



World Health Organization

COVID-19

Speaker key:

MH	Dr Margaret Harris
TAG	Dr Tedros Adhanom Ghebreyesus
TU	Tu
MR	Dr Michael Ryan
VA	Vadia
MK	Dr Maria Van Kerkhove
DI	Diego
IM	Imogen
CR	Charles
CO	Corinne
CS	Costas

MH Good morning, afternoon and evening. Welcome, everybody, and thank you for joining this latest WHO press briefing on COVID-19. As most of you are aware, we here at WHO headquarters in Geneva are practising physical distancing as one measure to stop COVID-19 transmission so from this week and onwards these press briefings will be held as virtual meetings with very few of us in the room. You can see we're well apart.

Just some housekeeping; if you've joined online please use the raise your hand icon to indicate you want to ask a question. If you've joined by phone press # 9 on your keypad to ask a question. Listen out for your name. Sometimes names are not clear when we get them so my apologies in advance.

We have here today three people who for most of you need no introduction. We have WHO director-general, Dr Tedros, our executive director of our emergency programme, Dr Mike Ryan, and our technical lead, Dr Maria Van Kerkhove. Dr Tedros will provide some opening remarks, then we'll open it for questions. I'd like to remind you we can only have one question per journalist. We've got limited time. This is a very busy time for everybody so please respect that. There are a lot of you and we want to give everybody a fair chance. Now over to you, Dr Tedros.

00:01:24

TAG Thank you, Margaret. Good morning, good afternoon and good evening wherever you are. Every day COVID-19 seems to reach a new and tragic milestone. More than 210,000 cases have now been reported to WHO and more than 9,000 people have lost their lives. Every loss of life is a tragedy. It's also motivation to double down and do everything we can to stop transmission and save lives.

Of course we have good news today. Yesterday Wuhan reported no new cases for the first time since the outbreak started. Wuhan provides hope for the rest of the world that even the most serious situation can be turned around. Of course we must exercise caution. The situation can reverse but the experience of cities and countries that have pushed back this virus gives hope and courage to the rest of the world.

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Every day we are learning more about this virus and the disease it causes. One of the things we're learning is that although older people are the hardest-hit younger people are not spared. Data from many countries clearly show that people under 50 make up a significant portion of patients requiring hospitalisation. Today I have a message for young people; you're not invincible, this virus could put you in hospital for weeks or even kill you, even if you don't get sick the choices you make about where you go could be the difference between life and death for someone else.

I'm grateful that so many young people are spreading the word and not the virus. As I keep saying, solidarity is the key to defeating COVID-19; solidarity between countries but also between age groups. Thank you for heeding our call for solidarity, solidarity, solidarity.

We have said from the beginning that our greatest concern is the impact this virus could have if it gains a foothold in countries with weaker health systems or with vulnerable populations. That concern has now become very real and urgent. We know that if this disease takes hold in these countries there could be significant sickness and loss of life but that's not inevitable. Unlike any pandemic in history we have the power to change the way this goes.

WHO is working actively to support all countries and especially those that need our support the most. As you know, the collapse of the market for personal protective equipment has created extreme difficulties in ensuring health workers have access to the equipment they need to do their jobs safely and effectively.

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This is an area of key concern for us. We have now identified some producers in China who have agreed to supply WHO. We are currently finalising the arrangements and co-ordinating shipments so we can refill our warehouse to ship PPE to whomever needs it most. Our aim is to build a pipeline to ensure continuity of supply with support from our partners, governments and the private sector.

I'm grateful to Jack Ma and his foundation as well as Ali Kodam-Goatay [?] for their willingness to help provide essential supplies to countries in need. To support our call to test every suspected case we're also working hard to increase the global supply of diagnostic kits. There are many companies globally that produce diagnostic kits but WHO can only buy or recommend kits that have been evaluated independently to ensure their quality.

So we have worked with FIND, the Foundation for Innovative New Diagnostics, to contract additional labs to evaluate new diagnostics. In parallel we're working with companies to ensure the supply and equitable distribution of these tests and we're also working with companies to increase production of the other products needed to perform the tests from the swabs used to take samples to the large machines needed to process them.

We're very grateful for the way the private sector has stepped up to lend its support to the global response. Just in the past few days I have spoken with the International Chamber of Commerce, with many CEOs through the World Economic Forum and with the B20 group of business leaders from the G20 countries.

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We understand the heavy financial toll this pandemic is taking on businesses and the global economy. We're encouraged by the solidarity and generosity of business leaders to use their resources, experience and networks to improve the availability of supplies, communicate reliable information and protect their staff and customers.

We're also encouraged that countries around the world continue to support the global response. We thank Kuwait for its contribution of US\$40 million. In addition to increasing access to masks, gloves, gowns and tests we're also increasing access to the evidence-based technical guidance countries and health workers need to save lives. WHO has published guidelines for health ministers, health system administrators and other decision-makers to help them provide life-saving treatment as health systems are challenged without compromising the safety of health workers.

The guidelines detail actions all countries can take to provide care for patients regardless of how many cases they have. They also outline specific actions to prepare health systems according to each of the four Cs; no cases, sporadic cases, clusters of cases and community transmission. These guidelines provide a wealth of practical information on screening and triage, referral, staff supplies, standard of care, community engagement and more.

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We encourage all countries to use this and many other guidelines which are all available on the WHO website but we're not only advising countries. We also have advice for individuals around the world, especially those who are now adjusting to a new reality. We know that for many people life is changing dramatically. My family is no different. My daughter is now taking her classes online from home because her school is closed.

During this difficult time it's important to continue looking after your physical and mental health. This will not only help you in the long term; it will also help you fight COVID if you get it. First, eat a healthy and nutritious diet, which helps your immune system to function properly. Second, limit your alcohol consumption and avoid sugary drinks. Third, don't smoke. Smoking can increase your risk of developing serious disease if you become infected with COVID-19.

Fourth, exercise. WHO recommends 30 minutes of physical activity a day for adults and one hour a day for children. If your local or national guidelines allow it go outside for a walk, a

run or a ride and keep a safe distance from others. If you can't leave the house find an exercise video online, dance to music, do some yoga or walk up and down the stairs.

If you're working at home make sure you don't sit in the same position for long periods; get up and take a three-minute break every 30 minutes. We will be providing more advice on how to stay healthy at home in the coming days and weeks. Fifth, look after your mental health. It's normal to feel stressed, confused and scared during a crisis. Talking to people you know and trust can help. Supporting other people in your community can help you as much as it does them.

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Check on neighbours, family and friends. Compassion is a medicine. Listen to music, read a book or play a game and try not to read or watch too much news if it makes you anxious. Get your information from reliable sources once or twice a day. To increase access to reliable information WHO has worked with WhatsApp and Facebook to launch a new WHO health alert messaging service. This service will provide the latest news and information on COVID-19 including details on symptoms and how to protect yourself.

The health alert service is now available in English and will be introduced in other languages next week. To access it send the word hi to the following number on WhatsApp; 0041 798 931 892. We will make this information on our website later today. COVID-19 is taking so much from us but it's also giving us something special; the opportunity to come together as one humanity, to work together, to learn together, to grow together. I thank you.

MH Thank you, Dr Tedros. I'll now open the floor to questions. We don't have a floor but I'll open the virtual world to questions. First in the very long queue is Tu Liu from Xinhua. Tu, can we please have your question?

TU Hi, can you hear me? Hello?

MH Yes, we hear you very well.

00:14:13

TU Hi, it's Liu from Chinese Xinhua news agency. Almost a week from now G20 countries will have a meeting to discuss the COVID-19 and the heavy impact on the global economy. My question is, now China has reported no new cases since yesterday so what does that mean for China and what does that mean for the rest of the world and what are the difficulties lying ahead for China in combating this global pandemic? Thank you.

MR I think the simple message, echoing the director-general's comment, is a message of hope, it's a message that this virus can be suppressed, we can break chains of transmission. It takes a huge effort, it takes an all-of-society effort, it takes co-ordination, it takes solidarity, it takes activated communities, it takes brave health workers, it takes supply chains that work, it takes commitment and if it's done this virus can be turned around.

Other countries are showing the same thing and not by doing exactly the same thing; they're achieving the end by mixing and matching and creating a comprehensive strategy that's matched to the threat they face and to the context in which they're working. So I think there's

a message of hope there from China and that's a message of hope to many countries around the world who have very low numbers of cases right now and can turn this virus back.

We've seen the damage this virus is doing in health systems in a number of countries but we've also seen that this virus can be pushed back so that's, I suppose, the implication that we see for this but it's going to take time, it's going to take effort and it's going to take solidarity and it's going to take co-ordination at community level, at government level, at international level to make this happen.

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There wasn't a specific question [unclear].

MH Thank you very much. I'll now hand it over to Vadia from [sic] Nowruz in Iran.

VA Hello, can you hear me?

MH Very well. Please go ahead.

VA Hello? Yes. I asked this question before in a one-on-one which I did with Dr Ryan but can I ask now Dr Tedros, as you know, today is [inaudible]. This is the first day of spring in the northern hemisphere, the spring equinox. Many people in central Asia and western Asia are celebrating it as a sign of renewal and new beginnings. In this climate what would be the WHO's message to people who are celebrating Nowruz, especially Iranians, who are among the people struggling the most with the outbreak of COVID-19.

MH We missed your question but was that really about temperature? Are you talking about celebrating the spring?

VA Hello?

MH Dr Ryan will answer.

00:17:34

MR Yes, hi, Vadia. I trust you had a safe trip back to Iran; we miss you in Geneva. I think celebrations and gatherings, particularly religious gatherings and ones that celebrate renewal, are obviously very important but we may need to change the way we celebrate things for now and in countries like Iran. It's very clear from the Government that in Iran we have to separate people physically so we don't transfer disease and mass gatherings, particularly mass gatherings that bring people from far away to one place and then they mix and they go again far away - and that's very often religious gatherings - they can not only amplify the disease but they can disseminate the disease very far away from the centre.

So they can be very, very, very dangerous in terms of epidemic management. We see the authorities in the Kingdom of Saudi Arabia; how careful they have to be every year with the Hajj because of the health risks and that's managed extremely well. But in this particular case with this virus, with this seriousness I think we need to heed the instructions from the Government in Iran, we need to heed instructions all around the Middle East that gatherings

of a certain size - and they're different size in each country - need to be avoided and we would support the Government's efforts in that.

But as we've seen - and it's not just in Iran, where we might have religious gatherings - we have other gatherings around the world; young people gathering, as the DG has said, and other people coming together. So whatever reasons we have to come together - and they can be very good reasons - we need to listen to local authorities, we need to listen to national authorities and if national authorities believe that those gatherings represent a risk to those individuals but more importantly to the vulnerable people they will go to visit after the gathering then I think we really do have to take it upon our own personal responsibility.

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This is not about the responsibility of government. This is about each individual making a decision to protect themselves and protect others. We shouldn't always have to have a government telling us to do that. This is about personal responsibility but in the case of mass gatherings in the context of countries like Iran I think we need to be exceptionally careful at this point and we need to be very, very careful not to bring too many people together too closely at any one time.

MK If I can just add, you may have heard us use the phrase physical distancing instead of social distancing and one of the things to highlight in what Mike was saying about keeping the physical distance from people so that we can prevent the virus from transferring to one another; that's absolutely essential. But it doesn't mean that socially we have to disconnect from our loved ones, from our family.

Technology right now has advanced so greatly that we can keep connected in many ways without actually physically being in the same room or physically being in the same space with people so as the DG highlighted in his speech a lot about this is - we say social distancing. We're changing to say physical distance and that's on purpose because we want people to still remain connected.

So find ways to do that, find ways through the internet and through different social media to remain connected because your mental health going through this is just as important as your physical health.

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MH Thank you. We'll now have a question from Brazil. It's Diego from Vortex. Diego, are you on the line? If so please go ahead.

DI Yes, I am. Thank you very much. I'd like to ask a very basic question; how central and crucial is physical distancing at this point when you have community transmission? Because there is a lot of debate going on around the world about the physical distancing measures so I'd like the most accurate data and comment possible regarding the physical distancing measures. Thank you.

MR I think there are a toolkit of measures that can be taken to deal with this virus. There are public health measures that focus on containment and those are identifying cases and

identify their contacts. The principle there is you take the case of the confirmed case and the contact away from everybody else so you separate the virus from the population.

When disease has reached a certain level, especially in community transmission, and it's no longer possible to identify all the cases or all of the contacts then you move to separating everybody from everybody else. You create physical distance between everybody because you don't know exactly who might have the virus.

If we look at that situation that's very difficult to manage because that's costly in social terms, that's costly in economic terms and ideally our approach to this should be to really focus on containment measures, case finding, isolation, quarantine of contacts and in that situation the social distancing or the physical distancing measures or the movement restriction mechanisms may not have to be as extreme. If you think about Singapore in its fight against COVID-19, it never closed its schools, it didn't shut down its public health system, it didn't do lock-down but it was absolutely committed to the concept of case investigation, cluster investigation, case isolation, quarantine of contacts and it really, really, really stuck to that task.

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That was okay because Singapore had a relatively low number of cases so we're not criticising in any way countries who have to take physical distancing measures. That's a necessary measure in situations where the virus is fairly widespread in communities but what we should hope is - and this is maybe the thing that we have to be very careful with - large-scale physical distancing, movement restriction are in this sense a temporary measure.

What they do is they slow down to some extent the spread of infection in communities and thereby take pressure off the healthcare system. They don't fundamentally deal with the problem of disease transmission and if you want to get back to what countries like Korea, Japan, China or Singapore, Hong Kong and others are doing you really have to get back to the hardcore public health measures of case finding, contact tracing, quarantine, isolation.

So in some senses we need to slow down the virus, then we need to suppress the virus and then we need to go after the virus and that takes different combinations of different measures but social or physical distancing measures and movement restriction measures are very hard socially and they're very hard economically. We need to use whatever time those measures are in place to put in place a public health architecture that can then go after the virus because lifting those measures may result in the disease returning if you don't have in place the public health measures to deal with the virus. Maria.

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MK Yes, I think if you think very simply about what physical distancing can do, if you think of a large gathering or you think of a crowded space and people are very close to one another, if you have infected individuals in that clustering of people the opportunity for the virus to pass between people is much greater because you're physically closer to one another.

What physical distancing does is just that; it actually separates people out so think of that same cluster of people but spread out over a much larger geographic area. Just think of a drawing where you're seeing a bunch of dots; either they're every close together or they're

very spread apart. If those dots are spread apart and those dots represent people and you have infected people in those areas you remove the exposure, you remove the opportunity for that virus to pass between one person and another.

But as Mike has said and as we have said before, social distancing, physical distancing alone is not enough. It has to be part of a much larger package of interventions.

MH Thank you, Maria. Now I have a question from Imogen Foulkes. Are you on the line, Imogen?

IM Yes, can you hear me? Hi.

00:26:10

MH Very well, go ahead.

IM Great. There have been some questions about the mortality rate in Europe; Italy's is tragically really, really high. Germany's so far is quite low and there've been some questions about how the cause of death is being recorded, for example, with an individual who already had serious underlying health conditions. Do you have any data from the different countries about how they're recording cause of death?

MK We don't have any specific data about how each country is recording a cause of death, whether it was associated with COVID-19 or if there were other reasons why people died. We do know from the confirmed cases if those individuals have been reported as having recovered or who have died.

We spoke about this the other day; the differences in mortality as you compare them by country. We have to be very careful about how we compare countries right now. There's a combination of factors as to why we're seeing differences in mortality by country. The first is about the populations that the virus is affecting and infecting. We give a comparison between the virus moving in older populations because we know that the virus can cause more death in older individuals as opposed to the virus circulating in younger populations where you see less mortality.

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So there are a number of factors in which the mortality rate can vary by different populations and we also discussed previously the challenges of describing mortality as an epidemic unfolds, as this pandemic unfolds. Looking just at the numbers of deaths over the number of cases that are reported is only a snapshot and it's an incorrect snapshot of what the true mortality is because we don't know the extent of infection in the population on the one hand.

And on the other hand there are a number of individuals who are very severe who are still in ICU, some of whom will recover and some of whom will die so we don't have those precise numbers yet of how many will die out of those infected and we still don't know the overall infection rate in the general population.

MH Thank you, Maria. I'm going to ask now a question that was sent to me by email by a correspondent, a health writer in India who's been struggling to get on virtually. Her name is

Mayank Bhagwat and she asks - India has tested close to 13,000 samples; WHO says test, test, test - she asks, by not scaling up the tests has India lost critical time?

MK It's wonderful that we're seeing testing being done across countries. We know that there are challenges associated with doing that test. We are working very hard across all of our regions with many different manufacturers to ensure that tests are available in countries that need them. We're working with labs across all countries to ensure that the lab capacity in each country is increasing and we're seeing many countries take additional steps to further increase that capacity.

What the DG meant when he said test, test, test was that we would like to see all - we recommend that all suspect cases be tested and we recommend that all contacts that have symptoms are tested. The reason that that is absolutely critical is that we need to know where this virus is so that we can stop the onward transmission from those who are infected to infect other people.

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So doing that, by having adequate and ample testing as part of your strategy will help reduce this down but that isn't enough. We know that finding those cases, isolating cases and caring of those cases is critical; quarantining of your contacts so that they cannot pass that virus onward is absolutely critical to stopping transmission moving between people.

MH Thank you, Maria. DG, you wanted to add? No. Okay, now I'd like to ask Charles Ondelam from Liberacion; Charles, are you on the line?

CR Hello. This is a question to the DG. Dr Tedros, I'd like to know how you are coping with the different pressures you might have from member states who don't really have the same priorities or ways to fight this virus. How do you cope with the different appreciations coming from the larger member states?

TAG I think for WHO, whether it's a small country or big, whether it's a rich country or poor it's the same, we treat them the same way. To treat all the same way the best principle is to actually be principled and to help them, to give them advice or to respond to their queries based on principles.

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As long as we do that then I think I don't consider anything that comes from member states as pressure.

MH Thank you, DG. I've got another printed question that was emailed to me by John Zaracostas on behalf of France 24 and the Lancet. What is the shortfall in the global supply of PPE and critical life-saving medical equipment and in view of the surge of cases how much does the production of these supplies need to increase?

MR John, it's difficult to make an estimate obviously for the whole world because we don't know the stocks that national governments actually hold so we can only make estimates based on the number of health workers that we would expect to be in the front line at a certain level of service. A shortfall is the difference between what you need and what you

have and right now we don't know how much we need because we don't know how fast this is going to develop so we have projections for that and there are different scenarios.

Equally it's difficult to know where the gap is because we don't have full knowledge of what countries themselves actually have. We are going through a very sophisticated process of establishing and finalising the gaps as we see them. We're asking countries what their gaps are specifically. We're doing market analysis as to what the supply chain has within it. It's safe to say that the supply chain is under huge pressure.

We're working with the pandemic supply chain network to maximise the flow of PPE into a protected supply chain for PPE for health workers around the world but it's not just the PPE itself.

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It's getting that PPE now to countries. We have issues with flights, we have issues with getting access so we're going to need an architecture. In effect we're going to need air bridges that allow us to bring staff, to bring stuff to countries to help and assist them and that stuff may be lab tests, that stuff may be PPE, that stuff may be expertise. It's becoming increasingly difficult for us to move material around because even ships and cargo...

I think as we speak over 100,000 merchant seamen are currently sitting in ports all over the world and can't either come into the country they're in or move on on the ships they're on so we have some serious issues within the supply chain. It is not without hope though and the DG may wish to speak to this but the manufacturers in China in co-operation with the Chinese Government have moved very significantly and offered to resupply our warehouses in Dubai and we're currently finalising those shipments and finalising the needs and we will obviously continue to do that.

We do have a whole series of numbers, John, around what is potentially needed and I'll be very happy to share some of them with you in the next couple of days as soon as they're validated. We're currently validating the number of lab tests we need but if I give you a sense of scale, WHO has distributed 1.5 million lab tests around the world.

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If we look forward in this epidemic and we project ourselves forward a number of months and the amount of testing that's going to be needed, we need to scale that up approximately 80 to 100 times so it's not about doubling the availability of lab tests, it's not about trebling it. It's about potentially increasing that 80-fold. That's an extreme analysis but that's what we need to aim for and the director-general outlined the mechanisms by which we're going to achieve that, working with the public/private partnership and scaling up production and access to tests as they are needed.

Equally we estimate that there are probably - if you look again around the world - in excess of 26 million healthcare workers who may have to at some point engage in healthcare to people who potentially have COVID-19. That's an awful lot of healthcare workers to protect. You work out that those healthcare workers are doing a few hours' shifts; they have to change PPE every time they do a shift; they have to be trained to use that PPE.

I think you can see just what the gaps are in terms of masks and gowns and gloves in that but, as I say, we're validating those numbers because we have to match them against what countries actually have. The greatest tragedy for me among all the tragedies we're seeing in this outbreak is the prospect of losing part of our health workforce, that those individuals, those doctors and nurses and hygienists and others who put themselves in the front line to care for our most vulnerable would themselves become exposed, become sick and potentially die because they don't have protective equipment.

It is a huge responsibility at local, at national and at global level that we protect the supply chains for health workers around the world and that we have solidarity between governments, between producers, manufacturers and others to ensure that our bravest get the best possible protection.

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TAG I would like to add a few issues. I think Mike has covered almost everything. Whatever the amount we need - we are saying we have shortages but whatever amount the shortage is, without political commitment of our leaders I don't think this shortage of supply of PPE could be addressed.

As a result of that because of lack of political commitment, one, the supply is short; two, because the supply is short some countries are closing borders and banning exports and that cannot be a solution. The solution we're proposing is, one, if there is political commitment - and we need political commitment - we need to do three things with political commitment.

One, increase production because there is this supply/demand mismatch so to address that increasing production is the answer. Second, we need to have free cross-border mobility, meaning we should not ban exports. Third, equitable distribution is key because all countries may not have access based on their needs.

So we're asking those three things and we're working with the International Chamber of Commerce very closely and with B20 - these are the businesses that belong to the G20 - to address the problem with logistics we are facing at its root. Thank you.

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MK If I can speak to the individual level, even the individual actions that all of you take affect the supply chain so as it relates to masks, members of our team are having teleconferences across our infection prevention and control networks where there's very serious discussions about the use of medical and surgical masks.

We need to ensure that we prioritise the use of these masks for our front-line workers and so we plead with you; if you do not need to wear a mask at home as an individual in the community don't wear a mask, don't hoard those masks, make sure that those masks are available to the front-line workers because they're making very difficult decisions about extended use or potential reuse and we don't want to put our healthcare workers in any further danger.

So please, if you're not caring for a sick person at home then you don't need to be wearing a mask so again please prioritise the use of these masks for our front-line workers.

MH Thank you. We now have a question from Corinne at Bloomberg. Corinne, are you on the line?

CO Yes, can you hear me?

MH Yes, we can. Please go ahead.

00:40:41

CO Okay. Given that 10,000 deaths have been reported and many researchers estimate that the mortality rate of COVID-19 is 1% is there any reason not to estimate that one million people may have already been infected?

MR Yes, I think you may be mixing up two lines of logic here. There've been over 200,000 confirmed cases reported and we have 10,000 deaths so deaths can be calculated as a proportion of those. We try to avoid that in general because very often your reported cases reflect infections up to 14 days before but your deaths can actually reflect people who were exposed two weeks, three weeks, four weeks before so it's not necessarily a good thing to make that calculation.

But using deaths as a way of calculating how many people are infected is making an assumption that you actually can make that calculation and unfortunately we can't make that calculation.

What I think we need to focus on - and we will have to wait for serology tests to really understand what the population attack rates are but all of the data so far suggests that asymptomatic cases are a relatively low proportion versus symptomatic cases. We don't know beyond that whether there are others who just get infected and just develop antibodies and never ever know they're infected or may not even be infectious.

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The question is what's driving infection and what we believe is driving infection is for the overwhelming majority of people who are infected they're infected by a symptomatic other individual; somebody who is sick and symptomatic who either coughs or sneezes close by or who contaminates a surface close by. That is the main driver of transmission and that's what we have to focus on in order to avoid infection.

We can worry about all of the other ways that we could possibly be infected theoretically and that's important and there are outliers in all of science but the driving force is that. With regard to the deaths, rather than try to... We can say 10,000 deaths and it sounds like a lot and then other people say, people die of other things too. But take one look at what's happening in some health systems at the world; look at the intensive care units completely overwhelmed and doctors and nurses utterly exhausted.

This is not normal, this isn't just a bad flu season. These are health systems that are collapsing under the pressure of too many cases. This is not normal. This is not just a little bit worse than we're used to. This is tough for systems and therefore trying to use the absolute number

of deaths as a measure of the overall impact of this outbreak is probably not the right term to use.

But certainly when we say 1% overall case fatality it's a number but I would say to you that in certain situations, particularly in the over-70s, in a number of situations the case fatality, the clinical fatality, the case fatality in those people admitted to hospital is up to one in five for people over the age of 70 years of age. That's a really, really serious outcome for anyone being admitted with COVID-19.

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Equally when we look at people in intensive care; if you look in Italy at the moment, two out of three people in intensive care in Italy are under the age of 70 and in fact 12% of people in intensive care in Italy are under the age of 50. So again let's look not just at deaths, let's look at severity, let's look at the impact this is having in society.

MK I just want to take this opportunity to say something about models. Mathematical models; WHO works with a large number of modelling groups across the globe, statisticians and modellers and this is really important for us to help work through scenarios and work through the what-ifs; what may happen if we don't do anything, what will the trajectory of this outbreak in each country at the global level or by region look like if we do nothing?

Those numbers are scary. I'm sure you've seen some scary numbers that have been reported in the media and those numbers will likely continue. The important thing is that there's something we can do about this. We have seen in a number of countries now that there are several actions that can take this comprehensive approach that we've been talking about to drive those numbers down and we owe this to ourselves and the rest of the world, to do everything we can to make sure that those predictions do not become a reality.

MH Thank you, Maria. Now I have a question - we're moving around the globe to Greece; Costas from ERT. Are you on the line?

CS Yes, I'm on the line. Do you hear me?

MH Please go ahead.

00:45:04

CS I will ask a question to Doctor General [sic]. Give us please an update about the vaccine research; how far away are we from the lucky first day to win COVID-19 [sic]?

MH A question about the vaccine.

MK We are working across the R&D blueprint with a number of scientists and researchers all over the globe and one of the areas that we are working on is the acceleration of vaccine developments; not just us, we're working with people across the globe. There're at least 20 vaccines that are in development for COVID-19 and you heard us report - I think, Mike, you can give a little more detail on this - of the first trials that are starting 60 days after the virus was sequenced, if I'm not mistaken.

The acceleration of this process is really, truly dramatic in terms of what we are able to do, building on work that started with SARS, that started with MERS and is now being used for COVID-19. We're still some time away before we would have a vaccine that could be used and they still need to go through the trials to look at efficacy but this work is underway and we are very grateful to all of the partners that are working to get these clinical trials underway. Mike?

MR Maybe I could supplement again, yes; very pleased to see the work accelerating and we thank our colleagues in CEPI but also working very closely with Seth Berkeley and his colleagues at the GAVI and many, many others; the Gates Foundation and others.

00:47:44

I think beyond the scientific research into vaccine - and it's fantastic to see the innovation going on to develop vaccine candidates and to take those candidates through the necessary testing and many people are asking, why do we have to test the vaccines, why don't we just make the vaccines and give them to people? The world has learned many lessons of the mass use of vaccines and there's only one thing more dangerous than a bad virus and that's a bad vaccine so we have to be very, very, very careful in developing any product that we're going to inject into potentially most of the world's population.

We have to be very, very, very careful that we first do no harm so that's why people are being careful but to be eight weeks into a major event of a new disease and have a vaccine going into the arm of a volunteer this week is just unprecedented in its speed and that would never have happened had countries not put the genetic sequences out in public. I think that again shows why solidarity is so important but we will face another challenge down the line and one that the director-general is very concerned about and is reaching out to other institutions like GAVI and others to discuss right now.

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That is that even if we get a vaccine that's effective we have to have that vaccine available to everybody, there has to be fair and equitable access to such a vaccine, not just for ethics reasons; because the world will not be protected until everyone is protected. So in that sense there are other hurdles to cross now, not just the hurdles of science but the hurdles of how do we scale up the production of such a vaccine, how do we ensure we get enough of that vaccine in time, how do we distribute that vaccine to populations all over the world and how do we convince people to take the vaccine.

Because you've all seen over the last few years the loss of confidence in vaccines. It's one thing having a vaccine but people need to avail of that vaccine so there's a lot of work to do and the director-general will be leading a process with other organisations to address the issues of production, scale-up, financing, advance market commitments and fair and equitable distribution of those vaccines and has already been reaching out to major institutions and global health leaders on this.

TAG On the vaccines, one thing I'd like to stress, as Mike said, is one, the speed is really unprecedented. In 60 days to have the first person enrolled in a vaccine trial is really amazing. I hope the vaccines under trial work and at the same time though before even we have the vaccine, as Mike said, we have to prepare so that the vaccines can reach everybody

who needs them because this vaccine should not be for the haves; it should be for those who cannot afford it too.

So we need to answer that question as early as possible but the solidarity we're witnessing is very, very encouraging. My colleagues were sending me a text about another solidarity; this solidarity which we're saying is a solidarity of scientists who came together, as you remember, six weeks ago to find solutions, diagnostics, treatment and vaccines.

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Then the other solidarity is the financing, the Solidarity Response Fund. As you know, we started it last week and today we have mobilised already US\$66 million. This is a record but it's not the money. 175,000 people were involved in one week and not only that, there is an outpouring of support which is still flowing and including many stories that really touch our hearts.

I will give you some of the stories. In New York a theatre group started a virtual singing challenge, getting people to donate and in Ireland, Mike's country, Karen Ford is staying active and pledging 4,000 squats in a GoFundMe campaign to support the fund. Then online a popular video game streamer started hosting regular fundraisers with his followers; very innovative, and on and on. I don't want to take time on this but these are stories of solidarity and when humanity's confronted with a common enemy like this it also gives us a chance to bring the best of us and that's what we need; solidarity in everything.

With that kind of solidarity which is - we said it last week - more infectious than the virus itself we will be able to stop this virus.

MH On that note I'm going to close this press conference. It's so important that we all stay positive. I'm so sorry to the 277 journalists online that you didn't get to ask your questions. We will be sending the transcript out. We'll also send the number of the WhatsApp chatbot. You just have to put in +41 798 931 892 and send the word hi but we'll send it to you so you can all use it and see what a great chatbot it is. We will also send the usual audio files. Thank you so much for joining this briefing today. Goodbye.

TAG Goodbye. Thank you and bon week-end, have a nice weekend.

00:54:21