

Center for Strategic and International Studies

TRANSCRIPT

Event

**“Preventing, Detecting, and Responding to Animal
Disease Threats: 20 Years of U.N. FAO ECTAD”**

DATE

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FEATURING

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The White House*

Nidhi Bouri

*Deputy Assistant Administrator, Bureau for Global Health,
USAID*

Thanawat Tiensin, M.D.

*Assistant Director-General, Animal Production and Health Division,
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CSIS EXPERTS

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Transcript By

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Caitlin Welsh: Good morning, everybody. On behalf of CSIS and the Food and Agriculture Organization of the U.N. we are so pleased to welcome our audience in person and online to today's event, "Preventing, Detecting, and Responding to Animal Disease Threats: 20 years of U.N. FAO ECTAD." I'm Caitlin Welsh, director of the CSIS Global Food and Water Security Program. And ECTAD, of course, is the Emergency Center for Transboundary Animal Diseases.

Now, transboundary animal diseases and zoonoses might not be terms that you hear or read in the news very often but the issues are making headlines every day like avian influenza, which has spread globally, contributed to record high egg prices, infected cattle and hundreds of other mammal and bird species, killed hundreds of millions of animals, and jumped to humans including in the United States.

Avian influenza and mpox and Marburg and COVID-19 and many others are national security threats because they can have profound and abrupt impacts on economies, human health, the environment, and food security. They require action by these sectors at global, national, and local levels.

We'll talk about all this today – transboundary animal diseases, zoonoses and the One Health approach. We're marking the 20th anniversary of ECTAD this month and this week is National – sorry, World Antimicrobial Resistance Awareness Week. So we'll also discuss AMR.

Here to talk about the importance of preventing, detecting, and responding to animal disease threats are five globally recognized experts and we really have such a fantastic group of experts with us today including Dr. Stephanie Psaki, Dr. Thanawat Tiensin, Nidhi Bouri, Dr. Michael Murphy, and Dr. Erin Sorrell, all of whom I will introduce again when we turn to our panel discussion.

But before we start the show I have three announcements. Safety first. For those of you who've been with us before you know that exits – emergency exits are behind me to the right and in the corner of the foyer behind you and to the right. So should the need arise please move to those exits.

Also, following today's panel we will welcome questions from the audience and we very much encourage those questions. So if you have a question please submit it at the ask questions here button on the event page or if you're in the room scan the QR code and submit your question there.

And, finally, following today's event we will welcome you to a reception on our second floor foyer just outside the room.

Now, on with our program. We'll begin with a short video from the U.N. FAO.

(A video presentation begins.)

Rein Paulsen
(Director, Office
Of Emergencies
And Resilience,
FAO):

Since 2004, FAO Emergency Center for Transboundary Animal Diseases – ECTAD – has been supporting national governments to reduce the risk of animal health threats that can devastate livelihoods and threaten food safety.

By building members' capacities to prevent, detect, and respond to these threats FAO plays an essential role in protecting the health of people and animals, transforming agrifood systems and safeguarding farmers' livelihoods, economies, and global food security.

Thanawat
Tiensin:

Thanks to the long-standing partnership with the United States Agency for International Development – USAID – FAO work with countries all around the world to increase their abilities to manage animal diseases and enhance productivities and trade in animals and animal products. By helping to avoid national, regional, and global disease spread FAO ECTAD contribute to the protection of people and animals.

(Video presentation ends.) (Applause.)

Ms. Welsh:

FAO does do great videos – (laughs) – so applause are warranted.

It's now my pleasure to introduce our keynote speaker Dr. Stephanie Psaki.

Dr. Psaki is deputy senior director for global health security and biodefense at the National Security Council, a deputy assistant to the president, and the first U.S. coordinator for global health security at the White House. She's been a generous contributor to CSIS scholarship on global health in close collaboration with the CSIS Global Health Security Center, for which we are grateful. We last featured her on the CSIS stage in April 2024 on the launch of the new U.S. Global Health Security Strategy and she introduced the strategy as a blueprint for protecting American interests and noted that the strategy goes beyond the usual global health programming and sees opportunities in integrating with animal health programs.

In that event Dr. Psaki also noted that, and this is a quote – I'm quoting you to yourself – (laughs) – "Health emergencies impact every sector so

it makes sense that every sector would step up to make sure that we're safer."

I think this is a great place to kick off our conversation today. Thank you for joining us, Dr. Psaki. Welcome back to CSIS. The floor is yours.

(Applause.)

Stephanie Psaki,
M.D.:

Good morning, everyone. I'm a little shorter than Caitlin.

Thanks for joining, those who are in the room and those who have joined online. Thank you to CSIS and FAO for the opportunity to join you today to celebrate the progress made through ECTAD over the last 20 years and to discuss how we can collectively advance the mission to strengthen local and national capacity to prevent, control at their source, and reduce the impact of zoonotic disease.

In my current role as the U.S. coordinator for global health security at the White House I work through the National Security Council with partners across the White House and with many partners in departments and agencies including USAID – and I know Nidhi will speak more to that later today – to figure out how to work with partners around the world to prevent, detect, and respond to the full spectrum of accidental, natural, and deliberate biological threats, and the preparedness needed for all types of threats is very similar. In fact, when threats emerge we often don't know what their origin is so we need to be prepared to respond to all of those.

From day one President Biden and Vice President Harris have worked to end the COVID pandemic and to protect the American people from future health threats. But we all know that COVID-19 was not the worst case scenario that we could face. It was containable through infection prevention and control measures and we were able to rapidly create novel vaccines building on decades of research.

But we are still recovering from the health, social, and economic impacts of that pandemic even knowing that it could be much worse. We know that COVID was not the only health security threat that we will see in our lifetimes. In fact, currently we are supporting major responses from the White House for mpox, Marburg, and avian influenza, all of animal origin.

Climate, demographic, and technological changes and global conflict are driving increased incidents and impact of outbreaks, especially those of animal origin. The continued emergence, spread, and impact of antimicrobial resistance is taking a devastating toll and the willingness

to invest critical financial and political resources has waned as global health security competes with other priorities for attention and resources. Understanding and attention is even lower for animal health systems and human public health systems in many places.

So where does that leave us? First, we can celebrate the progress that we've made, and we have made progress, spurred on by the collective experience of the COVID-19 pandemic. The pandemic galvanized an unprecedented global response that fostered innovation and unified action by communities, nations, and diverse sectors.

The Biden-Harris administration has led on efforts to harness momentum from that response to strengthen global health security, working with countries around the world to prevent outbreaks when possible and to rapidly detect and respond to emerging biological threats when they occur.

Advancing these objectives is the purpose of the global health security strategy that Caitlin mentioned and that we've spoken about at CSIS before and it is tied and built on lessons from COVID-19, but it's in many ways also connected to the strategy of the previous administration and potentially to the strategy of the next administration.

Advancing the objectives of this strategy is key to what we're doing and it's relevant across all of the sectors so I'm going to talk a little bit about some of the connections between this strategy and our discussions here today.

So the first goal of our global health security strategy is strengthening health security through bilateral partnerships. A lot of that work is implemented by USAID and CDC around the world. We know that the cornerstone of global health security is the ability of each country to effectively counter biological threats within their borders before they spread and become a broader regional or global challenge.

We have under this administration expanded our formal global health security partnerships to more than 50 countries around the world. The long-standing FAO USAID global health security partnership is fundamental to supporting our partners for global resilience, particularly in the areas of zoonotic disease and antimicrobial resistance.

This includes efforts to develop and implement locally relevant solutions such as on-farm best practices. The forecast, prevention, detection, and response capacities that ECTAD develops supports the animal health capacities for many of our bilateral partners.

The second goal of our strategy is catalyzing political commitment and financing to achieve global health security. During this administration the United States led the launch of the Pandemic Fund in 2022 established to invest in building stronger pandemic prevention, preparedness, and response around the world. FAO is an essential implementing partner and has an important role to play in the long-term success of the Pandemic Fund.

And the third goal is maximizing the impact of U.S. government investments in health security and complementary programs. This includes, as just a few examples, the Feed the Future initiative that supports research to identify innovative approaches to improve animal health including strengthening animal health laboratories and the animal health workforce, water for development and water sanitation and hygiene programs and initiatives that strengthen overall infection prevention and control in health facilities on farms and in communities.

This impact maximization also means strengthening a One Health approach to global health security including by integrating infectious disease data from human, animal, plant, and environmental sectors.

These goals present three clear, discrete lines of effort for global health security but in practice, as we all know, they overlap and we must work together to address the increasing complexity of these challenges and mobility of infectious zoonotic disease through integrated well-resourced systems and better international collaboration.

So while we have made progress since emerging from the acute phase of the COVID-19 pandemic, continued investment of financial, political, and technical resources is essential to ensure success in building stronger preparedness today, sustainability of these efforts, and resilience to future health security threats.

So in this moment I think it's important for us to be really clear about why it's important for the United States to maintain leadership in this space. Disease outbreaks, whether natural, accidental, or deliberate in origin pose a threat to U.S. national security as well as to global economic stability so it is in the United States' interest to ensure that, one, we are able to prevent, detect and respond to outbreaks at home; two, other countries have the capacity and the willingness to do the same; and three, regional and global institutions including the World Health Organization have the agility and capacity to both prevent health emergencies and coordinate an effective response.

The COVID-19 pandemic highlighted gaps and weaknesses in each of

these critical areas which the Biden-Harris administration has worked to address over the past four years. In many ways, our approach and even our strategy, as I mentioned, is well aligned with the work of the previous administration.

So while we have made progress since emerging from the acute phase of the COVID pandemic, a lot more work is needed, and success in these efforts will not only make Americans safer and protect our economy, it will also reduce international reliance on U.S. resources and expertise during times of crisis.

So, fortunately, the same world that presents these increasing threats also offers a swath of technology systems and efforts like ECTAD to counter them. It provides a source of hope now and going into the future.

I look forward to hearing insights from the panelists today and I encourage us all to use this important anniversary and this AMR Awareness Week to recommit to the multifaceted challenges of confronting transboundary zoonotic disease.

Thank you all. (Applause.)

Ms. Welsh:

Thank you so much to Steph Psaki for those insightful remarks and for laying a great foundation for the conversation that we'll have up here today.

I'm happy to introduce my expert panel as I'd mentioned previously.

So online we're joined by Thanawat Tiensin, who is assistant director general and chief veterinarian and director of the animal production and health division at the U.N. FAO in Rome. Dr. Tiensin has held multiple positions within the government of Thailand, the missions of Thailand to the EU and to the FAO, and with the FAO, and he started his career as a veterinary officer.

On stage with me I have Nidhi Bouri, who's USAID's deputy assistant administrator for global health. She has served in several positions in the White House including as director for global health response and as acting senior director for development, global health, and humanitarian response at the National Security Council, responsible for the administration's global health worker initiative, among other initiatives.

Dr. Michael Murphy is director of the division of animal and public health at the American Veterinary Medical Association – AVMA. He spent his career in veterinary medicine including at the FDA Center for

Veterinary Medicine at the University of Minnesota College of Veterinary Medicine and as a practicing veterinarian. He is also a lawyer.

(Laughs.)

And Dr. Erin Sorrell is a senior scholar at the Johns Hopkins Center for Health Security and associate professor at Johns Hopkins Bloomberg School of Public Health. She leads collaborations across the U.S. government, international organizations, and government ministries to strengthen health systems and she's applied this expertise at the U.S. Department of State and many other places as well, including in academia.

So welcome to all the panelists. I'm very much looking forward to the conversation we'll have here today and I'm going to start online with Dr. Thanawat Tiensin.

Thanawat, very nice to see you. Thanks for joining us online from Rome.

Dr. Tiensin: Good morning there and also a good – I think it's a good afternoon here in Rome.

Ms. Welsh: (Laughs.) That's right.

Dr. Tiensin: Very nice to talk with all of you here virtually from Italy, and also I'm sure that we will have a(n) interesting session and also to exchange our information and views how we're going to proceed and work together closely.

Ms. Welsh: Great. Thank you.

So I want to start my first question to you about successes of ECTAD in its first 20 years. We hear in the news not so much about successes but about when things go wrong so can you talk about successes including some examples from the local level?

Dr. Tiensin: Yeah. Thank you very much. Actually, last week I was in Thailand and also with my colleagues from FAO regional office for Asia and the Pacific because we talk about what we have done so far over the past 20 years.

I remember very well that in 2004 when we have a big outbreak of avian influenza, H5N1, across Asia, and FAO called an urgent meeting with our members and also different stakeholders to discuss how we're going to control and prevent the situations in Asia to make sure that we will not create a pandemic of avian influenza at that time and that's why the FAO Emergency Center for Transboundary Animal Disease was

created after that meeting.

And during that time we know that most of the countries don't have enough capacities – laboratory capacities, surveillance capacities, and animal health workforce capacities – to control the situation or the big outbreak of avian influenza and how to deal with these contagious or emerging zoonotic disease, and that's why we support our partners with support of the United States.

We can make change and we can manage the situation at that time, and you can see many countries at that time even that don't know about the disease. At that time, nobody, even the country's laboratory – the National Laboratory in many countries in Southeast Asia – they were not ready and even though in terms of the surveillance system and no one have the capacities, and that's why the support of the United States and also other partners it really make change.

And you can see that today all the capacities that we built together with your support and we can give you some example today, especially during the COVID-19. We know that during the COVID-19 many countries or even the ministry of public health have no capacities to detect or don't have a laboratory capacity to detect the virus and that's why many countries used the capacities of the animal health laboratory that get support from the United States to support the human laboratory during the COVID-19. And it's really proved that the support and also the work that we are working over together for 20 years it really helped us to prevent the pandemic.

Ms. Welsh: Thank you.

Dr. Tiensin: And I'm sure that – yeah, thank you very much.

Ms. Welsh: Thanawat, thank you.

I want to ask one more question before we move on to the panel. You mentioned partnerships and the importance of partnerships to ECTAD's successes. Can you give some examples of partnerships at the global level, national level, or even at the local level that lead to some of the successes that you're talking about?

Dr. Tiensin: Sure. Absolutely.

At the global level, today you have heard about the quartet-type organization between FAO, WHO, UNEP, and WOAHA that we are working through the One Health approach. And that's why, even though the situation of avian influenza outbreak right now in many regions, many

countries, and that's why FAO, together with WHO and WOA, we are discussing how we're going to deal with this situation to improve our biosecurity at the country level, to improve the surveillance system at the global level, regional level, and country level and that's why we need a partnership.

We need a strong partnership from different agencies, different organization(s), and also at the country level we need partnerships, collaborations, and better coordinations with our members, with the countries, with others' agencies that can bring knowledge, can bring experience to deal with the situation of the pandemic or any other's pandemic that may occur in the futures and that's why this strong partnership between FAO with the United States or any other partners is very crucial to build the capacity at the country level.

As you know, the FAO have 195 countries and we are operating at the ground level in more than 140 countries with your support as well and that's why the ECTAD – the Emergency Center for Transboundary Animal Disease – are operating in 49 countries around the world at the moment.

It really make change. It really make impact at the ground level.

Ms. Welsh: Great. Thank you. Thank you very much.

It's a good place to start my conversation with Nidhi. Nidhi, welcome to the stage.

What is the importance of addressing transboundary animal diseases, or zoonoses, to USAID equities writ large? So not only to global health but to other things that USAID is concerned about?

Nidhi Bouri: Yeah. Thanks, Caitlin, and thanks for having this panel.

USAID, as you might know, is a development agency for the U.S. government. Our approach is to really holistically look at all different sectoral needs that impact communities around the world so whether that's food security, health, emergency assistance, economic resilience, and when we look at these types of threats – zoonotic disease and transboundary animal health threats – it's not just about health, and I've seen firsthand in a lot of travel that where I've had the chance to visit some of USAID's investments, particularly the work that USAID does in partnership with FAO where we see firsthand that a lot of times not addressing threats and some of the mitigation and then reactions that you have to have in addressing threats as they unfold has a downstream and very quick impact on communities.

So when you look at farmers it's not just looking at, OK, how do we address the health threat. It's addressing their livelihoods. It's when we look at working with FAO to expand workforce capacity to support animal health systems. It's creating career cadres and opportunities for economic opportunities in the workforce.

So there's a lot of links in the approach, the One Health approach that we call it, in the international community and how we drive that in USAID's programs and I think one of the other things I'd note is USAID's approach isn't just to think holistically about how sectoral areas come together and really centering it in what impacts communities. It's also a holistic approach to partnerships.

So just building on some of the comments that have been shared already, different types of actors all have a really critical role in supporting the capacity of animal health systems and animal health systems should not be thought of as different than the health system at large.

It is – they are inextricably linked, and our partnership with FAO has really allowed us to accelerate and deepen the way that the U.S. government can invest in utilizing different types of partners, not just through the network that FAO has but then the related network with community organizations, the private sector, other international partners, because each of these entities have a different role. But FAO has really been able to drive a way of supporting both a country level and regional approach when we look at these threats.

Ms. Welsh: Thank you. We spoke earlier and you talked about this variety of partnerships that USAID supports from multilateral to bilateral programs with public sector, with private sector. Anything else you want to comment about that?

Ms. Bouri: Sure. I mean, one thing I'll say that – so and Dr. Psaki noted this in the way that the U.S. government's approach is – is our approach to global health security, and this is true for USAID, is a combination of bilateral and multilateral partnerships.

FAO is probably the only partner or one of the only partners for USAID that actually implements in both ways, at the country level and at a multilateral and kind of global level, and I note that because when we talk about health systems, health systems require very tailored investments depending on what the capacity of a country is and then, obviously, the targets that they're aiming to achieve.

So we work a lot in the U.S. government in supporting countries, identify those plans and the roadmaps for how they close gaps, and having targeted ways of supporting – whether it's laboratory capacity, strengthening the workforce, the ability to do community-based interventions, we need partners that have those different networks. FAO is positioned where they actually are able to work across that whole space, but we also then are able to leverage some of these opportunities with the private sector or community-based organizations that might have a different type of reach than we can have alone.

Ms. Welsh: Great. Thank you.

And last question for you before we turn to Mike Murphy is about veterinarians. So why are veterinarians essential to safeguarding not only animal health but human health?

Ms. Bouri: So I feel so strongly about this issue that when we talk about the health workforce that includes veterinarians. That includes colleagues who have the right technical training to support different aspects of veterinary health.

I was in Tajikistan earlier this year where I had the chance to visit labs where USAID has invested in supporting animal health capacity, essentially looking at the capacity of the health workforce to detect zoonotic diseases early and then, obviously, communicate and figure out what you do with that information for early detection.

And I also had the chance to go visit some trainings where FAO was training veterinarians. Tajikistan is a country where there are actually not a lot of veterinarians but that doesn't mean that the need has gone away.

It's a country where there is a substantial amount of the population whose livelihood is actually linked to something in the agricultural space, and so having the ability to think holistically about workforce and animal health – the animal health sector as part of environment, as part of health, and, likewise, you know, from other positions – allows us to really think of the continuum of how to support from prevention to detection response because you need workforce at every side of that spectrum to be able to address and mitigate those threats.

Ms. Welsh: Thank you very much.

Perfect segue to my conversation with Mike Murphy. Welcome to the stage. Welcome to CSIS.

A note on AVMA for our audience, because this is the first time we're featuring AVMA here on the CSIS stage, AVMA was founded in 1963. It's one of the oldest and largest veterinary medical organizations in the world with more than 105,000 member veterinarians representing over 75 percent of all veterinarians licensed to practice vet medicine in the U.S.

So impressive organization. Welcome to our stage for the first time. I'd like to start our conversation by focusing on something that I mentioned in my introduction but also that we're reading about in the news every day, which is avian influenza, and we're reading about the impacts in so many ways on the economy, on food prices, on animal health, on environmental health, so many different things.

But we spoke earlier and you mentioned that there are actually some successes to be held up with regard to biosecurity systems in the U.S. Can you speak a little bit about this?

Michael
Murphy:

So thank you very much. I'll touch on, like, how we have a constant surveillance program in the United States first and then come to the biosecurity at the end, if you don't mind.

Ms. Welsh:

Great. Mmm hmm.

Mr. Murphy:

So in the United States, and you touched on it in your presentations and other, we use accredited veterinarians who already have a relationship with the producers for these notifiable and reportable diseases, so in this case avian influenza.

So if the producer reports clinical signs consistent with respiratory diseases in poultry samples can be taken. They go to a national animal health laboratory that can do testing for other respiratory diseases in poultry and if there's suspicion of HPAI that can go to the federal lab that does that confirmation.

Once that – if that confirmation from national vet services lab occurs that triggers state animal health officials to act and sometimes federal animal health officials to do what's called stamping out, depopulating that particular flock so that the disease doesn't spread to other animals and reduces any risk of it evolving to become a public health disease.

So then turning to your biosecurity point, investments of poultry producers over the last several years in structural and procedural biosecurity plans in this outbreak reduce considerably farm-to-farm transmission. It was more wild bird introductions than in prior HPAI outbreaks. So the biosecurity investments were helpful.

Ms. Welsh: OK. Thank you. Thanks for that.

You've actually started to answer this question but I want to focus specifically on One Health and how AVMA defines and also operationalizes One Health and, perhaps, you can speak about the avian influenza example or maybe other examples.

Mr. Murphy: So AVMA has been an advocate of One Health for a long time and basically sees it as what you have here today, a variety of disciplines working together on an issue, whether it's locally or nationally or internationally.

We support veterinarians working, you know, nationally with their state and federal regulatory bodies, internationally with the organizations represented here today, and examples of things that – particular topics that we would think of as One Health topics are HPAI, as we've already been talking about. Rabies, particularly dog rabies, is an example of a fairly obvious zoonotic disease, some animal welfare, and then antimicrobial resistance is one that's already been mentioned as well, and there are others just for example.

Ms. Welsh: Sure. Thank you. And on AMR how does AVMA approach AMR? What's your position on antimicrobial use in animals in specific? Can you speak a little bit about this?

Mr. Murphy: Sure.

Briefly, AVMA recognizes the importance of antimicrobial resistance and sees the role of veterinarians in preventing that further development. Now that FDA's Center for Veterinary Medicine has transitioned all the medically important antimicrobials to requiring veterinary oversight we support veterinarians – licensed veterinarians – with what's defined in regulation at the state level or federal level as a veterinarian-client-patient relationship to then decide whether those antimicrobials are needed in a particular instance and if so what the appropriate one is for that client and animals in that particular situation. So that helps support the veterinary oversight of whether they're needed and it maintains the effectiveness of those antimicrobials over time.

With respect to progress that's been made, which you touched on earlier, FDA published in the last month or so what's called a sales and distribution report of medically important antimicrobials in the United States, showing about a 37 percent reduction in the sales and

distribution from 2015 until 2023. That's not the beginning or end of it but it's just one metric.

Ms. Welsh: Certainly. Thank you, and thanks for clarifying that AVMA's position is not to not use antimicrobials in animals, certainly, but to use them as needed.

Mr. Murphy: Judiciously.

Ms. Welsh: Yeah. Yeah. Thank you. Thank you. Great. Appreciate those comments, and happy to turn right now to Dr. Erin Sorrell.

Welcome back to CSIS. We spoke a couple days ago as well and you were talking about a transboundary zoonotic disease simulation exercise you conducted just this summer on the border between Iraq and Jordan and that there were important lessons learned for all the sectors represented and also for the countries represented there.

Can you tell us a little bit about that, that sim-ex, as we called it?

Erin Sorrell,
M.D.: Sure. Would love to.

To our knowledge – I caveat that it's to our knowledge – it's the first transboundary zoonotic sim-ex in the region and it incorporated a number of nontraditional stakeholders. So we engage ministries of health, agriculture, environment for Jordan, the ministry of water and irrigation, the Jordan CDC, which is under the prime minister's office and not ministry of health. Jordan armed forces, border, health, customs and immigration. And then from a(n) Iraq perspective health, ag, environment, and border commission, which incorporates both customs and immigration.

And it was a labor of love that incorporated a lot of work on everyone's part and what we found was that while there is not a copy/paste perspective, right, for the preparedness and response to zoonotic disease threats there has to be an integration between sectors on roles, responsibilities, and authorities.

What works for Iraq might not work for Jordan but in both cases the countries had operationalized One Health at borders and were able to successfully operate this exercise, which aligned also with sim-ex requirements under the international health regulations and the performance of veterinary services pathway.

So both countries were able to actually report the sim-ex under those frameworks and actually get credit for them through those health

frameworks. And so it's, I think, not a one-size-fits-all but how do you integrate roles and responsibilities for the prevention, detection, and response.

What was also really interesting to find was that in addition to the more traditional drivers for disease emergence both countries recognize political instability and climate as key drivers for transboundary zoonoses.

Ms. Welsh: Drivers of them.

Dr. Sorrell: Yes.

Ms. Welsh: Thank you.

So talking about this sim-ex and you mentioned One Health, when we were talking you actually said that the One Health approach was – existed before it was defined and we talked a little bit about the fact that it might be easier to operationalize it at the local level than at the national or global level.

Can you talk a little bit about your thoughts about the One Health approach and then challenges and benefits of working at different levels?

Dr. Sorrell: Sure. I think challenge and benefits to working in all levels from national and international to local at the community level, I applaud and think it's been fantastic the efforts that have been made to really integrate One Health at the international stage and at the national levels.

Just thinking about how the tripartite is now the quadripartite is massive, and so policies and programs that really look at a One Health approach are fantastic and now we need to match the – what I think has been operationalized One Health for centuries at the community level and think about how those lessons can be applied and scaled up to match those international and national policies.

So I think it's kind of meeting in the middle and taking successes and lessons learned from both approaches.

Ms. Welsh: Yeah, and you mentioned that it's easier to operationalize maybe around a kitchen table in a village where these impacts are happening. But I hope that we'll get a little bit further into this conversation about One Health about how the local operationalization can be supported at the national and global levels.

But last question for you, Erin, before we turn to questions from the audience is about national security, and I mentioned at the beginning that you served for two years at the State Department, that you have that perspective and overlay that onto the work that you do.

Can you talk about the national security implications of transboundary animal diseases and zoonoses for other countries and also for the U.S.?

Dr. Sorrell: Sure. I think our simulation exercise is just case in point to the type of sectors that are really involved from a transboundary perspective and from a national security approach to One Health. You wouldn't necessarily bring in the Jordan armed forces, right, to a national discussion on zoonotic diseases but, you know, we did and we found that they were open and engaged and very much interested.

When we talk about highly transmissible diseases, whether they impact the agricultural sector or the agricultural sector and the human health sector, there are downward implications both in terms of economy, right? That's been echoed many times here already today. Impacts to food safety, food security, human, agricultural, and animal health, and they need to be discussed and approached, I think, in a single conversation.

There have been examples of countries banning flights on just the risk of an outbreak, countries banning imports of food products whether that's meat or eggs just on the risk of an outbreak, in complete noncompliance, right, with the International Health Regulations and other frameworks, and I think that that can either be a political play or just a complete misunderstanding of how diseases transmit.

Either way, that's a national security impact and something that we should address.

Ms. Welsh: Yeah. Well, thank you.

I do want to turn to questions from the audience but before then is there anything that the panelists would like to comment on each other's interventions?

Mr. Murphy: I'll just say I couldn't agree more about food security and the availability and affordability of food, particularly in areas of the world where disposable income is, largely, spent on food. So I'll just leave it at that.

Ms. Welsh: I'd agree.

Dr. Tiensin: If you may, I just would like to complement from our previous speaker already mentioned about the national security. You can see that the issues around health security, food securities, at the end it linked to national securities and all the example that you gave to us is really clear because during the COVID-19 outbreak you can see that the food price it become a food security issue.

The food price crisis happened during the COVID-19 and also a lot of misunderstanding about the import and export or banning of import of food products from one country to other countries, and this one is already show us that how the agrifood system is fragile.

We need to get ready and that's why it's very, very important, and also, as the previous speakers already mentioned as well about the role of veterinarians because we know that in most of the countries they don't have capacities.

Even there were some country don't have veterinary school and that's why the work of a community animal health worker or para veterinarians is very, very important and that's why I think this kind of work it really can help us to strengthen at the FAO, together with the United States agencies. We will continue, and I'm sure that we will make a lot of change.

Thank you very much.

Ms. Welsh: Thank you. Thanks very much.

So we do have a couple of really good questions in the audience. I'd like to invite Megan Lewis and then Andrew Bisson to ask questions.

Megan, would you mind raising your hand and Andrew as well? Great. Megan's right here and Andrew. Great. And we'll take both at the same time and then we'll turn to panelists for responses.

Q: Thank you all so much. This has been a really helpful presentation. I'm wondering if you could speak to some of the gaps in our current surveillance system when it comes to the One Health approach and how this data is all integrated and how it impacts both animal and human health.

Ms. Welsh: Great. Thank you. And over to Andrew for questions.

Q: Hello, everyone. Thanks so much for this event. Really, really important topic.

I'm Andrew Bisson. I'm a livestock advisor now with USAID but I worked for ECTAD in the avian influenza outbreak in Southeast Asia going back to the beginning of this 20-year period.

When I arrived in Vietnam I think some part of us was alarmed by what we were seeing in terms of the outbreak of avian influenza. And I think perhaps the strongest feeling was not that there was an outbreak, but that it hadn't happened sooner because of the way that the farm systems were evolving. They were cooking up a lot of pretty high risks.

So I wonder – playing forward 20 years, we're seeing great growth in animal source food production around the world, particularly in emerging economies. Are we investing enough in the just food transition that it's also a safe food transition? That the structural development of animal source food production is such that we're not increasing the risks of emerging diseases but, rather, we're trying to reduce it?

Have we got the balance right between the investments upstream in risk reduction and then in sort of emergence at the farm gate level and then the transition across to humans? How are we allocating the resources? How do we make those decisions? And are we getting enough upstream?

Ms. Welsh: Thank you. Two great questions. I'll turn it – whoever would like to start.

Ms. Bouri: I'm happy to start. Thanks for those questions. Just a few comments.

The USAID focuses on global investments so we don't work here in the United States. But a couple things that I would say is – one is assessing capacity is not a onetime exercise. You have to consistently and regularly be assessing capacity of a system and then tailoring the way that gaps are addressed.

So, for example, an example that I like to speak to a lot is USAID's investment as part of a U.S. government investment in the DRC. In 2017-2018 Ebola hit DRC. Ebola, sadly, is not a stranger to this part of Africa, and there were thousands of people who died and it was weeks before we had really adequate detection capacity.

You fast forward five years to 2022 when Ebola hit again, and because of investments, largely, from USAID and CDC to improve diagnosis capacity the virus was detected within 48 hours and five people died.

So when we talk about cost effectiveness it's not just, obviously, the expense that you put into mounting a pretty significant effort to get a disease under control once it starts to spiral. It's also, obviously, a direct impact on people and on human health, right, and the workforce that you have to mobilize on kind of every sector that might be impacted.

And so I note that because when we talk about gaps in surveillance specifically the answer depends on the country you're talking about and when you're asking the question, and we have a lot of focus rightfully on supporting countries to have national plans. But plans only get you so far if you take what you find on paper and you do something about it.

And so that's where I think having this approach to utilizing different types of partnerships, particularly as FAO has spoken a lot to starting at the community health level, looking at community health, community animal health workers, all the way up to training technicians and labs and looking at that throughput but then also the way that human health surveillance and animal health surveillance come together.

This summer my counterpart at CDC and I were in Guatemala where USAID and CDC are jointly investing in the national lab and it was an interesting site visit because on one side USAID is investing on animal health surveillance and you walk about a hundred feet and CDC is investing in human health surveillance. And that is a great model, but it's not what happens in all parts of the world.

And so having that throughput where you have not just the capacity that is built up – whether it's in, you know, the detection capacity and running through kind of what you do with that information – but having a workforce that talks to each other, where you have ministries that actually talk to each other because typically this work is not all under one part of a national government, is really important to addressing this question about threats.

And just briefly on the food supply question, which I'm sure others will want to come in too, you know, I think of food supply in kind of – in two ways. So, one, there's the global food supply when you're talking about real trade, kind of moving products around outside of borders, and then there's the way that most communities in the world get their food, which are informal food supply networks and systems, right – local markets.

When we think of reducing threats it's a very different list of things when you're talking about community members walking to a local market where there are probably not a standardized way of approaching food safety practices as opposed to products that are

prepared for formal export.

And so I would say we have to think a bit specifically when we're talking about how food moves and have very different ways of looking at it according(ly).

Ms. Welsh: Yeah. Great. Thank you.

Erin? Mike?

Mr. Murphy: Go ahead.

Dr. Sorrell: If I could just add a little bit to Nidhi's comment about surveillance. I think what's interesting is everywhere I've had the pleasure of working ministries of health have zoonotic disease units. Ministries of ag do not, right, for obvious reasons.

And so how do you look at tying some of the most critical agricultural diseases – animal diseases – to ministries of health and understand potentially downward impacts to public health and why it's important to share that information and how to link surveillance systems, whether they can be completely integrated or at least there's that coordination of we have this suspect event or we have a confirmed case if we're able to have proper laboratory confirmation.

So I think just starting those conversations earlier than later is really key to bringing everyone together for a prompt response.

Ms. Welsh: OK. Thank you, Erin.

Mike, anything?

Mr. Murphy: Just very briefly. Agree with comments made, and the United States has a very robust system, as I'm sure you all know, and there are things that would work here that may not work in other countries, to your point.

And so biosecurity that's been enhanced here to the extent that's useful is fine and not – I agree that you need to. Even in the U.S. we still do tabletop exercises and discover things and we have natural disasters which discover things, that we have gaps and we still need to work with that.

And then, lastly, I'd just offer the alternative that in the SARS-CoV-2 outbreak in the U.S. the national animal health laboratories offered surge capacity and provided it for human testing because they're so accustomed to doing high throughput for notifiable reportable diseases

and even here that surge capacity was useful. So –

Ms. Welsh: Great. Thank you, all.

Two more great questions. One is online and I'll read that question, and then the other one from someone who's in the audience and I'll invite that person to ask a question.

The question online from Ohio State University is about safe handling and disposing and recycling. The question is: What are the international efforts on safe handling, disposal, and recycling of animal mortalities during disease outbreaks?

And then the question in the room is from Mary Denigan-Macauley in person. Where is Mary? Great. Mary, over to you.

This is about strengthening the strategic partnerships.

Q: Yes. Thank you very much. Mary Denigan-Macauley with the U.S. Government Accountability Office.

Great conversation today. We've talked a lot about the importance of strategic partnerships and I'm wondering if you all can talk about ways that they need to be strengthened or are the existing partnerships sufficient. And my interest is admittedly on the surveillance side here in the United States and how we can work better with our partners.

Ms. Welsh: Yeah. Great. Thank you very much. Two great questions.

Over to the panel. Would somebody like to start?

Dr. Tiensin: I'm happy to, if you don't mind.

Ms. Welsh: Oh. Thank you, Thanawat. Thank you. Yes.

Dr. Tiensin: OK. Thank you very much.

I think I can combine the previous question about partnership and also another comment from colleagues. We used to work in Southeast Asia. I think this – and also linked to another question about sharing surveillance data from human health sectors and animal health sectors.

I can give you a good example. During the outbreak in Asia of avian influenza you can see that we received the report of human case in some countries, in some regions, but at the same time we didn't get any information or data about the case of avian influenza in animals, and

sometimes when we received the data of avian influenza in chickens or any other animals that our counterpart from medical doctors or public health they didn't receive those data or those information.

And you can see that this one is the gap and that's why working through One Health approach it really can help us and that's why, as previous speaker already mentions and that's why two sectors need to talk and in some case, for example, when it linked to wildlife or wild birds.

Both ministry – ministry of health and ministry of agriculture – also have no authority to collect sample from those wildlife or wild birds. That's why we need to work with our counterpart from the ministry of environment. And that's why I think the work that we are working together it really can make a lot of change.

And even though when you're talking about antimicrobial resistance or even though about the disease – the highly transmissible disease – and we know that if we want to prevent those kind of disease in animal farms we also need to improve the good animal husbandry practices at the farm level that we can reduce the need of antimicrobials.

We can prevent better – we can have a better by all the securities and that's why this year FAO introduced the framework of sustainable livestock transformation. We need to transform the way that we produce. We can produce better and we can reduce the risk or threat – biological threat to human or to animals, and even though today our consumers and policy makers meet not only for animal health or animal disease, they're talking about lower carbon production. They're talking about animal welfare. They're talking about any other issues' environmental impact. And that's why One Health really can approach – can really bring all sectors to discuss around the issues –

Ms. Welsh: Thank you.

Dr. Tiensin: – human health, animal health, planet health, and so on.

Thank you very much.

Ms. Welsh: Great. Thank you. Thank you, Thanawat. Thank you.

I want to see if the panelists would like to respond to those questions.

Ms. Bouri: Let me make a quick comment. So if you don't think of One Health you're not actually preparing for health threats. I mean, I think if we – we've seen the data. Seventy-five percent of diseases originate from animals. So if you're not thinking of that interface of human and animal

health you're just not actually preparing a health system.

But the one comment I'll make just to actually both of the questions is we typically talk about the interface that needs to happen, for example, in countries between ministries, bringing the human and animal health side together. But what we don't often talk about is also engaging up and down within a country – the municipal level up to a national level.

So sanitation practices, disposal practices, things like that, sometimes are the responsibility of the municipal government and if there is a disconnect, which is not uncommon no matter what country you're talking about, between a national kind of vision that can come from a ministerial level and then what is actually happening then, again, there might be some real gaps that pose immediate threats or can pose threats to your ability to really quickly stop something at its source.

Ms. Welsh: Thank you.

Mr. Murphy: I agree with everything you just said – (laughter) – and so I'll give some more context to it in HPAI with depopulating a flock.

The question is do you own the land that you can then compost those birds on and can you get the time and temperature to inactivate the virus on your own property so you're not going down the road and spreading it more, or do you not and is it geographically not feasible, or some portion of the government, whether it's municipal or another agency, requires you to take it down the road and dispose of it another way.

Those are – there's not a one-size-fits-all to the question from the folks in Ohio, I guess, is my view. (Laughter.)

Dr. Sorrell: Yeah, agree with everything, and only to add I think field biosafety is something that we don't consider.

Mr. Murphy: Yes, that's my view. (Laughter.)

Dr. Sorrell: Yeah. Agree with everything and only to add I think field biosafety is something that we don't consider in outbreak response both from a human EPI and an animal EPI perspective, and so I think incorporating that into containment and then response, particularly with carcass removal and including municipalities who may not be involved in any other part of a response, I think is critical.

Ms. Welsh: Great. Thank you. Thanks very much.

So we have one last question from the audience. I'd like to hear this question – this is from Willy Valdivia – and then I'd like the panelists to respond and then just take 30 seconds or so to make any last comments, anything that you wanted to say that we didn't get a chance to get to, any questions you wanted to ask that we didn't get a chance to ask.

So I'd like to hear the question.

Q: Thank you.

Ms. Welsh: Great.

Q: The question refers to food supply, trade, and border security. While we report diseases – so countries are bound to report diseases to FAO – there is also the consequences of reporting some diseases and affecting trade, and I wonder what policies we need to address in order to actually encourage the reporting of – the report of diseases rather than the delay in the reporting of these events.

Ms. Welsh: Great. Thank you for that question, and we'll go in reverse order of the panel so starting with Erin and then Mike, Nidhi, and then to Thanawat. Again, 30 seconds to respond to this question and anything else you'd like to say.

Dr. Sorrell: Definitely the easiest question of the day. (Laughter.)

No, I – you know, I think it's hard because there are many systems in place that don't have accountability mechanisms so how do you encourage nations to be accountable for outbreaks and to communicate effectively the risk and to update in a timely fashion what that risk is both to consumers, to animal handlers, to community members, et cetera.

So I think there's a lot of work to do there and I am pretty happy it's not my job to handle – (laughter) – but I think it's a continued challenge and I applaud countries that are transparent about that to be able to prevent cross-border transmission.

Ms. Welsh: Thank you.

Mr. Murphy: So, very briefly, in my prepared remarks I say in the United States, when that sample goes to NVSL and it's confirmed, that triggers response. So it's a set program in the United States. The degree to which that is not implemented in other countries I don't feel competent to talk about that. So –

Ms. Welsh: (Laughs.) Great. And anything else you'd like to add?

Mr. Murphy: Thank you for doing this. I think it's a true One Health meeting.
(Laughter.)

Ms. Welsh: It's a huge compliment. Thank you.

Nidhi?

Ms. Bouri: I think what's behind your question is really the concept of incentivization to report, right, and I think one of the things that we've seen continuously, whether it's tabletop exercises or other forms, bringing different stakeholders to the table so the trade industry, different parts of governments, those who kind of handle supply chain, right – I mean, not just the animal and human health folks, we've seen to be really critical to surface and then get kind of some of the specific answers that are needed.

And the last thing I would say is, just going back to a comment I made at the beginning, FAO is probably one of the very few entities in the world who can work at the community level, the national level, and the global level and I really hope to see the United States continue to fully fund FAO in its critical work.

Ms. Welsh: Thank you, Nidhi.

Great place to turn it over to Thanawat.

Dr. Tiensin: Thank you. Thank you very much.

I think it's easy question, but difficult to answer – (laughter) – because you know that when we're talking about trade issues it's always complex. But we know that when we share data or information of the situation of whatever, any disease – plan, pace, and so on – it really can help us to contain and control the situation quickly and we can have a rapid response. And that's why building trust among trading partners is the key. And when we can manage to control the situation quickly, I'm sure that we can continue to trade and we can build safer trade among ourselves.

And that's why at FAO our role is to support the countries to build capacities of phytosanitary and phytosanitaries at the country level, that we can help the countries, between the country in the regions or even international trade can continue, don't have any impact after we have the situation. And that's why all the tools today in terms of regionalization/compartmentalization will help us.

But, anyway, I am sure that when we talk we always find solution and especially between trading partners you also can figure out how we continue the trade without any barriers.

Thank you very much.

Ms. Welsh:

This is a wonderful place to end the conversation today. So on behalf of CSIS and the U.N. FAO I would like to thank Stephanie Psaki, Thanawat Tiensin – thank you for joining us from Rome – Nidhi Bouri, Mike Murphy for coming in from – flying in from Minnesota for this event, and Dr. Erin Sorrell. Thank you so much for joining us today.

I want to thank the FAO for your strong partnership always and in particular for this event. So many people were involved in the success of today's event including colleagues from Washington, Rome, and Bangkok, and also thanks to FAO colleagues around the world for doing the important work of ECTAD.

Thanks to my team, especially Anita Kirschenbaum, Isabella Gascon, Emma Dodd, Zane Swanson, and David Michel, and to the CSIS External Relations team. To our audience, thank you for joining us in person and online. Those of you who are with us, again, are welcome to join us for a reception on the second floor foyer. And this concludes our event. Thank you. (Applause.)

(END.)