

**Hospital Preparedness Program Teleconference Transcript
Capability 14: Responder Safety and Health**

**September 9, 2013
11:00 AM – 12:30 PM EDT**

Operator: Good day, ladies and gentlemen. And welcome to the HPP Capability 14: Responder Safety and Health conference call.

At this time, all participants are in a listen only mode. Later, we will conduct a question and answer session and instructions will be given at that time. If anyone should require operator assistance, please press star then zero on your touch-tone telephone. As a reminder, this call may be recorded.

I will now introduce your host for today's conference, Scott Dugas, branch chief for the Hospital Preparedness Program. You may begin.

Scott Dugas: Hello, everyone. And welcome to today's call. This is, of course, the HPP awardee technical assistance call on Capability 14: Responder Safety and Health. And continuing in the spirit of the awardee calls that we have done specific to the capabilities, we are going to walk through, just briefly, a high level on Capability 14. and Mr. Bill Mangieri, the project officer for Region VI is going to talk with you a little more in-depth about the Capability. And then, we will have Ms. Shayne Brannman who is the chief of our health care systems evaluation branch to talk a little bit about the program measures and those indicators that correspond to this work.

Afterwards, we are going to get in to the implementation section of our presentation. We have a number of distinguished speakers from the states and locals who have helped us over the years on these calls with our work group. And we are going to turn to them afterwards, and then we will open up for some questions and answers.

So, of course, Capability 14: Responder Safety and Health speaks to the ability of healthcare organizations to protect their workers from a variety of hazards. There are two primary functions underneath this Capability as we have defined in our guide book.

So with that, I'm going to turn it over to Mr. Mangieri to talk a little more in-depth about the Capability and then he will lead from there. Thank you. Bill?

Bill Mangieri: Thank you, Scott. My name is Bill Mangieri. I'm calling you today from Grand Prairie, Texas, HPP headquarters for Region VI. Today, we are going to be speaking about Capability 14. It's actually my one-year anniversary working with the Hospital Preparedness Program.

I'm very excited. It's been an interesting year. I have learned a lot at this level. And I'm excited to get started on this call. We are going to go over the presentation which is going to take just a few minutes on my part and Shayne's part. We are going to go over a background of the overview of the Capability, the framework and some of the program measures, some of the expectations, the functional – I'm going to speak a little bit about the functional breakdown and some of our planning objectives, and then we are going to get right in to the state and local presentations.

We have some really great experts coming on the call today. In addition, we have our healthcare coalition executive working group who is available to take questions as well.

So the first slide, I want to go over – you should have got a slide deck in our e-mail – is slide three. Everything that we are going to talk about today, you can jump into and look at for yourself in the national guidance for Healthcare System Preparedness which was released back in January of 2012. And Capability 14: Responder Safety and Health is one of the capabilities that we focus on in the Hospital Preparedness Program.

Historically, we have focused our efforts and invested in equipment purchases. So on slide 14 – slide 4 rather – we have two different areas that we like to use to explain the responder safety and health.

First is, the responders safety and health capability describes the ability of healthcare organizations to protect the safety and health of healthcare workers from a variety of hazards during emergencies and disasters.

And secondly, this includes processes to a equip, train or provide other resources needed to ensure healthcare workers at the highest risk for adverse exposure, illness or injury are adequately protected from all hazards during response and recovery operations.

As I said, over the years, I have been involved with this program for a long time as a sub-awardee, but historically, we focused our efforts and investment in equipment purchases. Our grant program has invested millions of dollars in equipment and training to better protect our responders during an event.

We bought protective suits. We got – we have respiratory protection, decontamination systems that safely and effectively decontaminate a patient while offering the best available level of protection for hospital first receivers.

We put federal dollars towards the proper set-up of point of dispensing systems. So our patient care providers can dispense medications and prophylaxis effectively in our communities. We financially supported training decontamination teams at the local hospital to meet potential Chemical, Biological, Radiological, Nuclear and Explosive (CBRNE) threats to our facilities and healthcare systems.

In January 2012, the Assistant Secretary for Preparedness and Response (ASPR) introduced the national guidance for healthcare system preparedness that recommended specific guidance through functions and resource elements. Instead of just funding the stuff that I have been talking about to buy, you know, responders safety and health. We are now investing heavily in the planning and decision-making processes that occur before, during and after an incident.

This shift in emphasis correlates with our expansion from focusing primarily on protecting individual healthcare facilities to supporting preparedness activities of networks of healthcare coalitions. So we have spent a lot of time and effort building these coalitions.

Now, the capability is important. This Capability is important because of recent national and international public health crisis events that have occurred that have impacted responder safety and health. These impacts have been cross-cutting through all levels of government, the private sector and partner industries equally.

This is an important Capability. This is a Capability that I have worked on in-depth for the last several years. And it is one that, when I go through the functions you are going to understand, these recent events that I just spoke about have really highlighted the need to continue to develop plans and purchase equipment to make sure that our responders are safe out there in the field, and they are healthy even after the event.

Let's go to the next slide, slide five. I'm going to turn over to Shayne who is going to talk a little bit about the HPP-PHEP capability alignment as it relates to this capability. Go ahead, Shayne.

Shayne Brannman: Good morning. And thank you, Bill and hello, everyone. Thank you for taking time out of your busy schedules to be with us today and especially on this important topic.

As Bill discussed, obviously, we embrace within HPP and our PHEP colleagues grant alignment and there is a very strong relationship between the HPP Capability 14: Responder Safety and Health and our PHEP colleagues' Capability 8 on medical countermeasures. These two capabilities I think need to just be put into perspective that they both work best when we do have an alignment and synergy between public health, health care coalitions and the healthcare system emergency planners. As they strategize to decide on the placement of caches, equipment, supplies and pharmaceuticals and other aspects that would help support responder safety and health and the maximization of community medical countermeasures.

Next slide. It's important that you understand that we within HPP have a separate indicator under the program measures of continuity of health care operations that specifically addresses and attempts to evaluate the healthcare coalition's ability to address its member's healthcare work force safety needs, through training and resources.

We have an expected outcome from this as well again as being able to document the training, and again the strategies of how to make sure that prior to deployment, during the deployment, and on the recovery phase, after an incident has concluded, how we are addressing and insuring the safety and well-being of our healthcare work force.

Next slide. We have two as part of the HPP strategy for budget period 2 (BP2) not only do we have program indicators, again, the two program indicators for, excuse me, the two program measures for BP2 for HPP specific are medical surge and continuity of operations. And under continuity operations, we do have an indicator on responder safety and health that I just discussed.

We also have the ability and the need to be able to track over time the functionality and expanded abilities of our healthcare coalitions. So we have established what are called healthcare coalition developmental assessment factors that helps healthcare

coalitions and our Awardees assess the development and stage that their healthcare coalition is in so we can track over time, enhance capabilities and functions.

Within those factors, we have two, that specifically address, tangentially at least responder safety and health, and that's the healthcare coalition has an ability to conduct an assessment of each of its members healthcare delivery capacities and capabilities. So obviously for most of you on the phone, you understand that we highly encourage a diverse participation rate within a jurisdictional area of different types of healthcare members, hospitals, public health, EMS, the greater emergency and management community as well as long-term care, home health, those aspects.

And we want to understand what each of those folks bring to the table when they join the healthcare coalition. And in that way, we can ensure that we are leveraging as much as those resources as possible, and in this vein to make sure that we protect our healthcare work force to the extent possible given the incident at-hand.

The second response factor is number 14, and that is that the healthcare coalition demonstrates resource support among its members under a time urgency, uncertainty and logistical constraints of an emergency. And again, I think you can see the intersection point with our PHEP colleagues on medical countermeasures, something is short in supply is that you are leveraging and integrating, and making sure you throw the maximum amount of resources possible during an event. And that would include those measures that would be taken for responder safety and health.

And before I pass it back to Bill, I just want to reiterate as well, we do have an indicator for recovery plan. And again, a big thing that we are starting to see more and more with responder safety and health is we understand that we need to take preparedness efforts to protect our healthcare work force. We need to have response efforts to be able to integrate and leverage to the extent possible the safety of the healthcare work force.

But for some of the incidents that we are involved in, in different areas it is of such significant magnitude that there is a potential mental health and behavioral health count that the responder safety work force has to deal with as well. And so, we just want to make sure that we highlight the importance of that as well, although not clearly depicted within the indicators, we understand the importance, and growing importance as we just went through with Sandy Hook and different aspects like that

where there can be a significant emotional and well-being need to responder safety and health as well as medical countermeasures.

So with that, Bill, I will turn it back to you. And again, thank you everyone for allowing me to participate today.

Bill Mangieri: Thank you, Shayne. I appreciate it.

Let's go to slide eight, Capability 14 functional components. So if we can think back to the 2001 anthrax attacks when a highly refined form of inhalational anthrax was disseminated through our postal delivery system. If you could remember as always with these types of events, there were initial recommendations made regarding, on the treatment of potential victims like the postal workers and other at risk groups.

Some of those recommendations, of course, were modified. I can think of the Cipro to doxy modification comes to mind. Some of these individuals at the two primary postal facilities that were contaminated, some of those employees from the American media building down in Florida, and some of the staffers at the senate office building who may have been exposed to high doses of inhalational anthrax were given an opportunity to receive the anthrax vaccine which was at the time an investigational new drug.

So there was a certain level of uncertainty about the recommended antibiotic protocols, the IND status of the anthrax vaccine and it fuels a certain level of distrust in the public environment. This unfolding of this public health adverse event became a significant, and I would say a very complex risk communication environment.

More recently the H1N1 pandemic, we are still calling it a pandemic, of 2009/2010 highlighted again the enormous complexity of developing, testing and distributing the novel H1N1 vaccine. And the demand for the H1N1 vaccine, if you remember, caused a shortage of vaccine supply. And there were delays in manufacturing the vaccine.

The availability of the vaccine varied state by state. I was working in New York at that time and we had some significant challenges with it because New York was trying to make it mandatory that all healthcare workers take the vaccine. So not only there was a shortage, if you can get it, it went from something like \$9 a dose to several hundred dollars a dose when the distributors heard that we were making – we were trying to make it mandatory.

So communicating the distribution plan for the vaccine was yet another complex task that highlighted again the importance of protecting our responders and our healthcare workers' safety and health. In New York where I was working because they were trying to make it mandatory and the nurses, and nurse's associations were pretty much against it from my memory. I was really worried about, as an emergency manager at a healthcare facility, about potential staff shortages.

If this measure went through and nurses were threatening to walk out and, of course, the executive leadership was prepared to take disciplinary action. So we were worried about shortages in staff because of a potential mandated vaccine distribution.

So you can see here that it's not just about buying stuff and training your people on how to use the stuff. Critical decision-making processes that affect the safety and health of our responders have proven to be key success factors in very complex events.

When we look at function one – assist healthcare organizations with additional pharmaceutical protection for healthcare workers – think about what it would take to assist your healthcare organizations to provide timely distribution of some of those critical protective medications or immediate treatment for healthcare workers and their families during an exposure incident like a CNRNE attack or a hazmat release.

The pandemic flu scenario I just spoke about also fits the dynamics of this functional preparedness strategy. Some of the resource elements that we have included in the function include pharmaceutical needs assessment. Well, during H1N1 that happened prior to the event, it happened during the event, you have to continually do a needs assessment to make sure that you are able to pinpoint the at-risk groups that needed the vaccine first because of the shortage.

Pharmaceutical cache storage, rotation, replacement and distribution, these are issues that are hitting some of our states right now and specifically rotation issues of expired medications. And how to effectively rotate your medications in a way that is cost-effective but still meets the requirement to care for your patients.

Medical countermeasure dispensing, pharmaceutical cache protection and pharmaceutical cache training, when I was a healthcare emergency coordinator at the VA in Tennessee, we had all hazards cache. And I started to do training with my pharmacy folks with my all hazards response team. And I was really taken aback by

the fact that, yes, we had this all hazards cache. It was filled with medications that could protect folks in a medical surge or a very large incident.

But what I was taken aback about was the lack of knowledge from our nurses that this cache even existed and how to request it and activate the cache. So training in pharmaceutical cache is very important. Protection or protecting your pharmaceutical cache is very important as well having that security and our CHEMPACK system, at our hospitals, there is a security system connected to them and we have to make sure we maintain that to, you know, continue that secure environment.

So if I'm looking at function two, on one side, on function one we are looking at the pharmaceutical side and on function two, now we are going to discuss personal protective equipment. So going back, again, to that H1N1 outbreak in the fall of 2009, there was concern, if we remember in some states, of the impending shortage of N95 respirators.

There were several moving parts to this potential disruption in the supply chain. And there was new guidance that came out from the Centers for Disease Control (CDC), and I think the Occupational Safety and Health Administration (OSHA) had some guidance as well, recommending the use of N95 respirators in these expanded healthcare settings where the probability of H1N1 transmission could occur. So this action obviously increased the needs to use N95 respirators in healthcare settings.

National Institute for Occupational Safety and Health (NIOSH) also they had revoked at that time, revoked the certification of 22 N95 respirator products from China that were manufactured and assembled in China, which had affected the quantity of inventory available in the market place.

At my hospital where I was working, the director of general management shared with me evidence of an abnormal supply request of N95 respirators that were not consistent with historical trends. And it turns out that nurse managers who have been hearing about this potential shortage of N95 masks were requesting more masks so than they needed, essentially hoarding them in different areas, storage rooms in case the pandemic got bad and there were no more masks to be found.

Probably a smart move on their part, give them kudos for thinking ahead. But it caused the supply team to think that there was a shortage when, in fact, there were N95 respirators being absorbed but they weren't being used in anticipation of a

nationwide shortage. So these are the things that can happen at all level that can cause a supply shortage.

So we were thinking about function two, provide assistance to healthcare organizations with access to additional personal protective equipment for healthcare workers during a response.

So some of the resource elements are involved. And you really want to think about what types of assistance you can render to your healthcare organizations to ensure that they have adequate levels of PPE during a response. Some of those resource elements are personal protective equipment needs assessment, personal protective equipment caches, personal protective equipment supply and dispensing, and the right PPE for the identified risks in your jurisdiction. That's a big one.

I did some work with a hospital on the west coast that had a railroad system less than a quarter mile from the hospital that brought in commercial chemicals throughout the day, every day, all day, dangerous chemicals. They were at risk for an accident because there had been a few accidents on that rail line in the years prior. And the only thing that they had in their emergency room was N95 respirators.

They had no powered air respirators (PAPRs), they had no Level B respirators so they were not prepared for a potential release of noxious chemicals if that were to would occur. And again, assist with training when new PPE caches are developed, it's very important. So those are the two functions that we are dealing with when we are dealing with Capability 14: Responder Safety and Health.

Let's go on to the next slide, slide number nine. Top five planning objectives for responder safety and health: the who, what, where and how, and why of planning.

- Determine who will need responder health – safety and health – assistance. That's obvious, we do that in our planning all the time.
- Determine what is needed to protect the healthcare work force. What types of medications, what types of personal protective equipment do we need?
- Determine where pharmaceutical and equipment caches will be located, and make sure that folks know where they are.
- Determine how you will assist healthcare organizations in maintaining and distributing cache contents, and that is very important. Again, you will be surprised to find out that folks that need to know about your CHEMPACK in your hospital have actually no idea that CHEMPACK is there.

- Determine, and this is really important, always at – actually in the beginning conceptually but always at the end as well – determine why assistance is needed to protect the safety and health of responders. Because often in our planning efforts, we get frustrated, we get confused, we get overwhelmed because of the enormous amount of information that we have to look through and, as we are putting the plan together it is often easy to forget about the why. And the why for this capability is simply because we need to protect the safety and health of our health care workers. And that has to be paramount in our planning so we have to go back to that. So when we get frustrated, always ask the why. Why are you doing this? Okay, great.

We are going to transition now to our state and local presentations. Questions will be held until the end of the presentation. And if you do have a question, please identify the person you are directing the question to so they know that they are prompted to answer the question.

Okay. The first guest speaker we have today is Ms. Elisabeth Weber. She is the HPP coordinator at the Chicago Department of Public Health. And she is going to talk about pharmaceutical cache management, inventory and tracking. Ms. Weber?

Elisabeth Weber: Hi. Thank you for the opportunity today to speak to you. I'm representing 35 hospitals, 28 which are acute care, seven which are specialty and our local healthcare coalition. We manage that coalition in partnership with our hospital association which is called the Metropolitan Chicago Healthcare Council.

Several years ago, probably about nine, I was on the hospital side for the first five years of this grant and in public health for the last four. We made a decision here in Chicago that we would forward deploy pharmaceuticals to the hospitals. That was done initially through a process where recommendations were made and funding was applied.

Now that we run our program through a coalition model, there are still medications at hospitals and we found something called the pharmaceutical cache recommendations and we have included our recommendations as part of the e-mail that came to you on Friday.

And at the top of page two is how we define how one calculates what kind of medications to use. So for example, we define a number of employees – either the

actual number or a factor, or the insured employees – the average daily census in a hospital – looking at adult and pediatric patients and then a 20 percent surge for planning purposes – and we always say that if there is a pediatric patient we include one caregiver. We have asked hospitals over the last two to three years to make those caches ready for about 96 hours so that we are going with the Joint Commission accreditation recommendations, and those medications are maintained by pharmacists per their accreditation standards. About third of them expire every year, and so we budget for that in the HPP budget, and we have noted that it's gone up about 33 percent and so we have added additional funding for that.

Last year, we asked the pharmacists, did we want to bring some of those medications into a more centralized or warehousing option for them. And they said, absolutely not. They wanted to maintain these and they needed to know what they were. And so, through that process, many years ago and then we constantly do training on something called hospital dispensing and vaccination response team.

So, in essence, for public health and for everyone on the call, these are closed pods. Hospitals are closed pods. And the expectation is that they are going to take care of their patients and their employees, and their families. There has been a challenge with the long-term care, the way that they do their pharmaceuticals and so we have an additional limited cache of antibiotics for long-term care which we store at the local VA facility. And, in addition, of course, through the PHEP program, we have for the rest of the 2.8 million citizens of Chicago.

Speaking about the CHEMPACK storing hospitals, there are 14 plus we have cache at EMS, and all 14 of those hospitals have partner hospitals up to three. So in case we are going to need to break those down, we have a process to do that.

We maintain our pharmaceuticals within an inventory management system. And all the hospitals have access to that inventory management system (IMS). At the present time, we just maintain the grant purchased items within that IMS, but we are piloting with one interested hospital to have that IMS system be there direct admission inventory management tool. And if that works, we will open up the inventory management system for all emergency preparedness items not just the grants funded items.

We do have a defined process as to how people would request additional pharmaceuticals or additional items, and that's through a resource request process.

And that is attached to our healthcare coalition emergency operations plan, that's one of the annexes. Of course, as required, we exercise that and test it a minimum of once a year with the hospitals.

Our recommendations most recently have been informed by something called our medical formulary advisory group. This is rather new group and has recently made recommendations and you will see when you look at the pharmaceutical cache recommendations, they are updated about once a year or when the science changes. So the last recommendation was updated in January. And our formulary advisory group will look at those recommendations again and see if they need to be changed in January.

And lastly, the hospitals use the inventory management system as I said, and that inventory management does have a linkage with the integrated CDC IMS which is called Inventory Management and Tracking System (IMATS). So I believe that's what I wanted to tell you this morning and certainly if there are questions or if you need the Word Document of those pharmaceutical cache recommendations, I'm happy to provide them.

So I will turn it back to Bill.

Bill Mangieri: Thank you, Elisabeth Weber. That was a great presentation. And if you have any questions, we are going to hold them to the end. Just write down Ms. Weber's name and write down your questions so you can remember.

The next individual we are going to introduce, we have actually Linda Scott is going to be taking this particular track on personal protective equipment management and inventory tracking. Ms. Mary Keating fell ill this morning and she cannot be with us. We hope that she has a speedy recovery.

But Linda Scott has stepped in and stepped up to bat to take over this track. Linda, are you on?

Linda Scott: I am. Thank you so much. It's great to be able to provide an overview of Michigan strategies for PPE management and inventory tracking. I'm going to outline a couple of different projects that we have just to give you a sense of where we are at.

Again, some ground work, Michigan has eight regional healthcare coalitions. And we do have dedicated staff to support the healthcare organizations that fall within

each region. Any resources that come in to the state either through ASPR funds or that, like what happened during H1N1, are deployed to the regions for distribution to their healthcare organization.

We certainly recognized that the coalitions have much more detailed knowledge of their agency's needs, resources and capacity. So a couple just general thoughts, since the onset of the hospital preparedness program, any equipment and supplies that have been purchased with any of the preparedness funds belong to that region but also the state, the agency, the region, the state and federal agencies not just the end recipient of that resource.

So we always make it clear that when any resources are deployed that they understand it can be pulled back and mobilized if it's needed for an incident in which they are not impacted. We also work hard as a leadership team to coordinate purchases to get the best pricing and also to try to ensure that we have consistent types of equipment so it's interoperable state wide.

With mutual aid and one healthcare coalition helping another, we want to try to standardize as much as we can. So we did a statewide, for example, with decontamination tents, affordable ventilators and any equipment that is purchased is also exercised during that year to make sure that everything is kept current.

So a couple of specific projects that I will just highlight. One is what we like to call our trailer inventory project. And like, I'm sure many of your programs, our regional healthcare coalitions have established readily deployable mass casualty, alternate care site or communication trailers that stand ready with equipment and supplies to be mobilized when needed.

When this first initiative kind of started slowly, each region pretty much had various methods to track their content including expiration dates. So on January of 2010, each region was asked to refine their trailer inventories for all trailers that housed resources, purchased with the Health Resources and Services Administration (HRSA) or ASPR funds.

Now, this included some of the collaborative projects where perhaps Homeland Security funds may have purchased the trailer but the contents were medical supplies. So that was any trailer that was affiliated with our program.

And what we wanted to make sure of is that all of these inventories had a consistent format that there was a schematic of the inside of the trailer, illustration of the contents, where the contents were located in the trailer and how they are organized. We suggested a color coded or a numbered legend.

And the ultimate goal was to have anyone assisting with this resource that was deployed to another healthcare coalition would have easy access to what we call “smart books” for loading and unloading any of the resources. These smart books are located on the door of each trailer so that as they are deployed, folks have access to that information.

And at the state level, we have a copy of all of these smart books here at our community health emergency coordination center so that if we need to have assistance or there was an EMAC request, we could assist to identify the best resource available. So that’s been a really great project that we have established with some of our trailer resources or mobile resources.

The other piece that we recognized was the need to have a better status of overall inventory for that which had been purchased with ASPR funds. And then also a way to capture that information better when we mobilize them. So we actually have developed on a SharePoint platform an inventory management system.

And so, state and healthcare coalition leadership established a consistent template. And each region submitted an inventory with their midyear report back in December of 2011. And we were able to get a sense of what inventory was there, look at where some gaps were.

And the categories in the platform are set up consistent with National Incident Management System (NIMS) typing so that we have all of our resources identified by the categories of communications, decontamination, evacuation, medical, pharmaceutical, PPE, respiratory and then the ever desirable other category.

Then for each of those items in the category, we have an item description, an estimated time to deploy, the model number, the serial number, the unit of measure – so when we say the amount is one, one each or one case of 25 – we have a unit price, a total acquisition cost, the date acquired, the funding source, the percent of HHS funding because we have some resources that are jointly funded with Homeland

Security funds, who holds the title to that resource, where it is physically located, and then any comments that would be affiliated with that specific item.

Now, this system has been piloted currently in two out of our eight regions and, by the end of BP2, all regions will be – have uploaded this inventory. And that way, the regions themselves will be able to track that inventory and we at the state level in our community health emergency coordination center, which is our ESF-8 entity, will be able to observe all of the different resources in this inventory as well as track that equipment through that deployment.

The next thing I wanted to talk about was some of the challenges that I know many of us have with expiring equipment especially things like cartridges for PAPRs or when there has been new upgrades to PAPRs. And through this inventory management program, we do categorize the expiration date on any of the materials that are in that equipment list.

And also, when the hospitals exercise that equipment throughout the year, they are required to check those expiration dates. And then whenever those do expire, we don't dispose of them necessary but we make sure that we hold those around and then they can be utilized in future exercises.

The final thing I just would like to provide a really quick overview of is our pharmaceutical cache inventory project. Pharmaceuticals are captured into that inventory management system. But the other thing that we have here is something that we call the MEPPP which stands for the Michigan Emergency Preparedness Pharmaceutical Plan. Of course, you know, we all love our acronyms.

And that plan is actually at a state-level where we categorize all the different types of pharmaceutical caches that have been established throughout the state. And have a specific criteria of information like who is the target audience of that cache, what are the contents, how quickly can it be deploy, is it – for which aspect of CBRNE is it.

And we not only have medical and public health cache content into that but we also have some caches that have been established through our state police, for example, the bomb squad or other state agencies, that have established pharmaceutical cache resources. That MEPPP is updated quarterly and is kept in a very secure location at the state emergency operations center as well as our community health emergency coordination center.

So that again just provides, at a state level, an overview of different pharmaceuticals that are out there and then how and what we could mobilize most quickly in an incident. So we have a lot of different categories. We have a lot of different resources. And I will be happy at the end of the call to answer any questions.

Bill Mangieri: Thank you so much, Linda Scott. That was an excellent presentation.

The next speaker we have is Ms. Asha Green, the Senior Associate at the Hospital Preparedness Program for the Louisiana Hospital Association. She is going to be discussing coordination with joint personal protective equipment and pharmaceutical assets.

You have the line, Asha.

Asha Green: Thank you. Good morning. Today, we are going to be – I will give you a brief overview of our PPE and our pharmaceutical caches in the State of Louisiana. And basically I'm going to tell you a little bit about our institutional level surge caches. And so basically I'm going to tell you a little bit about our participating entities and what do they require to maintain those caches? And then how we actually monitor those caches and make sure that the cache is being maintained. And then I will give you a little overview about our regional and our state caches.

Now, in those institutional level caches, they not only are required to have pharmaceutical caches or PPE caches, but also the decontamination equipment. For the decontamination equipment, all of our tier one facilities, which are basically our 24/7 hospitals – emergency department (ED) hospitals that have 24/7 EDs – they must have a decontamination team, of course, and then appropriate equipment for each team member. Each team must consist of at least five to ten persons. We encourage them to have more than a five to ten person team, but the minimum they should have is at least that 5-10-person team.

They need to have an A and a B team and then they should have a roster, a call-down roster of those team members and then the process to activate their team. Now, for the equipment, of course, as many of you already know, of course, they need to have their PAPRs, their disposable suits, the boots, the gloves, and gowns, things of that nature.

Of course, the pharmaceutical cache, again the hospital must have some kind of biological cache and the cache must be able to take care for in-patients, the staff

members and their family – the staff’s family members for a 72-hour period. The cache must be a separate cache and it is usually located in the pharmacy department and must be properly labeled either their emergency or disaster cache. And then they must make sure they are inventorying this cache.

So they must be able to tell us the amount in this cache and the expiration dates of those caches. Now, we do ask them to rotate the cache to their normal stock, but, due to the amount in that cache, it's pretty hard to do. So they have a lot of those medications remaining at the expiration date. So you simply have to dispose of those drugs and ask to replenish those drugs.

And then we also look to make sure they have a mass prophylaxis plan on how they are going to distribute their medication to their employees, their staff and their staff family members. And then, as we look at the PPE caches, our participating entities are encouraged to have about six to eight week cache per CDC guidance.

Now, we also look at the plan for their PPE caches. And, as Bill mentioned earlier, a lot of times, they don’t have these caches listed in their plan. And so we want to make sure that they have a plan, they know exactly where this cache is located in their facilities, the amount of their cache and then exactly when does their cache expire.

Again, they must rotate their cache through their normal stock, but, due to the amount of their cache, they do have a lot of those masks and gloves, and everything remaining. And so they simply have to dispose of those from their cache and then replenish their cache.

Currently we have – our hospitals have – about a six-week cache and then our EMS providers have about a three-week cache. Now, to ensure that they are maintaining these caches, we actually go out and we do site visits. And we actually go out to about 20 percent of our participating entities. We have about 350 entities in Louisiana that are eligible to participate in the program.

And so we go out to those entities whether or not they participated in their last grant cycle or not. So, if they did not participate in the last grant cycle, we will educate them on the program, educate them about the caches and make sure they are aware of these things.

Now, if they did participate, we will actually look at that inventory, look at those caches, make sure they have an inventory tracking sheet, make sure that that equipment is tagged, and they know exactly where the equipment is. We will also look at their plans.

And so, as I mentioned before, for the pharmaceutical cache, they must also have a plan on how they are going to distribute those medications. Of course your PPE cache, a lot of times a lot of the staff in the hospital don't actually know where their cache is or that they have that cache. And we want to make sure they their cache listed somewhere in their plan. And then they have a process or protocol on how they are going to access their cache.

And so on this tracking sheet, we want to make sure they have the disposition of that cache, the condition, the expiration date, the year they acquired that information. And so again, as I mentioned, we look at that as well.

The other piece that we look at when we do go out and do these site visits, the first thing we do is actually look at their NIMS compliance. We have the hospitals or other participating entities indicate whether or not they are in compliance with those eleven elements. And so we want to make sure that they actually in compliance with those elements, and we actually ask them to walk us through each of those eleven elements.

And then we will talk a little bit more about those caches and whether or not they tracking and they have those caches in their plan. We also look at the other components such as your communication plan, your mass fatality, your surge plan, so we also take a look at those plans as well.

Now, some of the findings we have been finding in these site visits: One, there is limited storage. And so a lot of those facilities are electing to have a small cache at the facility and then have an off-site location for the remaining cache. Some regions also have a regional cache, that any of their participating entities can have access to their cache. But we do require that at each institutional level that they also have their own cache.

As far as the pharmacy cache, a lot of our facilities don't actually have pharmacy departments. They don't actually have a pharmacy onsite. And so the challenge is how we maintain the cache or how you can get that cache. And so a lot of those

facilities have a parent company or they have agreement with their local pharmacy supplier to deliver those drugs once it is needed or once the plan has been activated.

Now, the concern is that if you don't pay for the drugs up front and you wait until later after the drug is delivered, you may not actually have access to those drugs. And so to get around that, we are – a lot of our smaller facilities, we want to make sure they partner with one of the larger facilities to ensure that they have access to those caches.

And as far as decontamination, the main concern or challenge is keeping those employees or your staff members engage in decontamination – in the decontamination team. So we have been looking for incentives to keep those staff engaged. With the staff turn-over, you have to do more training on decontamination. And just making sure that they are aware that they are on this decontamination roster or the decontamination team, and that they know what they need to do.

Some of the other challenges would be the expiration of equipment and then the cost of some of these drugs. The cost increase – the cost has increased of these drugs over the last few years – over the last year. Our caches are becoming smaller and smaller because of the cost. Also, the national shortage on some of these drugs, our life saving drugs, they tend to – those life saving drugs tend to be more on the ambulances or in the hospital ED.

And so those drugs are actually on the national shortage list. And so they – those drugs are kind of hard to come by. In any event, we do require that the hospitals and our providers, they rotate these caches to ensure that they are maintaining these caches and that they look into a shelf-life extension program with their vendors to ensure that they can actually replace some of those caches.

Now, as I turn to our regional cache which is also at the coalition level, we not only have the institutional cache but we do also have those regional caches. So some regions have pharmaceutical caches. They also have personal protection equipment caches and then we also have regional decontamination trailers as well.

But one thing I really wanted to share with you is our buffer packs. As you know, we all have CHEMPACK containers in our hospitals or with our EMS providers. And so these –co-located with these CHEMPACK containers are our buffer packs. And

these buffer packs give us time to identify the scope and scale of an incident without having to open their CHEMPACK container.

So the buffer pack contains about enough atropine or pralidoxime to treat about five patients for a 12-hour period. And we have had to use those buffer packs, last year we actually used, I want to say about two buffer packs were used last year so we would not have to go into the CHEMPACK container.

And then of course we have our state pharmaceutical cache. We have a state contract with Morris Dickson to help maintain or rotate our cache. And our state cache is composed by schedule, so maybe a biological schedule, so maybe a chemical schedule, then there is a schedule of those drugs that we may need for our sheltering contracts.

And so as I close this presentation, I just want to mention that we also do training and exercises. We do go out to all of our regional coalitions and we provide training. We just recently had some HAZMAT trainings around the state, each of the coalitions held trainings. They also have individual trainers at each of the hospitals and some of those regions.

We also provide trainers on the grant itself and how important these plans are, not only having a cache but what you should include in those plans. And after we finish those site visits, as I briefly mentioned before, we actually come back and share those findings with the rest of our partners. We want to make sure everybody is on the same playing field, everybody knows exactly what we are looking for when we go into these facilities and that they also have this plan.

We also have plans listed on our Website, sample plans. So if you don't have any plans, they can simply go to our Website and use that as starting point to develop their plan. And these plans maybe their point of dispensing site plans, it may be emergency operations, evacuation, shelter-in-place plans, things of that nature.

And then also, again we have exercises. Just this past year, we had a mass prophylaxis exercise. And so, this pretty much concludes my presentation. So I will turn it back over to Bill.

But I do want to point out one last thing, there is a slide set that we sent out on the listserv, and there is contact information. So if you have any question or concerns, or

anything, feel free to access – send us an e-mail. You should have that in your slide presentation.

I will turn it over to Bill.

Bill Mangieri: Thank you so much, Asha. That was an excellent presentation. So that was Asha Green from the Louisiana Hospital Association.

Next up, we have Ms. Jackie Gatz. She is the Director of Emergency Preparedness for the Missouri Hospital Association. And she is going to be speaking about preparedness for decontamination during chemical biological, radiological, nuclear and explosive response.

Ms. Jackie, are you there?

Jackie Gatz: I am.

Bill Mangieri: You got the floor, go ahead.

Jackie Gatz: Thank you, Bill. As Bill said, my name is Jackie Gatz. I'm at the Missouri Hospital Association and we are a sub-contractor of the ASPR Hospital Preparedness Program. We have seven healthcare coalitions in the state of Missouri and 158 hospitals.

So, again as Bill said, I'm going to talk a little bit about preparedness for decontamination. We really see bioterrorism and decontamination as something that was, from the beginning, it was at the forefront of our efforts when we were looking at hospital preparedness. And it was really an early focus for Missouri as it was for many other states.

As we begin to develop our preparedness system and with the new frameworks that are in place, we have taken a more close look at decontamination preparedness to see if we can put some tools and structures in place to assist our hospitals and healthcare coalitions with a more sustainable approach. So I'm going to talk through a couple of steps we have taken just recently and hopefully that will provide others with framework if they are looking for similar guidance.

So again, it was an early focus for us in Missouri with grant funds in the inception of the program in the early 2000s and one of the things we did in Missouri that was a little different than in other states is we centrally purchased all equipment for

hospitals and we continue to do that. So we had standardized decontamination equipment from the very beginning which has provided, throughout the years, a great incentive and helped as we develop our plans. We are talking about the same equipment and that helps at the state level, it also helps at the local level.

So as we are developing systems of preparedness, present day, we have really recognized that we need to further strengthen hospital-based decontamination programs. Many of the elements exist that we have put in place over the years. But we really need to connect them and two specific tools really have helped us do that:

1. The coalition structure
2. The ASPR guidance

So using both of those kind of different tools we have been able to move forward and make a lot of progress in a short amount of time, further developing decontamination programs.

Again, our hospitals had the equipment, they had some trained staff, they had a policy, but they were kind of all disjointed pieces that didn't fit together. And so whether there was multiple staff working on each of those components or one person trying to keep it all together, it was not a cyclical process and it was wasting a lot of time and resources in trying to maintain capability and capacity at the hospital level.

So last fall, we established a decontamination work group and basically pulled together our strongest hospital programs who currently have taken the tools over the years and built a program that has really worked for them and provided results – and continues to show those routine trainings, there is rotated equipment, they are meeting Joint Commission requirements, they are successfully donning and doffing, and they are responding to events effectively.

So we took those strong hospitals as our best practices if you will, and we brought them together and conducted a Strengths-Weaknesses-Opportunities-Threats (SWOT) analysis of decontamination programs across the state. And what really came out of that is we divided the group into a policies and procedures group and an equipment and training group. And I will tell you the reason we did that is because there are people that love equipment. They love the training, they love the technical details. They do not like policies or requirements or standards, and they kind of are the hands-on group.

The others, who are developing policies and making sure OSHA requirements are met and reading through the first receiver guidance, they think much more at a kind of a strategic and program level. They are not thinking about the technical decontamination piece. So early on, our work group was one group, and we have made much more progress in separating those two groups out and letting them kind of work at their own pace and focus on their priority areas.

So from that group, I want to talk first about what the policies and procedures group has done and then second about the equipment and training. So the policies and procedures group, in spring 2003, outlined the need for a foundations level course which ended up being a one-day course that we offer twice.

The first day was to our large hospitals, 150 beds plus and the second day was for our smaller facilities which ended up mostly being our critical access hospitals and community hospitals with 100 beds or less. And really that brought us all back to basics to ensure that anybody that was at the table to strengthen their decontamination program understood, had a basic understanding of the program components, the program requirements and the regulations.

And it allowed us to just have a conversation about what's required and what the end-result is going to be, and then what are the steps we need to do to get you there. So again that was kind of a more a policy-side discussion.

The next steps for that policy and procedure group, coming off of that spring educational course, is to develop plan templates for staff to utilize across the state. And then at the same time, we are utilizing the Harvard School of Public Health hospital-based decontamination program assessment that's going to accompany those plan templates.

So together between the program assessment and the plan templates we are either going to help the hospital refine their program or we are going to help a hospital potentially create a stronger program from those initial templates.

The coalition has really come into view here on this policy side because, as we conduct our Hazard Vulnerability Assessments this year at a coalition level, we are spending a little bit more time trying to identify specific CBRNE threats for chemical, biological, radiological, nuclear explosive threats that the coalition may face.

And we really think that's going to help us strengthen those templates. We are going to – it's going to allow all of the coalition members to think through what their plans need to include when it comes to decontamination, breach of those areas. We have the Callaway nuclear plant, I believe it's seventh largest in the country, in the center of our state. So it not only impacts the coalition where it resides but it really impacts all coalitions in our state.

We have a very large agricultural community. And we have several very busy highways that cut through the state and connect the national corridor. So we know there are hazards. And we think the coalition has really put us in a place where we can have a conversation about what are on those trucks, you know. What kind of chemicals are being used in our agricultural fields and what kind of threats can healthcare organizations expect coming off of these incidents?

Switching gears now to the equipment and education group, that's really where we have done the most of our work to date and are seeing a lot of progress. We have recognized that access to operational-level decontamination training is difficult. It's expensive. It's time consuming. And we put some kind of practices in place in the past that really haven't played out as successfully as we would have hoped.

So in the past, we have provided state-wide, grant-funded, operations-level training. It's a three-day course. And while they were meant to be train-the-trainers, most of our organizations use these training courses as their primary source for training. So each time we offered it, they were sending more staff and then looking for refresher courses from us as well.

And as many of you know, those kind of pricey, consultant-based educational programs are very expensive. And again, they take up a lot of time – they're three days. They require a lot of equipment. They require space. And it just was not the best use of our grant funds to continue to bring in outside trainers to provide the same routine training.

So what we did this summer, we have established regional training centers in each of our healthcare coalitions. And so, we have identified an existing strong hospital, again they are a member of our work group and they sit on that education-side of our work group. And we have worked with them to formalize a quarterly offering by their hospital where they will open up their program to their coalition members. We

have asked for a minimum of five seats every time they host an operations-level program.

And we have then shared this with our coalition members. So coalitions now have a close by familiar access to operations-level training that can be conducted at the coalition level. Some of our coalitions are discussing potentially moving their training around their region. So it will be that same training center providing the training components but they potentially would move it around to just access different facilities.

So the focus of these operations-level training programs at these training centers is correct PPE use and the specific technical process required to do decontamination. So what we are trying to stress to our hospitals, because we have hospitals with a thousand beds, we also have hospitals with four and five beds. We are trying to stress that it's not dependent on the environment or how established your decontamination training facility is.

Again, some of our hospitals have very nice newly constructed decontamination centers right at their emergency departments. Other hospitals do not have that. We want to show that protecting your staff and cleaning your patient can be done really in any environment. And that is what the – it's not to say the mission of our training centers, but it's in the forefront as they are educating their own hospital staff and their coalition members, that that's really what they need to be focused on.

So our next steps for training are to assess and standardize our curriculum state wide. Everybody is using – the programs we have looked at, we have assessed them – the training centers are using very similar training. It's all the same components. We have had a request from really all of them to standardize it, to say this is the Missouri operations-level training program that our training centers are using.

So we are going to be working to do that and providing PowerPoints to them for that operations-level training, as well as providing an awareness-level PowerPoint because one of the biggest setbacks we find is hospitals are at risk in recognizing risks coming to their door. So if we can create different kinds of awareness training, we can identify and train volunteers, front line staff, nurses, et cetera. So anybody in the hospital really, we want to be able to give them the scalable training they need to recognize threats that are coming towards them.

And then finally, in 2014, we are going to be focusing on CBRNE-specific education. So we will not only train our regional training centers to be better trained in each of the CBRNE-specific hazards, but we will specifically focus on how can we get further training out to all healthcare organizations about, specifically for 2014, our focus is radiologic threats and then the decontamination process.

So in conclusion, I think, just to identify really what we have tried to accomplish, we are trying to use a simple and straight forward approach so that we can utilize the tools that are available to us and the structures, such as our coalitions, that we have in place right now. We continue to try to identify challenges.

I heard from, I think every speaker prior to me today about staff turn-over and the need to retrain. So we believe the system that we have put in place now really will allow us to develop a more sustainable decontamination program moving forward.

So with that, I will turn it back to Bill. That's the conclusion of my presentation at this time.

Bill Mangieri: Thank you so much, Jackie. That was an excellent presentation on preparedness for decontamination for CBRNE response. Again Jackie Gatz, she is the director of Emergency Preparedness at the Missouri Hospital Association.

The next speaker I would like to introduce is Ms. Leah Tolliver, Director of Pharmacy Emergency Preparedness at the Kentucky Pharmacists Association. She will be speaking on state pharmaceutical cache management strategies. Leah?

Leah Tolliver: Good morning, everyone. This is Doctor Leah Tolliver. And I am the Director of Pharmacy Emergency Preparedness for the Kentucky Pharmacists Association. My role is to manage the cache in Kentucky.

And the cache here in Kentucky consists of medications that treat anthrax. But we also have medications in our cache that treat – that are anti-virals, that treat H1N1. One thing that I want to point out in particular is that the Kentucky Public Health Association (KPHA) has a partnership in place with the Kentucky Department for Public Health (KDPH).

So it is a contract between those entities. And I work hand-in-hand with KDPH, primarily the Strategic National Stockpile (SNS) coordinator, to manage the cache in Kentucky. A couple of points that fall under management of this cache is that many

of the states are – their cache is becoming outdated this year and next, primarily the medications used for anthrax. And we were in the same boat of course.

So ours began to become outdated this summer, after a lot of research, I was able to find a pharmaceutical wholesaler that's in the business of purchasing short-dated product. So we were able to do that without having to let the drug expire and then have to pay for the destruction of the drug.

So I am now working with other states to provide that resource for them to be able to do that. For instance, we also have region-wide the caches within Kentucky. as an example, Louisville has their own cache. And their cache doesn't go out of date until next year so, the point being the longer the date the more that you can – the higher the price you can sell that cache for before it goes out of date.

The other key program to the management of our cache is that we are beginning to look into a rotation program which would be a solution to preventing any of the cache from ever going out of date. And what I mean by that is we are currently working with a pharmaceutical wholesaler that – and we are literally right in the midst of looking to see if we can develop this program with this wholesaler. But it looks really good that we are going to be able to put this together.

So what we would do is take our current cache which is now up-to-date. And we now have four-year dating on our current cache. And we are working with this wholesaler to store that cache at their warehouse. And within two years of that cache going out of date, they would distribute it into the retail sector and then replenish it with that same drug at that same cost with four-year dating.

So that's what we hope to develop through our contract in Kentucky. And once we finalize this program and the contracts with this wholesaler then we will roll it out to region four, which consist of Kentucky and seven other states, to be able to discuss this with the SNS coordinators in those states.

So that's primarily what I have to discuss. If anyone has any questions about that?

Bill Mangieri: Thank you, Leah, for that presentation. I want to turn it back over to the operator now to prompt us for any questions out in the field.

Operator: Thank you. Ladies and gentlemen, if you have a question at this time please hit star then one on your touchtone telephone. If your question has been answered or you

wish to remove yourself from the queue, please press the pound key. One moment while we hold for questions.

Looks like we have a question from Esmeralda Valague. Your line is open.

Esmeralda Valague: Hi. I was actually speaking to the first person who spoke and he says he was concerned about how nurses didn't know about the CHEMPACK. But I'm a CHEMPACK administrator and I'm being told that we want people not to know they are there because of the security implementation.

So, how do you balance having the nurses know they are there with the security concerns that they are telling us they don't want us to tell our nurses that they are there? So, if you can speak to that that would be great.

Bill Mangieri: Yes. This is Bill Mangieri. That has been something that has come up in the past when I was with the VA. Also we have the all hazards cache and that seemed to be the protocol. But what we found out is that we needed a certain level of people to know about it, if nobody knows that you have it then how are you going to activate it.

So we came up with a protocol where the emergency manager, the nursing – the director of nursing, of course, executive leadership if we needed to activate the CHEMPACK or an all hazards cache or any other cache that we operated that there would be a process to activate that cache. And that we would at least have to give some level of training to pre-identify a group of people so they can take the cache contents with the pharmacist and deploy it into a pod or to a certain locale where they were going to dispense the medication.

I decided to give that authority to my Emergency Medical Response Team. It was our – sort of like our decontamination team. What I did was instead of focusing just on decontamination, I developed an all hazards response team that was called the Emergency Medical Response Team and they were in-charge of not just decontamination but things like activating our cache and making sure the contents got to the right place. They were also in-charge of, you know, assisting nursing staff if there is a tornado, assisting nursing staff on the wards to move patients, shelter-in-place, some of the patients away from the window. So it was more of a broad-based response strategy instead of just focusing on decontamination.

So I hear you. I think in many, many ways, I think we have misled some people on saying that it's super secret and nobody can know about it. I think there are processes

in place and protocols in place to make sure that we have at least a small group of people that have knowledge of it and know how to activate it as well.

(Ismael): Yes, that's about what we have done as well. There are certain people that have it on a need to know basis, but the average floor nurse won't know unless it's been activated. So thank you. Thank you so much.

Bill Mangieri: You are welcome.

Operator: Thank you. Our next question is from Nathan Rubio. Your line is open.

Nathan Rubio: Yes, good afternoon. I'm sorry, good morning. Nathan Rubio, City of Laredo Health Department, TSAT. I had a question for Jackie. You know, Laredo just got ranked the third largest port in the nation and yet we only meet the minimum qualifications when it comes to funding. Yet our coalition has deemed that decontamination has been our top priority and training gap. And so what I was looking for is more information on these regional training centers. And that's it.

Jackie Gatz: Okay. Well number one, I'm happy to give you a little bit more information right now and then in the interest time if I need to follow up with you offline that's – I'm happy to do so.

At this time, because we established training centers with hospital that were already committing resources to training quarterly – their classroom and their training time – , we haven't had to expend any funds for. What we have identified funding for is we will be, in the future, reimbursing equipment that's used for training which really supports a nice rotation of PPE equipment. We don't anticipate that it's going to be a pricy thing.

I think we would maybe budget \$20,000 to \$25,000 per year for the seven centers to just do a slow rotation of that equipment. So really the system we put in place is fairly low cost compared to the money we were spending on training in the past. So I definitely think it would be a feasible approach for you.

And like I said, I'm happy to follow up and give you some more details.

Nathan Rubio: Thank you very much. That would be great.

Jackie Gatz: Okay.

- Operator: Thank you. Our next question is from Chuck Trudo. Your line is open.
- Chuck Trudo: Yes. This question is also for Jackie. We, here in Northwest Arkansas, we have used the DQE. They have training modules for awareness and operation modes of decontamination that only cost \$25 per person. They have a year that they can do those trainings online and refer back to those. It's a total of about five and a half to six hours if you take notes. It doesn't cover the hands-on portion which we can cover because everyone has different PAPRs and things like that.
- What do you think of those trainings as far as satisfying the requirement?
- Jackie Gatz: I, by no means, am an expert in validating which education programs are best. We did look at DQE and the reason it didn't work for us is because we didn't use DQE for the initial operations-level training and we had hoped to use DQE for the refresher, but it would have been cost prohibitive to do that. I think they would have charged us for that initial operations-level course training that we have really gotten out there to some of our hospitals already. And it was really more a refresher piece we were looking for, how we could have a sustainable approach.
- I've heard very good things about DQE. The reason, like I said the reason that didn't work for us is because we would have basically had to pay for the initial implementation before we could pay for the refresher offering that we were really looking for. Does that help?
- Chuck Trudo: Yes, we liked it because it was hospital-based. We had some other folks put on some things but it was more first responder-based.
- Jackie Gatz: Yes, like I said I have heard good things about that. We didn't go down that path initially. Absolutely we would have just been – we were fearful that we were going to commit more grant funds to an outside training source that may not prove to be successful, as we have in the past, so that's why we decided to internalize it.
- Chuck Trudo: Thank you.
- Operator: Thank you. Again, ladies and gentlemen, if you have a question please press hit star and then one.
- Bill Mangieri: You know, Chuck Trudo. This is Bill Mangieri. Another idea for your operations-level training, what I did a few times was bring in some folks from the noble training

center in Addison, Alabama. They do the three-day CBRNE for medical operations course I did in – I have them come to Tennessee, and I believe I had them up in New York as well.

That is pretty cost-effective, if you can do it right, it can go through your county Emergency Management Agency and have them sponsor it. And then you can invite several people from different hospitals to attend. I think they have a minimum of 20 participants. And, if you can get people out for those three days, that's the kicker, is to get people to release for those three days. It's pretty good training.

Operator: And I'm not showing any other questions in the queue.

Bill Mangieri: Okay. Thank you very much. We have no further questions. What I'm going to do now is hand it back over to Mr. Scott Dugas to do some closing comments. Scott?

Scott Dugas: Thank you, Bill. And thank you, everyone, for another fabulous call. I think we covered the capability in-depth. I think the ground-level explanations of how you all do your work is helpful for all of the awardees and us here at headquarters and in the field as well. So I greatly appreciate everyone's time and their effort in thinking through these functions for us and what it takes to get this capability completed through the grant funds. It's very encouraging for us here and enlightening.

Now, with that, if there is no other questions we can close the call. I just would like to let everyone know that call minutes from the past calls are going to be released very soon. So most likely today by close of business, we are going to have the call summaries from all the calls including the national calls on IBA/Med Surge and Pediatrics, as well as the other three or four capability calls that we have done. So you all can look for that today.

Thank you so much. With that, we will close the call. I will turn it back to Sue.

Operator: All right ladies and gentlemen, thank you for participating in today's conference. This concludes today's program. You may all disconnect. Everyone, have a great day.