



World Health Organization

WHO Virtual Press Conference on Ebola response

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Speakers

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BA Bruce Aylward
JC Jamil Chade
GS Gabriela Sotomayor
TM Tom Miles
TU Tulip Mazumdar
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MK Makiko Kitamura
FD Frédéric Durand
JH Jan Herbermann
MS Masaki Kondo
MC Maria Cheng
JY Jennifer Yang

BA Welcome everybody. Tarik, you're going to introduce us but I always want to say our goal is always get down to the Palais but other people wanted to hear from us and we understand we can't link them in from there. As many of you know, I've ridden my bike up and down to the Palais many times to brief you and I'm always happy to do that, so thank you for accommodating us today. Tarik.

TJ Thank you Bruce. Good afternoon again everyone.

BA Now you guys understand why my staff really hate me.

TJ Good afternoon again everyone here in Geneva in WHO Headquarters but also to all those who are calling in for this virtual press conference with Dr Bruce Aylward, our Assistant Director-General, who will give us an update on response to the Ebola crisis. Dr Aylward has been briefing media in the past and we are planning to have, regularly, this kind of briefing so everyone is up to date with what is happening right now on the ground. Before

I give the floor to Dr Aylward, just to give you for your information, one is that the audio file from this virtual press briefing will be available shortly after the end of the briefing while video package and transcript will be available a little bit later. We will start with Dr Aylward giving an opening statement. After that we will start with questions. For those who are online, we would ask them to type 01 on their telephones and that would place them in the queue to ask questions. I will give the floor now to Dr Aylward for the opening remarks.

BA Good afternoon everyone, again, it's going to be remarks, not a statement. First a couple of words by introduction and to those of you who are on the line, there may be a few people on the line that I owe a particular apology to because I don't think I've ever been so either popular or unpopular with the press in terms of the requests for interviews and information. And I want to apologise upfront for being unable to realise so many of them but I've been in this position for a week and my job is to get the response up, not up but reinforced, especially our interface with UNMEER and that's taken a huge amount of time. So, apologies to so many people whose phone calls I haven't returned. For those of you who've worked with me on other programmes like the polio programme, etc, you know that we do make ourselves fully accessible and that's still the goal, it's simply the demands on the time right now. Yesterday I went to bed at five and got up at seven and that's really frequent these days, so when I am talking to you I'm often a little garbled, as well. So, apologies again and again, it's simply having the time to be able to talk to people.

Just a little bit of the context for a few comments today. As you know, I just got back from Sierra Leone, Accra, I was in Conakry as well and then I was in Washington at the end of last week for the World Bank meeting that was convened by Jim Kim. And there, as I think some of you may have heard, I suggested that we all get behind the 70:70:60 target which seemed to cause a tremendous spike in demands on my time to explain what is that about. And Christy ended up having to deal with a lot of the questions, and Tarik, and they said, look, would you just answer these questions. So, part of today is really to bring people up to speed on that. Then I'm getting on a plane tomorrow. I'm on my way back to Accra. So, I think what we wanted to commit going forward is that we regularly sit down and try and brief you on what we see is happening with the outbreak, with the trends, with the response, etc, and then through me, of course, to anything to UNMEER or others as we go forward. So, that's a little bit of the context.

In terms of the overall numbers, just because you're going to ask me for them if I don't give them to you, it's 8,914 cases are the number today. We will go over 9,000 cases this week; this trend, as you can see. The number of reported deaths are 4,447 as of this morning and those are the numbers you'll see in our SitReps for those of on the line as well when it goes out tomorrow. There's a couple of things I'd like to highlight about those numbers that seem to get lost in the way they're presented sometimes and the first is that 95% of those are occurring in 19 of the 67 districts, countries or prefectures across the three countries. And one of things as we looked at the data earlier today was, okay, that's where it is today, where was it a month ago and, in fact, one of the guys who had updated the data said it was almost exactly the same, it wasn't very different. Because, as you know, we're seeing areas where it ebbs and flows, the disease, a little bit, where it escalates. But over the past month about 95%

of the cases and really about a third of the districts, counties or prefectures; and I want to say the three because that first administrative level is different across the three countries.

A couple of other trends that are interesting that you may see in the data as you look at it and we get it out to you. One is if we look at the reported number of cases over the last four weeks and we take seven day blocks for which we have full data it's been running about 1,000 cases a week now for about three to four weeks. A couple of people have looked at that and said, well, what's going on? Is the epidemic slowing down or are we not seeing the exponential growth? And quite frankly, it's too early to say because, as most of you know, the numbers go up and down. The labs sometimes can't keep up with the amount of specimens they're getting. When you start getting up in the thousands of cases like they are now, sometimes countries end up with a big stack of reports that they're going to have to sit down over a weekend and get a bunch of people to enter into the computer. So, really too early to say because there's a lot of data issues around them.

But there's a couple of positive things we're seeing that, again, I think some of you have seen and one is a slowing down of the rate of new cases. In some areas in what's been the historic epicentre, Lofa County, Liberia, in both Kanama and Kolahun it's been slowing down over the last couple of weeks, as well. Now, as some of you also know though, in Guéckédou right across the border, we've seen the disease go up and down, as well. But when we look – and I have to be careful because I've not been into either of those areas myself – but as we talk to our teams on the ground there and teams from other organisations... I've learned you talk to your own teams but you really learn when you talk to team working for other people sometimes, so we speak to both. There's a lot of information that suggests that this is the result of real change in the behaviour or the approach of communities, most often. We've talked about this before, just how important those behaviour changes in the communities are to bringing this down.

But remember, I have to be careful what I say with the press, but some people look at that and they've said to me, that's great, there's only a little bit of disease and I've said, well, that's like saying you're only a little bit pregnant. This is Ebola. This is a horrible, unforgiving disease. You've got to get to zero. And what gets you down to a level of control may not be and usually isn't what's going to get you down to zero. As you guys know, with a bit of change in the behaviour of the populations, with some burials happening safely, just increasing that a bit; with a little more case management, a couple of new centres opening and getting cases in, you're going to slow this down very quickly. That's not going to stop Ebola. To stop Ebola you've really got to have great contact tracing in place, great case finding in place, same day isolation, all of those pieces that you know about. And those pieces are not systematically in place in these places.

So, as we go forward there's a lot of people involved in this response because it's so big who are going to be looking at trends and saying, okay, that's great, we feel good, we can back off and, in fact, it's then that you're going to have to really put the pressure on this virus to get it to zero as, again, I think most of you now are familiar with. A couple of positives, though, and the reason I wanted to highlight those couple of places is what it does demonstrate a bit is

the proof of principle. When we're looking at something like that 70:70:60 target we'll come back to, is there any evidence that those kind of targets could actually turn the tide of the disease, at least in terms of the carnage that it's leaving in its wake right now? And so, yes, there is new information in that regard.

There are some concerning things, though, that we saw; certainly I saw when I was in the countries over the last couple of weeks and then also looking at the data. And the first is that the disease continues to expand geographically. There are more districts, counties and prefectures that actually have disease than there would have been a month ago and it's happening in all three countries; you're hearing one or two new districts or counties or prefectures. And it's important looking at a map, as well, where they're coming up because they're on the border areas, as well. With Côte d'Ivoire, in particular, we're seeing some additional areas reporting cases that we hadn't. So, that's concerning, just that geographic expansion.

The second thing that's concerning... I see a couple of people shaking their hands already. Sorry about that. Slow me down a little bit if I'm going too fast for you. The second thing that's concerning for me is what's happening in the capitals. In capitals of all three countries you're seeing different numbers of cases, different burden of cases. And we often talk about Monrovia, of course, and the huge number of cases that we're seeing there but also in Freetown and Conakry you have escalating case numbers. So, while those overall trend that we look at over the last few weeks is relatively flat there may be a number of reasons for that that may not... people may draw the wrong conclusion it's coming under control. Certain areas we're seeing disease coming down, appears to be for the right reasons but that doesn't mean necessarily they're going to get to zero and even more concerning the geographic expansion and the disease in the capitals.

So, any sense that the great effort that's been kicked-off over the last couple of months is already starting to see an impact, that would be really, really premature. And this is because we're really facing a number of big challenges and what I thought maybe first is to share three thoughts of what I saw coming, as I have, from a couple of the countries. The first is I see a couple of gaps that are going to be absolutely essential to get addressed and you may have heard this in one format or another before but the first is really getting these programmes to common operational plans, believe it or not. There's a lot of actors on the ground. An awful lot of them are working with Ebola and these kind of diseases for the first time. There's a huge amount of goodwill and desire to be relevant in this. And what's happened is a lot of things, actually, are happening but the challenge right now is making sure all of that adds up to the kind of plan that you need to stop this disease and I keep it really simple, as I did in Sierra Leone. Have we got, in one place, for every single district or county or prefecture, have we got who is doing burials or taking the lead accountable to say this is the infrastructure in place, this is the percentage of safe burials being achieved now same day? Who is taking the lead on case finding and contact tracing? Who has got the lead on case management and care? Who has got the lead on the behaviour change piece? Every single district. I think, at a high level, WHO will lead on the case finding and contact trading. We'll be accountable on making sure that piece is in place; UNICEF on the behaviour change, etc.

But an awful lot of us, of course, are working through partners and making sure that's in place. So, in every country the presidents and others are concerned that we are to a common operational plan. So, that's a top priority and deliverable of UNMEER and the work that Tony is driving, really impressively, actually, out of Accra.

The second thing that one sees is that real sense of crisis management and how you run and manage a crisis isn't present as it needs to be. It's tough in crises because, as you know, it's one thing if you're running a military and you have a command and control structure, it's another thing when you're running an awful lot of partners that are funded different ways, they have different accountabilities, etc, and you have to get them to common purpose, as well, and accountabilities. But there are things that can be done. Every country has got an emergency operating centre or something to that effect. Often it's a meeting. Everybody gets round the table, says what they're doing and you know what? I don't care. What I care about is here is what has to be done, is someone doing all of those and does this all fit on the critical path that gets you to zero? And if they're not, are people being tasked against those gaps and being held accountable? So, it's got to be key, especially as you get this disease closed-out that that critical path and that common operational plan we talked about it super solid and then that crisis management of that plan is really in place and that the investments, the monies, the activities that are going into these countries that you read about every day are actually against those.

The third big gap or challenge that was evident is just the geographic presence of the response effort. Clearly now, in Sierra Leone and Liberia you've got to have the capacity to implement and support the government efforts in every single district or county of those two countries and right now this is really hampered by issues around infrastructure, logistics, connectivity, etc. And one of the early commitments that UNMEER has made now is we will get field crisis managers not only in the capital of each country but in each of the key districts and prefectures, etc, and I think we're gunning for about 45 in that regard. And I haven't been in Accra for, what, about six days but I understand that already we've got 12 of them under recruitment. So, again, one thing you'd say for UNMEER, it moves very, very fast and that's why you get briefed about where UNMEER is from Tony, two days later it's out of date; not out of date, they've built on it or we've built on it because moving so quickly.

When I've mentioned those three gaps we see round operations planning, common operations planning, common crisis management that everyone will be accountable to, that geographic presence; those are three tough issues. They've been in place there for a long time and UNMEER has prioritised all three as to what they will bring to the table. And you saw the Secretary-General even before we'd left Conakry or the next day had announced/nominated three people as Ebola crisis managers. And, again, that was a recognition. They got to the ground, they realised this is a key gap, we have to fill it, we have to empower and bang they were in place. So, that's some of the challenge at country level.

Internationally, a lot of resources, not a lot of cash in the multi-donor trust fund. Dave Nabarro has got the best numbers for you and he'll be tracking that. I spoke to Dave. Dave and I sat down last night. I'm going to get his number wrong. I think it's \$22 million in

commitments against the billion dollar multi-donor trust fund. Now, remember, not all money has to go through the trust fund. Some of it obviously is going to be in bilateral and in kind, some of it direct to agencies, etc, but there's going to have to be real financing of that trust fund if we're going to be able to keep all the necessary parts of this initiative moving forward.

The second gap continues to be in the area of human resources. You've heard about this before. At the national level there is training programmes being put in place; strong training programmes, particularly in Sierra Leone, Liberia by both the UK and the US is working with us, WHO, and with UNMEER, and that will rapidly scale-up, that capacity. But then there's still that challenge of getting internationals on the ground in these countries who have got expertise, in Ebola ideally but, as you can imagine, we've far exceeded that but expertise in infectious disease, expertise in infection prevention and control in particular and in the areas relevant to the response. Some of the constraints to getting that international capacity on the ground are being overcome. One of the biggest challenges, of course, has been the availability of high-quality in-country care for people and now the UK hopes to open by the end of this month a 12-20 bed – the number fluctuates still a little bit – facility that would provide UK-standard care for any responders; at least international responders; I believe any responders. And then on the Liberia side, US is working to put a similar capacity in place.

And then, at the same time, the second piece is trying to get in place the medevac capacity, as you've heard about. And again, now, the UK, the US, but especially the EU is really working to put in place now an integrated mechanism that will help ensure that we always have at our disposal the capacity to medevac someone who may, number one, be infected with the disease obviously and unable to receive the level of care necessary for their condition, again, among the responders; so, some progress being made in that regard. But the third thing, I think, the most encouraging is that there's an increasing number of NGOs, countries and others talking to us about can they deploy a team to help with the case management and run one of these Ebola treatment centres in one of the two or three countries; so, again, some very positive things in that regard.

Maybe the last couple of comments. There's a lot of bleak news out there about this outbreak and there should be. That's appropriate. It's a terrible, devastating disease and unforgiving, not just in terms of the populations it ravages but also those who are trying to respond and help as well, unfortunately. But there are a lot of things that are positive. We talked a little bit about the trends that were seeing in the disease in some of the epicentre areas. We're seeing the step-up in the international response. The UK's response you know about and I met with them on the ground while I was there in Sierra Leone. It's impressive. It's integrated with the government. It will follow the government and the rest of the players, as well. It's really aligned. And then, in Liberia, the US commitment there which everyone has heard about which starts to add up now to the kind of treatment capacity that is going to be needed.

We've seen some positive things in Monrovia. There has been a real concerted effort to scale-up the number of burial teams. You all know about the challenge that that was and I mean it was not just a horrible thing in terms of being able to ensure dignified burial of the remains of people who'd died but also it was a source of tension and anger, of course, in some settings

about how this was being handled. But in Liberia they've gone, if I understand the numbers right, from about six to 54 safe burial teams in the course of September and in Monrovia they reported out, one of the groups working on that, that they were getting to over 80% now safe burials in a very, very short time period, as you've heard. And, again, important because a lot of what we need to know is can we hit the kind of ambitious targets that we're setting out and are they ambitious enough? And the other thing about the geographies I talked about a little bit. So, there are a lot of things happening. And then you saw the Bank under Jim Kim's leadership has just been exemplary, coming out with additional financing commitments, as well.

Last week at the Bank I said, look, the numbers we need to get behind are 70:70:60; that number is 70% safe burials, 70% cases being managed and cared for properly; and within 60 days of our start date which for UNMEER we're taking as 1st October. So, our goal is to have that in place by 60 days which would be 1st December. And those numbers come from our assessment of what it's going to take to... you've heard Margaret Chan and others talk about bending the curve and trying to get that upward curve go in the other direction in terms of case numbers. And so the 70:70:60 is really designed to strike that balance between how fast, with an incredibly concerted international effort and commitment can we build those capacities and then how fast will that have an impact in terms of cases. And we believe that 70:70:60 that's a real stretch target; that's really pushing the system hard to have that kind of capacity in place but that is the goal because if we don't do it in 60 days and we take 90 days, number one, a lot more people will die that shouldn't and, number two, we will need that much more capacity on the ground eventually to be able to manage the case load.

What we did as well – a lot of people say, well, is that feasible? – well we went out to 60 days with some of the projections that we'd been doing in terms of case numbers, etc, and again it's impossible to look in a glass ball and say we're going to have this many or that many but we anticipate the number of cases occurring per week by that time is going to be somewhere between 5,000-10,000 a week; it could be higher, could be lower but it's going to be somewhere in that ballpark. And the goal now is taking all the different pieces of the response that are planned, everything from the Ebola treatment centres, to the people deployments, to the community engagements and trying to make sure we've got that capacity in place by that time so that we can ensure 70% of cases can be properly managed or isolated and 70% of burials can be done safely by then. So, that's where the 70:70:60 came from and as you've seen from the data from Monrovia, you can probably hit that pretty quickly in terms of safe burials but remember that's an urban centre where it's easier to get to, logistics are easier in some ways, etc. Getting it out to some of those rural, tough areas is going to be harder and remember, as well, some of those practices that you're dealing with are much deeper-rooted sometimes in the rural areas than in the urban areas. So, there's going to be huge challenges and different kinds of challenges as you try and scale it geographically.

And in terms of case management, as you know, big commitments for a lot of additional capacity from the US, the UK in these countries and France in the case of Guinea with an additional centre in Macenta that they've said they would put in place. But in addition, in each of the two big countries, in particular, Sierra Leone and Liberia now, they are looking at

scaling-up more rapidly in the community level what they're calling CCCs or CCUs but community care units which would be very, very small units – two-four beds, something like that – where, if treatment centre beds aren't available, people can actually be managed without being at home where through either throwing-up or diarrhoea or whatever they would be infecting a lot of additional people.

We think that there's sufficient proof of principle that it can be done. We know from the mathematics and the epidemiology, the modelling that that could change, that rate of week-on-week cases but there's going to be some big challenges, not just in achieving, also measuring it. These are tough things to measure. I know what you guys are going to do next week is, okay, what percent are we at now and I'm going to say I have no clue. No, I'll say we are at more than we were last week or I'm going to say we're more than we were two weeks ago but a big part of what we have to do now is try and put in place the capacity, also, to measure these things, as well.

Now, as we go forward here at WHO, as Christy and Tarik said, they're sick of trying to answer all the phones when I won't. So, when I am through Geneva I'm quite happy to sit down and brief or update and take questions on whatever I've seen most recently, what we know, what we don't know. We are also dividing up our work a little bit. Keiji Fukuda is going to head all the work on the preparedness side of things, particularly in the high-risk areas and the IHR-related pieces which sit under him. So, he'll be able to brief on that. In fact, it would be good for him to do that soon because he was just in Brazzaville working that out right across OCHA and all the other partners. And then Marie-Paule Kieny, who some of you know from here, who is another ADG, will head up our experimental therapies and vaccines work. So, really depending on the issue and what's more topical, one of the three of us will try and brief every week. If it's a waste of your time tell us because it's really hard for me to find that much time in my life right now but, again, we're hoping to find a more efficient way to help keep you all up to speed. And I'm going to get on a plane right afterwards, so I won't be answering my phone. Okay, so with that, Tarik.

TJ Yes. Thank you very much, Bruce. It's 2:33, so we'll start with questions. Like we did last time we will go first for three questions from the room and then we will be taking three questions from journalists who are online. So, I have here Jamil, then Gabriela and then Tom. Can you please ask your questions? Please state your name for all those who are listening, as well.

BA And Tarik we're going to take three at time because then we're going to pick one out of three to answer, right? I wanted to say if I do forget to answer your question, tell me, because I don't get enough sleep to remember everything, even when I write it down.

JC Jamil Chade, I'm a journalist from Brazil. A question first on this issue of getting the centres ready to deal with patients there and not evacuating them to the United States or to Europe. Why are you doing this? Is it to avoid contamination in the US and in Europe? Why is this being set-up? And just to clarify that 5,000-10,000 number, when is that the projection? Is it for the 1st of December?

BA Yes.

JC Okay, thank you.

TJ Thank you, Jamil. Gabriela, please.

GS Yes. Gabriela Sotomayor, Mexican News Agency. Regarding the situation of health workers in Liberia that were going to call the strike, could you tell us about that? And, concretely, how many beds do you need in Guinea, Liberia and Sierra Leone? Thank you.

TJ Tom.

TM Tom Miles from Reuters. About the figure of health workers: initially you had a target to recruit 12,000 locals and bring in 750 foreigners. That target is noticeably blank, the progress accounts of that target, on the UN website mapping progress. So, where have you got to? And also, since it's based on a ratio of the number of cases, number of beds needed, what's that target grown to because it must be going to be a lot bigger than the initial 12,750?

BA Sure.

TM Thank.

TJ Thank you, Tom. Bruce, would you like to take those?

BA Yes. First, on the in-country care, the why, in fact I'd never ever thought about it in terms of avoiding contamination of other countries. That was not the driver; not at all. The big driver, first and foremost, was just because there was not enough medevac capacity frankly, enough beds, enough medevac capacity. Even now it's quite constrained. There's not a lot of airplanes around the world that can actually transport people that actually have these kinds of disease. The other thing is you want to be optimising the care of these people as early as possible and what has been happening is sometimes it could take some days to sort out the medevac and move them and people deteriorate during these periods. So, you want to make sure that you can get those people into supportive care appropriately as rapidly as possible to optimise their chances of survival. And then a third factor, remember, is this is like any kind of clinical... medicine is an art and a science and part of it is how often you have seen something and managed it that builds your skill set to be able to really optimise care and then by having high-end in-country capacity you could concentrate, hopefully, that kind of expertise and that kind of experience because most of the places where cases have been medevaced to they've dealt with one case here or one case there and they've having a huge effort trying to just coordinate what works, what doesn't, so it's trying to get that together, as well. In fact, until you asked, Jamil, I don't think anyone had asked about to avoid contamination and really that... I know that there have been obviously breaches resulting in secondary cases but one of the realities of Ebola and Lassa and diseases like this is once you know the pathogen you're dealing with you usually eliminate healthcare worker infections immediately because you know it. And that principle still holds. You should be able to manage those things. Things will happen and they have but it doesn't change those basics.

In terms of the 5,000-10,000 cases that would be a week; so, a rate per week in the first week of December. And, again, that number will go out there a bunch of monitors are going to come and say, oh, WHO has got its head up its rear, that number is actually 50,000, that number is two but it's having a careful look at the information. And, again, it's a bit of an art and science because the modelling tells you one thing but then the one the disease is actually behaving over the last few weeks tells you something else and remember every time you isolate another patient, every time you have a safe burial you're taking some of the heat out of this outbreak. Is it Maria, sorry?

GS Gabriela.

BA Gabriela. Pardon me. I'm sorry. I just figure I'm going to meet people a few times so I should learn some names here. In terms of the healthcare worker strike in Liberia, I have to be honest, I know as much about it as you do. I probably know a little bit more because I read the paper. I wasn't in Liberia so I wasn't actually actively managing that or engaged in it but one of the recurring themes we're seeing in many countries is that countries are coming out with policies about if you are a healthcare worker involved on this, they've got to be paid the salary, they've got to get hazard pay in each country, laying out this is what that hazard pay would look like and then often, as well, insurance should something happen. People have families and there are very, very fractured – that's the wrong term – frayed safety nets in these places so that insurance has got to be there if something happened, as well. And now the countries have all come out saying this is what that will look like but it's really hard to put that in place and make sure people are actually receiving it. So, there's a bit of patience for it at the beginning and that patience wears thin pretty quickly and that's what we've seen in most countries where we've seen either the threat of or the reality of healthcare worker action. And, at the end of the day, yes, these things have got to be fixed. They should have the right to make sure that they... they have a responsibility to their families, to their communities, as well. And that's what they're doing, they're demanding that. For those of you have spouses, I think you know when you go home in the evening if you haven't got that extra piece of your pay or something it's not good enough to say the boss didn't do it. You are using your voice to make sure you do get paid. And, again, different mechanisms are being used to make sure they're in place. The Bank is providing some support to countries to make sure they can ensure those extra payments are in place, etc.

Now, in terms of the actual number of beds in the countries right now; gosh, I don't have that number. We update it every day. We're about... I'm going to get wrong. What are we, about 2,000 right now, if I remember correctly; maybe a little bit less than that. We can follow-up with the number. We actually have spreadsheets where we track these things every day and, by the way, we will be making those things public. We're just trying to get the information sorted now so that you can see what is the target for each country, what is the actually today, what is the gap and we want to make sure everybody can see those numbers. So, again, it's one of the things we're trying to put together. We do have those data and, you know what, I'll try and pull it up while I'm speaking.

In terms, Thomas, of the number, 750 and 12,000, those are still, in general, the ballpark numbers. They're going to be a little bit higher than that but what we're finding, Thomas, as we go forward in this epidemic is that the MSFs and the emergency... there is this great Italian NGO working in Sierra Leone and the others. We're learning a lot. A lot of our original estimates about how many people were needed, etc, that was really based on the classic way we would approach Ebola. Now, as we go forward, we're learning that, okay, maybe this number of internationals and this ratio of nationals can actually work as well. So, right now, this week – in fact, the reason I'm flying to Accra – we're going to sit down and we're going to relook at a whole bunch of those assumptions with all of the information that we have and try and look at a reset. What are the actual numbers now that we need to hit this 70:70:60? And, again, in terms of the actual numbers engaged right now we haven't got the whole picture. As I said, right at the very beginning, the biggest problem, we don't have those common operational plans. We know there's lots of people out there doing things. If I were to add them all up, I'm sure we could find 600 internationals, probably, and thousands of nationals engaged. Are they all doing the things that are going to get us to 70:70:60? No, that's the problem.

So, some of this is going to be about alignment and repurposing and then, Thomas, your point getting those numbers and bringing that rigour to the initiative. And we've got to get there very, very quickly. And this one of our 30-day goals is actually to make sure that not only are the common plans in place, at least of the field level infrastructure for crisis management, but that also we have the information systems in place to do it. So, linked to that, with UNMEER, one of the goals is that for 50% of those districts we have got VSATs on the ground and connectivity so that we can actually be transferring the data efficiently enough to know if we're in front of this. But you're asking exactly the right questions and the same ones I do, in fact, and I wish I had the answers to them all. But remember, right now, as well, a lot of things will tell you where you're going with this epidemic and the thing that will tell the most is the virus and the cases. And the virus is still moving geographically, still escalating in capitals and that's what concerns me.

TJ Thank you very much, Bruce. We will now take three questions from colleagues online. We start with Tulip Mazumdar from BBC. Tulip, could you please ask your question?

TU Sure. Two, if I may. The first one is because of the scale of this outbreak now, are you having to change the focus to isolating cases over treating them? And the second question is just about the latest on the treatments. WHO recommended whole blood treatment, so blood transfusions who have survived from the virus as being a key treatment that can be used now. Is there anything specifically happening in these countries to make that happen? Obviously, if there's 4,500 deaths there are going to be around 4,500 survivors. Are you doing anything or are governments doing anything to try and get those people to give blood?

TJ Thank you very much Tulip for this question. We will take now the second one from Kai Kupferschmidt from Science. Kai, can you hear me?

KK Yes. Thank you very much for taking my question. Bruce, I just wonder that 70:70:60 goal that's been going around for a while now. We've been told a lot of times that it's not clear how many cases there really are, that we can see about maybe half or a quarter of all the cases. How do you even benchmark this? How do you even know whether you're reaching 70% of cases or 70% of what are we talking about?

TJ Kai, thank you very much for your question. We will take the last one in this round and that's Makiko Kitamura from Bloomberg. Makiko, can you hear me?

MK Yes, hi. Thanks for taking my questions. I just have two, please. One, given your concern about Ebola escalating in urban areas and the fact that it can really travel to anywhere in the world now, how confident are you that preparations for proper..?

BA I don't think I said the second part of that.

MK In megacities in Asia, such as in India; big cities in Bangladesh, Mumbai, etc, how well are they prepared? And then second, on PPE, we're hearing from labour unions in Liberia that places like Nimba County they only have 12 boots, 12 sets of PPE. What is being done to get more PPE out there for healthcare workers? Thanks.

BA Okay. Sorry, we're writing it down otherwise I'm going to insult people by not answering their questions. So, first, in terms of, Tulip, your first question suggesting there is a change in focus. There is no change in focus in terms of isolation verses treatment; it's isolate and treat. Let's be really, really clear. It's just how you do that. It would be horrifically unethical to suggest – I can't even go there, frankly – to say that you're simply going to isolate people. That's not what one wants to be doing. But remember, as well, in terms of treatment, the treatment for Ebola basically is symptomatic, as most you know, and supportive therapy. What we're looking at is how do we do that? If it's taking so long to establish these large-scale Ebola treatment centres, which most of you know about, if it's so hard to get international foreign medical teams or others into actually run these things and run them safely, is there something can be done in the interim or as complement to this that might be able to reduce the rate of transmission of this disease and then also make sure that people are getting some minimum – not minimum level – people are getting care for other conditions, potentially.

So, the idea with these CCUs is really building on what's already happening in these countries. There's a number of examples, like I think it's called Timinila [?] is this town or area of Guinea people often refer to where early in the epidemic they had cases. The community very rapidly and community leaders established a place where these people could be put, where they would still be fed, receive oral re-hydration, etc, analgesia, whatever, in an effort to try and make sure that they reduce the amount of secondary infection happening from these people as a result. And really the idea of CCUs or CCCs, as they're called in some place, is just to help communities understand that there are things that you can do to reduce the risk of more people in your community getting exposed to the virus and by doing that you may also be able to get better level of supportive care to these people. And this is really rather than leave them in the homes where, again, as you can imagine, little tiny homes often or a

hut, if somebody throws-up or has diarrhoea that virus is everywhere. And so the goal is get them out of those places, get them safer before that happens to try and, again, reduce some of the heat of this epidemic. It doesn't replace treatment centres and goal still is to get enough treatment capacity, well, treatment centres, as we say, in place to be able to manage them.

But linked to the CCUs, I should have mentioned is, remember probably the majority of the people who have got a fever or feel unwell in these places may well have malaria or have some other disease. So, that idea is when they come to these places that they would get treated symptomatically or in terms of syndromal [?] treatment for malaria and possibly a short course of antibiotics as well as ORS and then an Ebola test conducted with the idea that an awful lot of those people may get better from whatever they have which isn't Ebola and then only really the Ebola cases would obviously be isolated. So, it's a different idea than the Ebola treatment centres and would not replace them.

In terms of the convalescent sera issue, remember WHO has recommended this as one of the things that can be most rapidly evaluated and I think we have to differentiate a little bit from a large-scale recommendation that this definitely works, use it. What we're saying is evaluate. This is one of the things can be evaluated in the near term and Marie-Paule Kieny's group is the best to brief you on that. What they're trying to do is look at are there ways that this could be at least piloted or looked at in some of these affected areas. There was thing you said Tulip about the number of survivors – 50% survivors – and I need to be clear again. 50% of people are not surviving. It's 30% at most in these countries. You'll remember at the beginning I said there's this many cases we're aware of, there's this many deaths that have been reported to us but that doesn't mean you divide one by the other and you get how many this disease kills. To get that number we have to take a bunch of people, follow them right through the course of their disease and understand how many survive. So, for that subset of people for whom we know they were sick and we know their final outcome, what we're finding is 70% mortality. It's almost the exact same number across the three countries. So, this is, again, a high mortality disease in any circumstance but especially these places where it's happening.

Coming to, Kai, your question on the 70:70:60 and how we benchmark, how do we plan? In terms of planning, that part is relatively simple, you just adjust for the underreporting. And so what we've been looking at is, well, in Guinea it looks like let's take 1.5 the current number of cases, in Sierra Leone let's take twofold the number of cases reports and then for Liberia let's take 2.5. And there's been a little bit of work, some capture/recapture study done in Monrovia in particular that helps guide this but basically we've sort of doubled what we think the capacity would be. If you were looking at 10,000 beds, it's probably double the capacity or, sorry, the reported numbers expected by early December. So, for the planning side, it's more straightforward but I think you hit the nail on the head, Kai, with that question about, well, what about measuring it, because that's tougher and that's why in parallel with the effort to build the treatment centres, to improve safe burial, etc, on the WHO side one of our things that we're committing to is to getting people in each one of the districts and getting case finding and contact tracing teams out there – if not through us, with our partners – that we can actually get a much better fix on the amount of disease. Now, even then, as everybody knows, you're always going to miss some cases of any disease. The big thing is are you

missing chains of transmission? You've got to find the chains of transmission. And the goal is that, by 60 days, we can identify all those chains of transmission and we know where this disease actually is even if we don't have an exact fix on the number of cases.

Then, Makiko, you mentioned that I said this virus can go anywhere. I didn't say that, actually, and I don't expect it to go just anywhere. I've been in and out of these countries multiple times. There is exit screening in place, as most of you know. Sick people, certainly, are not going to be moving. People who may have been exposed can move. You've seen that as well and we've seen the consequences of that but we have not seen a huge amount of international spread, obviously, so far. But, that said, we've seen even in places that are well prepared or believe they are there can be breaches and the disease can get missed. We take every piece of information that comes into this outbreak and we look at how do we adjust, what do we do better? And, as I mentioned last week, they had a very specific meeting on preparedness bringing together all the big agencies working on it, looking at, okay, how do we really push preparedness globally for this so that in those megacities, etc, that you mentioned, Makiko, we can be assured that capacity is there.

Now, we're already tracking with countries based on self-reporting. Where are they in terms of... we look at four or five key indicators. Have they got a protocol for identifying suspect cases? Have they got an identified isolation ward? Have they got protocols for case management, etc? Generally, everyone reports, yes, we have all of that, we're in good shape. The next big thing is have you gone a simulation? Have you done your protocol testing to make these things really work? And then have you got the stocks in place for them? And that's where you usually find your gaps. So, although many countries are giving attention to it, Makiko, we would not be able to validate that, yes, they are prepared and what we are doing now is rolling out from next week, beginning with what we believe the highest concern countries, the ones bordering the infected countries, really short missions into each of them to help them simulate, pressure test their protocols and see if they really work and then we'll expand that out to a broader group of countries. The travel patterns in and out of the three countries are fairly well defined from pre-outbreak periods, so I think it's relatively straightforward to identify how does the risk increase as one moves further from those countries and how do you target your preparedness support that way.

Makiko, one of the issues you mentioned was about PPE and the gaps and what's being done about that. A number of things. One of the big added value, we think, of UNMEER can be to help bring better coordination to the identification of PPE needs and then coordinated demand assessment and forecasting as well as ensuring that there is a minimum stock at any one time to deal with gaps when they occur. So, one of the things we're doing with UNMEER is looking at establishing a larger... not only doing that for the countries to ensure they have better pipelines, better visibility on their PPE needs but then maintaining a sufficient stock probably in Accra or elsewhere in the world so that we can rapidly airlift into these places where we do identify gaps. So, part of it, Makiko, will be dealt with through improved planning, needs assessments, part of it through stocks and then part of it through information systems that will allow us to more rapidly address those gaps as they come. And UNMEER, again, this is, I think, one of the more positive impacts they're having already is trying to

address those things but, again... the media has so much of a role to play in this but often you're going to hear about gaps. Someone is going to complain to you. Someone is going to say this isn't there or that's not there; getting that back into the system so that we know about it and can act on it because sometimes you're going to hear about these things before we do.

TJ Thank you very much, Bruce. We have time for a couple more questions so I have here in the room, three questions. Start with Frédéric.

FD Yes, thank you. Frédéric with NHK Japanese TV. You addressed, a bit, this issue in your last reply but is it a concern for WHO to see that in the few countries, highly developed countries nurses or healthcare workers also showed some fears about the way that maybe the hospitals were not dealing properly, including the equipment. Does WHO leave all this to each country or do you think you will maybe update some measures also for the richer countries which cannot maybe deal 100% sure with this virus? Thank you.

TJ Thank you, Frédéric. Can you please pass the mic to Jan?

JH Yes, good afternoon. Jan Herbermann, I write for a couple of German media. Just to clarify this number, 5,000-10,000 cases. So, you expect the number of cases to peak in the week of 1st December and then it would go down. Is this correct?

BA That's the goal.

JH That's the goal according to your 70:70:60 scheme?

BA Let me clarify that one because that's so central to a lot of what we've talked about. If you look at the UNMEER targets that we're putting together, and when I say UNMEER targets this is really the global and David's picked them up as the same targets for the Global Ebola Response Coalition. It's 70:70:60. That's an outcome target. That's what we're trying to achieve with the programme but the impact that we're trying to achieve is by 90 days. So, the goal is if we had that in place, that capacity... So, say we hit that capacity by 1st December, it's going to take some time then for that have its impact and our goal is by 90 days we're seeing a week-on-week reduction in cases in at least 80% of the infected geographies. Do you follow, Jan? So, have all that capacity in place by 60 days – okay, 61 days, 62, whenever, but get it there – with the ultimate impact being able to measure by 90 days that you're starting to see a week-on-week reduction in the actual number of cases because it will take a little bit of time for that to kick in, so it may continue to climb for a little bit in the early part of December.

And, again, people say, well, why not at 90 days or why not at 120 days? And it's got to be that balance between what you think realistically or unrealistically – these are really tough places to operate logistically and every other way – what can be put in place with an extremely aggressive programme. And then also the human cost, financial cost, every cost of waiting another 30 days. I haven't got the models but we ran some numbers. About every 30 days you see a doubling in the number of cases that actually won't be... additional cases that will suffer the disease. You need that much extra capacity, that much extra burial teams, etc. So, that's the reason we laid it out that way. This is really aggressive. And other people say,

well, if you don't hit it you fail. What are you talking about? We all fail. This is not about one piece or another getting it right. A lot of pieces and everybody's work has got to feed into this. Sorry, Jan. Then you were going to someone else.

TJ Well, why don't we take the last question here from the room and then we can go back to Frédéric's question.

MK Hi, Masaki, Jiji Press from Japan. If everything works fine do you still stick with the projection which is more than 20,000 cases by the end of early November? Do you stick with this projection? And also what is the current state of the numbers, the percentages of this project?

BA I didn't get your last question. I was writing down the first one, sorry.

MK Yes, 70:70:60, what is that right now? What is it? 35%? Because you said earlier the target is to double the capacity. Thank you.

BA Okay, so on the first question, Frédéric, I'm not sure I quite understood but I think what you are referring to is in a number of the industrialised countries, so in Spain or in the US or whatever we've had professional bodies say we're very concerned that the right measures weren't in place or something like that and then would WHO be doing anything in that regard. Well, for us, we would certainly rely on the national authorities in these countries, frankly, to be managing those situations. They have their own standards for the management of hazardous pathogens and we provide technical advice or guidance, etc, but we draw heavily on industrialised countries for that kind of advice, as well. It's neither the role, the mandate nor the need of WHO to do more than that in terms of... People ask me, well, will there be an investigation about this or something? No. That's a federal or a national jurisdiction, national responsibility to look at. Of course, they will have to investigate what happened. There was a breach here somehow. You have to accept there was either some kind of a breach or magic happened and I think that we know between the two it's more likely there was a breach in this – much more likely – so the question is going back and look at can you identify that breach? And let's be clear, you usually and very often cannot find where was the breach in a protocol that resulted in an infected healthcare worker. We've found this in the countries, as well; really tough. You can often identify it was probably a result of this and this circumstance but you can't put your finger right on it. Very rarely do you have a needle stick injury and that was what caused it or something else, unfortunately. That would make it easy.

And really it comes back to going back, tearing apart your entire protocols and then taking them forward. I think one of the biggest things you learn from these healthcare worker infections and others is just the importance of the buddy system in this process. You want to make sure, and this comes back to one of the earlier issues we talked about, the human resources. If you don't have enough people to operate in these facilities the first thing you do is processes that you should do with two people, you do with one person. That's when you get breaches and that's when you can't even tell that a breach has occurred because and, again, some of you may have read in a number of the facilities, especially industrialised countries, you observe the people taking off their PPE to make sure that they don't do it in a way and to

stop them if they're going to contaminate or potentially contaminate themselves or expose themselves, as well. But that's one of the first things that gets compromised in settings where you don't have enough people. So, you go back, tear those things apart, you reinforce them and you move forward because, again, when you do the right things this disease is not going to spread in these settings.

BA Masaki, you asked, do we stick by the 20,000 number. Now I'm trying to do it my head, what would the number add up to, the cumulative numbers? I was actually thinking this morning, Masaki, we're going to hit 10,000 cases unfortunately relatively soon in the epidemic and I'm trying to remember what was the number the first time I spoke to you and used that 20,000 number which scared everybody to death. Everyone was, oh no, impossible and the next day people said, no, there's going to be millions. But, anyway, the reality was that was a very careful assessment and what I was actually saying at time, whatever was quoted was that is the... you want to make sure that you had the capacity to manage that many people, that's how big this outbreak could be. Now, clearly, this outbreak – now I've got to do the math in my head – this outbreak would exceed those kind of numbers. I haven't got the number right in my head. I'd have to sit down and work out what is the week-on-week and I haven't done that but we can get that for you. In terms of do we have to adjust our numbers very much? No. The kind of bed capacity that we're looking at to be able to manage these case loads and hit a 70:70 target because remember 30% of them still aren't in case management is still relatively similar.

Where are we today on 70:70:60? We don't know exactly. This is part of the issue and a number of you have asked about it. We know in some areas. We know in Monrovia that the reported safe burial rate is quite high but that's for people we know, people have said we think that's Ebola but a lot of people die in countries where people aren't saying, well, that's Ebola. So, we be reading 80% of the ones we're notified but not of 80% altogether; so there's a high rate. We know in other places the rate is much lower; under 10%. So, it's a wide range. I heard someone say the other day overall we think it's 18.5%. How the hell do you come up with that? But probably around 20-30%; case management figures probably around 30-40%, 20-30%; they're in those ballparks; less than 50% on both. But in some places it's a bit higher. You know in Lofa and you know in Kanama and Kolahun that you've got to be over 50% for those curves to be coming down because remember we know the reproductive number of Ebola is – you should all know this number by now – is about two, right.

So, every case is generating about two additional. You've got to know this. That's how you work it out. I'm going to start asking you guys questions. So, when you hit you 50% or 70% safe burial of the rest, you're trying to get from that two down to one person being exposed down to less than one person. Expose half a person; figure that out. But, no, to try and get that number below one, right. So, if you get up to 70% safe burial of the rest you usually have a margin and you're getting that number below one. So, there is a science – coming to your point, Jan – behind what we're trying to do here. Somebody asked on the line – I think it was Kai – about benchmarking. With 70% safe burials you should be able to drive down the reproductive number very fast and so it should drop faster than that. There's actually an overage here in terms of what it takes to bend the curve.

So, we know that in places like Lofa, Kanama or Kolahun we know that for those cases to be coming down right now they must be safely burying or isolating one way or another 70% of cases, of 50% at least, otherwise the numbers wouldn't be dropping. Next time I come I'll bring a couple of graphs because I had some nice graphs. A couple of weeks ago we generated a here's what happens if you do it at 60 days, at 90 days, at 120 days just to try and understand these things. And then as we looked at the Kanama and Lofa data, it looks exactly like those curves in terms of what happens if you hit those kind of control measures. So, we know we're probably in the twenties overall in most areas and we know though in some areas there's certainly over 50% of safe burial otherwise the curves wouldn't be going the way they are; in Bombali, you're not; in Monrovia, you're not; in Conakry, you're not; in Freetown, you're not. The virus is telling you you're below 50% because it's doing this.

TJ Thank you, Bruce. I think we can do two more questions that we have from online, if that's okay with you.

BA Let me check that we can do. Okay.

TJ Okay, very short two questions from online. I'm calling first on Maria Cheng and then Jennifer Yang; very, very short questions before we close this. Maria.

MC Okay. Thanks very much for squeezing me in. Bruce, do you have any concerns that there are countries, perhaps, with suspected or confirmed cases that aren't reporting them? You mentioned that there are lot of cases in these border areas, so how much of a worry is that, that it is continuing to spread geographically and perhaps internationally?

TJ Thank you, Maria. Jennifer.

JY Hi. Thanks for taking my question. So, sort of something that MSF has been raising from the start is that there has been a lack of coordination of the response effort, overall. Can you give me very specific examples of where the weaknesses in coordination were before and compare that to how things have changed today so that we can get a sense of how we've moved forward on that front, perhaps looking at a specific country to make it easy; Sierra Leone, Liberia or Guinea?

TJ Thank you very much. So, Bruce, if you could just answer those two questions and then we will close this virtual press briefing.

BA Sure. Maria, first, in terms of the question, I don't think anybody is suppressing cases; let's be really clear on that. There's absolutely no evidence and, as you can see, this is not a virus that is easy to suppress or hide. So, I don't think that's happening or certainly wouldn't have any reason to suggest it. Are there places that might have cases and not know? Well, when you've got the virus right on the border of Côte d'Ivoire right along that relatively long border there, obviously you want to be getting active surveillance going there and being sure that there aren't suspect cases. And when I say it's right on the border, remember the district that borders that area may have cases but they can still be a very, very long way away from that border and not necessarily crossing. But Guinea-Bissau, obviously you're going to be concerned about close relationship with the neighbouring country. Senegal already had a case.

Mali, of course, a concern as well. But there's not that kind of disease in the area bordering Mali right now. So, probably the area... and, again, this is a big of stretch. Which ones would I be most worried about? The ones with a geographic border but particularly Côte d'Ivoire and obviously those are the ones where we would try and work most closely with the governments and others to help if we can in any way reinforce... irrespective of whether or not they have it, really making sure that they reinforce that active surveillance, looking for the cases, not just waiting for them to come to them and then also their protocols.

Jennifer, on your question on lack of coordination, pick your area. Was it ETC planning and beds? Was it on some of the policy issues? I'm trying to think of some good examples for you. I think the biggest one for me, Jennifer, was the one on what I call a common operational plan – and I sound like a broken record – but it tells me for every single district and geography who is doing what piece of it. So, I think there was lots of what people would call coordination meetings where they all come to meetings and talk about what they're doing but you've really have got to have what needs to be done and then make sure that people are against those things and then, great, all the other stuff, real good, it's going to help but are these critical things that have to be done and when I look at the lack of coordination, I didn't see that, Jennifer, and that was my single biggest concern. Now, also remember I'm at a bit of a 30,000 feet here and I don't want to insult people in the countries because they're doing really, god, fabulous work if you go down and see them. Everybody is keen to help. And there was a lot of reasons for that coordination challenges. Part of it is a lot of these people and actors on the ground are development workers rather than emergency workers. The connectivity in the countries wasn't good, so it was very difficult just to talk to different areas and monitor what was going on. And then as things scale-up rapidly, often coordination gets worse, not better. You've got to go in with your coordinating mechanisms first.

Now, in terms of where things are going to get better. Again, Tony Banbury has really prioritised the crisis management skill set and mechanisms for these countries. And, again, not putting our own in because each government has one, how do you help that government professionalise and really make that work. And sometimes it's not professionalising government, it's professionalising all of us who are trying to work with the government and driving them nuts. So, that's why we will be concretely be putting an Ebola crisis manager in each one, get the common operational plan in place and then be monitoring holding people accountable against that. Jennifer, I hope that sort of captured, at least, what you asked.

JY Yes, I think so. I'm just trying to understand who was coordinating the response before. Was it WHO? Were countries driving the response in-country and how has that changed now, perhaps?

BA Okay. Now, that's a good question. Yes, okay. So, let's be very clear. This has got be coordinated and run by governments. In the world of development where I've spent my life, and emergencies, you hear that all the time and sometimes you can tell it's not very sincere. But in this case it absolutely has to be. This is a disease that cannot be stopped without the full engagement of the communities and the people that lead them, especially both local and national leadership. So, that piece has to be there. And I think in each government they have

either an incident management system or an emergency operating centre, etc, but when you go to those, Jennifer, like the one in Guinea, for example. The president appointed Dr Sakoba to head that – President Condé appointed him – and they designated space, made it available but the phone lines weren't in. There's no broadband there. There's no connectivity there. The other partners aren't operating out of there. So, it's not going to work. They'd all get together for a meeting but it might be in another place and you've got to manage a crisis in real time. So, what UNMEER will try and do, as we go in, is not to replace that; and it's not just us, also the UK in the case of Sierra Leone and Liberia. What it's all about and, again, it's all about trying to strengthen systems for future, as well. So, it's how do we work with the government to strengthen that process and not put in a separate one. So, if the problem is they don't have broadband, well, we'll put that in. If the problem is they haven't got crisis management skills, well we'll come in with people and help to mentor and teach and put those in place. If the problem is the UN system is incoherent and all over the map, well, there Tony has got, if he wanted to exercise it, command and control authority, so the crisis manager by UNMEER in each country can at least pull that piece of it together. So, I think we're trying to do a lot of very, very concrete things really to help governments that want to be and need to be leading this do that better.

TJ Thank you very much, Dr Aylward. Thanks to everyone.

BA I love when Tarik calls me Dr Aylward. Dr Tarik, it's Bruce.

TJ Thanks again to everyone here and online. Just to remind you that the audio file will be available shortly and we will be sending it out to our media list. Video package and transcript will be available a little bit later. Thank you again and have a nice day.

BA And folks, from all the questions, either something was really useful or really useless because you had to ask a bunch of questions but if it is useful – and please talk to Tarik – we're completely willing to help any way we can to keep you briefed on what's happening because everybody sees so much information, so much is available. Sometimes I feel like we're just repeating stuff you're already hearing but if it's useful the commitment is there to help in any way I can. All right. And I'm sorry, it's not that I don't want to answer more questions but I've got the head of GAVI waiting for me on the other side. I've got to be there.