## Swine Influenza Investigation Update Timothy Uyeki, MD, MPH, MPP April 24, 2009

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Coordinator: Good morning or good afternoon and thank you for standing by.

All participants will be able to listen only until the question and answer portion of today's conference. To ask a question, please press star 1.

Today's conference is being recorded. If you have any objections, please disconnect at this time. I would now like to turn your conference over to Ms. Alycia Downs. Ma'am, you may begin.

Alycia Downs:

Thank you. Good afternoon and welcome to today's COCA Conference Call on the Swine Influenza Investigation. We are very excited to have the subject matter expert, Dr. Tim Uyeki present on this call.

Dr. Uyeki is a medical epidemiologist in the influenza division here at the Centers for Disease Control and Prevention in Atlanta, Georgia. We also have Dr. Mike Bell, who is with the Division of Health Case Quality and Promotion here at CDC and he is an Infection Control Expert who will also be here to answer some of your questions.

We will not be using a PowerPoint presentation for this call and there will be no continuing education credit or contact hours available. I will now turn the call over to Dr. Uyeki. You may begin.

Tim Uyeki:

Thanks. So what I'd like to do is just give you a little bit on the update on the current situation, talk a little bit about some of our guidance and then open it up to questions.

The first point I'd like to make is that this is an evolving situation. We will post a lot of updates on our web pages. And whatever I say today should be thought about as interim. The situation may change by tomorrow and so forth. So again, this is an evolving situation.

So here's the situation. Recently CDC confirmed human infection with a novel Influenza A virus. That is a swine Influenza AH1N1 virus and we have confirmed human infections to date in eight individuals in the US. And those individuals reside in California and Texas. And that includes six people in southern California in the counties of San Diego and Imperial County and also two individuals that live in San Antonio, Texas.

All of these eight individuals from the virological data that we have to date - and again, this is preliminary - we have much more detailed virologic date on some of the earlier cases on the most recent cases. But these cases basically had illness onset going back late - the end of March to as recently about the middle of April.

Basically, the age range of these cases - the age range of cases range from about 7 years to 54 years of age. A number of them are in children but not all does - it does include adults. Of these eight individuals, seven of them were seen as outpatients, one individual was hospitalized. That was an adult woman who had auto immune disease - auto immune Hepatitis and she was immunesuppressed. She was hospitalized but not hospitalized because of lower respiratory tract disease.

Anyways, all eight of these cases have recovered completely. Only one of these individuals to my knowledge was actually receiving specific influenza anti-viral treatment. All eight of these individuals are infected - were infected with the identical - appeared to be the identical virus which is a new Swine Influenza AH1N1 virus.

What is new about this virus, it is unrelated to any swine influenza virus previously identified in North America. Now swine influenza virus infections of humans have occurred sporadically in the US because swine influenza viruses are circulating in poultry in the US, it's a bit of an endemic problem and we do see sporadic human cases.

However, in these eight confirmed cases, none of them had contact with sick or ill pigs. And except for two of the cases who are relate - a father and a daughter - basically all of these cases are epidemiologically unrelated. So they are not related to having any pig contact, pig exposure and in general they are not epidemiologically related except for a father-daughter pair.

Our assessment that there is ongoing human-to-human transmission of this new swine influenza A1HN1 virus. Of note, based on genetic sequencing as well as in vitro testing of this virus, particularly from the first two cases, what we can say is that this virus is resistant to the anti-viral medications at - that are in the (edimantene) class - Amantadine and Ramantadine. But they appear to be susceptible to the neuraminidase inhibitors, (Alphitamivir) and Zanamivir.

Therefore, clearly we do not recommend use of Amantadine or Ramantadine for treatment for prophylaxis for this - of this virus infection. We do recommend treatment with either (Alphitamivir) or Zanamivir. Treatment

should be initiated as soon as possible. And we are recommending standard treatment the same as season influenza. That is, twice a day for five days.

Now there are some - as this is an evolving situation and we do not have data on a lot of cases, we do not know the incubation period for this virus infection. There's probably a range of about one to seven days - maybe more like two to five days but we don't know at this time.

In terms of other things about this situation is I mentioned the cases have been confirmed in southern California and in San Antonio, Texas. We do know that there are reports of respiratory disease influenza-like illness as well as severe respiratory disease requiring hospitalization and fatal cases in Mexico.

This has occurred in central Mexico but other areas of Mexico. This is - CDC has received clinical specimens from Mexico and also the Canadian National Laboratory has also received specimens from Mexico. And both the Canadian lab and CDC have confirmed swine influenza AH1N1 virus infection. And it appears to be the identical virus as have infected these cases in the US in Mexico.

So we don't - we are trying to get much more epidemiological and clinical and neurological data from Mexico and better understand the situation there. But appears that again, the eight cases we've confirmed in the US tend to have had uncomplicated influenza-like illness, that is febrile influenza-like illness. Whereas we're hearing reports in Mexico of severe lower respiratory tract disease, including fatal cases. And there are rumors of illness involving healthcare workers as well.

Let me just talk briefly about some of the clinical signs and symptoms; all we can say about these eight cases we've identified in the US is that they have all

had fever and generally they have had symptoms that are characteristic of swine influenza virus infection of humans. That is, upper respiratory tract illness and influenza-like illness; fever, cough, sore throat, runny nose, headache, (milagia).

But in addition, several of the cases have reported gastrointestinal symptoms such as vomiting and diarrhea. And this is also what has been described with swine influenza virus infections of humans.

So we see - jus to summarize again; eight confirmed cases to date in the US. We would not want clinicians to take the message that this is an only mild illness, given the reports of severe lower respiratory tract disease in Mexico as well as the expectation that as more cases occur in the US, we would expect complications similar to what we experience with seasonal influenza virus infection.

That is, in persons with underlying chronic medical conditions, exacerbation of those conditions as well as secondary invasive bacterial infections, including secondary bacterial pneumonia and so forth.

So that's sort of a quick summary on the clinical side that we've seen today. And from CDC, we have issued some draft guidance - sorry - interim guidance on the web pages of CDC. And we are in the process of posting a number of guidance documents that include guidance on infection control, guidance for anti-viral treatment and chemo prophylaxis, guidance on - for laboratory workers and so forth.

And so I think I'll stop there and just open it up to questions and go from there. So I'm happy to take - I think my colleagues and I are happy to take some questions.

Coordinator:

Thank you. If you would like to ask a question, please press star 1. You will be prompted to record your first and your last name. Please unmute your phone before recording your name. To withdraw your question, press star 2. One moment please. You have some questions - one moment.

Our first question. Your line is open.

Question:

Could you confirm what you do know about Mexico and also confirm whether the media is posting that Canada has issued a healthy advisory for returning travelers is true?

Tim Uyeki:

So what I can say is that CDC has received some clinical specimens from probably suspected cases from Mexico. We were not provided with really any patient information. So we cannot relate those specimens to clinical symptoms or clinical status of those cases.

But what I can tell you is that we have confirmed swine influenza AH1N1 virus infection in a number of the specimens that we received. We did not receive a very high number of specimens. But we - probably in about - as far as I know, we got about 14 and half of those we've - in about half of those we've confirmed the same virus infection. So that's what I can confirm.

And our understanding is that the Canadian lab has also confirmed a number of swine influenza virus infection - same virus - in specimens sent from patients from Mexico.

Coordinator:

Our next question. Your line is open.

Question:

Thank you. I was just wondering if strains in Mexico and in the US are similar or identical? Is there any explanation for the high fatality rate in Mexico as opposed in the US?

Tim Uyeki:

I think I can't - none of us can comment on that until we really have more epidemiological data on the situation on Mexico. We've heard the same information that you have had that there - in some areas there may be quite a number of deaths. But I think we would not really want to be - we - it's impossible for us to comment on that or it would be speculation.

But what I would say is that is quite a concern and that is something, you know, we have to assume that that is something that we will confront in the US.

Let me just say one other thing which I did not say in the call - a little bit earlier in my brief summary is that I want to remind clinicians in the US that we still have seasonal influenza activity in the US. The seasonal influenza - the season is not over and we still have circulating human influenza A and human influenza B virus infections in people in the US.

And so this is a real issue for diagnostics. And what we have - what really is important for clinicians to know is that in order to diagnose this swine influenza virus and infection, you really need to get clinical upper respiratory tract specimens to your state health laboratory for real time PCR testing. They have the CDC primer protocol to detect influenza A and influenza B and subtypes of influenza H1H3.

And what we have seen is that these viruses can be identified as influenza A positive but test negative for human influenza H1 and human influenza H3. They've been then forwarded on to CDC where we've identified these viruses,

swine influenza A viruses. And in particular this - the identical swine influenza AH1N1 virus.

So that is to say that current diagnostics available for seasonal influenza virus detection will not distinguish that a patient could have either seasonal influenza A virus infection or swine influenza virus infection. That would be in other words, using immunal florescence or using a rapid diagnostic test will not be able to tell you whether a patient has this swine influenza virus infection.

And that creates some complications because - for clinical management because there - as I believe most clinicians on this call probably realize, this season - this influenza season in the US as well as world wide - at least in the US - nearly all the influenza AH1N1 viruses that is human influenza AH1N1 viruses circling in the US were resistant to the anti-viral medication (Alphatamivir).

Now what I told you is this swine influenza AH1N1 virus is resistant to Amantadine) and Ramantadine but is sensitive to (Alphatamivir). So this is really - can present a clinical dilemma for management of a patient with influenza A but of unknown - it's unknown whether this is human or swine. And I think we'll be trying to work to help clinicians with some guidance for this.

But I just want to point out that there is still seasonal influenza activity, both influenza type A and type B activity in the US.

I can take the next question.

Coordinator: Thank you. Our next question. Your line is open.

Question:

Hi, good afternoon, this is (Stew Wise) from MedTrust Consulting in New York. I'm a physician. My question to you is concerning the alert levels for the US government and the WHO - many business continuity plans around pandemic are related to those alert levels has been in discussions at the WHO or within US government about changing the alert levels from our current state to a higher state.

Tim Uyeki:

I think it's too early to tell. Those discussions are obviously ongoing. And as this situation evolves that will - that situation in terms of whether or not this is actually a influenza pandemic and weren't an increase in elevation in the current WHO pandemic phase is, I think, you know, will be reevaluated and probably on a daily basis. So you know, those discussions around going with WHO and within the US and I would just say stay tuned.

Question cont'd: Thank you.

Coordinator: Our next question. Your line is open.

Question: (Tim), a couple of questions for you.

Tim Uyeki: Hi, (Fred).

Question cont'd: Do any of these illnesses in the US occur in immunized persons and did you have any data yet on post-immunization (unintelligible) in terms of reactivity against this isolate? That's one - and then two would be tell us about animal surveillance. Is there any evidence for disease and swine poultry, other species, how might the swine - Asian swine lineage change (unintelligible) or do they do swine import into Mexico, for example? And then three would be,

what could you tell us about illness that might be intent for America. Is there evidence of activity elsewhere?

Tim Uyeki:

Thanks, (Fred), for those great questions. And obviously those are questions that we're addressing as well as gazillions of others. We can't necessarily answer those. I'll try to tackle those in different orders. In terms of the global situation, obviously this is something that countries are on alert. We're in discussions with WHO and clearly that is an issue because this situation in Mexico, as you're alluding to, has these implications for countries that are near Mexico.

So we don't have any information on that. It clearly has implications for the US in terms of surveillance for both increases in influenza-type illness as well as for hospital-based surveillance. And those - that is being ramped up, enhanced in the US and active in some states.

I think in some sense we're a little bit fortunate that this is towards the end but not completely the end of the influenza seasons. So as we're - we may be able to detect increases in influenza-like illness that could signal - that could be a way to sort of track the spread of this virus. So I can't comment specifically on Latin America, Central America - we haven't heard anything yet.

In terms of the vaccine, you know, of the eight cases all I can tell you is about the eight cases in the US. One of those individuals was - did receive seasonal influenza vaccination appropriate last fall. This individual did become ill with influenza-like illness - fever, cough, runny nose and so forth. Did have, I guess we would say uncomplicated influenza-like illness. So we have one individual.

The other individual to my knowledge were either not vaccinated or we don't have the information. I think most of them were not vaccinated. In terms of looking at cross reactivity with seasonal influenza vaccine - particularly H1N1 and cross reactivity - those investigations are underway.

Preliminary information suggests that there's not a good match. That this is antigenically distinct. But those investigations are ongoing. And I can also tell you that vaccine development - candidate vaccine development is underway in a number of approaches, both using classical reassortment method as well as reverse genetics approach.

And in addition, I think there's discussions about a live vaccine candidate approach. So vaccine development is underway and I think that's all I can say right now.

Question cont'd: Anything on the animal side that you can tell us.

Tim Uyeki:

Sorry - on the animal side - so yeah, this - we've not heard reports about swine influenza in animals, at least in terms of this virus. But the caution would be a couple of things; one, as I mentioned, swine influenza is a bit endemic in the US. Surveillance is, I would say, not as good as for avian influenza among poultry in the US.

In addition, because this is a new virus and diagnostics in terms of being able to detect this new virus, may not - our important so the diagnostics that some of the veterinary labs are using may not necessarily pick up this virus. So actually CDC is sharing our primers and probes and so forth to make sure that our USDA colleagues can detect this virus.

So I think that is starting to be ramped up. But again, these eight cases had no link to poultry - sorry, to pigs, no link to poultry or other animal exposures. Our sort of assessment is that this is human-to-human ongoing transmission.

Question cont'd: Thank you.

Coordinator:

Our next question. Your line is open.

Question:

Yes, thank you. It's a recurrent recommendation that all specimens that test positive for flu A be submitted for evaluation. Let's say, you know, like in the Northeast or other parts of the country. Thanks.

Tim Uyeki:

Well, I'm not going to speak for your state. But what I would say is that all state health departments have the capacity to do real time RTPCR to detect Influenza AB and Influenza A subtypes H1, H3 and H5. And we would like to see - and I believe state health departments would like to see - specimens routed through the state laboratory.

In these situations where these cases have been picked up in the US, I want to say one important point is that I would say that in some sense, they were picked up accidentally. In other words, they were not people that had - in which the clinician suspected that the patient had swine influenza virus infection.

Rather, they were generally enrolled in some kind of surveillance protocol in which they were sampled as part of that protocol. These were generally outpatients except for one hospitalized individual. And as part of that, the diagnostics were done by RTCPCR which found an Influenza A positive but Influenza AH1, H3, H5 negative - Influenza B negative.

So those specimens were forwarded onto us at CDC as part of the protocol because novel Influenza A virus infection of humans in the US is a nationally notifiable condition as of 2007. And that's how we have picked up sporadic swine influenza virus infections of humans.

So that's - so in some sense, we picked this up accidentally. What we are hoping is that there'll be much more active testing of patients with influenza-like illness as well as with lower respiratory tract disease or people who are suspected to have potentially, you know, symptoms and signs compatible with what we have seen with swine influenza virus infection.

And again, that does include both respiratory and gastrointestinal symptoms. And so we don't want those specimens forwarded directly to CDC but they should be routed through the state health department. And I think that right now what we have seen is that epidemiologically - again, there's no link to pigs, there's no link to really other animals. The link is in what we've seen in confirmed cases is - sorry - we have a mother - sorry - a father/daughter pair. They're obviously linked to each other.

But we've seen no link between other cases. And cases investigations have been done in which contacts of those confirmed cases are being followed and tested. I think that - so we've been using a suspect case definition of sort of ILI - with an epi-link to a confirmed case.

Now what's going to happen is, because of the situation in Mexico and obvious concern about travel to Mexico is that there probably will be sort of a broadening to consider a suspected case to be an individual that has influenzalike illness and who has a history of recent travel to Mexico or is a contact of someone who is ill who had recent travel to Mexico.

And again, we'll be revising this as we go. This is an evolving situation. As we get more information, we'll be posting this. But I just want to also, you know, as - just to reiterate, there's still is seasonal influenza activity in the US.

So the question is, if the clinician has someone who is - who has influenzalike illness of lower - or influenza like illness with absolutely no epidemiological relationship to travel to Mexico or to a person that traveled to Mexico and was sick, the question I think is whether that person should have specimens collected and sent to the state health department for RTPCR.

I think that is something that can be considered. I think definitely patients who are hospitalized with unexplained lower respiratory tract disease or one could say just hospitalized with febrile lower respiratory tract disease, including patients who are diagnosed with bacterial pneumonia because it could be secondary bacterial pneumonia.

I think there should be consideration in testing those patients. And what we've seen is specimens - clinical specimens that would also be good for detection of seasonal influenza viruses - such as nasal pharyngeal or nasal swabs or aspirate specimens or washes would be optimal. I think a throat swab alone is not what I would recommend.

If you're going to collect a throat swab, I think it would be good to also collect a nasal or nasal pharyngeal sway and pull the specimens. So I don't know, that's a long answer to your question.

Question cont;d: No, that's excellent, thank you very much.

Coordinator: Our next question. Your line is open.

Question:

Thank you but my question has already been answered. I was question if the patients who were infected had already been vaccinated prior to their infection. Thank you.

Tim Uyeki:

I think the assumption can be that if someone receives seasonal influenza vaccination, it appears, you know, again, we'll be able to comment as we get more data. But at least at this time, it does not appear that seasonal influenza vaccination would afford protection with this infection.

Whether or not there's some element of protection, some degree, I mean, that is a possibility but we really can't say at this time. But I don't think sort of someone who has received seasonal influenza vaccination this influenza season, should not be considered protected from this virus infection. There could be some but I don't think one should assume there is protection at this time.

Coordinator:

Our next question. Your line is open.

Question:

Hi, are you seeing any cases anywhere outside of the United States and Mexico?

Tim Uyeki:

Not to date. But you know, obviously this is something where surveillance has got to be ramped up.

Question cont'd: Right.

Tim Uyeki:

In all countries to look for this. So, you know, the situation could be different, you know, this weekend or next week. But as of now, we have confirmation

of cases in Mexico and the US. I can't comment about Canada because I've not - I don't have that information.

Question cont'd: Thank you.

Coordinator: Our next question. Your line is open.

Question: Hi, I've - during the presentation; I'm receiving an email from colleagues, an

epidemiologist in Mexico. They're talking about approximately 27 deaths to date, starting on March 22nd and mainly in the central portion of the country. Do you know if the onset of these cases are somehow close to the onset here

in the US or after?

Tim Uyeki: So the onset of the US cases that have been confirmed with swine influenza

AH1N1 virus infection - this new virus - is the end of March going through

mid-April. But you know, more specimens are coming in from different

places of the US and one can only expect that to increase.

Question cont'd: Mexico was March 22nd so it's almost identical, no?

Tim Uyeki: Yes.

Question cont'd: Okay, what's the next step on the investigation with Mexico? There seems to

be a lot of confusion (unintelligible) from daycare to college were closed in

Mexico City, the state of Mexico, surrounding communities.

Tim Uyeki: Yeah - so I can't comment directly what's going on in Mexico. Actually we

have a parallel call going on right now with Mexico and Canada and WHO.

And so my colleagues will probably have more updated information about

that. I can't comment directly on that.

But you know, the Mexican public health authorities are definitely investigating this. We are hoping to be helping them with their investigations shortly. We are definitely assisting them in terms of laboratory testing. As I've mentioned, we've confirmed some of their - this swine influenza virus infection in some of the clinical specimens that have been sent and they are sending more to us.

Coordinator:

Our next question. Your line is open. Please hit your mute button. Sir, your line is open.

Question:

Yes, this is (Unintelligible) Department of Health. One of the questions that came up yesterday on a CDC brief when this was a little bit smaller was states wanting to know how best to formulate our messages out to our communities through health alert messages. Several states wanted to go ahead and do something with that and we are waiting for CDC to see if we can go out with a one voice and then tag on local or state surveillance information to it.

Is there any plans since this is exceedingly complex with regards to treatment and testing regimens are there any plans for CDC health advisory to be at least in the next couple of hours, next couple of days?

Tim Uyeki:

Right, thanks for that question - a good point. So we are going to be releasing a MMWR dispatch today about the current situation. But again, this is evolving and the situation could be quite different, you know, in a few days.

I believe that we are going to release - if we have not already released (unintelligible) on the situation. At least in terms of a lot of guidance. We are posting interim guidance in a number of areas as I mentioned, including

antiviral treatment and chemo prophylaxis. That will be available on the CDC web pages.

Keep in mind that this is all going to be interim guidance and we welcome feedback as we post these documents. Also realize that the situation is evolving and as we get more information, we will be revising these documents. So we hope to post a number of documents in the next 24 to 48 hours. Let me tell you that a lot of people here are working incredibly hard here and this is just the beginning of this event.

But I do agree with coordinated messages as much as possible. And we are really trying hard to keep the states and our public health partners as well as our clinical partners as updated as possible on the current situation. And as was mentioned, we will be doing another one of these calls on Monday and so we'll probably have some new information on Monday.

Coordinator:

Our next information. Your line is open.

Question:

Hello, I was wondering if the sensitivity of rapid testing would be the same for human influenza A as it would be for the swine influenza A?

Tim Uyeki:

So excellent question. The answer is we don't know. This is the kind of information that I think would be - is important and would be obviously very useful for clinicians. But keep in mind that one, the sensitivity of this. So this is an Influenza A virus, so rapid tests that detect influenza A virus antigen in theory should pick up this test. Some of these cases have had rapid testing done.

However, we would not recommend rapid testing for diagnostic purposes for this virus. Again, there are seasonal influenza A viruses circulating among people still in the US. In addition - so a positive could be - could indicate seasonal influenza H1N1 or H3 and 2 virus infection, it could be a false positive or it could indicate the swine virus infection.

So it's an excellent question but we cannot comment on how these rapid tests perform to detect this virus infection in upper respiratory tract clinical specimens. But I would say again, for specific diagnosis of this virus infection, we really want real time PCR to be done preferably at state health laboratories.

Coordinator:

Our next question, your line is open.

Question:

Yes, thank you very much. Living in San Diego, it occurs to me that it is, with any of these eight cases, were they Hispanic background or had any of them traveled to Mexico recently or had contact with relatives that may have traveled to the US?

Tim Uyeki:

Yeah, so some of them are of Hispanic background and some of them are not. And most of them did not have a travel history to Mexico. A few of them had some travel but actually it's really impossible for us to - give the investigations that have been conducted so far, to really track - trace back this.

And again, from what we know that's going on in Mexico, you know, one can only conclude that given the lack of epidemiological links among these cases in Imperial County, San Diego County and San Antonio, Texas, that there is ongoing human-to-human transmission of this virus. And that's about all we can say for now.

Coordinator:

Our next question. Your line is open.

Question:

Thank you very much. I'm calling from Odessa, Texas, which is distinctly closer to Mexico than it is Bexar County, San Antonio. From the animal standpoint, you know, here in Texas, we have over 6 million wild hogs that respect no boundaries.

But our most immediate problem is that we do have fairly large numbers of Mexican nationals presenting to our hospital, we have a helicopter service that picks up from 17 counties, including all those between us and Mexico and we do pick up Mexican nationals with it.

Do you have any guidance for us?

Tim Uyeki: So we will be issuing some guidance on our web pages...

Question cont'd: Okay.

Tim Uyeki: But what I would say is that my understanding is that both Texas and

California and probably other border states have increased surveillance for

influenza-like illness as well as...

Question cont'd: At the border?

Tim Uyeki: I'm sorry?

Question cont'd: You mean, like, increased screening at the border?

Tim Uyeki: No, I mean at hospitals.

Question cont'd: Okay.

Tim Uyeki: And outpatient clinics throughout the state and certainly given that this

appears to be linked to the situation in Mexico and given that border states do

see individuals crossing the border to seek healthcare.

Question cont'd: That is the case here, very often.

Tim Uyeki: I think you should expect that you will see patients - ill patients - infected with

this swine influenza virus.

Question cont'd: Thank you.

Tim Uyeki: And therefore coordination should be done with the Texas State Health

Department Urology Laboratory and the public health side to coordinate how

specimens should be obtained and sent to the state health laboratory for

reverse transcriptase pulmonary chain reaction.

In addition, again, we are issuing infection control guidance and a number of

guidelines - interim guidelines that hopefully will be useful to your facility

and others.

Question cont'd: I'm posting those in our emergency room. We just kind of want to know

what's coming down the pike to us. We figure it will get to us before it gets to

a lot of places - the next closest places from here closest to Mexico is El Paso.

Tim Uyeki: Well let me just say that we posted some interim guidance...

Question cont'd: Right, got those.

Tim Uyeki: Early this week and we are revising that guidance...

Question cont'd: Okay.

Tim Uyeki: And we will be issuing a number of documents. So these documents will

supersede the one that's currently up right now.

Question cont'd: Okay. We'll be watching all weekend and we really do appreciate this very

timely call today. Thank you.

Coordinator: Our next question. Your line is open, sir.

Question: Hi, thank you very much. I guess the big question - which I haven't heard

addressed yet - is where on the epidemic curve are we? If we have eight

confirmed cases in the US and had been discovered very serendipitously, you

know, we probably have had at least hundreds of cases at this point.

So the question is how far does CDC think it has spread and what should other

regions be doing for enhanced surveillance?

Tim Uyeki: So again, what's been suggested -again, this is sort of state by state, you

know, it's a state decision. But certainly along the border states, enhanced

statewide surveillance at healthcare facilities for influenza-like illness as well

as hospitalized cases of lower respiratory - acute respiratory track disease

should, you know, all be enhanced and there should be active surveillance in

collecting specimens from these cases -from these patients because I suspect

that they will start seeing them.

And it raises the question about, what about non-border states, other states in

the US because of travelers from Mexico or travel from people in the southern

US to other parts of the US?

Again, we're going to be issuing guidance on this but I think it's quite likely that other states and non-border states are going to see such swine influenza H1N1 virus cases. I think all states need to be prepared. And in terms of where we are on - in terms of this outbreak or epidemic, if you will, it's hard to say.

But again, we're early in terms of when we look at our national surveillance, okay, looking for influenza-like illness; again, this is towards the end of the influenza season. So we've seen a decline in influenza-like illness cases in influenza activity in the US - but not zero. There clearly is seasonal influenza activity.

We have not picked up sort of a large increase or a recent increase in this kind of activity. So it does suggest that this is somewhat recent although I think all of us would probably agree that the detection of eight cases in date in two different states is probably an underestimate of the cases that have occurred. And with enhanced surveillance, we can expect to detect more cases - both in outpatients as well as hospitalized patients.

So in terms of where Mexico is in the epidemic, I really can't comment until we have more information. But it does sound like there's been a peak in febrile - influenza-like illness in febrile respiratory tract disease in April.

Question cont'd: All right, thank you.

Coordinator: Our next question. Your line is open.

Question: Yes, I want to definitely appreciate the extraordinary efforts that you all have been making. A question on the clinical side of things; you mentioned that the cases in the US had had some increase in vomiting and diarrhea, GI symptoms

in comparison to one expects with seasonal flu. Do you have any information on the other end of illness? Did the duration of this illness appear to be similar to that for seasonal flu?

And then a second question is whether any of the adult patients were on Statin?

And a third question for whether there's any hint - I realize it is very, very early - but are there any hints that some of the severe cases in Mexico may have represented bacterial pneumonia?

Tim Uyeki:

Thank you, excellent questions. I have no information about Statin so I cannot answer that question. In terms of duration of illness, what we're hearing is really duration around four to five to six days roughly. Again, this is a small number of cases and I think one of our - one of many interests is to certain describe the clinical spectrum and really describe the duration of illness and so forth.

What I can tell you anecdotally is that one recent case in a child - seven year old child - who had resolved their fever at Day 8 but had runny nose was PCR positive for this virus. And...

Question cont'd: On Day 8?

Tim Uyeki:

Yeah. In terms of severe cases in bacterial pneumonia, we don't have any information on that in terms of the Mexican cases. But you know, I think if we assume with seasonal influenza and as we've seen in past pandemics although again, we're not calling this a pandemic yet. But with - even with seasonal influenza, we do see invasive secondary bacterial pneumonia. So I think it's something that should be expected.

Alycia Downs:

All right, well we are up for our time for today. And I would really like to thank Dr. Uyeki for providing our listeners with this very timely information. I want to thank our participants for joining us today.

If you were unable to ask your question, please send and email to coca@cdc.gov - coca@cdc.gov and we'll try to get those answered. The recording of this call and the transcript will be posted to the COCA web site hopefully by Monday. That web address is emergency.cdc.gov/coca.

We will also be including information of those updated guidance and information in our COCA update as well as, like Dr. Uyeki said, we will be hosting another call on Monday at 2:00 pm. We will be sending out that information once we receive it and we should be looking for it on our web site and our COCA update at the CDC emergency Twitter feed and our RSS.

So we're really trying to keep the clinician community up to speed on what's going on. And please feel free to email COCA with any questions or comments. Also, for the human swine influenza investigation page, that URL is cdc.gov/flu/swine/investigation.htm#clinics. We will also include that URL on our COCA web site.

So thank you again for participating and I hope everyone has a wonderful weekend.

Tim Uyeki:

Thanks.

Coordinator:

Thank you for your participation. You may disconnect at this time.