



# World Health Organization

## Coronavirus

### Speaker key:

TJ	Tarik Jasarevic
TAG	Tedros Adhanom Ghebreyesus
UF	Unidentified female speakers
MK	Maria Van Kerkhove
MR	Michael J Ryan
UM	Unidentified male speakers
JA	Jamie
JO	John
CA	Carmen
LI	Lisa
TO	Tom
HE	Helen
TI	Tina

TJ Good afternoon, everyone, and thank you very much for coming to our headquarters here in Geneva. Welcome to all journalists online and a warm welcome to everyone who is watching us right now on WHO social media platforms, Twitter and Facebook. We are again here for our daily press conference regarding the novel coronavirus. I'll just repeat the same thing I say every day; we will have an audio file from this press briefing immediately after the press conference hopefully tonight.

Journalists online please type 0 1 to be in the queue to ask questions and I will ask again everyone to ask only one question so we can take as many as possible. I will just reintroduce our guests, Dr Tedros, WHO director-general, Dr Mike Ryan, executive director of the WHO health emergency programme, and Dr Maria Van Kerkhove, who is head of infectious emerging diseases and zoonosis. I will give the floor immediately to Dr Tedros for his opening remarks. Dr Tedros.

TAG Thank you, Tarik. Good afternoon once again and thank you for joining us. First an update on the latest numbers. As of 6:00am Geneva time today there were 31,211 confirmed cases in China and 637 deaths. For the last two days there had been fewer reported new infections in China, which is good news but at the same time we caution against reading too much into that. The numbers could go up again. As you know, epi curves can zigzag.

Outside China there are 270 cases in 24 countries with one death. As I mentioned on Wednesday, WHO is sending testing kits, masks, gloves, respirators and gowns to countries in every region. However the world is facing severe disruption in the market for personal protective equipment. Demand is up to 100 times higher than normal and prices are up to 20 times higher.

This situation has been exacerbated by widespread inappropriate use of PPE outside patient care. As a result there are now depleted stockpiles and backlogs of four to six months. Global stocks of masks and respirators are now insufficient to meet the needs of WHO and our partners. WHO estimates that global front-line health emergency responders will require approximately seven to 10% of market capacity. This percentage may be higher for other critical supplies.

Front-line health workers in China require the bulk of PPE supplies. This afternoon I spoke to the pandemic supply chain network which includes manufacturers, distributors and logistics providers, to ensure that PPE supplies get to those who need them. The network is focusing initially on surgical masks because of the extreme demand and market pressures. We're appreciative of companies that have taken the decision to only supply masks to medical professionals.

There is limited stock of PPE and we need to make sure we get it to the people who need it most in the places that need it most. The first priority is health workers. The second priority is those who are sick or caring for someone who is sick. WHO discourages stockpiling of PPE in countries and areas where transmission is low.

We call on countries and companies to work with WHO to ensure fair and rational use of supplies and the rebalancing of the market. We all have a part to play in keeping each other safe. I thank you.

TJ Thank you very much, Dr Tedros. We will start with questions and we will start here in the room. I have one, two, three and then we will go online. Please, can you introduce yourself and press the button.

UF Hello, my name's [Unclear] from [unclear], Japanese public TV. Regarding the situation report that you issued yesterday, you're now collaborating - cooperating with 15 laboratories including the one in Nagasaki University. Can you please specify what exactly what WHO is doing with those laboratories right now and what you're planning to do in the future? Thank you.

MK We have convened a global network of laboratories from the beginning of this outbreak. We're working with labs that have experience with coronaviruses, with influenza and setting up a referral system to improve diagnostic capacity in countries that currently don't have that. These referral labs have agreed to accept samples from countries that don't have primers and probes at the moment to do diagnostics for those countries. There are 15 labs so far that have agreed to do that and those are listed in our sitrep as of yesterday.

We're also working to identify tests. As you know, the sequence was shared very quickly in the beginning of this outbreak and because that had happened PCR tests, PCR primers, PCR assays have been made available so that the world can detect. So we are looking for tests that

can be shipped to countries that have molecular capacity. This is across all of our regions and this week we've shipped 250,000 tests across all six WHO regions to 159 laboratories and we're looking to find more tests that can be provided to the labs that need those.

So it's a referral system for countries that currently don't have that capacity but also providing all labs with the diagnostic assays, primers, probes and positive controls so that they can do the diagnostic tests themselves.

MR If I could just add, that's an ongoing collaboration between our existing global influenza surveillance and response system, GISRS, the global laboratory network for high-threat pathogens and our WHO collaborating centre network so we have all labs in the world with capacity in respiratory diseases working together and we can provide a list of the reference labs and a map of the countries in which we're providing reagents and training in the coming days.

TJ Thank you very much. We have a question from a colleague and then we will come back to this part of the room.

UF Hi, thank you, Tarik. This is [Unclear] from Xinhua news agency. I have one question. A large number of Chinese right now are outraged over the death of Dr Li Wenliang, partly because he was previously investigated for spreading the so-called rumours of the virus. We know that the WHO has right now reiterated again and again its determination to fight against the spread of the rumours and misinformation, against the so-called information epidemic, as you call it so that's also the reason why we are here today.

It is understandably and imaginably hard to distinguish between truth and false information, misinformation right now when we're dealing with a virus that we knew nothing about a month ago. But we also know that it is extremely important right now to have the truth, especially when we are fighting the deadly disease.

So my question is, how may the WHO ensure that they fight against rumours without creating bigger rumours in the complex situation right now and what suggestions may the WHO give to other public institutions, authorities or even media like us in our common fight against the misinformation? Thank you.

TJ [Inaudible].

MR First and foremost, as I said yesterday, we all mourn the loss of a fellow physician and colleague, medical worker and we suffered similar losses with the death of Carlo Urbani during SARS so we feel that loss and I'm sure his family, his colleagues, his friends do too.

The issues about misinformation; you're absolutely correct. There is an understandable confusion that occurs at the beginning of an epidemic. When you don't know your enemy the fear of that enemy grows because you don't understand the nature of your enemy and then as people come to terms with that it's difficult.

So we need to be careful to label misunderstanding versus misinformation; there's a difference. People can misunderstand and they can overreact; that can happen and information cures that but misinformation and the manipulation of information and the misdirection of populations; that's very different because that's a committed act and we need

to separate what is a genuine confusion that we in the public health sector need to address through good information and communication from what is politically manipulated or directed misinformation aimed at creating trouble or aimed at disrupting a response.

That's something that's very difficult to do and we've seen that across all aspects of society in the last number of years. That's not just an issue that affects health response and I don't believe the health sector has the answer to those questions. They're deeply political questions and we will continue to fight to put out the best information. We're working with UNICEF, we're working with the Red Cross, we're working with experts all around the world in risk communication.

We will try our best to continue to communicate in an effective, honest and transparent way and we will continue to encourage our member states to do the same but misinformation and the misdirection of society is another matter entirely.

TJ Thank you very much. Please.

UM It's [Unclear] with Xinhua news agency. There is a global shortage in antivirus protective gear so besides the measures you mentioned just now what more needs to be done both in China and in the rest of the world in tackling this problem?

MK In terms of antivirals or in terms of supplies?

UM Against the global shortage in antivirus protective gear.

MK The equipment, PPE. As Dr Tedros said in his opening remarks, it's really important that we prioritise the use of these materials for the people that need it most and these are the healthcare workers who are treating patients, these are people who are caring for their families, who are caring for their loved ones and those that are sick so it's making sure that we prioritise and best use the materials that we have.

MR I'd just add, Dr Tedros said that he had just come off a call with that global network so this is an area which the public sector, the private sector - it's not just the producers, it's the producers of raw materials, it's the producers, it's the distributors, the wholesalers and the retailers because at every stage of the supply chain there's a possibility for disruption or profiteering or diversion.

So this is not an easy problem to solve. There are many players both in the public and in the private sector and this is an idea opportunity for what the DG has called for again and again; solidarity. We need solidarity not only between countries but we need deep solidarity between the public and the private sector to ensure that we do not see a future where healthcare workers are forced to take care of patients without protective equipment. That is not something any of us wish to witness.

TAG Yes, and the other problem related to that is, as you know, when supply is short and demand is high then there could be bad practices like hoarding in order to sell them at higher prices and that's why we ask for solidarity and for people to really understand what fighting an outbreak like coronavirus is and to uphold the protection of humanity rather than running for their profits.

So there is a moral issue here also and that's why we had a discussion with manufacturers and others to co-operate and I hope they will stand together in the principles of solidarity.

TJ Thank you very much. To remind journalists online, if you want to ask a question please type 0 1 on your keypad. We will stay in the room now; Jamie, John and one more question here. Jamie, please.

JA Good afternoon, everyone. Dr Tedros, I just want to make sure that I understand the number that you mentioned. You said that there was a very high increase in demand... you said, if I understood, it was 100 or 200 times demand. You also just mentioned how you could see some bad practices, let's say. You could but have you yet seen those practices, have you seen people trying to do price-gouging and other sorts of things that are jacking up prices for you? Thanks.

MR We've seen price increases of up to 100 times for some equipment. Paul Molinaro's with us, who manages our operation support and logistics and his team manage the pandemic supply chain network and we've carried out a market survey and a market analysis so it's difficult to go into the details right now but it's safe to say we've seen a significant increase in prices but it's not just a price issue; there is an availability issue.

I'll give you an example; for Ebola right now we were very lucky. We pre-purchased equipment that takes us through to, I think, April, May in Ebola so the knock-on effect of this will not only affect nCoV but other epidemics like Ebola, lassa fever and others so the knock-on effects of this are real.

We're not saying here - let me be clear; this isn't saying that the private sector have failed in any way; not at all. There are normal market forces and they need to be managed and what we need to do is get everyone to focus on ensuring that we prioritise. It's not all of the supplies, it's not everything on the planet that needs to go into some mechanism but we need to start looking at, what is the minimum amount of supply that needs to be protected and directed to those institutions and systems that require it for the next number of months.

That shouldn't be too hard to do. There's still plenty of money to be made but we need to make sure that the right material gets to the right people at the right time and that's something I think the public and the private sector can stand together on.

JA Are you discouraging people who are not sick from buying masks for example?

MR No, there's a difference here. I think we've seen the types of mask that people wear in public, surgical masks and other things. We're talking here more about particular types of mask; FFP2, FFP3, N95 masks, masks that are designed for use in clinical environments. They're the masks that we need to protect; it's the protective gear that people use. You've seen it on the TV.

Surgical masks and other things...we have our own views. Masks don't necessarily protect you and they can often give a false sense of security. But they do, if you have disease, stop you giving it to someone else; for sure they help with that and they provide a sense of safety and a sense of assurance and if that allows people to move and go to the shop and get their food and that provides confidence then we're not going to say anything about that.

But if we start to see the normal civilian market being flooded with N95 and other respirator-type masks and we see doctors and nurses in hospitals not having those then there is a problem.

TJ Thank you very much. John, and please let's try to have only one question because we have journalists online as well.

JO Good afternoon. John [inaudible] for France 24 and The Lancet. I was wondering if you could elaborate a little bit on the need and the shortfalls for mechanical respirators. How critical are they in serious situations? And with reference to multiple organ failures; the data coming in; is it more kidney, renal failure that you're seeing and what can be done on these fronts? Thank you.

MK We do have some information on patients who are advancing mild, severe, critical disease. What I can tell you overall; we've seen some data on about 17,000 cases and overall 82% of those are mild, 15% of those are severe and 3% of those are classified as critical so overall you know that our proportions are changing in terms of how many are severe and how many have died.

We know that 2% or less than 2% now of the reported cases have died. We know that individuals who are of advanced age have higher likelihood of dying. We know that underlying conditions like the ones that you mentioned make people more at risk.

In terms of more details than that, those are being discussed on our clinical network calls and we're trying to get a better handle on that level of detail that you're requiring here. We do know that individuals need mechanical ventilation and some even need ECMO and then some ultimately die.

JO My question was, do you have shortfalls in mechanical ventilators or not? And in terms of organ failures, which organs are shutting down first, is it kidneys, what organs [inaudible]?

MK We don't have the breakdown of all of the cases in terms of how they progressed to death. What we reported yesterday; we know that people die from multi-organ failure; that's what I can tell you right now.

MR [Inaudible] the issue of mechanical ventilators; you're correct, John. It is an issue. Not all patients require that type of ventilation but clearly that is an issue and that will be another issue in the supply chain. This is sophisticated equipment but it's not just the equipment, it's the technicians who're needed to use that equipment.

That is also an issue and we saw that, those of you who witnessed the measles outbreak in the Western Pacific before Christmas and that awful sight of young children on ventilators; all the ventilators in Western Samoa occupied by young children and there was a real struggle. Again we thank very much the emergency medical teams from Australia and other places who went and created a system to expand that.

At the moment we're working with Australia and others to translate that clinical infrastructure into something that can be there for nCoV if it comes but we need to look at that in every

country. So you're right; it's not just preparing for the detection and the treatment of cases. There will be in every country a small number of people who require very intensive care and in the weaker health systems that's the very kind of care that won't be available.

But it's not just a matter of sending a machine; there's a human infrastructure that goes with intensive care and ventilation that we also have to address and we have a physicians' group looking at that and I think we've had... As of yesterday - it was interesting, I think - we put a new course up on our open WHO platform on the critical care of severe/acute respiratory illness and I believe we had thousands of registrations within a few hours.

So clearly there's a massive demand out there for this kind of training and then the machinery that goes with it but I think maybe we can come back to you tomorrow with some hard numbers on the ventilators.

TJ We had one question there and then we will go to a few journalists online. Please introduce yourself.

UM I'm [Unclear] from Japan's Asahi newspaper. A fresh infection has been detected of 41 people among the passengers confined on the cruise ship off Yokohama, Japan. It seems more cruise ships will face difficulty reaching their destinations. What do you think are the correct measures to cope with this kind of situation? Thank you.

MR As it happens we're in the middle of a technical call between the public health teams in Japan who are supporting the cruise ship and our technical teams here, asking those same questions; what are the lessons being learned. We've seen large cruise ship outbreaks before of norovirus. Many of you have seen cruise ships that have been quarantined in the past because of norovirus infections so these aren't particularly unusual.

It is difficult for people who get caught up in that situation because they are confined and we're looking with Japanese authorities on how we can cohort patients in a way because at the moment every time there's a new case the quarantine extends 14 days. So we need to find a way to break that vicious cycle and find a way of organising the patients on board in a way that we can get people off the ship in due course.

So there's a lot to work out and there's a lot to do to support those patients not just from the point of view of their physical health but from a mental health perspective. It's quite scary, very, very scary to be in that situation. We had meetings yesterday with the Japanese ambassador here, many of us, and there's a very high commitment on behalf of the Government of Japan to provide all support to the people.

Those individuals who are on that ship are in contact with their own embassies and there's direct access to support from their own home countries so everything is being done as far as we're concerned to take care of people's basic needs but it is still a very stressful situation for those individuals and they have our sympathies.

But you can understand from the Japanese authorities' point of view that they have to be very thorough and they're being very responsible in terms of the health of their own population but, I think, being careful to provide the appropriate care for the people on the ship.

TJ Thank you very much, Dr Ryan. We will now take a few questions from journalists who are online. We will start with Carmen from Politico. Carmen, can you hear us?

CA Yes, I can. Can you hear me?

TJ Yes. Please go ahead.

CA Thank you. In Europe we have seen potential thoughts and probably next week when health ministers meet even a move to maybe close down the passport-free travel area of Schengen in response to the epidemic and trying to make sure it doesn't spread. At the same time there were reports that in Italy the President of the Republic had to go to a school with a majority of Chinese ethnic kids to reassure to people that this epidemic is not about them. Is there something that the WHO can do to respond to this kind of potential actions in Europe?

MR There are two parts to your question. The second one is easy, I think, to answer; there's absolutely no justification for any form of stigma or profiling regarding people who may or may not have or are suspected to have or have not nCoV. We've seen and witnessed some of this. It's utterly unacceptable, it is unhelpful and WHO condemns it quite frankly and everybody including ourselves and governments need to move quickly to ensure that that kind of stigma is not to continue.

With regard to what the European Union and other economic integration areas do, it's very similar to what nation states can do. They will carry out their own risk assessment based on what they believe to be in the best interests of their citizens. Whatever measures they put in place we will be observing and if we feel that these measures are excessive or exceed greatly our advice we will ask for those justifications and ask them to justify why they're doing that.

But we trust that the European health authorities have the best interests of their citizens and all citizens in their minds.

TAG I have been in contact with many of the ministers and we hope that they will make the right decisions based on facts. That's what we expect.

TJ Thank you very much. The next question is from Lisa Schnirring from CIDRAP. Lisa, can you hear us?

LI Yes. Thanks for taking my question. I remember during MERS the hospital outbreaks were a huge concern and worry. I'm wondering if you have the information that you need right now to assess that risk. What are you seeing, have you been able to use the information that you have to advise other countries? Thanks so much.

MK Hi, Lisa. Thanks for that question. You and I have spoken quite a lot about MERS over the years. Yes, indeed, healthcare workers, front-line workers and hospitals are areas that we are always concerned about when we think about respiratory diseases and from the start when we knew about this new respiratory pathogen, knowing that it was a coronavirus, we thought that there was going to be the possibility of amplification events or super-spreading events.

We've only one instance of an outbreak in a hospital that we're aware of in Wuhan involving 15 healthcare workers but when we've created our guidance all of our guidance material is



about infection prevention and control in healthcare settings, making sure that the right advice is given to healthcare workers so that they can protect themselves from getting infected.

What we can say with certainty is that standard infection prevention control measures at all times in all hospitals is really a must, related to this virus or for anything else. This is what can protect healthcare workers. If they are treating patients then we recommend droplet precautions. If they are performing aerosol-generating procedures we recommend airborne procedures but we have not seen healthcare-associated outbreaks in other cities. We have not seen healthcare-associated outbreaks in other countries but that is certainly something that we're on the lookout for.

TJ Thank you very much, Dr Van Kerkhove. On the line we have Tom from ITN. Tom, can you hear us?

TO Yes, I can. Hello. Can you hear me?

TJ Yes, very well.

TO Fantastic. Going back to the cruise ship question, obviously they are isolated from a much wider outbreak but I'm wondering, given the sheer numbers of cases linked to that single cruise ship original case, is it teaching us anything about the transmissibility of the virus or the risk to the wider population in similarly confined areas?

MR I think again we need to be careful here. I think we have - is it 61? - people on the ship but there're over 3,700 people and crew and this is after extensive searching for cases and testing and testing of many, many people so if I don't get my maths wrong that's less than 2% of people.

It's not a great number, it does show the virus has spread on the ship but again let's be careful here not to overreact. This is a very closed community living at extremely close quarters and we did see in the Metropole Hotel, if you remember, in SARS, even though SARS petered out afterwards we were very scared because we saw the Metropole Hotel and the Amoy Gardens outbreak.

In the Metropole Hotel a single individual infected many people in the hotel who then flew all over the world and nobody could understand at the time; this disease isn't airborne, how could one individual in a hotel who just touched doorways and touched other people in lifts transmit the disease to so many people?

There was a great scare that this was now airborne and this was a pandemic. It didn't turn to be so. I think we need to recognise that a cruise ship is a very particular environment in which you can have higher levels of transmission even with a virus that isn't very efficient at transmission.

That's not to say this virus won't gain more efficiency or spread more but we need to be very careful to extrapolate the experience on a cruise ship to that of a general population.

MK If I can add, one of the things we've talked about here in this room and previously is the need for additional studies to be carried out so studies amongst family members for

example, looking at secondary, looking at household attack rates. Doing these early investigations in any country that has cases is really critical right now.

Questions around secondary transmission; how are people getting infected from one another; looking at the extent of infection. We're hoping that serologic assays are going to become available in the coming weeks to look at what is the more mild end, how many people are infected without developing symptoms, how many have subclinical infection, mild infection.

Those are the types of studies that can begin now and we have early investigation protocols that we have on our website where we provide methodology that can be used and we're hoping that countries will use these to try to answer some of these critical unknowns.

TJ Thank you very much. We have time for one or two more questions. Helen Branswell, please. Helen, can you hear us?

HE Yes, thanks very much for taking my question. I was wondering if Maria could explain a bit more about the breakdown of cases and how the 82% of cases being mild figure was arrived at. Last week there was some reference to household transmission studies being done. Where are you guys getting the data about 82%?

MK We do have reports from Chinese authorities. As we've mentioned, we do get reports every day of the cases coming in overnight and we report those here to you and in our sitreps. We have some data on 17,000 cases that I just mentioned, saying 82% are considered mild, 15% severe and 3% critical and that varies with age; we do know that the older you are the higher proportion of severe cases there are. So it comes from reports from our Chinese authorities.

TJ Thank you very much. We'll take the last question from Tina from Bloomberg. Please if you can just press here, thank you.

TI I wanted to come back to the price increase you've seen in protective gear; on the masks the price as much as 100% in particular. Also do you have a sense of what companies could help most in this effort? It's probably not only private sector but in particular some companies that could help out most; a bit more colour on that.

MR Yes, I would refrain at this point from naming companies. I can give you the types of companies. Clearly there are the big producers of the masks, being the most acute but there's a big chain in between, as I said. There're producers, there're wholesalers, there are distributors, there are retailers and along that value chain there's an opportunity for hoarding, there's an opportunity for gazumping; there're many things that can happen.

Production is also an issue and I think most manufacturers are scaling up their production capacities but again that production can't scale up if countries are restricting exports of raw materials so that chain goes all the way back to the rubber plantation, all the way down the chain to that health worker and everything in between and that chain works every day of every year normally.

That chain is disrupted now. It's not broken but it's disrupted and we need to ensure that it doesn't break and I think we need to work with everyone along that chain. It was interesting; I

think it's the first time that WHO is in a large-scale engagement with the private sector directly on trying to manage that chain and support that process.

We do this with the World Economic Forum as well and this has been a joint project of the WEF and WHO over the last three years and again the supply chain network didn't come from nowhere. We've had that in place as part of the epidemic readiness accelerator and we've been doing that with the private sector in both communications with companies like Korea Telecom; we've been doing it with the World Tourism Organisation in terms of preparing hotels and cruise ships for epidemics.

We've had a collaboration on Epibrain, which is an IT collaboration on predictive analytics for outbreaks so we've been working with the private sector over the last four to five years on innovation in epidemic response and we're now benefiting somewhat from that building of a partnership. We need to now make that partnership work for the front-line workers and that's what we hope to do in the coming days.

TI You said 100 times or 100% [?]?

MR I think our colleague was right; for other PPE it's different.

TAG 100 times.

UM Are you going to introduce mandatory price controls in an emergency?

MR We don't have the power to do that. We can make the recommendation but we'll come back and let's analyse the problem before we make any knee-jerk solutions. I believe solutions are possible if everyone acts responsibly so let us try and get that done.

TJ We will conclude with that. Thanks to everyone watching us online and dialling in. We will send audio files shortly. We will also send you the audio file from today's presentation during the executive board meeting on coronavirus because many of you have asked for that so that will follow up and then we'll see you again tomorrow. We will send details about tomorrow's press conference early morning. Thank you very much.

TAG See you tomorrow. Have a nice weekend.