Global Health Issues

Virtual Press Conference
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Speaker key:

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AM	Dr Abdirahman Mahamud
AH	Dr Ana Maria Henao-Restrepo
SB	Dr Sylvie Briand
HB	Helen Branswell
LG	Laurie Garrett
DM	Donato Mancini
CO	Christiane Oelrich
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CP	Carmen Paun

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CL Hello, and welcome to WHO, right out of headquarters here, in Geneva. It is Thursday, 23 March, and we welcome you to today's virtual press conference on global health issues, but also on a very special occasion. It's World Tuberculosis Day, which we're celebrating tomorrow, and we have some special guests for this with us today. My name is Christian Lindmeier and I'll run you through this press conference.

Now, we will not have interpretation today. Apologies for this, but let me go into the participants. First and foremost, of course, we have Dr Tedros Adhanom Ghebreyesus, WHO Director-General. We have Dr Maria Van Kerkhove. She is the Technical Lead on COVID-19. We have Dr Abdirahman Mahamud, Director ad interim for the Alert and Response Coordination, with us here. I believe we also have Dr Mike Ryan online, the Executive Director for WHO's Emergencies Programme.

Then, we have two special guests. Here in the room, with us, is Dr Tereza Kasaeva. She's the Assistant Director-General ad interim for Universal Health Coverage but she also leads the Global Tuberculosis Programme at WHO. Online, with us, is Jeff Acaba. He's an activist and a TB and HIV survivor from the Philippines and he's representing the Civil Society Task Force. Very glad to have you with us today.

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I believe that's it from me. Now, as usual, if you want to ask questions raise your hand with the Raise Your Hand icon and afterwards don't forget to unmute yourself, but I'll remind you of this. With this, over to the Director-General for the opening.

TAG Thank you. Thank you, Christian. Good morning, good afternoon and good evening. On Tuesday, Tanzania confirmed its first known cases of Marburg virus disease. So far, eight cases have been confirmed, including five deaths. More than 160 contacts have been identified and are being monitored.

National responders, trained jointly by WHO and the US CDC, have been deployed to the affected region to carry out further investigations, monitor contacts and provide clinical care. Tanzania was able to confirm the outbreak because the first samples were tested at a mobile lab that was set up by the result of work supported by WHO last year to prepare for outbreaks of viral haemorrhagic fever, including Ebola and Marburg. WHO has offered further support to the government of Tanzania.

A month ago, Equatorial Guinea also reported an outbreak of Marburg virus disease. Since then, eight additional laboratory-confirmed cases have been reported, bringing the total to nine confirmed and 20 probable cases. WHO has deployed experts to Equatorial Guinea to support the government's response and to strengthen community engagement.

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Marburg belongs to the same family of viruses as Ebola, causes similar symptoms, transmits between humans the same way and, like Ebola, has a very high fatality ratio. While there are no approved vaccines or therapeutics for Marburg, WHO is leading an effort to evaluate candidate vaccines and therapeutics, in the context of the outbreak.

The developers are on board, the clinical trial protocols are ready, the experts and donors are ready once the national government and the researchers give the green light. In the meantime, we're not defenceless. Careful contact tracing, isolation and supportive care are powerful tools to prevent transmission and save lives.

We continue to see misinformation on social media and in mainstream media about the pandemic accord that countries are now negotiating. As I said last week, the claim that the accord will cede power to WHO is quite simply false. It's fake news.

Countries will decide what the accord says, and countries alone, and countries will implement the accord in line with their own national laws. No country will cede any sovereignty to WHO. If any politician, business person or anyone at

all is confused about what the pandemic accord is and isn't, we would be more than happy to discuss it and explain it.

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Yesterday, the first UN Water Conference in 50 years began in New York. Around the world, two billion people lack safe drinking water and almost half the world's population use sanitation services that leave human waste untreated. Half of all health care facilities globally lack water and soap or alcohol-based hand sanitiser.

The consequences are deadly. Each year, at least 1.4 million people, many of them children, die from preventable causes linked to unsafe water and poor sanitation. Right now, for example, cholera is spreading in countries that have not had outbreaks in decades.

Around the world, WHO and UNICEF work with governments and partners to improve access to water, sanitation and hygiene. We are calling for stronger government leadership to drive change, for improved funding and financing, for investments in workforce and institutions, for better data and evidence to guide decisions, and for innovation and experimentation. The right to health means the right to safe water, sanitation and hygiene.

Tomorrow is World Tuberculosis Day. It marks the date 141 years ago, the 24th of March 1882, that the German scientist, Robert Koch, first presented his discovery of the bacterium that causes tuberculosis, or TB. Since then, we have come a long way. We have tests, treatments and a vaccine against TB that have saved countless lives. TB is a preventable, treatable and curable disease.

Since 2000, deaths from TB have dropped by nearly 40% globally, and more than 74 million people have received access to TB services, and yet it still kills 1.6 million people each year and affects millions more, with enormous impacts on families and communities.

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The COVID-19 pandemic and conflicts in many countries have severely disrupted services to prevent, detect and treat TB. As a result, WHO last year reported an increase in TB deaths for the first time in more than a decade. In 2015, the nations of the world committed to ending the global TB epidemic by 2030 in the Sustainable Development Goals.

This September, world leaders will meet in New York for the second High-Level Meeting on TB. We believe that meeting should be a turning point in the fight against TB if leaders make real and lasting commitments to invest in the response to TB. Ending TB by 2030 is an extremely ambitious target. To support that target, we established the WHO Flagship Initiative on TB five years ago to advance research and to increase access to TB services.

We need to make the tools we have available to more people. But we also need new tools. Increasing drug resistance is undermining the effectiveness of some medicines that are used to treat TB and the only TB vaccine developed to date, the BCG vaccine, is more than 100 years old and does not adequately protect adolescents and adults, who account for most TB transmission.

That's why WHO has proposed establishing a TB Vaccine Acceleration Council to facilitate the development, licensing and use of new TB vaccines. But it's also clear that we cannot truly end TB unless we address its drivers, poverty, malnutrition, diabetes, HIV, tobacco and alcohol use, poor living and working conditions, stigma and discrimination, and more.

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For that reason, we have decided to extend the initiative for a further five years, until 2027, and broaden its scope. To say more, I'm delighted to welcome Dr Tereza Kasaeva, WHO's Assistant Director-General ad interim for Communicable and Noncommunicable Diseases. Tereza, welcome, and you have the floor.

TK Thank you very much, Dr Tedros. And to add to the excellent overview from Dr Tedros, in line with the very positive slogan of the World TB Day this year, Yes! We can end TB!, please let me highlight some of the achievements made as a part of the Flagship Initiative.

Since 2018, through DG's initiative, support has been provided to more than 100 countries, including 49 countries with a high TB burden. Two new anti-TB drugs and 12 new TB diagnostic tests were recommended by WHO. WHO developed new consolidated TB guidelines, recommending for the first time fully oral, two or three times shorter, and more effective treatment, including for the most severe forms of drug-resistant TB.

All WHO recommended oral medicines for the treatment of TB in children have child-friendly formulations and are commercially available. 109 countries are using now WHO-recommended all-oral new treatment of MDR TB, and 26 out of the 30 highest TB-burdened countries are using WHO recommended rapid molecular diagnostic tests.

WHO is leading monthly monitoring and reporting on TB epidemiology and management from over 100 countries, and this is vital to help countries to address urgent needs in real time and plan and prioritise their activities properly.

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New, effective drugs for TB treatments are available due to the effective collaboration of WHO with the Member States, partners such as Stop TB Partnership, Global Fund, Unitaid, USAID, manufacturers and civil society. These partners are closely engaged in the Flagship Initiative.

For the upcoming period of 2023-2027, the initiative will feature new, ambitious targets and intensify focus on enabling universal access to quality, WHO-recommended TB prevention and care, advancing research, especially into new TB vaccines, strengthening engagement and accountability across sectors beyond health and on linkages to the broader health agendas like AMR, UHC and pandemic prevention, preparedness and response.

We hope also that new targets will inform the upcoming UN High-Level Meeting on TB at the General Assembly in September this year. One of the main focuses of this Flagship Initiative is on the accelerated uptake and rollout of key WHO recommendations that can significantly improve health outcomes for those ill with TB, and especially with drug-resistant TB.

Yesterday, WHO and over ten key partners, including civil society, launched a call to action urging governments and other stakeholders to accelerate the implementation on a novel six-month all-oral regimen for the treatment of drug-resistant TB.

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In closing we, at WHO, are calling for countries to fast-track efforts to ensure all people with TB access quality prevention and care in line with the WHO drive towards achieving UHC, particularly for the most vulnerable populations. This is critical to leverage and amplify the high-level spotlight and opportunities on ending TB. Thank you.

TAG Thank you. Thank you, Tereza. Ending TB is not a job for WHO alone, or governments alone, or health systems alone. It will take action and greater accountability from all governments, agencies, donors, researchers, the private sector, and civil society.

The voices of people who live with TB are the most powerful, and must be heard the loudest. So, I'm delighted to welcome Jeff Acaba, a TB and HIV survivor from the Philippines, and a member of WHO's Civil Society Task Force. Jeff, thank you for joining us today, and you have the floor.

JA Thank you so much, Dr Tedros, for inviting me to today's press briefing and for the opportunity to speak on behalf of the Civil Society Task Force on TB, or CSTF. Good evening from Bangkok, in Thailand.

My name is Jeffry Acaba and I'm currently working as a Senior Programme Officer with APCASO, a regional civil society network based in Thailand working on health, human rights and social justice. I have also been a member of the CSTF since 2018, representing Western Pacific.

I'm a gay man from the Philippines and I have been living with HIV for nine years now and, also, I am a TB survivor. I'm proud to share that I'm currently enrolled under TB preventive therapy and this is my third of six months now. This is important to underline as we stand behind the new call to action for a shorter and effective new regimen for all people with drug-resistant TB or DRTB.

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For CSTF, it is the right of every individual that we benefit from the research and the development of new tools and treatment regimens. For too long people with DRTB have struggled with painful injections, longer regimens, side effects and catastrophic out-of-pocket costs. We, as the CSTF, join this call to action and strongly urge governments, especially ones with high burden of DRTB, to roll out and accelerate the implementation of the novel six-month all-oral regimen for the treatment of DRTB.

This has the potential to dramatically increase cure rates due to its high efficacy, allow broader access due to its lower cost and improve quality of life as this regime is all-oral and significantly shorter than the conventional treatment regimens. As CSTF we also look forward to contributing to the continued and expanded DG Flagship Initiative with five strategic pillars, namely engage, accelerate, align and account, and advocate.

We would like to acknowledge the close collaboration with the Director-General over the past five years, which has made our engagement more meaningful. We have had several joint statements with the DG to push forward key issues for the rights of those affected and their families.

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With regards to the CSTF priorities in the upcoming High-Level Meeting on Tuberculosis, I would like to first take this opportunity to thank the WHO Global TB Programme in organising and collaborating with the CSTF in the ongoing social listening exercises that are taking place across the six WHO regions. This is a momentous undertaking and we recognise WHO's openness to work with civil society organisations and TB-affected communities even more. This is game changing.

Based on what we listened to from these consultations so far, our constituencies are saying that first we need adequate and sustainable funding for the tuberculosis funds, including in the development of novel TB vaccine and support for organisational development of civil society in TB-affected communities.

Second, strengthen the implementation of the WHO Multistakeholder Accountability Framework for TB as a vehicle for multisectoral action and accountability. And, third, sustain the prioritisation of TB in both the upcoming UN High-Level Meeting on Universal Health Coverage and also in the Pandemic Preparedness, Prevention and Response High-Level Meeting, especially in the context of reducing the impact of catastrophic costs against people with TB, and sharing of technology and technical knowhow during pandemics.

On behalf of CSTF, we look forward to an active participation during the multistakeholder hearings this May in New York and sustained engagement in advocacy with our respective governments and WHO leading to the High-Level Meeting on TB in September. Thank you so much.

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TAG Thank you. Thank you, Jeff, for your advocacy and commitment to the fight against TB around the world. Thank you also for your kind words regarding our partnership, which is becoming more impactful, and I assure you that we will work with you, civil society, even more closely because we have seen in the past five years how important it is to include you in our work, especially guideline development for TB, which you have contributed to greatly.

Finally, today marks the first day of Ramadan, so for all Muslims, I wish you Ramadan Kareem. Christian, back to you.

CL Thank you very much, Dr Tedros. With this, we can open the floor for questions and, again, to remind you if you want to raise your hand, with the Raise Your Hand icon on the screen, and please unmute yourself when it is your turn. The first question goes to Helen Branswell, from STAT News. Helen, go ahead.

HB Thanks very much, Christian. I wanted to ask about the Marburg outbreak in Equatorial Guinea. Is it WHO's sense that that government is

taking this threat seriously enough? Is there enough testing being done there? Is there enough contact tracing being done there? And in his opening remarks the Director-General talked about clinical trials being ready to proceed for vaccines and drugs when the countries green-light them. Is Equatorial Guinea indicating that it would be willing to conduct those trials? Thank you.

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CL Thank you very much, Helen. This goes to Dr Abdirahman Mahamud. He's Director of Alert and Response Coordination. Please, go ahead Abdi.

AM Thanks, Helen. In term of the government leadership on the response, this is the first time Equatorial Guinea is dealing with VHF Marburg virus and it is a learning curve. Initially, the outbreak was limited in a remote village. Now, with the spread in three provinces and the urban centre, the government has recommitted and yesterday there was the highest level of the political committee announcing now to the public and to WHO.

We issued the disease outbreak news and with the outbreak spreading geographically and some of the chain of transmission, I think there is a recommitment in bringing again the forecasts. Some of the experiences where countries are dealing with viral haemorrhagic who haven't dealt with it before is the thinking that it may go away.

But with the spread, right now, I think it brings a new commitment and at the heart of it, as you rightly said, is contact tracing, community engagement and building. From WHO's side, we have a big team there and we are ready to support.

The Director-General has been engaging with the head of the state and our commitment. One of the challenges was finding expertise who are Spanish speakers, but also going around some of the visa restrictions. We just had the good news from our representative there that the government has agreed for further visa on arrival.

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So, it's an evolving epidemiology and I think, with the current situation, we believe that the government will take stronger measurement and community engagement that we have been calling for.

In terms of the research, the initial thinking was as the cases were only confirmed by only one lab, right now with new cases across the country we are engaging again and hopefully we'll be able to integrate the research into the outbreak response. This is how we learn and we save more lives. Thank you.

CL Thank you very much, Dr Mahamud. I see Dr Ana Maria Henao-Restrepo, she's the Coordinator for the R&D Blueprint, wants to add.

AH Thank you very much. Just to add to what has been said, is that WHO and all the partners, including the developers and several of the donors, and many of the scientists around the world, we are working together to try to prepare, together with the countries, better and better after every outbreak.

What we are doing is making progress on, first, ensuring that we have a coordinated approach to evaluate the vaccines through our Prioritisation Committee, that we have a coordinated approach to ensure that there is

vaccines into vials, candidate vaccines into vials by the time the outbreaks have started. And we want to thank several of the partners including the US BARDA, CEPI, in the European Union, HERA, and many other partners, Canada, etc., for working with us towards that.

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And, third, we are working on having innovative and simple protocols that can be implemented in the countries with the inputs of the national researchers. In the case of Equatorial Guinea and in the case of Tanzania, as Abdi has mentioned, we have conveyed this information to the national authorities and invite them to appoint principal investigators who can be our counterparts.

Both countries are considering it and in the meantime we are getting all the things prepared so that when they are ready to introduce research into the outbreak response we are also ready to be good partners and facilitate the process as required. Thank you.

CL Thank you very much, both. Next question goes to Laurie Garrett. Laurie, please go ahead and unmute.

LG Thank you very much and good morning or afternoon or whatever it is for you. This is about Marburg. I'm trying to determine the strain specificities. Have the strains in Tanzania, Equatorial Guinea been genotyped? How do they compare to the earlier strains in Uganda? Is it all Ravn? And are these isolated, separate outbreaks or is it possible we're looking at a migratory bat equatorial experience with a common strain? Thank you.

CL Thank you very much, Laurie. Dr Mahamud, please.

AM Thank you. To start, firstly on Tanzania, we don't have the information on the genetic sequencing. We are working with the national public laboratory. WHO recommends sending to the collaborating centre, so we are working with the country office so that we have the result in terms of the sequencing.

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For Equatorial Guinea, with thanks to IP Dakar. They have initially done, although we are still waiting for the whole genomics to be published. The data shows that the sequence is related to the Marburg virus isolated in bats in Sierra Leone in 2017. That's closely related to the large outbreak that happened in Angola in 2025.

We are trying to understand more and get the detailed field investigation combined with the sequencing result, but the lessons we learned from COVID is sequencing plays a very, very important role and it will help us in understanding both the therapeutics, the vaccines, but also understanding the virus and virulency.

We are waiting for the samples from Tanzania and also for the other eight samples that were detected to understand better are we dealing with one single outbreak within Equatorial Guinea? What are its links to Tanzania? Are these separate events with Equatorial Guinea. So, more questions than answers but as soon as we get it, we'll share with you.

CL Thank you very much, Dr Mahamud. The next question goes to Donato Mancini, from the FT. Donato, please go ahead and unmute.

DM Hi. Good afternoon. Sorry if I sound like this. I lost my voice. Sorry, if all these questions are about Marburg, I know important TB is, but how concerned are you? Are you concerned that community transmission is taking place? Then, specifically about Cameroon. Have those cases there been confirmed as Marburg? Do you have any fresh information? Thank you.

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CL Again, Dr Mahamud, please.

AM Thank you. Today, instead of TB, it's becoming a Marburg day. But, yes, we've been working very closely with Cameroon and Gabon. They have increased their readiness level and they have tested samples. All have been negative but the risk is very high. As you have mentioned yesterday, the sub-regional risk is very high.

It's happening right at the border with the population movements, so the countries need to be alert to increase their readiness. It can happen anywhere. We're working very closely but from what we've got all the alerts recorded were investigated on time. There's a strong community engagement and awareness going on across Gabon and Cameroon, and we have pre-positioned all the logistics and supplies.

Both MOH, Ministry of Health Cameroon and Gambon are ready and they do have the experience. They bring again, more importantly, the regional approach. We learnt it when we had the Sudan virus disease in Uganda where the Minister of Health convened all the regional countries to have one regional approach. So, that the same thing, we expect to see it in Equatorial Guinea, the three countries coming together to have one common response. Thank you.

CL Thank you. Yes, and indeed we want to encourage, although Marburg is terribly important, for those for our special guest speakers, to come forward with TB questions for those who have them because we don't have that opportunity very often. Next question goes to Christiane Oelrich, from dpa. Christiane, please go ahead and unmute.

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CO Danke, Christian, and I'm sorry to disappoint you but my question was also on Marburg. Population growth, encroachment of wildlife areas, these are some of the drivers, I guess. Is WHO worried that Ebola or Marburg or viruses from that family will become the next pandemic? Is there a risk that this will spread beyond the region? How worried are you and what needs to be done against that? Thank you.

CL Dr Mahamud.

AM I will turn to my colleague, Sylvie, who is leading the Epidemic and Pandemic but, indeed, as you have seen from Ana Maria, Marburg is top of our priority disease for research as we don't have countermeasures approved. So, I will turn to my colleagues, Sylvie and Ana Maria, to add.

CL Let me start with Dr Sylvie Briand. She's Director Epidemic and Pandemic Preparedness. Dr Briand, please.

SB Thank you very much for this question. I think this is why we try to have a very rapid response to this kind of event when we have spillover from animal reservoir to human population. It starts with a very localised outbreak and this is why the contact tracing is so important to stop the chain of transmission and protect the other members of the community or the family to be infected.

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Those diseases are transmissible by close contact, so it's easier probably to prevent further amplification of the disease by taking care of the patient first and then preventing further transmission by having contact tracing and isolating contact as soon as they show symptoms so that we can prevent further amplification.

But it requires a lot of effort. It requires a lot of communication with communities so that they really understand the risk and they can implement preventive measures at their level, first and foremost, and we need also to support them in doing so to avoid stigmatisation of course and also to support them when they see their beloved one dying from this disease, unfortunately. But early response is really the most important thing until we have countermeasures in place so that we even provide more support to the communities.

Having said that, if we are successful in this initial phase, we can prevent further spread of the disease within the same country but also to neighbouring countries. But, again, it's an endeavour that requires the input and the collaboration of everyone because it is at the very first stage of these outbreaks that we can prevent further amplification. Over to you, Ana Maria, for more details on the countermeasures that can be developed. Thank you very much.

AH Thank you, Sylvie. I just want to first talk about an integrated approach that has been initiated by the scientific community globally, One Health, that is really important in the context of these filoviruses and these emerging infectious diseases.

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As you know, it's an integrated and unifying approach that has the disciplines across the board of science that will help us to prevent, predict and detect if there are spillover events from animals to humans and between humans, as for the case of these diseases. So, that is a critical part.

The other critical part of the work that we are doing is comparing these pathogens and these viral families and bacteria that have more possibilities of creating outbreaks and that spread and become public health emergencies of international concern and perhaps pandemics.

So, we are going through a global exercise currently, reviewing the evidence of 25 viral families with 25 groups of experts and one group working on bacterial diseases and another one working on the Disease X or the Pathogen X.

From those working groups and those discussions, then we look into the lack or the availability or the pipeline of medical countermeasures to prevent these spillover events, to prevent the transmission between humans or to protect or

treat people have been infected. And that is the work that we have started since 2015 on the basis of a resolution of the World Health Assembly. Thank you.

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CL Thank you very much, all of you. Now, it seems like TB-related journalists are a bit shy today. So, I have one question here in writing. How optimistic is WHO about developing at TB vaccine? Are there good candidate vaccines right now, and when will we have one or what should be done to accelerate the progress toward one? We'll have Dr Kasaeva for that.

TK Thank you very much for the question. We may think that absence of questions means that our awareness campaign at WHO is going well. Indeed, we are very optimistic about having new vaccines, effective TB vaccines soon because we have some reasons for this.

First of all, there are about 16 vaccine candidates in the pipeline and at least one of the vaccines at this stage, three clinical trials are showing efficacy at least 50%. So, it means that if it will go the right way, quite soon we may have a new, effective TB vaccine. Furthermore, we've heard some positive news from companies working with mRNA-based vaccines like BioNTech, that they have one vaccine identified and their phase 1 trials will start quite soon.

As WHO, we've created, and Dr Tedros highlighted this, a new platform that can help us to bring all the partners. We see growing interest and this is the right momentum, building on the experience with COVID-19 to strengthen collaboration and share responsibility, increase investments in the vaccines development. That's why we're quite serous and we'll work hard on pushing forward this agenda. Thank you.

CL Thank you very much, Dr Kasaeva. Next question goes to Jérémie Lanche, RFI. Jérémie, please go ahead and unmute.

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JL Thank you. Mine is on TB also. Maybe if you can explain a bit more. What are main drivers of the drug-resistant TB? Is it the same thing for any other drug-resistant disease or is there something specific here? And if you could comment on the recent move by India. I heard that Médecins Sans Frontières is welcoming the Indian Patent Office rejection of Johnson & Johnson's attempt to extend a monopoly on a life-saving TB drug. I would like to know if you consider this thing a positive sign also. Thank you.

CL Thank you very much. Dr Kasaeva, please.

TK Indeed, the multidrug-resistant tuberculosis is one of the major contributors into the AMR agenda and the reasons for the development of drug resistance are the same as for any, the resistance of the antibiotics of course. First all, improper use of antibiotics and non-completion of the treatment of the patient. Also, the pipeline was for many years very poor and the resistance is developing for the drugs over time.

Now, we have at least three new effective drugs and we are trying to guide countries carefully and manage and give these drugs following all WHO recommendations. Also, proper diagnosis is becoming key before putting

patients on treatments. That's why we are encouraging to provide access to all TB patients for the proper diagnostics first using rapid molecular diagnostic tests.

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In terms of news from India, we are considering them as positive news. As you know, Janssen Pharmaceuticals have a monopoly over bedaquiline, one of the most effective drugs for the treatment of drug-resistant TB, and this monopoly will continue until July 2023.

Then, countries that do not have a secondary patent are expecting to receive generics. India is one of these countries who doesn't have secondary patent and their generic manufacturers are quite ready to enter the market with quality-assured tablets of bedaquiline. That's why, from that point of view, we are considering this news as positive.

CL Thank you very much, Dr Kasaeva. I see one more question and that one goes to Carmen Paun, from Politico. Carmen, please go ahead and unmute.

CP Thank you so much, Christian. I apologise but my question is also regarding Marburg. I just wanted to clarify on the statement that the WHO is prepared to help with research in Equatorial Guinea and Tanzania. Does that mean that if both countries agree, there will be vaccines, candidate vaccines, going to those countries for clinical trials? If so, can you give details of the amount of those vaccines? When we will know which ones will be tested? What does that actually mean in practice? Thank you.

CL Thank you, Carmen. No need to apologise. We'll got to Ana Maria Restrepo, please.

AH Thank you for the question. Let me explain a little bit more and thank you for the opportunity to do so. When we say we are ready, it is because we have been working in preparation for outbreaks but also, since January, through the outbreak in Equatorial Guinea and now in Uganda in three fronts.

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The first front is a very strong and good collaboration with all the researchers and the developers working on Marburg vaccines and therapeutics under a consortium called MARVAC. We published in two peer-reviewed journals, the protocol but also the willingness to collaborate of this community.

Second, because we have prepared the protocols with the SOPs and have the discussions and debates about what is the best way to advance what we know about these vaccines. And, third, because with several donors, and I mentioned some in my intervention, we have been working towards enhancing the availability of candidate vaccine doses so that we can deploy them.

We had a consultation about ten days ago and the information is available on our website, but briefly just to say that from the Sabin ChAd Marburg vaccine there are about 750 doses available, perhaps a bit more, and they have a bulk of 8,000 doses. This is all on our website. The IAVI Marburg vaccine, they are running good manufacturing practices and good manufacturing production runs and they will be available a bit later this year.

From the Public Health Vaccines, we also have a rVSV platform vaccine. They have several hundred doses frozen that are GMP available in one-dose vials. From Auro/Emergent there is also a VSV vaccine. They have 4,000 doses in vials available. Johnson & Johnson have an Adeno26 vaccine with about 3,500 doses available from a project that is now moving forward. And the University of Oxford have 1,000 doses in vials now and is expected to have additional doses shortly.

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And, as I said, this is thanks to these developers and to the work of the funders, including the US BARDA, the European Union, CEPI, Canada and the government of the United Kingdom and many others. So, this is what we mean, that we are trying to ensure a collaborative global effort, that when there is an outbreak we can approach the researchers in these countries and the authorities and say we are ready to support.

The other piece of work that is equally important is that with our colleagues in the regulatory team we are working through a platform that is called AVAREF, that involves all the regulatory and ethics committees in Africa.

And it is our intention in the months to come to ensure that all these generic core protocols are reviewed scientifically by the experts in these regulatory authorities in the affected countries and pre-approved, so that it shortens the time between the declaration of the outbreak and the authorisation to initiate the trial. So, we are all learning and we are trying to, every time, be more effective and faster. Thank you.

CL Thank you very much, Dr Restrepo. With this, we've come to the end of our list here. Thank you all very much for your participation. As usual, we'll be sending the audio files and Dr Tedros' remarks right after this briefing, and the full transcript will be available tomorrow during the day. If you have any follow-up question, please don't hesitate to write to us, to mediainquiries@who.int. With this, over to Dr Tedros.

00:46:25

TAG Thank you. Thank you, Christian. Thank you to all members of the press for joining us today, and I wish Muslim friends and the Muslim family Ramadan Mubarak. See you next time.