Good afternoon, good evening and, potentially, good morning to others on the phone. My name is Marsha Vanderford. I'm the Director of Communication here at WHO and it is my pleasure to welcome you to the press conference of the World Health Organization for the first Emergency Committee under the International Health Regulations regarding yellow fever that was held here today on May 19th. We have some reporters here in the room, and we know we have many more on the phone. In addition, we have people watching on WHO's Facebook Live.

To open the press conference this evening, we will have opening statements from Dr Bruce Aylward, who is Executive Director for WHO's Outbreaks and Health Emergencies. And also from Professor Oyewale Tomori, who is the Chair of the Emergency Committee that met today.

Following these statements, we will open the room and the phone for questions. Should you wish to ask a question from the phone, we'll ask you to dial 01. So now we will begin with Dr Aylward's opening. Thank you.

Thank you very much, Marsha, and good evening ladies and gentlemen. First, if I might apologise for us being a few minutes late, as we were working to pull the work report
together under the guidance of the Chair of the Emergency Committee. As introduced, I'm Bruce Aylward. I’d like to make just a couple of introductory comments and then hand to our Chair, who I think you're most interested to hear from, to outline the findings of the Emergency Committee.

First, the Director General of WHO convened this emergency committee because of the urban yellow fever outbreaks, which we're seeing in Luanda in Angola, and also in Kinshasa in the Democratic Republic of the Congo. For those of you not familiar with yellow fever, this can be a devastating disease with a high mortality rate and rapid spread in areas, particularly urban areas. Urban yellow fever is a particularly dangerous and concerning situation, because of both the potential for explosive spread in urban settings, with high mortality. And also the risk for international spread as well as national spread from urban centres in to areas with high population susceptibility to the disease. And it was for this reason that the Director General convened the Emergency Committee, concerned as she was, by the evolving situation in the two countries, which I mentioned.

I would like to mention, though, a little background on yellow fever. This is a disease which, since 2005, has been managed under something called the Yellow Fever Initiative, which is comprised of a number of strategies to try and reduce the risk of urban yellow fever. It has been quite successful, in fact, because in West Africa, where it's been applied most aggressively over the last ten, now 12 years, over 105 million people have been vaccinated, and there have been no significant yellow outbreaks in that time. A key element of managing the yellow fever situation globally has been the availability of a global yellow fever stockpile, which is overseen by something called the International Coordinating Group constituted by WHO and including Médecins Sans Frontières, the Red Cross and Red Crescent movement, and also UNICEF.

The evolution of the situation since December 2015 in Luanda Angola, with international spread to China, Kenya and DR Congo has put a great strain on that stockpile. And it was one of the reasons leading the Director General to convene this committee. The World Health Organization assesses that the risk of urban yellow fever is changing, with changing trends in the continent, both in terms of urbanisation, in terms of the mobility of the populations, and that is part of what we see as driving the situation which led to the convening of this committee. We asked for advice from the committee on a number of points. Obviously, whether it constituted a public health emergency of international concern at this time, and then measures that could be taken to manage the evolving situation.

With that, I suggest I hand to Professor Tomori, who against that background chaired the committee's deliberations on those two issues.

OT Thank you very much, Bruce. The Emergency Committee met this afternoon. It was convened by the Director General of the World Health Organization to look at the situation of yellow fever in these two countries and the implications for the world. The two countries that were involved also participated by providing up to date information about what is happening in their country. The WHO Secretariat provided information for us as a kind of background about yellow fever, and also we had much more detail on the current situation, as Bruce has mentioned, about what happened in Luanda and the spread to other countries, the DR Congo. And in particular to China and Kenya.
We then deliberated on all the information that was available to us, and the committee was of the opinion that we have a serious issue on our hands, which at the present moment does not constitute a public event of international concern. However, the seriousness of what is going on, what it could lead to, the potential of the spread into becoming a much more serious international concern, was focused on. What do we need to do to ensure that it does not become what we don't want it to become? Therefore, the committee, having concluded that, yes, this is not, at this particular time, it is not a public health event of international concern, but it is serious enough, and gave certain advice to countries, I mean to the Director General, for countries to implement.

We then looked further at the need to intensify surveillance in the different countries, to look at the issue of mass vaccination, well-coordinated mass vaccination, to look at the risk communications so countries are aware of the immediate problems and how do we get the communities themselves involved in ensuring that they participate in the mass vaccination that is occurring. We also looked at not just for Angola but also for DR Congo.

The committee also wanted the assurance that any traveller going to either of those two countries should ensure that they are well vaccinated. That they do not go there unprotected, because they could expose themselves to the danger, or could bring back the problem into their own different countries. We also looked at the intensification of surveillance and preparedness activities, not only in those countries but also countries that surround where we have the epidemics going on right now, so that they are well prepared in case of any transmission across the border. The need for neighbouring countries around Angola and DRC to work together to ensure that there is prevention of spread of the disease into their different countries.

The committee emphasised the need to manage and ensure that we don't have yellow fever importation into other countries that are around the place. We also, more importantly, looked at the fact to consider that if there is the problem of supply, shortage of supply of the yellow fever vaccine, that proper action may be taken. And we are advising that other bodies, other agencies of the WHO like ICG should look into the implication of maximising the amount of yellow fever vaccines that are available. And not only there, but that countries also use it judiciously based on information that is provided.

Another issue that was considered by the committee was the fact that the application of policy of one lifetime vaccination of yellow fever to as many people as will get it. Because the good thing about the yellow fever vaccine is that once you get it, we believe you are protected for life. And so everybody, as much as possible, especially in endemic areas and those who are travelling to those endemic areas, get their yellow fever shot.

Going forward, the committee agreed that there should be a planned review of the revision of the global strategy for prevention of yellow fever transmission. Not only in the affected countries, but also in the neighbouring countries that are there.

Based on this information and these views, the currently available information, the Director General of the WHO accepted the committee's recommendation that the current yellow fever situation is serious, which is the message we are trying to ensure around the country, and of great concern and it requires intensified control measures but does not constitute a public health event of international concern.
The Director General also urges members to enforce the yellow fever vaccination requirement for travellers who are going into those countries, namely Angola and the Democratic Republic of the Congo. While the Director and also the members also decided that it was important to continuously monitor what is going on, and if need be, that this committee will be reconvened as determined by the epidemiology of the outbreak. Thank you very much.

BA Thank you very much, Professor Oyewale. I should have mentioned that Professor Tomori has been working with so many of us for so many decades in international public health, we think he's as famous to everyone else as he is to us. But I would like to highlight that we were truly honoured to have you serve as Chair. Because Professor Tomori has got a rare experience in yellow fever, having managed and been involved with the management of some of the largest urban outbreaks ever seen in Nigeria back in the 1980s. And it was that and other experience that he and the committee brought to this committee that was so valuable to us.

I would just add a couple more comments before we open to questions. First, in the deliberations of the committee, it did highlight that with 2,400 cases or suspect cases in just four months, and with the high mortality rate, with 300 people dead, reinforced just the potentially explosive nature of this diseases and the risk internationally.

The second thing I would like to stress is, in considering the three criteria for a public health emergency of international concern, the committee highlighted that large urban outbreaks were not unprecedented, while very, very, obviously, serious public health events. And that, while there had been international spread of this outbreak, it had been associated with migrant workers and had slowed substantially since greater emphasis had been placed on the vaccination of all travellers in and out of Angola and Luanda. And with the decrease in intensity of transmission in Luanda. As well as, I believe you're aware, the Director General's Note verbale to all member states on the 22nd of April emphasising the need for vaccination of all travellers in and out of Angola.

The last point I'd highlight is the value to, certainly, our organization and the state parties to the IHR of the combination of short term and immediate, I would say, recommendations and measures. But then, also, measures for the medium term. And the committee's concurrence that there is no short term fix for the situation we're seeing with yellow fever. They believe that this is a function of the changing risk of the disease on the continent, and calls for a substantive review and revision of the entire strategy for managing and preventing yellow fever outbreaks going forward. It was emphasised as well by the Director General, certainly her commitment to moving forward on that, given that we have a vaccine that costs, a very effective vaccine, just over $1 a dose, which we are not using to full effect in controlling this disease.

MV Thank you, Dr Aylward. Thank you, Professor Tomori. As a reminder for journalists on the phone, should you want to ask a question, please dial 01 on your keypad. So, we will start in the room and ask if there are questions here to begin. Stephanie, please go ahead. And if you will, everyone, please say your full name and your news agency for the benefit of our spokespersons. Thank you.

00:14:45
SN Thank you, Reuters, Stephanie Nebehay; can you perhaps address your concerns or findings about the situation in a city like Kinshasa, where I think there have just been a few of the cases in DRC; your concerns about potential for local transmission in a setting like that. And then also, separately please, on the vaccine issue; your committee's voicing concern on the limited supply of vaccines and suggesting one looks at dose-sparing strategies, but you also just said it doesn't cost much and we're not using to full effect the vaccine in controlling the disease, so could you perhaps address those, maybe Bruce on the vaccines perhaps?

BA Did you want to take a few comments?

MV Are there others in the room? Yes, please.

JM John Male from [unclear] news agency; do you think China faces a high risk that the virus gets local transmission because I think China has a large number of migrant workers in Angola, and also the mosquito populations will increase in the summer in most of the Chinese [unclear] cities. And what kind of [unclear] recommended China to implement?

MV Shall we take one more before we answer? Another? Okay, let's go with the first two then, and we'll wait for others in the room and on the phone.

OT Thank you very much. I think what we found is that with the supply of vaccines to DR Congo and the vaccination programme being put in place right now, the risk of spreading beyond Kinshasa is very, very limited. But [unclear] a large proportion of [unclear] there's enough vaccine to vaccinate people in Kinshasa to be sure that it doesn't spread outside of that region. On the idea of dose-sparing, what the committee recommended was that yes, there was some research that had been carried out but that a more detailed review will be carried out by SAGE to ensure that the appropriate information because there are a lot of operational issues that are involved with a change in strategy or the use of fractions of doses. So we are asking SAGE to look into it and come out with a much more detailed recommendation that will be applicable to different countries.

As to Asia, China, I think what's most important is that whoever is coming from China into Angola gets vaccinated and once you have [unclear] people vaccinated the risk of spread...if you don't get a disease you can't spread it. So I think it must be stressed any person who is going from China into either Angola or DR Congo be sure that they receive their vaccination.

MV Thank you, Professor Tomori; Bruce, did you want to add?

BA Sure; on the risk in Kinshasa, although there's been a limited number of cases the vast majority have been individuals who were sick or became infected, it appears, in Angola and then travelled back to DR Congo. So as Professor Tomori highlighted, while there is potentially some evidence of local transmission, if it is there it is still at low levels and the country has a strong history of very high quality immunisation campaigns, mass campaigns, its ability to mount them for various diseases. So expectation is, and again the situation will continue to be monitored very, very closely, the expectation is they should be able to rapidly manage that with their campaign starting just next week.

In terms of the global vaccine supply, because this has been highlighted in the press a number of times, the committee looked at this issue carefully and highlighted first of all that the international global stockpile is actually right now, or by the end of this month will be at a
higher level than it normally is; normally we have in reserve about six million doses, it will go to seven million doses by the end of this month. And given the work with manufacturers to optimise production there's an expectation that within a few months' time there could be as much as 17 to 18 million doses of yellow fever vaccine available, and the committee, recognising that, said the priority now is really how this vaccine is used, ensuring it's used as rapidly as possible. It emphasised ensuring that coverage is as high as possible very, very quickly. So it emphasised good use of the vaccine, replenish the stockpile, work with manufacturers to optimise production, and then as a contingency look at dose-sparing of the vaccine if additional urban outbreaks were to occur requiring additional mass campaigns. So that was really as a contingency strategy that we were asked to rapidly evaluate.

And I want to be clear not to confuse the current vaccine situation with what the committee thought was the right way to go in the medium and longer term, so when we talk about expanding routine vaccination in mass campaigns, this would be part of a longer term, five, ten year strategy to really build on the experience of the last decade with the yellow fever initiative and expand the use of the vaccine in routine vaccination over time as we build up production capacity to ensure a more robust, let's say, barrier against this disease.

And in terms of China, to the points that also Professor Tomori highlighted; this is applicable to so many countries that have a competent vector for yellow fever but may not have the disease at present. The emphasis on ensuring the vaccination of all workers and travellers going back and forth to endemic areas, and the heightening of surveillance so as to rapidly detect any sick travellers coming back and then ensure the rapid isolation, now China has seen 11 importations of the disease, none of these have resulted in further transmission and there have been no further importations detected in over a month now. So the expectation is the situation with respect to that risk can be managed as well.

MV Thank you, Doctor Aylward. Thank you, Doctor Tomori. For those on the phone just a reminder, to ask a question dial zero one on your phone. We do have a question on the phone, and apologies ahead of time, I believe we may not have this name quite right, Mr Ty Cooper, who appears to be calling in from Germany. Mr Cooper, would you like to go ahead?

KK Hi, it's Kai Kupferschmidt from Science; there was just one question about the doses you mentioned, a few weeks ago there was discussion that the stockpile was almost depleted, now you're saying actually in a few weeks it will be higher than it has been in the past, where does this vaccine come from? I mean are there other routine vaccination campaigns being postponed, or what's being done on that level to ensure this? And also just one other question if I may; I wanted to ask why the decision to call the emergency committee now? You gave a few reasons why the emergency committee was called but all of those reasons would also have applied a month ago or more, the fact that it's an urban outbreak and that the vaccine situation actually looked worse a few weeks ago?

MV I think we have one more on the phone, this is Lisa Cohen; please go ahead.

LC Hello; I would like to ask if you could tell us which species of mosquito is spreading the current yellow fever outbreak? I was wondering if it was the same vector as Zika? Thank you.

MV Are there other questions? We can take another one before responding, or go ahead with two. Let's go ahead with these two then?
OT   Did you want the one on the vaccines?

BA   Oh so just on the vaccine issue then; Ty, there are actually four manufacturers of the vaccine with a combined production capacity of now approaching...I think it's about 70 to 80 million doses globally, and part of what we've been able to do is working with the manufacturers, identify where the vaccine was in the supply pipeline and just make for a much, much better and tighter management of that. Some routine vaccination shipments could be delayed a month or two months without compromising ongoing activities in countries. So really this has been the result of a much better and tighter management of the global supply pipeline. It also reflects a commitment on the part of the manufacturers to increase production as well in response to the increasing risk. That action to increase supply on the manufacturers' side actually those decisions were undertaken some months ago, when the urban outbreak was first detected in Luanda. So what we are seeing now is some of that additional production capacity also coming online. So there's a combination of factors that have allowed us to, working with those manufacturers, to create a bigger stockpile than we would normally be holding and which we think will be able to accumulate further over the coming couple of months.

In terms of the timing of the IHR emergency committee, this was actually a result of... two phenomena were probably the main drivers in that; first was the increasing evidence of risk of a second urban outbreak in Kinshasa and the recognition of the Director General that that combined with the vaccine supply situation could lead to a more grave situation in terms of vaccine supply and our ability to manage future outbreaks. So really it was the combination of those two, plus although we have a better vaccine supply situation right now the recognition that one larger of an outbreak could compromise that. So the Director General was interested particularly in the advice of the group around expediting the evaluation of dose-sparing activities as well. Just in terms of the vector, and anything else you want to comment on?

OT   Aedes Aegypti is usually associated with a bulk transmission of yellow fever. It also carries other viruses but that's the main species of mosquito that is involved with transmission in urban cities. There are other species of mosquito that occur outside of the urban area, in the peri-urban, in the forest, but for what we're having right now it is specifically Aedes Aegypti. Usually the same mosquito also carries other viruses and so it is not strange to find, during a yellow fever epidemic, to find other viruses being transmitted at the same time.

MV   Thank you very much. As we wait to see if there are any more questions, just a reminder that there will be an audio file sent out to the media list, and also a transcript that will be posted on the WHO website shortly following this event. Are there any other questions in the room please? Or any other questions on the phone? Chris? Looks like maybe one more on the phone, Natalie Hewitt from Politico; please go ahead.

NH   Hi, thank you for taking my question; I'm a bit confused about the dose-sparing strategy. You've examined the possibility of using just a fraction of a dose to cover more people, or you are going to? Just to be clear and if you could clarify that please.

BA   Yes, sorry, Natalie. Pardon me, Marsha, if I might? Do we have any further questions?

MV   Please go ahead. No, we don't have any further questions.
Sorry, Natalie, I hadn't meant to confuse with that; what the committee recommended in terms of optimising the use of the available vaccine were the measures that I mentioned, but then it said as a contingency you should rapidly evaluate and have the SAGE group, what's called the Scientific Advisory Group on Immunisation evaluate the evidence as a matter of urgency for using fractional dosing, or dose-sparing, that would mean a fraction of a dose, strategies going forward if new urban outbreaks were to occur and to potentially exceed global production and stockpile capacity in the near term. So really it was part of a contingency planning; it did not recommend the application of that strategy right now.

Thank you.

We have two more on the line, one appears to be from CBC, and that's Vicky from Toronto, and then we'll pick up a follow-up question from Kai Kupferschmidt. Vicky, please go ahead.

Hi there, I think that was me, Vic Doppia [?] here.

I'm sorry.

That's okay, I get it all the time. My question is about, and I believe Doctor Aylward might have referred to it earlier, but can you discuss what if any challenges are faced in deploying all these vaccines and getting people immunised?

A follow-up question by Kai; go ahead, please.

Thanks, yes, I just wanted to check in terms of the dose bearing regimen that's being discussed, is it necessary to declare a PAGIC for that to be used? I've never been quite clear on that.

Shall we pick up a third question or go with two? No? Alright, we have two in front of us then.

Okay, so just on the second question; in terms of applying a dose-sparing strategy that would not require the declaration of a FIC, no, but that was one of multiple pieces of advice provided by the committee in terms of measures to ensure that the world is able to manage any contingency going forward, or certainly further urban outbreaks, but it was not linked to an issue around the declaration of a FIC. In fact the use of a dose-sparing strategy would require a number of other steps related to the regulatory processes and procedures in a country and their evaluation of the scientific evidence. But the emphasis of this committee was there could be work at an international level to facilitate future consideration of fractional dosing, and that work needed to be expedited because right now there are gaps in the scientific knowledge as to how long immunity would persist following fractional versus whole dosing, how that might affect some of the policies around the need for vaccination certificates for travellers, also how the fractional dosing would actually be done in practice as well as whether the fractional dose would be one-fifth or one-half etc.

But the emphasis of this committee was there could be work at an international level to facilitate future consideration of fractional dosing. And that work needed to be expedited because right now there are gaps in the scientific knowledge as to how long immunity would
persist following fractional versus whole dosing, how that might affect some of the policies around the need for vaccination certificates for travellers. Also how the fractional dosing would actually be done in practice, as well as whether the fractional dose would be one fifth or one half etc. The other issue is the formulation of the vaccine differs by manufacturer, which further complicates what fraction of which dose would be appropriate, so there’s a lot of complex technical issues associated with it. But the view of this committee was that needs to be rapidly addressed, because you could potentially need such a strategy until global production is further increased. So I hope that’s clear [unclear] and if not, please just reframe it and we’ll go back at it.

In terms of the question [unclear], that you asked about deploying and using vaccines in situations like this. Well, these are the challenges we face in the implementation of any mass vaccination campaign, and as Professor Tomori is a lot closer to the action in Africa with the respect of vaccination, I’ll have him add a couple of comments. But usually the challenges are around, again remembering that often we’re operating in very resource poor areas where everything from the logistics of moving and keeping vaccines at the right temperatures, to finding sufficient trained vaccinators, ensuring that they’re trained quickly, actually planning and identifying the populations, targeted populations as well as the whole risk communications and community mobilisation activities necessary to ensure there is a high uptake of a vaccine in a situation like this. All of these pose challenges in any environment and in resource poor environments, particularly tough challenges, and that’s part of the reason, for example, in Luanda, it took some weeks and months to get coverage up over the 90 percent level where they’re reported to be now in Luanda.

OT I’d like to add also that existing health systems in many of the countries that are affected are quite fragile, and having an emergency on top of that stresses the situation much further. And so it may take a little longer before they can get the emergency situation in place. I was given the example of what happened to us in Nigeria in 1985 86 when we had to import almost all of our 30 million doses of Yellow Fever vaccine into the country. The resources were, the logistics, the staff to make use of all the vaccines within such a short time was a major problem, and that delayed the vaccination exercise, which also sometimes may lead to some wastages, and I think it’s to prevent that, they learned from the experiences of the past. The interventions that we put in DR Congo and also in Angola, is based on learning from the experience of the past, particularly to [unclear] time. But definitely it reduced the wastage, and we showed that tests are done much properly and that’s the whole essence of what our committee is looking at. We do the right things at the right time to ensure that we don’t have the [unclear] declared.

BA And maybe just two other comments I might have mentioned in this regard. One is when we’re conducting these campaigns, the Yellow Fever campaign. Remember you’re using an injectable vaccine which requires the safe handling of the needles, syringes etc. And again, in areas with fragile and very weak health systems, as Professor Tomori highlighted, there are risks associated with injectable vaccines and which require appropriate training and supervision etc. All of these things complicate the actual deployment use of those vaccines. And on the communications side as well, vaccination in many of these settings is seen as an activity which is primarily targeted at children usually. So now we’re targeting a different age group, and in fact the whole population, and that requires further social mobilisation, community engagement, to optimise the coverage in the age groups that are at greatest risk of the disease.
MO Thank you. Please go right ahead.

OT One more comment.

BA We have lots to say about our [overtalking].

OT The mass campaigns, they were carried out in West Africa between early 2000 up to now. You probably have not heard of outbreaks of Yellow Fever again in West Africa. That used to be the scene of activity of Yellow Fever in those days. But gradually it’s moving towards East and Central Africa, and I think what was done in West Africa where countries carried out mass vaccination, is a long term plan and I think we need to look forward to that kind of thing and do the same type of thing in those parts of Africa where we’re now seeing the epidemic pieces [?] of Yellow Fever [unclear]. This is a long term plan and I’m sure that if that is done, we can bring Yellow Fever to zone [?] control without having epidemics all over the place.

MO Doctor Aylward, we have a request for you to repeat the figures about the size of the stockpile at the end of this month.

BA So the expectation, and again remember the stockpile balance I give you today could change tomorrow if there are other demands put on it, but currently we expect by the end of May the stockpile will be about seven million doses.

MO Thank you very much. Please go ahead.

UF So you have now seven million doses. You think you’re going to have them by the end of this month. How much do you think we’re going to need of, like, how much do you think you’re going to need actually? And I think in Angola you wanted to use like, about ten million but the population, it’s more than twice as large, so I just wanted to know when can we stop? Like, how much do you want to invest here?

BA So in terms of maybe, and also to be clear, we’re just over five million doses stockpiled right now. Now in terms of how much we would need, the stockpile usually sits at about six million, five million now, end of the month seven million. The stockpile usually sits at six million doses and that calculation is based on how much we would expect to need to manage Yellow Fever outbreaks based on historical information and trends. So in terms of the current situation, we expect that that seven million doses, especially with its, the additional doses expected by August, should be sufficient. It is sufficient vaccine, we believe, to stop the transmission that we currently know, and that is because the areas where we know we have transmission, there is sufficient vaccine to actually cover that population at the levels needed to stop transmission.

So the bigger challenge is the application, the effective application of the existing vaccine, rather than a vaccine shortage. And this has really been the situation from the beginning. When you detect local transmission of Yellow Fever, get on it very quickly with vaccination, you can stop the transmission quickly as well. The challenge has been getting vaccination coverage up high enough, fast enough, to prevent further spread and persistence of it. But, at this point, Angola has built a large vaccinated population through the vaccination campaigns that have been ongoing in most affected areas, all affected areas, and in, as I mentioned DR
Congo, they have a history of getting to high vaccination coverage through mass campaigns very, very rapidly. A lot of experience through different campaigns.

So the expectation is the current situation could be handled with the existing vaccine. The challenge will be, of course, if there are other urban outbreaks in large areas, if these prove to be explosive because of an inability to rapidly detect or vaccinate, that is when we could potentially end up in a situation of needing to look at dose sparing strategies. But at this point, the assessment of the committee was that we are not there in terms of needing dose sparing strategies.

UF This is just a follow up question. Basically, those seven million doses, have you already bought them? Have you, they’re just produced for you? Or, how many are produced for you?

BA So, produced for us? Seven million doses.

MO So I think we see no more questions. I’d like to thank Doctor Tomori and Doctor Aylward for their comments and thank you to all the journalists on the phone and those in the room and the followers on Facebook.