Hello, everybody. This is Margaret Harris in Geneva on this Monday, August 3... our first for this month, first of many of course, and welcoming you to today's World Health Organization press briefing on COVID-19. We have with us as always the WHO Director-General, Dr Tedros, and Dr Mike Ryan, Executive Director of our Emergencies Programme, and Dr Maria Van Kerkhove, Technical Lead for COVID-19.

As usual we are also translating this simultaneously in the six official UN languages plus Portuguese and Hindi. Remember that under the quirky Zoom system you need to go to the Korean button to use Arabic. Now without further ado I'll hand over to Dr Tedros. Dr Tedros, you have the floor.
TAG    Thank you, Margaret. Good morning, good afternoon and good evening. On Friday the emergency committee on COVID-19 met and reviewed the current pandemic. It was a sobering moment coming six months on from when the committee advised and I agreed that the outbreak constituted a public health emergency of international concern.

At the time, 30th January, there were fewer than 100 cases and no deaths outside of China. When the committee met three months ago three million cases of COVID-19 had been reported to WHO and more than 200,000 deaths. Since then the number of cases has increased more than fivefold to 17.5 million and the number of deaths has more than tripled to 680,000.

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In addition to the direct toll COVID-19 is having the committee notes the health impact that disrupted services are having on a range of other diseases. That compounds what we already know about reduced immunisation coverage, cancer screening and care and mental health services.

A survey of responses from 103 countries between mid May and early July found that 67% of countries reported disruption in family planning and contraception services. More than half of countries reported disruption in antenatal care services and more than a third of countries reported disruption in childbirth services.

On top of the health impact we have seen the damage COVID-19 has caused socially, economically and politically. The committee put forward a number of recommendations for countries to continue to implement to bring the virus under control. These range from sharing best practice to enhancing political commitment and leadership for national strategies and localised response activities driven by science, data and experience.

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We know from serologists' studies that most people remain susceptible to this virus, even in areas that have experienced severe outbreaks. Over the past week we have seen several countries that appeared as though they were past the worst now contending with fresh spikes in cases.

However we have also seen how some countries, regions or localities that had a high number of cases are now bringing the outbreak under control. It's not easy of course. Strict measures
may cause their own problems for delivery of essential health services, the economy and societies overall.

The committee acknowledged that member states have tough choices to make to turn the epidemic around but they were also clear that where leaders step up and work intensely with their populations this disease can be brought under control.

We learn every day about this virus and I'm pleased that the world has made progress in identifying treatments that can help people with the most serious forms of COVID-19 recover. The Committee recommended that countries engage in the Access to COVID-19 Tools, ACT Accelerator, participate in relevant clinical trials and prepare for safe and effective therapeutics and vaccine introduction.

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A number of vaccines are now in phase three clinical trials and we all hope to have a number of effective vaccines that can help prevent people from infection. However there is no silver bullet at the moment and there might never be. For now stopping outbreaks comes down to the basics of public health and disease control; testing, isolating and treating patients and tracing and quarantining their contacts. Do it all. Inform, empower and listen to communities. Do it all.

For individuals it's about keeping physical distance, wearing a mask, cleaning hands regularly and coughing safely away from others. Do it all. The message to people and governments is clear; do it all and when it's under control keep going. Keep strengthening the health system, keep improving surveillance, contact tracing and ensure disrupted health services are restarted as quickly as possible.

Keep safeguards and monitoring in place because lifting restrictions too quickly can lead to a resurgence. Keep investing in the workforce and communicating and engaging communities.

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We have seen around the world that it's never too late to turn this pandemic around. If we act together today we can save lives, we can save livelihoods if we do it all together. This week we're also launching a mask challenge with partners from around the world and we're encouraging people to send in photos of themselves wearing a mask.

As well as being one of the key tools to stop the virus the mask has come to represent solidarity. Like the safe hands and healthy
at home challenges, we're going to be spreading further positive messages about how everyone has a role to play in breaking chains of transmission.

If you're a health worker, a front-line worker, wherever you are show us your solidarity in following national guidelines and safely wearing a mask, whether caring for patients or loved ones, riding on public transport to work or picking up essential supplies.

As well as hand sanitiser I carry a mask with me all the time and use it when I am in places where there are crowds. By wearing a mask you're sending a powerful message to those around you that we are all in this together. Wear a mask when appropriate. Keep your physical distance from others and avoid crowded places. Observe coughing etiquette. Clean your hands frequently and you will be protecting yourself and others. Do it all.

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One of the areas that we have been continuing to study is the origins of the virus that causes COVID-19. The WHO advance team that travelled to China has now concluded their mission to lay the groundwork for further joint efforts to identify the virus' origins. As a result of these efforts WHO and Chinese experts have drafted the terms of reference for the studies and programme of work for an international team led by WHO.

The international team will include leading scientists and researchers from China and around the world. Epidemiological studies will be done in Wuhan to identify the potential source of infection of the early cases. Evidence and hypotheses generated through this work will lay the ground for further longer-term studies.

Finally this week is breast-feeding awareness week. As we have seen again and again, standard public health measures are often the most effective. This week is breast-feeding awareness week and we're reiterating the importance of breast-feeding, which has life-saving benefits for babies and families.

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At the time of COVID-19, especially when there is disruption of health services, WHO recommends that mothers with suspected or confirmed COVID-19 should be encouraged, the same as all other mothers, to initiate or continue to breast-feed. Mothers should be counselled that the many, many benefits of breast-feeding for newborn babies and children substantially outweigh the potential risks for COVID-19 infection.
Mother and infant should be helped to remain together while rooming in throughout the day and night and to practise skin-to-skin contact including [unclear] mother-care especially immediately after birth and during establishment of breast-feeding, whether they or their infants have suspected or confirmed COVID-19. I thank you.

MH Thank you very much, Dr Tedros. I will now open the floor to questions but before I do I'm going to answer a question that a few of you have asked already; why are we not wearing masks? The reason we don't wear masks during these press conferences is because we're following social distancing regulations and we've got very strict rules about how many people can be in rooms and the spacing. If you could see a 360-degree you would see that we're all physically distanced.

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We do the same thing with lifts. We only have one person in many of our lifts, which has been excellent for my fitness because I have to take the stairs a lot. We have a lot of you wishing to ask a question. For those who've not done it before please use the raise your hand icon to get in the queue to ask your question.

I'll also apologise now; there's a long list of people connecting and asking questions, for which we thank you all. But we restrict these briefings to under an hour so if we don't get to your question this time please either send me your question or let me know and we will try to get your question asked at the next briefing.

The first person we have is Ankit Kumar from India Today. Ankit, please unmute yourself and ask your question.

AN Thank you, Margaret. My question is on India. India is now on top of the list in terms of highest daily cases. How do you assess the situation in India, what do you make of the Government's response and are there any concerns with regard to India? Thank you.

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MR Yes, India has a very high number of cases but I think we should obviously see the number of cases in India today against the backdrop of the country's size and its massive population of 1.3 billion people. The cornerstone of the response is still the same no matter where you are. As of yesterday there were over 1.75 million cases and over 37,000 deaths reported.
India's done well on sampling; it's done 20 million tests already and does on average 0.5 million tests per day. There's been a move in then last number of days and weeks to really expand testing and to allow greater freedom for medical practitioners to request testing so the approach to increasing that, the creation of a COVID diagnostic training centre as well is also helping to expand the capacity to do testing.

So clearly India is determined to expand its testing regime further and further afield. I believe the Ministry of Health is also importing extra oxygen concentrators and also really trying to leverage the over 43,000 health and wellness centres across the country to ensure continuity of essential health services.

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Again a focus, I think; working with WHO and with UNICEF on issuing a front-line health workers' toolkit to really improve the capacity of health workers to recognise COVID and also manage infection prevention and control in a clinical setting.

India is also playing a leading role in the development of potential vaccine candidates and also producing potential anti-COVID drugs so overall India is making a strong contribution on the international phase.

Clearly India is facing a challenge with the disease but it is focused in particular areas. Our concern at the moment is that the disease, in moving into more rural areas that don't necessarily have the same strength in their health system, that we would see increased spread and potentially increased mortality.

The pattern of the disease moving into younger age groups is also felt in India as well so India again being a large, very diverse country, the situation varies across the country. The Government is ramping up its response.

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The front-line health services are being supported but again the potential for this disease to spread quickly in overcrowded urban areas and in poorly-served rural areas is always there and India will obviously have to keep up a very strong and sustained effort to both prevent the spread of the disease and to treat those who fall ill.

MH Thank you very much, Dr Ryan. The next question goes to Simone McCarthy from the South China Morning Post. Simone, unmute yourself and ask your question, please.
SI   Thank you very much for taking my question. My question is about the WHO two-person scoping mission to China that you said has recently been completed. I'm wondering if you can provide some more details about the kind of information that was discussed with the Chinese counterparts such as whether information was shared about animal tracing and testing being done at wildlife breeding farms or markets in the Hubei region or elsewhere; anything particularly interesting or how the information about research conducted in China may guide the international team.

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Of course I'd also be interested to know any further details regarding preparations, goals or timeline for the larger international team's visit. Thank you.

MR   Thank you. The team is actually not back yet and we obviously haven't had a chance to debrief them. The terms of reference document that has been agreed with the Chinese colleagues lays out both the previous work that has been done to understand the disease and also the studies that are going to be needed to further understand the original cases in Wuhan, to further explore the epidemiologic links of those cases and then to use that as a starting point to see what the animal origins of the disease would be.

The Chinese counterparts have provided information on their initial investigations for example around the Wuhan seafood market and the testing that was done there. There are gaps in the epidemiologic landscape and what is required is going to be a much more extensive retrospective epidemiologic study to look at those first cases and clusters in Wuhan and to fully understand the links between those cases so that we can then determine at what point in Wuhan or elsewhere was the animal/human species barrier breached.

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Again one must remember that there was a specific surveillance system in place in Wuhan for picking up clusters of atypical pneumonia. It was there for a very specific purpose and the fact that that fire alarm was triggered doesn't necessarily mean that that is where the disease crossed from animals into humans.

The Director-General has been very clear on this in the past; we must start where the human disease appeared to begin and then work from there and a lot of the work was around the initial
designs of those studies; what types of studies would need to be carried out, what kinds of data would need to be collected.

In knowing that and in getting a better understanding of that - and remember, studies and a lot of surveillance has been done by Chinese colleagues, a lot of excellent scientific work has been done but these specific retrospective studies require a very in-depth approach, a very detailed approach to understanding those first cases.

On the basis of that understanding we can then move on to phase two studies which would allow us then to explore in a much more precise way potential animal sources for the disease. Otherwise it's like needles in a haystack; you can sample every animal in China and outside. You might have no luck because you're guessing.

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The real trick is to go to the human clusters that occurred first and then to work your way back systematically looking for that first signal at which the animal/human species barrier was crossed. Once you understand where the barrier was breached then you move into the studies in a more systematic way on the animal side and then you're directed and much more precise on how you achieve that.

The mission was really about discussing those phase-one and phase-two studies; how they would look, how they would need to be designed and at this point we're moving forward with agreeing on their international team and ensuring that we have the right expertise there to work with our colleagues in China both to design and to implement those studies.

**MH** Thank you very much, Dr Ryan. The next question is from Jamil Chaid, the Geneva correspondent for a range of Brazilian media. Jamil, please unmute yourself and ask your question.

**00:20:14**

**JA** Thank you, Margaret. Good morning to all. My question is on Brazil; if you could give us some light on the current situation and what can be done from this moment onwards since the 100,000\textsuperscript{th} death mark is about to be achieved later this week. What further steps can be taken in order to avoid an even bigger tragedy? Thank you very much.

**MR** I'm getting all the questions today. You are correct; the situation in Brazil continues to be of great concern with many, many federal units reporting a large number of cases; on the
average daily count around 60,000 per day and in excess of 1,000 deaths.

As it is in other countries that are experiencing intense community transmission with significant pressure on the health system - Dr Tedros has spoken again about this before - there are only a few roads out of this crisis for countries and suppressing intense community transmission is that first step.

That can only be achieved with a very strong partnership between federal, state, governments and with communities. The government needs to do its part in every country to detect cases, to isolate cases, to trace contacts when possible and to create conditions in which the disease cannot spread easily. We're talking here about crowded situations and trying to create an architecture of safety within the country.

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Communities then can participate, comply with government advice and regulations and also reduce their own individual exposures. That is very easy to say; it is difficult to achieve. It would seem to me that in most countries that have experienced intense community transmission the way out is long and it requires a sustained commitment to doing many, many of what on the face of it are very simply things but are difficult to actually implement.

As I've said before, there is no magic bullet here. This is going to require a reset in many countries around how they approach suppressing this virus, how we approach communicating and engaging and empowering communities. Some countries are really going to have to take a step back now and really take a look at how they're addressing the pandemic within their national borders and are they doing everything possible politically, economically, medically to suppress the virus and support their communities.

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MK I think the only thing to add to what Mike has said is, especially in countries that are seeing the most intense transmission now, to break down the problem to where the most intense transmission is, to where the biggest burden is and to mobilise your resources and your efforts in those areas first.

We do see that in many countries, even those that are experiencing quite some outbreaks right now, transmission is not
uniform across an entire country at the same level in all locations at the same time.

We have seen from other countries that went through something similar that what they tried to do was to isolate, where is the biggest issue, where is the biggest burden, where is the most intense transmission and mobilise the resources there first to see how, if resources are limited...

We know in Brazil there are tremendous resources, there's tremendous will to be able to tackle this problem and, as Mike has said, to engage communities, engage people, to not only inform them but engage them in this battle against this virus and it is about the application and the use of the tools that we have right now.

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There are tools that will become available and we do hope that there will be a vaccine that will be safe and effective and available but at the present time what we have now are tools that work. They're tools about finding cases, active case finding, isolation of cases, even mild cases, finding contacts, quarantining of contacts, ensuring that there's testing capacity so that we know where the virus is.

It's about using all of the tools for physical distancing, wearing a mask where appropriate, making sure that you practise respiratory etiquette. As the DG says, do it all; not just the governments to do it all, not just businesses getting engaged but individuals; you can play a part in this as well.

TAG Maybe I'd like to... It has been said; just very, very brief. To governments, to communities, as my colleagues said; if we do it all, if we follow the comprehensive approach we can turn around the situation. We have to understand that it's never too late and I would like to quote what Martin Luther King Jr said.

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The time is always right to do what's right. So I think from this what we can learn is we shouldn't give up and anything can be turned around and it's never too late and please follow the comprehensive approach. If the governments, communities and of course all players including our health professionals can work in concert it can be turned around whether it's in Brazil or elsewhere. Thank you.

MH Thank you very much, Dr Tedros and Drs Van Kerkhove and Ryan. The next question goes to Anne Gulland from the
Telegraph, UK. Anne, can you unmute yourself and please go ahead. Anne, we can't hear you. Have you unmuted yourself? Please ask your question. Looks as if we've lost Anne. Anne, I'm going to move on to the next question. We'll put you further down the list. The next question will go to Yei Li of Xinhua news service.

YE  Thank you, Margaret, for taking my question. Last week Dr Tedros mentioned that the COVID-19 pandemic has become a once-in-a-century health crisis, the effects of which might last for decades. Dr Tedros, could you give us more clarification on the historical significance of the event and what would be your suggestions on the possible long-term effects or coexistence with this, as you called it, killer virus? Thank you.

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TAG  Maybe I would like to start with, as you know, since we started probably recording this is the first ever coronavirus-caused pandemic. Of course we had influenza pandemics many times; since we started recording in the last 250 years, if I am not wrong, ten pandemics. But this is the first eve coronavirus pandemic.

Not only that, it has two dangerous combinations; it moves fast and at the same time it's a killer and it surprised the whole world, be it a wealthy nation or a poor one. If you compare it with the previous pandemics, even with the advanced technology we have now, you can see the potential.

That's why, one, it has very peculiar features and second, with the two combinations I said, you can see how fast it's moving and the world has never seen anything like this for several decades, actually since 1918; that's why I said once in a century.

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But at the same time the impact has been in the past six to seven months not only on lives but livelihoods; not only on the health aspect but on social, economic and political. It has touched almost everything.

So its impact, if it touched everything then the second part you said is, it will be felt for decades to come because one of its impacts is on the economy for instance, let's say, and some countries' economies are shrinking significantly. That will in turn affect many other thing so that's why.

Not only is this something that happens rarely but because of its degree its impact will be felt also in the future and that's what we
are seeing. But when I say this I'm not saying there is no solution now. Whatever happens in the next few months or years I also believe that it's in our hands.

Many people ask us saying, what do you think will happen in a year from now. Our answer is always, it's in our hands. The reason for this is since the outbreak started many countries have shown that it can be controlled or serious transmission can be suppressed and we have mentioned many countries in the past like Spain, Italy, China, South Korea and many countries now in Europe; other countries.

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So we should also believe that the solutions at hand can help us to suppress and control the virus and that's why we keep on saying, if we do it all, if the governments can do contact tracing, the rest - do it all - if communities, societies can do their share, starting from hand hygiene, masking and the rest - do it all - it's possible. We can minimise its impact and we can suppress, control and ultimately stop it.

The other hope we have is related to technology. Of course we say now, let's focus on what we have at hand, using whatever we have at hand we can suppress and control it. But at the same time there is hope in having therapeutics and vaccines. I know there are many vaccines now under trial and a couple of them in the final stage of clinical trials and there is hope there.

It doesn't mean that we will have the vaccine but at least the speed with which we reached the level we've reached now has been unprecedented and we hope some of these vaccines can have protection.

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Of course there are concerns that we may not have a vaccine that may work or its protection could be just for a few months, not more. But until we finish the clinical trials we will not know; we may also have better vaccines that can protect for long and effectively.

So there is hope; things that we're doing within our hands and there is hope in the technology that we're trying to do. I think the most important thing is at national level to have the national unity and do everything that we can and at global level also, global solidarity will be important.

I think with those we can suppress and control the pandemic so it is in our hands and that's what we believe. Thank you.
I would just add that Dr Tedros would also have been referring beyond just the impact of COVID itself, to the massive disruption that this has done to health services around the world. In a recent survey just being analysed now by WHO of our member states three-quarters of our member states reported partial or complete disruption of immunisation services and rehabilitation services and dental services.

Two-thirds reported a partial or complete disruption of non-communicable diseases, chronic disease, diagnosis and treatment, family planning, treatment of mental health disorders.

Over half reported disruptions of malaria treatment campaigns, distribution of insecticide-treated nets, antenatal care, cancer diagnosis and treatment, palliative care services and services for sick children.

So what we're seeing is a secondary effect in terms of both provision and access of health care which really does challenge and threaten achievement of the Sustainable Development Goals, especially SDG3 which is all about health. Dr Tedros has said, health is not a reward for development, health is an investment.

Much is being and has been invested in health and the impacts of COVID-19 go well beyond the intensive care units that you see with COVID patients. It's having a direct negative impact on the capacity of health systems around the world to deliver.

Equally the economic impacts of this; while the economic impacts are severe on people's pocketbooks there are direct impacts of the loss of purchasing power for many people in terms of accessing health services in countries where there are user fees.

Again WHO in terms of our universal healthcare strategy really focus on giving all people in the world access to healthcare without fear of financial ruin. In this case as health services become less and less accessible, as potential costs and user fees increase and as people's disposable income decreases then we fear that people will be making unhealthy choices or choices not to seek healthcare because the cost of doing so is so difficult for them and their families.

So I think we're going to see and will see and are seeing a lot of secondary effects from the COVID-19 pandemic and they need to
be managed as well and there are lots of other effects beyond in the economic system and the recovery of that system.

But COVID-19 is killing people and COVID-19 is disrupting health services at the same time.

MK I just want to add something to this on the side of information. In the 2009 influenza pandemic, that was the first pandemic that we had with the internet. Now in 2020 given the access that everybody has to the internet there is so much information that is available and incredibly rapidly.

On the positive there's an incredible amount of science that is happening and research studies and collaboration that is happening at an unprecedented pace and the global community has come together in solidarity to really harness that knowledge to put it towards the response and to evolve; as the pandemic evolves the response evolves and that is incredibly positive.

We're seeing wonderful solidarity across all countries, across all sectors, in all different technical fields to use that to help save lives and break chains of transmission. On the other hand we have an incredible amount of information and misinformation and myths and disinformation that is very difficult for all of us to handle.

Our brains are not set up to receive so much information so quickly and to receive false information and so we've worked really hard with many partners across the globe to fight the infodemic, to ensure that people have access to good information.

We're working with tech companies to ensure that people can find that good information. We're working with businesses and different types of sectors. We're working with religious leaders, we're working with youth groups, we're working with individuals to be able to provide and share good information so that you know what you can do.

It is really important; I think the impacts on not only physical health but mental health are incredibly challenging right now. Everyone is feeling the fatigue of this pandemic but we have a long way to go. We need to remain focused, we need to remain strong, we need to accept that this is challenging but use these challenges to really put it towards something positive and fight this pandemic together.
So we will continue to do that and I think for me to say that this is a once-in-a-century; I hope so. I hope that we will never see something like this again but we also must use this as an opportunity to build back stronger, to build back better, to have our public health infrastructure in place, enhance it and in many places build it so that we have surveillance in place, we have a public health workforce in place, we have health workers who are trained, who have the right equipment, who have PPE.

To ensure that we have supplies that can protect front-line workers, to protect all of us. Again we need to use this as an opportunity to build back better so that if this does happen again we are in a much better position to tackle it.

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MH Thank you very much, all, for those very full and comprehensive answers. We now have Anne Gulland back from the Telegraph, UK. Anne, could you unmute yourself and then ask your question.

AN Hi, thanks very much for taking my question. Sorry for that earlier. The UK Government has just announced that it's going to roll out lots of rapid tests to care homes and hospitals and I just wondered how important it is to have these rapid turn-around tests and what kind of impact this is likely to have on transmission in the UK and what likely impact this could have on preventing a second wave if at all. Thank you.

MK Thanks for this question. I will begin and perhaps, Mike, you'd like to supplement. It's very important that when you have a test that is done you have the answers to that test quickly. We are seeing unfortunately in many parts of the world that it takes quite a long time to get a test back so we need individuals to know if they have this virus so we know which actions need to be taken.

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So you have somebody that is infected with COVID-19, infected with the SARS-CoV2 virus; whether they have symptoms or not they need to be isolated. Once we know that somebody is a case we can carry out contact tracing on all of the contacts of that individual so they can be put in quarantine. This is what breaks chains of transmission.

If we have results back in four, five days, even longer that is not going to help us so the fact that we have rapid tests that are in development - and we should say, it is really again incredible the
number of tests that are being developed and the fact that we have rapid tests that are being developed; this is a positive thing and this will help control efforts.

I do want to point out that our teams here and with our partners across the globe, with FIND and with others are very quickly evaluating all these rapid tests so that we can see how well they perform. We need to make sure that if they find a positive test that this is a person who is actually infected and importantly if someone comes back and tests negative that in fact that person is negative.

So again these tests are improving all the time. The scale-up of them is increasing and we hope that more tests are able to provide answers quicker.

There are potential techniques to increase the efficiency of testing even by putting tests in a sequential manner. Some countries have pooled tests which means especially in low-incidence situations you can pool a number of different samples into one pool and then test that and if it's negative it means everyone in the pool is negative; if it's positive then you'll want to do formal testing of everybody else.

The other way being explored is to use antigen testing first so you have the PCR-based testing as a secondary test. Maria will have explained in the past that antigen testing is directly detecting the proteins of the virus, not just its nucleic acid material.

The difficulty with antigen tests is they tend not to be sensitive enough; in other words they tend to miss infections so one way that some countries are looking at is to use the antigen tests first. Those who are positive are very likely to be positive so you can immediately isolate them and start to take action.

Those who are negative go on to have a second test, a PCR test which allows you to use an antigen test more effectively. But, as Maria says, all of this depends on the basic performance of these antigen tests and other rapid tests and I'm sure the Government in the United Kingdom will have looked at the performance of these tests and will have looked at how the sequence of tests goes to maximise the benefit.

But again, as Maria said, getting the time from testing to confirming the status of the patient is the single most important
thing. There's no point having a test result a week later when public health action is late so everything we can do to speed up the turn-around of tests, the availability of tests and again focusing in on testing the right people, ensuring that as a primary objective you're testing suspect cases and ensuring that you're isolating suspect cases.

Yes, population-based testing - and we've seen it done in many countries - can be done and it can be useful but it is very time-consuming, it's labour-consuming and it consumes a lot of reagents in the system. If you have them and you have the capacity, fine.

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If you've got limited capacity in your laboratories you must focus on trying to detect suspect cases and confirming those cases, isolating those cases, quarantining those contacts and, as the DG said, taking all of the measures necessary. That is the most efficient use of testing at the current time.

MH Thank you very much, Dr Ryan. The next question goes to Thomas Moullier from Bloomberg News. Thomas, could you please unmute yourself and ask your question.

TH Hello, thank you very much for taking my question. I have a question regarding Vietnam. We've had the news recently of their first several deaths even though they had hundreds of cases. What is the research telling us about how they've avoided having deaths until this point? I'm asking also because there has been speculation that perhaps COVID-related viruses had already been spreading in the region. Is there any sense in those hypotheses?

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MH Your second question is you're suggesting there were some studies suggesting that there'd been circulation of the COVID virus for some time in the region. Is that what you're asking, Thomas?

TH Either of the COVID virus or not necessarily but other viruses that are very linked to the COVID virus.

MR Yes. Thank you for that. There's been quite a bit of interest and speculation around that. Certainly SARS-like viruses, coronaviruses are present in animals across a wide region and it would be no surprise if people have had previous exposure to viruses, either naturally circulating in humans or potentially that
have infected people in rural areas and the animal husbandry industry.

The specific issue though in Da Nang is probably more related to a very, very low level of cases that may have been triggered by people bringing the disease in from outside and causing clusters of cases which now need to be dealt with.

Again the authorities of Vietnam have taken rapid action and obviously they had very, very low levels so this is a bit of a shock to the system but they have reacted. Again they've shut down a lot of religious and sporting and cultural events. They've put in place a mask-wearing order in public places. It's compulsory.

They've limited gatherings to 30 people or fewer. They've shut down borders strategically. I think they're also reducing the number of domestic flights and from that perspective have taken a lot of action. I think they also plan to test a lot of people in Da Nang city itself. I'm not sure of the details, Maria, of that but certainly they are reacting as a country that has experienced very low caseloads and very low mortality.

They're obviously not taking any chances with this one and doing their best to prevent this turning into a major incident but we've seen around the world how difficult that is. This virus spreads very easily, this virus moves very quickly and sometimes it's not possible for countries to get ahead of the curve but in this case we wish Vietnam all the best in trying to achieve that. Maria, any more details?

MK Only to add on the experience of Vietnam and showing that Vietnam has a lot of experience of dealing with infectious disease outbreaks and what they're doing is they're applying the tools. So in a situation there may be many countries that will experience a resurgence again. Vietnam is an example where they are applying the methods, they are applying the public health tools that can bring these outbreaks under control.

They're acting fast, they're acting comprehensively and again they have the system in place that can bring these outbreaks under control. As Mike just described, they're not doing one thing; they're doing it all. They're bringing everything together on active case finding, contact tracing, the use of public health measures, testing, communicating and this is what we need to
see from all countries, even with countries that have the ability to bring it under control, that will bring it under control.

As the DG has said, countries can turn difficult situations around, they can bring these outbreaks under control. We all must remain ready to be able to quickly identify any surge in cases so we can apply these tools and bring these outbreaks under control quickly but it's about acting fast, it's about acting comprehensively, acting aggressively to bring even the smallest cluster under control.

00:50:50

MH Thank you very much, Dr Van Kerkhove and Dr Ryan. We're now moving back to India from Vietnam and we have a question from Divia from the Economic Times, India. Divia, please unmute yourself and ask your question.

DI Hello, thank you for taking my question. The seroprevalence study done in two major cities, in Mumbai and Delhi in India, show that on average 40% of the populations in these cities have developed antibodies. What is WHO's view on this high seroprevalence rate? Thank you.

MK Thank you very much for this question. Yes, we are aware of these two studies that have been conducted in India and in fact we actually have a presentation from one of the groups, presenting to us later this week where we will get much more details about the studies that were conducted, how they were conducted, the tests that were used.

It's very important that these types of studies are conducted in as many populations as they can be. These are called seroepidemiologic studies which are measuring the presence of antibodies from the virus, which indicates that somebody had been infected with the SARS-CoV2 virus.

00:52:05

There are more than 100 studies like this that are underway globally. Last time we looked at the end of last week there were 31 peer-reviewed, published papers plus an additional 60-plus pre-print papers or government reports which are looking at the extent of infection in different types of populations, whether these are general populations or specific workers like health workers or front-line workers.

What we are finding generally is that most of the seroprevalence results find that less than 10% of the population is seropositive, indicating that they had evidence of infection. There is some
higher seroprevalence in certain types of occupations like health workers or front-line workers who have had a higher level of exposure but the two studies that you point out in India are indeed very, very interesting and we need to look at a few things.

One is the populations that were under study; if these are specific populations and if they represent larger, bigger populations; and secondly what the type of circulation was in these areas where the studies were done and the assays that were used.

00:53:17

So we will fold this into our general understanding and we look forward to learning more from the actual researchers who are carrying out these studies later this week.

MR       Yes, and if I might add, certainly in India there's been a 35% increase in cases in the last week and an over 25% increase in deaths and, as I said, India's really trying to beef up its testing regime. It's aiming for a million tests a day, which is huge but it's getting there slowly at 600,000 a day.

The worrying aspect of this is that the positivity rate continues to increase and is now at about 12.5% so it does demonstrate that the disease is still circulating intensely. As I said, India is a very large country, it depends on where you are, as it does in all big federal states but the disease is moving around.

It's moving from urban to rural back to urban. It's circulating efficiently in the population and clearly having a major impact in terms of cases and deaths so it's not surprising that in very crowded cities like Mumbai and Delhi there would be a higher seroprevalence rate.

00:54:36

But, as Maria says, we need to look at the exact population that has been sampled because in many of these seroprevalence studies - and they're very well-conducted - there are natural biases in who's sampled and we'll need to just check on the peer-review data to make sure the numbers indicated are an accurate reflection of what we believe the population infection rate to be.

MH       Thank you very much, Dr Ryan and Dr Van Kerkhove. We're coming up to the hour so I think we've only got time for one or two more questions. In the interests of regional balance we'll go to the Spanish news wire, EFE. We have Antonio from EFE. Antonio, please unmute yourself and ask your question.
Thanks very much for this question. It’s a really important one. As you’ve heard us say and as you’ve heard the DG say many times, there are many things that we can do right now to not only break chains of transmission so prevent people from getting infected but also save lives.

What we understand about mortality; there’re different ways that mortality can be calculated and if we look very crudely, if we look at the number of people that have died over the number of people that have been reported you get a certain percentage.

What many groups are looking at right now is what we're calling the infection fatality ratio, which is looking at the number of deaths among all of the people who have been infected and might now we don't know how many people have been infected because there are challenges with surveillance and detecting every single one of the cases. Certainly there are many unrecognised cases at the moment.

What we understand from many of these studies - these are estimates of the IFR, the infection fatality ratio - is that the estimates over around less than 1% or 0.6% and there are a couple of studies out that have estimated this 0.6%. That may not sound like a lot but it is quite high if you think about a virus that can transmit readily, that can transmit well and infect - overall we have more than 17 million cases and there's still a long way to go with this pandemic.

0.6% is quite high and so we need to do everything that we can not only to save lives among the cases that we know about but to prevent as many infections as possible and that leads to all of you who are watching, all of you who are part of this fight with us; not only do you need to prevent yourself from getting infected, you need to prevent you passing it to someone else who may be part of a vulnerable group.

We do know that mortality increases with age. We know that mortality increases among people who have underlying conditions like chronic respiratory diseases, chronic heart conditions, obesity, diabetes. There are many different groups that are at a higher risk of severe disease and death so we must do everything that we can to prevent ourselves and those
individuals from getting infected. Mike, do you want to say something about the therapeutics?

MR  Yes. Maybe also just putting in a bit of perspective, when we look at the infection fatality rate, it's in all those who are infected, whether you know it or not. That 0.6% is just over one in 200 people infected potentially dying. That's hugely skewed by age and the risk is much higher in older age groups.

But if you compare that to the 2009 it was more like one in 10,000 or up to one in 100,000. The ranges are very wide but when you think one in 200 versus one in 10,000 or one in 100,000 you get a sense of just how much more deadly this virus is in communities.

Again points to the fact that we should try to avoid being infected. As I said at a previous press conference, while you may not become very sick the long-term health implications of being infected with COVID-19 are not well understood so it's not only important that you avoid infection from the perspective of your own health and ensuring your long-term good health but that you don't get infected and be the reason that somebody else is infected.

I think this is a moment of huge need for our collective solidarity as a human race. We can go around this and there's a huge amount that governments need to do and there's a huge amount that we need to do to support communities in order to facilitate this. But in the end this virus moves from person to person and that virus jumps when we provide the opportunity for that virus to jump.

Some people don't have the opportunity to prevent that jump because they live in very difficult conditions and we have to support them as much as we can but many people have a choice and younger people have a choice. When we talk about death and fatality that is the outcome of an infection and an infection is an outcome of an exposure.

If people are not exposed to the virus they cannot be infected. If they're not infected they cannot infect anyone else and they don't die so we need to push back to the concept of exposure. Everybody on this planet needs to do whatever they can to avoid exposing themselves or exposing others.
That's why the Director-General has spoken today about doing it all and has launched a mask challenge, to add in to that the importance of mask-wearing in the appropriate setting. So everything we do to reduce our exposure, our exposing others will add benefit to this.

It's macabre to talk about deaths and fatalities but in the need that starts somewhere and it starts with each and every one of us doing everything we can to reduce our chances of being infected so we don't infect others.

There are many, many situations where that's very difficult to do; in closed communities, in long-term care facilities, in prisons and other places and that's where the government and the state need to step in and ensure that the right support is in place to reduce exposure.

01:02:06

But for those of us going about our daily business, going to bars and going to shops and going to all of these different things, we have choices. Maria has said it before; you can choose, you have choices. I hope if we focus on that - exposure reduction, infection reduction, then we'll be talking about mortality going down because this virus, as the DG said, is dangerous, it is vicious, it is deadly in older individuals and those with underlying conditions and we just don't know the impact that this is going to have even in those moderately unwell with this virus in younger age groups.

MH Thank you very much, Dr Ryan and Dr Van Kerkhove. We are definitely on the hour now so this is the last question and it goes to Emma Farge at Reuters. Emma, please unmute yourself and go ahead.

01:03:01

EM Thank you. Very quickly, I was wondering if you could comment on the remarks made at the weekend by White House experts about the epidemic entering a new phase in the United States where it's extraordinarily widespread. Thank you.

MR Yes, I think their intention wasn't to create a sense of a new phase. I think they were trying to really - I hope I interpret what they're doing correctly - remind all states that the disease never went away, that there is a huge potential for the disease to increase its speed and accelerate.

It has shown that acceleration in southern states and there are signs that in other states in the centre that acceleration may be occurring as well and I think they were taking a very prudent
step in warning all states to really re-examine exactly where they were in the pandemic, to implement all of those comprehensive measures that the Director-General spoke to.

I think those lead scientists are laying out exactly what they feel needs to happen in order to suppress this and get this virus back into the box because the intensity of transmission in many countries is such that suppressing that virus transmission is going to require a huge effort in terms of personal behaviour, community behaviour and also in some cases, as far as I can see from the report, in stepping back some of the measures of reopening and taking a step back and trying to reset in certain areas back to an earlier stage of virus control.

01:04:43

That would seem prudent. It's not our job to tell the US what it should be doing at subnational level. The state-based planning and implementation guided by the national scientists seems to be the right path.

The difficulty for us all is sometimes we know the right path. The difficulty is choosing to walk it.

MK If I could say something, I have many, many friends and family in the United States right now and we've seen quite some notes of feeling depressed and despairing. The United States can turn this around and we know that. We have seen this in many, many countries that have applied this comprehensive approach and I just appeal to all of my friends and family and all of yours to follow the guidance, to be part of this, to play a role in this and follow the guidelines, stay at home if you're asked to stay at home, wear a mask if you're asked to wear a mask, be part of this fight with us and we know that you can turn it around.

01:05:52

MH Thank you very much, Dr Van Kerkhove and Dr Ryan. Your questions have been so good we've well and truly filled up the hour and I apologise. I know that there are many more of you on the line; I can see it. If you want your questions answered immediately please send them to media enquiries. If they can wait we can have them at the next press conference.

The audio file and all these excellent answers will be available on the website as usual. Now I'll hand over to the Director-General for final words. Dr Tedros.
Thank you. Thank you, Margaret. Thank you to all who have joined today and see you in our next press conference which is on Thursday. Thank you.