



>> So thank you all for coming. And our apologies for a bit of the chaos this morning. We do have some changes that are going to affect the TATFAR meeting, but we are all rolling with it and going to have I think a very successful international engagement. I want to kick it off by thanking everyone for coming. We appreciate your willingness to travel, your willingness to partner, and the spirit of collaboration that you bring to TATFAR. I'm Michael Craig. I'm Senior Adviser for Antibiotic Resistance Coordination and Strategy at CDC. And before we kick it off, we have some announcements about the water issues that have affected everyone's mornings. On behalf of the U.S., I apologize. We were told by DeKalb County that there was a water main break, and it is the largest water main break in the history of the state. It affects this campus. And so we have negotiated that we will be doing the opening session until roughly 9:30, 9:45, and then the campus is going to close, and we're going to have to identify alternative sites. So when the campus closes, everyone will have to go, and we are going to be in communication with you via e-mail on securing that alternate site and what the plan will be for the rest of the meeting. We have already secured a room for Thursday and Friday, and we will be also looking to secure transportation from your hotels to accommodate. We don't have everything wrapped up in a bow yet, but we will have that. And when we do have it wrapped up in a bow, we will be communicating with you accordingly. If you are having hotel issues, or if your hotels are forced to close or anything like that, please let Stephanie Gumbus know and be in contact with her. We will try to secure alternative accommodations for you if those are necessary. And we work to support and provide any guidance as we can accordingly, recognizing that this is an emergency situation that we were not apprised of until roughly 6:30 this a.m. So with that, I'm going to turn it over to Larry Kerr to introduce the meeting. And we'll go with it. So thank you all for coming.

[ Applause ]

>> Well, good morning, everyone. And Michael, thank you. You know, let me first start off by saying, what an incredible amount of work that your team, the TATFAR secretariat has done to assemble all of us here. And the amount of preparatory work that has gone into this has been absolutely breathtaking to observe. And could I just ask, could we please give them a round of applause because--

[ Applause ]

--they absolutely deserve that. And let me start then by saying, good morning once again. My name is Larry Kerr. I am the Director of the Office of Pandemics and Emerging Threats Within the Office of Global Affairs at the U.S. Department of Health and Human Services. And it is my incredible pleasure to welcome you to the TATFAR meeting of 2018, only our second in-person meeting. And, you know, I was looking over the roster. We have 13 nations represented. We have people from governments. We have people from academia. We have people from the private sector. This is an absolute incredible gathering, where despite the logistic challenges, we're going to have opportunities to network in this time period. So even if when we are displaced this afternoon, take this opportunity to get to know one another, because the value that we have in sharing and exchanging and talking will not necessarily occur during the formal sessions, but will occur often when we are able to meet one-on-one or in small groups. So, you know, in looking at the 13 nations that are represented here, I also wanted to welcome, in particular, this is the first time we've had colleagues from South Korea and Japan to join us, so we



welcome them, and from traveling so far to Atlanta for this meeting, we welcome their participation. I've already recognized, but greatly, greatly want to thank the TATFAR secretariat and the U.S. Centers for Disease Control and Prevention for offering us this facility, and now the incredible logistics aspects that they're going through to try and facilitate the ongoing aspects of this meeting during the water challenge. I also want to acknowledge The Pew Charitable Trust for their support in creating this meeting and helping us to get underway, and then to talk about and thank the two keynote speakers that we will have the fortune of hearing this morning before we disperse. But one of the aspects that, as I was coming and thinking about and preparing for this meeting, is each of us comes to this meeting with a common cause. Every single one of us wants to do every single thing we possibly can to combat AMR. From whatever our discipline, from whatever our background, whether or not we've been personally affected by diseases impacted by multidrug resistance, whether or not we come from a scientific, a medical, a public health, an advocacy standpoint, we are here for that common purpose. And so over the next couple of days, and then when some of us convene on Friday, we are looking to take all of the information that people have and are willing to share. And so over the next couple of days, I beg you to work, to share, to debate, to learn from one another, to help us strategize what TATFAR can do over the coming years, maximize its potential, and to keep it as one of the leading forces around the world, working with many other entities. I mean, we've seen the global conversation about AMR rise over the last few years. We must maintain that global commitment to action, and we must see those actions carried through. Commitments are words. Programs are implemented. And then we must measure those in terms of the impact that they are having upon people, upon animals, upon the economy, upon our national security, all based in the fundamental aspects that should antibiotic resistance rise, they threaten all of those sectors. And so I wish to welcome John Ryan, my co-chair, and thank all of you for your participation and look forward to the next few days learning and engaging with you. Thank you.

[ Applause ]

>> Thank you very much. My name is John Ryan. I'm the Director of Public Health in the European Commission. And I'd like to welcome you in my turn here this morning to this important physical meeting. As Larry has just said, we don't meet physically very often. Normally, our meetings are done very economically, I must say, through video or audio links, and we see tiny pictures of each other in the distance. But it is, I think, important on occasion to come together and actually have time to discuss and have lunch together, have coffee together, and actually bond and create the networks, which are very important for the survival of any group like this. This is a very unique group, I would say. I've participated in many international initiatives over the years, but this is really quite unique in the sense it's driven by a list of agreed priority actions, which are then followed up in every meeting. So it's not a process-driven organization. It's driven by a list of agreed objectives, which we agree across governments and across agencies. It's really a one health approach, which I think is really an example and a leadership to other countries in the world. And I welcome all of you here today, and want to thank you, as well, for all of your commitment. Because it's not very easy sometimes to get your word in in a video conference. The time is short, and it's not always easy. But there is a whole process going on there behind where you have contacts with each other over the year. And I think this is an occasion to mark our appreciation for all the good work that you do and the linkages you have established between our different countries. I'm also very happy to welcome the representatives of South Korea and Japan here today. I think that's also a signal that we're not a closed group, that we want to open, and also share our experience in working together with



other parts of the world. And I'm also grateful for the private sector representatives and the member state representatives who are here because that also brings your expertise to the table. Now, in regard to the organization of the meeting, I have to express my great thanks to our colleagues in the CDC, particularly to Michael Craig and to Stephanie Gumbus and her team for all the work they've done in setting this meeting up, because it's no easy feat to establish an agenda and to try and bring everybody together on an agreed day and to make it happen. And that's a very great achievement. And also the calm with which you're facing this water shortage is quite impressive, and I'm sure you'll find some solutions this afternoon so that we can continue our discussions between now and Friday. The aim of this meeting is actually to review the progress which we have made so far. We had our last physical meeting in Luxembourg in 2015. And since then, there has been a huge amount of activity. And as Larry said, the pace has picked up. The UN General Assembly adoption of a resolution on AMR, but also the G7 and G20 work has been continuing. And the European Union itself adopted in 2017 its own action plan, second action plan on antimicrobial resistance. And we'll be talking about this in more detail later on. So antimicrobial resistance is a political and health security objective for the European Union, and it gives me great pleasure to introduce my Director General, Xavier Prats Monne, who has traveled here to join us here in our meeting this morning, to give his perspective on the challenges we face, and the next steps. Xavier.

[ Applause ]

>> Good morning. Good morning to all of you. I've been doing some inquiries about Rear Admiral Schuchat. And I hear from sources within and outside CDC that she is a good woman to have around in a disaster. This applies mostly to the Avian flu type of disasters. It applies to the common flu type of disasters. And I know that Dr. Schuchat has done a fantastic job in this year's influenza in the U.S. I'm sure it applies also to water main disasters. And I guess this is the reason why Rear Admiral is not here with us yet. It's a very good reason. If I had to choose between addressing a water main disaster or listening to a speech by me, I know very well which one I would choose. Having said that, I would like to just start by saying that, indeed, it is really an honor for me to be here, to grasp the opportunity that this is the only second physical meeting of the TATFAR. And the first thing I want to do is indeed to acknowledge the extraordinary work that the CDC has done, particularly the secretariat for the TATFAR. And as most of us, or at least many of us, certainly myself, are [inaudible] but prefer to call ourselves public servants, I'd like to stress that we talk about institutions, but behind institutions, there is very committed efficient and extraordinarily dedicated people. And these people are, in particular, Michael Craig, as we said; Jean Patel, she's a scientist for the TATFAR secretariat. And indeed, Stephanie Gumbus, who makes it all come together. And I would like to just say from our heart that we are extraordinarily grateful for what you are doing to help the TATFAR task force go ahead. And now to say a few words, but it will be a few, I know that this is not the place to stress, it's really familiar to stress the importance of the gravity of antimicrobial resistance is a challenge. Actually, this is not really a very new problem. Well, an example framing of the model price in 1946, he started in his speech by warning about antimicrobial resistance. So it's not that it's a new problem. It's just a problem that is becoming extraordinarily acute. And I had a look at the 2017 report by DCD on AMR. And it was, if I wasn't shocked, it's only because we have similar reports. I believe you had twelve hundred and seventeen million prescriptions of antibiotics in the U.S. in 2015. 30% of those, unnecessary. I mean, this is really, really something to think about, and something maybe we should try to do more. Because as you know, we had the [inaudible] reports on antimicrobial resistance, a particularly interesting piece of work, not [inaudible] comes from treasury. He's a finance minister, but a health official. And he had a very striking presentation of the



economic impact and the human impact of antimicrobial resistance. It's boiled down to having, if we continue like this, 10 million deaths of antimicrobial resistance by 2015. And maybe more important to him because this is about human people. More importantly, we risk not being able to perform a simple cesarean operations. So this is how serious the situation is. But I don't want to give a gloomy picture, because, indeed, we have many good news. And many good news in terms of the progress that has been made. And importantly for all of us, in terms of the priority that our top political leaders in our own countries, in the EU, in the G7, in the G20, indeed, in the General Assembly of the other nations has been given now to antimicrobial resistance. I believe the other nations' General Assembly has discussed health issues only four times since its beginning just after the second world war. One of them was on AIDS. The other one was, indeed, antimicrobial resistance. So this gives a sense that there is now an opportunity. And I think, as has been already said, I think it is now up to us to grasp this opportunity and translate these words with intentions, exponential statements into facts and actions. From our side, as John said, we have, indeed, an EU action plan, approved in June last year. We would produce, in a matter of weeks, a report on the state of implementation of the action plan. This is because in our institution, and I fear in some of your institutions too, we do have sometimes action plan that have more plan than action. We were determined to avoid this. We have, as I said, an action plan that has over 70 actions, and that is organized around three major themes. The first is Europe as a best practice region of antimicrobial resistance, partly because in some areas, we are a best practice region. But certain because we want to make sure that we become a best practice region, and that we bring up the standards of some EU countries to the best levels that we have. We have countries in Europe. So the difference between, for example, let me look at the level of prescriptions, of unnecessary prescriptions in humans. We have a difference between the threefold model. The threefold difference between the best performer, the [inaudible], and the worst performer [inaudible] for example. And when it comes to veterinary medicine, the difference is about 40 times between the worst and best performer. So there's a lot of room for improvement, for learning from each other. And the first trend of our action plan is about exchanging best practice learning, but also monitoring civilians through CDC indeed, and through the help of CDC also. The second strand is research. And we are doing a significant effort, as we've done in the past, to make sure that we have a strong element of innovation and research. To compensate, of course, for the fact that we have not really found new strands of antibiotics for the last quarter century, but also to look at early diagnostics and improvements in other areas that would help reduce antimicrobial resistance. And then the third aspect is the one that I would like to focus more, because it is a response to the fact that we are very conscious that antimicrobial resistance has to be a global effort. And this is why the third aspect of our action plan focuses precisely on this, on making sure that the European member countries contribute to the global agenda against antimicrobial resistance. And one of these aspects that we mention explicitly as a promise for the future is TATFAR. Yesterday, when we arrived, we had the privilege of visiting the [inaudible] here. It was, on the one hand, reassuring because it was empty. Not completely empty. It's never completely empty. But it was reassuringly not a hectic place at the time, which means that there was not really a big problem. But it was also a reminder of how strong the contribution of the U.S. is to fighting communicable diseases and to fighting epidemics around the world. You just needed to see the level of intense monitoring, and the presence of CDC staff around the world. But it was also a reminder of how global the problem of antimicrobial resistance is. So this is why, as I said, our all action plan is really focused on ensuring that EU, the EU and its countries strengthen research, cooperate more with each other, but also contribute to a global agenda on antimicrobial resistance. Now, what about TATFAR? Again, I think it's really quite extraordinary what we have achieved. And what we have achieved in terms of practical experience, in terms of concrete operational results, two reports that have been quite extraordinary recently by TATFAR, by CDC. So we have many achievements. And the question for all of us, I think, is what can we do more? And I think we may want to look at the things that we may want to do



more [inaudible]. The first is do we want to commit ourselves to more quantified targets, to more specific objectives, that we can hold ourselves accountable to? Process and good practice is fine. Maybe we can think of how over the next years, now that we are midway through the mandate of TATFAR, how can we try to think about specific objectives we could aim at together? The other point we may want to look at is whether there are any specific areas that deserve particular attention. And if you look at what AMR is as a global phenomenon, one area that comes to mind as an area where the TATFAR can focus more is what it could do in terms of leading the way and being an example by practice and by experience for others to follow. And the area that comes to mind immediately is the use of antibiotics for growth purposes in animals. The EU has done extraordinary progress in this area. We put legislation in place 11 years ago. Canada, Norway have done exceptional progress. The U.S. has done exceptional progress, FDA guidance. The private sector industry is sensitive to this issue now. Can we make sure that we use the experience of TATFAR, that we use also the new [inaudible] that are being associated increasingly with TATFAR, to make sure that this issue is more present internationally, and that other countries follow the experience that we have in TATFAR and do more in this area of the use of antibiotics for growth purposes in animals? This is just an example of the sort of things we could do more together. We hope that over the next two days, we'll have a better chance for this class what the panelists are now part of TATFAR could do, whether we can have specific objectives to take ourselves accountable, and when we meet again, make sure that we can test how strong our willingness has been, and also to make sure that we, as a community of countries, 13 countries presented here, can also be an example for others who follow in the future. Thank you very much.

[ Applause ]

>> Ladies and gentlemen, you'll indulge me if I have a bit of a rare honor this morning. And I say rare because I have the opportunity to introduce someone to you all that I view as a hero. Dr. Anne Schuchat is an individual that is absolutely remarkable, and I want to sing her praises for just a second. I've had the honor of knowing Anne since around 2006, but her distinguished career begins at CDC in 1988 where she was an Epidemiological Intelligent Service Officer. Anne as a person is a leader. She is a physician, scientist where I've seen Anne go toe-to-toe with the best experts in medicine, public health, epidemiology, and be the advocate for public health writ large. She's an individual that knows not only just, you know, one or two diseases, but she knows diseases writ large and has an expertise across many areas. In 2006, when we were working on the national strategy for pandemic influenza, Anne was the voice for CDC that helped launch not only the domestic, but the global efforts to prepare for influenza that last, and those capabilities exist today. She's an incredible advocate to our Congress, fighting for CDC's budgets and programs and making sure that those make it out to our states and international partners. She's an absolute leader in the sense that she's been asked many times to step up into the leadership position and guide this incredible institution that is CDC, both domestically and the global efforts. And I've seen a remarkable capability for, in one breath, to be briefing the president and the cabinet members and defending CDC's recommendations and guidance and policy advice, and in the next breath, turn to the public and be able to explain those in lay terminologies in a way with confidence and a manner in which they understand, respect, and appreciate. So when I say I have the honor, I really would ask you to help me welcome to the stage Dr. Anne Schuchat, Admiral, Rear Admiral, excuse me, within the Public Health Service Corps.



[ Applause ]

>> Thanks so much, Larry. And my mother sent him those remarks. It's a delight to look out and welcome you. I don't know how much has been said already about the excellent water supply here in DeKalb County and here at the campus. So I am so sorry for what you all went through at your hotel and what you're going through here. And I understand after my remarks, we're likely to be moving the meeting to another facility. But I definitely wanted to have a few minutes with you this morning to let you know how important I think this work is, and give you sort of my personal take on the Transatlantic Taskforce on Antimicrobial Resistance, and the challenges that you face and the opportunities that you have. In preparing to speak with you, I was thinking back 15 years ago to an antimicrobial resistance meeting that I attended downtown in Atlanta. It was a convening of 27 states around the United States where we were working together with state health departments on the new challenges we were having with drug-resistant respiratory infections, particularly *Streptococcus pneumoniae*. I see Maryann shaking her head. She was probably at that meeting too. It was March of 2003. And it made a real impression on me. The public health and healthcare and many states were convening with federal partners to talk about the issues. But what really made an impression on me was returning from that meeting downtown to the CDC to what was then the National Center for Infectious Diseases, and sitting in a small conference room with a few of my colleagues from around NCID, including Dr. Cabas, who was then in viral diseases, and learning of an unusual severe illness occurring in nurses in Hanoi at a hospital, and in a multi-generation cluster in Toronto, Canada, and in hospitals in Hong Kong. CDC was getting reports from WHO and partners in other countries about what was going to be called the Severe Acute Respiratory Syndrome, a nightmare infectious disease with no treatment that was jumping continents, affecting healthcare, and frightening the public. Today, antimicrobial resistance has a lot in common with the SARS pandemic, the issue of infections that we don't know how to treat, challenges with diagnostics, ability to spread rapidly silently from country to country, and a critical role for the human-animal interface. As I looked at the agenda of what you are trying to tackle, and why the Transatlantic partners really do need to come together in both a multilateral and bilateral way, I realize that the SARS story really resonates. So I know that your three days of meeting where we do hope to get you water and power and bathrooms, for instance, I know that you have a chance to roll up your sleeves and continue to make progress, but I just want to say how important the connection between countries is, the connection between sectors, the role of detection and response and containment, as well as the opportunities for prevention. We heard a little bit about antibiotic use on the farm or in agriculture. Clearly, we have a focus on improving antibiotic stewardship in healthcare and in the community. These are not issues that are the purview of one doctor or nurse, one hospital or facility, or one country. And so the ability to work together is vital. I also heard a little bit about best practices. And I know as I was learning about *Candida auris* and this really nasty new fungus, that it was the UK experience that helped us understand how to tackle that in your own facilities. Last week, we had a great event in Washington with congressional staffers around the antimicrobial resistance challenge here in the U.S. And going from discovery and research through to delivery and containment, we have a job to do. We heard about Alexander Fleming. And I just want to tell you my own story, that my uncle was a pulmonary physician actually and did his training in the 1940s here in the United States and described to me taking care of patients, you know, in Brooklyn, New York, before there was Penicillin and after there was Penicillin, and seeing the difference it made for pneumonia patients. That was my uncle's story in his medical career. Now, my nephew, having knee surgery, the same week that I got the MMWR report about the nasty graft-related infectious diseases that were being spread in minor surgery, realized that in the course of just a couple generations, we've gone from breakthrough drugs to nightmare infections. So what you're doing together as



TATFAR, as multilateral and bilateral and as individual leaders, is just critical. CDC and the U.S. government place antimicrobial resistance as a top priority. I am here to reaffirm that we continue that in this administration. We're really looking forward to working together on the family of issues. And I will apologize again that we do not have water. So thank you so much for all you're doing. And again, Larry, thank you for the nice introduction. Thanks.

[ Applause ]

>> Good morning again! So we have information on our alternative plans for the day. But did you know that CDC has a museum? And it's on this very campus. And it has a lovely exhibit right now related to Ebola. And that's what we're going to go look at next. Yes, so we're going to have to exit here because they're going to have to close these facilities because the campus is closed. But we are going to take--we are all going to go look at the museum. It is an affiliate of the Smithsonian, so it's a real deal museum. And while we are waiting there, we have secured transportation from the CDC shuttles to take us to an alternative site for today. So we are going to continue the meeting today. We might have to alter the schedule accordingly, but we will have shuttles to take us to the alternative site. It won't be as luxurious as what you have here. But we will do our best. And we will have shuttles to take folks back to both the Emory Conference Center and the Decatur Courtyard later this evening. We have secured the same building for Thursday and Friday. And we will have shuttle transportation in the morning and evening to and from. So there will be a little bit of hiccups here. But in the meantime, thank you all for a wonderful morning session, and continue to have some bilateral discussions, and we'll head out to the CDC museum while we await our transportation. Thank you.