenomena that can happen when you're
13 trying to make in critical incident decision. I just wondered, from your perspective, does
14 any of your research of the physiological aspects tie in with some of what we've been
15 talking about for the last half hour or so?

16 **DR. MATTHEW McALLISTER:** Yeah. I mean, we really haven't
17 been able to tie in any physiological markers with cognition. That's something that I'm
18 just not able to address from our line of work. I think maybe Judith might have more
19 likely a better answer. We just haven't been studying specific aspects of cognition ---

20 **MS. KRISTA SMITH:** Yeah.

21 **DR. MATTHEW McALLISTER:** --- in relation to the biomarkers.

22 **MS. KRISTA SMITH:** Okay. So we'll go to your area after the
23 break.

24 Judith?

25 **DR. JUDITH ANDERSEN:** Yeah, thank you.

26 So we have done work looking at cortisol levels, and what we find
27 in tactical level officers, they're beginning with higher levels of this diurnal activating
28 hormone, which is part of the stress process and it's part of your daily living, so they're

1 already in a different physiological state, and we don't have all the answers as to what
2 that means, but we do know that it is an important role playing. It can matter. So we
3 want to find out more about that.

4 But I wanted to step back to talk about making these critical
5 incident decisions. So we do know that social evaluative threat is one of the biggest
6 psychological threats that can happen. Like, if there's critical incident commanders,
7 they're highly respected in their organization, they're thought to have all these skills;
8 however, a social evaluative threat, making a dumb decision, even in training, we know,
9 physiologically, when we're looking at that, is one of the highest triggers of these stress
10 chemicals, and that can actually affect -- you talk about intelligence, but intelligent
11 decision making. I won't say, you know, it takes down their overall intelligence, but
12 intelligent decision making.

13 And so a priority would be to reduce the level of socio -- social
14 evaluative threat in training so that no idea is dumb. And this goes in with grim
15 storytelling. You're generating -- you're all there, you're all experts. Nothing is off the
16 table, nothing is stupid. We are not evaluating you at this point. Nobody -- that
17 process, you don't have to worry about being judged at or being transparent, because
18 it's a thought generation process.

19 So one of the things we know about activation also -- so there's
20 that, so that should be a component of training, non-stress and also just take away that
21 social evaluative threat, because they could even be thinking, oh, this other person I
22 highly respect from a different police service and going to think I'm not as -- or that's a
23 stupid decision in training, and so they won't say it. And then it doesn't feed into their
24 knowledge base of schemas of possible things that could happen. So we want to
25 remove that in training.

26 But also, this idea of how is the body in activation involved in
27 switching tracks? So what we do know is, you know, when you have that high
28 activation but you make a decision, that actually reduces your unease. It reduces the

1 chemical process and you feel better, right? It reduces that physiological feeling of
2 uncertainty if you make a decision, even if it's -- whatever decision it is. And that is why,
3 physiologically, it can be harder to then go back and make a different decision, because
4 making -- switching roles activates everything again and raises your actual physiological
5 level of unease, so your body is actually, you know, resisting that.

6 But again, the good news is, we have some ways that we've seen
7 from manipulating physiology to kind of give you a break to work through that unease
8 and switch tracks. So that's the good news for after the break.

9 **MS. KRISTA SMITH:** Great, thank you so much.

10 So it's 11:23 now, and we'll take a 10-minute break? Do we want
11 15? Okay, 15-minute break, thanks.

12 --- Upon recessing at 11:23 a.m.

13 --- Upon resuming at 11:44 a.m.

14 **MS. KRISTA SMITH:** Hi, everyone. Welcome back. Before we
15 move on to training, there's just one more topic that we would like to cover. We were
16 thinking about this a bit over the break, and we hadn't gotten to looking at some of the
17 organizational factors that can influence critical incident decision making. So I think I'm
18 going to start off with Wallace because we were chatting.

19 And so you spoke a little bit about the importance of the -- being
20 able -- you know, the fact that we're talking about using your imagination and being
21 creative, how important it is that there's some space there for people to feel safe to
22 share and to spitball. Can you tell us a little more about that piece?

23 **SUPT. WALLACE GOSSEN:** Absolutely. And it comes to -- I --
24 the term that I use -- I picked up on it somewhere -- was, you know, building that
25 psychological safety within your team. I know, for myself, when the team is performing
26 well, most of the solutions to our problem are coming from on-ground, meaning the
27 officers that on the ground, and it's filtering its way up into the command post. And, you
28 know, as an incident commander, I have the luxury, then, of picking which option that

1 they're recommending is the best.

2 I know the team isn't functioning well when all of the ideas are
3 coming from the command post, all right? Again, I go back to the decision-making in
4 command, it is a team and collaborative effort, and if we don't foster an environment
5 where people feel comfortable putting forward what they feel might be a solution to the
6 problem, command is a very lonely place. And that, unfortunately, takes time to
7 develop, and it can't occur spontaneously without a high level of trust amongst the
8 individuals that are working on the problem.

9 And, you know, I think that's one of the issues we have in policing,
10 is we may have teams that work together constantly and have within their own little unit
11 a high level of psychological safety, but we rotate the commanders, and each
12 commander has to be assessed. They have to develop the trust. They have to prove
13 themselves, shall we say, to the team, and then start having the issue sort itself out, as
14 far as the trust piece goes.

15 And I think, to an extent, that also goes back to the culture of
16 policing. One of the first things we do with a new recruit on a platoon is -- you know,
17 almost every coach officer, I would hazard a guess, at some point has said, "Just keep
18 your mouth shut," right; "Just watch and learn." The problem is, if that individual that's
19 been told to keep their mouth shut is in the back of a house observing something and
20 they suddenly see something that may actually be the key to solving your problem,
21 they're now afraid to speak up and say anything. And then, in the command post, all
22 the decisions have to come from the command post, and we have incomplete
23 information.

24 So there's a lot to unpack there, I recognize, but bringing it back to
25 the context of crisis management and decision making, you know, I think,
26 organizationally -- and we've talked about it, I think, right out of the gate. The doctors
27 have discussed -- experience matters. And the ability to maintain the skillset, exercise
28 it, and -- you know, the training of large-scale scenarios is so important, and they're so

1 labour intensive, and so costly. You know, you end up -- with the way that we move
2 people around, you have one commander that experienced that great big scenario that
3 was a fantastic learning experience but they're no longer the person in command
4 anymore. So now you have to generate a whole other new scenario, and it may or may
5 not be as good as the other one they had. So I think there's issues there for, you know,
6 organizationally.

7 And again, the ability to identify people that have a natural capacity
8 for this job. You know, there's -- there's clearly individuals that are better suited to it
9 than others. And that by no means is meant to indicate that you're not great at all kinds
10 of other things. It's just, for whatever stranger reason, you have an emotional
11 predisposition to being able to function in a high-stress environment. And that's not
12 everybody. And those individuals that may function well in a high-stress environment
13 may not do great in a low-stress environment where it's, you know, day-to-day
14 leadership management pieces.

15 But identifying those individuals and fostering that skillset within
16 your organization is crucial because they don't exist in abundance. That's been my
17 experience. And, you know, organizationally, from a career-development position, you
18 need to capitalize on those individuals, and allow them to operate in that environment
19 that they are comfortable in and then go on and teach others.

20 So I think I answered your question. I may have gone off on a
21 tangent there, but I think there's a number of organizational pieces that do come to bear
22 on whether we've got the right decision-maker with the right skills at the right moment at
23 these crisis points.

24 **MS. KRISTA SMITH:** And the other thing that was coming up for
25 me while I was talking with you -- or while you were speaking was a conversation I had
26 with Bjørn yesterday during a break, and he talked about collective situational
27 awareness, so the idea being that -- he talked about it actually in the round table
28 yesterday afternoon about both horizontal situational awareness and vertical. And so I

1 was thinking especially about the vertical piece as you were talking about culture, and
2 about police recruits feeling, you know -- or younger police officers feeling okay to
3 mention what they're noticing. And there's -- he talked about the relevance of having
4 that information when you're making a decision, and that there's almost sort of layers in
5 a critical incident response from the frontline to the command post, to the centre, the
6 incident centre that we heard about yesterday. And as you get further and further from
7 the frontline, the quality of your information changes, and it could be that you're making
8 a decision that no longer speaks to the needs of those on the frontline. So I'm -- maybe
9 I just ask you to comment on how can organizations do a better job of cultivating
10 collective situational awareness.

11 **SUPT. WALLACE GOSSEN:** So I -- well, I'll just go back, Judith
12 just said to me, the word I was probably looking for was tenure; right? You know, when
13 you -- we tenure people out of positions, you lose that operational experience and
14 potentially that skillset.

15 As far as fostering the flow of ideas in a command post goes, which
16 I think is the root of your question, again, it comes back to this team environment. If I
17 make a decision in the command post that either the negotiator or the negotiator TL or
18 the tactical commander disagrees with, I fully expect them to say, "Hey, boss, I don't
19 think we should do that, because of the information that I've got, my interpretation,
20 because I'm the one directly talking to the chain of command on ground." And I have to
21 take that as information in regards to whether, okay, maybe I don't make that decision.

22 So, really, it -- again, that collaborative piece, maintaining that trust
23 where, you know, again, the negotiator might say, if you do that, breach his window, or
24 put the throw phone in, that's going to make our job harder, and it could result in this.
25 Again, that -- the challenging of ideas, that comes from training; right? And that
26 scalable piece where you experience it in training, in, you know, soft, safe environment,
27 then you ratchet up the training to make it harder and harder, and then you get conflict,
28 and you want that conflict, and learn how everybody, not just the commander, but

1 everybody in that command post understands how they're -- how emotionally they're
2 reacting and how they're going to work through that in the moment. To try and figure
3 that out on the day, extremely difficult.

4 **MS. KRISTA SMITH:** And thank you, Wallace.

5 Neil, I'd like to take it to you for a moment. There were -- the
6 commissioned report speaks about things like role ambiguity, interoperability,
7 communication complexity, and uncertainty about how response systems work, as
8 those are the sort of organizational factors that can impact decision making. So I know
9 we've touched a little bit on some of them so far, but I just wanted to give you an
10 opportunity to expand a little bit on some of the ones we haven't talked about yet.

11 **DR. NEIL SHORTLAND:** Yes, I think in terms of the -- what I
12 would add in terms of -- with reference to the last question is the -- one of the issues
13 around the organizational factors that impact critical incident decision making, I see it as
14 two prongs really, two elements or avenues that are required to make an effective
15 decision. The first is knowing what's going on. And that comes back to the piece I
16 mentioned earlier of exogenous and endogenous uncertainty. So good situation
17 awareness -- and as you mentioned from yesterday's round table and just then, you
18 know, vertical and horizontal situation awareness, so knowing what's going on around
19 you. And then the added complexities of knowing who is operating with you, where they
20 are operating, what they are doing, what roles fall to them, and then again, you know,
21 with ad hoc teams. The -- one of the issues that we came over in our research was the
22 expectation -- sometimes decisions -- people found themselves making decisions because
23 they expected somebody else to do something that they didn't do, and either because
24 they didn't understand that it wasn't that person's responsibility, or sometimes that they
25 trusted someone to make a decision that that person didn't make; right? So I think all of
26 these added areas add to the uncertainty that is within an organization. I think you can
27 have organizational practices that try and minimize those uncertainties, good
28 relationships working together on exercises and training together, good flow of

1 command, good communication policies.

2 The second dimension of the organization as it relates to decision
3 making is beyond knowing what is going on, and I think we can all agree that effective
4 critical incident decision making is pinned upon the best situation awareness you can,
5 and an updating and adapting situation awareness. But the second part of good
6 decision-making is being able to chose a course of action when you are -- when you
7 have several in front of you. And I think where the organizational factors that come in
8 there, and we cited this in the report, would be accountability. And I think this actually
9 goes back to a point that Dr. Andersen made earlier about the -- I think she called it the
10 self-evaluative threat, and I apologize if I got that wrong, but one of the things that we
11 talk about with decision-making and one of the things we want of our decision makers,
12 and Superintendent Wallace mentioned this in terms of priorities, is, you know, to be
13 approach-orientated, to take action, to prioritize saving lives, to prioritize making the
14 decision -- making the situation better. And one of the ways that we phrase that is this
15 idea of being approach-orientated, wanting to improve, to go forward, to create good in
16 a situation.

17 Now, one of the issues we've seen, and it directly stems to the
18 organizational issue of accountability, is that in some organizational environments, if
19 they have I think some of the elements that I mentioned, that Superintendent Wallace
20 mentioned, is they can create a equal avoidance tendency. And, you know, so
21 Laurence, and you may want to talk about this, but had a paper a few years ago with
22 Claudia van den Heuvel, which was how uncertainty and accountability can derail
23 strategic save life decisions, and we cite this in the report. That when officers felt
24 accountability, career fear, that they would be, you know, directly accountable for the
25 outcomes of their actions, the power or presence of that accountability was sufficient to
26 match the approach tendencies and the want to make a positive impact on a situation.
27 And referring to our previous point, or our previous discussion, once that polar opposite
28 force of avoidance equals the level of the force of approach, that's -- you know, that's a

1 recipe for indecision, decision inertia and redundant deliberation.

2 So I -- when I think of the organizational dimensions of it, I think of it
3 in two forms. The first is barriers to good situation awareness, barriers to updating
4 situation awareness and accurate situation awareness, which I think element on those
5 combinations of communication, interoperability, and all of those issues. And then
6 secondly, it's if the organizational culture or even policies, or whatever it may be,
7 manifests in a way that is increasing avoidance tendencies, they can then equal the
8 approach tendencies, and that is -- you know, we would call that -- you know, a lot of
9 our researchers identify that as a cause of indecision or worse, I mean, as Laurence's
10 paper and with Claudia identified, you know, derailing indecisions and focussing on
11 avoidance. So that's where I would see the two dimensions to organizational elements
12 would come -- would play on this process.

13 **MS. KRISTA SMITH:** Okay. That's very helpful having the kind of
14 two buckets that that can fall into.

15 Laurence, did you want to follow up?

16 **DR. LAURENCE ALISON:** No, I mean, I think that's pretty
17 comprehensive just from Neil -- I mean, just to echo what he said, and I thought it was
18 fascinating what Dr. Andersen was saying about the threat of evaluation, and it's, you
19 know, exactly what we've seen, what we call accountogenic decision-making, which is,
20 you know, I'm making this decision on the basis of my perception of accountability,
21 rather than the incident itself. And you don't want to create a culture that is all about the
22 accountability. You know, it's got to be a value-based system which is clearly about
23 helping the public and saving lives.

24 **MS. KRISTA SMITH:** Okay. Thank you very much.

25 I want to move on to training now. And I'd like to start off with
26 Judith, and thinking about, you know, looking at some of the work that you've been
27 involved in, and your colleagues have been doing, I ran across materials, this concept
28 of evidence-based policing. Can we sort of start with that concept and go from there?

1 **DR. JUDITH ANDERSEN:** Yeah, sure. That's a great question,
2 because so -- it's like, becoming almost a buzz term, "evidence-based policing". Like,
3 what does it actually mean?

4 So in our research, we've defined this as, we grab multiple sources
5 of evidence. We try to have biological evidence that shows us what's happening in the
6 body, and then you have more subjective evidence, either the self-report from the officer
7 or the trainer. And so you can combine these and see where they're discrepant, and
8 then can we design training that helps the body, and then also helps the officers', you
9 know, confidence and kind of those self-reported aspects.

10 So do you want me to just continue with some of the things we've
11 seen in training?

12 **MS. KRISTA SMITH:** Yes.

13 **DR. JUDITH ANDERSEN:** So I'll begin by saying that, you know,
14 the first number of years with our studies, we observed all of these kind of deficits in
15 training and in performance and so forth, and then we began to kind of calculate how to
16 address it in intervention-based research.

17 But we did see that even at the highest federal level tactical teams,
18 there was about one to two percent of officers who, no matter what kind of training,
19 biological or psychological training, they were unable to perform tactically, right? So
20 they became very disorganized. You could see it in the physiology when we were
21 looking at their monitor. You might not be able to tell it on their face, but their like, heart
22 rates were at 200, their behaviour became disorganized, turning around, they needed to
23 be helped by another officer out of a building, and so forth, complete in the blackout
24 kind of level of activation.

25 And so that -- but that was only about one to two percent at the --
26 but some of those individuals were actually amazing at the cognitive tasks with the --
27 you know, in the police department, and so their skill set was not for the field, but it was
28 excellent for in the office. So that, that we've seen on that level. And then, that's on the

1 activation side.

2 And then when we've worked with frontline officers measuring
3 them, we also see -- you see that same thing. There's some people that just
4 overactivated, so fieldwork is really not the best suited for their health, long-term health
5 either, as well as safety.

6 But then we've seen a component, maybe a larger percent -- and
7 again, this is somewhat anecdotal -- but about 10 percent of officers in -- who aren't
8 engaged at all, so they have no kind of physiological response, and it's not just because
9 they're burned out or tired, they're just -- they'll start a scenario and they'll just make
10 mistakes, and they're not even activating to an engagement state. And this may be a
11 function of training, this may be a function of social evaluative threat, there may be other
12 things there.

13 But what that made us realize is that there's a large window of
14 people that can benefit from biological, physiological training, combined with tactical
15 operational training, so you must do this in combination.

16 So we start by again, looking at that stress response and changing
17 the brain. So you have activating, but the thing I didn't talk about this morning was the
18 modulating areas that we have in the body. And one of them is the parasympathetic
19 nervous system. You've probably heard of it. You know, you've got the fight, flight, and
20 you have the rest and digest, so that great parasympathetic nervous system helps
21 modulate.

22 Often, people think of it as just rest and digest, just when you're
23 relaxing and so forth, and no, newer science shows that actually, if you can activate --
24 you can activate both systems at the same time, and if you do that, having higher
25 parasympathetic dominance helps you to focus in on that task and gets you in that zone
26 where you're thinking clearly and hearing everything and have high situational
27 awareness.

28 So that's the goal, then, to get a person into that physiological

1 state.

2 Okay. So how do we do it? Well, in police training, what we
3 observed when we came into it, a lot of people say, "Yeah, we train about stress. We
4 give a PowerPoint, and we -- you know, before we start the scenario, we say, 'Calm
5 down.'" So you can imagine how that feels.

6 Now, you know, and we do it too in life, you know? You tell your
7 teenager, "Calm down." But what we found is that it doesn't actually calm people's
8 physiology down.

9 And you can think about it in terms of even though it seems
10 intuitive, I should know how to breathe and calm down, but think about driving, learning
11 how to drive, especially a standard car, a stick shift. You tell a kid, "Just drive."

12 Well, no. How do I -- like, what are the motor movements? How do
13 I make that become automatic? And that's what we need to do. So using behaviourally
14 -- behavioural conditioning of the autonomic nervous system through a technique called
15 heart rate biofeedback variability, lots of articles on it, and we can -- but I'll break it
16 down. There's short-term and long-term HRV biofeedback. And it's basically, you take
17 signals from the body -- you can use heart rate, you can use brain waves -- and you
18 have it on a monitor. You can see your stress response going up, you're able to bring it
19 down with different body positions, breathing, there's a number of techniques, and then
20 you feel, you actually feel like what it is to be in that optimal state, and then you perform
21 the scenario in that.

22 And we have trained people, hundreds of officers, and were
23 fortunate to actually be able to work with a high-level military officer who has worked
24 with folks in the U.S., and from his operational experience, he's explained this as when
25 they go in, they want to teach their operators to have -- like, get in the zone, but what
26 does that actually feel like?

27 And so he talks about it in terms of a routine. So there's things that
28 you do, like, when you're not in the zone, you're -- you might be sitting around talking,

1 smoking a cigarette, doing whatever, and then 30 seconds out, and you can see around
2 the room, they're all -- they're breathing, they're getting in their body position, and
3 they're like, in that. They're in it.

4 And that does not come automatically to people. You cannot give
5 them a PowerPoint to have them feel that. You have to teach them how to do that. And
6 we can accelerate that learning by using these physiological tools that we have done.

7 But you can also -- some of it, you can learn from years and years
8 and years of experience, but we can also, like I say, accelerate this learning.

9 And so the goal of this military operator, and ours, ultimately, is to
10 be able to train officers to go from, like, sitting, non-emergency, to I'm in it, right, like,
11 kind of this master of shifting their physiology.

12 So we've seen that success, and that's an exciting part.

13 The other aspect to that training is using the same kind of
14 techniques to work on the recovery system. So we've found that some officers, one of
15 the issues is that they run high, their physiology is activated high all day long. So you'll
16 see it on the monitor. Their body never comes down into a resting state, so they're
17 burning through all of those chemicals and that energy level and those things that
18 Matthew talked about, and they have nothing left at the end of the day.

19 Well, then a critical incident happens, and the brain is less able to
20 even make those decisions.

21 So we can use some of these physiological techniques to have
22 people's bodies in any downtime state, they can train their bodies, behaviourally
23 condition their bodies to get into a state where the -- you know, the cardiovascular
24 system and the respiratory system is in a state of synchrony. It's called, you know,
25 cardio-respiratory synchrony, and it helps deliver oxygen to the body. The immune
26 system is working. You know, you're recovering your energy reserves.

27 And we've shown officers as they do that for small bits throughout
28 the day, they don't have to rest, they don't have to go sleep, they don't have to shut

1 their eyes, they can do this once they feel it -- like, driving a stick shift -- once they feel
2 it, they can do this in their downtime and their performance doesn't suffer over time,
3 because we know that accumulated stress -- and we've seen officers go from one call to
4 the next call to the next call to the next call, and they're taking the stress and it's getting
5 worse and worse and worse over time, and their performance can deteriorate over the
6 course of a day or a week or a month.

7 So it's critical, we find, that this kind of physiological hack, for lack
8 of a better word, be integrated into reality-based training, because when people are in a
9 state, a focused state, they can learn better. All of these great techniques that you have
10 and all of these strategies and so forth, or reducing social evaluative threat and all of
11 this over, you're in the state to learn better, and then you're more likely to perform that
12 way out in the field.

13 So we also have the techniques to help in the acute moment, so if
14 they're coming into the stressor, I've got to get into that door, they can reset their
15 physiology and get in, and we have an example from Finland to -- tactical officers were
16 going to a call, person was barricaded with a knife, and they were running, rushing to
17 the door. And they -- the one guy said to the other guys -- so this was another thing -- it
18 has to become part of the culture where you can say, "Wait." You can say to your
19 buddies, "Stop. Let's take that breath. Let's focus two extra seconds."

20 Boom. They said, "I'm going to open the door and you're going to
21 go this way."

22 And just that few seconds saved their life. He said, "We would
23 have probably been killed and maybe the other person be shot."

24 So he said doing that, and talking to each other about it, and
25 communicating saved lives. So that's why we just believe that it's so important to
26 integrate this training.

27 And I'll say one more thing, and the wrap up, but we don't believe
28 that using physiological training -- or, sorry, using physiological measurements should

1 be used on, like, the first day, or first week, to weed people out. There's a push with,
2 you know, some of these kind of sports monitors and so forth, to hook people up on
3 their first day and so forth. Can you imagine, on your first day of a job? Some people
4 have really high stress responses, that doesn't mean how they'll, you know, perform
5 later on, but you provide people with this kind of training in addition to their other
6 training, and watch them over the course of training, and some people will adapt to it
7 and use it and be able to get into those routines, and others won't. And then maybe
8 that's not the job for them, right, if they're not able to apply that training. And it's true,
9 it's not the job for everyone; right?

10 That's where I'll stop right now.

11 **MS. KRISTA SMITH:** Okay. So I will mostly resist the temptation
12 to ask you for more, but there's one piece I'd love to ask you about is just, you know,
13 you mentioned take a moment, get focused, perhaps communicating with a partner or
14 with someone, those are tools, those are tools that can be used. Are there other
15 hacks?

16 **DR. JUDITH ANDERSEN:** Yeah, so it's the -- it matters the way
17 that you breathe. So there's a lot about breathing, and relaxation breathing, and box
18 breathing. There's so many breathing techniques out there, but we found for
19 operationally -- operationally, you need to have something that you can program your
20 body that you can do this reset, refocus, respond technique. So your body position is in
21 the ready state. You're not hunched over, you're not yelling, you're not, like, crunching
22 your lungs, you're open, you're taking this reset breath, long exhale, and then you're --
23 you get into your routine, whatever that is, and so your mindset -- so when a trainer is
24 training this, they're training the body position, they're training the breath, and they're
25 training to think about your next step as one whole piece. So we call that the reset,
26 refocus, respond, and people do it over and over and over, so that it becomes
27 automatic. They don't have to think about it. But it is a particular way to breathe.

28 Then the recover breathing is paced breathing, and you get your

1 body into a state of where you can see that your heart and lungs are in tune, you can
2 see a wave pattern in your heart rate variability. So that's a separate training. But,
3 yeah, this ready state is what we call it.

4 **MS. KRISTA SMITH:** Thank you. Very interesting.

5 So I'd like to take it to Matt now. I know the focus of your research
6 is somewhat different, but your work ultimately leads to learnings about effective training
7 as well when it comes to critical incident decision making. So can you tell us a little bit
8 about that?

9 **DR. MATTHEW McALLISTER:** Yeah, it is a much different
10 approach. We haven't looked at decision making per se, but I wanted to pick up on
11 some of the things that Judith was talking about. She did a great job. I agree with
12 everything she said. It's interesting because when you try to pinpoint how much stress
13 is too much, you know, as Judith was talking about, there were some individuals that
14 demonstrated heartrates of 200 and they had a -- they may have -- they may
15 demonstrate a more difficult time making decisions. So then it's -- the question is how
16 much stress is too much, especially if we want to train people. And it's not a simple
17 question to answer, because in all reality, it's relative.

18 And I'm going to give an example, and this is going to sound like it's
19 totally unrelated, but it's really not related. I used to judge power lifting competitions,
20 weight-lifting competitions; right? And before these individuals would do high intensity
21 weight-lifting performance events, there was a large discrepancy in how these people
22 would prepare for these events. You had some men and women that would sit in the
23 corner, and be quiet, and calm, and practice deep breathing, and things like that. You
24 had some on the other end of the spectrum that would want to take stimulants, want to
25 yell, and scream, and get amped up for the same level of performance. And so why is it
26 that some people need to try to achieve a calm state and some people want to get more
27 riled up physiologically? It's because we all respond differently to stress, and so finding
28 that appropriate zone of how much stress is too much, it's relative to the person. It's a

1 difficult question to ask and to answer.

2 But in terms of training, what we've done is looking at the
3 consequences of stress, first of all, when you're acutely exposed to stress, it's clear that
4 people that engage in exercise training, I'm an exercise physiologist, so we do a lot
5 looking at exercise physical training, it is clear that people who are more physically
6 trained from -- especially a cardio-respiratory standpoint, people that do endurance
7 training, let's say, on a regular basis, they do demonstrate a different acute response to
8 stress. In fact, it may surprise you because most of the time, people that train on a
9 regular basis, again, exercise training, demonstrate actually higher heartrate responses
10 and higher adrenaline responses to acute stress, which is actually -- it may seem like
11 that's not a good thing, but perhaps it is a good thing acutely. That does not necessarily
12 reflect their long-term stress concentrations though.

13 But what I'm more interested in, in our work, is not necessarily
14 looking only at things like adrenaline and heartrate, but we're looking at the
15 consequences of that stress. And again, it goes back to the free radical damage and
16 the inflammation that I was talking about earlier. What is clear is there are a number of
17 dietary as well as physical training interventions that can be done on a regular basis that
18 increase your body's protective mechanisms against the damage from stress, different
19 occupational stressors. And what that means is, earlier I was talking about -- I talked
20 about, you know, dietary antioxidants, for example, but we have antioxidants in our
21 body that are protective mechanisms that are very powerful in terms of reducing the
22 impact of stress, if it's excessive stress. Exercise training on a regular basis is the most
23 effective thing that you can do to increase your body's natural level of antioxidants to
24 protect against some of the adverse effects of these stressors. And so that's really
25 been shown extensively.

26 We've also taken people that exercise on a regular basis and
27 exposed them to the same stressor that people that don't exercise on a regular basis,
28 and people that do exercise on a regular basis actually have the opposite effect when

1 you look at some of the post-stress responses in the body. Again, people that exercise
2 on a regular basis, when they're exposed to the same stress as people that don't
3 exercise on a regular basis, you look at the biomarkers in the blood post-stress and it's
4 clear, I mean, that exercise training has a huge effect, likely more powerful than any
5 effect you can get from dietary supplementation or dietary modification, not taking away
6 from the benefits of dietary modification. There are some things that we're doing right
7 now, looking at ingestion of different metabolites that can improve or mitigate some of
8 the physiological effects of stress.

9 But one fascinating study that I wanted to talk about was one that
10 we actually did in firefighters that was a couple years ago, and we showed in a group of
11 firefighters that regularly train in a live-burn victim search and rescue scenario, we had a
12 controlled burn, and we had a mental challenge that was victim search and rescue. And
13 we had different conditions where we gave them a healthy dietary supplement that is
14 known to produce beneficial effects in the body. We had them also do the search and
15 rescue with no environmental heat, and we had them do it to conditions with
16 environmental heat that -- the long story short is that the firefighters that trained in those
17 scenarios on a regular basis, before they even went in to engage in the search and
18 rescue task, their body upregulated protective mechanisms that protected against the
19 adverse effects of stress, which totally overwhelmed any benefit you can get from a
20 dietary supplement. In those individuals, before going into that fire, their body
21 upregulated this protective mechanism, which is wild, and I think it can potentially
22 extend, or those findings could potentially extend to law enforcement and military
23 personnel as well. I tried to, in that study, take away the effect of perceived heat,
24 because we had them do a condition with no fire and then a condition -- or two
25 conditions with fire. Unfortunately, we tried to blind them, so we tried to tell them, you
26 know, we're not going to tell you if you're getting heat or a fire today or no fire, but it just
27 wasn't possible to blind those individuals, because when they pulled up at the station,
28 they clearly knew the building was on fire or it wasn't, so it was just not possible to hide

1 that from them. But the finding was when they were exposed to the heat and the high
2 environmental stress, their body upregulated this protective mechanism that protected
3 against the stress, which is a wild finding. And again, I think it could potentially stretch
4 and provide implications for future studies in military and law enforcement personnel as
5 well.

6 **MS. KRISTA SMITH:** Thank you very much.

7 Judith, I want to go back to you just for one second. We heard this
8 morning Laurence tell us that the value of small repeated -- you know, sort of creating
9 habits. You know, doing something -- a thought experiment three times a week for
10 seven minutes can be enormously helpful.

11 What I get from some of your research is that getting -- embedding
12 people in these sort of very realistic scenarios is also very helpful but can be incredibly
13 expensive, so how do you -- how do you kind of balance -- or how do you -- how do you
14 think about the repetition on a day-to-day basis versus scenario-based training?

15 **DR. JUDITH ANDERSEN:** Great question.

16 First, I -- yeah, I just want to make sure that I hit home that back of
17 what we were talking about, it's about modulating the stress response, not relaxing,
18 okay. So it's modulating and you can do that through the parasympathetic nervous
19 system modulation. And it's true that the body will sometimes, you know, activate in
20 certain people, but their -- that's their state. That's their active state. That's their ready
21 state.

22 So there is that individual difference. There's no perfect zone for
23 everybody, so training that can incorporate the individual's needs and the individual's
24 body and brain is so important, and integrating that into the training resources that we
25 have currently.

26 And that's why we've worked hard in our research program to see
27 how can we integrate some of these, you know, either, you know, bio training or psych
28 training right into the use of force training they're already doing at the agency because

1 the services are often doing scenario-based training quite a bit or yearly or they can --
2 they have different days or how can we go into the field with them and, you know, do
3 some just brief initial training. But then the practise is -- just like you go and practise
4 driving, learning how to shift and so forth, you start in a parking lot and then you're
5 practising every time you do it.

6 So we're integrating that into the training that they're already doing.
7 And that's what we've noted, is to streamline this it's not some extra additional long
8 amounts of training, but it is using it every time.

9 And yeah, small, repeated stressors -- sorry, small, repeated times
10 where you're going over possible things that could happen, this is great. It's in a non-
11 stress time. The social evaluative threat is low and so you're able to think creatively
12 and think through some of these things.

13 And we were talking to that to an ATF officer who was saying that.
14 He -- they did some similar sessions to what Laurence was talking about just five
15 minutes here, five minutes there, just generating all the possibilities that could possibly
16 happen. And he gave the example of a house and there was a barricaded person in
17 there and they had the audience think about how many ways could you go in there, and
18 people gave different suggestions.

19 And they said one actually -- what one person did was just drive the
20 truck right into the garage. And nobody had thought about that, but because that -- they
21 had engaged in those kind of exercises in a non-kind of stress state was able to kind of
22 think outside the box there. And those can be integrated throughout training as well.
23 Yeah.

24 **MS. KRISTA SMITH:** Thank you.

25 Wallace, how -- how do you -- do you see some of these
26 physiological techniques to modulate stress -- do you employ that when you're doing
27 critical incident decision-making training?

28 **MR. WALLACE GOSSEN:** I want to say yes, but it is not

1 emphasized, by any means, to the extent that it's being emphasized here.

2 You know, we teach them effectively, to your point, take a breath.
3 Breathe, right. Shake it off.

4 I think we -- what we are doing is teaching them to be aware of,
5 listen, you're going to get stressed and you need to figure out how to manage that
6 stress. We'll -- really, we're not in a position to give you the specifics of how to do that
7 other than through anecdotal own personal experience, which isn't necessarily the best
8 way for that individual.

9 So you know, one of the things, though, that we see and we
10 emphasize is -- and this is problematic for smaller organizations. You can't do more
11 than 12 hours on. You know, when we work kidnapping files or long hostage-takings,
12 it's 12-hour shifts. The commander is 12 hours on-12 hours off, you have somebody
13 who comes in, briefs themselves up because that -- to be in that elevated state of
14 vigilance for that length of time, your -- your decision-making and cognitive abilities
15 seriously decline near the end of those 12 hours. And there's the -- you know, the
16 factors of decision-making fatigue and things like that.

17 So we very much stress you have to look after yourself because
18 you have to look after everybody else. And if you're suffering, then everybody else is
19 going to suffer as well.

20 So we emphasize it, but we don't give them the specific tools such
21 as what we're talking about here. We rely on their own past experience to have been
22 able to cope to get them to this point, to be able to management themselves moving
23 forward.

24 So that's -- that's my answer, I think, to your question as far as
25 where do we talk about it. It's addressed, but again, nowhere near on the level that
26 we're addressing it here today.

27 **MS. KRISTA SMITH:** Thank you.

28 Laurence, I'd like to just check in with you. We started to speak a

1 little bit about training to improve some of the barriers, cognitive and psychological
2 barriers, to decision-making. How does any of what you're hearing right now play into
3 your work?

4 **DR. LAURENCE ALAN:** I mean, all fascinating. You know,
5 fascinated by the readiness state that Judith mentioned, you know, and I'll follow up with
6 her how she's doing that. I'd be very fascinated to look at that.

7 I mean, my sort of nutshell on this is, you know, I think there's
8 short, brief cognitive imagination pieces are useful. You know, we use another
9 scenario-based process that Neal might want to speak called Lucifer, which is a slightly
10 more developed version of that, which is somewhat more immersive and a little bit
11 harder.

12 And then we use another thing called Hydro, which might be a two-
13 day event. It's not a full-blown physical geographic scenario, but we have audio feeds
14 that can actually be quite stressful that do get people stressed.

15 And you know, I hope I don't come across as saying that I'm anti
16 these large-scale vents. You know, we've done big simulated exercises on ferry
17 disasters and railway crashes and -- I mean, it's about getting the mix right, really. Any
18 one of these things on their own is inadequate and you want a full supplement, really.

19 The broader point, though, I would make is, you know, in hard
20 economic times quite often the budget line that gets axed is training and that -- you
21 know, you pay for that later, so you know, economic analysis of the value of what the
22 input is financially to training reaps rewards longer down the line and then you end up
23 paying for it later because training is inadequate, police officers aren't ready to take on
24 big challenges and then, you know, the cost of that is human suffering plus all the sort
25 of offshoots of it.

26 So I think it's about getting the balance right knowing what is doing
27 what and measuring the efficacy of the training.

28 I mean, quite often, again -- final point on this before I muffle on too

1 long. How often is training evaluated in the police? I would argue not that often.

2 They go on courses and, you know, worryingly infrequently, there
3 isn't a pre and post-course assessment or even how long the efficacy lasts.

4 And you know, that's a piece of the puzzle that we need to look at,
5 but I'll end there and maybe Neal has something more to say.

6 **DR. NEAL SHORTLAND:** Yeah, I mean, I'll just jump in.

7 I think the -- there's one point, I think, that's come to my mind
8 based on our work that perhaps, I think, integrates what Matt and Judith mentioned.
9 One of the things that we have studied and we have a few papers written on this with
10 Lucifer that Laurence mentioned is maximization. So it's a personality trait about how
11 willing you are to try and make the best of a situation versus how willing you are to
12 accept something that's good enough. And a lot of the economic work kind of finds that
13 satisfiers are generally better or happier and better able to make decisions because
14 they're not always trying to squeeze every bit of good out of every situation, which
15 we've always said -- I think mentioned this morning may be a good trait in critical
16 incident.

17 Another point on that which I think is interesting is we then did a
18 study with mindfulness, which I don't think is the level of some of Judith's work on
19 breathing, but it was a -- kind of injected a breathing exercise. And not only did we find
20 that the breathing exercise helped, which I think supports Judith's point, but we also
21 found that whether you were a maximizer or not impacted how the breathing exercise
22 affected your performance, and in maximizers it had the inverse effect to satisficers.

23 So one of the things I think about training, and something that
24 Laurence and I have been doing with partners with the armed forces and in the police,
25 is simply awareness, self-awareness training, if you will, almost, of having people learn
26 about their personality and their tendencies. Are you someone who's always trying to
27 maximize; are you someone who is far too ready to satisfice? And being aware of that
28 when you are then making -- entering one of these stress critical incident situations,

1 being that whatever your tendency may be, it's realistic to assume it may get worse as
2 the stress goes up. And so knowing what your miss is, kind of may allow you to
3 modulate your performance a little bit when you know your resources are depleted. As
4 Wallace said, you know, you're tired, everything's run down at the end of the shift.

5 And so I think from the training standpoint that we've been doing
6 and with Lucifer, a big part of it is helping people identify what cognitive tactics they
7 naturally use and how these could benefit them or not benefit them, as stress,
8 uncertainty, and all the physiological strains increases over time.

9 And I think that's probably the only thing I would add, other than I
10 think everything that Laurence mentioned earlier.

11 **MS. KRISTA SMITH:** Thank you very much.

12 I want to move us into sort of the concluding questions for this
13 roundtable, and I may combine the last two questions.

14 We always like to check in with everyone to see if there's anything
15 that they wish to share, that they hoped to share today that they haven't yet had the
16 opportunity to talk about. So we'll kind of call that part A. And part B is, given each of
17 your respective fields are different, can you give us a sense of where's the research in
18 your field headed? Or what's new and exciting; what's around the bend; what does the
19 future hold?

20 So we'll start with Judith.

21 **DR. JUDITH ANDERSEN:** Yeah, I wanted to emphasize that
22 another important thing that we did was not only developing these techniques from what
23 we've seen, but testing them in different types of studies, randomized control trials,
24 longitudinal, pre-, post- studies, and looking at an objective outcome, lethal-force errors.

25 And of course there's a lot of consequences with lethal-force errors
26 from not shooting or shooting incorrectly. And so we studied officers over time, we did a
27 pretest. These were officers that were experienced frontline officers, and they had the
28 equal level of skill test, and then we taught them these skills, these physiological

1 modulation skills in an integrated learning fashion from low stress to high stress,
2 different context, different usage, getting into the routines, and we found that it reduced
3 lethal-force errors by 63 percent at immediate post-test. And that was maintained over
4 the course of 18 months, with a little rise at 18 months, giving us an indication that a
5 booster training is probably necessary, just like any other training, even your body,
6 physiological training, a booster is appropriate.

7 So we have kind of hard and fast outcomes showing that this can
8 reduce actual objective important indicators that are important to policing and important
9 to people like here at this very Commission. And so our goal, then, is to how do we get
10 this integrated into police training across the board, and even commander's training. I
11 was talking to Wallace last week at a conference, and talking about this; how do we get
12 this in the hands of the people that need it, and have the awareness from the
13 administration?

14 So a lot of the officers we talked to want this; they want more
15 scenario-based training. They want to know how to do it. They're tired of just being
16 told, you know, "Just do it. Shake it off. Suck it up. Get in the suck." "What does that
17 actually mean? How do I do that? How do I get in the state?" They need to see it, feel
18 it, do it.

19 And so they want it, but then you come to talk to the administration
20 and it's, "Oh, there's funding," or there's this or there's that. But, like Laurence was
21 saying, in the end, if you don't put the initial -- you know, for some of these studies it
22 was two- to four-day training, that's it. And to have those lethal-force outcomes over a
23 year -- you know, a year or two, it's a cost/benefit analysis. You invest in the training to
24 have these outcomes. So we believe, yes, but that's what I'll say.

25 **MS. KRISTA SMITH:** Thank you.

26 Wallace? Oh, mic.

27 **SUPT. WALLACE GOSSEN:** That's the first time I did that.

28 Yeah, I completely agree with Judith's statements, as far as shifting

1 maybe a bit more of the focus on incident command decision-making versus that -- nor
2 versus but, you know, as much attention should be given to critical incident command
3 decision-making as it is in use of force scenario decision-making.

4 I think, you know, by the time an incident commander's engaged,
5 the consequences of mistakes, you know, can have massive ramifications. It's not that
6 it doesn't in use of force scenarios, but it's just as critical. And there really, certainly, I
7 think within Canada, has been very little research done on it, that has filtered into our
8 community for us to be able to use. And I think, obviously, there's some doors opening
9 right now.

10 Andi also think in policing, you know, if you were to ask police
11 administrators sort of where their areas of concerns are, I'd be very surprised if anybody
12 said incident command. And I think it's sometimes an afterthought, and it's not
13 something that necessarily agencies focus on too heavily until they really need it or until
14 there's a problem. And that's an issue. And I get it; we have competing resources,
15 limited funds, but, you know, what this boils down to, to me, for policing is just
16 formalizing leadership training, right?

17 You know, the leadership skills necessary to go on and become an
18 incident commander, we take a very holistic approach to it. There's no formalized track,
19 right? There's no formalized process to identify those that are suitable for this versus
20 that, and then track their careers in that area.

21 So, really, for me, I think that is sort of where I see the next level for
22 us in policing goes and for the incident command side, you know. And obviously
23 incorporating the science now that is available to us and working through that process
24 to increase the capacity of our incident commanders.

25 So that's my statement in regards to that, Krista.

26 **MS. KRISTA SMITH:** Thank you.

27 Let's take it to Neil.

28 **DR. NEIL SHORTLAND:** Thank you.

1 So I think in terms of one of the things I see is we have this meeting
2 of two moments, I think. The first is the physiological state that the decision-makers are
3 in, and the second is the cognitive process we are, I guess, requiring of them to make
4 effective decisions. I think that we have kind of -- I think between the two sides of the
5 table, it's clearly articulated that that's not a happy marriage there.

6 In terms of one of the things I see from a policy standpoint and a
7 training standpoint, we are often trying to remove the choice or remove the need for
8 choice from the decision-maker. And I think that's a good thing. Choice is laborious, it's
9 cognitively heavy, it's time -- it takes time, it takes resources that we may not always
10 have. So that's why there's a big push for, I think, scenario-based training; building
11 what Mike Matthews called in his book, *Headstrong*, a library of experiences and always
12 have. And I think that's where the big push for recognition prime decision-making
13 comes from, good policy and all of these things.

14 The problem I see with that, and I think it will relate, probably, to
15 what Laurence may talk about, but is as Taleb had said, you know, these kind of black
16 swan events do occur, often in critical incidents. These novel, new, challenging
17 decisions, and they require -- they require choice, which is a cognitively different
18 strategy to using experience or matching a policy to the situation. And it is difficult and
19 challenging to make choices; it is a cognitive skill. It has pitfalls and it requires practice
20 and awareness of the ways in which that process goes wrong.

21 And so I think in training, while we should encourage -- heavily
22 encourage developing experience, developing patterns, routines, analogies, it is also
23 important that we just practice and ingrain the process of choice, and actually having to
24 Grimm story tell and weigh on certain alternatives, and be adaptive and novel, and be
25 aware of what the pitfalls are. Some of our training is simply around saying these are
26 the three ways you can become inert. And I think just ingraining that into the holistic
27 library of trainings so that people are equipped to use whatever strategy of decision-
28 making is required of them and not always trying to use an analogy, trying to use policy,

1 and be, I guess, trained and ready to make choices in the rare event that they occur in
2 normal critical incidents. So I think that would probably be my reflection there, Krista.

3 **MS. KRISTA SMITH:** Thank you.

4 Laurence?

5 **DR. LAURENCE ALISON:** Yeah, I mean, summarizing everything
6 the last three speakers have sort of said, really, you know, we train our officers that
7 have got their finger on the trigger, quite rightly. You know, they go through drills. They
8 know how to handle weapons, et cetera, et cetera, and, generally speaking, those
9 people are very good at what they do.

10 But if we're not requiring the people that ultimately are in charge of
11 the larger macro-level incident, then we're kind of letting them down because we're
12 expecting them to deal with something which is rare, unique, difficult, challenging, and
13 that they'll probably take with them for the rest of their lives. And it's also not fair on the
14 communities they serve. So just summarizing everything everyone's said before,
15 you've got to invest in that level of training for what, you know, Neil has referred to as
16 these "Black Swan events".

17 I mean, my God, we're living in an age now where we've had two
18 major events which probably most people thought were improbable to almost the point
19 of being surreal. But you only need a one-off event to happen once for it to be
20 cataclysmically awful. And if you don't arm the people to sort of be able to deal with
21 that, whether it's a pandemic or whether it's a war, you know, you're doing a disservice.

22 We don't a lot of research on viral epidemiology and so forth and so
23 on, but very little of decision-making in these areas, very little, and particularly at these
24 high-level pieces. So, you know -- and very few researchers are doing it either. That's
25 the other disturbing thing about it.

26 You did also ask about where the research is going and where the
27 sort of exciting bits and pieces are. Well, you know, Neil and I are engaged in looking at
28 the use of artificial intelligence to support decision-making, you know, and where that

1 will lead, we don't quite know. But obviously, we're moving towards those sorts of
2 processes and what cognitive load we can take off the decision-makers and how AI
3 might support it. And actually, in doing that, it is about revisiting how experts do what
4 they do and how those remarkable people that are able to grip incidents and move
5 forward.

6 And, of course, we always end up in situations like this where we
7 see that things have gone wrong, but we very rarely look at where incidents have been
8 prevented and have gone right. So I suppose my concluding sort of comment is that,
9 you know, in the spirit of looking at what is effective, you need to also commit a
10 sufficient level of energy at looking at those remarkable people that don't ever get the
11 limelight but they're doing their job extremely well and are preventing these things
12 happening, or at least managing them as they unfold. And there are instances of that,
13 and they are also underexplored, in my opinion.

14 **MS. KRISTA SMITH:** Thank you. Yeah.

15 Lastly, let's go to Matt.

16 **DR. MATTHEW McALLISTER:** Yeah, closing remarks, I just
17 wanted to say this is an important area of work and I really wanted to thank you, Krista,
18 thank everyone else for coming, and thank the Commission for holding this because this
19 is important research, and a lot more needs to be done before we have really solid
20 answers. I think, to Laurence's point, not enough people are doing this type of work, so
21 it's very important that we continue.

22 One of the other questions you asked was, what's new and what's
23 going on right now? We have a number of studies ongoing right now with different
24 agencies where we're currently looking into using virtual reality based occupational
25 training scenarios in military, firefighters, and law enforcement officers, and looking at
26 both the acute and chronic adaptations from those types of interventions.

27 We've -- we're also increasingly looking at differences between
28 men and women because that's an interesting thing. We've seen that men and women

1 respond differently to acute stress when you look at biomarkers, such that women
2 actually tend to demonstrate lower concentrations of stress biomarkers when they're
3 exposed to the same scenario as men. That -- so those are two major avenues that
4 we're continuing on right now.

5 And I'm just excited to be a part of this. Thanks again.

6 **MS. KRISTA SMITH:** Thank you. Matt, can you say a little more?
7 What do you mean by -- what are acute and chronic adaptations to stressful situations?

8 **DR. MATTHEW McALLISTER:** We are looking at both the short-
9 term and long-term effects, is what I meant by that. So we're looking at virtual-reality
10 based occupational high-stress scenarios. For firefighters, it is live-burn events. For
11 law enforcement personnel and military, it's primarily active shooter events and
12 simulations. And we're studying the impact of short-term participation in those training
13 interventions as well as long-term adaptations, or long-term effects of that training.

14 **MS. KRISTA SMITH:** Got it. Thank you very much. That's helpful.
15 I'd like to turn it over to the Commissioners now, if there are a few
16 questions.

17 **COMMISSIONER MacDONALD:** Commissioner Fitch.

18 **COMMISSIONER FITCH:** Thank you very much. This has been a
19 fascinating panel and I certainly enjoyed the reading leading into it.

20 I have a number of comments/questions, but I'm also very mindful
21 of time, so, the old saying goes, "Deciding not to make a decision is still making a
22 decision." So I have to make a decision from my list here of what I'd like to prioritize.

23 It -- we've talked a lot about the importance of training, and
24 decision-making, and the various levels of decision-making, and bearing in mind that
25 officers who are out in the field every day find themselves potentially in a position that
26 they have to make very critical decisions even though it's not a critical incident, per se,
27 on a large scale.

28 So when we look at that and then we look at organizational

1 priorities on how to train people, or prepare people, Wallace, to your point, of how we
2 train people up to be good critical incident commanders, I would suggest that that
3 actually starts at the recruiting stage and the work that needs to be done upfront to
4 recruit because there are such critical decisions that are made and left in the hands and
5 the minds of the people working the street every single day. And so, for me, it needs to
6 be, I would think, a continuous journey of nurturing, developing those skill sets.

7 Now, the question I have, in a very roundabout way -- and I'll set
8 the stage with making a comparison between -- we often hear about the differences
9 between police and military. We hear a lot about PTSD, particularly with military, and
10 people try to make those comparisons. But in reality, when we see the role of military,
11 they're recruited and they spend a tremendous amount of time in training and
12 preparation to be deployed for short bursts of time where they are exposed to very
13 critical incidences.

14 In policing, you're trained for a very short period of time; then you
15 are deployed for your whole career; and you are exposed to ongoing cumulative stress
16 and critical incidences over the course of your career.

17 So the reason I'm kind of setting of stage before I ask this question
18 -- and I'm going to pose it to Judith, and then anybody else can jump in -- is, what is
19 being done to better understand the cumulative stress on police officers? From day one
20 to the time in which they could potentially become a critical incident commander, they've
21 suffered a lot of cumulative trauma over that time.

22 So to your point, Wallace, that you made earlier, what can be done
23 going forward to, a, support the healthy decision-making and coping strategies
24 throughout one's career, how we can nurture that? Then, how do we select carefully
25 the people that are the appropriate ones to become critical incident commanders? And
26 I -- I love the expression that you used about creating a psychologically safe space to
27 be able to spitball and have those ideas heard. That's so important.

28 So I guess a very long, roundabout way of saying, how do we

1 ensure that we have the right people -- and I think a lot of this is related to a whole
2 culture overhaul, but that's another story for another day -- to make sure that we have
3 the right people with the right training with the right supports to be in those critical
4 incident making positions considering the long-term impact of trauma that is inevitable?

5 **DR. JUDITH ANDERSON:** Thank you. It's the million-dollar
6 question, right? But I will say that our work focussed on the biological effects of the
7 long-term wear and tear on the body, and all this great work that you've heard today.
8 There's also a researcher, John Violanti at SUNY Buffalo, who has looked at police
9 officers over time, PTSD, the effects of the long-term accumulated stress on cortisol and
10 all these other stress elements, it is absolutely 100 percent without doubt affecting their
11 health, their mental and physical health. Their reserves are low. They're becoming --
12 they have cardiovascular disease, diabetes, suicide risk, and PTSD, and often early
13 mortality after retirement. It is a reality and it's undeniable.

14 So how do we do something about that? So in our work with --
15 again, being embedded with tactical teams in Ontario, what we saw is that many of
16 them liked their jobs. It wasn't about hating their job. They wanted to do a good job and
17 they wanted to do that. But they -- when they saw their physio profile, they were, like,
18 this is real. It became real. It's one thing to talk about it, oh, yeah, stress, whatever, we
19 kind of ignore it, feel burnt at the end of the day, have that drink, try to lay on the couch,
20 try to be refreshed. It's another thing to see it and say, "I need to do something about
21 this today."

22 And so one example was this tactical officer began to do this
23 breathing paradigm, and do our recover, you know, and that was one technique he
24 used. I know there's great nutrition, and diet, and there's a lot of health interventions.
25 But he actively engaged in that on his own time, during -- when he had breaks at work,
26 but also on his own time, and he changed his physiological profile, got off cholesterol
27 medicine and all that. I'm not saying that's going to happen to everybody, but it takes
28 this engagement.

1 And so what we've seen, it's how do we change that in policing?
2 We've seen it -- a lot of it comes from the trainers. So when we come in to train a police
3 service, we can know pretty soon. If the trainers are bought in and they're doing the
4 breathing and the body position, the ready state with us, and they're doing it in front of
5 the recruits, and they're, like, this -- they've drunk the Kool-Aid, for lack of a better word,
6 but they're in it, they're believing in this, then the frontline officer, then -- even the
7 tactical officer will -- this is serious. This is -- okay. I'm going to do this.

8 So it's so much also about the buy-in, and how do you select
9 people for that. I believe these -- the realities of the stress response and recovery
10 should be emphasized from, absolutely, recruit training all the way through. You can't
11 just start at the tactical level. And we've -- we also have studies showing that just pure
12 experience doesn't always get rid of all of these things. No, even at the tactical level we
13 see the health problems and the stress in some situations. So, yes, integrated
14 throughout all of training, and then at -- even not even just trainers, but the
15 administrative buy-in. If I see the chief of police doing the breathing or do -- talking
16 about the ready state, or talking about somebody, hey, they're getting too stressed out,
17 hey, I'm -- let's take a breather. Let's go out. It's okay. You don't look dumb. If we can
18 break through that barrier, we're more likely to succeed.

19 And I do believe that we can look to medicine, because in surgery,
20 surgeons used to own that surgical and they -- you could never say anything to them.
21 And now, because of funding and medical mistakes, it has been the case that any nurse
22 can speak up, or a porter, or something, something's going wrong, and then they have
23 to listen; right? So that could be -- but I don't think doctors wanted to do that at first. So
24 it did take some pressure from the outside to make that change.

25 I hope I answered your question.

26 **COMMISSIONER MacDONALD:** Commissioner Stanton?

27 **COMMISSIONER STANTON:** I didn't know if anyone else wanted
28 to weigh in on that before we moved on.

1 Okay. So we've heard quite a bit about situational awareness in
2 the last couple of days, and in the paper that, Neil and Laurence, you wrote for the
3 Commission, there's a couple of things that I just want to address. You talk about good
4 situational awareness involving updating our perception of an event as we receive more
5 information as it unfolds, and poor situational awareness involves picking one possible
6 story and sticking to it. And then you also reference others work with respect to how
7 one common form of error was to incorrectly perceive the situation and a failure to
8 observe available information was the largest cause of error. And so there's two things
9 there. There's the perception of information and then there's actual updating of
10 information. And I want to just explore that a little bit because I'm wanting to think about
11 how a decision-maker can analyze information during the decision-making process in a
12 critical incident. How can they combat both that perception piece and also be -- I mean,
13 first of all, how are they going to ensure they're getting the information updated and
14 accurate, and taking the time, as you point out, to -- and Judith's example as well of just
15 taking a little bit of extra time to assess and then act, and it could be microseconds, but
16 those pieces of perception of the information and also actually taking the time to update
17 yourself, or be briefed, and to analyze that information, I wonder if the two of you could
18 expand on that a little bit, please?

19 **DR. LAURENCE ALISON:** Sure. I mean, I'm happy to start and
20 Neil may chip in, correct or edit.

21 I mean, I think the first thing is, as I said at the very beginning, you
22 know, the better decision-makers will think about whether they have the time to
23 interrogate the situation or assessment that they've developed. So, I mean, what you
24 don't want to be doing is if you have calculated accurately that that window of
25 opportunity is collapsing, it's better to act than not act, generally speaking. But if you do
26 have time to act, then I think there are quick things that you can do that will assist you in
27 making sure that you've tested that what you think is happening is happening. And
28 they're things like, you know, seek the opposite, recognize that all information matters,

1 and it's not necessarily the stuff that comes in at the beginning that is the most
2 prominent as I think or the primary single reason, the effect. I got the same information
3 first, so it counts most, not necessarily. The order in which it came in is irrelevant and
4 all information should be treated equally. Accept that some things are grey. You're not
5 going to have all the information or you need to interrogate it further. And, you know, a
6 point that I think has been made throughout this morning or this afternoon, whichever
7 time zone you're in, is allow for dissent.

8 You know, one of the things that maybe we have only sort of
9 loosely touched on is this opportunity for having a devil's advocate as part of your team.
10 I mean, when we're doing training, we sometimes put someone deliberately in that role.
11 It shouldn't always be the same person because then they feel outside of the team, but
12 you need to have in your team someone that will regularly disagree in a gentle and
13 friendly way, but nonetheless vigorously. So I mean -- and this is about teaching good
14 thinking, which disturbingly, perhaps, you know, at recruit level. And, you know, I've
15 spoken to police officers that have 30 years in service, and I have said, "Have you ever
16 been taught anything about decision making?" And quite often they will say no. I mean,
17 literally nothing on the psychology of decision making, and as we've said, they're
18 making decisions every day. So, you know, having some knowledge of the architecture
19 of how decision making operates, I think, is critical.

20 Neil?

21 **DR. NEIL SHORTLAND:** Yeah. No, I think I'll add two points onto
22 what Laurence said. I think the first is to reinforce what time pressure does to the
23 decision-making process. And there's an interesting paper that we saw in the report
24 that Laurence did a few years ago that found that it was a hypothetical police
25 investigation, and they told half of the group that they were running low on time and the
26 other half of the group they didn't say that to, and they had the exact same amount of
27 time. And there was a very marked difference in how people performed, a specific
28 group of people who had, I think, were high-time urgency, simply just by knowing they

1 were under pressure. And I think when it comes to situational awareness, I think there
2 are two -- I think there's one major thread through all of this, which is discomfort. And I
3 think Judith made an amazing point earlier about the -- almost a physiological moment
4 of making a decision, it lowers everything down and you become more comfortable. So
5 making a decision, not -- making a decision makes you more comfortable, and being
6 uncertain makes you uncomfortable, and having to navigate the decision-making
7 process and update situational awareness makes you uncomfortable. And so I think
8 that a big part of situational awareness and building good situational awareness is
9 resisting the urge to need to remove that discomfort straight away and make that
10 decision straight away.

11 And we did a study a little while ago where we identified a pattern
12 called a foxtrot thinking, which was a study of police officers. And in that sample, two
13 things emerged, which I think back up some of the points and a point Matthew made
14 earlier, which was the police officers with military experience and deployments, and
15 also, female police officers demonstrated a different pattern of decision making, which
16 was what we called foxtrot thinking, which was that they took longer to assess the
17 situation but were then more able to identify what they wanted to do and commit to that
18 course of action.

19 And so I think a big part of situation awareness is teaching people
20 or emphasizing that it is okay to be uncomfortable, to ask good questions, and to get
21 more information. And it is okay to, I guess, re-engage, to re-engage discomfort to
22 reassess the situation as it's going on.

23 And I think you were citing the study in the report we mentioned
24 about a lot of errors don't stem from being incorrect in your situation awareness the first
25 time, but being incorrect later in time because the situation has updated and you haven't
26 attended to the cues, or you have attended to the cues but haven't re-updated that
27 situation awareness. And I think a lot of that stems from the fact that that process of
28 being in uncertainty is psychologically and clearly physiologically uncomfortable. And

1 we have to, I guess, encourage people to manage that without going too far and trying
2 to answer all of the questions about the situation before you're allowed to act, which
3 would, I think, in most cases, take you beyond the point of the window of opportunity ---

4 **COMMISSIONER STANTON:** Thanks very much, and I just
5 wanted ---

6 **DR. LAURENCE ALISON:** --- more female police officers.

7 **COMMISSIONER STANTON:** Oops, sorry. Go ahead.

8 **DR. LAURENCE ALISON:** --- as if to say, more female police
9 officers.

10 **COMMISSIONER STANTON:** Indeed. Thanks so much to both of
11 you as well for the excellent paper. It was extremely helpful to have been able to read it
12 and to hear from you today with respect to fleshing out some of it.

13 And I've really gained a lot from this discussion, so appreciate it.

14 **COMMISSIONER MacDONALD:** Thank you. Krista, I'll turn it over
15 to you.

16 **MS. KRISTA SMITH:** Thank you. And really, I just want to thank
17 you as well for giving of your time and expertise today. It's really an act of public service
18 to help us contextualize some of the information that we've heard over the course of this
19 inquiry.

20 And I feel very -- it's kind of exciting, actually, the work that you're
21 doing and where it could head, and so I'm -- I think there's a lot more discussion to be
22 had, so I look forward to watching it unfold in the years ahead.

23 Thank you very much.

24 **COMMISSIONER MacDONALD:** And thank you, Krista, for your
25 very able facilitation of a very important topic. Thank you for organizing such a
26 wonderful panel. It's a great blend of professional first responders, researchers, and all
27 very, very thoughtful people who have helped us immensely in the very difficult work we
28 are doing.

1 And I said this yesterday and will say it again, that, you know, it's so
2 gratifying in our work to see and monitor the responses of people when we ask them for
3 help. They are always so willing, with enthusiasm, to do so, and you embody that, all of
4 you, and we certainly greatly appreciate it as we go about our task. So thank you very
5 much.

6 Judith, I know you'll be with us this afternoon as well, but to our
7 other wonderful panelists, thank you so very, very much. It's so greatly appreciated.
8 Thank you.

9 And Professor Cunliffe, we'll break til two o'clock and be sure to
10 add a half an hour onto your panel this afternoon so that it will have the allotted time.

11 Thank you all. Til two o'clock.

12 --- Upon breaking at 1:04 p.m.

13 --- Upon resuming at 2:05 p.m.

14 **COMMISSIONER MacDONALD:** Good afternoon.

15 Professor Cunliffe?

16 **--- ROUNDTABLE 2: CONTEXTUALIZING CRITICAL INCIDENT RESPONSE: RISKS**
17 **AND TRADE-OFFS**

18 **DR. EMMA CUNLIFFE:** Thank you, Commissioner MacDonald.

19 Good afternoon, and welcome to this roundtable on contextualizing
20 critical incident response, risks, and trade-offs. As facilitator this afternoon, my name is
21 Emma Cunliffe, I'm the Director of Research and Policy for the Mass Casualty
22 Commission. I'll be asking questions and directing follow-up.

23 Could I ask all roundtable participants, please, to speak slowly for
24 the benefit of our assistants, partners.

25 The core themes for today's roundtable are as follows. The
26 question of whether there's a risk that increasing the focus on critical incident training
27 and preparedness will have unintended consequences for other aspects of the police
28 function and, if so, whether this risk can be adequately addressed or mitigated; how

1 competing priorities for emergency services training and resources might be resolved;
2 and finally, to consider the role of civil society in police training and resource allocation
3 decision.

4 To get us started today, I'm going to ask each of the roundtable
5 members to introduce themselves, and I'll start, bucking convention, with our virtual
6 participants.

7 Kimmo, if I may ask you to start, please.

8 **DR. KIMMO HIMBERG:** Thank you very much, Emma. My best
9 regards, first, from Finland. For you, this is an afternoon session. Here, it is 8:00 p.m.,
10 so it's a nice evening session for me.

11 I retired at the beginning of this year from the position of Director at
12 the Police University College after having served for more than 30 years in various
13 managerial positions in the Finnish National Police.

14 I believe that not many of you are familiar with my native Finland,
15 so I'll give you a brief introduction. I live in a relatively small country, at least in terms of
16 population, which is located in the northeastern corner Western Europe, bordering
17 Russia. We -- Finland has a large geographical area, 340,000 square kilometres, and a
18 small population of 5.5 million. With the exception of a few larger cities, the entire
19 country is relatively thinly populated.

20 Admittedly, Finland is a relatively peaceful country, which perhaps
21 is also indicated in the fact that our police service is small in size. There are
22 approximately 7,500 police officers in the entire country. And as you can imagine, it
23 means that in larger parts of Finland it is quite normal that the geographical distance
24 between two police patrols can be several tens of kilometres or a 100 kilometres, which
25 also means that support patrols are seldom readily available, which again means -- and
26 also, our police education -- that we have concluded that Finnish police education has
27 to be a generalist, semi-academic education program. All Finnish police officers are
28 educated in a three-year bachelor program. Bachelor in Policing is the degree that they

1 get from the Police University College. Our small police service has also concentrated
2 its education and training services, so the Police University College is the only police
3 education institution in the country.

4 Personally, on a personal side, I am originally a natural scientist,
5 and I entered the police service in the forensic area. But later on, as I said, I've served
6 in other managerial positions and later also studied criminal justice management in the
7 UK.

8 I believe that during this session I will have an opportunity to give
9 you some insights into Finnish policing which relies into strong research base and the
10 strong and extensive education, not only the education, but also the intensive
11 continuous training to all police staff. Let's return to those aspects later.

12 Thank you, Emma.

13 **DR. EMMA CUNLIFFE:** Many thanks, Kimmo.

14 Hunter, if I may turn to you next.

15 **DR. HUNTER MARTAINDALE:** Yes, so Hunter Martaindale. I
16 work for an organization called ALERRT, the Advanced Law Enforcement Rapid
17 Response Training Center, at Texas State University. We're equal distance between
18 Austin and San Antonio in Central Texas. We're a grant-funded organization that
19 provides active-shooter training for law enforcement, fire, EMS, and civilians. And that
20 entails the active-shooter response part of it, but it's also medical response, integrated
21 response, and a few other topics as well.

22 So my job is the Director of Research, so I oversee our research
23 program, and that takes a couple different area. One, it's descriptive analysis of the
24 events as they happen, and we use those to help inform our training, and what we're
25 training, and how to adapt. And then we also run experimental studies to look at issues
26 with law enforcement decision-making, stress response, as well as take apart parts of
27 our classes to make that the concepts that we're instructing are based on some sort of
28 empirical foundation so if we ever get asked, "Why are you teaching tactic A instead of

1 B," we have some sort of foundation to point to and say, "This is why we're teaching
2 this," and then we present all the options, so that everybody has the ability to choose
3 what works for their individual jurisdictions. So happy to be here. Looking forward to
4 talking about the -- kind of the U.S. side of it. I know it's probably -- it's very different
5 from the Finnish side and probably slightly different from some of the Canadian issues,
6 and happy to share.

7 **DR. EMMA CUNLIFFE:** Thanks for joining us again, Hunter.

8 Ben, please go ahead.

9 **DR. BENJAMIN GOOLD:** Thank you very much, Emma. So my
10 name is Benjamin Goold. I'm a professor at the Peter Allard School of Law at the
11 University of British Columbia in Vancouver. Prior to arriving at UBC in 2010, I worked
12 at the University of Oxford in the United Kingdom for about 7 years, prior to that at the
13 University of Niigata in Japan, and then before that rather, John Jay College of Criminal
14 Justice in New York in the United States. I work primarily near policing, with a focus on
15 surveillance technologies, privacy and human rights. My research also focused on the
16 role played by institutional trust in the relationship between frontline state agencies like
17 the police and the public, with a view to improving transparency and accountability when
18 it comes to delivery of core policing functions. I'm also the reporter of a -- sorry, the
19 author or a report on police discretion for this Commission.

20 **DR. EMMA CUNLIFFE:** Thank you very much.

21 El, if I may turn to you next, please?

22 **DR. EL JONES:** Good afternoon. My name's El Jones. And
23 before I say anything, I do want to say that I recognize that we are here because of the
24 tragedy that families experienced, and I want to keep that in mind as we speak, that we
25 are not solely here to have an academic discussion. We are here because people lost
26 people and are in great pain, and I hope that we hold that with us throughout the
27 afternoon as well.

28 I -- and I'm in the department of Political and Canadian Studies at

1 Mount Saint Vincent University in Halifax, but I come to this work particularly through my
2 research in advocacy work with communities facing policing and state violence at
3 multiple sites, including of course street policing, but also, borders, prisons, the mental
4 health system, child welfare, so all the various sites in which people are engaged with
5 policing, and then trying to work with communities on advocacy around that, including
6 work on defunding or reducing the scope of police. So thank you.

7 **DR. EMMA CUNLIFFE:** Many thanks, El.

8 Paula, if I may turn to you next.

9 **DR. PAULA Di NOTA:** Good afternoon, everyone. I'm Dr. Paula
10 Di Nota. I'm a post-doctoral -- excuse me -- post-doctoral research fellow in Dr. Judith
11 Andersen's lab at the University of Toronto, Mississauga. I completed my PhD in visual
12 neuroscience in 2017, where I studied how expertise shapes brain activity, specifically
13 in ballet dancers, but now I study police officers, who also have to perform very complex
14 behaviours, little margin for error, and investigating how, together with Judith, how
15 stress impacts not only their performance, but also cognition and as well as their health.
16 I had the pleasure of conducting a field study in Finland with Rectory Himberg there at
17 the time in 2018, where we looked at the potential impact of resilience training on critical
18 incident managers, relative to today's discussion. And from there, I was also fortunate
19 enough to forge a collaboration with Chief Inspector Juha-Matti Huhta, who is the Use of
20 Force and IPrep instructor there, and together we've investigated the cognitive basis of
21 situational awareness and other pedagogical aspects of training situational awareness
22 and use of force in police. And relevant to our friend in B.C. as well, I also completed a
23 post-doc at the Justice Institute of British Columbia, and there I investigated more the
24 mental health aspects related to police and other public safety personnel, and
25 understanding different coping mechanisms, and training interventions, post-incident
26 services that might be useful in preventing the development of post-traumatic stress
27 injuries. So I'm very privileged and happy to be here today. Thank you.

28 **DR. EMMA CUNLIFFE:** Thank you very much, Paula.

1 Judith, please go ahead.

2 **DR. JUDITH ANDERSEN:** Thank you. And it's an honour to be
3 here again. Appreciate it.

4 I'm an associate professor at the University of Toronto,
5 Mississauga. And as I mentioned, I do study the psychophysiology of stress and stress-
6 related performance among first responders. But for -- in relevance to this table, I've
7 also done quite a bit of work on use of force training and policy and the focus of, you
8 know, developing models of use of force training and models of de-escalation training,
9 and how do those models of training actually impact behaviour in the real world, and
10 how do they impact how people learn. And so -- and how that can shed light on the
11 conversation today, I'm hoping. Yeah, thanks.

12 **DR. EMMA CUNLIFFE:** Many thanks, Judith.

13 Kimmo, I'm going to turn back to you and to something that you
14 picked up on in your introductory remarks today and also mentioned in your
15 participation in a round table yesterday. Finland, of course, has shifted from a model of
16 police training to one of police education, including a three-year degree program for
17 police recruits. And I understand that this is both a degree in applied science and an
18 education in policing. I'm wondering if you could please describe the overall philosophy
19 and approach that the Police University College adopts to police education, and how,
20 for example, you introduce students who are future police to questions about use of
21 force.

22 **DR. KIMMO HIMBERG:** Thank you. Thank you, Emma. This is,
23 of course, an extremely broad subject and I'm afraid I could very easily spend the entire
24 session on this. I'll try to be concise, however.

25 Of course, it didn't -- the change, the education reform did not
26 change, did not happen abruptly. It's a development over decades. Quite recently, we
27 still had police officers who already nearly had undergone a five-month training to
28 become officers. So all the way until 1970s, our police training was quite short, quite

1 concise as well.

2 In several states, it has then been extended, but perhaps even
3 more importantly, a separate, small research and education unit for upper police
4 education was established in 1990s. And that perhaps was the time when it started to
5 become understood that we cannot develop modern policing without a strong
6 knowledge base, which is built on active research. In 2008, the former police school
7 and this higher education unit were merged together to form the current Police
8 University College.

9 From an organizational viewpoint, let me emphasize that the
10 Finnish police is a national organization. The whole country is divided only -- to only 11
11 regional units. And on top of those, we have two so-called nationwide units, Police
12 University College being one of them. So Police University College, or Polamk as we
13 really call it, it's an abbreviation of the Finnish name, it is -- it has an ambivalent role. It
14 is simultaneously a university of applied sciences, but it is located organizationally
15 within the national police. And when I was rector, my supervisor was the national police
16 commissioner. This also means that the research that we do is very often based on
17 research themes and ideas that we have obtained from the operational units, because
18 the cooperation between Polamk and the operational units, it's an everyday activity.
19 Also, because active police officers in operational tasks, they very often come to
20 Polamk for special training courses on various subjects.

21 So the ultimate goal on this is that we want to build the police
22 service which is efficient, able to adapt to changing operative -- changes in the
23 operative environment and a police service, which enjoys high-level trust by the citizens.
24 I wouldn't like to boast with this, but according to several international studies, citizens'
25 trust to the -- towards the police is the highest in Finland. According to latest figures, 91
26 percent have strong trust on the police.

27 It, of course, also involves not only the professional competencies,
28 but it also involves a strong value base and continuously emphasizing the importance of

1 the attitudes of the police.

2 I hope that satisfies you at this stage.

3 **DR. EMMA CUNLIFFE:** It does. Thank you, Kimmo, and I do have
4 a follow up for you, so perhaps it doesn't completely.

5 In a recent conversation, you said to me that use of force training in
6 Finland is built on a prior understanding of ethics, of law, and of the mindset of use of
7 force.

8 I wonder, first of all, did I capture that correctly, and secondly, could
9 you explain please what that means?

10 **DR. KIMMO HIMBERG:** What you are referring to serves as an
11 example why we don't particularly like to talk about police training, but rather, about
12 police education.

13 We believe that "modern policing" as a profession is such a
14 complicated spectrum of skills and knowledge needs that we need to have an extensive
15 education which combines theoretical and practical aspects.

16 I wish to mention that we are also extremely careful in selecting our
17 students through several psychological test sets and interviews. We definitely do not
18 want, as an example, Rambos, Rockys. We want young people who are able to take
19 initiative, make independent decisions, who have the characteristics for this so that we
20 can build the education on those characteristics.

21 But once again, I would like to emphasize the importance of
22 research-based knowledge here. And as Paula and Judith indicated, we have a
23 number of these kinds of also international research projects which go down to the
24 basic operative skills of police officers.

25 Thank you, Emma.

26 **DR. EMMA CUNLIFFE:** Many thanks indeed.

27 El, I'm going to turn to you now. You recently chaired a
28 subcommittee of the Board of the Police Commissioner for Halifax Regional

1 Municipality, and you were a lead author on the report "Defunding the Police: Defining
2 the Way Forward for HRM".

3 Commissioners, that's P-001908, for your records.

4 The phrase "defunding the police" has arguably been widely
5 misinterpreted within public discourse in particular. The subcommittee adopted a
6 definition that was first put forward by an Edmonton based Community Safety and
7 Wellbeing Task Force, that to defund police means -- and I quote here:

8 "To allocate money in preventative and community
9 building ways rather than in reactive and militaristic
10 ways." (As read)

11 Do I have that right?

12 **DR. EL JONES:** Yes, that's correct.

13 **DR. EMMA CUNLIFFE:** Okay, great. And so now I'm going to turn
14 to your contributions.

15 You're quoted in the report as describing the most complex aspect
16 of defunding the police as being the work of -- and this is a quote attributed to you:

17 "Finding consensus around what roles belong to the
18 police, what exists to replace police services, and ideas
19 of safety and risk." (As read)

20 So my first question is, how did -- how do you, in your work,
21 approach seeking that consensus?

22 **DR. EL JONES:** So for people who aren't familiar, this was a
23 subcommittee commissioned by the Board of Police Commissioners in the aftermath of
24 2020 when there was a large international interest, particularly in the U.S. and Canada,
25 around police violence, and particularly, the impact of policing on Black and Indigenous
26 communities.

27 And so out of that, emerged, at first, the Board of Police
28 Commissioners was looking for a simple definition of defunding, but those of us who

1 were working on the report who were in a group called the Nova Scotia Police Policy
2 Working Group, which is an informal group really formed to examine the shortcomings
3 in police policy, both in not having access to them and then also trying to really engage
4 with those policies, we felt that that wouldn't be adequate to get to the question.

5 So in the context today, for example, I suppose many people would
6 say, "Well, this is exactly why we need to fund police. The police are very necessary
7 and they have to be very well equipped in case these kind of events happen."

8 But of course, when we see expanding police budgets across the
9 country and huge portions of municipal budgets that are going into policing, one, it's not
10 clear that it's actually effective in reducing crime; two, we know that it has a large
11 impact, particularly on marginalized communities, Black and Indigenous communities in
12 particular, unhoused people, people who use drugs, sex workers, queer and trans
13 people, people experiencing mental health difficulties, who experience the brunt of
14 policing, the brunt of arrest, the brunt of violent policing, surveillance in all forms of
15 policing.

16 But so as we were developing a definition, we wanted that to be
17 part of community work, not simply saying, "Okay. Well, this is what defunding is," but
18 really looking within our communities, how do these people experience policing, where
19 do people feel that we could remove policing, especially as police roles have
20 expanded?

21 One consensus was around mental health, for example.
22 Everybody, including actually the police that we talked to, agreed that the police are
23 inappropriately involved in mental healthy calls. They are not equipped and trained to
24 deal with that and has negative effects, both on, of course, people who are experiencing
25 mental illness and the stigma around mental illness, and also around how the police
26 actually experience those calls as well.

27 So we wanted to have a communal process that would look at how
28 people experience it, where are people thinking, where do people understand the roles

1 of police, what would people like to see as alternatives to police, and also, how do
2 people experience safety in their communities beyond policing, so everything from
3 recreation to lighting to crime prevention to housing, to all of the things that make up the
4 social world in which policing takes place.

5 And out of that emerged a report based on public consultation,
6 based on input from a number of community and social service groups, and also based
7 upon best practices in other municipalities, particularly around things like
8 decriminalization of drugs, civilianizing mental health, treatment of unhoused people,
9 and also the experiences of radicalized communities.

10 **DR. EMMA CUNLIFFE:** And what did you conclude and
11 recommend in particular about investment in police training versus other approaches?

12 **DR. EL JONES:** So we had many, many years of reports on
13 policing. Most recently, in Halifax would be the report on street checks, and what we
14 see repeatedly is that training is always recommended. So it's almost just a reflex, we
15 need more training.

16 Right now, often that training is focused either on cultural
17 competency training or anti-unconscious bias training.

18 But when we actually went looking for the report, there's
19 surprisingly little data on what training is taking place. So we know, for example, that
20 the Halifax Regional Police train in blocks, but we don't know really what the content of
21 those blocks is. And there's no follow up on the actual programs that have been
22 undertaken. For example, the Wortley Report recommended cultural competency
23 training. It turned out it had only been offered once. It was supposed to be mandatory.
24 It wasn't being offered on a mandatory basis. In fact, officers had been requesting this
25 training and had not been able to take it.

26 And then, of course, there's little review of the efficacy or practice of
27 those trainings, so we could only find one review of the training program, which is, of
28 course, called Verbal Ninja, and it seemed that the only improvements they saw were

1 on basic communication skills such as introducing yourself, but it had no real impact on
2 other forms of communication.

3 So despite all the resources that we often want to put towards
4 training and say the number one thing we need is more training, we have no data on it,
5 we don't evaluate the training, we don't actually have any process for externally
6 reviewing that training, so tracking that it's being taken. And there's really no evidence
7 that any of the training that we recommend actually has an impact.

8 And what it does do, of course, is further put resources into
9 policing, and we end up with more and more resources going unaccountably into the
10 police.

11 So that is why, in our report, you'll see that we actually did not
12 recommend more training for those very reasons, and instead, we wanted to focus on
13 other areas that could deal with a lot of the social challenges that policing is called upon
14 to respond to.

15 **DR. EMMA CUNLIFFE:** Thank you, El.

16 Ben, in El's remarks, she identified a lack of research base with
17 respect to the aspects of police training that the subcommittee was reviewing in Halifax.
18 I'm conscious that you've lived and conducted the police research in England, in the
19 United States, in Canada, and in Japan.

20 And first of all, I'm wondering if you could please describe for the
21 benefit of those you may not know the research methodologies of ethnography field
22 studies, the research methods that you've used at times in your research?

23 **DR. BENJAMIN GOOLD:** So thank you, Emma, for the question.

24 When I think about police ethnography, I think primarily about
25 having some connection with the day-to-day work the police are doing. So a classic
26 sort of ethnographic technique, which is one that I've used, would be to spend time with
27 police officers in their workplace observing them where appropriate, speaking to them
28 where appropriate, interviewing them in various forums. And essentially seeing the

1 work from a sort of 360-degree perspective, as opposed to sort of other research designs
2 where you might, say, for example, provide them with a survey, interview them formally,
3 et cetera.

4 So for example in my early work on closed-circuit television
5 surveillance in the United Kingdom, I think I spent well over 400 hours just being in
6 police stations, watching police officers do their work.

7 So you get a very different perspective than if you are simply
8 interviewing officers in a very constrained situation or the like.

9 So depth of ethnographic work, I would say, is increasingly rare in
10 police studies around the world. I think it was something that was a staple of some of
11 the really good police studies that were done in different jurisdictions in the 1970s and
12 1980s. But it becomes less and less present as you move into the 1990s and 2000s.

13 I think it's right to say now it's extremely difficult to do ethnographic
14 research on policing, be it in Canada, the United States, United Kingdom, or elsewhere.
15 And there are good reasons for that. I think we are more thoughtful about some of the
16 ethical challenges involved in doing that research, but I would also say that I think
17 there's a challenge in terms of getting access to police organizations to do that sort of
18 work.

19 So in that sense, I think there is a gap. I think it's very difficult for
20 us to understand the day-to-day workings of policing if we don't have access to them
21 and an opportunity to see them. Albeit, of course, of the caveats that go around it about
22 the type of work they do and the privacy and confidentiality concerns, and also the
23 collateral intrusions that we might engage in, in terms of the people they are policing.
24 So there are some quite significant issues there as well.

25 I'm just forgetting the second half of your question, Emma, so sorry,
26 if you could remind me, that would be great.

27 **DR. EMMA CUNLIFFE:** No, you've answered it fully, thanks, Ben.
28 And I do have a follow-up planned, which is given that you've worked in a number of

1 jurisdictions and sought to do work with police research on police in each of those
2 jurisdictions, I'm wondering if you can share what you've observed in the various
3 jurisdictions that you've worked in with respect to openness to research of the kind that
4 Kimmo's described, or to work such ethnographic work and whether police cultures,
5 national police cultures, particular services differ in the degree in which they're open to
6 partnering with academics for that kind of research?

7 **DR. BENJAMINI GOOLD:** Thank you.

8 I would say that my work in Japan and the United States was very
9 much theoretical work. So I wouldn't describe -- I didn't do what I would consider to be
10 empirical work in those spaces. So although I learned a lot about the policing systems
11 in Japan and in the US context, certainly around what was happening in New York City
12 and New York State, I wouldn't describe my work there as being original, empirical
13 work.

14 In the United Kingdom, somewhat different. As I said, my early
15 work was on CCTV surveillance. I was also involved in an ethnographic study of covert
16 policing practices in the United Kingdom, where two researchers who I was associated
17 with went out on, essentially, covert operations with police officers and they were able
18 to observe them doing that work, and we've written about that extensively.

19 So I think the best point of comparison for me is with the United
20 Kingdom. I would say in my -- I'm conscious that it ended in 2010, when I moved to
21 Canada. There was a considerable openness to academic research. It wasn't always
22 easy to get access, they were -- often involved in long processes of negotiation, ethical
23 sort of questions being raised on both the university side and what was the policing
24 side. But my sense was there was an openness to that relationship, and certainly I
25 observed a respect for academic researchers in many police services that I worked
26 with, even if I wasn't always confident that they would take what we were writing on face
27 or necessarily adopt the recommendations we might make, there was an openness to
28 the possibility of independent research.

1 Again, I can't speak to what the current environment is in the United
2 Kingdom, it's been a little while since I was there, but I would say I was struck when I
3 came to Canada that that didn't seem to be the culture; that it was my observations
4 when I arrived here was it seemed to be very difficult to get access to police services in
5 Canada to do the sort of work that I had come to see as sort of crucial when I was
6 working in the United Kingdom.

7 **DR. EMMA CUNLIFFE:** Thank you.

8 Judith, you've also conducted policing research in multiple
9 jurisdictions, including Canada and Finland, for example. What observations can you
10 share about the research culture within policing in each of these jurisdictions?

11 **DR. JUDITH ANDERSON:** Yeah, thank you.

12 When we started wanting to do research very -- you know, research
13 with objective outcomes and measurable, does this training work in the field, you know
14 how can we measure this and look at this in different ways, and I took my proposals to
15 Canadian police services and no-one was interested in doing research. And I
16 happened to be at a conference in Finland and the government opened arms, "We want
17 to learn, we want to do this," and with Director Kimmo, we were able to have years of
18 this kind of much more high-quality research because we were given access to be able
19 to make the measurements and do this and see if this works in the field. But you need
20 that openness and access in order to actually test these things.

21 And then when I had data, I came back to Canadian police and
22 that's when they started, their couple of chiefs were, "Okay, we'll do this here." And
23 then when I went into the use of force office to -- in the different services to even do our
24 research and ask for their assessments, "What's your use of force assessment form
25 look like?" "Oh, well, we don't really have" -- you know? And it was like, "Well, we'll just
26 pass this person along." And, of course, I'm not going to say any names or anything,
27 but I was shocked that, "Well, how do you know if this training or how do you know if
28 this person passed this?" It's all based on the trainer at the time or the day.

1 And we found that with programmes as well. So they would
2 institute a programme and it would almost be like a checkbox, “Oh, yeah, we did this
3 diversity training,” or, “We did this for one time and now we can say we did that.” And
4 so we’ve struggled with that push and pull as well. And with our programme, even with
5 something as high buy-in as the physiological data, where they can see the change and
6 see the results, we’ve had services implement this and take it right through, like Finland,
7 right through from recruits all the way to their federal forces, and it’s in the culture, it in
8 the language, and it’s used, to other services in Canada where, you know, after we
9 leave and the training material is there, they turn it into a 15-minute PowerPoint and
10 then it’s a checkbox and it’s gone.

11 So we’ve seen it all but we really -- in order to have training with
12 integrity, and the kind of training that we recommend has to be research-based, it has to
13 be evidence-based. Does this actually work in the field, otherwise, why are you
14 spending the training dollars on it? That’s what we’ve been working on and trying to get
15 the government to listen to us, at least in some of the reports that we’ve written, and
16 we’ve found that’s been challenging.

17 **DR. EMMA CUNLIFFE:** Many thanks.

18 El, that checkbox approach to training is one of the things that your
19 report also picks up on. I’d wonder what you’d add to the observations that have been
20 shared so far.

21 **DR. EL JONES:** Yes, well, I think perhaps this will sound harsh but
22 of all professions, police are the only profession that every time they make a public
23 mistake, or they have a failure, they receive more resources. It’s the only profession
24 where the solution for everything seems to be, like, “Why don’t we just give them more
25 money? Why don’t we just give them more money? Why don’t we just give them more
26 money?” whether that’s for training, whether that’s to hire different kinds of officers,
27 whether that’s for different forms of weaponry, more weaponry, more ERT teams.
28 Whatever it is, we constantly see this piling of resources into policing and of course

1 what we know is that when they have it, they use it. So it is not just saying, “Okay, well,
2 it’s the exact weapons”; it’s the whole ideology around the idea that the police is so
3 unshakeable and so necessary that there can never be an imagining of anything else
4 other than giving the police more. And the impact of that, whether that’s through more
5 training, let’s send them to university for free, let’s give them all these resources, is that
6 we see at the end, a constant increase of use of force; an increase in militarization, an
7 increase in surveillance. When police have things, they use them; when we have more
8 police, we get more policing; when they have more funds, we get more policing. And
9 the impact is, of course, largely felt in those that are considered to be not members of
10 the public and not deserving of safety: Black communities, Indigenous communities,
11 communities of people who are unhoused, communities of people who use drugs. And
12 we have seen use of force exploding in these communities over years.

13 Wortley -- Scott Wortley did a recent report that showed that when
14 you control for everything, Black people are heavily over-represented in Toronto and
15 Ontario in use-of-force incidents. We know that Indigenous people are experiencing
16 highly militarized policing on their own territories, particularly by the RCMP in concert
17 with the courts and resource extraction firms, and we’re seeing this kind of force being
18 used.

19 So the question here isn’t just around sort of narrowing it down and
20 saying, “Well, which boxes are being checked?” It’s to say, “What does it mean when
21 every time there’s a failure, when every time Black communities or Indigenous
22 communities come and say, ‘People are dying. Our communities are being surveyed.
23 We’re being criminalized. This isn’t working for us. There’s mental health calls and
24 people are dying.’ -- over 50 percent of deaths in Canada by police are people with
25 mental health crisis and, instead of actually going to the root of that, we just take a
26 superficial approach to leave the status quo in place and then just add in this box or that
27 box, “So what if we had more Black officers, or what if we say a land acknowledgment
28 before we go out on shift?” or whatever it is.

1 So to put this in more technical terms, many of us talk about this as
2 de-tasking, which is the act of removing tasks from the police and placing them into
3 more appropriate service organizations, that we must consider that the proliferation of
4 policing is a social problem. Even the police themselves have said, “We should be the
5 last call and not the first call.” But over many decades, the police have become the first
6 and often only solution as we’ve disinvested from all of the forms of crime prevention,
7 from all of the forms of social support.

8 We’ve defunded education, healthcare. We’ve defunded programs
9 that help people get employment. We are constantly cutting back on the social issues
10 and then, when these gaps emerge, we say, “Well, we just need police to fill them,” and
11 then we need to constantly try and shore up those gaps in the police instead of pulling
12 back and saying, “What if we spent more money on violence education for young men?
13 What if we spent more money on identifying domestic violence causes and working with
14 families? What if we spent more money on mental health care? What if we spend our
15 money on housing? What if we spent our money in communities making sure they have
16 resources to start their own businesses?” Those would all be uses that would actually
17 prevent crime, reduce violence, enhance safety in all kinds of ways that are not
18 attached to the idea of “The only we have is to put those resources into police.”

19 So what I’m saying here is that it’s a bit of a broader conversation.
20 It can very, I think, easy to start having the conversation in a narrow way that becomes,
21 “What is the data on this,” and leaves out a lot of the social issues that surround
22 policing.

23 Kevin Walby, for example, has been extremely critical of this idea in
24 criminology, right, that criminology kind of gets bogged down in the data or, “What did
25 this interview say?” or what does this say without looking beyond that and saying, “What
26 are the social conditions in which policing takes place and what is the will to punishment
27 that we have? Who is it that we feel that we feel needs to be policed? Why do we feel
28 that if someone’s actions would change outside a Tim Horton’s, they need to police?”

1 And increasingly, we're using things like SWAT teams to deliver
2 warrants. We're increasing ideas of danger. The more that we police, the more that we
3 see danger, and then the more we want police to fill that in. And that actually creates
4 more unsafety, including for officers, because now we're living in an extremely violent,
5 and distrustful, and punishment-based culture that sees no other avenues for people.

6 So all that to say that I think it's very important to not just sort of
7 look at each thing as a, "Is it training? Is it this? Is it that?" and look at the much
8 broader picture of why is it that we rely on policing, as a society, to solve problems that
9 in many and most cases have their issues in social problems that should be addressed
10 through social means?

11 **DR. EMMA CUNLIFFE:** Thank you.

12 Hunter, if I can turn back to you, yesterday, of course, you
13 described how your research has influenced the ways in which you structure and deliver
14 active-shooter training ALERRT. I'm going to sort of turn the question on its head a little
15 bit now. We've heard about -- we've heard about resistance to research culture and
16 resistance to change at times within police culture.

17 But my question is, how -- one of things you've mentioned in our
18 conversations is that your students help you to identify new research questions, and
19 directions, and approaches, and I'm hoping that that's something that you can speak to,
20 what you've observed of the students' interest, police interest in the kinds of research
21 that you're offering.

22 **DR. HUNTER MARTAINDALE:** Sure. So our program is
23 obviously very hyper-focused on active-shooter response and issues surrounding that.
24 We do turn to our students to find out what they're doing and what they think is
25 important through survey methods.

26 So we have trained in all 50 States. It's about 180,000 officers.
27 Nine thousand (9,000) agencies have had at least one officer touched through our
28 training program. And we maintain that database and we update it as new students

1 come through. And, obviously, this is over a 20-year period, so we don't have 180,000
2 current officers, but we do send surveys to past course attendees a couple months after
3 they're finished. One, to see, are they able to implement anything in their normal job?
4 Understanding that very few people are ever going to experience and active-shooter
5 event, are these skills being used some other way? Are you feeling more confident?
6 Are you -- you know, how is this impacting your everyday job?

7 And then we'll ask them, "Are there other things that you
8 experience in your day-to-day job that you think need some sort of data behind them?"
9 basically, and worded differently than that, obviously, but we're just asking, "Are there
10 questions that we could help answer?" And we get a lot of different responses, and
11 they're mostly tactics-based because we're obviously a tactics type of program. And so
12 we can then take those questions and turn them into projects and figure things out.

13 I guess I could start talking about one such project. It turned into
14 my dissertation, actually. But we had some people respond and tell us -- or point out
15 the issue of CNN in the news when officers misidentify an object as a weapon, as a
16 gun, and they apply the wrong level of force, and they wanted to know if there was
17 anything simple that could be done to help officers make that decision more accurately.
18 And so a lot of planning went into that.

19 And if you don't mind me burning a couple of seconds, I'll go
20 through that study really fast, but we wanted to know if we can have some sort of short
21 intervention that can help officers quickly and correctly identify if an object is a gun or
22 it's not a gun. And I'm sure everybody's seen videos of an officer approaching
23 somebody, and then an object comes out of their pocket, and it ends up being a cell
24 phone, and the officer misidentified it and applied the incorrect level of force, or force at
25 all.

26 And so we took the concepts of deliberate practice, which is just
27 that you have increasingly complex training; you get immediate feedback so you know
28 how to correct it; and then you have a lot of repetition. And so we took that concept and

1 we put into what I want to call, like, a vision training program.

2 So broke people up into two different groups, one test group, one
3 control group. The test group would get training media related to firearms, so they
4 would either have to say there is a gun or there's not in this image -- a still image -- a
5 still image with a little more complexity and then a video where somebody's presenting
6 the item. And the control group got it but without firearm-related media. It was -- they
7 had to find a vowel. So is there a vowel in this image or not a vowel?

8 Split them up, they only got about 20 total minutes of training in its
9 entirety. They're pre-test, there was zero differences between the groups. And then in
10 the post-test, the test group made one-third the number of misidentifications, so they
11 correctly identified the gun much more accurately than the control group. They were
12 able to find it visually. We had them all wearing a vision tracker. They were able to find
13 the item, I think it was, 16 to 20 percent faster than the control group.

14 But the interesting thing was that they made their decisions in the
15 exact same amount of time. So this little 20-minute program, we were able to get
16 people to visually find the item, gather that contextual data from the visual image, so
17 gather the information of the size, the shape, distinct features, use those data to make
18 their decision, "This is a gun," and make that decision correctly, or, "It's not a gun," and
19 not identify it as a gun in the exact same amount of time as the control group.

20 And it was interesting anecdotally ... but the control group would
21 make their decision and then would see them find it and then they would voice their
22 disappointment in the fact that they got it wrong because they were making that
23 decision subconsciously, based off the movement or whatever it was, and incorrectly
24 making that decision before they had all the extra data.

25 So it was a short, easy study to put together. It's something that
26 we're expanding right now. Obviously, it was quick experiment, so there are lot of
27 limitations to it. We're expanding the media out and improving the training part of it, but
28 we have our officers go through it and find it's really neat ideas like that that can have

1 immediate impact on their day-to-day life outside of an active-shooter response. And
2 we try to harvest as many of those ideas as we can and turn them into interesting
3 projects that we can then publish, and push out, and go to conferences and get that
4 data out. I hope that answered your question.

5 **DR. EMMA CUNLIFFE:** It does. Thank you very much for sharing
6 the example.

7 Judith, I'm going to turn to you now. One of the questions I believe
8 you've thought about in your research, as has Paula -- and I'll come to Paula in a
9 moment -- is how implicit messages about the degree of risk out in the world can be
10 conveyed through how training is organized and delivered. It's, as I understand it,
11 frequently the case that scenario-based training for use of force, for example, training
12 scenario after scenario where police are being attacked by civilians.

13 How does police training impact police understandings of their role
14 and in turn how might it impact how they act when they're acting as police?

15 **DR. JUDITH ANDERSEN:** Yeah. There's some great data coming
16 out of different studies in the U.S., and then I'll speak to some in Canada.

17 But typically, when use of force training, the one or two days of
18 training that police officers were getting per year was focused only on weapons and
19 tactics, how to use your weapon, how to use different tactics, and so forth, there was
20 more of a tendency to rely on use of force options at every call. So it became more
21 likely that they would go to a use of force option right away and then use it.

22 And we saw this in some of our observational work. We were
23 starting a study with a state police in the U.S., and with a simple scenario, a person had
24 a knife but dropped it and then just came toward the officer, far distance, but the
25 majority of the officers pulled their gun out first and then ended up shooting the person.

26 And when asked afterwards, they had said, "Did you miss --" you
27 know,"-- did you not see that they dropped the knife when they were coming towards
28 you?"

1 Said, "No, I know. I saw they dropped the knife. I didn't know what
2 else to do."

3 And so they shot the person.

4 And so we stopped the study. We went back and talked with the
5 school, and they were not doing transition drills, they were not doing other kinds of, you
6 know, de-escalation scenarios, and the weapons and focus, the focus on that weapons
7 and tactics was creating a situation where they thought every call was going to be about
8 use of force.

9 So when we look at the Canadian statistics, I think there's one
10 study, and it's not perfect data, but it's only about one percent of calls in the U.S. --
11 sorry, in Canada actually would even call for use of force. So 99 percent of calls could
12 be de-escalated or non-escalated. That's another important word, non-escalation.

13 And so if use of force training or the one -- annual training that you
14 get is not proportionally focused on the kinds of calls that you see, you're going to have
15 an inflated sense of risk when you go to every call, and that this is borne out in theory of
16 risk as well as the data.

17 And so we have been -- there's a whole groundswell -- and I know
18 EI is speaking to that kind of approach to policing, even in the training that -- without
19 even talking about adding more training, more dollars, but just what is the focus of
20 what's going on right now, and is it matching the demands out in the field?

21 And that's not to say that critical incident training isn't important, of
22 course, as we know, and that, what we have seen and what we recommend is a
23 separation in assessment, right? You can't have one day of training and also assess
24 officers on that same day and pack everything into that same day and say, "You
25 checked all boxes, and they're ready for critical incidents and de-escalation and this and
26 that."

27 And so separating out training and assessment days is important,
28 and I know Paula can speak to the timing of that much better.

1 **DR. EMMA CUNLIFFE:** Thank you. And before I turn to Paula on
2 that very topic, I just want to ask why is non-escalation an important word?

3 **DR. JUDITH ANDERSEN:** Sorry?

4 **DR. EMMA CUNLIFFE:** Why is non-escalation an important word?

5 **DR. JUDITH ANDERSEN:** Yeah. So when we started -- so we've
6 done several large-scale kind of review reports to government policy recommending a
7 shift in training focus, again, to this more de-escalation, non-escalation, and just even
8 the idea was new to many services in talking. Many calls should never be escalated in
9 the first place, and the officer can be the one that may escalate a call, even you know,
10 pulling over someone or in a car or so forth.

11 And so this idea of the approach to training -- and we really looked
12 at the models of training and the way that training is presented could possibly escalate,
13 or have an officer escalate their use of force, or not engage in de-escalation. And the
14 training materials matter.

15 And I don't know if you wanted me to get into that now or later, but
16 they do matter.

17 **DR. EMMA CUNLIFFE:** We'll get to that later; definitely.

18 **DR. JUDITH ANDERSEN:** Okay.

19 **DR. EMMA CUNLIFFE:** Yeah. Thank you, Judith.

20 Paula, first of all, would you add anything to what Judith has just
21 said in response to my first question?

22 **DR. PAULA Di NOTA:** Aside from some of the principles that
23 Hunter touched upon, like, the idea of, you know, deliberate practice, it seems illogical
24 and it's also supported by science that you can't also evaluate someone's learning at
25 the time that the learning is actually occurring. And especially in the case of police use
26 of force, these evaluations often count for their recertification to carry a firearm and to
27 actually carry out their duties. So the professional implications as well and the added
28 pressure of needing to perform effectively and demonstrate your capacity while you are

1 learning is counter-intuitive.

2 **DR. EMMA CUNLIFFE:** Thank you.

3 And so now, I will ask you to get a little more deeply, as Judith
4 prefigured for you into the -- the questions you had studied about how the timing, the
5 sequence, and the format of training can impact by its recall of key principles, but also
6 understanding of the overall context of the skills being taught in the work that police do.

7 So what is known or believed to be true, whether from your
8 research or that of others about trade-offs in training, and what does the research tell us
9 about how training should be structured?

10 **DR. PAULA Di NOTA:** As touched upon already by some of the
11 other speakers, there's such a lack of this information, because there's a lack of access
12 to what the current training practices are and how effective they are, access to data and
13 these types of things.

14 So to our knowledge and in the comprehensive reports that we've
15 put together, we've had to look to other literature, to other areas of research, and in
16 complex motor learning and training skills related to what police use, and specifically
17 related to use of force and critical incident response and management is what I'll speak
18 to today.

19 But as again, Hunter had mentioned, there's a vast literature in
20 expertise, so studying how individuals develop these expert performance, and what my
21 dissertation research also focused on is how that actually shapes brain activity to
22 facilitate more effective performance, so learning faster, performing more accurately,
23 being able to perform effectively under stress, and that stress component is what we
24 spoke at length about this morning in this morning's session that critically weighs into
25 how police are trained, because it's necessary that the training incorporate this element
26 of stress because that -- those are the conditions under which officers are needed to
27 perform these skills that they're trained upon.

28 So we've examined kind of the spectrum of stress, as we know, that

1 there are moderate levels of stress that can be adaptive, that can heighten your
2 attention, your awareness, and your vigilance, and that can be conducive to promoting
3 learning as well, but kind of going to more extreme levels, can actually be preventative
4 for learning.

5 So putting a rookie officer into a critical incident scenario and you're
6 responsible for managing what's going to happen, that's going to stress them so much
7 that literally, the parts of their brain that are responsible for encoding and retaining that
8 information are not going to absorb it. And so that means they are definitely not going
9 to exhibit those skills then when they need to.

10 So just understanding these fundamental neuroscientific principles
11 of how the brain learns and how it performs under pressure is really critical to informing
12 how police are trained for these various skills.

13 And working with some of the individuals at Finland's police college,
14 they've really taken that into consideration and have a very deep appreciation for that
15 and have been able to structure the curriculum that builds progressively, so once you
16 have the foundational skills using different methods, like, more observational learning
17 and talking things through, but you're then able to build upon that to get to progressively
18 more stressful, complex decision making processes.

19 **DR. EMMA CUNLIFFE:** Thank you.

20 I'm going to shift gears a little bit now and turn back to a theme that
21 El touched upon in her remarks, which is the question of public trust in police and
22 community trust in police.

23 And Kimmo, I'll turn back to you in the first instance and ask you
24 about the Finnish Police Service attitude to what trust -- what responsibilities the police
25 have with respect to cultivating the public trust in their actions, and then how do you
26 introduce students to that question and that responsibility in the police university
27 college?

28 **DR. KIMMO HIMBERG:** Thank you, Emma.

1 If I may take a step back to the previous discussion we always want
2 to avoid taking a standpoint to the practices and policies of policing in any other country,
3 and I wish to emphasize that I am not doing that when I say the following. I'm always a
4 little bit bolder when the discussion of police use of force, and especially the police use
5 of firearms, concentrates on the technicalities, on the technical skills. The spectrum of
6 techniques of using force that the police has access to is wide. And use of firearms is
7 the extreme form because their evident lethal danger is immediately present. And for
8 us, the police should always be able to avoid using lethal force. I'm sorry, but I will go a
9 little bit into statistics, but I want to illustrate what I mean.

10 According to our statistics, a Finnish police officer has to warn the
11 target person of the use of firearm approximately once every two days. So those 7,500
12 police officers in the country, 1 officer every 2 days has to warn about the possibility of
13 the use of firearm. Last year, 2021 in Finland, the police shot 7 shots all together. In
14 2020, 2 shots to a target person. Now, no persons were killed in these incidents. Why
15 is this? As I tried to indicate earlier, use of force is built on police ethics and police
16 legislation, and national police board orders. So the technical skill comes somewhere
17 very far after we have gone through several stages of teaching the theories of ethics
18 and law.

19 Emma, you used -- in your question, you used the word
20 responsibility. It is important to emphasize that the responsibility of acting properly is on
21 an individual officer. And if you allow me to refer to *Finnish Police Act*, which is the
22 most important piece of legislation that we have, immediately in the beginning of the
23 Act, of course, the law emphasizes the importance of respecting fundamental and
24 human rights, and the law says that in exercising police powers, the police has to
25 choose from all reasonable options the course of action that best asserts these rights.
26 And then the law presents three important principles. Principle of proportionality, so the
27 police action has to be proportion with recount to the important danger and urgency of
28 the duty, the objective saw the behaviour, age, health and other specifics of the person

1 targeted or reaction, and other factors influencing the overall assessment of the
2 situation. And this evaluation has to be made by the individual officer, depending on the
3 nature of the case and the incident, and depending on the character of -- and behaviour
4 of the person that the police confronts.

5 Next principle -- second principle is principle of minimum
6 intervention. The law says that the police shall not take action that infringes anyone's
7 rights or causes anyone harm or inconvenience more than is necessary to carry out
8 their duty. Once again, the law states that the police has to keep calm and to use a
9 minimal amount of action, a minimal amount of power, and once again, the
10 responsibility is on the individual officer.

11 Third principle is principle of intended purpose, so the police may
12 exercise their powers only for the purposes provided by law. This is, of course,
13 important because an individual officer may never, by law, act unless there is a legal
14 ground. And the individual responsibility is so strong that in a case of misconduct, an
15 individual officer may end up with criminal prosecution because of breaking these
16 principles.

17 I will -- I want to -- I don't want to bore you, but I will read one more
18 sentence from the Act. The police shall seek to maintain public order and security
19 primarily through advice, requests and orders. This illustrates that the purpose, the aim
20 of policing in my country is to avoid using force always when it is possible to avoid the
21 use of force. And if there is a situation where there is no alternative, then use a
22 minimum amount of force.

23 Now you understand that the calmness, the ability to make
24 decisions in stressful situation, it cannot be trained in short training courses. It has to be
25 built step by step so that also the attitude and value basis is strong enough in the young
26 police officers.

27 It's difficult to put all of this in short, but last but not least, of course,
28 it has to be admitted that police conduct is always dependent on the society. If a police

1 officer has to be prepared always when confronting a citizen, if a police officer should be
2 prepared to a situation where the citizen is actually carrying a gun, or has a gun in the
3 car, of course, the stress levels of officers would be higher and, of course, the risk of
4 misconducts and excessive uses of force would also be higher.

5 Finland is a country of forests. Hunting is a very common hobby
6 and there are approximately 1.6 million registered guns. So a person carrying a gun is
7 not a rarity in Finland, definitely not. But the starting point is that also for the police that
8 the target person in a regular policing situation will not carry a gun. But then again, your
9 question about trust, of course, building the trust will take a generation or several
10 generations. It cannot be built with a snap of fingers. And a trust, to my -- in my belief,
11 the trust is based on the behaviour, on the professional competence, and the way how
12 an individual officer confronts a situation. Also, those citizens who have alcohol
13 problems, drug problems, mental health problems, who are agitated because of some
14 particular reasons, they -- as the law implies, it is the police who has to bring in the
15 calmness into the situation.

16 I will add one last thing. You use the term de-escalation. To me
17 and to us, de-escalation is a very curious concept, because it contains the idea that the
18 situation has escalated, and then it has to be calmed down. Our way of thinking is the
19 opposite. We try to avoid the escalation of the situation at all costs. If the target person
20 or persons behave in a way that the police has to progressively increase the level of
21 intervention and perhaps enter using force, officer should first select physical force,
22 handcuffing, perhaps pepper spray, then taser, and only in an ultimate situation or in an
23 emergency where immediate threat to life and health is present, then to enter into using
24 firearms.

25 I hope I somehow could illustrate our thinking.

26 **DR. EMMA CUNLIFFE:** Thank you. That's very helpful. I -- to
27 play devil's advocate, I suspect there may be many people listening to the conversation
28 today who would say, well, that's all very well and good, but when you're faced with a

1 critical incident or a mass casualty, that surely that goes out the window. And I wonder
2 if you can provide an example of how the Finnish attitude to use of force plays out in a
3 critical scenario.

4 **DR. KIMMO HIMBERG:** The critical scenario or a critical incident
5 is, of course, an extreme policing situation. And all the principles that I described will
6 apply. But admittedly, of course, when there is a school shooting, for example, we
7 talked about them yesterday, when there is a school shooting, firstly, there are -- and
8 there will be a number of officers on site very rapidly, well, in some places in Finland not
9 very rapidly, but anyway, this is an extreme type of incident and certainly a high priority.
10 Depending on the situation. I tried to point out yesterday that for us, there can and
11 there may never be a situation where it is unclear who is leading the situation, who is
12 leading policing at the situation. It's -- when the first patrol enters, one of the officers
13 takes the lead. When there are more patrols on site, it will be what we call a field
14 manager, typically a sergeant. And very soon, the leadership will be transferred to a
15 command centre, and then the leader -- the situation leader is not any more necessarily
16 present on site. He or she may be tens or hundreds of kilometres away, relying on the
17 information that flows in from the site.

18 When it comes to use of force in a school shooting case, yes,
19 definitely, then the police will have a high risk of having to enter to using a firearm to
20 stop the criminal activity. That's for sure. But even then, depending -- once again,
21 depending on the situation, the police will first start to -- try to stop the criminal activity
22 through orders, unless the target person is met in the situation where he, for example, is
23 pointing a gun at the police officer, and there is a specific guidance in the legislation for
24 these kinds of situation. It's difficult to translate the Finnish term, but it's something like
25 emergency protection situation where the police has the right immediately to use a
26 firearm to avoid the immediate threat to life.

27 **DR. EMMA CUNLIFFE:** Thank you. And you alluded to the fact
28 that seven shots have been fired by Finnish police against people in 2021 and 2 in

1 2020. How are Finnish police trained to aim and what is the objective that they train to
2 seek when they do discharge their weapon?

3 **DR. KIMMO HIMBERG:** The aim is to stop the criminal activity,
4 quite simply. Officers are trained to aim, if possible, to aim at a limb, because we know
5 by experience that in most cases that will be enough to stop the activity. In most cases,
6 it is enough to shoot one shot, sometimes two. I can give you an example. In 2017, a
7 young Moroccan man made a knife attack against members of the audience in the
8 market square of Turku, the third largest city in Finland. He stabbed 12 persons, 2 of
9 them died, 10 were seriously wounded. The Emergency Call Centre received tens of
10 calls within approximately one minute. And in two-and-a-half minutes a local police
11 patrol identified the man on the street, and the man was threatening an elderly lady with
12 a knife. He was stopped with one shot on the leg and the other constable tasing him.
13 He stayed alive, could be interviewed, and we know now that he had been inspired by
14 Isis. He was convicted of a -- of violent acts of terrorist nature, but I think this is a
15 valuable aspect because he stayed alive. He could be interrogated, and we now know
16 the backgrounds of the case. If he had been -- if he had died, we couldn't have had that
17 opportunity.

18 **DR. EMMA CUNLIFFE:** Thank you very much.

19 Hunter, I'm going to turn to you and bring us back to this core
20 theme of public trust in police. The U.S., of course, as El alluded to, has been engaged
21 in a national conversation about police use of force, as has Canada. And in particular
22 about the occasions when police misuse force or use excessive force. From your
23 vantage point as a researcher and as a teacher of police skills, what has emerged from
24 these conversations for engaged researchers, for police leaders, and for police officers?

25 **DR. HUNTER MARTAINDALE:** Well, it's getting a little outside of
26 my realm of research and what we do specifically here with active shooter training.
27 There are 18,000 different agencies in the States, and I can tell you that the NIJ,
28 National Institute of Justice, just released a grant proposal, the one that we actually just

1 applied for, to get a better understanding of what agencies are currently doing in
2 response to the last couple years of this call for change. You see a lot of anecdotal
3 media accounts of agencies incorporating co-responder models where they have a
4 social worker or like-minded individual, like, trained individual deploying with officers in
5 the cars. They have dedicated units that are going in place of officers, as EI spoke to
6 earlier, trying to remove some of the tasks that are originally assigned to law
7 enforcement that don't have the skillset to manage those tasks. And then you have
8 other models being deployed where there are critical -- I missed the acronym now -- CIT
9 groups, Crisis Intervention Teams, that are trained officers that are there to try to
10 alleviate some of those issues. There's no real clear understanding of how many of
11 these are being incorporated, how many agencies are attempting to use these different
12 techniques, if they're successful, what results they're receiving from these ideas, and
13 anything. And then the data's just not there right now, and it's been going on for a
14 couple of years. NIJ just released this call and they're trying to get a grasp of what that
15 looks like. So there should be some much better data coming out of the States
16 regarding at least how often these programs are in place and some of the evaluations of
17 those programs. Hopefully we're able to be a part of that and can help shape that
18 research, but at this point, I don't know those exact numbers look like.

19 Public trust, speaking from an active shooter point of view, is very
20 readily seen in some of these events. So the easy example is the Parkland attack a few
21 years ago in Florida, where the school resource officer failed to intervene. He stayed
22 outside the building, and he didn't intervene. It was a very swift, obvious issue of public
23 trust that that was not what was expected of that officer. And it was a situation where
24 the officer was indicted and charged. Don't remember the exact charge. It was some
25 negligence charge, but it was very clear that the public expects officers in these types of
26 situations to act. I'm sure everybody's aware of Uvalde and the issues that were
27 happening down in Uvalde, and that's -- investigation's ongoing and just starting, but
28 you're going to -- I imagine you're going to see some very similar reactions coming out

1 of Uvalde. And the issue of the public's response to that has been very swift and very
2 strong, as it should be.

3 And so I hope that's kind of answered your question. I don't go -- I
4 don't have very much experience on that side of the research, so I have a limited
5 vantage point, but it's obviously a big topic in the States, and agencies are trying to be
6 responsive to what that is. Part of the problem in the States is that you do have so
7 many different jurisdictions and agencies, and they all kind of do their own thing. And
8 so it's hard to get a grasp of what's actually working until there are some really good
9 evaluations, and not just evaluations of a department, evaluations of multiple
10 departments in multiple types of locations and geographies and different things.

11 Hopefully that wasn't a poor response for your question.

12 **DR. EMMA CUNLIFFE:** Not at all, Hunter. Thank you very much
13 for sharing your perspective.

14 Commissioners, I'm going to suggest that this would be a good time
15 for a break. Fifteen minutes? Fabulous. So we'll come back at 20 minutes to 4.

16 --- Upon breaking at 3:24 p.m.

17 --- Upon resuming at 3:41 p.m.

18 **DR. EMMA CUNLIFFE:** Thank you, Commissioners.

19 I have one last question on the public trust topic that we were
20 discussing before the break and then I'll move on. El, if I can come back to you and
21 Halifax report, the subcommittee surveyed community members about their experiences
22 with police, and as one would expect, received a range of responses from very positive
23 to quite negative to very mixed. What have you learned from your work about the
24 conditions that either foster or diminish public trust in police?

25 **DR. EL JONES:** So as part of the report, we had a number of
26 public engagements, and that included nearly 2500 surveys from people in Halifax,
27 which I do think might be the biggest dataset on policing perhaps in Canada. And of
28 course, as you said, there was a wide range. People who strongly support the police,

1 people who strongly don't support the police, and a lot of people that had varied
2 thoughts. So they may, for example, want the police to be present fighting crime, but
3 agree that the police often also are involved in what they shouldn't be, for example. So
4 overall, I would say that -- to put it in the context of the Commission today, people
5 understand, for example, that they would wish the police to be present and effective in
6 events such as this one. If the police are perceived to be acting in a necessary way, in
7 a proportionate way, in a way that maintains public safety, then largely, people are
8 going to understand that the police are necessary in that scenario, and also, of course,
9 understand that the police have a difficult job, that they are going to experience trauma,
10 that they may put their life on the line. And I think people are understanding of that.

11 Where you see a breakdown of trust, particularly in racialized
12 communities, but not solely, there are, of course, people in racialized communities that
13 support the police. There are people in non-racialized communities that do not support
14 the police. There is no one narrative. People have many, many different orientations
15 politically, many different desires, so we shouldn't generalize, but we do know from
16 multiple surveys that overall black people consistently for decades have testified to
17 experiencing more police force and having less trust in the police, and that's through
18 numerous reports. But where that really comes in is when people feel that it's
19 disproportionate and unfair. So, for example, the feeling that in Dr. Scot Wortley's
20 recent report on Use of Force, for example, he pointed out that black people rarely
21 survive being shot by police; whereas, white people do. So we know that the perception
22 that black people police more harshly, for example, that we end up experiencing force in
23 ways that people that are being much more violent do not. Or, you know, if you have
24 the Muslim community talking about being surveyed for terrorism and feeling that, you
25 know, there's much more surveillance and criminalization and many more interventions;
26 whereas, then you have other situations where a white man may be radicalized and is
27 not receiving any of the same police attention. So when people feel that the policing is
28 disproportionate, it's being unfairly distributed to their community, that there is bias

1 involved in that policing, and that they are not receiving a feeling of safety from that, and
2 it's not, you know, promoting anything in their community, then that's where the trust
3 really goes.

4 Added to that is there are many studies that show that the more
5 that police are disconnected from the communities they police, that does not build trust.
6 So as opposed to -- there are problems with community policing model, so I don't want
7 to just come and say community policing because there's also a lot of studies that show
8 that community policing itself is much more accepted by white communities than
9 racialized communities. But the more that people feel that the police are at least aware
10 of their community, understand it, are seen within their community, aren't just coming as
11 an outside force to police that community, those are things that really lead to the
12 breakdown of how people experience policing.

13 We saw a lot of commentary, for example, with the convoy in
14 Ottawa where a lot of communities of colour, like, we can't do that, you know? So the
15 recognition that policing -- everybody does not experience policing in the same way.
16 And so one of the concerns, I suppose, is to make sure that, obviously, that there are
17 the resources for when we have the kind of scenarios like a mass shooting scenario,
18 that the police are able to deal with that, but the concern that often that doesn't actually
19 effectively happen, and then there's a spill over into other communities that then
20 experience the backlash.

21 And I'll give a -- just one current example. Many people right now
22 from Uniacke Square are sending me photos of a tank that was used in the community
23 to execute arrests. So there's been some gun violence in the community and people
24 are traumatized already from that, and then feel that rather than receiving help or
25 resources, or, you know, the police being able to deal with that scenario, what they get
26 now is a tank in the middle of their community. People were pulled out in their
27 underwear. That further traumatized the community, it's further broken trust, and people
28 are very, very upset and feel powerless about that. So that's an example where

1 something, an instrument of force that was supposed to be used for things like -- I
2 mean, particularly, post-Justin Bourque, people said, "Well, the police didn't have
3 protection. We need these vehicles, and now we're being used to, what execute a
4 warrant in a black community." Right? So that sense of disproportionality and the
5 sense that no matter what black communities do, we end up receiving the heavy brunt
6 of policing that makes us more unsafe, makes us unable to deal with our own problems
7 in our community, leaves us completely vulnerable to criminalization and that's where
8 you see the breakdown.

9 But overall, I would say, yes, that, you know, people do expect the
10 police to be able to do their job when it comes to engaging with crime, and especially in
11 these particularly high -- like, these critical response incidents, but people do not want to
12 see that same kind of violence or same kind of energy brought to everyday interactions
13 such as policing people -- or policing people who are intoxicated in public and want to
14 see that pulled back. So, really, it's a principle of fairness, proportionality,
15 reasonableness, and necessity. And if people see those in place, they're much more
16 accepting of the idea that the police have a difficult job to do, and those sacrifices will be
17 made. But to understand that it was done carefully and not just done out of racial bias,
18 or out of other forms of unfair policing.

19 **DR. EMMA CUNLIFFE:** Thank you. And, El, if I can just confirm
20 the Scot Wortley Study that you refer to, is that one from July 2021, the Canadian
21 Criminal Justice ---

22 **DR. EL JONES:** Yeah, so this is the study that really -- because
23 we have very little data on use-of-force is part of the problem. There's better data from
24 the United States, and there hasn't really been a lot of data on -- in Canada, so is trying
25 to look at that. And it showed that in all -- whether it's major use of force, or even the
26 small uses of force, Black people, in particular, were just disproportionately represented
27 at all levels whenever you control for things like having a weapon, having a criminal
28 record. Even with all those controls in place, it's very clear that Black people, over time,

1 are consistently over-policed and over-victimized by force. And it's these kind of
2 statistics, and people's awareness of this, that leads to a breakdown of trust, in
3 particular, between the police and community.

4 **DR. EMMA CUNLIFFE:** Thank you very much.

5 Commissioners, that report is cited in the Halifax Report, but we'll
6 ensure that it's tendered before you -- I believe it's Wortley and co-authors, Professor
7 Owusu-Bempah and one other, from July 2021.

8 Ben, I'm going to turn to you now. And in a sense, this is a
9 continuation of the conversation about public trust, but I'd really like to turn to the report
10 that you've prepared for the Commission about police discretion. And before we turn to
11 the public trust element of discretion, I'm hoping that you can begin by explaining what
12 you share in your report about how policing scholars have understood the nature of
13 police discretion and how different understandings of discretion, in turn, shape different
14 regulatory ideas about how police actions and inactions are best managed, best
15 reviewed, best proactively addressed.

16 **DR. BENJAMIN GOOLD:** So thank you for the question, and I'll do
17 my best to summarize the core arguments of the report. So I -- the report begins by
18 observing that -- and these are not my words. There are the words of others -- that
19 police discretion was really discovered by scholars in the 1960's. And it's not surprising.
20 That's really when sort of independent sociological and criminological research on
21 policing started to really pick up momentum and people started, particularly in the
22 United States, doing studies of police behaviour and police conduct.

23 And so it involves this idea that discretion is something that
24 inescapably part of police work and that it's partly a function of the type of work that they
25 do, that they do a range of things; they're not easily defined; they're often having to deal
26 with situations, particularly in the context of, say, policing on the street, that require
27 them to make decisions. But it's also a function of the fact that a lot of police work is
28 what is referred to in the literature as "low visibility". It happens out of sight of formal

1 mechanisms of oversight, and accountability, and control.

2 So this narrative, I think it's fair to say, develops in which discretion
3 is something that exists outside of policing statutes and war. It's something that the
4 police, for want of a better word, take unto themselves to allow themselves to do their
5 work. And I argue in the report that that conception of discretion really animates a lot of
6 conversations that happen around discretion, not just in the academic literature, but it's
7 right to say even in some of the legal literature, in some case law, and the like.

8 And what I do in the report is I juxtapose that with another
9 conception of police discretion which argues that rather than something that is taken by
10 the police, it is something that we actually need to think of as saying, "We confer."
11 There's what John Kleinig refers to as a -- I believe I'm quoting him correctly -- as "a
12 normative resource". It's something that the public via elected representatives through
13 statute give to the police to allow them to do their work. \

14 And what I argue in the report is that that's a very different way of
15 thinking about discretion because something that can be conferred can be withdrawn or
16 can be conferred but with very particular boundaries around it. And one of the points I
17 make in the report is that the law, statute, case law is very much focused on the duties
18 and powers of police but not really about the question of what discretion actually looks
19 like and what it means.

20 And just to dovetail, maybe, if it's all right, in lieu of the
21 conversations about trust, what I would say is I think it's really important to think about
22 trust as an ongoing relationship, that it's something that's constantly being referred to
23 and renegotiated. And I would ally that with questions of police legitimacy. If we think
24 that police are -- operate on our behalf, for us, through sort of a policing-by-consent
25 model, that we confer upon the police these quite exceptional powers, not the least of
26 which is a legal monopoly on the use-of-force, or violence, that should be said in saying
27 that it's constantly having to be renegotiated, that that legitimacy and that consent is
28 something that the police should not presume.

1 And so I -- what I would suggest is that, actually, if we think about
2 legitimacy, trust, and consent in this sort of collective way, allied with a conferral
3 discretion model, if I'm being blunt, it places the onus on the police to keep explaining to
4 us why we should continue to consent and why we should continue to confer discretion,
5 and why we, the public, should continue to allow them to exercise the powers that they
6 do.

7 And this dovetails again back into the question about research, is
8 that it strikes me that, to be frank, we should not have to, in a sense, work so hard to get
9 the police to explain to us what they're doing, to give us access to their organization so
10 that we can do independent research because, ultimately, the obligation is on them to
11 explain to the public and to, obviously, academics, as member of the public and civil
12 society, exactly why we should continue to re-legitimize them.

13 And so I think that process -- so I would say -- and I go back to
14 something Kimmo said, and I think it's really important, and I think it also speaks to
15 some of the things that EI had said, is that trust takes generations to build but it's lost --
16 it can be lost overnight. And I think that's a really important thing to remember. And
17 certainly, my experiences of watching the way in which surveillance power was
18 deployed against certain communities in the United States and the United Kingdom,
19 particularly post-9/11, trust was obliterated very quickly amongst those communities
20 because of the way in which the police behaved vis-à-vis surveillance powers. And I
21 think it's still the case that those communities and those relationships are yet to recover.

22 And so I just want to say that that process for me has always been
23 a constant one of negotiation and so this is -- when I come to the question of trying to
24 get access to police organizations and I have difficulties there, I always get to the point -
25 - I always sort of go back and say, "This shouldn't be so hard because, actually, you
26 have an obligation to help me understand this because you have been given these
27 incredible powers that really require constant re-justification, constant re-legitimization,
28 and constant re-conferring of consent."

1 So I hope that's somewhat responsive, Emma.

2 **DR. EMMA CUNLIFFE:** Yeah, it certainly is, Ben, and it
3 anticipates my next question, so I'm going to ask a different one instead.

4 The -- as I understand it from your report, the notion of police
5 discretion is lying at the heart of police work replaced an earlier idea of police as law
6 enforcers, as universal law enforcers. And I wonder if you can speak to that idea and
7 why it was found wanting.

8 **DR. BENJAMIN GOOLD:** Yeah, so I think one of the observations
9 that some of these early scholars make is that police are not engaging what could be
10 referred to, and was referred to at the time, as "full enforcement". They're constantly
11 making choices about how to deploy their resources because they don't have infinite
12 resources, be it time or other resources.

13 So if we take the officer who is on a patrol, they are constantly
14 having to make choices about whether they look at this thing or that thing, whether they
15 stop that person or stop somebody else. And so I think one of the early observations
16 was there's not full enforcement. That's a myth. And because there's not full
17 enforcement, there are choices being made about how police authority is being
18 deployed.

19 One of the things that I really think it's important to emphasize, it's
20 not just about the choices that police officers make, it's the choices they don't make,
21 right, the non-enforcement. And we see it, and I think that there's a wealth of evidence,
22 that both decisions are subject to all sorts of biases and systemic problems. So the
23 choice to stop person X is also -- it may be a choice not to stop person Y. The choice to
24 respond to one behaviour is -- it may also be -- so there's a choice not to respond to
25 another. And so -- and that -- and discretion influences that.

26 One thing I would say is that I was struck in the process of
27 preparing the report in Canada, how little Canadian research there was on just police
28 decision-making and the like. I think there have been some really -- really important

1 studies but they're few and far between. And so going back to this again is, when you
2 think about how important discretion decision-making is in policing, and how little we
3 actually know about how it operates in Canada, there's a real disjuncture.

4 But I want to answer this -- this -- this -- I think one of the real
5 insights is the non-enforcement, the non-response, the non-decision is, in many cases,
6 as important as the decision. It's more difficult to study because it's not observable in
7 the same way, right? The decision to walk past something and to do nothing, they'll not
8 be a record of it in most cases, right? There will be nothing to indicate that happened in
9 the way that there might be, for example, if your officers actually decide to stop
10 someone and question them.

11 And so there's a -- there's also an individual problem. This is
12 another argument for doing ethnography, is you can actually pick up -- you actually see
13 the non-decision in a different way.

14 **DR. EMMA CUNLIFFE:** Thank you very much.

15 Judith, one of the things that Ben said a few moments ago is that
16 it's important that police be able to communicate why they're acting as they are and why
17 they're making the decisions that they do. And that's a theme that you've picked up in
18 some of your work, particularly about visual models that are shared with police to help
19 them guide their use of force decisions and then communicate those decisions to the
20 public.

21 I'm wondering if you can please share with the Commissioners a bit
22 more information about that work that you've done?

23 And Commissioners, for the record, that's Exhibit P-001884.

24 **DR. JUDITH ANDERSEN:** Thank you. Yes. So we were tasked
25 with looking into responding to Ombudsman Dubé's report on "A Matter of Life and
26 Death" in 2016 where there were a lot of SRU investigations for shootings and the use
27 of force incidents, and recommendations from hundreds and hundreds of surveys of
28 families and all across Ontario of asking for changes to the Use of Force Model and

1 asking for changes to police training and de-escalation, and just transparency and what
2 it was. What are you actually training?

3 And the lack of public understanding of the Use of Force Model --
4 I'm not sure if you're familiar with it's -- it's a circle and it has a lot of colours and
5 acronyms -- and so we dug into the literature on actually how the brain works when you
6 look at training models and how the information is presented, accessibility issues, and
7 what that -- the way that the model is actually presented, how might that translate into
8 actual behavioural action?

9 And so we've written that up and engaged even cognitive scientists
10 and visual graphic scientists to re-envision a model that's in plain language, that
11 explains to people what de-escalation, non-escalation, and if possible, use of force, and
12 what would that mean, and the relationships between in a way that the brain can
13 function, with the focus on the sanctity of life.

14 And I think one takeaway point from that that we were shocked,
15 after we handed that in and we gave that in, that was 2017-2018 were two reports, and
16 they were buried, nothing was done about it. I had to publish it on my own website in
17 order to get this information out. And I think it just was a smokescreen. I felt like this
18 was a smokescreen so that there was no transparency and that they hoped that the
19 public would then start talking about something else, and some other issue would come
20 up, and they would never have to return to changing the Use of Force Model in that
21 way.

22 Now, since then, there has been a huge debate, and now even
23 CSEP and other places are starting to -- RCMP is starting to look at the national use of
24 force model, but the resistance in changing even the accessibility standards on the
25 model is shocking to me, and I think it's shocking to some other -- many people, that
26 even changing things like fonts, colours, the way things are designed so that people
27 could understand them and so that it doesn't set up if/then contingencies, like, if a knife,
28 then the shoot for sure that we've known, there's resistance to change that.

1 And so I know when, Emma, when you called me for this
2 Committee, I was just going through this stuff and I was so frustrated about who is
3 actually holding these change organizations accountable, because we, as researchers,
4 we do this work, community gathering, you know, surveys and community work, and
5 there's response, and then where does it go, and you know, how can we kind of hold
6 the hand to the fire, I guess? So that was one of the -- what I'll add to Ben's talk about
7 the lack of transparency in that.

8 **DR. EMMA CUNLIFFE:** Thank you very much.

9 Paula, I'm going to turn to you, if I can, and actually pick up on
10 something that Judith has just shared about the importance of uptake of research and of
11 research conclusions.

12 And I know -- and Judith has alluded already to the fact that you've
13 had mixed experiences. You've had very positive experiences, the Finnish experience,
14 and less positive experiences at times in Canada.

15 I am hoping that you can speak a little bit to the uptake of your work
16 on design of training programs in Finland and any experience that you may have had
17 with respect to that here.

18 **DR. PAULA Di NOTA:** With respect to Finland, I believe that
19 legacy was began before I started working with Judith, so I came into this very open
20 team environment where the -- you know, the police practitioners, the use of force
21 instructors were an essential part of that team in informing the development of training,
22 and were very receptive and very open to listening to what we have to say, and
23 specifically, Harri Gustafsberg and Juha-Matti Huhta that I'd mentioned previously.
24 Like, they were both also pursuing PhDs and you know, so called "pracademics", that
25 they're practitioners and academics also trying to just pursue the betterment of their
26 situation and directly translating that into improvements to police education, so again,
27 not training. I really respect Rectory Himberg's stance on that, that it is from an
28 educational model and not just training.

1 And some of these challenges that Judith just described where
2 there's like, a break in the chain somewhere between, you know, evidence, the
3 evidence base and then the implementation of that into practice seems to be broken
4 here, largely, not just in Ontario, not just in Canada, but also in the United States.

5 So we have such an appreciation that in Finland, it's such a fluid
6 process. It just makes sense that no, this training works. We have tested it, it's
7 effective, so now let's implement it. Let's roll it out for everyone.

8 So I think we really have a lot to learn from our partners there. And
9 just having these partnerships and being able to, you know, ask these experts, "Hey,
10 like, what is it actually like?"

11 Like, me sitting behind a computer and I can study what policing is
12 like all I want, but I don't have that lived experience.

13 And the same with EI. Like, you have valuable lived experience
14 that needs to be brought to the table and to these conversations.

15 So I don't think that moving forward is possible by siloing
16 information, that it's exactly these types of activities and events where we're sharing this
17 information together, that that's really going to help drive more effective training forward.

18 **DR. EMMA CUNLIFFE:** Many thanks.

19 And if I can just really focus for a moment on the stakes of that,
20 Judith, you alluded in passing in an earlier response to a finding, a research finding that
21 suggests that use of force training, if poorly done, can potentially lead police to use
22 more force, and potentially excessive force.

23 I guess I have two questions; first of all, have I understood, have I
24 characterized that correctly? Let's start with that simple question.

25 **DR. JUDITH ANDERSEN:** Yes. So there's a lot of both field
26 research and now more training lab kind of studies showing that if you're programming
27 these automatic responses, not only in the focus of your training, if it's not proportional
28 to the actual types of calls that you have on the road, that's going to influence your

1 behaviour, more likely, to go to the weapon first and use it.

2 But also, just these automatic responses, again, as we look to
3 physiology, we want to reduce unease. It's a physical embodied issue. We're asking
4 these officers to go toward a potentially conflictual situation and then we arm them and
5 then, you know, if the -- depending on how the training is focused, if it is focused on
6 weapons and tactics, they go there first, and then the automatic kind of training kicks in
7 and to take the situation down, to take the unease down, to take that -- then they're
8 more likely to use force.

9 So we do have to think about the physical embodiment within the
10 training as well, for sure.

11 **DR. EMMA CUNLIFFE:** Thank you.

12 And Commissioners, some of that research is summarized in the
13 Baldwin, *et al, et al*, including Andersen's study, that is P-001880 in the record.

14 Hunter, if I can turn to you, I believe that at Alert, you have focused
15 on addressing the kinds of risks, or seeking to mitigate the kinds of risks that Judith has
16 described. And I'm wondering if you can describe the steps that you take within how
17 you design your training to seek to address the risks that use of force training might lead
18 to inappropriate use of force?

19 **DR. HUNTER MARTAINDALE:** Yeah. So within the active
20 shooter training world, these scenarios in this training is very specifically and hyper-
21 focused on an active shooter event. And so you are putting officers in a situation where
22 they did know they were going to use force. They know their warmup; they're going to
23 draw their training weapon and fire the training weapon. And it's just this kind of silo
24 training that we get stuck with, especially in the U.S. where there's finite amount of time
25 and resources and you get really focused.

26 Outside of Alert training, I'm just going to speak broadly about
27 police training in the U.S., the academies are incredibly siloed. There is taser week,
28 there is difference of tactics week, there is driving week. And so that week, we were

1 going to do these things, and so every solution -- not every solution -- a lot of solutions
2 in taser week are to use my taser, where I'm going to be given a scenario, and
3 ultimately, I'm going to need to use my taser. And so it's -- you run to the siloed type of
4 training that happens kind of across the board, and you get 18,000 agencies, they all
5 train differently, but you do see a lot of that siloed throughout those.

6 For our trainees, to try to help break that, we have a different series
7 of scenarios that they'll go through. They're not all shoot scenarios. We will try to get
8 them to start thinking about the contextual issues around what they're seeing. I talked
9 about this yesterday, so sorry to repeat a little bit, but you have shootings that have
10 happened in the U.S. where somebody responded to an event that they thought was an
11 active shooter, and the one that I always talk about happened in 2014 in a Walmart.
12 The call came in that a man was walking around with a rifle. The caller said that he was
13 pointing it at people. And so the first responding officer went to that scene, thinking he
14 was walking into an active shooter event. That officer quickly approached where he
15 was told the individual was. Mr. Crawford was his name. He turned the corner, he said,
16 "Drop the gun," and before he finished gun he shot. And he was wired to think this guy
17 was walking around Walmart, trying to kill people. What he failed to do is think about all
18 the context -- I shouldn't say failed. What he didn't do is think about all the context. He
19 didn't see any wounded people. Nobody was panicked or running from the location.
20 There wasn't the smell of effervescent gunshots. There were no gunshots being heard.
21 Come to find out it was a BB-gun and he was walking around for some reason holding it
22 while he was talking on the phone, but that officer didn't have all these other clues that
23 could have told him this probably isn't an active shooter. I need to slow down and see
24 what's going on. And so we really try to reinforce in our training this idea of slow down,
25 see what's happening, gather as much data as you can, and use that to inform your
26 decisions as you're going through the process.

27 There are -- if I can talk about a -- kind of a side project that we've
28 been trying to help some other agencies with, for training purposes, and in trying to

1 reduce the impact of force, there are agencies that are turning to different techniques,
2 and one of them is Brazilian Jiu-Jitsu, so they're teaching their officers really just how to
3 physically control somebody and not turning to their weapons, as people have talked
4 about; right? So if you're training them to use your firearms and use your taser, once
5 you have this -- you know, your body perception of what's going on, you know, I'm not
6 going to win this confrontation, I'm going to turn to my tools, and I'm going to use my
7 gun, I'm going to use my taser. So they've taken this kind of very different approach,
8 and they're trying to teach their officers control techniques so they don't have to go to
9 their weapons. And it's hard to compare because they don't have great before or after
10 data, but what they've -- or comparison data around other agencies, but they've seen a
11 dramatic drop in the injuries to civilians, the uses of force and weapons, injuries to
12 officers. And so it's trying to get officers outside of that mindset of you only have your
13 tools. If you have somebody that's trying to fight you, there may be some ways to
14 control them without having to go to your tools, and that's building up that confidence
15 and trying to flip the switch on that embodied perception of what's -- what they're
16 capable of doing and how they can hopefully control the situation without having to use
17 an escalated level of force.

18 **DR. EMMA CUNLIFFE:** Thank you.

19 Ben, if I can sort of circle back to where this conversation began,
20 which was with the idea of discretion, if we understand discretion as a privilege that's
21 extended by civil society to police, in which for that reason can be bounded, can be
22 structured, can be supervised by civil society in the manner in which it's exercised, what
23 does that mean with respect to policing organizations and the kinds of conversations
24 that we've been having about how use of force is trained and the options that police are
25 trained in and the understandings that are conveyed about the use of force within their
26 roles?

27 **DR. BENJAMIN GOOLD:** I think that question raises some really
28 complicated issues. I guess my initial response would be there just has to be greater

1 transparency and flow of information between the police organizations and those
2 responsible for regulation and oversight in the public at large. I do. I mean, I think
3 going -- again, I'm going to go back to the question of trust. Is when you don't have that
4 transparency, what effectively the police are saying to the public is you have to trust us
5 that we're doing things responsibly; right? And I think already a number of people have
6 spoken to the fact that that trust is broken down in a number of communities, and so
7 that answer isn't really adequate. And so I think the provision of information is really
8 important. And it also has to be structured in a way that it's seen as a constructive
9 relationship, that in fact -- I'm always struck by the fact that it, in many respects, the sort
10 of somewhat defensive attitude that many police organizations take is really
11 counterproductive for their own aims; right? That in fact, having independent oversight,
12 having academics and -- or research rather, a mix of society coming into organizations
13 and providing another perspective, or at least critical reflections on what you're doing is
14 a healthy and positive thing; right?

15 There's a rich literature on why police organizations are generally
16 resistant to that sort of relationship. And one thing that I think comes out in a lot of that
17 literature is a belief on the part of the police that people who are not police cannot
18 understand what they do. And at the so sharp end, they can't understand the sort of
19 difficult decisions that they are required to make in high pressure situations, for
20 example, use of force. And one response to that, just being blunt is, the onus is on you
21 to help us to understand it; right? That actually, if we don't understand it, if that is
22 genuinely true, that members of the public and legislators and oversight body don't
23 understand, then we need to; right? And how will we get there? And I think my answer
24 to how we get there is better data, better studies, more independent review and
25 oversight. But the answer that, well, you can't understand what we do and therefore
26 you just have to trust that we're doing it well is just not adequate, in my view. And I
27 think that's -- unfortunately, I'm being a little reductive, but often that's what it boils down
28 to.

1 And so I do think that when we're talking about discretion, we need
2 to know more about how it's being exercised. One of the things that is problematic
3 about studying discretion is we see its outcomes but we don't see its processes. So we
4 can see -- obviously, the decision to arrest somebody is a function of discretion, that a
5 choice was made at some point to stop that person or to respond to that person and
6 that led to an arrest, but we're only seeing the outcome. We're not seeing the process.
7 And so the only way we understand that is to actually, for example, speak to officers
8 and get them to explain how you came to that decision, or in some cases, actually got to
9 observe them in field making those decisions. And that's the sort of research we have
10 very little on.

11 And so it's often -- we talk of -- you'll see that sometimes in
12 literature it's referred to -- discretion is referred to as a black box process. We know the
13 input; right? We know this is a police officer, and often training can be seen as the
14 input, and we know the outcome, being an arrest, a use of force, et cetera, but we
15 actually don't know a lot about what's going on between them. And as a consequence
16 of not knowing a lot about what goes on in between, we're somewhat in the dark in
17 terms of how to regulate it. And so one of the -- and so we tend to talk about duties,
18 responsibilities, and the like, but we're actually speaking about discretion, often
19 somewhat working in the dark. And so I do think this is -- and I know it's a standard
20 thing for academics to ask for more access and research. I think that that -- but I think
21 it's not surprising that's what we call for. But in this one, we just really know very, very
22 little about how police decision making works. And I would think it's in the police's
23 interest to actually -- for us to know more about that, for the reasons that Hunter is
24 describing. I think that I -- you know, police want to do better, I would hope. And so the
25 more information and the more independent reviews that one could have, the better.

26 **DR. EMMA CUNLIFFE:** Thank you.

27 EI, in the Halifax Report, you identify four pillars of community
28 safety and set out that these pillars rest on a foundation of trust and accountability.

1 What are those pillars and why is it important to think about them together?

2 **DR. EL JONES:** Yes, so when you were asked to define
3 defunding, we really went -- so the four pillars really work from the inside out, so it
4 begins with stuff like transparency and accountability, access to police policies. Then
5 we move to things like detasking, like, the actual tasks that police do, then we look at
6 things like legislative oversight, and then finally we end with things like municipal
7 engagement, like participatory budgeting, how are people involved in their city, how are
8 people involved in public safety. So just to add to this conversation on transparency,
9 particularly around use of force, and I'm going to quote Commissioner Harry Critchley
10 here, is that part of the problem is also the relationship between policing, police
11 governance and the courts. And in Canada, we don't have -- our police oversight
12 agencies aren't doing the work of making policies transparent to the public and
13 accountable. And they're also not doing the work to create policies to do things like
14 constrain use of force. And that tends to be deferred into the court. So we wait until we
15 have a court decision, which tend to defer to the police.

16 So when we're talking about things like use of force, those tend to
17 be very conservative decisions; the principle is whether it was reasonable and then how
18 do you determine reasonable in the context of policing.

19 And so there isn't really anybody that's creating strong lines saying,
20 "No, you can't have this tank and use it in this way. No, if you're going to use tasers,
21 you can't use them on minors, that's not..." Like, that isn't happening.

22 And so part of the problem is that we have a large failure in this
23 country where police governance is not doing its job, and their job is supposed to be to
24 do things like create policy to constrain use of force, to constrain weaponry, to make
25 sure that these things are happening.

26 And so, for example, with risk assessment, it wasn't until we really
27 got *R. v. Lee* that it was officially acknowledged that Black people run from the police
28 because they're scared. Now that is usually part of police threat assessment, right; if

1 somebody runs, that is part of, “Oh, they’re a risk and therefore I might shoot them or I
2 might consider them to be more criminal,” and it wasn’t until we got a judge saying,
3 “Well, no, it's actually reasonable that Black people be scared and therefore run. That’s
4 not a threat and you can’t respond to that like it’s a threat. You have to respond to it like
5 it’s perhaps a fear.” But it took a long time to get that kind of legal decision.

6 So part of the problem is these relationships. So when we think
7 about policing, we want to think about it taking place in this broader context. So, yes,
8 what do we know about police that needs to be -- and we’ve heard so much great
9 content here today about, like, why the training needs to be transparent; why the
10 policies -- we need to know when they’re interacting with minors, what are the police
11 doing? Like, why are they pulling their gun, all of that. But then also moving up the
12 levels, what tasks are they doing; how is the public allowed to respond to that? What is
13 the legislative framework that allows us to get access to this?

14 And then because the police are a part of provincial, federal,
15 municipal, like, structures, what is happening there and how do we as people actually
16 have some kind of power and way to engage with that, whether that’s our democratic
17 engagement, our financial engagement, or otherwise. So those were within our four
18 pillars, we were trying to look at the totality of how we experience policing and the
19 totality of how we can make the police accountable to us.

20 **DR. EMMA CUNLIFFE:** Thank you very much.

21 Kimmo, if I may turn to you; how does the Police University College
22 teach its students about discretion and the exercise of discretion? What do you want
23 graduates to understand about discretion when they’re beginning their policing career?

24 **DR. KIMMO HIMBERG:** I talked earlier about how important it is
25 that the personal responsibility of an officer is understood by everybody; of course, most
26 important by the officers themselves.

27 I have to confess that I’m here perhaps a little bit confused because
28 English is not my native language, and it is a little bit -- the concept of police discretion

1 is a little bit vague for me, perhaps. But it's -- if you'll allow me to use other wording
2 here, independent decision-making for an individual police officer is evidently a must. I
3 mean, it is -- we discussed the same in the yesterday morning session. It is not
4 possible to describe all possible situations, policing situations, in the training, for
5 example, and then expect that an individual officer would follow exactly those lines,
6 those guidelines. There has to be space for independent decision-making.

7 I wish to emphasize also, because we have been concentrating so
8 much on the extreme policing situation where use of force is important, even use of
9 lethal force, they are a minority; a small minority of situations where the police and a
10 citizen meet each other. There are plenty of completely different situations where a
11 police officer is in contact with a citizen. And as I refer again to the piece of law I
12 referred earlier where the police may need to give advice or even give orders, but not
13 use force.

14 It is a huge variety of different situations, different persons who the
15 police is confronting, et cetera, et cetera. Evidently there has to be room for
16 independent decision-making and independent decisions on selecting the most
17 appropriate way to act. But always, of course, strictly according to legislation and
18 orders that have -- procedural orders that have been given to the police.

19 Once again, I cannot emphasize it enough that to be able to
20 educate young police officers to understand their high responsibility, and to educate
21 them to make those decisions in different situation, it cannot be done in short training
22 courses. It will take time because it involves, also, combining theory, theoretical
23 knowledge with practical exercises, adapting the theoretical knowledge to different kinds
24 of situations. It involves a process where the ethical thinking of an individual develops
25 to the required level. And this will take time. It will take plenty of education; it will take
26 plenty of practical training, but, unfortunately, we could never train police officers to all
27 those different situations that they will confront in their future career.

28 **DR. EMMA CUNLIFFE:** Many thanks indeed, Kimmo.

1 So my last question of the day, and then we'll give the
2 Commissioners an opportunity to ask any questions that they may have, and it's a
3 question for each of you; I'll start with Judith. How should the Commission ensure that
4 as it proceeds through its work, we don't allow our focus on critical incident response to
5 inadvertently undermine or cut across important discussions about the police role within
6 civil society?

7 **DR. JUDITH ANDERSEN:** If I think I'm understanding you
8 correctly, so there really are two things we're talking about here in this session today;
9 there's the majority of police training, that is for the 99 percent of calls that they get in
10 Canada that does not require force, and then there is the critical incidents.

11 And so what we've seen in our observations, in our embeddedness
12 in Canadian policing is that often they're trying to combine training and assessment into
13 one day or two days. So what we know for sure from science is that you can't -- if you
14 have an assessment on one day, a big test, to see if you're going to -- are you allowed
15 to be out on the road, a field officer, and we're going to test you on this, but we're also
16 going to try to teach you how to respond to a critical incident that day? Like, we would
17 never do that in university training. We would never do that in other professions. Think
18 about a surgeon who, you know, is learning all of these brain -- a neurosurgeon is
19 learning all these techniques. No; there's many, many training for the intricacies of that.
20 And then that's training, and then there's testing days, so obviously we need both.

21 So we're saying that critical incident training in itself is so important;
22 it is. If this is what -- and even the public legitimacy of police is seen to respond to
23 these events, I think we can all agree that, over each country, that has been a common
24 theme; that responding to these critical incidents is important.

25 So separating out these types of training and relying on evidence
26 base, and we've been -- I mean, unfortunately, every time we go and do a project and
27 we give a recommendation, okay, two, three days for this skill to start and then maybe a
28 booster, we're always asked, well, how can we whittle that down to 15 minutes or two

1 hours, or something like that.

2 And then it becomes a waste of resources. So we're talking about
3 not even just adding more money but making the training time that you have an efficient
4 use of time. So one thing that was shocking to us when we went in and saw, like, a
5 training day, well, there's 15 minutes walking around in the morning, then they sit down
6 and they kind of shoot the breeze, and then there's a PowerPoint, then there's a break,
7 and then they get to the scenarios, and the actual scenarios really only last between 30
8 seconds and 2 minutes, and maybe one person gets two scenarios in the entire day,
9 and that's their Critical Incident Training?

10 So we're talking about -- and people think, oh, they got a whole day
11 of training, or they got, you know -- no, they got three minutes, and they were so
12 stressed that -- and then the feedback after, you know, the trainer says, "You didn't do
13 this, you did this," and they're deer in the headlights. They're not absorbing that
14 information.

15 And so how can we make the training dollars, the training time, and
16 the training facilities more efficient and transparent? We didn't find this out until we
17 went and observed, and we were lucky to get in to observe this training.

18 So I think more transparency and just like, how are you using the
19 actual dollars that you're using, and then not combining those trainings. I think those
20 are my two points.

21 **DR. EMMA CUNLIFFFE:** Thank you.

22 Paula, I'll turn to you next.

23 **DR. PAULA Di NOTA:** I think Judith stole everything that I was
24 going to say. But yeah, those are the critical points, and then especially dealing with
25 what we're here to talk about today, dealing with critical incidents. Those are inherently
26 the most stressful situations that any officer will ever face if they're unfortunate enough
27 to face that in their career.

28 So coupled with separation of training and evaluation, there has to

1 be attention paid to modulating your physiological response to stress. So we've shown
2 and other researchers have shown that this will not only benefit their performance, but
3 their mental health, their physical health. So just by the addition of this one facet of
4 training that -- it's not additional training, it's something that can very easily be
5 incorporated into existing training protocols, can have a multitude of benefits, because
6 we know that when your brain is stressed, you're acting on these muscle memories or
7 implicit biases, including racial biases.

8 So it's maybe not so -- I know that's a separate issue in dealing with
9 unconscious biases, but once again, by being able to modulate your physiology;
10 broaden your situational awareness; rely on the skills that you have been trained to use
11 and not muscle memory, which might be to react in a way to result in a more severe use
12 of force, which again, us and many other researchers have shown that attacking that
13 stress response in a way that's adaptive; that's going to help them pay attention but also
14 act effectively, would be the best course forward. And I hope we've been able to share
15 evidence for that here.

16 **DR. EMMA CUNLIFFE:** Thank you very much.

17 Hunter, I'll turn to you next.

18 **DR. HUNTER MARTAINDALE:** Well, they're stealing my thunder
19 too. So the -- what Judith and Paula are both talking about are areas that we're acutely
20 interested in helping them explore and push that part of training forward to make it
21 where people are able to retain the training and act on it into the long term.

22 I talked about it yesterday a little bit about using virtual reality as a
23 skill retention tool. It's an area of evolution in our training where we're hoping that once
24 we go out and touch an agency, we can leave some very specifically-built VR tools and
25 have them have the ability to get five minutes here, five minutes there, over a long, long
26 period of time, and continually be exposed to the different principles of what we're
27 training and observe that and evaluate it over a long period of time and see if they're
28 retaining those skills that are very specific to what we're training them.

1 And what Paula was talking about, helping modulate some of the --
2 physical responses, it's -- we've got a couple of projects running right now where we're
3 hoping to see that we can show that in practice in these high-stress active shooter
4 scenarios that we're putting people through, because they do give a very limited number
5 of touches, because there's only X amount of time and X amount of training hours, and
6 so we're trying to make sure that we're able to capture them and help them as much as
7 possible, because they all just want to improve, and it's going to get better for sure.

8 **DR. EL JONES:** Just to add to some of this too, I think that we
9 haven't talked a bit about police cultures, but just to recognize too as in all kind of
10 securitized situations, there's a lot of learning that takes place on the job, and that
11 obviously takes place in everyone's job, but is particularly enhanced when we're dealing
12 with things like policing or prisons or those kind of environments. So part of the problem
13 is also interrupting the idea of people will say, "Well, you know, I just -- we've always
14 done it this way," or "You know, I came into the job and somebody -- this is just the way
15 happened."

16 So there's a lot of kind of implicit or received training, and that can
17 help perpetuate some of these problems, because people aren't actually learning in the
18 training blocks because they're so small. They're learning from each other, they're
19 learning from veterans, and that can set a culture where you come in and you're told
20 immediately, you know, "Oh, you have to be careful when you're doing this," or you
21 know, "When you go into these kind of neighbourhoods, these are high-crime
22 neighbourhoods. Be on alert."

23 So that kind of shared knowledge sets cultures that also need to be
24 addressed and understood, and I think, interrupted in training often.

25 And then the final thing I'll also just point out is studies have shown
26 that the more there's a concentrating on threats, the more that threats are perceived.
27 So this is the argument about, well, we always need more force, we need more force,
28 we need more force. You get police saying, for example, like, "Oh, well, there's more

1 weapons present at the scene." But there's no clear evidence that that's happening,
2 and we don't know if that's after the fact finding, like, a baseball bat in a house and then
3 saying, "Oh, well, there was weapon in the house."

4 "So were they using it?"

5 So when you train towards threat, then you perceive threat all over
6 the place and then that actually decreases officer safety and it decreases the safety of
7 the public.

8 So while obviously there are situations where threat and risk are
9 extremely active, for the most of policing, there isn't. And this idea of always
10 approaching in the context of risk that, oh, well, I don't know if this unhoused person is
11 going to create a risk. I don't know when I knock on this door to deliver a warrant if
12 they're going to have a weapon.

13 If you start from that position, that is what creates scenarios where
14 you end up with escalation. So it is also very important to have a reasonable threat
15 assessment that isn't just starting at the level of everything's a *de facto* threat and then
16 everything we're going to respond to as though everything is a threat, so then we're
17 always bringing force and everything's already escalated before the scenario has even
18 started. So I think that's important as well.

19 **DR. EMMA CUNLIFFE:** Thank you.

20 Ben, if I can turn to you?

21 **DR. BEN GOOLD:** Yes. I'm mindful of all the really insightful
22 things that have been said in response to this question.

23 I guess the thing I would add maybe to emphasize is I think of the
24 question of training and so learning through one's career as a police officer sort of a pre-
25 condition for the ongoing legitimacy of policing. And so if that is the case, then it is
26 really incumbent on the police to demonstrate that the training is working, however we
27 collectively understand that to mean.

28 And so I think this is, again, going back to this point about the

1 police have to demonstrate that, and I think they have to allow the possibility for others
2 to assess that, to others to come to the conclusion that training are not working as part
3 of the broader conversation about accountability and governance. And that requires, as
4 we've already talked about this morning, to really think about the way in which
5 transparency around these processes works.

6 And the point that was made earlier by EI, I believe, about you
7 know, governance is sort of a stack of things and agencies and people, and running
8 through it all should be, I think, people retaining the question of legitimacy as something
9 that's on -- is constantly being re-conferred. It's not a one and done thing.

10 And so if you think about it that way, then it's again, it's -- the
11 responsibility falls to policing agencies, given the enormous authority and powers they
12 wield, to constantly be reclaiming that consent or reaffirming it, or us reaffirming it for
13 them as a precondition for legitimacy.

14 **DR. EMMA CUNLIFFE:** Thank you.

15 And Kimmo?

16 **DR. KIMMO HIMBERG:** Thank you very much, Emma. It's really
17 difficult to add anything meaningful to what has already been said. But if you allow me
18 to rely on my own field of expertise, the education field, I would perhaps like to pick up
19 two points, to take two steps back.

20 You have been referring -- or we have been referring in this
21 discussion into research, which seems to show that increasing in the use of force
22 training will lead to an increase in use of force or even excessive use of force.

23 I'd like to ask a question. What kind of training is that? Shouldn't
24 training in use of force rather improve the decision-making abilities? Shouldn't it rather
25 develop the police discretion that we have been discussing about?

26 And from here, I come to another point. If there are -- if police
27 practices, for example, in use of force, are not apt to create trust among citizens, if the
28 policies and practices of use of force by the police are acceptable to a great -- to great

1 numbers of citizens, or if the police has unacceptable behaviour patterns, or if there are
2 unwanted attitudes among officers, and then whole training that is given is internal
3 training, doesn't that lead to a vicious cycle where the same practices, the same
4 behaviour patterns and the same attitudes are cycling from older police generations to
5 younger ones.

6 My conclusion is twofold. Firstly, it is important that we have
7 educational expertise in police education. It cannot rely entirely on police officers who
8 only have operative experience. We require from all our teachers an academic
9 vocational teacher education. If they don't have that education when they are recruited,
10 they have three years to complete it, and the employer will support it. It is, of course, a
11 big investment. But on the other hand, we are educating people who will work as police
12 officers for 30, 40, 45 years, perhaps. The cost of education is marginal in comparison
13 to the cost of the officer as a whole.

14 Pedagogical and education expertise in police education,
15 essentially important. And secondly, we have many times been referring to the
16 importance of transparency, which partly is -- can be achieved through legislative
17 oversight, a possibility for citizens to put in complaints to independent bodies, et cetera,
18 et cetera.

19 Those perhaps are my last conclusions. Thank you, Emma.

20 **DR. EMMA CUNLIFFE:** Thank you very much.

21 Commissioners?

22 **COMMISSIONER FITCH:** Thank you very much, everybody. This
23 has been absolutely wonderful, and I have more notes to myself than I do questions
24 today. But one question I have, and it's for Kimmo, when we've been learning about
25 critical incidents and one of the common definitions that we hear is that a critical
26 incident involves a set of circumstances that overwhelm a unit's or an agency's normal
27 ability to respond with their staff and resources. It's something that involves a lot more
28 resources than would normally be deployed on any given day. So I'm wondering in your

1 training -- pardon me, in your police education, which I like and I am now adopting into
2 my new language, along with de-tasking, two favourite words that I heard today, in the
3 police education, is there time spent during those three years helping your officers learn
4 the value of collaboration with partners outside of policing in and of itself? So breaking
5 down that police only rely on police and how important it is to be able to develop
6 partnerships and collaboration on a day-to-day basis and then in particular with respect
7 to critical incidents. If you could speak to that, please?

8 **DR. KIMMO HIMBERG:** Thank you. Thank you for the question.
9 This is essentially important. And thank you for adopting police education. I appreciate
10 that.

11 What you asked is, of course, essentially important, because at
12 least in the Finnish police practice, operative police will cooperate every day with rescue
13 services, emergency ambulance services, social services, child protection services, and
14 also with a third -- with several third-sector actors, for example, from various ethnic
15 groups, techno-minority interest groups, et cetera, et cetera. This is an important part of
16 the education, and from a relatively early phase of the education program, we have, for
17 example -- to take a few examples, we have joint exercises with the rescue services.
18 Unfortunately, the Finnish Rescue Academy is located in a city which is 300 kilometres
19 from where the Police University College is located, so it's not easy to arrange joint
20 exercises with the two academies, but we have joint exercises with the local rescue
21 service units. We have a social authorities lecturing at the Police University College.
22 We invite groups of, for example, vocational schools and universities of applied
23 sciences, students who come from various immigrant groups to work together with our
24 students, and we invite people from various interest groups, third sector associations
25 and the like, to give lectures to our students. It is essentially important and it's part of
26 our attitude training, if I could use such a term.

27 Did I answer at all ---

28 **COMMISSIONER FITCH:** Yes, thank you very much.

1 **DR. KIMMO HIMBERG:** --- to your question?

2 **COMMISSIONER FITCH:** Thank you.

3 **COMMISSIONER STANTON:** Thanks very much. I recognize that
4 it's 11 o'clock at night, or approaching that for you, Kimmo, so thank you so much for
5 bearing with us in the late afternoon here in Nova Scotia.

6 Yesterday we heard from Deputy Chief Steven MacKinnon of Cape
7 Breton Regional Police about the importance of building relationships in communities
8 between police and civil society. And in your paper, Dr. Goold, you mention there's a
9 limited body of research on the use of police discretion in rural police departments, and
10 you cite some research about how community relationships are more likely to play a
11 role when it comes to police decision making in rural areas. I wondered, Kimmo, and,
12 El as well, if you would be able to comment a bit on because in Finland the rural context
13 is the prevalent context from what you've told us with respect to policing, how building
14 relationships and community factors into police education and police operations.

15 **DR. KIMMO HIMBERG:** I hope I understood your question
16 correctly, but yesterday, I also referred to the importance in proactive policing.
17 Proactive policing is often a bit difficult because especially in -- with limited resources,
18 the police will easily focus and the reactive part, the reactive role of policing, this
19 happened in Finland in the past, also, and, luckily -- luckily, we were woken up with that
20 and we have now returned to a active -- proactive policing mode.

21 Every regional police unit has a separate proactive police unit and
22 they work together with various interest groups, and especially put a lot of effort into
23 meeting the young people, and they work together, for example, with third-sector
24 organizations who try to meet children and youngsters who seem to be having problems
25 with overuse of alcohol or drugs, for example. And they go to schools to meet young
26 people and to tell about policing, generally, traffic safety, things like that. And I wish to
27 emphasize these visits to schools are not recruitment visits, not at all, but it is an
28 important part of policing.

1 And I would actually like to refer to an earlier comment by EI who
2 said that -- when talking about defunding the police, that security in the society cannot
3 be achieved by policing alone. The security is very largely built on good social support.
4 And here in the Nordic countries, of course, I believe that we are all known for the good
5 social welfare system. That is perhaps the most important societal factor which creates
6 security.

7 Excuse me this lengthy answer.

8 **COMMISSIONER STANTON:** Not at all. It's very helpful, thank
9 you. I appreciate it.

10 Did you have anything to add, EI?

11 **DR. EL JONES:** So all the theories of policing are often based
12 around what we used to call "broken windows policing", which is the idea that lack of
13 social cohesion in communities is what led to crime, and this is particularly within urban
14 environments. But part of the problem in policing rural communities, especially around
15 things like domestic violence, is the social cohesion can also lead to social silences,
16 right?

17 So the perception is, "Okay, it's harder in the city because people
18 don't know each other and that's where the conflict has -- and then you don't have
19 anything to rely on so you call the police." But yes, particularly when it comes to things
20 like gendered violence, racialized violence, hate crimes, stuff like that, those can
21 actually end up buried further in rural communities and there isn't as much access for
22 people. People don't talk. They know these things but they don't tell. No one want to
23 call the police.

24 So particularly when we're thinking about the role of domestic
25 violence in often precipitating -- so many of the red flags that come around incidents are
26 through things like what's happening in the home, and that can end up silenced in all
27 communities. I'm not going to claim it's only in rural communities but our kind of
28 perception that "Oh, it's safer because everybody knows each other" can sometimes be

1 a detriment as well.

2 **COMMISSIONER STANTON:** Thanks very much.

3 Emma, did you have anything to add? Okay.

4 I just want to thank everyone for their excellent contributions today.

5 I really do want to also recognize our research and policy team, Krista, who facilitated
6 the earlier panel today and Emma Cunliffe, who's here, and one of her team members,
7 Emma Ronsley who's done a tremendous amount of research in order to find these
8 people who have so much to tell us that directly relate to our mandate.

9 And just for people who may not be aware, the Orders in Council
10 that set out our mandate require us to consider issues including police actions,
11 operational tactics, response decision-making, and supervision, and police policies,
12 procedures, and training in respect of active-shooter incidents, but it also directs us to
13 give particular consideration to any persons or groups differentially impacted. And so
14 this particular panel obviously is related to that piece of our mandate.

15 The mandate is extremely broad and the words on the page don't
16 quite assist people in understanding the range of issues that actually are required to be
17 understood in order to make a sensible set of recommendations at the end. We're
18 required to look into the causes, contexts, and circumstances of this mass casualty and,
19 obviously, one of the contexts is the rural context that -- in which it took place. But there
20 are other considerations to try to make recommendations that are actually
21 implementable.

22 If we look at the Phase 1 work that we've done so far, it does
23 provide us with many of the circumstances and the -- and we're starting to dig into the
24 causes, of course, but the context is also something that needs to be understood. And
25 past reports have made many recommendations that have not been implemented, and
26 so in order to make recommendations that actually can be implemented, we do need to
27 hear from people who have thought deeply about each of these aspects of the work that
28 is set out for us.

1 As you've heard from each of the people today, they've all spent a
2 lot of time doing research and also practical studies to really understand various
3 aspects of what look like small words on our page in terms of the Orders in Council. But
4 there's a wealth of knowledge that it's important for us to access in order to make
5 recommendations that are going to be meaningful in that they can be actually
6 implemented at the end of this process.

7 So just to say that it's been tremendously helpful this last couple of
8 days for us to have been able to hear from people who have such a wealth of
9 experience and have thought very carefully and deeply about the issues that we're
10 required to consider in our mandate.

11 So we have learned more about how first responders and others
12 tend to respond during critical incidents and how they could be better trained and
13 prepared. But we've also heard about the kinds of considerations that we need to have
14 when making recommendations about, for example, training. It's -- just to say, "There
15 need to be more training," there's obviously much more that needs to be thought about
16 with respect to making a blanket statement like that.

17 So thank you again to Supt. Gossen, who was here this morning,
18 Drs. Allison, Anderson, Di Nota, Goold, Hinberg, Jones, Martaindale, McAllister, and
19 Shortland for taking part in today's roundtables. We do trust that your insights will assist
20 us in shaping stronger recommendations through our work.

21 Next week, Commission counsel will be sharing more foundational
22 documents to build our understanding of what happened with a focus on the interactions
23 between different first responder and emergency services organizations. We do plan to
24 hear from more police and civilian witnesses next week. And as we move forward, we'll
25 continue to uncover and share a large volume of information with the public through the
26 foundational documents, witnesses, reports, and source materials. These are all
27 available on the website.

28 We're making progress in sharing information that can begin to help

1 answer some of the questions the public will have about what happened, how and why
2 it happened, and building the understanding we need to develop the Commission's final
3 report which will include our findings and recommendations.

4 We remain grateful to all the people who are contributing to this
5 work in a constructive and collaborative way, including the Participants and their
6 Counsel, witnesses, round table members, community organizations, the media, the
7 Commission team, and of course, members of the public. There are many ways that
8 the public can help share the coming recommendations and be ready to help implement
9 them, including reading the many resources being shared by the Commission on our
10 website, including the Foundational Documents, source materials and the
11 commissioned reports, watching and listening to the public proceedings, including
12 hearing from witnesses and through out webcasts, and sharing information you think
13 may be important to our ongoing investigation, or making submissions about research
14 you believe is relevant, or a change you would like to see in your community. You can
15 make these submissions through our website.

16 Your engagement is much appreciated and very important to us.
17 And when the Commission's work concludes, it will be up to all Canadians, including
18 policy makers, public institutions, community groups, and members of the public to take
19 actions based on our findings and recommendations that can help make our
20 communities safer. And through all of this, of course, we are grounded by the memory
21 of those who were taken and appreciate that EI has acknowledged that again this
22 afternoon. It is what grounds our work, and we do hold that with us each day. It's a
23 very long process, I know, for all of the folks that are coming along on this journey with
24 us, but we do want to stay focussed on ensuring that meaning comes from this, and
25 we'll work to ensure that our recommendations are worthy.

26 So with that, I want to thank you all, and we'll see you here again
27 on Monday. Thank you.

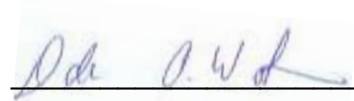
28 --- Upon adjourning at 5:00 p.m.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

CERTIFICATION

I, Dale Waterman, 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, Dale Waterman, un sténographe officiel, certifie que les pages ci-hauts sont une transcription conforme de mes notes/enregistrements au meilleur de mes capacités, et je le jure.



Dale Waterman