



**Transcript of virtual press conference with
Gregory Hartl, spokesperson for pandemic (H1N1) 2009, and
Dr Keiji Fukuda, Special Adviser to the Director-General
on Pandemic Influenza, World Health Organization
5 November 2009**

Gregory Hartl: Welcome to the World Health Organization speaking from Geneva, Switzerland. This is our weekly virtual press briefing. They will now come to you in future at this time, which is one o'clock in the afternoon, Geneva time on Thursdays and this Thursday I have the pleasure of welcoming Dr Keiji Fukuda, the Special Adviser to the Director-General on Pandemic Influenza who will make opening remarks and then we will open this to questions. Dr Fukuda please.

Dr Keiji Fukuda: Thank you, Gregory. Welcome everybody. Thank you for tuning in to this virtual press conference. What I am going to do is what we did in the earlier virtual press conferences held at the beginning of the pandemic which was to give you an update on the situation. Today I will give you a somewhat longer update than normal since it has been quite a while since we have last spoken with you and then as usual will turn it over to questions.

In today's press conference there are two things that I want to broadly cover. One of them is simply where are we? What is the assessment of the pandemic to date and then the second issue is that I would like to talk about vaccines and really focus on some of the key things which are important for you and everybody to know.

If we look at the pandemic right now it is clear that the pandemic virus has become the dominant influenza virus in all countries. In the southern hemisphere we have now seen that activity has tailed off although there may be some pockets of activity in some countries but in the northern hemisphere we clearly are seeing that infections are picking up in a number of different countries and we will go into a little bit more detail. What this means is that we anticipate seeing continued or increased activity during the winter period in the northern hemisphere. This also means that we expect to see continued reports of serious cases coming out of countries and deaths.

Now, one of the basic points is that I want to point out that we are not dealing with seasonal influenza. I think there is a lot of confusion and a lot of comparisons made but this is one of the basic points. There are some features with this pandemic that we are seeing which are similar to seasonal influenza. For example, we are seeing that the pandemic virus is about as transmissible and about as infectious as seasonal influenza viruses is to people. We are seeing that the majority of people who get infected in fact develop a self-limited illness and get better without any special medical interventions. We are also seeing a pattern where the disease activity is higher in the winter. This is what we often see with seasonal influenza

and these are more regular parts of influenza as a general disease but there are also some features which are clearly different.

For example, in the northern hemisphere we saw activity continue at high levels in several different countries during the summer months. This is unusual for influenza. Perhaps most importantly, we are seeing a pattern in which many of the serious illnesses and deaths are concentrated in people younger than 65. Again, this is a very different pattern than we normally see with seasonal influenza.

So let me amplify on this a little bit. We are now about seven months into the pandemic and we have gone through quite an active period during the summer of the northern hemisphere and in the winter of the southern hemisphere. During the past several months we have seen that the virus has rapidly spread to virtually all countries in the world. We have now have laboratory confirmed cases in most countries in the world. We have also seen however that the experiences vary quite widely from country to country, with the experiences being relatively mild in some countries and then quite difficult in other countries. Now on the verge of the winter period in the northern hemisphere, in different parts of the world we are seeing the activity pick up.

So, for example if we look at North America we see that the activity began there quite early, really towards the early part of the fall and has continued to increase and remains at high levels in North America. So, for example in Mexico in the period since September to now, they have seen more pandemic influenza cases than they saw in the preceding months after the pandemic started in April. In the United States they are reporting high levels of influenza-like illness activity which is how it frequently followed at levels higher than in many other previous years.

Now, if we switch our attention to Europe and Central and Western Asia again we see that activity is picking up in that region. I think a good example is the Ukraine. This is a country which has received a lot of attention in the last few days and clearly they are seeing high levels of infection go on in that country. The numbers are being updated by the Ministry and so we continue to work very closely with the government there to try to provide all support which is possible.

In East Asia again we seeing that activity is picking up, a good example is what we are seeing in Mongolia which has reported a number of cases over the past week or so. Again we are working closely with the government there to monitor what is going on. Interestingly, East Asia is one of the parts of the world where seasonal influenza viruses have remained in a reasonably high circulation. These are the H3N2 viruses which have remained in fairly high circulation but as we head into the winter, even in that part of the world the pandemic virus is clearly becoming dominant and so we are seeing it crowd out the H3N2 viruses and these are really falling down in terms of the overall proportion.

Now if we look at other parts of the northern hemisphere, such as the Caribbean, again, we are seeing that cases are being reported from a number of countries such as Cuba and Haiti. Then, if look and move our attention a little more towards Central America and the southern hemisphere, now we begin to see that the activity levels have really gone down as they have moved from the winter period into the southern hemisphere summer period.

Now, let's turn our attention to some of the clinical features which have been seen over the past seven months. Now as I mentioned in the beginning most of the infections result in self limited illness so this means that when people get infected, they may develop fever, body aches, coughs or sore throat but they generally get better without the need for specialised medical attention and they do not have chronic problems afterwards. Now, this fact that most people recover from the illness has led some people to speculate that this is really a very mild situation and really do dismiss the pandemic infection but at WHO we remain quite concerned about the patterns that we are seeing, particularly again, because a sizeable number of people do develop serious complications and death and again we are seeing most of these occur in people who are younger than 65 years - a picture which is different from seasonal influenza. Now, as more studies come in, as more information comes in, the picture continues to evolve about which groups are at most risk for different outcomes and we will follow along. But, I think that the important point here is that we do see that the serious complications are concentrated in younger age groups rather than in the older age groups.

We see these complications occur in people who have chronic underlying medical conditions, we see these occurring in certain groups of people, such as pregnant women but we also see these complications can occur in people who are perfectly healthy and are young.

Based on the current picture, I think that one of things that is prudent to do is not over simplify the disease or the situation. I think what the reality is that we are dealing with two pretty different groups of people when they get infected. One is the group of people whose infection gets better pretty quickly and they don't have a problem but there is another group of people who develop quite serious disease and this can result in death. We are finding that in some countries that the numbers of people who develop serious illnesses can put considerable pressure on intensive care units and require high levels of care. So again this is an important point for people working on health systems to take into account in their planning.

In terms of the virus, so far we see that the viruses being isolated now are generally similar to the viruses which were isolated over the past several months. This is true in places such as the Ukraine, this is true in places such as the more recent outbreaks that we are seeing in the northern hemisphere. Now, because these are influenza viruses and because more people will eventually develop immunity against these viruses, we do expect to see these viruses begin to change over time. But, at least at this time right now, these viruses remain fairly stable in terms of the genetics and in terms of their antigenic properties.

Now, one of the things that we closely monitored is whether we see any antiviral resistance to the drugs currently available in these viruses. As we have discussed in the past, we continue to see sporadic cases or sporadic instances where these viruses may be resistant to oseltamivir which is one of the main drugs which is useful against this infection. However, we see no evidence at all that there is widespread occurrence of antiviral resistance and these remain really quite isolated and infrequent occurrences and so right now, we believe that the antiviral drugs are quite useful against these infections and that these viruses remain sensitive to both oseltamivir and zanamivir.

Now at this point I want to switch from a description of what is going on and move on a little bit to what are some of the things that people can do to protect themselves. This is

really the most basic question when you are facing a new disease situation. The first thing I want to do is point out that there are many things that people can do which do not have anything to do with hospitals, drugs or vaccines. First and most important, is that it is really prudent to keep yourself informed, both for yourself and for your family. This is really critical but we also recognise this is at a time now when there are a lot of different voices talking about pandemic influenza. There is a lot of conflicting information out there and this is really proving confusing to many people so I think one of the important things to point out is that when you are looking for information about pandemic influenza, it is really helpful to rely on sources that you know to be credible. Sources that are informed, sources that are experienced and sources that can really provide you with the best up to date information. I think this is one of the most useful things to do to reduce confusion about what the situation is.

Now the second thing is that there are several things that people can do if they are sick. For example, if you become ill one of the basic things to do is simply to stay at home until you get better. This is both good for you, this is both protective for the people around you and will reduce the chances that you will spread infection to others but it will also make sure that you are getting some attentive care at home. There are things to do when you are around people. One of the basic things to do is something called respiratory etiquette. This means that when you cough it is prudent to cover your mouth; if you can do that using your sleeves that would be very good. If you have to cough into your hands it is important to wash your hands. If you know that your hands have not been washed recently or may have some virus on them, it is prudent to avoid touching your eyes or nose and infecting yourself. These are some of the basic steps that you can take.

Another third basic point is that if you are taking care of somebody who is sick, you should understand that the vast chances are that they are going to get better and they just need some supportive care, and being around providing them with whatever attention is needed. There are certain some things to be on the lookout for. If somebody has a fever which keeps getting higher, which goes past three days or is causing the person a lot of distress, if the person is having trouble breathing, if the person has any trouble staying conscious or awake, these are signs that perhaps the illness is getting worse and that it would be a good thing to contact a health care provider at that point.

The fourth and last point that I want to make is that if you are a person who has an underlying medical condition or you are a pregnant woman and you feel that you are getting sick from pandemic influenza, then it would be prudent again to contact a health provider and seek advice. It may that you should be seen, it may be that you need to be on antiviral drugs but these are steps that you can take to help protect yourself.

Now at this point I want to turn to vaccines and really to help provide some clarity on an area which is of high attention right now. First I want to start off making two basic points. One of them is that WHO, along with other public health authorities believe that these vaccines are very useful against pandemic infection and do support their use. The second point is that these vaccines now have been used in a significant number of countries, vaccination programmes have started in over 20 countries over the past several weeks and, based on this experience in which millions of people have now received vaccines, we in fact see that these vaccines are very safe. The levels of local side-effects - sore arm, redness, swelling in the arm when you get injected - are really very similar to what we see with seasonal influenza vaccines or perhaps lower. In terms of any unusual or unexpected side-

effects, we have no evidence right now that these vaccines lead to such side effects and so basically, what we are seeing right now is that these vaccines are highly safe and have been received by a significant number of people without problems.

One of the most basic questions to ask about vaccines is why are these being promoted? Why are these useful? I think here the answer is relatively straightforward and simple. We are in a situation in which the world is seeing a new infection, this pandemic influenza. This is an infection which clearly can cause death or serious illness in a number of people and again particularly in people who are younger than 65 and particularly in certain groups such as pregnant women. We now have vaccines which are developed specifically against this infectious disease. These vaccines clearly can produce a good protective immune response and in fact one of the best surprises we have found to date, based on the studies done recently, is that one dose of vaccine rather than two is going to be enough for most people to develop a good immune response. This is really somewhat unexpected but very welcome news.

So the third point, as I point out is that we now have good evidence based on many people receiving the vaccines, but have no picture of unusual side effects emerging. Also, the side effects which are expected, such as a painful injection site, or perhaps some swelling at the injection site, these are occurring at rates that are expected and usually seen with seasonal influenza vaccine. So the picture right now looks quite good in terms of the safety.

Now one of the issues being addressed in some countries, where vaccination programmes have started, the vaccine authorities are trying to do this in a step-wise manner and focusing on certain groups first. One of the groups in whom immunization programmes are targeting are healthcare workers for the very fact that these are the people who take care of everybody else who is sick, whether with pandemic influenza, or other diseases such as heart attack, or asthma or whatever. So these vaccination programmes are trying to make sure that health systems continue to be able to do that job.

Secondly, these immunization programmes are also targeting people who are at higher risk than other people for developing serious complications. So I think that if you are in a country in which vaccination programmes are being conducted it would be useful if you take these attempts at approaching vaccination in a step-wise manner into your considerations and really work with your immunization authorities so that these proceed in a way which reduces I think stress and panic at the vaccination places.

Now a final point that I want to make about vaccines is that we are in a situation in which some countries have vaccine available and other countries do not. WHO has been working very closely with both a number of countries as well as with the pharmaceutical industry to free up as much vaccine as possible, to provide vaccine to countries which would not be able to get it in any other way. So right now, based on the pledges provided by 11 countries and by four vaccine manufacturers we anticipate that WHO will be able to receive about 200 million doses of vaccines to go to about 95 countries which are countries which otherwise would not receive vaccine unless this type of assistance were provided. I want to point out that none of this vaccine has arrived yet, we continue to work very closely with the donor countries and the companies to get the vaccine out to the recipient countries as quickly as possible.

Now the last point that I want to brief you on before we open it up to questions, is that in our last virtual press conference which was conducted last week, by Dr Marie-Paule Kieny, we focused on some of the recommendations made by the SAGE group, this is the Strategic Advisory Group of Experts on immunization, and this is a group that WHO relies upon for advice in terms of immunization policy. So I just wanted to again reemphasize some of the points that were made by the SAGE committee which I think are quite important.

The first point, is that SAGE recommended that one dose of vaccine should be adequate for people who are 10 years of age and above, so adolescents who are 10 years of age and above, and adults. So this really reflects the newer information that has become available over the last several weeks, that one dose of vaccine in this age group really should provide a good immunological boost which should be protective for people.

Another recommendation made by SAGE is that for children six months to nine years, that at least one dose of H1N1 vaccine should be used when countries consider this group to be a priority group for their vaccination programs. Now here the considerations are somewhat more complicated and a little bit different than with the older age group. One of them is that we know that there is less immunogenicity data on children who are six months to nine years of age. We also know that overall supplies of H1N1 vaccine are generally limited. So after extensive discussion, what the SAGE considered was that because of these considerations that it would be better to provide one dose of vaccine to as many children as possible rather than provide two doses of vaccine to fewer children. We are mindful that more information will be coming out over the next few to several weeks as some of the studies results come out and it is possible that some of the recommendations would change and would adapt as more information becomes available. So this is some of the basis for this recommendation. So I want to point out that this recommendation does not limit vaccination of children to one dose. It may be that for some specific products, and it may be that for some of the regulatory agencies, they may point out that two doses are better for one product than one dose. In those instances, countries should follow those recommendations.

So this piece of information is a little bit complicated but it is available on the WHO website and you can go there to look for some of the details. With that I will stop the overview and then open it up for questions. Thank you.

Gregory Hartl: Dr Fukuda, thank you very much. Quickly to remind, an audio file of this briefing will be immediately after the briefing is over and later in the day we will have a written transcript posted on the website.

So now over to the first question...and it is from Helen Branswell, Canadian Press.

Helen Branswell, CP: Thank you very much. If I can ask just a couple of questions. Keiji you mention that the virus from the Ukraine don't appear to be different. From a distance it seems like something qualitatively different is happening there. Is it something related to conditions on the ground, like local health care, or might it have something to do with how the virus acts in colder temperatures, which is something the northern hemisphere is really looking out for?

My other question. Norway says it's going to be making oseltamivir available over the counter. Is that a good idea?

Dr Keiji Fukuda: Thank you Helen. Let me clarify on the viruses first. Right now we know that many clinical specimens and viruses have been sent to one of the WHO collaborating centres for further study. We don't know the results of those studies, and it will probably take a couple of days for the full analysis of those viruses to be available. But in the meantime, what we do not have is any evidence of viruses there or anywhere else as showing any big mutations. I raise this point because I have seen in some media reports that there are reports that WHO or other groups are saying that there are mutations and I want to point out that these are rumours and factually, untrue.

In terms what we are seeing in the Ukraine, again I think that we simply have to understand that influenza is an infection which can cause outbreaks in very large numbers of people. I mean the pandemic is an example of the ultimate kind of outbreak in which we see virus spread around the world in countries such as the Ukraine. And we are seeing very large numbers of people but I think that this is the pattern we often expect to see with influenza. I am not sure that we are going to point out to anyone factor as to why some countries have larger outbreaks than others. But it is true that we often see that patterns can be quite different from country to country.

Now in terms of your question about Norway, we have been in close contact with the Norwegian authorities both to find out about the situation in the country, and to discuss whether there is anything that WHO can offer to them. One of the interesting things which the Norwegians are doing is to make antiviral drugs more easily available for a limited period of time. The reasons that they are doing this is that the stress on the primary health care system is quite high, and that in looking at the experience in some of the other countries in making the antiviral more available it really can help facilitate both patients getting to the antiviral drugs more quickly. Also, it can also reduce the pressure being seen in the health care system.

So I think, overall, this is really an innovative and prudent move to try to make sure that the health system remains as unstressed as possible. I think that one of the underlying concerns is whether this should facilitate, or could facilitate the emergence of antiviral drug resistance, but most of the cases of antiviral drug resistance that we are seeing, in the sporadic cases, really have to do with prophylaxis and they do not have to do with treatment. And so this is really to access antiviral drugs to people who are sick. It seems to be quite an innovative move and would not seem to pose a particular danger to the emergence of antiviral resistance.

Gregory Hartl: Thank you Dr Fukuda. Before we take the next question could I remind our listeners that if you would like to ask a question please dial 01 to get into the queue. The next question is from Mr Richard Knox, National Public Radio.

Mr Richard Knox, NPR: Dr Fukuda, could you tell whether WHO and its consultants are trying to estimate when the pandemic flu will peak in specific regions, and if it is possible to do this? What the difficulties might be in estimating or projecting the peak? Secondly, how important is it to do that in terms of planning vaccine allocation.

Dr Keiji Fukuda: Thank you these are good questions. There are a number of different modelling groups around the world which are trying to address some of these kinds of questions. What might the future bring, what is the potential shape of outbreaks and the pandemic in general? These are important exercises because they give us potentially broad

guidance on what we might expect. Overall, the major principle for planning for the next period of time, which is the winter period for the northern hemisphere, is that we have to acknowledge that we are really not going to know what the future will bring. So the main focus of our efforts here is not trying to predict what may occur in the future but what steps are needed to make sure that countries are as prepared as possible to deal with disease levels. So I think that we are looking at the winter period, and so the next several months is the period at which countries are at risk for seeing outbreaks of pandemic influenza.

Then once we get into the late winter period to spring period, we will have to reassess how the patterns are going at that time. These kinds of efforts are helpful in terms of judging what steps are needed and how to allocate resources. But it is very difficult to do on a precise level. Thank you.

Gregory Hartl: The next question is from Michelle Cortes of Bloomberg.

Michelle Cortes, Bloomberg: Thanks so much. I was wondering if you could tell us what the situation is with the production of the vaccines? I'm piggybacking a bit on Richard Knox's question that if we do see peak earlier are we going to be able to get the vaccine that we need out to the people.

Dr Keiji Fukuda: I believe that the disease activity and the ability to more out vaccine are probably two different things. The disease activity is very hard to predict, on a country by country basis, how things are going to go. For example, we have seen relatively fast increasing peaks in some countries coming down. In some countries, for example, the United States, activity levels go up and stay up for quite a long period of time. Regarding access to vaccine, right now we are in a situation where companies out there are producing as much vaccine as quickly as possible. Much of the vaccine has been allocated to different countries on the basis of contracts. Those facts will really effect more how countries are able to get vaccines. This is one of the reasons why WHO is working so hard with donor countries and the vaccine industry to facilitate getting as much vaccine as possible for the countries which otherwise not have vaccine available to them.

Gregory Hartl: The next question is from John Zaracostas of the British Medical Journal.

John Zaracostas, BMJ: I was wondering if you could give us an update on the availability of vaccines going out to countries. Yesterday CDC experts stressed that availability at the end of October in the United States was a fraction of what they had predicted early this year. So how far behind the initial projections are companies in the production cycle of the vaccines? Thank you.

Dr Keiji Fukuda: John I cannot give you detailed information on that. I do not have that information. I noticed that earlier in the overview I mentioned that vaccine has gone out to a number of countries, and vaccination programmes have started in over 20 countries, but I suspect that the availability of vaccine is a company by company issue. It is really the companies and the recipient countries that are best at providing an update on how much vaccine is going out. So it is going out right now, but that is as much as I can say at this point. Thank you.

Gregory Hartl: Next question, Maria Cheng from Associated Press.

Maria Cheng, AP: I have a couple of related questions about populations that may be more susceptible to swine flu. There were reports yesterday about the virus appearing in populations of Venezuelan indigenous groups. I was wondering if there was anything that was clinically important about that virus in terms of has it affected aboriginal groups in perhaps Australia, New Zealand at the peak? If there were special concerns you had about aboriginal groups in North America and also something related to that, I wondered if you had any indication of the impact of the virus so far in Africa, and if you knew any more about people with immunocompromised conditions, if there were things you were seeing, or recommending to officials there on how to protect those people.

Dr Keiji Fukuda: It is clear that there are certain groups of people who are at higher risk of developing serious illness from underlying medical conditions. So for example, as we discussed earlier, and have talked about over the past several months, groups such as pregnant women, because of the pregnancy itself are at higher risk. Also, we see that certain groups of people with different medical conditions, such as chronic lung disease, are also at higher risk of serious complications because of those conditions.

We have also seen that in some countries, that indigenous groups have been more heavily impacted than non-indigenous groups. An example is Australia, which is one of the countries in which you look at the number of people ending up in hospitals, the aboriginal groups are disproportionately represented in people who end up in hospitals from infectious disease related to the pandemic. What is not clear is whether this is due to underlying chronic conditions in those groups, whether it is due to other factors. Here the reasons for this are still not clear. I believe there are a number of groups trying to tease this out, but it is not understood yet.

However, it is clear that in some countries, some of these groups can be more susceptible to ending up in hospital for serious complications. Hopefully we will understand this better.

In terms of Africa, it is fair to say at this point, we have not seen or heard of any unusual reports of severe impact in HIV-infected populations. Again, as we go through the winter period, this is one of the most important questions that we have to keep on top of, in addition to the immunocompromised people, are there other particularly vulnerable people, or groups that we are not aware of. Could different groups become vulnerable as we go into the pandemic because of something about their condition has changed? So that about sums up the situation right now. Thank you.

Gregory Hartl: Next question is from Mr Liu of Xinhua in Geneva.

Mr Liu: Thank you Gregory. Dr Fukuda, can you say something about the situation in China. Do you think the authorities there are facing a challenging situation considering the large population in the country? How do you evaluate the government response so far to the situation there and do you have any specific recommendations?

Dr Keiji Fukuda: Sure, I think that all countries pose different kinds of challenges. I think that when countries are faced by situations such as pandemic influenza there are common issues which all countries have to deal with. For example, how do you get good information out to people quickly and let them know what is going on? How do you make resources available? How do you try to protect your population? So these are common issues faced by all countries. And then I think in countries such as China, where you have a very large

land mass, and you also have a very large population, that these problems can be even more difficult simply because of the size you are dealing with. I think that the Chinese government, like most of the governments that I know of, have been working very hard to address the situation, and so I don't have any other particular comment on how China or any other countries dealing with it. But I do know from first hand experience with the government that they are working very hard to try to ensure that the pandemic is addressed there as well as possible. Thank you.

Gregory Hartl: Dr Fukuda, thank you very much. We will have time for maybe two more questions. Next one is from Martin [...] of **Science magazine**.

Martin [...], Science magazine: Yes, hello, thank you for taking my question. Keiji, you mentioned the problems of H3N2 in Eastern Asia. I understand that a lot of that virus is the first strain which is different from the vaccine for seasonal flu. And I wonder how worrisome that is. If that virus keeps spreading do you worry that we might see a lot of additional disease on top of this pandemic virus?

Dr Keiji Fukuda: Thanks Martin. This is again a very interesting and somewhat difficult question to answer. First, in most countries we are now seeing that the pandemic virus is really by far the vast majority of the viruses being isolated in those countries. It has really been in East Asia where we have seen that H3N2 viruses have been in fairly broad circulation in some of the countries there. But the more recent information suggests that even in those countries that the pandemic virus is now becoming, by far, the majority virus being isolated in recent weeks. However, we do have H3N2 viruses out there and the H3N2 viruses themselves have been changing. Now there are many years in which we have a situation in which the viruses in a vaccine are not exactly matched to the viruses which are circulating, because influenza viruses are always changing themselves and modifying. In those years, you find that you really have to do the kinds of studies to determine what really is the protectiveness of the vaccine against the newly changing strains. So for the current H3N2 viruses we don't have such studies. So I can't tell you right now the degree to which the current seasonal vaccines will protect against the [...] virus. I do think in the broader picture overall, again, we are seeing that the H1N1, the pandemic virus is really the majority virus in many countries. That also is an important consideration in trying to answer how much seasonal vaccine will protect people. So it's a little bit of a complicated situation. Thank you.

Gregory Hartl: Dr Fukuda, thank you very much. We have about five more minutes and will try to get in as many questions as we can in that time, so journalists it depends on you. The next question is from CNN. Go ahead please.

Melissa Gray, CNN: I presume that is for me, Melissa Gray, thank you Dr Fukuda. Quick question: Are there any countries where you are seeing a worrying rise in the number of cases; any particular regions that are of particular concern?

Dr Keiji Fukuda: Thank you Melissa. In the beginning when I was trying to provide an overview of what was going on around the world, I think that it is fair to say that based on that that, there are several regions in the world, North America, Europe, Northern and Central Asia, and also in other parts of Asia, where we are clearly seeing a pandemic influenza activity increase. I think that in some of the locations, such as the United States, Mexico and Canada, we have seen an early increase in activity and it has stayed up fairly

high. And so we hope to see at some point it go down, but we don't see that pattern yet. In other parts of the world, such as different countries in Europe, we are seeing activity pick up more recently, and then in certain countries such as the Ukraine, we are seeing evidence of very high levels of activity. So I think that there is no one single place in the world where we are focused on, because we are seeing that there is increasing activity going on in several different regions of the northern hemisphere. Thank you.

Gregory Hartl: Next Question is from Canadian Broadcasting Corporation - go ahead please.

Derek [...], CBC: It's Derek [...] here in Toronto. Thanks Dr Fukuda. I wonder if you can give me an assessment of just how effective the H1N1 vaccine is. Canadian officials say the adjuvanted vaccine that we are using here in Canada, is somewhere around 90% effective. What is your take on that?

Dr Keiji Fukuda: I think that the studies which are needed to actually measure the protectiveness, see how much illness and complications of pandemic reduces are being done right now. So I would love to see some of this information. But right now I don't have any study results on that effectiveness. So actually hearing these estimates from the Canadian government are actually very helpful and very useful for us. I can't add to that right now. Thank you.

Gregory Hartl: Dr Fukuda, thank you very much. The last question which we will take today after this reminder about the transcript and the audio file, remember on the website www.who.int. The audio file will be up immediately after the end of this briefing, and later in the day there will be a written transcript available also.

So last question is from Gabriella [...]. Go ahead please.

Gabriella [...]: Thank you. Dr Fukuda, you are talking about the pandemic viruses are the majority of the cases, but is it like 90% like in Mexico according to the declarations of the Minister of Health. Is it like this or how much is the majority?

Dr Keiji Fukuda: I think Gabriella that if you look at all people who are coming in with respiratory illness, what percentage of those are coming in with respiratory illness due to pandemic influenza, as opposed to other respiratory infections, varies from country to country. I think it is virtually impossible to give you a single figure for what is being seen in all countries. I can say that based on some of the laboratory data which is being provided, that when we look at the samples being collected from people, and being tested for pandemic influenza, the percentages of those samples that are positive are very high, much higher than we normally see for seasonal influenza. So based on some of the information provided to WHO, we have seen that up to about 70% of the samples being tested can be positive for pandemic influenza. But again I think it is very hard to give you a single figure, so you will see country by country estimates. Thank you...

[brief pause in the recording]

Dr Keiji Fukuda: ...a bit more about this... just to make it a little bit clearer. In countries where surveillance is conducted, if somebody becomes sick then frequently these people will go to a health care provider. Then in a sample of these people, they will have a swab which is taken. Then the swab will get sent to a laboratory. Then if it looks like its

influenza it may yet be sent on to additional laboratories, perhaps a national influenza laboratory, or perhaps one of the WHO collaborating centres. When we look at these samples we will see that some of them are positive for influenza, and that some of them are not. Now when the samples are not positive for influenza, this can be for several different reasons. It may be that the sample was collected or handled under conditions in which the virus does not survive. So it was really a positive sample but for handling reasons, the virus could not be found. It may be that the sample is handled well, but is taken at a time when the person is not infectious, so it may also be a real case but you don't find it. Or it may be that the person has another infection. Frequently we don't identify what the other infection is. Sometimes we do. So there is a variety of different reasons why you may get negative samples. But many of the laboratories around the world do follow this information. They do follow what percentage of specimens coming in is positive. In some countries, such as, in big surveillance systems, such as in the United States, you may frequently see about one-quarter of them to say about 30% of them be positive for influenza in a normal season. But right now in the United States they are seeing that over 40% of them are positive. Then as I mentioned, in some of the other countries, up to about 70% of them are positive. So this is where some of this information comes from. Thank you.

Gregory Hartl: So thank you very much to all of you listening. And thank you to Dr Keiji Fukuda. This has been our virtual press briefing for 5 November, and we will be here next week at the same time. Thank you very much. Good bye.