

# COVID-19

## Virtual Press conference

**10 August 2020**

### **Speaker key:**

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TAG	Dr Tedros Adhanom Ghebreyesus
Jl	Jim
MR	Dr Michael Ryan
BA	Dr Bruce Aylward
TO	Toni
MK	Dr Maria Van Kerkhove
ST	Stephanie
CL	Clive
AV	Avisit
LU	Lurivel
RO	Robin
SH	Shoko

### **00:00:22**

MH Hello, everybody. This is Margaret Harris in Geneva on this Monday afternoon, August 8<sup>th</sup> welcoming you to today's World Health Organization press briefing on COVID-19. We have with us as always our WHO Director-General, Dr Tedros, and Dr Mike Ryan, Executive Director of the Emergencies Programme, and Dr Maria Van Kerkhove, Technical Lead for COVID-19, who will answer your questions after Dr Tedros has made some opening remarks.

As usual we're translating this simultaneously in the six official UN languages plus Portuguese and Hindi and remember that under the quirky Zoom system you need to go to the Korean

button to use Arabic. Now without further delay I will hand over to Dr Tedros. Dr Tedros, you have the floor.

TAG Thank you. Thank you, Margaret. After my statement I will leave; I will not be staying for the Q&A and my colleagues will continue because I have another commitment so I would like to offer my apologies for that in advance.

Good morning, good afternoon and good evening. This week we will reach 20 million registered cases of COVID-19 and 750,000 deaths. Behind these statistics there is a great deal of pain and suffering. Every life lost matters. I know many of you are grieving and that this is a difficult moment for the world but I want to be clear; there are green shoots of hope and no matter where a country, a region, a city or a town is it's never too late to turn the outbreak around.

**00:02:15**

There are two essential elements to addressing the pandemic effectively. Leaders must step up to take action and citizens need to embrace new measures. Some countries in the Mekong region, New Zealand, Rwanda and many island states across the Caribbean and the Pacific were able to suppress the virus early. New Zealand is seen as a global exemplar and over the weekend Prime Minister Jacinda Ardern celebrated 100 days with no community transmission while stressing the need to remain cautious.

Rwanda's progress is due to a similar combination of strong leadership, universal health coverage, well-supported health workers and clear public health communications. All testing and treatment of COVID-19 is free in Rwanda so there are no financial barriers to people getting tested and when people test positive for the virus they're isolated and health workers then visit every potential contact and test them also.

**00:03:26**

Getting the basics right provides a clear picture of where the virus is and the necessary targeted actions to suppress transmission and save lives. This means that where there are cases the government can quickly implement targeted measures and focus control efforts where they're needed most.

Other countries like France, Germany, the Republic of Korea, Spain, Italy and the United Kingdom had major outbreaks of the virus but when they took action they were able to suppress it.

Many countries globally are now using all the tools at their disposal to tackle any new spikes.

Over the last few days UK Prime Minister Boris Johnson put areas of Northern England under stay-at-home notifications as clusters of cases were identified. In France President Macron introduced compulsory masking in busy outdoor spaces of Paris in response to an increase in cases. Strong and precise measures like this in combination with utilising every tool at our disposal are key to preventing any resurgence in disease and allowing societies to be reopened safely.

Even in countries where transmission is intense it can be brought under control by applying an all-of-government, all-of-society response.

**00:04:57**

Chains of transmission have been broken by a combination of rapid case identification, comprehensive contact tracing, adequate clinical care for patients, physical distancing, mask-wearing, regular cleaning of hands and coughing away from others.

Whether countries or regions have successfully eliminated the virus, suppressed transmission to a lower level or are still in the midst of a major outbreak, now is the time to do it all. Invest in the basics of public health and we can save both lives and livelihoods.

In the countries that have done this successfully they're using a risk-based approach to reopen segments of societies including schools and as they do so they must remain vigilant for potential clusters of the virus. We all want to see schools safely reopened but we also need to ensure that students, staff and faculty are safe. The foundation for this is adequate control of transmission in the community.

**00:06:11**

My message is crystal-clear; suppress, suppress, suppress the virus. If we suppress the virus effectively we can safely open up societies. As countries work to suppress COVID-19 we must further accelerate our work to rapidly develop and equitably distribute the additional tools we need to stop this pandemic.

Just over three months ago we launched the ACT Accelerator as the fastest and most effective way to do this. It's the only end-to-end global solution that combines public and private-sector expertise in research and development, manufacturing,

procurement and delivery for the tools needed to address the pandemic's cause.

The ACT Accelerator has already harnessed the international public health ecosystem in a unique way of working with early proof of its potential. The accelerator-supported vaccines are in phase two and three trials. A global vaccines facility is engaging over 160 countries. The first therapy for severe COVID, dexamethasone, is in scale-up. Dozens of other promising therapies are under analysis.

Over 50 diagnostics are in evaluation including potentially game-changing rapid antigen tests and a comprehensive framework for allocating these scarce tools for greatest global impact is under consultation.

#### **00:07:55**

The coming three months present a crucial window of opportunity to scale up the work of the ACT Accelerator for global impact. However to exploit this window we have to fundamentally scale up the way we're financing the ACT Accelerator and prioritise the use of new tools.

There is a vast global gap between our ambition for the ACT Accelerator and the amount of funds that have been committed. While we're grateful for those that have made contributions we're only 10% of the way to funding the billions required to realise the promise of the ACT Accelerator.

This is only part of the global investment needed to ensure that everyone everywhere can access the tools. For the vaccines alone over US\$100 billion will be needed. This sounds like a lot of money and it is but it is small in comparison to the \$10 trillion that has already been invested by G20 countries in fiscal stimulus to deal with the consequences of the pandemic so far.

#### **00:09:11**

I would like to close by saying a few words about the explosion in Lebanon that last Tuesday killed over 150 people, injured more than 6,000 and left over 300,000 people homeless. To the people of Beirut, the health workers and emergency workers on the ground, our thoughts are with you and we will continue to support you.

From our strategic stockpile in Dubai WHO immediately sent surgical and major trauma supplies. We released funds from the Contingency Fund for Emergencies and our staff are on the

ground supporting the assessment of the impact on the health sector with Lebanese and other UN partners.

We're shipping US\$1.7 million worth of PPE items to support COVID and humanitarian supplies that were destroyed by the blast. We're also working closely with national health authorities to enhance trauma care including through the deployment and co-ordination of qualified emergency medical teams.

We're also mitigating the COVID-19 impact, addressing psychosocial needs and facilitating the rapid restoration of damaged health facilities. We have issued an appeal for US\$76 million and ask for your solidarity and support to the Lebanese people. I thank you.

**00:10:47**

MH Thank you very much, Dr Tedros. We'll now open the floor to questions. If you wish to ask a question please use the raise your hand icon to get in the queue. I'll also apologise now to those who are waiting; we cannot ask all the questions but please ask only one question to give others a chance.

The first question goes to Stephanie Nebahe from Reuters, the Geneva correspondent for Reuters. Stephanie, unmute yourself please and ask your question. Stephanie Nebahe, did you hear? You have the first question. Can you unmute yourself and go ahead. Okay, Stephanie, we'll try and come back to you.

We now have Jim Rupe, Westwood One, on the line. Jim has been staying up very late to ask his question. Jim, could you unmute yourself and please go ahead.

Jl Thank you very much and hello, everyone. My question is about the vaccine or a vaccine, if you will. There are vaccines for other viruses, vaccines have been discovered. I really want to get this question right so bear with me.

**00:12:05**

Is there a key to finding that vaccine, is there something about the virus that each virus has in common that is the thing that is what scientists are going after? Is there something that you have learned from, let's say, a polio vaccine that could help in developing a vaccine for the SARS-CoV2 virus, is there something, a common link, a key, a specific target that you're looking for in this virus that would say, aha, that's the thing we need to get, we're able to create a vaccine now.

MH Thank you.

MR I can start and Bruce, who's more skilled than me in this area, may want to supplement. I think all of the vaccines or many of the vaccines that are currently under development focus in one way or another on trying to generate an immune response to usually what is a protein that's on the surface of the virus.

Many of you have seen the pictures of the virus with these spikes that stick out. It's called the coronavirus. Corona comes from the root for crown, I think from the Latin so the corona of the virus are these proteins that stick out and these proteins are what allow the virus to attach to human cells and enter the cell.

**00:13:30**

That's almost as if the virus can poke its way through the receptors on the surface of human cells and enter the cell in that way and once the virus enters the cell its nucleic acids, its RNA can instruct the human cell to produce more of the virus. When enough of the virus is produced the cell bursts and is killed and more virus is spread.

So you can imagine that each time a virus infects a cell it's a chain reaction inside the body so what you want to try and do is generate as quickly as possible an immune response specifically to those proteins and the vaccine candidates that are currently under development either present a protein like that that's in another virus. Sometimes it's a genetically engineered virus, a harmless virus that expresses that protein.

Sometimes it's a weakened version of the coronavirus itself and sometimes some of the vaccines actually have the instructions to make that protein so the vaccine actually instructs the body to make those proteins for which there is then an immune response.

**00:14:37**

So the key, I suppose, is making sure that we've identified that proper target; have we targeted the right proteins, particularly those on the surface of the cell? But Bruce can speak. We can develop vaccines and I believe huge progress has been made and credit to all the researchers out there that are doing that work.

I believe we will get vaccines that are both safe and effective. The challenge is going to be scaling up the production, allocating those vaccines in the way that does the most good around the world and stops this virus to the greatest extent possible, paying for all of that and preparing national systems to deliver this.

As I've said before here in press conferences, we have perfectly effective polio vaccines, perfectly effective measles vaccines and we still struggle to eradicate or eliminate those diseases. So having an effective vaccine is only part of the answer. You have to have enough of that vaccine, the right people have got to have access to that vaccine and you've got to be able to deliver that vaccine to a population that want and demand to have that vaccine. Bruce.

BA Thank you, Mike. That's an excellent question, Jim. My name is Bruce Aylward, by the way, and I'm co-ordinating, heading the work of the ACT Accelerator.

**00:15:52**

When it comes to a key to finding the vaccine, as Mike said, there are intrinsic properties of that vaccine and in this case we're looking for what generates that immune response that's going to neutralise the virus, as Mike said. The common target is the spike protein and what's interesting about the coronavirus vaccine development - you will have heard this already in so many places - is the fact that multiple different approaches are being taken to that.

There're five, six, seven different major approaches to try and generate immunity to that spike protein. The advantage of having those multiple different approaches comes to the second part of this issue, Jim, and it's not simply a matter of generating an immune response and having a great vaccine.

But then, as Mike alluded to, you've got to be able to get that vaccine into people so you're also looking at programmatic characteristics; does this vaccine work in all age groups and all different populations, what are its characteristics in terms of how it has to be stored, how stable it is?

**00:16:56**

Because those characteristics can be as important as the characteristics of the vaccine itself when it comes to getting it out into the large-scale use we're going to need, especially in the case of this pandemic.

Of course on that side thanks to the fabulous work being done by so many institutions, so many investigators we're in very good shape in terms of potential for generating the right kind of product in the case of COVID-19.

MH Thank you very much, Dr Aylward. My apologies for not introducing Dr Aylward before. As he mentioned, he's Senior

Advisor to the Director-General and he's in charge of the ACT Accelerator and COVAX facility. He's here to answer all those difficult questions on that huge area of work.

Our next question is from Toni from CGTN. Tony, could you please unmute yourself and go ahead with your question.

TO Thank you very much for taking my question. Dr Tedros in his opening statement said that there are essentially two elements to addressing the pandemic effectively; that leaders must step up to take action and that citizens need to embrace new measures.

**00:18:20**

For weeks now in Europe we have been in the grip of what many fear is a second wave so I'm curious how the WHO views this resurgence; does it see it as a second wave? Also is it a lack of the strong leadership or the citizens not embracing the new measures which is to blame for the rising numbers?

MR I think we - and I don't think anyone has said differently. There was always a likelihood that disease - we have said it - would spike and there would be flare-ups of the virus because until the virus is gone there's always a chance of flare-ups.

Countries in Europe deserve a lot of credit for the work they did and particularly their populations did to suppress the virus but it's not suppressed throughout all of Europe and there are significant issues still with transmission in parts of central and southern Europe that still remain to be fully under control.

**00:19:15**

Countries in western Europe in general have suppressed the majority of virus transmission and are now seeing flare-ups of that disease. The trick for them now is to really focus on identifying those clusters of disease, identifying any new community transmission and putting in place the kind of localised measures that can contain the virus, suppress the virus and reduce exposure and try to avoid if possible having the country-wide lock-downs that have done so much economic damage before.

That does require a very sophisticated approach, it requires very localised data, it requires very rapid turn-around of testing, it requires very fast investigation of clusters and the implementation of measures as localised as possible.



That will be what countries in Europe and countries around the world really need to focus on; how fast, how speedy, how effective is your response to those inevitable flare-ups and are you able to shut down transmission as quickly as possible and move on to the next flare-up.

I know that's not what people want to hear but that is the reality. Once you get the disease down to a low level you will have flare-ups. What you do about those flare-up and how localised you can be and the surgery that's needed to remove the virus really comes down to how well you've invested in your ability to do surveillance, to do quarantine, to do tracing and do all of those other things.

**00:20:48**

So no, I wouldn't characterise... Everyone's been speaking about waves and spikes and everything else. The reality is - and I've said it before - that in classic epidemiology of viruses in the absence of control measures very often viruses can show seasonal patterns and we've certainly seen that with influenza.

This virus has demonstrated no seasonal pattern as such so far. What it has clearly demonstrated is if you take the pressure off the virus the virus bounces back. That's the reality, that's the fact. You can call that a second wave, you can call that a second spike, you can call that a flare-up; you can call it anything you like.

Take the pressure off this virus; the virus will bounce back and that's what we will say to countries in Europe; keep the pressure on the virus. The DG said it; suppress, suppress, suppress.

MK If I could just supplement that - just to say I completely agree with everything Mike has just said there - just to answer the second part of that question, you used the words, what is the blame, in the question and I think we need to avoid the use of the word blame here because what we are seeing and what we have expected and what everyone should expect is that this virus likes people.

**00:21:56**

It likes an opportunity to spread and if we give it an opportunity it will so what we're trying to express beyond the all-of-government, all-of-society approach, strong leadership, clear national plans, strong local implementation especially where it is needed, is to empower communities.

We would like everyone on the planet to understand what their role is in this fight against COVID-19, to manage your own risk in terms of what you do every day, in terms of deciding if you can; if you're asked to stay home please stay home but if you do need to leave your house to do different things to follow the national guidance.

If you're asked to wear a mask when you go in shops or you go on public transportation please do so. If you can avoid crowded places, if you can avoid indoor settings with poor ventilation, manage your own risk. Reduce the opportunity for you to become exposed to this virus because not only are you preventing an opportunity for yourself to get infected, you prevent the opportunity for the virus to pass from you to somebody else who could potentially be in a more vulnerable grouping.

**00:23:04**

Again we're still learning about this virus but we know that if the virus has an opportunity to spread it will and it hasn't gone away. As Mike has said, there's no indication that there is seasonality with this virus. The virus is still circulating. We know that the majority of the population still remains susceptible to infection and so we have to do everything that we can to prevent infections and save lives so do it all.

Physical distance, wear a mask where appropriate, make sure you practise respiratory etiquette, avoid crowded settings, follow national guidance; be informed; all of this needs to be done every day.

MH Thank you very much, Drs Van Kerkhove and Ryan. The next question; we'll try Stephanie Nebahe again. Stephanie, if you're back on could you unmute yourself and ask your question.

**00:24:00**

ST Yes, can you hear me?

MH Yes, we can. That's great. Yes, we can hear you well now. Go ahead.

ST Reuters reported exclusively last Friday that Germany and France had [unclear] that US [unclear] WHO, saying that the [unclear] station had given notice of [unclear]. So my question is, how important is to WHO that this process, that the G7 reach a policy, united with one voice in their efforts to follow up on [inaudible]?

MH Stephanie, it wasn't very easy to hear your question, it was quite garbled. I think you were asking about the G7 discussions that were around WHO and you were asking how important that is to WHO. Was that the essence of your question?

ST Yes. Can you hear me?

MR Better.

MH Better now.

ST Okay. Reuters reported last Friday that Germany and France had distanced - quit the G7 talks as the US is trying to lead these talks despite having said they are quitting the organisation.

**00:25:28**

So my question is, how important is it to WHO that the major powers speak with one voice and follow up the WHO resolution aimed at learning lessons and reforming WHO? Thanks.

MR I'll pick up on the last point there, Stephanie. The resolution that was agreed, Resolution 73.1 of the last World Health Assembly, contains a large number of actions to be taken by WHO and the member states including the comprehensive evaluation of the response thus far but many others around the ACT Accelerator and vaccines, around surveillance, around so many other things that the world needs to get on and do together both now and into the future.

We know the G20 have also been discussing this issue of global preparedness now and into the future. We know the European Union have been doing that and many different regional and global bodies have been really sitting up and taking notice of the fact that this pandemic has come, this pandemic has taken people by surprise and we need to do better in future in order to stop pandemics like this and invest in the long-term solutions.

**00:26:46**

So we're always pleased when bodies like the G7, the G20, European Union, ASEAN and so many others get together and really take these issues seriously. Obviously the G7 have been some of the richest and most powerful nations in the world and organisations that, quite frankly, have invested a tremendous amount technically, operationally and financially in the World Health Organization.

So it's always a good thing when they're talking about global health, when they're talking about the threat of pandemics and

how we work our way out of this one so we welcome those engagements. We are not part of those discussions or negotiations and we would leave it to the participants in that discussion to clarify what their positions are in that discussion.

We trust that such powerful and capable nations will have consensus around how they wish to approach global health security because we all occupy one planet, we are all vulnerable to the risks anywhere on this planet and we need to find global solutions both in terms of preparedness and response and we trust that the G7 will play a major part in that in the months and years to come.

**00:27:56**

MH Thank you very much, Dr Ryan. The next question comes from Clive Cookson of the Financial Times. Clive, could you unmute yourself and please go ahead.

CL Thank you. This is a less political question but I'm interested in what you were making of the increasing talk about exposure to other coronaviruses in the human populations; the sorts that give you less severe symptoms; common colds. There's talk that this might give some form of cellular immunity to as much as 20 to 40% of the population in some places, that it might account for some of the huge varieties in symptoms, infection rates even among particular population groups.

I know it's not yet clear but I'd love to know where you think the evidence lies on that at the moment. Thank you.

MK Thanks for this question. It's a very good one. You did answer your question and say that it isn't quite clear yet but having said that, this is an area of active discussion amongst our groups, amongst our international networks.

**00:29:12**

What you're referring to are the common cold coronaviruses that circulate globally - there are four of them - and what that means for someone who has been infected with one of those coronaviruses; does it mean that they have some level of protection from the SARS-CoV-2 virus.

We don't have an answer to that yet. What we're discussing with our laboratory networks and particularly labs that have experience with doing a T-cell or a cellular response is trying to understand, if somebody has a T-cell response for SARS-CoV-2 what does that mean, does that mean that they've been exposed

to the SARS-CoV-2 virus and have the T-cell response to that or did they have exposure to another human coronavirus.

We don't have a complete answer yet. This is called cross-reactivity and we're trying to understand what this means in terms of potential protection if any from this new virus that emerged at the beginning of this year and what that means going forward.

So what we're trying to do is design some basic studies that need to be done in a laboratory to look at what T-cell response is and look at cross-reactivity.

**00:30:27**

These studies can only be done in a handful of labs globally so we're partnering with those labs to better understand. In addition to that we're looking at adding a T-cell response to some of the seroepidemiologic studies that we are supporting globally so we can look at both an antibody response and a T-cell response to see what it actually means in individuals and look at that over time.

We don't have complete answer to that yet but I can assure you that we have incredible scientists that are working directly with us on this and with all of you to help us better disentangle what this means.

MH Thank you very much, Dr Van Kerkhove. We now have a question from India, from Avisit from AM News TV India. Avisit, please unmute yourself and go ahead.

**00:31:18**

AV Yes, thank you very much for taking my question. Can you hear me now?

MH Very well. Please go ahead.

AV Dr Van Kerkhove just mentioned that the WHO is still learning about the virus, vaccines are a far cry... and the economy is absolutely shattered all over. My question is, the virus emanated from China, Wuhan [?] Province, so where does the investigation stand and what are the actions being taken so that in future such things do not happen? What is the status of this virus worldwide?

MH I'll just clarify your question. You're asking about the investigation into the origins of the virus and about the setting up of the mission to investigate. Is that correct?

AV Yes, absolutely.

MK I could start with the public health importance of looking at the zoonotic source of the virus. Normally what happens is wherever the first cases emerge - in this case the first cases were identified in Wuhan, China - that's where the studies begin. You start there and you look at what were the exposures of those individuals, you look back in time, you look forward in time to really determine what are the types of activities that those individuals did in terms of travel, in terms of exposure occupationally, in terms of everything that they did in their daily life before they developed symptoms.

**00:32:53**

Then you move from there and you follow the science, is what we say. We've done something similar for the first SARS virus in 2003; we did the same for the MERS coronavirus in 2012/2013 where we need to do these studies at what we call the animal/human interface.

We basically look at what are the types of exposures that people had to determine where the animal origin was. Those are where the studies will begin and that's what will happen with the SARS-CoV-2 virus.

MR Yes. It's important as well, I think, in general to reflect on what we've learnt about the virus in terms of its ease of spread, the multiple modes of transmission, the existence of asymptomatic and presymptomatic transmission.

This virus is proving exceptionally difficult to stop. It's difficult to recognise, it's difficult to distinguish between it and other syndromes unless you have adequate and immediate testing. You've seen that now in countries with influenza and with COVID at the same time.

**00:33:58**

So this is not an easy virus either to detect or to stop. Obviously the first clusters of cases were certainly picked up in Wuhan. That's where an epidemiologic investigation would always start but that does not - and we've done this and I've done this for over a quarter of a century now.

Case zero is not always where your first cluster is. Case zero is obviously before in time but it may be in another place so that's why you have to keep an open mind. All hypotheses are on the table. You start with an open mind and you follow the evidence and you follow the data.

If you follow the data and the science you will find hopefully the point at which the disease crossed the species barrier but I will remind you that it has taken decades in other diseases to do that. It took years to do it in the case of MERS. It's never been fully established in the case of SARS in terms of the actual event that crossed the animal/human barrier and it does prove very, very difficult to find that initiation point where the disease crossed the animal/human species barrier.

**00:35:08**

But it is important that we find that because as long as the animal/human breach has not been discovered there's always a chance that that barrier can be breached again and that's why we always - in Ebola, in Nipah, in many, many other diseases - seek to find the case zeroes in order to find that breach in the barrier.

We are at greater and greater risk around the world and let's face this. We live on a planet in which we're adding a billion people a decade. We are densely packed, we're exploiting pristine environments, we are creating and driving the ecologic pressure that is creating the risks that are driving the risk at the animal/human species barrier.

There are so many people out there working in the ecologic movement who are seeing this each and every day. We are pressuring the biologic system. We live in a biome, we live in a world of biology and we are actively creating the pressures that are driving the breaches of those barriers and we need to do better at managing the risks associated with that.

**00:36:18**

MH Thank you very much, Dr Ryan and Dr Van Kerkhove. The next question comes from Brazil, from Lurivel Santana of CNN Brasil, who's going to ask her question in Portuguese, I understand. Lurivel, could you please unmute yourself and go ahead.

LU I'll do it in English and thank you for the opportunity. Brazil has reached 100,000 deaths and President Bolsonaro keeps addressing this as an unavoidable fact by saying he's sorry for deaths from all causes. Now that he's gone through the disease he's still more confident in advertising hydroxychloroquine as a silver bullet, to use Dr Tedros' expression.

Our president thinks social distancing is not necessary and he's suspicious of Chinese vaccines so the Brazilian Government does not provide enough financial assistance for poor people to stay at home. What should Brazilians do under these circumstances to protect themselves against this virus and is there anything wrong with Chinese vaccines? Thank you.

MR That's a lot of questions in one. In terms of looking at the various things, certainly Brazil continue to have been 50 and 60,000 cases a day. The  $R_0$  or the reproduction number for the disease varies between 1.1 and 1.5 so the disease is still actively spreading across most of the country.

**00:37:57**

Intensive care units still cope and again it's a tremendous credit to the healthcare workers of Brazil; they have been at this for months now and hospital occupancy and ICU occupancy now in many places exceeds 80%, in some cases exceeding 90%.

Anybody who works in an intensive care unit in an infectious disease situation recognises the stresses and the strains on those individuals and their families and sustaining that for months is an almost impossible task.

COVID positivity rates in those tested are still very high, over 20% in many cases so a lot of the indicators for Brazil are really pointing towards continued community transmission, continued pressure on the health system. Even though cases are maybe only increasing by maybe ten, 11, 12% a week when you look at the base number that's very large.

Brazil is sustaining a very high level of epidemic. The curve has somewhat flattened but it's not going down and the system is under a great deal of pressure. With respect, in a situation like that hydroxychloroquine is not a solution and not a silver bullet.

**00:39:18**

It is the sovereign right of any nation to decide what it believes is the best treatment and the best course of action for clinically managing disease. At present from all of the randomised control trials that have been published hydroxychloroquine is not proven to be an effective treatment against COVID-19.

With regard to social distancing and physical distancing, masks and others - again the DG has said it - we need to sustain those activities. He says, do it all; hand-washing, social distancing, masks. It is though difficult for many, many people in Brazil. Many people live in situations of overcrowding and poverty where



doing that and sustaining that kind of activity is very, very difficult.

The Government should be supporting communities in being able to... It's very hard to act as a community if you're not supported and when Maria spoke about community empowerment, that's not just empowering people with words. You need to empower people with deeds, you need to empower people with resources, you need to empower people with knowledge and they have to be able to act.

**00:40:25**

Communities can't act with two hands tied behind their backs. They need to be given the resources, the means and the knowledge to act.

With regard finally to the issue of vaccines, there are a number of vaccines under trial including two Chinese vaccine candidates that are going through exactly the same types of trials that all of the other vaccines... There are four candidates that are currently in phase three. Bruce might speak to more coming through the pipe in terms of the 32 vaccines that are currently in some form of trial.

Each and every one of those vaccines will be put through the exact same rigorous phase-three trials and further into phase four and roll-out to communities. So there is at this point no need to be suspicious of any vaccine at that point. What we need to look to are the safety and efficacy trials.

WHO and our scientific advisory group on immunisation will be keeping a very close eye on the outcomes of those trials and WHO will not be issuing policy guidance regarding any vaccine unless we have seen, examined and looked at the data to ensure the safety and efficacy of any vaccine. Bruce, anything to add on vaccines?

**00:41:42**

MH Thank you very much, Dr Ryan. Our next question comes from Robin Millard of Agence France Press. Robin, please unmute yourself and go ahead.

RO Hello. Can you hear me?

MH Very well. Please ask your question.

RO It's a question about the virus. Obviously we all know what we as human beings are trying to do; our objective is to try and suppress the virus and eliminate it. What is the objective of the

virus? When you talk about knowing your enemy, what is the virus trying to do?

MR I'm going to start; Maria will come in. I think it is important and I think when we talk about what is the virus trying to do and the virus being an enemy, the virus doesn't have a brain. We're the ones with the brains. The virus is a very simple biologic entity that can enter a human cell and instruct that cell to make more viruses which can ultimately kill the person it infects or at the very minimum transmit to another person.

**00:42:51**

It's brutal in its simplicity; it is brutal in its cruelty but it doesn't have a brain. We have the brains and I think Maria may outline how we can outsmart something that doesn't have a brain but we're not doing such a great job right now.

MK Thanks for this question. In fact I'd always anticipated this kind of question, someone asking us what... The goal of the virus is to make more virus. The goal of the virus is to - I would use the word survive if it was alive but it's not alive. It wants to reproduce, it wants to find individuals to pass between but it also doesn't want to kill too many because if it kills its host then it can't pass to another person.

So what we can do to outsmart it - and I think, as Mike said, there're many, many, many things that we can do right now, with the tools that we have right now, to outsmart this virus. I think that's the unique thing about this particular pandemic.

We are all in support of rapidly addressing therapeutics and vaccines and that will continue but right now we have tools that can stop transmission and break chains of transmission.

**00:44:02**

What we need to do with this virus is to keep ourselves separated from somebody who is infected and what we keep saying with this physical distancing is that keeping at least 1m away from individuals, from others provides enough of a distance. If you can be more distanced great but at least 1m between people.

If we can isolate cases so people who are known to be infected with this virus, whether they have symptoms or not; if we isolate them from others we don't allow the virus to pass to somebody else.

If we carry out what is called contact tracing where we identify the contacts of a known case and we put those individuals in quarantine which separates them from others we prevent that virus, if those contacts are infected, from passing to somebody else.

We support the use of masks in areas where you cannot do physical distancing. We support the use of masks for healthcare workers who are caring for known patients. There are many, many things you can do. You can clean your hands. It is very unsophisticated but in many parts of the world this is a luxury to be able to do.

**00:45:08**

Make sure you have clean water, you have soap, you have an alcohol-based rub; you inactivate the virus that's on your hands and you don't inoculate yourself. If we do all of these things we can outsmart the virus and we can prevent this virus from passing from one individual to another.

So thank you very much for that question. I think everybody on the planet needs to understand that they have a role to play. No matter where you live, no matter what occupation you have, no matter what age you are you can be part of breaking the chains of transmission.

MH Ryan for those great answers. We're well past the 45 minutes. I think we've only got time for one more question and that will go to Shoko from NHK Japan. Shoko, please unmute yourself and go ahead.

SH Hello, Margaret. Can you hear me?

MH Very well. Please go ahead.

SH Thank you for taking my question. My question is about Japan. After the first peak in April we have experienced a quite stable period for about two months but since the end of July the number of confirmed cases exceeds 1,000 or sometimes 1,500 per day.

**00:45:24**

What advice do you have to countries like Japan who are experiencing a resurgence like this? Thank you.

MR Yes, Japan in some senses is experiencing something similar to Europe and again I would commend Japan on the approach they've taken. Because Japan, Korea and others have

had lower numbers for a longer time they've been dealing with spikes and flare-ups for months now.

Japan has already had a number of flare-ups and spikes going back two or three months and has managed to contain those by localised measures very often and really focused on very powerful, very strong cluster-based investigation and they've gone after each and every cluster.

They've examined each of those clusters in terms of the epidemiology and they've identified the risk behaviours associated with the generation of those clusters.

The other thing Japan has done is really looked at who is transmitting the disease. The majority of people in the Japanese context do not transmit the disease to another person and in fact it's a smaller number of individuals who are transmitting disease to others and very often that is driven by the context in which the transmission occurs.

#### **00:47:43**

Crowded places, closed spaces, areas where there're close-contact settings; the nightclubs, social gatherings, churches and other situations. By doing this Japan is really starting to pick apart transmission inside Japan, looking for those highest-risk behaviours, looking for those highest-risk environments and then taking action at that level, locally, surgically, trying to reduce those activities, close down those spaces that are most risky and then dealing with that step by step by step.

So I do think Japan deserves a lot of credit. Certainly in the data that I've seen I've not seen another country in reality that's produced as much really granular information on what's going on cluster by cluster by cluster.

#### **00:48:34**

For me when a country and when an authority truly understands the nature, type and local levels of transmission and once you understand the problem at that level that gives you a huge opportunity to intervene and it means you can intervene in a way that's not so brutal, does not have to be so population-based or widespread.

Bruce, you spent time looking at this in China and other places. I don't know if you have observations on Japan and what they've been doing.

BA I think, Mike, to the point you made, the response in Japan, like so many countries, has been extremely impressive in this but the question comes back a little bit to the last question; what's the virus trying to do?

As Maria said, the virus is trying to get from person to person and what we can do; we need to make it more difficult for the virus; it's as simple as that. We're not making it hard for the virus. We're coming together, we're clustering, we're coughing over each other and everybody needs to be asking themselves all the time right now in the face of a globally endemic virus at this point, am I making it more difficult for this virus to pass from one to another?

**00:49:46**

It's as simple as that at the end of the day and as Mike says, everything we talk about - finding the virus, isolating the cases, tracing the contacts - it's all about making it more difficult for the virus. This is not rocket science. This is simple but it takes a certain amount of discipline and it takes a certain amount of commitment by a global community now to stop this thing.

But it's definitely stoppable and we definitely have the knowledge and the tools already to be slowing it down a lot more than we are.

MR Also I think what Japan has done is not simplified but really distilled the public messaging down to something that people can really get ahold of. In terms of transmission they talk about avoiding the three Cs; closed spaces, crowded places and close-contact settings.

People are triggered to really look hard at when they get themselves into those situations and when they are in those situations and they can't avoid those situations they're given three more instructions; open the windows for ventilation, minimise the conversation, wear a mask.

**00:51:00**

I think we can learn a lot from... because people are overloaded with information and it's a deluge, it's a tsunami. I think governments could really look at how we not simplify; simplification is the wrong word because it sounds as if you're dumbing it down.

You're not; you're really trying to distil down the key behaviours that are going to protect you and protect others. I think if you believe your main mode of transmission is clusters - and that's

what's happening in Japan - and you want to stop clusters, if you believe that most people don't transmit the disease but do in these particular situations then you want to reduce risk in those situations and you want everybody reducing risk in those situations.

Then you try and give the simplest, most implementable message. Don't give me instructions that I can't follow. Give me instructions that I can follow. I think people are crying out for that. No country is perfect in all of this. Japan has had its struggles but I do think Japan deserves a lot of credit for the science-based approach that it has taken to this response.

MK Just to add - we have quite a lot to say for this answer. Just to say on that last point that Mike just mentioned on this science approach, this data-driven approach, I think one of the other things that we've learned from Japan and many other countries is the ability to be more specific, to be more targeted based on data.

**00:52:23**

One of the things that they've also looked at is within these clusters they're noticed a shift in the age, in the populations that are actually being infected. This is driven by nightclubs, it's driven by social contacts and the way that people crowd and come together and by knowing that you can target your approach.

You don't have to have a blanket, close-everything-down. You can focus on, where is this virus likely to circulate, where can we close that down. That data-driven approach is really, really critical.

We've said before that not everyone necessarily passes the virus to somebody else. We can prevent that from happening but there are some really good estimates out there that suggest that between ten and 20% of cases are responsible for about 80% of transmission events and that's really, really important.

**00:53:09**

That supports the nature of the epidemiology of this virus and that it likes clusters, it likes these super-spreading events. If we give this virus the opportunity to spread in these closed settings it will so we have to prevent that from happening.

Japan and other countries are really looking at the data from these outbreaks, doing detailed cluster investigations to be able

to drive the next steps. They've also learned quite a bit on long-term living facilities.

By preventing the virus from entering long-term facilities where we know it has had devastating effects in many countries you can prevent those types of outbreaks from happening and save lives. So again everything that we can do to collect the right types of information, do detailed investigations of where these clusters are happening...

If you're not in a position to do that learn from other countries that are experiencing that so that we can have much more tailored, specific, targeted approaches in our next actions.

MH Thank you so much, Dr Van Kerkhove, Dr Aylward and Dr Ryan, for these really strong and positive answers. On that positive note I'll close this press briefing, letting you know that we will provide you with the audio file, you'll get the transcript later and any questions outstanding that you need answered please send to media enquiries.

Thank you all again and we'll meet again on Thursday. Goodbye.

**00:54:38**