

# COVID-19

## Virtual Press conference

### 4 December 2020

#### Speaker key:

|     |                               |
|-----|-------------------------------|
| TJ  | Tarik Jasarevic               |
| TAG | Dr Tedros Adhanom Ghebreyesus |
| CS  | Professor Cass Sunstein       |
| NI  | Nina                          |
| BA  | Barzu                         |
| MR  | Dr Michael Ryan               |
| MK  | Dr Maria Van Kerkhove         |
| MS  | Dr Mariangela Simao           |
| KOB | Dr Kate O'Brien               |
| SO  | Professor Saad Omer           |
| CH  | Chantal                       |
| KA  | Kai                           |
| SS  | Dr Soumya Swaminathan         |
| RA  | Randy                         |
| JA  | Jamie                         |

**00:00:26**

TJ Good evening, everyone, from Geneva, WHO headquarters. My name is Tarik and I'm happy to be back at these press conferences; it's been five months. Welcome to another regular WHO COVID-19 press briefing. We have a number of speakers here in the room but also we will have some guests whom Dr Tedros will introduce in a moment. In the room with us we have WHO Director-General, Dr Tedros, we have Dr Maria Van Kerkhove, Technical Lead on COVID-19. We also have Dr Mike Ryan, who is our Director of Emergencies, we have Dr

Mariangela Simao, who is Assistant Director-General on Access to Medicines and Health Products.

We also have Miss Dia Satiani Saminachsich, who is a Senior Advisor on Gender and Youth. Online we have Mr Steven Solomon, Principal Legal Officer, we have Dr Soumya Swaminathan, our Chief Scientist, and we have Dr Kate O'Brien, who is the Director for Immunisation, Vaccines and Biologics.

As we always say at the beginning of these briefings, we have simultaneous interpretation in the six UN languages plus Portuguese and Hindi and I'd like to thank the interpreters who are here with us today. With that I'll give the floor to Dr Tedros for his opening remarks and also he will introduce our guests today.

**00:02:05**

TAG Thank you, Tarik, and welcome back. Good morning, good afternoon and good evening. This week I was pleased to see that the United Kingdom's Medicines and Healthcare Products Regulatory Agency gave an emergency authorisation for the Pfizer BioNTech COVID-19 for roll-out. Just as with the UK's finding on dexamethasone in the summer this is an important scientific step for the world as vaccines will be critical in the battle against COVID-19. Progress on vaccines gives us all a lift and we can now start to see the light at the end of the tunnel.

However WHO is concerned that there is a growing perception that the pandemic is over. The truth is that at present many places are witnessing very high transmission of the virus, which is putting enormous pressure on hospitals, intensive care units and health workers.

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Some countries in Europe have managed to reduce transmission of the virus by putting stringent measures in place that limit people from mingling. As previously seen, as these measures are lifted it's important that people should continue to follow national and local measures to ensure that cases do not rebound.

Even as vaccines are rolled out people will need to keep adhering to public health measures so that everyone is protected. We know it has been a hard year and people are tired but in hospitals that are running at or over capacity it's the hardest it can possibly be.

My personal ask to people is simple; please be careful, think of health workers and act for the greater good because it will save

lives and livelihoods. Fighting this pandemic is everybody's business; the government and every citizen. The pandemic still has a long way to run and decisions made by leaders and citizens in the coming days will determine both the course of the virus in the short term and when this pandemic will ultimately end.

With vaccines now being introduced it's really important that they're distributed equitably around the world. Since GAVI, CEPI and WHO set up the COVAX facility in April of this year 189 countries and economies have backed it. WHO is engaged with our partners at all levels, working to boost manufacturing and ensure roll-out of COVID-19 vaccines.

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A new 100/100 initiative, a major sprint by WHO, UNICEF, World Bank, Global Fund and GAVI aims to help 100 countries conduct rapid readiness assessments and country-specific plans within 100 days for vaccines and other COVID-19 tools.

First we're asking all countries to do a country readiness assessment that takes into account cold chain, health worker capacity, micro planning, initial target populations and training. This will form the basis of national deployment and vaccination plans which will outline how to roll out the COVID-19 vaccines and identify any potential bottlenecks that will need to be planned for.

For decision-makers this means passing any legislation and policies needed to expedite the process, ensuring the regulatory process is fit for purpose and confirming that the financing is in place. The COVAX facility, which is the vaccine arm of the ACT Accelerator, intends to provide doses to enable the 189 countries and economies to vaccinate those at highest risk of the virus.

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In the first phase of the roll-out sufficient doses will be provided to cover health and social care workers. As supply increases vaccines will be rolled out to cover 20% of the population of participating countries and economies, which will ensure further high-risk groups are covered.

The pay-off from this will be huge. New research by the Eurasia Group found that the economic benefits of a global equitable vaccine solution alone for just ten high-income countries would be at least US\$153 billion in 2021, rising to US\$466 billion by 2025. COVAX has already secured 700 million doses of three vaccines and next year we aim to use additional funds to ensure

that at least two billion doses of safe and effective vaccines are available around the world.

To ensure that this effort becomes a reality the ACT Accelerator urgently requires a cash injection of US\$4.3 billion to fast-track critical areas of work and ensure that rapid tests, treatments and new vaccines are distributed equitably.

On equitable distribution it's the right choice and the smart choice. As well as ensuring supply, manufacturing logistics and funds are all in place it's important to ensure that leaders communicate with their populations about the importance of vaccination and how and where to get it.

**00:08:52**

The WHO technical advisory group on behavioural insights and sciences for health, which was recently established and chaired by Professor Cass Sunstein, released a report this week focused on how best to ensure high coverage of new COVID-19 vaccines. The report provides initial lessons and recommendations.

However, as with everything in this pandemic, we need to learn fast and be ready to quickly adapt our strategies. To say more on how best to increase acceptance and uptake of COVID-19 vaccines I'm joined by Professor Sunstein. Professor, you have the floor.

CS Thank you so much, Director-General, and the technical advisory group worked long and hard with WHO colleagues on this report. It reflects decades of research on vaccine acceptance and take-up. Still this is an unprecedented and in some ways unique challenge and there's a great deal to learn in real time.

**00:10:07**

This report is the beginning but not the last word and there is a great need to adapt quickly to challenges and the technical advisory group together with WHO colleagues will be engaged in doing exactly that.

Without disclaimer there are three things that we know that should be helpful in providing a framework. The first is the essential importance of an enabling environment for vaccination. Central questions are where are vaccination opportunities located, how long do they take, are they time-consuming, are they expensive, what is the quality of the experience, are people treated with respect and kindness and is equity part of the picture.

It's clear that the essential step for increasing vaccine uptake is to ensure an enabling environment for people. The second part of the picture has to do with social norms. All over the world vaccine uptake has been promoted by favourable norms and sometimes it's been challenged by unfavourable wants [?].

We know a great deal about how to promote favourable norms. Health professionals are often trusted, especially if they themselves have been vaccinated. Health professionals who are part of the local community and are understood to be connected with the identity and self-understanding of people in the relevant location can be extremely impactful.

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To highlight new or emerging norms in favour of getting vaccinated in this very challenging environment can be a productive strategy. In addition to creating an enabling environment and promoting helpful social norms it's very important to put a spotlight on people's motivations.

Motivations are an outgrowth of values, they're an outgrowth of emotions and they are an outgrowth of information. A central way to increase motivation is to increase trust through transparency and empathy and clarity and through meeting people where they are and listening very carefully to people's concerns and fears.

An emphasis on the social benefits of getting vaccinated, not just the benefits to people who are getting vaccinated - the life you save might be your own - but also by emphasising the benefit to people around you and in your community - the life you save may be your father's or your closest friend's grandmother.

**00:13:02**

Local contexts greatly matter; we know that. One size fits only one; it doesn't fit all, which is one reason that learning from the community and engaging carefully with relevant people, leaders and ordinary citizens, is central both to promotion of widespread vaccination and to promotion of equity.

We have in today's document a provisional framework but it's important to underline the word provisional and put it in large font. It will be essential to obtain and consider new knowledge as it emerges. Thank you.

TJ      Many thanks to Professor Sunstein, who is, just to remind you, a university professor at Robert Walmsley University and

also Chair of our Technical Advisory Group. I give the floor back to Dr Tedros.

TAG Thank you so much, Professor. I couldn't agree more about the need to have an open dialogue with people about COVID-19 vaccines so we can ensure they're effectively rolled out. Again, thank you so much for your leadership, Professor, and it's a very important area that you're covering. We hope it will support the vaccination programme which we hope we will be starting soon.

**00:14:46**

It's important that all groups have a voice in the future of health and the planet. In this regard today I am announcing the launch of a WHO Youth Council which will provide advice on key health and development issues affecting young people. COVID-19 has affected young people a great deal, including mental health.

The Youth Council will serve as a platform for designing and incubating new initiatives and for maintaining and expanding existing meaningful youth engagement initiatives of WHO. It will work with organisations dealing with a broad spectrum of health issues affecting youth today.

Young people aren't just the future; they are the present and we must hear their voice and experience to build the post-pandemic world together. I thank you. Back to you, Tarik.

TJ Many thanks, Dr Tedros, and thanks also to Professor Sunstein, who is the Chair of the Technical Advisory Group. We also have online Professor Saad Omer, who is a Director of the Yale Institute for Global Health, who is a member of the Technical Advisory Group and who can answer any questions that come on this topic alongside Professor Sunstein. Also from our side we have Alena Altieri online, who works on behavioural insights so if we get questions on that we have several people who can answer.

**00:16:35**

Now I will open the floor to questions and as always please try to be short and one question per person. Let's start with Nina Larson from AFP. Nina, you have the floor.

NI Thank you for taking my question. On the issue of vaccine confidence, I see that US President-Elect Joe Biden and several former US Presidents have said they are willing to be vaccinated in public as soon as a vaccine receives approval. How important do you think that would be for building confidence in vaccination

and, to Dr Tedros, would you be willing to do the same? Thank you.

TAG Thank you so much. I think it's very good that they already have shown their commitment. They can influence, they're influencer and many of those who follow them can be influenced and it's a good idea so I support their offer.

I would be happy to do the same thing, I would be happy to do it but at the same time I need to also make sure that it's my turn because I don't want to take anybody's vaccine. Thank you so much.

**00:18:08**

TJ Thank you very much, Dr Tedros. I don't see anyone in the room wanting to add anything. Maybe Professor Sunstein would like to add, or Professor Omer, something on this particular question.

CS Yes, I appreciate the question and agree very much with Dr Tedros' answer. To have credible leaders, people who are in positions of authority and highly visible indicating their willingness and even eagerness to get vaccinated is a positive step.

TJ Thank you very much, Professor Sunstein. Now we will move to the next question. I understand we have Barzu Daragaghi from the Independent with us. Barzu, unmute yourself and please go ahead.

BA Hi. Thank you so much for doing this. I wanted to ask all of you, if you would like to answer this question - and Dr Tedros answered it to some extent in his introductory remarks - how do you guys see the coming six months? If, in as vivid a picture as you can describe, you could outline what public health officials, what policymakers, what average people, front-line medical workers could expect, what are some of the trials, challenges, potential pitfalls that we will see in the coming narrative, in the coming months? Thank you so much.

**00:19:45**

TJ Thank you very much, Barzu, for this question. Maybe Mike will start and then we will see if other colleagues have something to add.

MR As you said, Dr Tedros outlined much of this in his speech but just to say, each country's in a very different situation so everyone sees the crisis from where they sit and I think it's very

important that we say that the pandemic and the global epidemic has not reached what we would say is an epidemiologic equilibrium; in other words the pandemic has not settled down into a predictable pattern.

Some countries have had very low incidence, have contained disease very quickly and effectively are managing the situation but they're at risk of reintroductions. Some countries have very intense transmission and have contained one or two resurgences of that and are approaching lower rates of transmission.

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Some countries have had very high rates of disease and have not managed to get it under control and continue to have sustained surges of disease transmission and some countries have got some control of the disease in the last number of months and are going back into higher transmission again.

We say that because it's not a one-size-fits-all solution in terms of changing that situation; what changes the situation in one country won't necessarily change it in another. The level and intensity of the response and the direction and focus of the response needs to be different depending on the epidemiologic situation in the country at any one time.

Cases and deaths will continue; we have to be straightforward in that but the future is not a foregone conclusion. The number of cases and the number of deaths is to a great extent in our hands. We have seen the number of people infected continue to grow but we're also seeing data emerge that protection may not be lifelong and therefore we may see reinfections begin to occur so the question is what are the levels of protection in society.

**00:21:56**

We're very pleased with the advent of the vaccines. Vaccines will be a huge addition to the existing toolkit. Maria may speak to that toolkit that we have but again I would like to say, vaccines do not equal zero COVID. Vaccines and vaccination will add a major, major, powerful tool to the toolkit that we have but by themselves they will not do the job and therefore we have to add vaccines into an existing public health strategy.

We will have to continue to work on managing our personal behaviour, our hygiene and in many cases we need to recognise that the vaccine will not be with everyone early next year. You'll see, more and more authorities around the world, I think, are correctly following WHO, the SAGE advice - the scientific advisory



group on immunisation - in prioritising front-line workers, older persons, people with underlying conditions.

In that we believe that focusing on those groups will significantly reduce severe disease and deaths and that will take the pressure off the health system, that will take a lot of the sorrow out of this pandemic but it will not by itself end transmission. So the chance of transmission jumping back up again will always be there and as we extend vaccination out to a broader range of age groups and as we drive demand for that vaccine - in other words, as people want to get that vaccine - we believe that with high vaccination rates we can then begin to significantly affect the transmission dynamics of the virus but not until then.

**00:23:38**

So there are two phases; one is controlling and reducing death and severe disease and the second phase is controlling the actual transmission of the disease. Right now what we do have at our disposal are many measures that can significantly change transmission and they are physical distance, avoiding crowded places, hand hygiene, wearing a mask and all of the other things that we've all been speaking about. These are the measures we have at our disposal.

Beyond that I think I'll pass to Maria, who may be able to give you some more specifics. We are at the moment at an inflection point in the pandemic but we're not at a point where we can walk away from what we've been doing already. We ask that people sustain the effort, sustain their behaviours, work in communities to drive community behaviour and we hold ourselves and governments accountable to provide the necessary support to communities to sustain those behaviours in the coming weeks and months. Maria.

**00:24:42**

MK Thanks, Mike. I'm sure others will also want to add to this because it's a great question. I think the next six months are going to be difficult but hopeful and I think they're going to be difficult for a number of reasons because we need to have the patients and we need to put in the work to keep ourselves safe and to keep our loved ones safe.

I think the next six months require from all of us... Even in countries that have driven down transmission, have controlled COVID transmission we really need strict adherence and vigilance to keep ourselves safe. It's carrying out all of the measures, taking a risk-based approach, each of us, to our daily

actions from when we wake up in the morning to when we go to sleep at night for ourselves and our families.

I think we need... As we take that risk-based approach our actions will depend on the virus circulation where we live. We will continue to make modifications to our behaviour depending on how much of the virus is circulating around.

In countries that have controlled COVID there's more movement, there's more freedom to be able to do the things that were - quote, unquote - normal but I know we're all dealing with this new normal and developing and learning what our new normal is.

**00:25:54**

But I think the real critical factor here is the decisions we make right now can change the course of the next six months. The steps that we take now mean life or death for us and mean life or death for our families and I think that everybody needs to - and they do - understand the importance of that.

This toolkit that we have; we have an incredibly powerful toolkit right now which includes individual-level measure that all of us can take. It's the physical distancing, it's the wearing of masks, the safe wearing of masks, making sure that you have appropriate hand hygiene before you put the mask on, when you take the mask off, making sure that you clean your hands many time per day, making sure that you open a window if you're in a crowded space or a space that has poor ventilation.

Those individual-level actions are really important. Vaccination will be another incredibly important tool that we add to our toolkit as those vaccines come online. Knowledge is part of our toolkit, knowing where the virus is, knowing where it's circulating - what's happening around where I live, where I work - and using that knowledge to make decisions that reduce your risk.

**00:27:06**

You hear us say a lot, know your risk, lower your risk, take those actions to be able to protect yourself and to protect your loved ones because these actions are saving lives now and as many steps as we can take, as many infections as we can prevent mean lives saved.

So there is no shortcut to putting in the work over the next six months but the trajectory of this in all countries depends on our actions. In the countries that have brought transmission down they need to keep it down, make sure that it stays low. We're seeing a number of countries that have turned a corner, many

countries across Europe which are now seeing reductions in transmission.

We need to keep that up. We do not want to be in the same position we were in the spring and going back and forth between so-called lock-down and opening up and lock-down and opening up. We can keep that transmission down.

As we enter into this critical holiday period right now really consider what you do over this period and who you interact with because if you can modify your contact patterns you can modify the virus' ability to spread.

**00:28:12**

So we need to put in the work. I think it will be difficult, we need patience but it is a hopeful next six months.

MS Just some brief words because there's so much hope around vaccines right now and actually when you look at the next six months we can't be lulled into a false sense of security but at the same time we need to maintain the hope in our hearts because we're seeing that science is advancing quickly, more quickly than ever in our lifetime.

But at the same time the reality is we will have other vaccine candidates finalising phase there results in the first semester. Then these vaccines, if they are successful, will need to be licensed or get an emergency use authorisation by WHO or others and they need to be manufactured in enough quantity.

So let us say that the next six months; it's not over yet but we have hope with appropriate care so let's not lose the focus and let's keep hope with care. Thank you.

**00:29:28**

TJ Thank you very much.

MR I fully agree with Mariangela but we also have to be extremely clear at this moment that countries that currently have high levels of transmission up to the end of this year are going to have to sustain very strong control measures or this disease will blow out of control in some of those environments and they will risk an ongoing epidemic yo-yo situation through 2021.

There needs to be an aggressive scale-up of public health surveillance and control measures in countries that are currently experiencing very high incidence because you have got to get

transmission down to a manageable level and then the vaccines will come in and make a huge difference.

I've heard our colleague, Tom Friedman, talk about the one-two punch; we need to take the virus out through public health measures and then we need to hopefully finish this virus with the vaccine.

So I couldn't agree more with my colleague, Mariangela; we have to sustain that hope gut those countries currently in the fight of their lives; you have got to stick with this, you have got to try and control this transmission or your health systems will not be able to cope.

**00:30:44**

Some countries are turning that corner and, I believe, will sustain those control measures. Some countries are not and some countries are actually going back into very high transmission levels and there is no prospect that vaccine will end that transmission in enough time.

I think this is the difficult dilemma that everybody faces. We're all tired and I agree and we need the hope; I need this hope so thank you, Mariangela, for the message of hope. But we also need to be realistic; we're in a pivotal moment in some countries.

Some countries' health systems - not all, not that many in fact but there are some countries on this planet whose health systems are at a point of collapse and right now we have got to take the heat out of this transmission in order that those health systems can cope and bring that vaccine on as quickly, as safely, as efficaciously...

And as our previous colleague said, we've also got to drive demand and convince people and continue to convince people that this vaccine is a safe and efficacious way out. I have seen vaccines transform the world and change the course of epidemics and I fully expect that these vaccines and the ones that are to come will do that.

But I don't think we're in disagreement, Mariangela; I think we're in lock-step but I am concerned personally for some countries that are really, really struggling right now and we have to protect those health systems in those countries or there will be even more death and sorrow.

TJ      Dr Kate O'Brien, you wanted also to add something on this but also on a previous question. Kate.

KOB Thanks. I wanted to address this very much building on what Mike and Mariangela have said from the vaccine perspective. What is really important is that there's no country that is going to have enough supply from the very beginning to immunise everybody who should probably be immunised.

So I think it's extremely important that people have patience, as Maria has said, that supply will increase over the year. These vaccines; we are really at the very, very beginning of this endeavour and we do expect to have more vaccines that will reach authorisation based on the efficacy trials that are being conducted that demonstrate whether or not the vaccine can prevent disease and that is the metric that they need to be measured against.

**00:33:19**

I think what is really important; we're also seeing in the media some concerns or changes in expectations around who will go first. Prioritisation in every country is going to need to take place and it's really critical that the communities and the population of each country has a clear understanding what the basis was for those choices and why there are certain groups that are going first and which groups they are and what the evidence is for that.

If we don't have that sort of clear, public conversation then I think there will be concerns in some countries about who goes first, why they're going first. I just can't emphasise enough the importance and I think the media's such an important means for that conversation to happen.

The second part of that is that WHO through SAGE, the strategic advisory group of experts on immunisation, has already issued their recommendations on prioritisation more than a month ago and so I would really direct people to those recommendations which then are tailored within each country but we have already issued recommendations about the very first prioritisation, the next-most priority group and onward through a series of priority groups according to the amount of supply that is available in a given country.

**00:34:51**

Then the third point I want to make is I also think it's really important that people are prepared. As we have been saying, it's a daunting task to roll out these vaccines at the pace and scale that they need to be rolled out in and so there are expected challenges in front of us.

But there will also be unexpected challenges and no endeavour like this is going to go without some unexpected set of things happening. I think the more that we can be clear that we will be transparent, we'll be honest, we will explain what's happening; that's how I think people get confidence in the whole process.

I just really want to re-emphasise that so that people don't feel that vaccines are going to be some sort of turn of the switch and then we're completely over this. People need to get vaccinated and that's going to take some time in every country and in any country. Thank you.

**00:36:04**

TJ Thank you very much. This question from Barzu was one that got lots of interesting answers. I understand that Professor Saad Omer would like to briefly add something. Professor.

SO Yes, just to pivot to the behavioural response, I'm sure everyone recognises that the most perfect, equitable delivery system can get a vial to the healthcare provider, vaccinator's hand but not into the arm and so these behavioural aspects of immunisations are a core part of the response to this pandemic and the response to standing up an immunisation programme.

Countries should recognise that this has to be part of their core planning. It can't be just reactive and just as you plan for cold chain there has to be planning for the behavioural response that goes along with vaccination.

A few things specifically to keep in mind when you're vaccinating literally billions of people; there are natural background events that happen normally that would have happened without vaccination so those things will happen. In the current media environment even with the safest vaccine out there there will be rumours.

**00:37:22**

There are behavioural science-based approaches to inoculate populations against rumours. There are approaches to counter those rumours. Similarly we know that in certain populations there is a possibility of behavioural inhibition in a sense; those who are vaccinated earlier on or others who think that now there is a vaccine is available... may change their behaviour.

As Dr Ryan said, we are not out of the woods in terms of other measures until perhaps we reach a really, really high level of immunisation so countries will have to be prepared for that.

The last thing I would say is, just as we demand the most rigorous science from vaccine development countries should also demand the best possible behavioural tools because it is a science and it is serendipitous that WHO has stood up this programme around behavioural insights and the technical advisory group; my understanding is it was planned before the pandemic.

But what serendipity it is that, if it had to be stood up and one of the initial tasks this group is undertaking is to support countries in their behavioural response... So again what I would suggest is that we use the same level of rigour in the behavioural response and go to the science as a fountainhead of your interventions rather than just guesswork for the behavioural response.

**00:38:51**

TJ Many thanks, Professor. We will move on with questions. Hopefully we will be able to be a little bit faster and take as many as we can. We have from Montreal, from Radio Canada, Chantal Srivastava. Chantal, please go ahead.

CH Bonjour. I will switch to English but I want to let you know that I work in French as a science radio reporter. I'm based in Montreal and I would really appreciate if one of you could give me a clip in French for broadcast purposes but I can live with an answer in English for the content obviously.

I would like to follow up on something that was mentioned yesterday regarding the e-certificate for vaccination. I want to just clear up something that was a bit confusing in my mind. I want to know what it is exactly and maybe hear a little bit more about what's going on in Estonia now, the partnership with WHO and also know in which way it's different from the immunity passport that WHO didn't want to see come in last summer.

**00:40:01**

Where do you draw the line, what's the difference, what are the hurdles and so on? Thank you very much for taking my question.

TJ Chantal, thank you very much for this. We will answer you in English right now. There is a translation but we are also happy to do an interview with you in French on this afterwards so please, if a translation is not enough just contact me; I will send you an email - I have your email - and we will organise something for you. Thank you.

MR I think Kate O'Brien may speak to this as well but let me clarify a couple of differences here in terms of certification just



on vaccination. There's a difference between certifying vaccination within a country where people are issued with proof of vaccination or a certificate of vaccination, which children all have, which is a way in which people have a record of their vaccination so recording vaccination.

That is very different than the requirement for vaccination to occur if someone is travelling internationally so we have to have a very important debate about the issue of certification of vaccination and then the nature of discussion around mandatory vaccination. It is difficult to talk about mandatory vaccination when nobody has been vaccinated yet and when only small numbers of people will be vaccinated in the coming months but we must prepare for that.

**00:41:27**

There is only one vaccine that is required in certain circumstances for international travel and that is yellow fever vaccination, which is required under the IHR for travel from yellow-fever-endemic areas to other countries. Therefore if WHO were to engage in a process of requiring vaccination that would have to be supported by the International Health Regulations and our member states and that will require further debate.

With regard to Estonia and others, the Government of Estonia are working very closely with the Director-General, with Bernardo Mariano and our digital health initiative on digital tools in general and one of those digital tools may be a mechanism - and this is the tool you may use for certification or recording vaccination.

That is an ability to move from a paper-based record to an electronic record and that has its own challenges technologically and could be and should be a very interesting tool in both certifying vaccinations and if member states were to require mandatory vaccination could potentially be used as a way of demonstrating or proving vaccination.

**00:42:41**

There are many steps along the way. We'll be briefing our member states in the coming weeks around the process of requirements for vaccination and Kate may speak to the issues around vaccination certification in countries and maybe some of the work on the digital tool itself. Bernardo is not here with us today but he may join us at a future meeting to describe the work with Estonia.



KOB Yes, let me just add a little bit to what Mike has to say about this work. There is a big distinction, as Mike described, between an electronic tool that would document that you had been vaccinated with some validation that that was a true vaccination, that it was with a certain vaccine, and then what you do with that information.

Mike spoke very clearly about not being at a point of anybody deciding that there would be any requirement of vaccination for any purpose. But the point I wanted to make on this was that although there have been so many very difficult and tragic things about the pandemic there are some elements of our response to the pandemic that could really drive us forward especially on the vaccination side and in terms of leap-frogging some of the challenges that have been in vaccination programmes for a long time.

**00:44:03**

If this is the moment to make some real advances on things like electronic documentation of vaccination status that could have an impact in vaccination programmes that would be very, very widespread and if we could get past the use of paper-based records this would have enormous impact on improving vaccine coverage not only for COVID vaccines but also for all of the vaccines that we already have that are life-saving vaccines that people around the world are still not receiving in the numbers and in the places and in the diversity of the vaccines that they need to get.

So this idea - and making it a reality - of electronic vaccination certificates at the individual level is an extremely interesting and important step forward and we're working within WHO across all different groups to develop the guidance and the standards that any application should meet in order to have the elements within it that it would stand up to scrutiny. Thank you.

**00:45:16**

MK To the last part of the question related to the immunity passports and what is different there, separate to the e-certificate for vaccination that Mike and Kate just spoke about in the springtime WHO issued recommendations against using an immunity passport, which is what some countries were discussing, about issuing some kind of passport for travel for people who have been infected with the SARS-CoV2 virus, the virus that causes COVID-19.

So we recommend against that because of the antibody testing. This is different to vaccination; this is from natural infection and then antibody tests are provided and then we can get an estimate of how many people have been exposed to the virus.

There are still some challenges with the antibody tests that are available. What we understand is that 90 to 100% of people who are infected with the virus do develop an antibody response, whether you have mild infection or asymptomatic infection all the way to severe infection.

We are still learning how long that antibody response lasts, how strong it is, how it relates to immunity from another infection and how long that lasts. There's really great research that is ongoing that is indicating that the immune response, the antibody response lasts for six months, possibly longer.

**00:46:35**

In some people it may wane after a few months but we do get a good indication that the natural infection immune response is lasting for some months. We're about a year into this pandemic and so we still have a lot to learn but there are good results from that.

I just wanted to come in on the difference between an immunity passport, which is different than what you were talking about, the e-certificate for vaccination.

TJ Thank you very much. Chantal, we can stay in touch for French if the translation was not enough. We go to Kai Kupferschmidt from Science. Kai, please ask your question.

KA Hi, Tarik. Nice to hear you again. Thanks for taking the question. I wanted to ask for an update on what you expect with COVAX. The UK, the US, probably other countries in Europe are going to start vaccinating maybe before the end of the year and I think this already creates the perception of course that vaccines aren't being distributed equitably.

**00:47:38**

So I'm curious at what point we will be able to actually see the first vaccines go to other countries and also whether you have a message for these countries that at the moment are using bilateral deals to vaccinate their own populations first.

SS I can come in, Tarik.

TJ Yes. Thank you very much, Kai, for this question. Soumya, please go ahead.

SS Thank you. Thank you, Kai. That's a really important question and that concerns all of us at the WHO. As Dr Tedros has said many times, the ACT Accelerator was created in April, led by the WHO with many other partners, for two reasons. The first one was to try and accelerate the development of tools, therapeutics, vaccines and diagnostics.

But equally importantly to ensure equitable access because there's no point having products that do not reach the majority of the world's population and we've seen that happen in the past with simple diseases like hepatitis B where it took 30 years for a vaccine, after introduction in high-income countries, to get introduced into low and middle-income countries.

**00:48:59**

That's why the ACT Accelerator was launched and that's why the COVAX facility was created and, as you know, 189 countries and economies are a part of this. That represents over 90% of the world's population so this is really, I think, buy-in from most of the world.

How are we going to do this? It's by pooling the risk in investing in more vaccines on the development side - and that's what CEPI leads on on the R&D - and it's by pooling procurement, by having enough volumes so that you could get good prices but also being able to negotiate with a number of different manufacturers and developers and that's exactly what the COVAX facility is doing.

As of now we have deals which would provide access to about 700 million doses. That's not sufficient. The goal is to get at least two billion doses by the end of 2021, which will be enough to vaccinate approximately 20% of the population of the countries who are part of COVAX.

As was said earlier by the DG and by Mike, that's just enough to bring to an end the acute phase of the pandemic, reducing mortality, reducing impact on health systems.

**00:50:22**

This is going to need a couple of things for it to happen. The first is of course enough financing within the facility and again the DG has repeatedly called upon the world to make sure that there is enough financing because vaccine roll-out in an equitable way is our route to getting the world back to some degree of normality.

So we've raised about \$2 billion, which is enough for 2020 but we urgently need another \$5 billion in order to meet that goal of two billion vaccine doses. That's the most important thing.

The other is of course again for political commitment and political leaders around the world to demonstrate by action their commitment to equity; in other words sharing available doses of vaccines fairly around the world. We've seen many countries actually reach out to the COVAX facility expressing a desire to do exactly that so as they receive doses they would like to share a proportion with the COVAX facility from day one.

What we're telling countries now is that obviously as we do our best to make these deals and go forward, as you know, we have only a couple of vaccines today that are even close to getting an emergency use authorisation and WHO emergency use licensing as well so we have limited choice now but as time goes on we are going to see many more vaccines hopefully complete phase-three trials, hopefully proving efficacy and safety and therefore the choice will get bigger, the number of doses available will get bigger.

**00:52:05**

Our goal or our hope is that in the first quarter of 2021 we would have about half a billion doses available to be distributed across the countries in a fair manner and this is why we developed our allocation framework in order to do this fairly to all countries.

Then in the second half of 2021 the volume of doses will pick up and the speed at which they become available so countries can start expecting doses towards the end of the first quarter of 2021. A few countries may start earlier; it's likely, possible that we may have some learnings by going early into a few countries but then the majority, the bulk of the tranches would probably start moving out in the second quarter of 2021. Thank you.

TJ Many thanks, Dr Swaminathan. Let's try to take two more questions. We will start with Randy Morianto. I think Randy is now freelance; he used to work for the South China Morning Post. Randy.

RA Hi. Thank you for taking my questions. I'm Randy Mulanto, now with aljazeera.com so I'm basically working on a story about Timor Leste's success in somewhat suppressing the virus which is 31 cases and zero deaths, which could be an anomaly in Asia and the wider region.

My question is, what does the WHO make of this news and any under-reporting concerns perhaps from the body on this? Thank you so much.

MK Thanks for the question. I think what you're pointing out is there are some countries that have had quite some success in preventing outbreaks from really happening. I don't know the specifics of Timor Leste, I have to say, so we'll have to get back to you on specifics about that.

But what I can say is countries that have had success in preventing the seeding of outbreaks and those initial cases turning from sporadic cases to clusters of cases and clusters of cases to community transmission have used a combination of factors that you hear us talk a lot about.

A lot of it is an initial reaction and fast action related to active case finding; really being aggressive and having a robust approach for testing cases, having a high suspicion of potential cases, testing those individuals, isolating those individuals and carrying out the public health measures such as contact tracing, quarantining of contacts, making sure that they're supported in that quarantine, talking with communities and making them understand and listening to the concerns of communities to understand how they can best be supported through these very difficult times.

**00:55:05**

Outlining all of the different measures that need to be put in place; the physical distancing, the good hand hygiene, the wearing of masks where appropriate; good respiratory etiquette of coughing and sneezing into your elbow, avoiding crowded places; all of these things put in place.

What we've seen is this really early, robust action, taking an approach that's beyond health, that includes other aspects of societies has really had some success. I think that that is something that we continue to learn from. Many countries, many island states have had success in doing this, in preventing those initial cases from really seeding and taking off but they have remained vigilant, they've worked very hard.

**00:55:51**

There are some restrictive measures that may have been put in place in certain locations so it's a combination of factors; it's not a one-size-fits all. The tools are there but the application and the implementation of those tools have been tailored to different countries, to different areas, to different cultures, to different beliefs and I think that's the take-home here because it's the combination of factors implemented in different ways that fit the countries and the people that live there.

MR Yes, we could just add that Timor Leste is also dependent on the control in some of the surrounding countries so as countries around Timor Leste have gained control of the disease that's reduced the pressure.

But I would also suggest that, again a bit like in some other south-east Asian environments, Timor Leste has been through very difficult times. It's relied very heavily on UN and NGO-based support and as such there's a very distributed sense of healthcare delivery and there's a very high sense of community resilience, a decentralised approach to the delivery of healthcare.

Again organisations like the Red Cross and the Red Crescent Society are very well-represented there so there are a lot of community-based approaches and I know there was a lot of vigilance at borders, there was a lot of screening and a lot of follow-up of people entering the country.

**00:57:19**

So there are a lot of different things that may have... Again I don't have the exact details on every aspect of the Timor Leste response but there are factors that would point towards a lower incidence and there are many island nations - and Timor Leste is not a very large island but smaller countries that have managed to keep disease numbers very low, like Fiji and others.

They may be protected by their island status but they're nonetheless vulnerable and I think it tells a tale. If you can keep your numbers low then keeping them low becomes easier. The higher your numbers go the harder it is to get back to a low level and there's an eventual point where you lose control or the virus takes control and you lose control.

Those countries are always at risk and as we go through further waves and surges of this disease there is no guarantee that your last surge or wave is going to determine the next. We've seen countries all the way through this early winter experience much larger surges of disease than they did in previous waves.

**00:58:22**

So everyone needs to remain vigilant, including Timor Leste but it is very heartening that countries with very fragile infrastructure that are still continuing to emerge as nations, still require a lot of external support, can demonstrate that they can get reasonable control upon a devastating disease like COVID.

But as is the case in a number of situations the availability of testing may be a factor in some under-reporting of disease in

many situations. But in this case we believe that the community-based approach is there, the support of NGOs, the UN system and the resilience of the people of Timor Leste has helped to contain and keep this disease under some control.

MK Can I? Shigun, a very kind member of our comms department, just forwarded one of our sit reps which highlights Timor Leste so we can make sure that we send that to you and it outlines the different aspects of their strategy and it outlines all of the different things that they put in place, focusing on strategic objectives such as interrupting human-to-human transmission and reducing secondary infections among close contacts and health workers, strengthening surveillance systems and increasing laboratory capacities to detect COVID-19 case, ensuring adherence to the strictest standards of IPC - infection prevention and control - and increased capacity for infection prevention and control.

**00:59:48**

Identify, isolate and care for patients early, including providing optimised care for those patients, communicate critical risk and event information to all communities and counter misinformation and try as much as possible to minimise the social and economic impact through multi-sectoral partnerships. We'll make sure we provide that in the link to have that sit rep for all of them. Thanks, Shigun.

TJ Thanks, Maria. Indeed when we send the audio file from this press briefing we will include the link on this story that has been published. Now we will go to the last question for today; we are already at one hour but let's take the last one. I already apologise to those from whom we will not be able to take questions but as always contact at [media@who.int](mailto:media@who.int) with your questions and we will try to help.

**01:00:39**

Jamie Keaton from Associated Press; Jamie.

JA Thank you, Tarik, for taking my question. I guess this is for Mike and Maria. We've seen a number of health officials who are claiming the quality of their certification processes are better than others, particularly in Britain and the US but many people who I've spoken to - and these are educated, reasonable people - say that they're not convinced about vaccine, this vaccine has been developed at light-speed compared to other vaccines, that mRNA vaccines are a new technique and they're uncertain about



it and other vaccines in the past have had dangerous or harmful side-effects that maybe turned up afterward.

So what do you say to people who are distrustful of national health authorities or big pharma and worried that there may be unforeseen side-effects or consequences that may turn up down the road, especially when there seems to be this race to be first in so many places and in so many ways?

MR I think Soumya, Kate and others can speak to this, Mariangela and others but, Jamie, I would ask that you also be careful with your rhetoric. This is an important time for us to have a proper dialogue and the way in which you formulate a question can often betray the way you intend it to be answered.

**01:02:08**

That's how misinformation and disinformation spread. I think we need to have a very open debate on these issues. I think we need to get very good at getting good information out to people but pre-emptive statements around distrust, pre-emptive statements about previous problems and other things don't necessarily shape the argument and shape the dialogue that we actually need to have between ourselves and with each other.

There are differences between the safety and efficacy processes and then the regulatory process and the policy that's used then for distribution of vaccine. There are many moving parts in this and, as Mariangela said, it is a moment of hope but it is also a moment in which we have to be monitoring and very careful so Mariangela and others will speak to that.

But I understand your intent, Jamie, is good but please let us all be careful with our words on this matter. This matters, this counts; people being vaccinated matters going forward. They need to get the right information and we don't want people's health to be affected by a poisonous debate around this. We want positive, engaged, informative debate on this issue.

**01:03:23**

TJ Thank you. Dr Swaminathan, would you like to add something?

SS Yes, and thank you very much, Mike. I think there's huge responsibility on all of us including journalists in how and what we communicate. Let me talk about the mRNA first because many people have this impression that in some way this can create some genetic changes in the body.



This mRNA is of coding for the spike protein of the virus and the way it works is that it gets into the cells of our body, into the muscle cells where it's injected and then the mRNA is basically a mechanism to give messages to the cells to produce a protein that's encoded in it.

So the cells start producing the spike protein which normally they wouldn't; it's because it's a viral protein. Then the spike protein is released and then stimulates the immune system to start making antibodies and the T-cell immune response.

There is no way that the mRNA can get integrated with the genome of the human beings. We do not have any mechanism to integrate mRNA into our own DNA so I think the first thing is this is one of the big myths out there; that mRNA vaccines will alter the genetic profile of people into whom they're injected. There is no way that that can happen.

#### **01:04:56**

Having said that, the mRNA vaccines are a relatively new platform and while there are several that are in clinical trials - there are several vaccines that are in clinical trials for other infections, in phase one and a couple in phase two.

But it is true that we do not have a lot of people having been given the mRNA vaccine so in that way it's going to be a new one but there's no reason to really believe that it should be any less safe than any of the other platforms.

If anything it could be safer and the preliminary results we have from the Pfizer and Moderna vaccines are that there were not a lot of adverse events during this period but that's again a short period.

When we talk about vaccines having been accelerated I think again it's important to explain to people how we've been able to do that. It's not by skipping or taking shortcuts in the scientific process of vaccine development. All of these vaccines have still gone through preclinical, phase one, phase two and phase three.

#### **01:06:07**

Timelines were accelerated by overlapping phase one and phase two, by regulatory agencies willing to be flexible, looking at submissions so even before the phase one is complete they're already ready, if everything goes well, to approve the phase two. That doesn't normally happen with vaccine or drug development.

And most importantly the manufacturing at scale - investments were made well before we'll know if any of these vaccines are safe and effective. Because of that you're able to produce doses in the millions at a time soon after the phase three results or the interim results have been released.

I think that's needed a huge amount of investment that governments have made, foundations have made, companies have made and that's the main reason for having really compressed the timelines.

The other reason of course is that science and technology have progressed. There've been a lot of investments made into these new technologies like the mRNA, investments made by CEPI and other organisations over the last few years.

Many labs around the world had those platforms ready; even the viral vector like the ChAdOx vaccine from Oxford was a vaccine platform that had been tried in the past for other infections.

**01:07:20**

So they were ready and as soon as the genetic sequence of this new SARS-CoV-2 virus was made available they were very quickly able to, within a matter of days, create a vaccine against this virus.

So it's building on scientific progress over the last few years, it's accelerating clinical trials by overlapping and it's also by investing in manufacturing and then there are other downstream things like regulatory harmonisation and the willingness of regulators to provide emergency use authorisation while waiting for the full results of the full clinical trials to be completed and submitted.

I think our guests, Dr Sunstein and Omer, might want to add to this. Thanks.

**01:08:05**

CS I greatly appreciate the question. It's a very important question so thank you for it. It highlights the importance of transparency and clarity with respect to the science and also the immense importance of community engagement and listening closely to people and their concerns.

We've learned from prior outbreaks and vaccinations that it's very important to be listening to people as well as to be speaking to them, that there's a lot that can be learned from listening and attending to the concerns there are.

When people are worried about risks and side-effects to be very transparent with them is essential and also if they have particular concerns about what they see as unnecessary or excessive speed to engage, as was just done, with the issue on the merits in a way that treats people respectfully.

TJ Thank you very much, Professor Sunstein and Mike and Soumya as well. I think this is a really important message for everyone out there, that we need to engage in a positive debate and follow the science.

Before we conclude I will obviously give the floor to our Director-General for his final words.

TAG Thank you. Thank you so much, Tarik, and thank you to all who have joined today. I look forward to seeing you in our upcoming presser. Bon week-end.

**01:09:38**