Good day everyone, good morning here in Geneva. Welcome from Geneva, WHO HQ. It is shortly past ten o’clock here. This is the press briefing on the results of the ninth meeting of the International Health Regulations Emergency Committee concerning the Middle East Respiratory syndrome coronavirus. With us today is Dr Keiji Fukuda, Assistant Director General for Health Security and Environment here at WHO.

Before we start let me remind you that audio files of this press briefing will be available soon after. A transcript will be available later in the day. Video footage has been already opened and can be requested also afterwards. After the opening remarks by Dr Fukuda we will open for questions. For those in the room it is easy and for those online, please dial zero one. This will put you into the queue. This is it for the opening remarks. I am handing over to Dr Fukuda. Thank you.

Thanks Christian. So good morning everybody, it’s good to see everybody here. Let me just jump into some opening comments, and as Christian mentioned, we’ll then throw it open for questions.
So, today, what I want to just update you on, is the IHR Emergency Committee meeting that we had yesterday and its deliberations and then also update you on some of the findings of a joint mission which was conducted last week. In terms of that mission, it just ended this weekend, we held off on having the Emergency Committee meeting until that mission could complete its work so that the information would be available for the Emergency Committee members. That mission was co-led. I want to thank and acknowledge Dr Jong-Koo Lee who is the Director of the JW LEE Centre for Global Medicine at the Seoul National University College of Medicine; he co-led the mission along with myself.

So in terms of the IHR Emergency Committee deliberations, it’s the ninth time that this Emergency Committee has been convened, so it’s been convened eight previous times in the past two years. We have convened that Emergency Committee on a somewhat frequent basis over the past two years to make sure that they were fully assessed with the situation, and so they’ve periodically been looking at it and are quite informed. We brought them together this time specifically because of the outbreak situation in the Republic of Korea.

Now, in terms of the outbreak, this is the largest outbreak of MERS-CoV infection that has occurred outside of the Middle East and as of today the outbreak in the Republic of Korea has resulted in 162 cases of infections and there have been 19 deaths which have been officially reported. Currently there are over 6,500 people who are under monitoring as contacts of these cases but overall there have been over 10,000 people who have been monitored since the start of the outbreak, so it’s quite large numbers. Now, one of the things about this outbreak is that it has received a lot of attention and it has raised anxiety levels internationally which is one of the reasons why we wanted, specifically for the Emergency Committee, to discuss it and assess it and provide guidance and advice to the Director General.

Now yesterday, as we normally do, the Emergency Committee members heard information from a couple of different sources and so they had updates of the current situation and assessments provided by representatives from the Republic of Korea and also from China because there has been one case that was exported from Korea to China. In addition, the committee members heard directly from several members of the joint mission. And so there were six people from the joint mission who were part of the call. This includes two people who are part of the Emergency Committee itself, three people who were advisors to the Emergency Committee and then myself.

In terms of some of the major pieces of information which the Emergency Committee heard about, some of it had to do with the virus itself and so in terms of the virus, the available sequencing information to date has not identified any major changes compared with the viruses circulating in the Middle East. So this is one very important piece of information. In terms of risk factors associated with the spread of infection in the Republic of Korea, there were some major points that were highlighted. The first one is that in general I think it’s fair to say that there was a lack of awareness about MERS both among health providers and also the general public in the Republic of Korea before the MERS outbreak occurred there, so it really took everybody by surprise and this probably contributed somewhat to a delay in knowing what was going on.

A second major risk factor was suboptimal infection prevention and control measures in hospitals. So for example, what we saw is that in some instances there was close and prolonged contact between people who had infection and people who did not have infection, so for example other patients, visitors, healthcare workers in emergency rooms, so under crowded conditions and for prolonged periods of time. And then we also saw that there were
similar mixing of infected and un-infected patients in multi-bed hospital rooms, so where patients are kept. And so these kinds of things made it easier for the virus to hop from an infected person to an un-infected person.

A third kind of risk factor is that we saw that there is a practice of going to many different health facilities by some of the patients there and it’s been termed, doctor shopping. But in essence what this does is it makes it easier for the virus to go from one hospital to another hospital, so really contributed to the geographic spread of this virus. And then finally we saw that, I think similar to many countries there is a custom where when somebody is ill that either a lot of friends or family members accompany that person in going to the health facility and can often stay overnight to help take care of them. And again what this does is it increases the chances for infection to go from someone to people who are un-infected. So I think that in main these are the kinds of factors which really contributed to the spread of the MERS virus from person to person but also helps to explain why this virus was able to spread out geographically fairly quickly.

Now, in looking at the outbreak I think there are some other important observations to make that were discussed. So far this outbreak in the Republic of Korea is associated primarily with transmission of the virus in healthcare settings. Having said that, I want to make the point that it would not be surprising if in the future we were to see some instances of transmission outside of health settings; we have seen this occur in the Middle East. We know that this virus can go from person to person, so it can happen in other places. But what’s important to note is that even given that possibility, right now we do not see any evidence of this virus causing sustained transmission in communities that we’ve been through.

Another important point is that there clearly are gaps in our understanding about how this virus is transmitted. So for example, before and during the outbreak there have been questions raised about what other factors may affect how this virus is transmitted. So for example, what’s the role of potential environmental contamination? What is the potential role of poor ventilation in rooms and so on? What other factors may be affecting the ease with which the virus can be transmitted? And I think the answer right now is pretty clear. We don’t really know. We don’t understand the situation very well. And so one of the points that we stressed in the joint mission was a need for continued research and study on these kinds of questions; we need to understand them better.

So having said that, I think that when we look at the outbreak as a whole and we look at the overall shape of it and we look at the main ways in which the virus appears to be transmitted, in general it appears to be similar to what we have seen in the Middle East. It’s just moved to a different location but the fundamentals appear pretty similar to what we’ve seen in the past.

The response to the outbreak took some weeks to get up to speed but the Emergency Committee did note and commended the government of Korea on its now very extensive effort to identify cases and contacts to make sure that people who have infection or who might have infection are under proper levels of monitoring, and also to make sure that these people who potentially could be infectious to others do not travel during that time in which they would be infectious. I think in that vein the government is very aware of the need to minimise the chances of international spread and they have really taken very strong efforts to ensure that people who might be infectious do not travel to other countries or travel around in general.
Now, when we look ahead, of course we cannot predict the future but we do anticipate that it’s likely that some cases will continue to appear for weeks. One explanation for this is that there are likely to be people who are infected who are not identified right now and so as they go through their incubation period they will be identified in the future. But again what we can say is that when we look at the pattern of new cases, not old cases but new cases that are occurring now, we see that they appear to be going down. So when we look at the control measures which have been instituted and we begin to see the decline in new cases, we think that it’s likely that there is an effect there of the control measures. However, I do want to be cautious here because again we really can’t predict the future. So one of the main points that we made in our discussions with the government is that it is absolutely critical to keep up high levels of surveillance, keep up high levels of monitoring until we know that transmission is ended and the outbreak is over.

So on the basis of this information and extensive discussion, the Emergency Committee unanimously agreed that the current situation was of concern but that it did not constitute a public health emergency of international concern. This was transmitted to the Director General and she has agreed with their guidance.

So the last point I want to make is a point made by the Emergency Committee. In closing they said, again this outbreak really ought to serve as a wake-up call for countries. I think outbreaks are always occurring but some of them have been very prominent in the past year and as you know, I’m alluding to the Ebola outbreak but also the many others which occur. And I think one of the lessons from all of this is that it’s just very clear that these kinds of outbreaks can occur anywhere in the world. They can appear in any country and so one of the messages from the Emergency Committee to countries is that it’s really critically important for countries to be aware of, to be prepared for the possibility of these sorts of outbreaks occurring in their country.

So with that, Christian, let me stop and throw it open for questions.

CL Thank you very much, Dr Fukuda. So now we will be opening for questions. We’ll first take a round of questions from the room and then go out to the ones online. Please state your name and agency.

SB Simeon Bennett from Bloomberg News. Keiji, we know from the Middle East that there are probably a large number of, well who knows how many cases undetected in the community in asymptomatic people who just don’t show up because they don’t get sick. So what’s the likelihood that MERS is circulating at low levels in the community in South Korea or even in Hong Kong and in asymptomatic people and that we may at some future point see a re-emergence of the virus if it gets back into healthcare settings? And then a second question, obviously this is the first outbreak situation that WHO has had to respond to since Ebola and so are there any lessons from Ebola that have been applied in this instance and have you seen any improvement in the way WHO handles these situations? Thank you.

KF Sure. So Simeon, one of the discussions that we had with our colleagues in Korea was that it would be important to try and identify the extent to which infection may be in the country at levels which are not recognised right now. So for example, one of the studies which Korea has undertaken is to identify people who have pneumonia and then to test those people to see whether there are cases of pneumonia but not associated with MERS-CoV. Another thing is that we discussed that it would be important to do some serologic surveys again to get exactly what you’re asking about. So I think the answer right now is that we
don’t have that kind of solid information but the need for it and the importance of it has been discussed and hopefully we’ll have a better understanding of it. Having said that, I think that we have not had MERS detected before in Korea and right now we don’t have any reason to suspect that it has been there before. But we’ll have more information in the future.

And then in terms of what can we glean from this outbreak, I think that again we’re still very close to it and I think need to look at all the lessons learned from this, but I think one of them is simply what was mentioned at the end. As we have said over and over again, we do live in a very, very globalised world in which people simply travel all over the place and I think that the fact that health workers in Korea did not expect a case of MERS to walk through the door, I think this is not unique to physicians there. This is probably true to most physicians that are not in the Middle East. And so I think this whole issue of the importance of being prepared is just a very basic lesson but it’s so true.

And then I think that some of the other aspects is that even though it did catch the responders by surprise, they were able to accelerate and intensify their efforts really quickly I would say. I think this attests to the fact that there are some very strong capacities in the Republic of Korea and do despite having appeared a surprise, having those capacities in place, having a strong health system in Seoul really made it possible to bring this outbreak, hopefully, under control pretty rapidly. So I think at least these are some of the important lessons that we can take home right now.

SB What about WHO in terms of...

KF Well in terms of WHO, I don’t know whether this is a new lesson but it’s clear that you have to respond as quickly as possible. So we wanted to get people in the field as quickly as possible. We also wanted to get information out very quickly. There is critical information to get out and so we tried to provide that very fast. And so I think that again, in keeping with the pace of the world, getting information out, moving as quickly as possible is just critical.

CL Thank you very much.

LF Lionel Fatton, Japanese News Agency Kyodo. I have two questions. First, you underlined the fact that the virus has not changed between the Middle East and South Korea so I was wondering if we can expect, a little bit related to the question of Simeon, if we can expect that the virus will remain in South Korea for a long time like it is in Saudi Arabia? And the second question will be about the fact that, if I’m correct, half of the infection can be traced back to the same hospital, like the Samsung Hospital and I’m just wondering why. Is it because this hospital is practically affected by the problem you mentioned about suboptimal infection prevention or it is another issue? Thank you.

KF Let me take the first one and then the second one. I think one of the big differences between the outbreak in the Republic of Korea and what we’ve seen in the Middle East, for example in countries such as Saudi Arabia, is that in the Middle East we have countries in which we have known reservoirs of infection, so we have large dromedary camel populations which have a lot of contact with people and so there is the continual possibility that there is seeding from camels going to people and this happens over and over again. And then that might ignite an outbreak in a hospital or lead to clusters. By contrast, in the Republic of Korea, even though there are a few camels in zoos for example, it is not a big feature of the country and so we don’t know of any other animal reservoirs. So the goal here I think is to
just stop the outbreak, and I don’t think that we have any reason to believe that it would persist in the human population once we really reduce the cases.

Now, in terms of your second question, why have so many infections been associated with one of the health facilities? I think here we actually went to the health facility, spent a number of hours both talking with the infection control staff there and walking around parts of the hospital to get a sense of the physical layout, and I think one of things which was clear is that it’s a very busy emergency room and the person who is associated with the spread of infection to a lot of other people was in the emergency room for a few days. This is a common situation when you’re filled up in the hospital and you can’t move patients to other beds so easily. And during that time it’s clear that this person was coughing a lot and was also mobile in the emergency room, going around. And so when we saw that, and there is even footage on CCTV in the emergency room showing how symptomatic he was, you really get a sense of how one person can lead to so many infections. So this is what we saw there.

CL Thank you very much. Just to remind people, journalists on the line that you need to press zero one to get into the queue for the questions. At this point I don’t see another question... Yes, I do see another from the room.

UM [Unclear name]. It is regarding the lack of transparency in the case of Korea. In the earlier stage the South Korean government did not disclose the name of the hospital and many people went to the hospital without the knowledge of the virus and they contracted the virus. In your assessment, how much did this non-disclosure of the name of the hospital in the earlier stage contribute to the later stage, the so-called super-spreader? Thank you.

KF I think this is a complex question. Let me say this: I think that in my experience in dealing with outbreaks for the last few decades, what’s true is that whenever they occur, particularly when we have new viruses and new diseases, they invariably take everybody by surprise. They take the country by surprise, the responders and the government and there is always a period of time in which you have to get organised to deal with the outbreak. And I think that was true in this situation here. I think that in looking backwards, probably the government identifies things that they wished they had moved on more quickly. But having said that, and again having the vantage point of WHO, we see that there is always a learning curve in the beginning of these outbreaks.

In terms of whether knowing about the hospitals were part of super-spreading, I think when we look at the outbreak in detail and go to some of the hospitals where we see that larger numbers of people got infected, again I think it’s really the conditions under which the emergency rooms were operating which were probably the biggest factor and why you had large numbers of people get infected over a short period of time. And then those other factors such as going from one hospital to another hospital allowed it to spread to different hospitals. And I think that in some instances those people who moved around did not know that they had this infection and so on and so I think those really are the biggest reasons for why we saw a spread of this infection. I think it’s very difficult for us to say this factor was associated with this much of the transmission. It’s very hard to break it down. But as a group it’s clear that these were the important reasons for spread.

CL Thank you very much. Let’s move to the bridge now and I have the first on line who is Jack from Wall Street Journal. Jack, can you hear us?
Yes, hello. This is actually Jake Watts from the Wall Street Journal. So Dr Fukuda, I have two questions. In your view at what point did proper quarantine procedures start under the South Korean government? Could you be a bit more specific about the timing? And also what is your assessment of the current quarantine measures in place, specifically those people under voluntary, well not exactly voluntary but voluntary quarantine in their individual homes, are they sufficiently controlled?

In terms of the current level of quarantine... Let me start from the second question first. I think that in looking and hearing about the procedures which are underway right now, the level of monitoring is quite high. These people are either telephoned twice a day, if they don’t answer the telephone somebody actually goes to visit them to see what the situation is and why they’re not answering the phone. And then in other instances some of these people are seen physically twice a day. So I think the level of monitoring and quality of it is very high right now.

As to when did the level of quarantine reach the right levels, well I don’t think I can give you a single day or point but what I can say is that in our visit there and in our discussions it was clear that extensive efforts had been made over the previous weeks to improve the response. And even when we left there were plans to further strengthen how the response would go, and so I think that in a sense it was a continual quality control or quality improvement process that was moving very quickly.

Thank you very much, Dr Fukuda. We have one more from the bridge right now and we have Ms Morren from the BioWorld Today magazine.

Good morning, Dr Fukuda, it’s Nuala Morren speaking from BioWorld Today. You’ve referred to some of the lessons from the Ebola outbreak and of course one of the things that happened then were the way in which there was a huge international effort to expedite and activate the development of vaccines and antiviral drugs and also improve diagnostics. Do you think that there’s a need for a similar effort to try and come up with a treatment for MERS?

That’s an excellent question. I think that we have an important comparison between these two outbreak situations. When we look at the Ebola situation, what we have is a situation in which an outbreak again took everybody by surprise but we had health capacities which were really fairly weak. On that basis, the combination of those two things and having serious disease has meant that we’ve had a very difficult situation to deal with in the past year. By contrast, in the Republic of Korea, even though we have an outbreak which started and caught everybody by surprise, we do have strong capacities and this has really enabled the country to organise itself and move ahead very quickly.

In the specific area of vaccines and drugs, I think there is a common lesson from both of these situations. Here again we have infections for which we do not have specific vaccines and we do not have specific medicines. We have treatments. We have ways to take care of people and help them to recover more quickly but we don’t have specific vaccines and medicines. And I think that there is a common need for us to try to accelerate the development of these kinds of therapeutics for both infections. I think that’s also true for the MERS virus as it is for the Ebola virus and I think that the development of these things is probably best done through some combined international and national effort. I think it’s very hard for any single country to take that on by itself. So I think that an international effort would be helpful.
CL Thank you. We have another caller from the bridge. That’s Mary Ann in Korea. Mary Ann, can you hear us and could you please specify your outlet for us? Thank you.

MB Hi, this is Mary Ann Benitez from Hong Kong Standard, from Hong Kong. Dr Fukuda, could you just explain what you mean by the Emergency Committee concluding that there is no need to raise awareness as an emergency of international concern? And how does that sit with the Hong Kong government’s decision to impose a red travel, outbound travel alert against South Korea? Do you think in the future places like Hong Kong and other countries could be guided by WHO on how this travel advisory should be imposed on any country in case of an infectious disease outbreak? Thank you.

KF Thank you, Mary Ann. I’m not sure I caught all of the question but let me try to answer what you asked. The reason why the committee I think concluded that this was not a public health emergency of international concern at this time is that again in going over the entire situation, it clearly felt that this was a very important outbreak and this certainly was an outbreak of concern and it needed to be monitored and watched very carefully and responded to very strongly. But having said that, they also saw that the measures to contain it, the measures to prevent infection from spreading to other countries were pretty strong and were being pursued very vigorously, and in addition they saw that the number of new cases appeared to be going down, appeared to be declining and likely in response to the control measures that were being instituted. So on that basis they felt that this situation did not constitute a public health emergency of international concern but again they reiterated, keep watching this very closely, make sure that the fire goes out and doesn’t reignite.

Now, in terms of how this fits in with actions by national governments or by, in the case of Hong Kong, a special administrative region, here I think that governments can take and need to take whatever steps and whatever precautions that they think are important to protect the country and also to reduce anxiety in the country here. And so I think that from the vantage point of the Emergency Committee, they’re really looking at is this something which is likely to spread all over the world or at least spread widely among countries? And their answer is that right now, in our assessment, we think that this is less likely than more likely to occur. And then in terms of what countries need to do, they take steps to make sure that the populations in their countries are as well off as possible. So I think it really reflects that we each have different vantage points or perspectives that we need to convey or operate from. So I don’t really see a conflict here but I do see that we have different roles. Thank you.

CL Thank you very much. We’ll go back to the room here in Geneva. We have a follow-up from Bloomberg.

SB Keiji, I hear what you say about countries needing to take what steps they think they need to take but in the statement from the Emergency Committee today it says that WHO does not recommend trade or travel restrictions. So Hong Kong’s travel ban seems to be in direct opposition to WHO’s advice, so isn’t there a time for WHO to say, I know that you don’t like criticising member states but isn’t there a time to say this is actually a counterproductive move?

KF I think, Simeon, that Hong Kong has not issued a travel ban. They have not said you cannot travel. What they have issued is that people should be aware, a kind of advisory. And I think that this kind of information in fact is not out of keeping. One of the things in fact the Emergency Committee noted was that it was important to educate or inform travellers about
the situation which in a sense is be armed with as much information, as much knowledge as possible. So again, I don’t think there’s a conflict here. It is true that sometimes when we do have a public health emergency of international concern, in there are recommendations against travel or trade bans and then we will contact those countries if such bans are instituted. But in this situation we don’t have that situation.

CL Thank you. Fred?

FD Yes, Fred Durand with NHK, Japanese TV. I was wondering if you discussed in the committee the case in Germany because earlier this year there was also an imported case that was not diagnosed so quickly and also moved I think in different hospitals and apparently 200 contacts were found but there has been one transmission there. So is it only an issue of better control and infection prevention measures or do you have other hints of why it didn’t spread in that country? Thank you.

KF We did not discuss the situation or the case in Germany in specifics but I think that there were some important observations made during the joint assessment which address the questions that you’re asking about. For example, we saw that one of the persons who were infected with this virus, although it was not known at the time, came into contact with over 300 people but during that time none of those people became infected. And so what it tells us is that there are combinations of things which make it more likely that people will get infected. So for example, how infectious is the person at the time? Is he putting out a lot of virus or a little bit of virus? How close is the contact he is having with other people? Is it enough to allow the virus to transmit? Are there other factors which are making it easier for the virus to transmit? I think that changes from situation to situation. Simply being in contact doesn’t really tell you if the virus is going to pass to you. I think it depends on these other conditions and it’s clear that they simply can vary from situation to situation.

CL Thank you.

UM [Unclear name] from China, Xinhua News Agency. Dr Fukuda, according to the media report yesterday Germany and the Czech Republic reported both suspected cases and confirmed cases so could you clarify that, has MERS already entered into Europe or not? And my second question is earlier this week both China and the US announced they had developed a new antibody of MERS. Does WHO have any updates or comment on that? Thank you.

KF Sure. The MERS virus has been known now for the last couple of years. We’ve seen many outbreaks of MERS occur in the Middle East and I think to date we have now had about 24 countries which have had people who have been infected by this virus. And so in the past we have seen that travellers with MERS infection have travelled to European countries, so this has already occurred in the past. So the fact that there may be people with infection who travel to different places is not such a surprise. I think this is different than saying that the virus has become established in Europe. Right now we don’t have any evidence of that.

And then in terms of your second question, one of the potential ways that virus infections and other infections can be treated is that when somebody recovers from an infection, if they have a good immune response to it they will develop antibodies and then these antibodies can be given to people who have an infection at that time to try to provide additional immunity and get rid of the infection. And so this was discussed, this has been used in other infections, for example like SARS, it has been used with the Ebola situation to an extent and it has been
discussed that this is a possible way of treating people with MERS infection. So I think that there are many people who are aware of it and looking at how this can be done. It’s not a widespread treatment right now but it’s certainly one that is under discussion.

CL Thank you, and one more?

UM We remember that in the early days the MERS virus appeared, in a certain Netherlands institute, I remember it was Erasmus who took a patent for this virus. Is this patent putting any obstacles for the development of a vaccine or other treatment measures? And the second thing is just a clarification about reservoirs; the camel is already confirmed as the only reservoir and people shouldn’t worry about any other animals?

KF Let me start with the easier question first. I think that right now we know that camels can be infected and we consider that camels are a reservoir for this infection. Many other groups of animals such as sheep and goats, a large number of other animals have been tested for MERS infection and other reservoirs have not been found. But I think that researchers in this area are quite open to the possibility that there may be other animal reservoirs that simply have not been identified right now. So I think it’s accurate to say that camels are the only known reservoir of this infection, potentially in the future there will be others but it’s the only one which is known right now.

And then in terms of Erasmus University and patents, I will simply say that I don’t know the details of this activity and I also don’t know whether it has entered into any discussions about making vaccines or medicines. I think the discussions about making vaccines and medicines are probably at a fairly early stage right now but we are not part of those discussions directly.

CL Thank you very much. At this point I see no more questions on the bridge but I do have another one in the room so let’s please go ahead here.

UF [Unclear name] from Asahi Shimbun. To what extent can you say that there is no sustained human to human transmission and what was discussed about this criteria or this definition during the Emergency Committee?

KF I think that right now we can say clearly that we do not see any evidence for sustained transmission going on in communities. Maybe one way to put this is that when we talk about that, a good example where you do have sustained transmission is that when we have epidemics of influenza going through communities, then you see that people in stores, people in houses, people in schools, people everywhere can develop infection and it’s very hard to know who is getting infection from whom. And this is really the kind of pattern that you see when you see sustained community transmission. So right now we simply do not see that. It’s one of the things that we are always looking for but we do not see it now.

CL Thank you. I look around the room; I see no further questions here in Geneva. I also do not see any further questions on the bridge. I thank you all very much for participating in this press conference. Thank you, Dr Fukuda.