



TRANSCRIPT

**U.S. Department of Health and Human Services
Call with Nurses and Nursing Organizations
Containing and Treating Ebola
October 16, 2014
1:30 pm ET**

Coordinator: Welcome and thank you for standing by. At this time participants will be on a listen-only mode until the question and answer portion. At that time to ask a question press star one. Today's conference is also being recorded. If you have any objections please disconnect at this time. And now I'd like to turn the call over to your host today to (Melissa Harvey), ma'am you may begin.

Melissa Harvey: The most current information about how to safely care for a patient with Ebola and it is closed to the media. As the Operator just mentioned this call is being recorded. The recording and transcript will be made available on ASPR's website which is <http://www.phe.gov/>, as well as HRSA's website, which is <http://www.hrsa.gov/ebola>. And we will also be sending the recording and the transcript to our partner nursing associations within 48 hours of this call.

With us on the call today is the highest ranking nurse in the administration. The administrator of the Health Resources and Services Administration, Mary Wakefield, PhD, RN. At this time I'll now turn the call over to Dr. Wakefield for her remarks.

Mary Wakefield: Thanks so much. And to my nurse colleagues on the phone today thank you so much for joining us. I know that each of you is busy. We really appreciate your taking the time to participate in the call today. We know that nurses, of course, are concerned, especially after seeing the news that two of our nurse colleagues are infected with Ebola — after stepping forward to provide quality and compassionate care to the first patient ever to be diagnosed with Ebola inside the United States.

I also know that whether you are a public health nurse and your focus is on your community or you are a clinical nurse and your focus is on individual patients and their families, I know and the administration certainly knows that nurses across the board are dedicated to providing the very best care that they can for the patients for whom they care. And so to help nurses achieve that goal of providing highest quality care while also protecting their own health status we really wanted to reach out today to provide information and to take questions.

And I also want to add that we'll continue to engage with you through your nursing organizations going forward. If you have additional suggestions about how we can communicate with you most effectively certainly please let us know that during the question and answer session. So with those very brief opening remarks, we can continue forward and ensure that you have an opportunity to hear from everyone who is participating on behalf of the administration in this call and also to ensure that you have the opportunity to ask questions, let me turn it over now to Dr. Nicki Lurie.

Nicki Lurie: Great, thank you and hi everybody. Thank you so much for joining the call and thank you Mary as well for your leadership. So I'm probably someone not known to many of you but I'm the assistant secretary for preparedness and response here at HHS. And so it's part of my job to be sure that we are all as informed and as prepared as we can be for what is sometimes the unknown. And what sometimes is a little bit uncertain.

So with all of that in mind you know as soon as we learned about the situation in Dallas with the first nurse being infected we really wanted to get on the call with nursing organizations and frankly the nursing community all over the country and do what we could do to give you the information that you need. We understand that you have lots of questions, we hope to have some answers and I think we'll have more answers for you in the days to come. We recognize that you are the people who are really on the front lines of care. As Mary said, you are the people that provide quality, compassionate care every single day. And from my perspective good preparedness and response rests on the back of strong day to day systems of care and that includes incredibly strong nursing and the nursing profession in this country.

So I'll just start by saying what we don't expect: a widespread outbreak in the U.S. We know that the best way to prevent additional cases or small clusters is to take a lot of action both to address the epidemic in Africa which we are doing and doing everything we can to be sure that the US is prepared as well as it can be. We've heard from lots and lots of you in the past few days and I have to say I'm really grateful for that. So what I want to say is I view this as the beginning of a conversation. I suspect from trying to call in myself that some of your colleagues couldn't get on the line and I'll reiterate that this is being recorded. It will be posted on multiple HHS websites.

But I also don't think it's the last conversation we're going to have. It is a first conversation we're going to have. As we got ready for this call we had an opportunity to talk to a number of nurses in various places in the field and I think we started to hear a number of common concerns. And so we'll start to try to address those today and we'll take it from there. This involves personal protective equipment, triage and patient flow, healthcare worker safety and screening, I think, to name a few.

So at this point I'm going to turn this call over to my colleagues in CDC and ASPR who will address these topics and let you know where you can find the latest information to guide your own preparedness efforts. I do want us to leave time for Q&A and just know that we will be happy to schedule more calls with you as the need arises. So CDC do you want to go ahead introduce yourself?

Abigail Tempe: Sure this is Abigail Tempe from CDC, I'm associate director of communication science for CDC's division that handles healthcare safety and patient safety issues for the agency. And for the Ebola response I've been working with a team of communicators and our job is healthcare worker and section control outreach both domestically and internationally. So thanks for the opportunity to speak with all of you today. I want to give just a couple opening remarks and then I'm going to turn it over to Dr. Cliff McDonald who's going to talk through some updated recommendations that are being released on our website imminently.

So as we mentioned, the events in Dallas we have been looking at several issues in that investigation to really look at some lessons learned. And four key issues that we were really looking at:

One was personal protective equipment, how it was used, how it was implemented, were there areas for improvement on that to ensure that

healthcare workers were safe when caring for patient with Ebola?;

The second is decontamination of healthcare workers as they exit rooms where the patient was isolated;

The third is use of more oversight and particularly use of a buddy system both in putting on personal protective equipment and taking it off; and

The fourth was use of procedures and I think we mentioned in numerous press conferences the differences between care in African healthcare settings versus care in U.S. healthcare settings. And the fact that we have at our fingertips modern medicine but with that it may be that we are doing life saving techniques that could in some cases be maybe invasive and may potentially expose healthcare workers.

So all of those four things we've been looking at very closely. With regards to the personal protective equipment because I know that this is one key issue that people have very much honed in on and we certainly want to make sure that healthcare workers who are caring for patients are safe. We, when we originally released our recommendations, we wrote them to be somewhat flexible. We knew that personal protective equipment across the country and resources in different settings in different healthcare settings may be different. And so what we're doing and what I'd like to have Dr. Cliff McDonald talk through is updated recommendations for personal protective equipment and foreign infection control.

And basically what we're doing with this update is clarifying our recommendations based on some of the lessons learned from Dallas. And now being much more concrete and specific in hopes of better guiding implementation of personal protective equipment and infection control to ensure there's less wiggle room in hopes of you know improving healthcare worker safety.

So over the last 48 hours Dr. McDonald has been working both with the infection control experts in our division but also with CDC's NIOSH is our center that handles occupational safety and also OSHA the occupational safety and health administration to make sure that the updated recommendations are not only appropriate for infection control within a healthcare facility but that they're going to appropriately protect healthcare workers who are attempting to implement them.

And so with that let me turn it over to Dr. Cliff McDonald to talk about these forthcoming recommendations in more detail.

Cliff McDonald: Yes thank you Abigail. I want to begin by just reminding all employers and healthcare personnel workers that personal protective equipment is only one aspect of safe care in patient with Ebola. And sometimes we can over-focus just on personal protective equipment, which can give us a false sense of security of safe care and worker safety. It's critical to focus on the overall infection control of program and strategy and other things that you've heard about before. The importance of prompt screening and triage to identify early the patient because that continues — the unidentified patient with Ebola would continue to be one of our most major threats. We've certainly seen that before with disease outbreaks like SARS and other things.

Also things like limiting the number of people in the room and environmental cleaning. This document is right now and procedures for donning and doffing which is, as you know, putting on and taking off personal protective equipment used by healthcare personnel during management of patients with Ebola virus disease in US hospitals. And I really do like that procedure. That's really what it is. It's down more in the weeds than our previous guidance giving specific examples of different PP combinations and how they should be safely used together and taken off.

Also in this document is the explicit designation of areas — the need for areas to safely put this equipment on and take it off. You can't do this either on the fly nor can you do it without adequate space resources and really controlling the environment that way. Another key thing here that we're emphasizing and I think you already heard about the buddy system term used in hazmat responses. We're calling it a trained observer to monitor the use and safe removal and this will amend itself to checklists, which are forthcoming you know following the procedure. And this is a very forthright recommendation that this is something that is required.

This - the level of protocol and procedure that we want to emphasize here is something you need that kind of observation, a second pair of eyes to assure that we're doing it right. And then the step-by-step removal instructions. These include also disinfecting some of this personal and protective equipment as you're taking it off, especially the gloves. When you get right down to it is you're taking it off and I'll add to that the clear articulation of routine use, routinely using a double glove system. And the double glove system is you know this is not about trying to prevent needle sticks through double gloves, this is about having an extra pair of gloves which would be most contaminated during the patient care, taking those off in this protocol procedure for removal. And by taking those off early than you have under gloves on which have never become contaminated.

All along the way you're doing disinfection, sometimes you can get alcohol based hand rub of these gloved hands as you're taking off this equipment. So I think that hits the highlight. You know it's the key to all infection control recommendations including the use of personal protective equipment is consistent and meticulous implementation. Plus practice and training, that's the other big thing in here. Practice, practice, practice. I think these procedures

— and it's multiple procedures — multiple procedures that account for that there may be variation and different personal protective equipment used that those procedures have to be practiced. And so by putting this out and really being more specific we think here's a target to train for. Here's a target to practice for.

And I mentioned the checklist even here's a target to assess how well we're protecting nurses in our institutions. We've seen ... you know let me just say one more thing and then I'll stop. We're not in any of this saying that there is a new mode of transmission. Everything we are seeing and knowing about is consistent with this being spread through direct contact of the blood and body fluids of infected patients. There is of course the fact that some people don't realize there's a lot of diarrhea and vomiting in these patients. And that is why this level of attention to the personal protective equipment.

There's no change in the core what we're recommending. It's actually really the direction of the actual procedure here.

Abigail Tempe: So Chris, this is Abigail. I think that folks are, because unfortunately this is going up on the web as we're talking right now, which is [CDC.gov/Ebola](https://www.cdc.gov/Ebola/), because people have not been able to see this document could you just very briefly say the actual pieces of personal protective equipment that we'll be recommending in this? Not necessarily walk through the steps because folks can go into the details later but could we at least mention those PPE?

Cliff McDonald: Yes I'll just — this list is not in alphabetical order, otherwise — but it's a single-use fluid resistant or impermeable boot covers that extend at least to the mid-calf. Single use fluid resistant and impermeable gown or a coverall. Single use of course disposable nitrile examination gloves. With one of these pairs of gloves I mentioned the two gloves, double glove in procedural one

higher up so that it is up over the gown or the coverall. And then face and head covering. This is where there's some different routes to do the same thing. Again, routinely we recommend in addition to preventing contact, direct contact, preventing what we call droplet transmission. So we're protecting there with droplet transmission the mucus membranes of the mouth and the face.

So most care can be done using a surgical procedure mask, a face mask we'll just call it and a face shield. But there's also times when, clearly, that you need to move towards the use of respiratory protection, which involves either an N95 respirator use of a positive air pressure respirator, a PAPR, and we have some very clear guidance about this including head covering. If you're using the simple face mask or an N95 you're using a surgical hood along with that so that - and then a face shield over that. So there's basically no exposed skin in that setting in terms of exposed to direct inoculation from the patient.

There may be some, so I mentioned already that you at certain times you need some of this respiratory protection and that's usually when one reason is because you know you're going to be doing an aerosol generating procedure. I won't go into detail on those but another consideration is just there might be a variety of reasons that some facilities and some systems may want to actually go and use a PAPR all the time. It offers greater visibility, maybe greater comfort. Others may prefer the face mask, others maybe an N95 so there's a variety of things that go into that decision including familiarity, availability, I mentioned visibility of the patient being able to actually see your face.

But whether it's a face mask with a surgical hood and face shield or the N95 or the PAPR the front of the face and the head and all skin has a covering over it.

Abigail Tempe: Great so with that Dr. Nicki Lurie we'll turn it back to you to start any questions or any summary comments.

Nicki Lurie: Great well thank you so much. Let me just ask my ASPA colleagues if there is anything else that they want to share before we go to questions?

Greg Margoles: Hi Dr. Lurie this is Greg Margoles, I'm the Director of the Division of Health System Policy and I just wanted to briefly mention some of the resources that we have developed to help healthcare systems and healthcare professionals to be prepared for the possibility of encountering a patient suspected of having Ebola. In particular there are many, many resources that are on the CDC Web site but I'd like to specifically direct the audience here to a suite of checklists that have been developed for a variety of healthcare settings that were developed based on the presumption that all healthcare facilities need to be prepared to be a first receiver of a potential Ebola patient.

These checklists provide specific practical steps that healthcare facilities can take to be prepared to detect a suspicious case, to protect staff and other patients and to respond effectively. So I would encourage everybody on the call to review the CDC Web site and familiarize yourselves with these documents. And also to share them with hospital leadership, nursing leadership and hospital emergency managers as resources that will help healthcare facilities prepare.

I'll also point out that these were developed a couple of weeks ago and we will update them quickly as screening criteria and or recommendations for personal protective equipment change. So with that I'll turn things back over to Dr. Lurie and thank you for everything that you do to protect the health of the nation.

Nicki Lurie: Great, thank you, Greg, I appreciate that so much. So, as Greg was talking, I was thinking number one a number of your nursing organizations have been terrific also about putting a lot of this material on their Web site. And so that's another place that you can access it. And I'm also thinking that this material's terrific for nurse executives, nurse leaders, public health nurses, clinical nurses, everybody in the trenches.

Sometimes there are nurse executives and nurse leaders in an organization, sometimes nurses lead by managing up and so Greg's comments about sharing these with your executive leadership and being sure this stuff is also visible to them and very well known at all levels of the organization is an ask that I would make of you. Doesn't really matter where you are in the organization, you have a really, really vital role to play and in fact we're counting on you.

So with that we wanted to really be sure we had a lot of time for questions and so why don't we turn this now over to a question and answer session for the next half hour. I know that not all of your questions are going to be able to be answered and as I said before we'll either have another call, we'll take them by email; we'll do other kinds of things until we get through all of the issues. So Operator can you open the line for questions?

Coordinator: Yes ma'am thank you. At this time if you would like to ask a question please press star one and record your name. To withdraw your question you may press star two. Once again, at this time to ask a question, please press star one. One moment.

And your first question comes from Anna, your line is open. Anna, please check your mute button your line is open.

Anna: Hello?

Coordinator: Hello, hi go ahead.

Anna: Oh okay, I'm sorry, this is Anna from Georgetown University Hospital. On a previous call, Emory stated that the use of PAPR's and hazmat suits from a process practicality perspective they felt were necessary to prevent the occurrence of any type of exposure. If a given institution has access to the suits and PAPR's would you recommend the use of the suits and PAPR's over the use in Nebraska?

Abigail Tempe: So Dr. Cliff McDonald can answer that question.

Cliff McDonald: Sure.

Abigail Tempe: I think the updated guidance is really kind of providing both what was used in Nebraska and Emory as options, correct?

Cliff McDonald: Yes, yes and I think that we have discussions in there about all the factors that might go into that decision. We do emphasize, though, that the institution, the facility, make a decision and train on that and stay on that.

Abigail Tempe: Yes, back to you Dr. Lurie.

Nicki Lurie: Thank you. So what you train on sounds like is really the best to use within the CDC recommendations. So next question please Operator?

Coordinator: The next question is from (Carla Stevens), your line is open.

Carla Stevens: Hi, I have a question about labor and delivery. This seems to be a very hot topic right now and will there be any extra documents on about the labor and delivery patient?

Nicki Lurie: You know it's a good question and I will turn to my CDC colleagues. What I'm hearing is that you have a sense that there's a need for some, is that right?

Carla Stevens: Correct.

Abigail Tempe: This is Abigail Tempe from CDC, we actually are looking at several different procedures including labor delivery, dialysis, you know events that potentially could occur with a patient who has Ebola. And so we're going to be providing additional guidance on those particular procedure type events as soon as possible.

Carla Stevens: Thank you.

Nicki Lurie: Okay so why don't we go to the next question.

Coordinator: The next question is from - I'm sorry, the next question is from Nicky, your line is open.

Nicky: Yes what is required for the small critical access hospitals? What is the thinking right now regarding response time and our responsibilities for caring for that patient due to our limited resources?

Nicki Lurie: (*unintelligible*) CDC do you want to start with it?

Abigail Tempe: Yes, this is Abigail. I'm happy to jump in. So you know basically the events in Dallas have taught us that a patient with Ebola could potentially show up at

any U.S. healthcare facility. So regardless of the fact of whether a facility is going to manage that patient long-term, they should at least have a plan in place for what they would do as far as triaging the patient and isolating the patient — and potentially, even putting if the patient comes with, for example, several family members, putting the patient in one room and the family members in another room and calling local public health. At that point in time public health can assist as far as you know transferring the patient to a higher level facility as needed but having that initial plan in place is really going to be critical for all U.S. healthcare facilities. And not just hospitals, even outpatient settings as well.

Nicki Lurie: Thank you. We've had a lot of discussion about this issue in calls as well. And I think one of the things that we've discussed was, particularly for critical access hospitals and smaller hospitals, you have also a plan in place every day for where you're going to transfer critically ill patients to. But it's a good time to take a look at that and be sure that you and your referral hospital really have the same understanding at the same time you're doing the things that you need to be doing to protect yourself, your patient and everyone else around. Why don't we go to the next question please?

Coordinator: Yes the next question is from Theresa Robert your line's open.

Theresa Robert: Hi I'm a home care nurse, sometimes a first responder. For nurses that are going into the home are there any resources or anything out there for us to be able to grab?

Nicki Lurie: CDC go ahead.

Abigail Tempe: Yes this is Abigail Tempe from CDC. This is a great question and actually you know much of our initial guidance was really at US hospitals and

emergency rooms for example but we are looking at how we can provide additional resources for outpatient settings, school settings, home, etc. And I think Dr. Joe Purrs wants to elaborate on that.

Joe Purrs: Yes thank you for that question. I — again it's good for us to continue to be mindful of the entire healthcare continuum when we're thinking about Ebola response. And you know just a thought here is that you know when you're working in a household setting you often have a relationship but I realize you know that might not always be the case when you're presenting yourself and offering care in the home. So discussion about travel history could be appropriate in this regard.

A return traveler who's beginning to exhibit symptoms you know home care is not the environment for that. We are working with federal partners and the healthcare community to think about systems and appropriate messaging for return travelers and other potentially exposed individuals.

Abigail Tempe: Dr. Lurie back to you.

Nicki Lurie: Thank you so why don't we go onto the next caller.

Coordinator: The next question is from Susan Wilson, your line is open.

Susan Wilson: My question is similar to the previous one because I'm also from home health system. I was hoping that there might be a checklist on the CDC Web site and I have copied down what you just said and we've already implemented some of those procedures. I'm just wondering in terms of your general thoughts about PPE equipment. We already have PPE kits for all of our staff but we just want to make sure that it's appropriate. We are doing screening ahead of

time but if you walk into a situation what you feel would be appropriate in that setting.

Abigail Tempe: Yes this is Abigail Tempe from CDC. So there's a couple of resources on our website that might actually be helpful for you. The first is actually an algorithm tool that's basically a yes, no decision tree. And it helps a person identify whether a recent traveler may be at risk for Ebola.

The second piece is a checklist and the checklist is for patients being evaluated for Ebola, that's being updated today based on the PPE recommendations. But I think at the very least you know probably the - at least having some sort of protection if you did think that a patient had recently traveled and was experiencing symptoms that was similar to Ebola you know getting on you know whatever PPE you have in hand. And getting on the phone as soon as possible with local public health so that the individual can be transported from the home to an emergency department for evaluation.

Joe Purrs: Yes this is (Joe Purrs) you know along with the checklist that (Greg Margoles) described earlier you know we can help point the attendees on today's call to the two checklists that (Abigail) just described. Again I think you know the thing that every healthcare professional, every healthcare setting in the US does need to be prepared for is that initial assessment, some initial evaluation, you know the basic questions around having a subjective or measured fever, symptoms compatible with Ebola virus disease. And then of course critical as well is the travel history.

Abigail Tempe: I think, this is Abigail, one other thing I just want to mention we're you know we've been very focused talking about personal protective equipment but certainly there's other infection control procedures and even in home health setting doing some initial evaluation at a distance I think would be or by

phone would be helpful. I think we should also point out though that we have in U.S. healthcare facilities managed patients with other viral hermetic fevers in the past.

So, for example, a hospital in Colorado had a patient that actually had Marburg and Marburg is actually a sister virus from Ebola in 2008. And at the time the facility did not know that the individual had Marburg. They followed what was their standard personal protective equipment and infection control procedures and they actually did several very invasive procedures including gallbladder removal, which we would probably never recommend for a patient with Ebola.

But in that particular case there was no healthcare worker exposed and it wasn't until after the fact that the individual was retrospectively identified to have Marburg. So we do know that it is capable — we are capable, with standard infection control and personal protective equipment, you know, able to do this. Dr. Lurie I'll kick it back to you.

Nicki Lurie: Yes, now I think that's just such a great point, both about the Marburg and about that there are some procedures that you can think about doing, you know either at a distance or by the phone, before we go. It's also a good reminder that we're coming up on that time of year when we have lots of seasonal illnesses that present with fever, Influenza being just one of many. And so being sure that everybody is prepared to take that travel history is going to be really, really critical. Let's go to the next caller.

Coordinator: The next person is Sharon Wanson, your line is open.

Sharon Wanson: Hi thank you so much for having this call. I am the president of the American Morphology Nurses Association and I did hear you mention that you would be

establishing guidelines regarding dialysis. I'm wondering now if you might have a time frame as to when that might be available?

Abigail Tempe: This is Abigail Tempe from CDC so great question. We actually have been working with Emory and the manufactures as well to talk through the issue of dialysis and how to potentially do it safely. And certainly Emory has some experience that they talked about on our call last week about how they were able to manage it safely in their facility.

I think you know we're working to pull that guidance together and hope to have it soon but it certainly is something that we want facilities to be prepared for because you know it may be a procedure that facilities are looking at doing in treating patients long term.

Sharon Wanson: Okay thank you.

Nicki Lurie: I think these questions are really terrific so keep them coming. Who's next?

Coordinator: The next question is Elizabeth Cabbage, your line is open.

Elizabeth Cabbage: Hi, similar to the home care situation — public health nurses who would be responsible for doing symptom monitoring. Could you comment on your level of personal protective equipment?

Cliff McDonald: Yes so I think the key is, you know what I discussed with you, this is Cliff McDonald again, that this guidance I just described to you was for hospitals and that is one focus. There's the level of care that's commonly provided in hospitals. There continues to be no need for personal protective equipment if you do not come in contact or within three feet of a person who ends up having Ebola.

So there is that component — does your screener generally — there's one side of it that you are purposely trying to interact with people who could have Ebola and then there's the other aspect that you are not examining them, you are not cleaning up materials, blood and body fluids and whatnot. So this would be more consistent with the type of personal protective equipment that would use for screeners in airports or something like that, which will involve certain components.

I don't know that we want to go over them specifically here because we have not fully vetted them with this new guidance. But I think in the past it's involved a gown, gloves and a face shield. But not something like boots and you know the same level of protection.

Joe Purr): This is Joe Purrs. I'll jump in. You know again these questions of course are all related and really very practical, you know, very real world questions. We appreciate hearing them.

So in the context of interacting with, identifying a patient who has signs or symptoms that may be compatible with Ebola virus infection and potential exposure namely from recent travel history to the three affected West African countries. You know that then would be a trigger for additional actions in terms of if this is happening let's say in an emergency department environment — you know moving that person to a single room and then having additional assessment of that patient take place with personnel who would be wearing a level of PPE which we are re-examining here. But it would for a patient who's not symptomatic, you can imagine that you know it would not be of the same level perhaps as what Dr. McDonald described for the inpatient care.

Elizabeth Cabbage: I guess the concern that's been presented to us is if there is a patient who is on home quarantine and there are daily symptom checks where the public health nurse is going into the home to do those checks of course when you walk in you would not be aware whether they were symptomatic or not. That's the purpose of the visit.

Cliff McDonald: It's probably, you know we don't want to give the final guidance here, but you know it could well be you know glove, gown, face mask. It depends upon, again, are you going to touch the patient, I guess, are you examining the patient? There's even ways to measure someone's temperature without now coming in direct contact with them. So I think that you know the guidance that I've talked to you about today for hospitals is still to be translated in certain ways to other settings.

Abigail Tempe: And that's what we'll be doing for the next couple of weeks, yes. Dr. Lurie?

Nicki Lurie: Yes thank you, no I think that's a great question and I think you know some of the other discussion too about home care really got into a set of issues about standing at a distance and talking to a patient first. And those are I think good common sense that I think probably all of you do all of the time. And I know more guidance will be forthcoming. We're hearing lots and lots of needs and requests for guidance. I know you all, so many of you, feel like you needed them yesterday or at least today.

Our CDC team is just working 24/7 now trying to pump these out. And also being sure that they're actually say what they want to say so they get checked and double checked and triple checked and that's one of the things that just takes a while but we want to be sure that we can give the best and most accurate guidance that is humanly possible and that's the goal here. So next question.

Coordinator: The next question comes from Esther, your line is open.

Esther: Hi I am wondering; we all know that fatigue increases the likelihood of errors and when you look at the whole process of donning the gowns, etcetera, putting all the equipment on, I would imagine that is both physically and emotionally fatiguing. What have been the recommendations in terms of the shifts? You know are people working 12 hour shifts? Eight hour shifts? Or four hour shifts? Obviously, if you reduce the shift you increase the exposure of the staff, so I'm wondering what the experience has been to date.

Cliff McDonald: I don't think that I'm the right person to answer that question or we are necessarily. I think that would probably be Emory and Nebraska facilities and maybe NIH, but of course there are particular application of these safe practices. I will say though, that there is our final doffing or removal process for removing personal protective equipment is an assessment by, it may not be that trained observer but rather an infection prevention or occupational safety and healthcare coordinator or their designee would meet with the healthcare worker and review the patient care activities performed, identify any concerns about care protocols and record the healthcare workers level of fatigue.

So that, just that awareness as you're coming off shift, finding out whether, and then it changes too you know as you know the intensity of a patient's condition there's an intensity of care being provided changes that. I think that the models both in Emory and Nebraska are relatively few healthcare providers doing all the care for these few patients. That means some cross-training, that's some other things too. That level of shifting responsibilities and roles is not something that in this document we have at this time.

But I think that it is right away starts to open those questions up. I think, because we are becoming more prescriptive or descriptive of what we're talking about for hospital care people, we'll look at it and say wait a minute now, how do I implement that? And we did details here, good details of that, but what is the reasonable number of hours that someone can work? As many you know, it's really one-on-one nursing, that's pretty clear just because of the donning and doffing issue.

You know and I know, just from talking to people at Emory, you know there's physicians who are working there who are cleaning the room, okay. And because they're helping with the nurses because actually one of the things they're doing is the constant cleaning of the environment as the patients having diarrhea and vomiting to keep the viral loads low in the room at all times. And then doing that and so that means obviously cross-training — they have a different lab flow and other flow. You know they're not allowing a food service worker to walk in there, why would you want to go through all that trouble of training somebody up into the PPE and the donning and doffing when you can hand off a tray of food and have someone else deliver it and do those types of things.

Abigail Tempe: This is a great point and I think we're trying to get some lessons learned from Emory and Nebraska as well and that was part of our call last week and I think we've asked them to publish some of those - that information publically. Dr. Purrs?

Joe Purrs: This is Joe Purrs, I would add that the Texas experience also is adding to the knowledge and informing that and I wanted to say again that I think you know CDC and National Institute for Occupational Safety and Health are looking at worker safety in a comprehensive way here and appreciate the comment.

Abigail Tempe: Dr. Lurie?

Nicki Lurie: Great thank you very much. So we have about ten minutes left and I'd like to get in a bunch more questions if we can because I know these spots online are really coveted. So go ahead.

Coordinator: The next question is from Jasmine, your line is open.

Jasmine: Hi. I just have a question about the Nina Pham case and her being now transferred to a hospital in Maryland. Isn't that increasing the risk of exposure to the community and the people around by transferring the patient to another facility?

Abigail Tempe: This is Abigail Tempe from CDC. At this point we have you know quite a bit of experience with safely medically evacuating individuals or moving individuals. And so we've had several medical evacuations from West Africa to Emory and Nebraska at this point and I think that you know we're going to be working with them to ensure that all of those protocols are followed and that it's done safely. Dr. Lurie, back to you.

Nicki Lurie: Yes, now I think that's a great point and I don't know if you're aware but you know this requires a special airplane and a special liner for the airplane and a specially trained crew and team. And so again these are people who have practiced a lot of doing what they're doing and I think we have a lot of confidence in the transport-transfer procedure as well as the ability in the hospital in Maryland to be able to very safely take care of the patient.

Jasmine: Thank you.

Nicki Lurie: Next question, next question.

Coordinator: Next question is from Michelle Connelly, your line's open.

Michelle Connelly: Hi thank you, actually my question was about home health and that's been answered but I now have a second question. Once the healthcare provider has doffed their equipment and it's contained in the waste, what is then the protocol for that caregiver in terms of hand hygiene, showering? We've heard sort of varying things about that and I wonder if you can give some clarity? Thank you.

Cliff McDonald: Yes, so we have, of course, hand hygiene, bare hands, this is after the inner gloves come off, perform hand hygiene. Then there's an inspection of any indication of contamination of the surgical scrubs, I didn't talk about that and maybe we can talk if you'd like. And then showers are recommended for healthcare personnel performing high-risk patient care, e.g., exposed to large quantities of blood, body fluids or excreta and also suggested for personal spending, personnel spending extended periods of time in the Ebola patient room.

So showers are now, you know, brought into the discussion and they're not you know, right now that's not a routine recommendation but, you know, recognizing that there might be people who just go in for a short period of time, they are lower risk. We felt that this does stratify risk when I described to you extended period and more intense care with blood and body fluids.

Abigail Tempe: Dr. Lurie back to you.

Nicki Lurie: Thank you very much. Next question?

Coordinator: Next question is from Rachel Graffal, your line is open.

Rachel Graffal: Hi I have a question actually more than one question but I'll try to limit it. I'm wondering about does the PPE include the use of booties which you know something for your feet because we know that there is a lot of bodily fluids that might be in the room that you could step on. And then is there any guidance also in regards to hand sanitizers but more importantly maybe using the solution of chlorine and water? I saw nothing, in fact I only found something in an Army technical guide and that was it.

Nicki Lurie: I think when you see the new CDC guidance it's going to make those things really clear but why don't you go ahead quickly CDC?

Cliff McDonald: Thank you, thank you yes so yes it's actually called...

Abigail Tempe: Foot covers.

Cliff McDonald: Well yes, we call them boot covers, I think is the term.

Abigail Tempe: Up to mid-calf.

Cliff McDonald: Mid-calf or about, fluid resistant or impermeable boot covers that extend to at least mid-calf and paying attention to slip hazards. The other question, so that's routine. There's also in here the idea of using some washable shoes. Actually, this is again coming from the experience in Emory and Nebraska to part of it is just to have standardized attire underneath all this PPE. Again we're trying to get this focused on control. Control practice, control practice, control situation that's highly practiced and doesn't lead to variation. If someone wore different shoes today, they wore different clothing today and now they can't get the surgical hood off or they couldn't get the gown off because their collar was sticking up through the PPE.

So we talked about you know donning surgical scrubs before you go in and before you don your PPE and using these plastic shoes, probably like Crocs or something like that or clogs. And it's doing that and then cleaning those, actually that's in the doffing process.

Then the other question was about bleach or chlorine solution. You know that's in Africa where you don't even have running water and you have no alcohol-based hand rub and even sometimes that's being used on the hands. And we are recommending it too in those settings because it's available. You can get dry chlorine, swimming pool chlorine and make it up and we have directions on all that. Fortunately we're in a much different situation. We have alcohol-based hand rub, we have commercial wipes with (viricides) in them and whatnot. So that's where we are.

Abigail Tempe: Dr. Lurie back to you.

Nicki Lurie: I'm thinking we have time for if we're quick two more questions so let's go ahead.

Coordinator: Yes ma'am the next question is from Barbara, your line is open.

Barbara Bollins: Hi. Barbara Bollins from the St. Joseph's Regional Medical Centers. So my question is I know they talked about a rapid response team potentially coming and picking up a patient if we had a confirmed. My first question is how long does that potentially take and two, the next question is, is there - are there protocols in place that when the employee leaves the room and they remove their mask outside of the room how do we properly clean that to make sure we're not re-contaminating the equipment or re-contaminating the employee?

Abigail Tempe: Dr. Lurie would you like to start or would you like us to start?

Cliff McDonald: I'll jump in.

Abigail Tempe: Maybe we lost Dr. Lurie. So with regards to the rapid response team the plan would be that we would have a team in place within 24 hours of diagnosis.

Cliff McDonald: And regarding the facial headwear, mask, either components are - well not all components are disposable but all exposed, externally exposed components and what we're describing, are disposable. There are some parts that are not disposable I should clarify that, it's not externally exposed. The head is covered with an outer surface that is disposable. Positive air pressure, respirators, tappers, some designs have components that would be exposed usually in the back of the tubing and battery pack.

And the belt that would be worn over personal protective equipment. That would require de-contamination and there's some manufacturing directions on those and then other guidance we'll probably develop in the future. But face shields are typically disposable, that's what we're describing here and certainly N95 respirators and face masks we're talking about disposables.

Abigail Tempe: Dr. Lurie, back to you.

Maybe we lost her - I think, we'll take another question.

Coordinator: The next question is from Mary, your line is open.

Mary: Yes my question is how is waste from the room of the infected patient to be treated? All of the used gowns and all the used gloves and things that are

contaminated with body fluids. How is that waste to be first treated and then disposed of?

Abigail Tempe: Dr. Ryan Fagen from CDC can answer that.

Ryan Fagen: Yes so there's two parts to that question. One is if it's liquid waste such as the diarrhea, the vomit, you know dialysis fluid something like that, we are saying that it's safe to dispose of those fluids in the toilet into the municipal sewer systems. Regarding the solid waste such as the used PPE or anything else that needs to go in the trash, disposable dishware, etc., that waste is subject to Department of Transportation Category A Medical Waste Disposal regulations. And so, in the instance of Texas, they, the hauler for the hospital, had to obtain a special permit from DOT to take the waste out of the hospital. Requires special packaging requirement and outer disinfection of the bags, etc.

The good news is, though, that was a lot of work to put in place, there's now a template that would be ready for much quicker turn around but that would have to be worked out between the hauler and the Department of Transportation. The only way out of that is if the hospital has a large onsite autoclave, so not a lab autoclave, but more like 70 cubic foot to 60 cubic foot autoclave that's large enough for large waste bags that our autoclaves will bag. Emory actually obtained one of those. Most hospitals won't have that so I think you're probably talking about a special conversation between your waste hauler and DOT.

Abigail Tempe: So I think we're coming up on time. Administrator Wakefield, should we turn it back to you?

Mary Wakefield: Thanks so much and I want to begin by thanking our colleagues from ASPR and also from CDC for participating in the phone call this afternoon. Really appreciate your willingness and ability to respond to some of the questions from nurses from across the country. I want to provide a special shout out to the nurses who participated and especially those who asked questions that I know are on the minds of many of your hundreds and hundreds of colleagues who are also on this call today, thinking about the very same issues, but not having the opportunity to ask a question.

So special thanks for those of you who raised such important questions today, as well. As was mentioned earlier, this call is being recorded and it will be posted and available within 48 hour after the call. So if you have colleagues who were not able to get onto the line or who were even unaware of the call today please direct them to the websites that were mentioned earlier at the top of the call including www.hrsa.gov/ebola/ — H-R-S-A-Dot-G-O-V. And they should be able to find a copy of that recording about 48 hours - within 48 hours from right now.

We will go ahead and continue to stay in contact with nurses as we all recognize in the administration, you play pivotal, just critical roles in ensuring that people have access to high quality healthcare. We want to make sure we're doing everything that we can so that you have as high degree of comfort as possible and that you can continue to provide the very best care that people can get anywhere here in the United States by being well informed and in the process protecting not just your patients and their health but yours as well.

So we'll stay in touch. Thanks so much and appreciate your time today.

Coordinator: Thank you and this does conclude today's conference. All parties may disconnect. END