



World Health Organization

Coronavirus Disease (COVID-19) Press Conference 27 February 2020

Speaker key:

TJ	Tarik Jasarevic
TAG	Dr Tedros Adhanom Ghebreyesus
SH	Shane
MR	Dr Mike Ryan
JA	Jamil
MVK	Dr Maria Van Kerkhove
UM	Unidentified male speakers
BA	Banjot
CH	Christopher
JU	Julia
SH	Shoko
JA	Jamey
UF	Unidentified female speaker
JO	John

TJ Good afternoon, everyone. I'm sorry for this delay. Welcome to everyone watching us online, welcome to journalists dialling in. For them it's * 9 to ask questions. For those online it's clicking raise hand. With us today we have Dr Tedros, WHO Director-General, Dr Mike Ryan, Dr Maria Van Kerkhove and Dr Sylvie Briand, who's sitting here on the side but may also come in to answer questions.

We will have to keep it short today; there are important events going on immediately after that many of WHO people need to go to so I will give the floor immediately to Dr Tedros. Just to say, we will have an audio file from this, and we are uploading the transcript from the press conference that Dr Bruce Aylward did on Tuesday. Dr Tedros, please.

TAG Thank you, Tarik, and good afternoon to everyone online and in the room. Let me start as usual with the latest numbers. As of 6:00am Geneva time this morning China has reported a total of 48,630 cases of COVID-19 to WHO, including 2,747 deaths. But as you know, it's what's happening in the rest of the world that's now our greatest concern.

Outside China there are now 3,474 cases in 44 countries and 54 deaths. We're at a decisive point. For the past two days the number of new cases reported in the rest of the world has exceeded the number of new cases reported from China, and in the past 24 hours seven countries have reported cases for the first time; Brazil, Georgia, Greece, North Macedonia, Norway, Pakistan and Romania.

My message to each of these countries is, this is your window of opportunity. If you act aggressively now you can contain this virus, you can prevent people getting sick, you can save lives. So my advice to these countries is to move swiftly and contain it at its bud.

The epidemics in the Islamic Republic of Iran, Italy and the Republic of Korea demonstrate what this virus is capable of, but this virus is not influenza. With the right measures it can be contained. That's one of the key messages from China. The evidence we have is that there does not appear to be widespread community transmission.

In Guangdong scientists tested more than 320,000 samples from the community and only 0.14% were positive for COVID-19. That suggested that containment is possible. Indeed, there are many countries that have done exactly that. There are several countries that have not reported a case for more than two weeks; Belgium, Cambodia, India, Nepal, Philippines, the Russian Federation, Sri Lanka and Vietnam. Each of these countries is different and each shows that aggressive early measures can prevent transmission before the virus gets a foothold.

Of course that doesn't mean those countries won't have more cases. In fact, as of Tuesday both Finland and Sweden had reported more cases for more than two weeks but unfortunately both had new cases yesterday. That's why we advance a comprehensive approach. That's why we advocate for a comprehensive approach. Every country must be ready for its first case, its first cluster, the first evidence of community transmission, and for dealing with sustained community transmission. These are four scenarios and it must be preparing for all of those scenarios at the same time.

No country should assume it won't get cases. That could be a fatal mistake and quite literally. This virus does not respect borders. It does not distinguish between races or ethnicities. It has no regard for a country's GDP or level of development. The point is not only to prevent cases arriving on your shores. The point is what you do when you have cases.

But we're not hopeless, we're not defenceless. There are things every country and every person can do. Every country needs to be ready to detect cases early, to isolate patients, trace contacts, provide quality clinical care, prevent hospital outbreaks and prevent community transmission.

There are some vital questions that every country must be asking itself today; are we ready for the first case; what will we do when the first case arrives; do we have an isolation unit ready to go; do we have enough medical oxygen, ventilators and other vital equipment; how will we know if there are cases in other areas of the country; is there a reporting system that health facilities are all using and a way to raise an alert if there is a concern; do our health workers have the training and equipment they need to stay safe; do our health workers know how to take samples correctly from patients; do we have the right measures at airports and border crossings to test people who are sick?

Do our labs have the right chemicals that allow them to test samples; are we ready to treat patients with severe or critical disease; do our hospitals and clinics have the right procedures to prevent and control infections; do our people have the right information; do they know what the disease looks like? It's not usually a runny nose. In 90% of cases it's a fever and in 70% of cases a dry cough.

Are we ready to fight rumours and misinformation with clear and simple messages that people can understand; are we able to have our people on our side to fight this outbreak? These are the questions that every health minister must be ready to answer now. These are the questions that, when we ask them, can prepare us. These are the questions that will be the difference between one case and 100 cases in the coming days and weeks.

If the answer to any of these questions is no your country has a gap that this virus will exploit. I repeat, if the answer to any of these questions is no, your country has a gap that this virus will exploit and even developed countries could be surprised. We have already seen a surprise. There could be more surprise. Our message continues to be that this virus has pandemic potential and WHO is providing the tools to help every country to prepare accordingly.

We have shipped testing kits to 57 countries and personal protective equipment to 85 countries who need it and we have trained more than 80,000 health workers through our online courses in multiple languages. We have issued operational guidelines with concrete actions countries can take in eight key areas to prevent, detect and manage cases.

The guidelines also include key performance indicators and the estimated resources needed to prepare for and respond to a cluster of up to 100 cases. This is not enough so we will do more. WHO stands ready to support every country to develop its national plan. Once again this is not a time for fear. This is a time for taking action now to prevent infections and save lives now.

Fear and panic doesn't help. People can have concerns and rightly so. People could be worried and rightly so, but the most important thing is to calm down and do the right things to fight this very dangerous virus. I thank you.

TJ Thank you very much, Tedros. We will start with the questions from the room, then we will go online. Just before that a quick reminder for journalists who are here and who do not have a UN press badge; we are issuing badges for March so please register again; you will get that link in messages that we will be sending.

We'll start here, first Shane then Jamil and then we go to our friend from Iranian TV. Shane please.

SH My first question was about the Beijing Olympics; Shane from China Central Television, CCTV. Yesterday there have been some rumours and news saying that some delegates of the International Olympic Committee accepted interviews and said that the Beijing - the Tokyo Olympics could be cancelled. There have been some clarifications by the IOC as well; they say they are going to do the investigation as well in co-operation with WHO.

So how's the work with the IOC going on right now in WHO and do you have any suggestions or advice for the Tokyo Olympic Games, maybe some changes or something? We would like to know that. Thank you.

MR With regard to the Olympics, we're working extremely closely with the IOC and the Tokyo 2020 Organising Committee and are providing them with the risk assessment and risk management advice. To my understanding no decision has or will be taken in the near term regarding the future of the Olympics.

We've said this with regard to all mass gatherings; we need a risk management approach. There is no zero risk in organising any mass gathering at this moment in time. What we need to do for each gathering - and there are religious gatherings, there are sports gatherings, there are business gatherings all over the world all of the time - we need to have a clearly risk management approach for those events and we're providing advice on that.

We have an internal taskforce. We have a lot of experience in supporting mass gatherings before, in the midst of Olympics like during the Zika outbreak, during the previous SARS outbreak and the Special Olympics and many others and if you cast your mind back to those events, many of those events went ahead with appropriate risk management.

So we intend to work through the IOC Task Force which they've established with the Tokyo 2020 Committee so no decision on that from our perspective and we will be offering advice through time.

SH Is there any deadline or something you think that may take some actions or agenda for this decision?

MR No.

SH So we keep monitoring?

MR I think at this point everyone is monitoring the situation. I think the Tokyo 2020 Committee and the Japanese Government take the issue very seriously. So do the IOC and I think everyone is working together to try and preserve what is a fantastically important global event and everything will be done to make that a successful event for the world.

TJ Thank you very much. Please, if we can agree that every journalist asks one question so that we can get as many as possible. Jamil, please, then [unclear]. Jamil, if you can just introduce yourself.

JA Yes, Jamil [Unclear] from Brazil. Mr Tedros, my question is obviously on the first case in South America. It is in a way a novelty because of the tropical conditions so what does that mean for the virus? As you said, you have the country or countries having to take decisive measures but how does that apply when the local health system is already in trouble? Thank you.

MR I can begin. I think Brazil has a very strong, proud history of actually dealing with quite serious epidemics if we look at the dengue epidemics in recent years and yellow fever, and has clearly demonstrated the capacity for large-scale response. In fact, Brazil was in the

front line of the Zika response as well so risk management in Brazil and in South America in general; public health has a proud and scientific and evidence-based history.

It is disappointing to see South America, another continent as such, exposed to this virus and we were speaking this morning, myself and the Director-General, with our Regional Director in the Americas and we are already providing direct support to the Brazilian authorities in this matter.

With regard to the issue of the risk associated with the virus I think we need to be careful on making assumptions about whether a virus will spread or not because of climatic or other conditions but maybe Maria can add to that.

MVK Yes, just to say, the approach doesn't change, the approach is exactly the same if it were to show up in Brazil or if it were to show up in any other country. Just as the Director-General says, are you ready to take care of that case and to isolate that case, to provide clinical care to that case, are you ready to identify all of the contacts that are associated with that case?

There is a real opportunity here; I don't think we can stress that enough, that in all of these countries that are identifying cases for the first time it is within your control to be able to stop this and to do what you can to limit any onward transmission in those countries. So regardless of where this virus shows up the approach is the same.

TJ Thank you very much. [Unclear] please, then we will go online.

UM [Unclear] from Iran International TV. It is regarding Iran. Iranian health ministry says that the death toll has reached 26 but the confirmed cases of COVID-19 patients are about 245. It means unfortunately in my home country more than one out of ten is dying when they contract the virus.

But the worldwide rate outside China is about 2%. How does WHO explain this? It's five times bigger than the worldwide rate.

TJ Thank you.

MR There are a number of factors that could explain that. The most likely factor is that obviously this disease came on the scene and undetected into Iran so the extent of infection may be broader than what we may be seeing, as is the case with many epidemics when they start; you only see the severe end of the spectrum and then as you do more surveillance you find more mild cases.

Again Iran has dealt with many emergencies in the past and in fact Iran's history of earthquake and disaster response and emergency medical teams shows there's a very high clinical capacity for managing severely ill patients in Iran. So I don't suspect this is anything to do with clinical care; I suspect this is more to do with surveillance and detection of cases at this point and we would expect as surveillance steps up in Iran that more cases are identified that are in the milder range.

TJ Thank you very much. [Inaudible]. We start with Ms Banjot Kaur from India. [Inaudible].

BA Yes, I can hear you. Can you hear me?

TJ Yes, please go ahead.

BA Hi. The US has already confirmed one case of community transmission. If you could just tell us if there are more countries which are having cases of community transmission and which are those countries; and how many countries are also now having human-to-human transmission?

Also Dr Bruce has submitted a report to you, I think, a couple of days ago. He's also headed up this conference. Can that report be shared with us journalists? Thank you.

TJ Thank you very much.

TAG The report as reported by the international expert group will be posted, I think, later today. That's the information I have. For the rest maybe...

MR Yes, again there are many scenarios underway in the world. I didn't hear the country you mentioned first.

TJ US.

MR US, yes. I think we need to separate here - I think you talked about human-to-human transmission and community transmission. Let's go back to what the Director-General said; countries that have their first cases, their first importations and then countries that have clusters of disease and then countries that have evidence of community transmission but non-extensive and beyond.

The vast majority of countries that have imported cases are still in the importation phase. Some countries have localised clusters of cases; Singapore would be a good example where you have well-identified clusters of disease that are well-traced and being controlled through public health means.

Then there are other countries like Korea and Japan where there is mainly clusters of disease but there's some evidence of transmission at community level and a lot of hard work that's going on to try and identify exactly how those clusters are linked.

The questions then in the likes of Italy and Iran are as to how much of that transmission is clustered and how much of that transmission is at community level but in terms of sustained, efficient transmission at community level we don't see evidence of that yet in terms of the number of generations of spread.

In places like, for example, Japan we're seeing second and third-generation spread. We're not seeing extensive community transmission at this point. It's difficult to explain this in a verbal response. What I suggest we do is maybe put together data on that and maybe release that as part of our situation report with a more detailed explanation around those categories if that would help.

TJ Thank you very much. Next question comes from Rwanda; Christopher from Nonaha.com. Christopher, can you hear us?

CH Yes, I can hear. Thank you very much. The Director-General said that around 1,800 (unclear) health professionals have been trained. I want to know how many of them are from Sub-Saharan Africa. The world, even developed countries, fear the virus. I think it's very hard if the virus comes to Sub-Saharan Africa. How ready is the world, the WHO to help out the assets or the budget, how much is ready to help Sub-Saharan Africa for preparedness against the virus?

Lastly, I want to know, on the side of research what's being done to get the vaccine or other medical treatment against the virus? Thank you.

TAG Where's this from?

TJ From Rwanda.

TAG Okay. Amakuru.

[Foreign language]

TAG From the start, WHO already expressed its greatest concern would be our continent, Africa, my continent, because most of the countries have weaker health systems. From the start we have decided to invest as much as possible so countries, especially in Sub-Saharan Africa, can get ready.

We started from improving the diagnostics capability and that has improved significantly. As you know, almost all countries except a couple have been sending samples to other areas or elsewhere to have the results for coronavirus infection. Now more than 40 countries have the capability in-country to test for coronavirus.

But in addition to that we want the African continent to respond to this outbreak in a co-ordinated fashion and that's why last Friday we had a meeting organised by the African Union, Africa CDC and WHO meeting of the ministers of Africa, the whole continent, to agree on continent-wide response or continent-wide preparedness and also national-level preparedness and response.

That was a very productive meeting and I had the opportunity to attend and from that meeting we were able to understand the gaps they have and we will continue to support so that the preparedness is better and something that hopefully can address the gaps they have and minimise the concern that we have.

Then with training out of the 80,000 most of the trainees are from Africa but we don't believe that 80,000 is enough so we will continue to train more and move aggressively, especially in preparing the health workers in all countries. For the rest maybe, Mike.

MR Yes, not just in Africa but in all countries that have vulnerable health systems we're working quite fast now in terms of 85 countries receiving vital PPE supplies from WHO and that will continue to roll out as well as the training for health workers. In fact our Head of

Clinical Interventions is actually in Africa today presiding over specialist training for intensive care for respiratory disease patients in a multi-country training exercise.

Next week there will be two simultaneous meetings at our sub-regional platforms in Nairobi and Senegal to further extend those training initiatives in Africa but again Africa is very used to dealing with epidemics. I've said this before. There is a great deal of resilience in Africa and a great deal of coping capacity and what we need to do is give the resources and the training and the extra help that those systems need.

But Africa is dealing with so many outbreaks all of the time that that's the difficulty, that many African countries have to deal with more than one epidemic, be it measles or monkey pox or cholera or Ebola and this places extra strain on the health systems.

But these aren't the only countries that are vulnerable; there are vulnerable populations in every country so the idea of a vulnerable country versus the idea of a vulnerable community; every nation on the planet has vulnerable communities; older people, people with underlying medical conditions. So we also need to move to build capacity to treat and save lives everywhere, not just in one part of the world.

MVK Just to add to that, another way in which we're bringing healthcare workers into the fold and learning about this is through conversations, through bringing them together through teleconferences and sharing experiences. I've just come back from two weeks in China and the experience that the healthcare workers have there and what they're learning needs to be shared with the world so bringing that together through virtual means, either through teleconferences or through trainings, is something that is being done.

It has been done since the beginning of this epidemic but it will continue to happen so as we learn more, as they learn more we're sharing those experiences with each other so that we can protect them, protect ourselves and provide the best treatment that we can to anyone that's infected.

TJ Dr Van Kerkhove. We'll take one more from online; Julia Belluz from Vox. Can you hear us, Julia? Hello, Julia, can you hear us?

JU Yes, thank you so much.

TJ Please go ahead.

JU Thank you. Can you comment at all on how diagnostic criteria in countries should change given that we're learning so much more about people presenting with...? You mentioned that it's 90% fever as a first symptom but there's also evidence of gastrointestinal symptoms. We also know that countries, as you've been talking about, don't always have access to testing including the US.

So is there a sense of how diagnostic criteria should evolve especially in contexts where the diagnostics might not be available?

TJ Thank you very much for your question. We got it although the line wasn't the best. Thank you.

MR Thank you for your question. Yes, during any epidemic as we learn more about a virus and its impact we do evolve diagnostic criteria and case definitions and later on today WHO will issue updated surveillance guidance and case definitions based on what we've learned so far.

The best way to make a definitive diagnosis of COVID-19 is still a validated laboratory test. There are many other conditions that can be confused with COVID-19 especially when you've only got one or two cases amongst what might be background flu and other atypical pneumonias. In the middle of a very large outbreak, yes, an X-ray or a CT scan can be predictive of the disease.

So the diagnostic criteria depend on what proportion of your overall pneumonias have been caused by a specific disease. I know it's a very technical term so the best way of making this diagnosis is still with a validated test in the laboratory and almost all countries in the world now have that capacity.

To remind you of what the DG said, two weeks ago only two countries in Africa had the capacity to make the diagnosis; that was Senegal IP and NICD in South Africa. As of today almost every country has that capacity both in terms of training and in terms of laboratory capacity. In fact the one or two countries in which there are issues are less to do with anything other than transport, customs and other issues.

There are technical or logistics issues that have prevented those countries bringing their testing online but that will be solved in the coming days so yes, the diagnostic criteria will shift and change over time and will depend on the local context.

JU Can you hear me?

TJ Yes but very shortly, Julia. Please go ahead.

JU In some cases, obviously in the US right now the tests have to be shipped to state labs and there's a delay and so we're seeing this possibility of examples where it can take some time to diagnose the person. So what could health professionals do in those cases?

MR Yes, I think it's very difficult to make a comment on any individual country's arrangements but in the context of very low incidence or just importations of disease or localised clusters the issue is getting tests done at a properly validated, high-quality lab. If proper precautions are taken with suspect cases in the meantime you can wait 24 hours for the results. It's better to have a validated result from a good lab than trying to guess-work on this.

So it really is important that when a suspect case is detected that that person is appropriately isolated, that you begin the public health measures like contact tracing and then you adjust those measures based on the outcome of the test. We shouldn't be waiting for the result of the test to begin taking basic public health measures in that sense.

And yes, I think many large countries are now moving their testing down to state level and many of those are trying to move their testing down to the county or the next administrative level. The ideal situation would obviously be to have testing available at sub-national level especially in larger countries.

TJ Thank you very much. We'll go back to the room; first Shoko, then Jamey and then I our guest for the first time here. Shoko, please.

SH Hello. This is Shoko Koyama from NHK, Japanese public TV. Dr Tedros, you just mentioned that there were now more new cases reported from countries outside China than from China and you just said it's a decisive point. But what does it mean exactly, what do you mean by that decisive point? Thank you.

TAG When I say decisive point, one, there is a positive side meaning you can see signals that when you take containment measures as China is doing you can actually see a decline in the cases and ultimately it can be contained.

While on the other side the increase in the rest of the world, where we see more cases, is bad news and especially in three countries we've seen clusters; in Iran, in Italy and also in Korea. I was putting some four scenarios in my speech; the first one is single case, the second is cluster, third is the start of some community transmission and then the fourth is sustained and intensive community transmission.

So the decisive point then is we're seeing the third phase which is clustering of cases in three countries and I even said, if you take Italy, a member of the G7, it was really a surprise so even many other developed countries should also expect some surprises.

So that's why I say decisive; on one hand there is a positive signal; on the other hand there is a reason for concern. Then the two combined; it shows you that we're actually in a very delicate situation where the outbreak can go in any direction based on how we handle it. But still the message is, how are we handling it and how are we going to handle it?

It signals that the outcome will depend on how we handle it and that's why it's decisive; it's how we handle it but we see something negative and something positive. It shows that it can be contained but if we don't do the right things it can get out of control too. So let's use this narrowing window of opportunity - I said it many times. It's getting even more narrow. Let's use this window of opportunity to mobilise all the things.

We should do everything starting from containment, to preparedness for any eventualities, even worst-scenario, and give it our best. That's why I outlined more than 12 questions that a minister should ask from the first case and the last question is about whether the community is with us or not or whether citizens of a certain country are actually well aware and supportive. This question should be answered properly because we're in a decisive point.

So decisive because whether we get it wrong or right it's in our hands, that's it, because we saw both signs. When we handle it well we see positive results; even, I read, eight countries. When we don't handle it right then we saw what the consequences are in some countries.

TJ Thank you very much. We have nine minutes so we will try to squeeze very short questions. Jamey first and then [unclear].

JA Dr Tedros; you've been talking about preparedness as the main thing and I want to really hit hard on that point. A couple of very quick questions that are all together; how much does the COVID test cost, how much is that going to cost countries? Second, how concerned are you that masks may be in shortage, particularly in Europe? Then third, President Trump

said that people should be treating this like the flu virus in some ways in terms of the way they behave. Is that overly simple?

Then, Mike, you mentioned case definition changes. You've got the cameras rolling now. Can you tell us what those case definition changes are going to be? Thank you.

TJ For the four next press conferences no questions for you.

TAG No, by the way, it's okay to give him a chance.

MR He's the cameraman as well.

TAG [Inaudible].

MR The COVID tests cost - there is a range of different prices. There are different manufacturers but the tests that we have sourced cost less than \$5 each but there's a wide range of testing platforms available so I won't go into what others cost.

There is a shortage of supplies of masks but let's separate the issue of the surgical masks that people want to wear on the street from what are N95 or FFP2 or 3 respirator masks which are needed within clinical care environments. We've been trying to protect those supplies, that's what we've been trying to do.

The Director-General has written previously to all the manufacturers, he's written to all the producing countries, he's asked for people to show that solidarity not just at country level but at the private sector level. We've asked for national strategic stockpiles to allow some of those reserves in countries with larger economies who have strategic reserves to be able to provide PPE and masks to other countries that may not have them.

We have a global supply centre in UAE, in Dubai, our global logistics centre and we've supplied those 85 countries from there. We continue to try and resupply that but there are significant strains in that system. There's also the pandemic supply chain network which we operate jointly with the World Economic Forum and we've had a large number of private sector organisations, both manufacturers, distributors, transport companies working within that network for the last eight weeks on regular calls.

We've also done a detailed market analysis and we've looked at where the pressure points are in the system, particularly for respirators, respirator masks or the higher-level masks and we also within the UN system as part of the UN crisis management team have established a UN supply chain co-ordination cell between WHO, UNICEF and the World Food Programme.

With regard to the case definitions let them come out. We could be here for two hours as I explain to you the nuances of case definitions and I'm not sure whether the public might be too interested in the detail of that but we can take it offline.

JA [Inaudible]?

MR I'll leave the chief to answer that.

TAG By the way, on that, if I'm asked to advise the communities to prevent this virus I

would give them the same advice as you give for flu; wash your hands with water and soap and also don't rub your face and also six feet distance. So I think in that regard, especially in the absence of vaccines and so on and people taking care of themselves, it's the same.

If you see it scientifically you can say it's not flu but there are many things in common and you can prevent it using the basic things we use to prevent flu so the President is right to say that.

TJ Thank you very much. Ms Li.

UF Thank you for taking my question. [Unclear] from Xinhua News Agency. My question is a development from the previous one concerning the masks. We know that the masks could help prevent transmission from coughing and sneezing and people all around China are called on to wear masks from the beginning of the outbreak.

But [unclear], you wrote, it seems people still tend to think that only those who are sick need to wear a mask. What is the comment and suggestions of WHO concerning the stigmatisation of wearing a mask? Thank you.

MVK I can answer that question. You're right; there are a lot of people out there that have questions about the use of masks, particularly in the community and we're talking about medical masks here, not the N95 masks. The WHO guidance is that we recommend people to wear masks if they themselves are sick, if they themselves have respiratory signs and symptoms.

The reason for that is for them to prevent the transmission to someone else, not to protect themselves from getting infected so it can be confusing but we try to make it very clear that you use a mask when you yourself are sick and that we're talking about a surgical mask.

What's also important is how you wear that mask. We have some very good videos that are online that will show you how to actually put it on and take it off and how you dispose of it properly so that you don't actually increase your risk of infection. I had to wear a mask for a few weeks in China and I actually touched my face a lot more than I would have had I not had a mask on. I was following national guidance for when I was in China.

So you just have to make sure that you put it on properly, you take it off properly. It's very important that if we have shortages of masks we use them for the front-line workers and that we prioritise the use of those masks for the people who really need it in hospital but also for those who are taking care of people at home.

UF But some experts say that people in their incubation period can be infectious so people are worried that I might be affected when this one does not know he has already been affected. So what's the risk there [?]? Thank you.

MR Again we need to be careful here. The data from China and other places does not suggest that asymptomatic people are the driving force behind this epidemic and I think this is becoming a myth in this. It's not to suggest that scientifically someone cannot be infectious before they're sick; that could happen.

But the vast majority of transmission in this epidemic is occurring from symptomatic individuals to other individuals; it's important to get that and none of the data from the extensive studies in China have shown that asymptomatic individuals have been driving this epidemic so that's important to reassure people. I'm not saying it can't happen but it's not the major factor in this epidemic.

The second thing is I think Maria spoke about hands to face. I've been looking around the room here and I can't tell you the number of you who've put your hands to your face in the last 20 minutes or half-an-hour. Also we don't want to tell people what not to do. People take action to protect their health and we're not going to criticise them for trying to protect their health.

What we try to do is tell people how to do it properly and then what else you need to do and if I have to make a choice I will keep my hands clean, I will use hand sanitiser, I'll wash my hands with soap and water, I will cough into my sleeve. I will ensure when I touch surfaces that I wash my hands after. They're the actions that will prevent the transmission of disease as well.

So WHO doesn't want to tell people what not to do; we want to tell people what to do and we have lots of guidance out there on what to do so let's focus on that. There's also a cultural dimension here. Historically populations and communities in Asia have used masks for pollution purposes in cities and others so it's become a cultural norm as well so we have to take that into account; what's acceptable or not in a cultural context.

That's why we're very sensitive about saying no to people. It's about showing people; if you're going to wear a mask, wear it properly.

TJ The last 60 seconds for John and I'm sorry to Bloomberg. We will have another opportunity. I had five queries from the Bloomberg people [unclear]. John, please, last question.

JO Good afternoon. John Zarocostas for France24 and the Lancet. Director-General, you've mentioned that need for preparedness. From the WHO perspective and the six regional offices that you have how many Member States are prepared at the moment? You've got to be doing a stock-take in real time.

Secondly we're hearing concerns about shortages of conventional drugs because of this crisis, some on the essential drug list of the WHO.

MR I can take the second part of that question, John. There have been issues on supply chains, particularly for active pharmaceutical ingredients. Many of those are produced in China and they're on the critical pathway for producing many essential drugs around the world but many of those industries are now switching back on again.

We're beginning to see the pressure in that system beginning to ease. (Unclear) and her team here who work on essential health technologies are monitoring that on a daily basis and ensuring that we're doing all possible to ensure that those systems switch back on and efficiently deliver active pharmaceutical ingredients as needed into the system; on that point. Your first point was on...

JO The first one was how many Member States are prepared. From your regional offices you've got to be monitoring this in real time.

MR I would point you to the analysis that's done on self-reporting for IHR and the capacity, the joint external evaluations, the after-action reviews that are done for each country. If you look at it, most countries now have national action plans for public health security. Most of those national action plans have very great detail on the preparedness in any number of 14 different pillars of public health preparedness.

There are existing documents that exist for most countries. Other countries have specific plans for respiratory disease or influenza preparedness usually. When we did our analysis we looked at risk and vulnerability analysis at the same time; risk of importation and also vulnerability to spread once the disease had arrived. We've categorised those countries into different groups and that's what we've been using to prioritise the supply chain and what we've been using to prioritise national action planning.

I won't give you those lists of countries but we would consider that there are probably in the region of 30 to 40 countries who really have a high level of risk and a high level of vulnerability when it comes to this virus and we're working very closely with them but with all countries.

But again, as the Director-General said, there are four different scenarios that you have to deal with. Each country then has a different level of risk and vulnerability to those four scenarios so it's a complex matrix but we continue to focus on those countries with the highest level of vulnerability.

TJ Thank you very much. We will conclude with this as our guests have to leave. Please be aware that we will send the audio file immediately and the transcript as always will be posted tomorrow. For any additional questions don't hesitate to contact the media team. Have a nice evening.