

**ALL-HAZARDS MEDICAL PREPAREDNESS
AND RESPONSE**

HEARING

OF THE

SUBCOMMITTEE ON BIOTERRORISM AND PUBLIC
HEALTH PREPAREDNESS

OF THE

COMMITTEE ON HEALTH, EDUCATION,
LABOR, AND PENSIONS

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SECOND SESSION

ON

EXAMINING ALL-HAZARDS MEDICAL PREPAREDNESS AND RESPONSE

APRIL 5, 2006

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ALL-HAZARDS MEDICAL PREPAREDNESS AND RESPONSE

WEDNESDAY, APRIL 5, 2006

U.S. SENATE,
SUBCOMMITTEE ON BIOTERRORISM AND PUBLIC HEALTH
PREPAREDNESS, COMMITTEE ON HEALTH, EDUCATION,
LABOR, AND PENSIONS,
Washington, DC.

The subcommittee met, pursuant to notice, at 10:06 a.m., in Room SD-430, Dirksen Senate Office Building, Hon. Richard Burr, chairman of the subcommittee, presiding.

Present: Senators Burr, Hatch, and Harkin.

OPENING STATEMENT OF SENATOR BURR

Senator BURR. Good morning. I know we are going to be joined periodically by other members of the subcommittee, but I do want to go ahead and get started for the sake of everybody's time.

I want to thank all of our witnesses, both panels, for taking the time to come here to share valuable information as we attempt to reauthorize the bioterrorism and public preparedness bill. I want to acknowledge the incredible support that Senator Enzi and Senator Kennedy have shown to the effort, and I think this is truly bipartisan at every level as we begin to wade through where we are today, and more importantly, where we need to go tomorrow.

This roundtable continues to advance our discussions concerning the reauthorization of the Public Health, Security, and Bioterrorism Preparedness and Response Act of 2002. This legislation moved the country in the right direction and improved our public health and medical preparedness. However, because of the growing diversity of threats, we need to continue the progress to increase the momentum and refine our effort.

An effective medical response to disasters requiring Federal medical assets relies on a preestablished partnership, coordination at Federal, State, and local levels. This partnership must be adaptable enough to respond to all-hazard medical disasters with well-trained, well-equipped, and rapidly deployable assets.

As you all know firsthand, the response to disasters begins at the local level. It is our responsibility at the Federal level to support local and State medical capabilities by providing integrated additional personnel, logistics support, and operational proficiencies to assist in caring for victims of a disaster, particularly in cases where the local resources have been overwhelmed. State and local government responders should know who to call at the Federal Govern-

ment to get help. Right now, it is not clear who is in charge. That is something we definitely plan on addressing in this reauthorization.

Finally, we need to think systematically and collectively about how best to develop surge capacity within the U.S. health care delivery system.

I look forward to hearing from each one of our witnesses today regarding the experiences they have. I know all bring a different perspective to the table and this will not be the last hearing or roundtable that the committee has, but I believe that from a time line standpoint, we have got to begin to firm up some draft legislation and we will do that in a bipartisan fashion with the full and open knowledge of the agencies that are affected in hopes that we can, at the end of the day, find consensus not just in direction, but in details. It is my belief that that is one of the single most important things that this Congress will deal with as we conclude the 109th Congress.

At this time, I would like to introduce our first panel. Our first panelist today is Assistant Secretary for Health at the Department of Health and Human Services, Dr. Agwunobi. As many times as I have said that, you wouldn't think I would get tripped up. Until recently, he was Florida's Secretary of Health and brings invaluable operational experience to an important job at HHS. Doctor, we welcome you today.

In addition, Ms. Ellen Embrey is the Deputy Assistant Secretary of Defense for Force Health Protection and Readiness at the Department of Defense. She leads the Defense department-wide efforts to develop and implement policies, programs, and activities relating to force health protection, national disaster support, and medical readiness. Ellen, welcome.

And last but not least, Dr. Lawrence Deyton is the Chief Public Health and Environmental Hazards Officer at the Veterans Health Administration within the Department of Veterans Affairs. Before accepting his present position, he worked at the National Institute of Allergy and Infectious Disease at NIH and we certainly welcome you, as well.

I will go in the order that I introduced and make available to you any opening statement you would like to make. I would also at this time ask unanimous consent that all members be allowed to submit opening statements for the record and questions to the witnesses and would ask all our panelists today to make themselves available for those written questions, as well. Without objection, so ordered.

Doctor.

STATEMENTS OF JOHN AGWUNOBI, M.D., ASSISTANT SECRETARY FOR HEALTH, U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES; ELLEN EMBREY, DEPUTY ASSISTANT SECRETARY OF DEFENSE FOR FORCE HEALTH PROTECTION AND READINESS, DIRECTOR, DEPLOYMENT HEALTH SUPPORT, U.S. DEPARTMENT OF DEFENSE; AND LAWRENCE DEYTON, M.D., CHIEF PUBLIC HEALTH AND ENVIRONMENTAL HAZARDS OFFICER, U.S. DEPARTMENT OF VETERANS AFFAIRS

Dr. AGWUNOBI. Thank you, Senator. To save time, I will keep my comments very short. I will start by thanking you, sir, for this opportunity, this honor that you present us here today to have this discussion. I should also state that your leadership in this particular area is very clear and very well known and I thank you.

Secretary Michael Leavitt and I have talked often and frequently on this subject and have traveled the Nation in recent days visiting almost every State as we talk about pandemic influenza preparedness. But in each of those settings, we have focused on some of the same things that you have just mentioned, sir, related to the fact that it needs to be an all-hazards approach, that although local and State governments must always be a focus of preparedness for emergencies and all-hazard-type events, that the Federal Government does play a very critical and clear role as we move forward.

I thank you for this opportunity, sir, and look forward to the conversation.

Senator BURR. Ellen.

Ms. EMBREY. Thank you again for the opportunity to be here. I have a written statement, overview statement that was prepared, and I would like to submit that for the record to save time so we can actually have a dialogue in the areas of your interest.

Senator BURR. Great. Thank you.

Dr. Deyton.

Dr. DEYTON. Senator, thank you for asking us here. I will start out just with two personal comments. I thank you for pronouncing my last name correctly. My daddy's family is from Yancy County, North Carolina, and you are the only person who has said it right the first time, and thank you for that, sir.

Senator BURR. It is a shame I messed his name up right from the beginning, isn't it?

[Laughter.]

Dr. DEYTON. Second, sir, the table situation is uncomfortable for those of us on the administration side. We wanted to be at the same table, so we apologize for not sitting together.

I will dispense with my remarks, too, and just look forward to your questions, sir.

Senator BURR. Great. I thank all of you.

Let me just say, we have got a huge task. I referred to this in the staff meeting, that the task before us is somewhat like herding cats because everybody has a specific area of responsibility, and expertise within the Federal Government. I think it is safe to say that as we have gone through this process for now almost a year and a half on different pieces that we feel need to be in place, the one question that always comes up is, who is in charge? Who needs to be designated as the individual, area, agency?

It is the plan of the subcommittee that in the next 60 days, we will go to the Gulf Coast to explore the health infrastructure, and try to talk more in-depth about lessons learned. What worked? What didn't work? Why was the DOD's role in Katrina so important? Had it ever been planned for from the standpoint of local response? If not, why not? If it was crucial in the aftermath of that natural disaster, then how should we, in the future, plan for it? What were the differences that existed between Mississippi and Louisiana? Why could you have two States side by side with what I perceive to be totally different outcomes from a standpoint of the response to this disaster?

I have tried to keep everybody focused on the fact that we would make a true mistake here if our effort was not an all-hazards approach. I think we naturally sometimes get stovepiped within government. We get focused on the threat du jour and our imagination isn't great enough to realize that there is another threat around the corner. We just don't know the name of it and we don't know the impact of it.

I truly believe that it is time that we design a model that not only handles today's threats that we know about, but begins to address a blueprint that can handle tomorrow's threats without requesting that the experts come back to the Hill and we legislatively contort ourselves to try to accommodate what, in fact, is around the corner.

I think it is safe to say that as it relates to avian flu, though none of us know the eventual effects, we certainly know the threat is great enough that we have reexamined our capabilities and one glaring deficiency was that we were unprepared or ill prepared to produce countermeasures to offset the degree of the threat. I believe we have sufficiently, for the short-term, addressed the needs, but only the needs for that one threat.

My hope is, as we reauthorize this piece of legislation, that we will let our imaginations be a little more creative, that we will look across the scope of the world that is affected regardless of the artificial boundaries of agencies, and that at the end of the day, all will agree that as we move the deck chairs, that we are moving them so that the overall response capabilities are, in fact, better. So, I guess we are here today to discuss in more detail which chairs move and where those chairs move and what our capacity is and what our capacity should be.

Dr. Agwunobi, a proposal being discussed which was also included in the White House's report on the response to Hurricane Katrina is the direct command and control of NDMS and all Federal medical response elements to HHS. If this is done, what plans would HHS implement to assure rapid, flexible, and sustainable Federal medical response? I guess I should ask first, do you agree with the report from the White House and—

Dr. AGWUNOBI. Sir, I believe a lot of hard work went into the development of that report. It was very insightful. It reached out to all of the participants in the response to Katrina. It was a very deliberative process, and sir, I do concur with its recommendations.

I know for a fact that the agencies that would be responsible for following through on the NDMS part of those recommendations, DHS and NHHS, are currently in deliberation. We are working

very closely with them as we discuss not only how best to potentially come through on that recommendation, but also to assure that in going through, we don't threaten NDMS's ability to deliver on its mission in upcoming hurricane seasons.

So, I know that a lot of work is ongoing, as we speak, as to trying to figure out the minute details. Should we change the format when it is moved? If it is moved, how best would it be to—in terms of how can we protect its ability to deliver our services this year and in future years?

Senator BURR. Well, as a member of the Senate that represents a State that has a coastline and that has an annual opportunity to not just prepare but to actually practice response, this year is very important to me. Having said that, you know exactly what our capabilities are because you came from a State that had an annual opportunity to not only prepare, but to practice it, as well, and I think both of our States rate extremely well from a standpoint of their ability to handle up to a given point.

Dr. AGWUNOBI. North Carolina is one of the best, sir.

Senator BURR. Do you envision that there is any gauge that we can use of the degree of disaster before there is an automatic default to the Federal Government to be in charge versus local, State, and then a Federal request?

Dr. AGWUNOBI. Sir, I believe strongly, and this doesn't just relate to the fact that I am a part of a team that supports this philosophy with Secretary Leavitt and the President, it actually relates back to my experience at the State level. I believe strongly that our focus should always be on local preparedness and local response, especially if our notion is all-hazards, because each community has different sets of assets and each community is going to respond differently.

So I believe that as we go about improving our system over time, we should always have a focus on local public health, local preparedness, local emergency response, local National Guard and others, and then build on that. In other words, in this constant effort to improve preparedness at the local level, we should then assess what the role of the Federal Government should be in filling in the gaps or in backing up the system. I agree completely that we should always be there as a safety net should that system fail, but I always believe, sir, that local is better than—

Senator BURR. I agree with you totally. I would ask you this question: Is it true that not all public health entities mirror each other?

Dr. AGWUNOBI. Sure.

Senator BURR. The difficulty that we found is that a community can have a public health infrastructure that truly can address anything they are thrown, and 30 miles down the road can be a public health entity that has, by default or by choice, become the vaccination point for low-income children and that is the extent of what they provide. Can we legitimately go through this reauthorization without defining what the face of public health is going to look like in the future and set a goal that that face be replicated in every community that we feel a public health infrastructure should address?

Dr. AGWUNOBI. Sir, you bring up an excellent point. If you have seen one local community, you have really only seen one. There are no two that have exactly the same characteristics. Over the last—since 2001, sir, Congress and the President, that partnership has invested, I think, upwards of almost \$8 billion through CDC and HRSA grants into preparedness at the local level and that probably doesn't include the dollars that have come through DHS. Those dollars are focused not only on strengthening the individual strengths of each public health or each emergency preparedness entity within a community, but I think a lot of it has gone toward trying to set certain standards across each community while allowing each community the ability to figure its own way in terms of how it gets to that standard based on its unique characteristics.

So, although I would concur, sir, that we do need to have expectations of each community and each local government, I would wager that their citizens have high expectations, as well. But, I think we should always seek to find local solutions as opposed to trying to apply a single cookie cutter approach across each community.

Senator BURR. I certainly understand your answer. I am not sure how there can be a national framework if, in fact, the capabilities community by community have the ability to differ to a great degree, and I think this is what this subcommittee is struggling with right now, that if we limit this to the 12 targeted cities for chemical, biologic, radiological threats, that is one thing. But when you begin to try to model the country for an H5N1 threat without the consistency of knowing what capability exists community by community, it is impossible to put together a response—a Federal response that is in total.

I know we are not going to find the solution out today, but I guess my follow-up would be, is HHS open to the discussion as to what the face of public health should look like in the future and committed to try to achieve whatever we collectively decide that should be?

Dr. AGWUNOBI. Absolutely, sir. I can say that without hesitation, that I have heard the Secretary himself ask his team to reach out to partners across the community to do just that. What should the future look like? As we design a path to that future and make that available to each community so that they can begin figuring it out, how they are going to get there, our role absolutely should be to help define that future.

Senator BURR. Regardless of the community in America, who do you perceive in that community is in charge of a natural, deliberative, or intentional disaster? I mean, who would we look to in a given community to be in charge?

Dr. AGWUNOBI. Sir, I think a natural way to look at this is, who does the community look to when there is trouble, when there is an emergency, when there is a crisis, and all too often, my experience in Florida, and indeed now as I walk around the Nation, has been that they look to their elected leaders. They look to their Congressional representatives, their governors, their mayors. I think Rudy Giuliani, as he stood on that podium at 9/11, is an example of what communities expect—

Senator BURR. I agree with you, but Mayor Giuliani was not the one that determined where the debris went. He wasn't the one that determined how many assets needed to come in to support what may have been casualties that needed medical care. He was the mouthpiece, and I think we all know if there were a national disaster, we would look to the President for that ability to communicate with the American people.

I am more concerned with who we default to on the ground in charge. Who is the one that we see, regardless of the community, that is the traffic cop deciding where the surge capabilities are, which hospitals receive which patients? In the event that there were contamination, who maintains the protection of a contamination line without a decision to move people outside of it?

Dr. AGWUNOBI. Sir, North Carolina has a wonderful example of this in Leah Devlin, a great public health official, a great officer, and she offers great leadership on issues related to health and medical emergencies. But because emergencies like Katrina can be so much bigger than just health and medical issues, there needs to be someone above that level who is coordinating all of the activities of the different functions underneath, and so typically that is the Homeland Security Director or the Emergency Preparedness Director—they are called different names in different communities, but they all serve a very common function. They help coordinate and, therefore, lead across the individual areas.

If it is health and medical, I am pretty clear in my mind that it needs to be at the Federal level, the Secretary of the Department of Health and Human Services. If it is health and medical at the State level, I am pretty clear in my mind that it needs to be the State health officer or the Commissioner or Secretary of Health. And then, of course, if it is at the local level, typically, local communities have a designated health and medical, usually a county health department officer or director.

Senator BURR. Just out of curiosity, today, do we have a point of contact in all the States? Do we know who they have designated to be that person?

Dr. AGWUNOBI. Yes, sir. On the health and medical side, very clearly. I can only imagine the Department of Homeland Security, who aren't here today, also have designated or at least contacted people in each State.

Senator BURR. In all likelihood, is that person the same regardless of which agency is looking at it?

Dr. AGWUNOBI. Yes, I think it has been. There is pretty good consensus, I think, across the Nation as to who leads the health and medical response.

Senator BURR. So, is it safe to say that our plan, Federal plan, identifies an individual within that State designated by the State, regardless of the title, and then assume that they have put together a plan for that State to respond to whatever?

Dr. AGWUNOBI. Yes, sir.

Senator BURR. If you had to guess today, how many States have that plan?

Dr. AGWUNOBI. An emergency preparedness plan that addresses health and medical needs?

Senator BURR. That could respond to an all-hazard threat.

Dr. AGWUNOBI. In fact, I think one of the requirements of the cooperative agreement, the funding that Congress provided through CDC and HRSA, one of the requirements was that each State, in order to benefit from those funds, needed to show that they had a plan to expend those funds in an efficient manner and in a way that changes the public health and the preparedness of their State, and I think all of the States have actually shown that they have that ability.

Senator BURR. Ms. Embrey, some believe that DOD and the capabilities it controls is the only Federal agency that possesses the ability to effectively and rapidly respond to medical events of national significance. Because of this, they feel that DOD should take the lead in response. What are your thoughts on how the DOD assets should be utilized, integrated into a domestic Federal medical response?

Ms. EMBREY. Well, DOD has the advantage of command and control over its particular assets. For that reason, we are perceived as having good coordination and the ability to execute the assets under our control. But we are organized and our assets are trained and equipped to function in our warfighting missions and our peacekeeping missions, and we, with the global war on terrorism, are engaged pretty heavily in those activities with those assets. So the structure that exists today in the medical community is focused on those requirements and there is very little additional assets that have been organized to provide domestic support.

We do have a commitment to planning. We have public health emergency officers at all of our DOD installations whose job is to work with the public health infrastructure outside the gates to make sure we have an integrated response here at home. We have an immediate response policy that authorizes all of our installations and our assets of all types, even medical, to provide immediate assistance where lives or property are at stake for a short time until other assets can be brought to bear.

DOD has strength in planning and exercising those plans, and I believe that our biggest contribution to the readiness for response in this country would be to participate with our partners in establishing those kinds of training and standards and planning that we know how to do very well and share that with our lead agency partners.

Senator BURR. In fact, DOD participated in Determined Promise in 2004, which was—it sort of tested DOD's ability to assist civilian authorities in a coordinated response to simulated chemical, radiological, and explosive hazards. Clearly, that coordination was lacking as it related to Katrina. As a result of that, what specific plans does DOD have that would improve that integration when the time comes? I guess, what did you learn?

Ms. EMBREY. Oh, we learned a lot of things. We learned a lot of things in the broad context of the response, more than just health and medical. From a health and medical perspective, I think we were fairly well coordinated.

I think the challenge is that for the Federal agencies represented here, the VA and the Department of Defense have physical assets and people around the country and it is important that, in addition to having a national framework to understand how we integrate

with each other through the National Incident Management System and through the various other capabilities that we have set up to provide surge capacity to a locality, more importantly, though, is we have these places and people in communities and it is important that we look at ourselves as part of that community and to plan with that community and to plan with that public health infrastructure and to plan with that State on how these assets could be brought to bear immediately, not waiting for a much larger coordinated surge.

I think the real focus here is that we need to engage our State, local, and corporate partners, and private industry, in creating a community by community awareness of what our vulnerabilities are and quantifying them and looking at the community as the entirety of all of the assets in that community, whether they are the FBI or, you know, any part of the Federal community. If we are there, we should be part of the planning process and agree to preestablished arrangements for roles and responsibilities of how that community would respond and be prepared and to identify specific gaps in capability so that that community could work with nearby communities to fill those gaps initially and expanding there.

My belief is, and I believe the Federal Government is working toward a regional response model, where communities form a region within a State, perhaps, and a region of States becomes a region of communities, and that region of States becomes a plan in and of itself that recognizes the core reason why we have communities. There is some economic basis for those communities. It is either an academic center or a corporate town or a major government center or a financial center or maybe a combination of all of those things.

Military bases, again, are sometimes the reason for the existence of an entity. And so it is important for us to allow those communities to define what is important to them and to define and set out in a common framework what they are capable of doing based on their population at risk, and that would have to involve the corporate partners who have an economic incentive to keep that city or area functioning effectively.

And once we have done that, with all of us working together even at the local level, then bringing those together into a framework for a national response, using the National Incident Management System, I think is the proper way to go, and DOD is fully prepared to participate in that way and to provide support when needed with whatever resources we have that isn't otherwise engaged in our DOD missions.

Senator BURR. I am going to ask one more quick question and then I am going to allow Senator Hatch to make whatever comments and questions that he would like.

From a standpoint of the constant use of the Guard relative to deployment, should any of us be worried that their assets have been depleted to a degree that any State should be alarmed on our own capabilities to respond to disasters?

Ms. EMBREY. It is a very good question, Senator. I used to work in Reserve Affairs in the Department of Defense for a number of years, so I feel particularly aware of the demand that we are now placing on the National Guard. The National Guard is somewhat

schizophrenic, and I don't mean that in a negative way. But the National Guard is a State asset to the Governor and the legislature in each State has the authority to assign that Guard under the authority of the Governor to perform State missions. They may employ National Guardsmen in that capacity that are not federally recognized to perform those State missions underwritten by the State legislature and the funding that comes from the State.

In addition, the National Guard has federally recognized State employees that perform military missions. The Department of Defense takes those federally recognized assets and assigns specific military missions for them. In the past, it had been less and less of a—it was primarily for combat operations and it was primarily for surge for long-term operations. We are in a global war on terrorism which is a long-term, but maybe not highly intense, but it is a long-term commitment, and the way in which we now use the National Guard is for short tours over a period of time, which is different than it used to be.

So there is a conflict between what the Federal Government and the military uses the National Guard for and for its evolving State mission role under the control and command of the Governor and the adjutant general in the States, particularly since the adjutant general in many States is also the emergency response coordinator in many States. This puts a triple burden, if you will, or a double burden, at least, on the National Guard, and we are quite sensitive to that. There are some legislative changes that have occurred in the last couple of years that have put even more burden on the National Guard to perform domestic response missions underwritten by the Department of Defense in terms of emergency response. So that came following the anthrax attacks and the 9/11 attack.

Senator BURR. I am going to defer to Senator Hatch now. I will come back to you, and my concern probably deals more with equipment that is being left in theater that might have been equipment that was assigned to the Guard, used by the Guard, multiuse because it would be used for a State response, it is used in the war on terror. Leaving it there, they don't have that asset. Does that hurt us at all? But I will come back to that.

Senator Hatch.

Senator HATCH. Thank you, Mr. Chairman. To all three of you, if you care to answer any of these, welcome. We are proud of you and very pleased to have you here today. We want to work as closely with you as we possibly can.

In organizing a response to an emergency, many of the suggestions that we have heard today or will hear today have a top-down focus. Create a new HHS office and make HHS the responsible agency, etc., etc. These are important concerns, but most biohazards are likely to be regional or local and local groups, agencies, and leaders direct and carry out the initial efforts, as you have been pointing out. The interface between local efforts and the engagement of broader national assistance is a critical control point where things can go very well or they can go very much wrong. This was an issue with the Katrina hurricane and the flooding that occurred there.

Now, who should be the regional or local decision maker to initiate a decision to engage broader assistance? That is question

number one. How do we assure that all regions and localities understand the process of rules for asking for, approving, and receiving this support? And are there Federal or State regulations that would hinder this process? If you could answer those.

Dr. AGWUNOBI. Thank you, sir. Sir, if I understand your question correctly, I think I will respond as follows, and that is that the National Response Plan, and indeed most State plans, contemplate the fact that local-elected officials for particular sovereign areas have a primary responsibility for organizing within their teams of experts whether that be emergency preparedness or public health, and embedded in that responsibility is, I think in most plans, a clear process and expectation that those individuals will call for help if they need some.

I know that at the State level, every governor sees as a part of their responsibility not only the maintenance of their executive branch agencies, including emergency preparedness and public health and their ability to respond locally, but also this notion that they have to, on an ongoing basis, assess when they are overwhelmed and when they need help from the Federal Government.

Now, I also concur that the Federal Government has a distinct role in situational awareness. We have to constantly be aware of what the strengths and weaknesses of any given State are, as perceived by perhaps our measurements through the cooperative agreements for HRSA and CDC. As we invest, we have to be sure that we know how States are doing with that investment. But I do think that we also have to maintain the ability to come to the assistance as soon as we sense that a State is overwhelmed. But I still think that it should be something that is called for by State and local communities as opposed to something that is pushed upon them.

I am not sure if I understood your question correctly, sir. I hope I—

Senator HATCH. You have covered part of it, that is for sure.

Ms. Embrey, do you care to add anything to that?

Ms. EMBREY. Yes, sir. I think I will address the question relating to the last question you asked in terms of regulations and what suggestions that we might take to improve our ability to do this.

I think one of our challenges in medical response is how we are organized nationally. The States have responsibility for public health and safety and they reserve the right for credentialing. They reserve the right for formulary. They reserve the right for how we declare the cause and management of deaths in the States.

During disasters, if there is a Federal response, credentialing issues always become a problem, especially for volunteers surging into the State. What can be brought to bear based on the formulary in those States becomes an issue that gets routinely waived, but it would be better if we were doing something about it in advance.

And third, by having the capability to identify and surge needed personnel, because each State retains its own authority on that and it is a source of funding for the States, especially in credentialing. I think we need to examine a national framework that recognizes the authority and responsibility of the State, perhaps through validation and fund collection, but still has a national credentialing capability. I believe that is very important for us to have an effective

national capacity. It is important for the Department of Defense as we live everywhere. Our doctors move all the time and they are routinely engaging in different credentialing efforts as they move from State to State. We should have a national standard that we all agree to across the States, but still give the States the authority to validate that credential as they move from State to State.

Dr. AGWUNOBI. If I could just add to that, over the last few years, Congress has actually been moving in that direction as they have helped HRSA, one of the agencies within the Department of Health and Human Services, as it tries to develop and disseminate standards, an emergency credentialing-type standard across the States by investing in States, allowing them to build credentialing systems at each State level.

Now, this year in the President's budget, there is a request to try and link all of that activity together into a national portal where—national is probably not the best description, nationwide portal, a portal that States can use in one State to check on the verification of credentials of practitioners coming from another State rapidly because they have been pre-credentialed in this system. We call it ESAR-VHP, which is a number of letters that mean a very long phrase of words, but basically it is an emergency credential verification system that allows people ahead of time—and by the way, sir, that is the best way to have a standing army to surge up to health and medical needs is to have them register ahead of time so we can do the due diligence, credential them appropriately, and put them in a database that, in an emergency, is readily available to everyone.

Senator HATCH. Dr. Deyton.

Dr. DEYTON. Senator Hatch, several answers to your questions. Certainly the Department of Veterans Affairs is an extraordinarily well-endowed system to respond to local needs or national needs and it is one of our four articulated missions.

In terms of a national response, obviously, sir, you know that we back up the Department of Defense for whatever medical needs that they have in a time of declared emergency or disaster or war. We also are obligated to work with State and local communities in terms of responding to what their needs are, and we do that in the context of the National Response Plan. So we stand ready to do that whenever that is needed.

I am very glad that we are focusing on this as local issues and local responses because that is where any action will be required. The VA, again, is very well positioned because we are in every community in the Nation. We have got doctors, nurses, pharmacists, and psychologists everywhere. They are fully engaged in taking care of veterans, but when there are disasters or emergencies, we do ongoing planning both nationally within the VA system as well as in communication with State and local health departments at the lead with those Federal agencies. We have named contacts with every State health department to work directly with the VA.

Senator Hatch, I think another important concept that we are just beginning to explore is the idea of Federal facility-based deployable emergency response teams, and that is we have Federal endowments around the Nation, largely VA but also DOD and Public Health Service endowments, with Federal employees who are

health care workers—doctors, nurses, pharmacists, etc. The four departments, DOD, HHS, Homeland Security, and VA, are exploring together the concept of would it be feasible to have established teams of health care providers at facilities who are trained and ready to be deployed in response to an emergency, an all-hazards emergency, to help with the surge capacity kinds of issues.

Ms. Embrey, myself, Dr. Knable, sitting behind the Assistant Secretary here, and Dr. Waters from Homeland Security are all leading this effort at exploring the feasibility of this, and I think that that is a very exciting potential to consider. Obviously, we are working on it and we are moving ahead with that concept.

Dr. AGWUNOBI. If I could just add to that, it is an analogy of something Congress has investigated in the last few years, the Medical Reserve Corps, which are teams of private physicians and nurses and nurse practitioners in communities that have come together to form teams that could be deployed either locally or within the region, and so that would be an analogy, where we might do the same thing over in the Federal medical agencies and medical facilities.

Senator HATCH. With that reserve corps, I think we have provided some language that protects the reserve corps from liability, haven't we, or should there be language?

Dr. AGWUNOBI. I am not sure if we have specific language, but clearly, they are, for the purposes of deployment, they are part of a Federal deployment—

Senator HATCH. These are volunteers—

Dr. AGWUNOBI. These are volunteers, that is correct.

Senator HATCH. These are doctors who are willing to give of their time and effort—

Dr. AGWUNOBI. Yes, sir. Yes, sir.

Senator HATCH. We have got to provide some means whereby they are protected from liability should—

Dr. AGWUNOBI. We do need to remove every barrier we identify.

Senator HATCH. That is something we need to work on.

Senator BURR. Is it my understanding that when those teams are deployed, they are Federal—they are designated as Federal assets?

Dr. AGWUNOBI. Yes, sir. That was my point, that if they are a part of our response to an event, they come under our Federal protections.

Senator HATCH. Out in Utah, we have found that that has really helped us in rural Utah and other areas, not necessarily in disaster situations, but just in everyday life. So we are really excited. I am really excited about that, and that may be a way of helping to bring down health care costs, as well. But one of the problems that exists is that we are going to have to provide some means whereby these people who are volunteers, who are totally capable of serving, who are experts in their field and who are qualified, have some degree of protection from medical liability concerns. So it is something I think we have to worry about on this committee and I hope that both sides, Democrats and Republicans, will recognize the importance of that corps that may be very helpful.

Dr. AGWUNOBI. Four-hundred-and-eight. I mean, the response to this has been dramatic. Four-hundred-and-eight Medical Reserve Corps have stood up in recent years in 49 States. I think only

North Dakota at this point, and they continue to work on building theirs. So it has been dramatic. The volunteerism in the health and medical providers with the private sector across our Nation stimulated by Congress has been absolutely dramatic.

Senator HATCH. Mr. Chairman, the reason I bring this up and the reason I get excited about it is because there are a lot of doctors who are going out of the profession just because of medical liability concerns and the high cost of malpractice insurance. But they are willing to give their time free of charge as volunteers in our respective communities and elsewhere. We are going to have to find some way of protecting them and the Government is going to have to, it seems to me, provide that. Over the long run, it would be a very efficient cost for us.

Senator BURR. I think it is safe to say, Senator Hatch, that there were some glitches as it related specifically to the response of Katrina where there were some assets that were asked to leave, where there was a delay because of the lack of one agency or another being the one to assume the liability. I am hopeful that internally, those glitches have worked out so there is not a delay in the future and I feel fairly confident in those national assets.

Senator HATCH. I am going to count on Senator Harkin and others to assist in resolving this difficulty, because the more we can get qualified doctors to volunteer in the local communities—this isn't just for biohazards purposes but to help people who otherwise would not have medical care, we are going to have to find some way of, since they can't afford medical liability insurance, we are going to have to find some way where the Government backs this up. Hopefully, it will be a wonderful combination that will help us provide medical care at a much lower cost than what we are currently doing.

I have other questions, but I feel like I have taken enough time.

Senator BURR. Senator Harkin.

Senator HARKIN. I agree with that. I want to pick up on what we have just been talking about since I came in. I apologize, Mr. Chairman, for being late. Someone interrupted my schedule. But in talking about this reserve corps and health corps, that is all right as far as it goes, but consider what would happen, and I want to focus on a broader theme, what happens if we get hit with pandemic flu? We have got to have a broader pool than what is in the reserve corps right now.

I would just say, Orrin, that I introduced a bill last year, S. 2112, the Seasonal Flu and Pandemic Preparedness Act, and then what we did there, the idea was to set up a pre-cleared, pre-trained volunteer force all over America, not just doctors or nurse practitioners but other people that—there are a lot of nurses in this country, by the way, who went to nursing school. They may have been a nurse for a while. They got married, raised families. They are in our small towns and communities all over America. I discovered this in my State of Iowa. They have some background. They could be a great volunteer force. But they need to be trained and prepared and, in terms of the liability protection, what I did in my bill, Orrin, is I just said, cover them just like a Federal employee.

Senator HATCH. Torts claims.

Senator HARKIN. But it seems to me that, and Dr. Agwunobi, it is probably more in your bailiwick than anywhere, but again, thinking ahead about a disaster of the nature of pandemic flu, I mean, people can say, “Well, it may not hit here” and all that kind of stuff, but just about every health professional I talk to says, “Look, and we have had NIH here, we have had CDC here, we have had everybody up here saying it is not a question of if. The only question is when.”

Never in the history of mankind since we have been studying viruses have we known a virus not to mutate. They all do. Viruses tend to become virulent, HIV being one that we recognize as being very virulent. This pandemic flu also seems to be one that is very virulent, and if it starts going from human to human—we have one case that I know of where it went from human to human. The CDC has documented one case. It seems to me that if we are going to get ready for this, we have some, in that Health Reserve Corps you were talking about, we sort of have a template of how this could be done. It just needs to be bigger and broader.

Now, again, I am thinking of DOD, I am thinking of our National Guard forces that are out there also that could also—these are civilians that are out there that could also be utilized and trained or maybe people that served in the National Guard, maybe they are out now but they still want to contribute some way. Find these people. But establish a pool of trained, identified people who are—you were talking about credentialing. Somehow, we have got to get these national credentials that every State recognizes, and that is why you do it now. You start doing it now so that the States buy in, they do get credentialed, scope of practice, what can they do. That varies by State to State, also, what can they do. Liability, we talked about that. Workers’ comp issues, all these other things.

So again, in that, what I guess is called the Emergency System for the Advanced Registration of Volunteer Health Professionals—

Dr. AGWUNOBI. ESAR-VHP, sorry about that, sir.

[Laughter.]

Senator HARKIN. So we have got a system there that kind of gives us a way to go.

Dr. AGWUNOBI. Yes, sir.

Senator HARKIN. But it is just not robust enough to cover something like this, and so again, I don’t know if I have so much a question as just a discussion about how we might do this. I left the VA out, but obviously we have VA in every State, too, and we have got nurses there and we have got other health-type professionals that may not be doctors, but they can sure give it a shot, because my vision of this is that if pandemic flu ever hits, it is not going to be enough to have people go to doctors’ offices to get shots. You are going to have to do it at Wal-Mart, you are going to have to do it at churches on Sunday, you are going to have to do it at synagogues on Friday night, you are going to have to do it all over the place—shopping malls, sports arenas where people come. You are going to have to have systems set up where people can get these free flu vaccinations, or anti-virals, if that is the case.

And so how do we go about doing that now? How do we start setting up a preparedness system that gets these people trained, give

them periodic refresher courses. Obviously, if people die or something like that, you have got to have them replaced. How many people would it take? I don't know that I have a number in my mind, how many it would take. I don't know the answer to that question. But can we take that template and make it bigger for something like pandemic flu? I guess that is—

Dr. AGWUNOBI. Yes, we can, sir. Congress and yourself as one of the leaders have helped us design the path, as you state, things like this Emergency Advanced Credentialing System that we have in place, and in the President's budget this request to add to that a portal that links all of the State credentialing systems together and makes the information that is in each of those systems available to each of those States and to the Federal Government, this notion that the providers in Federal facilities through VA and, of course, in DOD and at the National Guard level be roped into this concept.

In addition to that, sir, I wear a uniform very proudly of the U.S. Public Health Service Commissioned Corps. Each of us are officers trained to lead others into health and medical battle. The opportunity to link our commissioned corps and its current ongoing transformation—we are adding a few officers and a few competencies in terms of building teams—allows us to now become the officers that lead those larger medical reserve corps into the fray, so to speak. We have all the pieces. We need a little bit of time to continue building upon them. And with the ongoing support that is already being exhibited by Congress, I am pretty certain that we will incrementally begin to grow.

As I stated, 408 of these Medical Reserve Corps have stood up around the Nation. Each community recognizes their value. I think it is true, sir, that we have started with physicians and nurses, but we should add to them nonphysician and medical providers and have them grow into a larger team.

Senator HARKIN. And you would admit that that is not enough to handle a pandemic flu.

Dr. AGWUNOBI. Sir, in a pandemic, it is going to take an awful lot more than licensed physicians and nurses to provide the care that is needed.

Senator HARKIN. They can provide the core of it, the leadership, as I said, the template of it, but we need—we talked about this—

Dr. AGWUNOBI. Extenders, yes.

Senator HARKIN. How do we start doing that? I mean, we can't keep waiting and waiting and waiting and waiting. I mean, we have to find these people, identify them, get them trained, get them credentialed, work with the States. I mean, this takes time.

Dr. AGWUNOBI. As we travel the States, the pandemic summits that we have been holding in each of the States, we are actually quite comforted to find that many States have actually gotten way out in front of this and have begun to do just what you are suggesting, sir.

Senator BURR. Let me drill a little bit deeper than what Senator Harkin has, and I am confident that each agency that is represented here has a model for pandemic. Have you modeled it with 40 percent of the individuals not able to fulfill the commitment that you have got them designed in your model? I think that it is

a conservative estimate, at any given point over the affected period of the pandemic, that 40 percent of health care workers won't be able to come to work. It is 40 percent of law enforcement. It is 40 percent of truck drivers. It is 40 percent of the military that is down, that can't respond. Is there worst-case modeling that is currently going on and do we have the capabilities to overcome that type of challenge?

Dr. AGWUNOBI. I think it is important that we state that we don't know for certain in a pandemic. We do know that there is going to be a pandemic in the future. What we are not clear on is whether or not it is going to be a 1918-like pandemic or a 1968-like pandemic, which had a lot less impact on our communities. But we are using, for what we call our planning assumptions, 40 percent—people staying home for 2 to 3 weeks at a rate of about 40 percent of the workforce, either because they are sick or they are scared or they are caring for a loved one at home.

The truth of the matter is, that is the challenge and that is why we have been reaching out into every community, every local community and saying, "Listen, the truth of the matter is"—and I quote almost my Secretary when I say this—"if you fail to respond and develop a plan and try to prepare at your own local level because you expect that the Federal Government will come in and rescue you, you probably don't fully understand the concept of a pandemic, which is that every community is facing this simultaneously, and it is not that we won't have the will or the money, it is that we really don't have the way to get to every community simultaneously across the Nation in a pandemic."

So we are using 40 percent, sir. It is a model, meaning that there isn't a lot of science behind that particular number, and there is some variation across entities as to whether they use 45 or 35, but I think, on average, most people are using 40 percent as their model.

Senator BURR. I know I will get into it with the second panel, but we are a just-in-time society now. Our economy is driven on just-in-time inventory. Should we be concerned—do you need to—

Senator HARKIN. Just one other—

Senator BURR. Go ahead.

Senator HARKIN. Again, listening to this, you are right about the pandemic. I mean, if it happens, you are going to have to rely upon people in those local areas to take charge. It is that whole idea of pre-training. How do you get them trained? How do you integrate training of these people into the planning of this?

Dr. AGWUNOBI. Sir, we haven't focused enough on that in our funding, cooperative agreements, and technical guidance. We have offered what we can to States and we have relied on States and local communities to figure out what their needs are locally and, therefore, what their training needs are going to be going forward. And we might offer more advice and more direction as we move forward over time. I know the Department looks forward to seeking input anywhere we can find it, in that regard. But we are listening to communities as we speak, and where we find communities who have a special need for training or a particular profession or a particular group, we are providing it.

Senator BURR. Where typically we have said in the case of a disaster, be prepared to have 3 days of water, 3 days of food, the supply chain will be there to accommodate you, do we have to change that as it relates to the pandemic? Can we believe that that supply chain is going to be there? Should we be concerned if hospitals haven't rethought the degree of inventory they had because of just-in-time inventory and potentially 40 percent of truck drivers are out? This potentially means that that resupply line is affected in a significant way and that DOD is even more important from the logistics standpoint than envisioned in the current modeling.

Ms. EMBREY. DOD is well aware that the infrastructure and our ability to sustain economic commerce during a pandemic is very important. The commander at NORTHCOM is considering that and does believe that there is a possibility that the Department may be asked to provide support to the Nation in various places to ensure that commodities get to where they need to be. But DOD would do that in the context of support with other Federal agencies like the Department of Transportation and others to ensure that we sustain our economic—our commerce.

Another idea that we believe is very important is to engage our corporate partners in their own campaign to educate and have a coordinator for their communities on what to do in this kind of crisis, how to sustain their operations and their supply chain and their distribution system, because they are going to be affected in the same way. So they need to come up with their plans and their contingencies and have a point of contact for us to talk to when they feel like they are going to be running south on that.

So, yes, I think it is very important that the Department, the Federal, State, and local and private sector all work together on contingency planning for a loss—a potential loss of our capability during this pandemic, and it is truly an environment, it is not an event. It will happen over time. Some parts of the country will be perfectly fine, perhaps. Other parts will not. So it will really depend on how we coordinate and have the ability—pre-established alerts to say, “You know, we are running a little short here. We need assistance.” And so doing the pre-planning, having that coordination well understood in advance is the most important piece, and DOD understands that we may be asked and we are preparing in several areas to make sure that we can provide that support if asked.

Senator BURR. Dr. Deyton, you have highlighted the fact that VA has a presence everywhere around the country. Operating medical facilities. They also are geared toward what the private sector utilities—which is just-in-time inventory. You have got the largest prescription drug availability in the country. So I think day in and day out, VA is challenged on a logistics standpoint. Give us VA's insight and expertise and experience so far as it relates to the logistics challenge that we might be faced with.

Dr. DEYTON. First, the good news is that we are all thinking about pandemic flu as a great model, and so for that one, we already have gotten guidance out to our facilities to begin to think through what are going to be our needs for sustaining care for veterans and for helping communities in a situation of a pandemic influenza. And so, we have given them actually lists and rec-

ommendations about the kinds of supplies that they may want to have more of available.

In addition, we are working through our National Acquisition Center, which, you are right, sir, is probably the largest single purchaser of health care equipment and drugs in the Nation, and we have our National Acquisition Center that is working with the various distributors and contractors on language that will deal with these kinds of emergencies to make sure that they are doing exactly what Ms. Embrey said, putting in place whatever kind of continuity of operations that they need for their own distribution and supply so that they can maintain the supply that we all need.

Now, VA also purchases through its National Acquisition Center supplies for other Federal agencies in response to disasters and emergencies, so that is why we take that very seriously and we are talking to our various distributors through the National Acquisition Center on what they need to do to keep the supply flowing.

Senator BURR. I desperately need to move to this second panel so that we are not going to run out of time, but I do want to ask one last question of you, if I may. The VA, in briefings with us, have estimated that were there the need, they could free up 4,500 beds within VA facilities to meet a surge capacity, and I would only ask you, have you attempted to practice that, to know whether this is something that we can actually accomplish or that it is just a goal that we have set.

Dr. DEYTON. We do that all the time, because that is the support we give to the Department of Defense, and we on a regular basis do, in fact, assess the beds that we have available and how we would be able to staff them up, how we would discharge patients to free up those beds. Have we actually physically done a disaster drill to do that? No, sir, we haven't, but it is an annual—it is more frequent than annual, it is a regular counting thing that we do so that we can—we are obligated to make sure and get that information to DOD.

Senator BURR. I lied. I am going to ask one last question, Doctor. [Laughter.]

I don't want this to be associated with any of my colleagues up here. I will take the blame if, in fact, this is portrayed incorrectly. One could look at the worst case scenario for pandemic and say, "if 40 percent of your health care providers are unable to perform their duties, a surge plan is sort of useless." Should we spend a tremendous amount of time as it relates to that surge capacity specifically as it relates to pandemic, or is that the reality, that if we have a 1918 scenario, that we are more on the model that Senator Harkin mentioned and that every available outlet that we have got, we are trying to tap into, but the realities are that even if we had the 4,500 beds, if you haven't got the health care professionals to show up, that we have done no additional good other than move somebody from a bed at home to a bed at a facility?

Dr. AGWUNOBI. Sir, you hit on a very important point here. In a pandemic, I think it is pretty clear that there are going to be a number of different things that we have to do as a Federal Government and as a Nation. One, we have to protect critical infrastructure, critical health care infrastructure. If there is only one producer of insulin in the Nation, a particular kind of insulin, we need

to protect that manufacturer. If you are a vaccine producer, we need to protect your employees and your ability to develop vaccine. If you are the only specialist of your kind and you offer a particular kind of life-saving intervention, we need to find ways to protect you and your team.

But I do think that when all is said and done, like in 1918, we are going to have to adapt to many of those standards and many of those customs and norms that we apply in our health care setting today. We are going to have to adapt to this massive increase in demand.

I do want to just state, if I may, the obvious, which is that although 40 percent of our folks will be out sick, fortunately, not 40 percent of our Nation will be in hospitals seeking health care. We expect that gradually, over time, there will be a surge-up in demand, and clearly, our approach is going to be how we manage that demand for services over time. So skills such as using anti-virals to shorten the length of stay will be a critical skill. Social distancing to particularly protect health care providers, I think, will be important. And then when the availability of the vaccine becomes ready, that they be a priority group in terms of protecting them for the rest of the pandemic.

Senator BURR. One last question. After Katrina, health care providers provided aid through several distinct government agencies and programs. The responders on the ground worked hard to help Americans trapped on the Gulf Coast. But we have heard the stories of people that didn't get help for days or weeks. Were the medical treatment and patient evacuation problems caused by a lack of trained personnel, a breakdown of communications, inappropriate structure to the Federal response, or something else?

Ms. EMBREY. Yes.

[Laughter.]

Senator BURR. Is that all of the above?

Ms. EMBREY. I think Katrina was a conflagration of many, many different things. Geographically, it was quite widespread. It shut down what connectivity did exist between authorities to render a response. And many of the folks who were available to provide support had lost their homes or their families had been evacuated. And so I believe that the situation of the pandemic is different. Homes will be intact. Electronic systems and coordination systems will be intact. We will have individuals who will be sick, but if we plan properly and we set those connections and coordination points in advance, we will have the ability, particularly through surveillance.

I think surveillance is another big area where we have a responsibility to come to some common agreement on how we communicate with each other across the States. Surveillance is not a standard in this country. It is an imperative and we all do it, but we all do it differently. It may be time to come to a common denominator on what is surveillance, how do we identify it across the Nation, how do we report and alert who, when, and that is another big area of opportunity here. I think we are working very hard to make sure that, right now, the differences become less so in our preparation.

Senator BURR. We had some very good insight from the panelists that we had 2 weeks ago as it related to surveillance and some of it highlighted current directions and some of it suggested that we needed to rethink it, and I think it was beneficial to all of us.

I want to thank all of you for coming. As one who represents a State where a mobile hospital was delayed for a few days from being deployed in Katrina because we hadn't quite figured out who was going to assume the liability, it is my hope that we won't have that problem again. From a conversation I had with a soon-to-be-former Governor yesterday who deployed medical assets, medical teams to Louisiana only for those medical teams to sit in Louisiana and not be able to perform their duties because the credentialing was not done at probably the most crucial time where lives could have been affected, it is disturbing to see the outpouring that existed within the country and the way people responded only to look back and find that we have a tremendous amount of work to do before we are able to sufficiently address something of that magnitude again and to look back on it and highlight the successes. But I am convinced that we are well on the road to doing that.

At this time, I will dismiss the first panel and call up the second panel.

Let me welcome the second panel, and my apologies because we did run over just slightly with the first one. My hope is that we will be able to conclude on time for the purposes of your schedule.

Let me welcome Dr. Tom Inglesby, who is the Chief Operating Officer and Deputy Director of the Center for BioSecurity at UPMC. Previously, he was a member of the Johns Hopkins School of Medicine faculty and one of the founding members of the Center. Doctor, welcome.

Richard Serino is the Chief of the Boston EMS Department. Mr. Serino also serves as the bureau chief for the city of Boston's Health Commission, where he assists in establishing public health goals and guides policy development. Richard, welcome. I also understand that you were intricately involved in the planning leading up to the Democratic National Convention, which I think can provide us a tremendous amount of insight in that planning and preparation.

Dr. Eddy Bresnitz is the Deputy Commissioner of the New Jersey Department of Health and Senior Services. He is also the Secretary of the Council of State and Territorial Epidemiologists, who he represents here today.

Dr. Rob Gougelet is an assistant professor of emergency medicine at Dartmouth Medical School and the Medical Director for Emergency Response at Dartmouth-Hitchcock Medical Center. His current duties also include the directorship for the New England Center for Emergency Preparedness and Medical Director for Emergency Response for the Vermont Department of Health. Welcome, Doctor.

I am going to go in the order of introduction and you are open for whatever opening statement you would like to make and then we will move to questions.

STATEMENTS OF THOMAS V. INGLESBY, M.D., CHIEF OPERATING OFFICER AND DEPUTY DIRECTOR, CENTER FOR BIOSECURITY, UNIVERSITY OF PITTSBURGH MEDICAL CENTER; RICHARD SERINO, CHIEF OF DEPARTMENT, BOSTON EMERGENCY MEDICAL SERVICES; EDDY A. BRESNITZ, M.D., DEPUTY COMMISSIONER AND STATE EPIDEMIOLOGIST, PUBLIC HEALTH SERVICES BRANCH, NEW JERSEY DEPARTMENT OF HEALTH AND SENIOR SERVICES, ON BEHALF OF THE COUNCIL OF STATE AND TERRITORIAL EPIDEMIOLOGISTS; AND ROB GOUGELET, M.D., DIRECTOR OF EMERGENCY PREPAREDNESS, DARTMOUTH-HITCHCOCK MEDICAL CENTER

Dr. INGLESBY. Senator Burr, thank you for the opportunity to address you and the committee on this very important issue. I think your committee is to be commended for taking this on so directly.

I have written comments, which I will submit for the record, but let me just pour out a couple of comments, especially after listening to the first panel.

I think one of the things that needs to be clear is the central role of hospitals in an all-hazards medical response. I think that one of the things that sometimes gets glossed over is that a medical response is essentially, by definition, going to be centrally located in hospitals. That is where people get health care in America and I think that point is worth punching. Hospitals have largely been out of the hot water loop in terms of homeland security and emergency preparedness, public health preparedness. I know the committee is addressing that and I commend you for that.

The second point is that I think in the event of a large-scale catastrophe, even America's strongest and largest hospitals are at great risk of becoming dysfunctional quite quickly or perhaps even going offline and not being able to provide medical care. I think this is a serious risk which I, again, think you are taking on directly.

I think that there are a number of things the first panel brought out in terms of the country's commitment to volunteerism, in some cases, nascent or just developing programs in HHS are going to be important, but overall, I think a general theme is that in terms of preparing America's hospitals to get ready for a pandemic or bioterrorist attack or large-scale chemical attacks, we are generally at the wrong order of magnitude and we don't have enough people in government and out of government working on this problem. I think the committee is considering a number of remedies for that and I look forward to talking about that.

But I think those are the points that I would just bring to your attention at the start.

Senator BURR. Thank you very much.

[The prepared statement of Dr. Inglesby follows:]

PREPARED STATEMENT OF THOMAS V. INGLESBY, M.D.

INTRODUCTION

Ensuring the capacity to provide medical care to mass numbers of sick Americans in the aftermath of a major regional or national catastrophe should be a top national security priority. The Public Health Security and Bioterrorism Preparedness Response Act of 2002 helped the country take a number of important initial steps

toward that goal. But planning for a medical response to mass casualties remains the most neglected component of public health preparedness and homeland security.

If an All-Hazards Medical response for hospitals is to be a major new initiative, there should be clearly articulated top hazards, and these must include pandemics and bioterrorist attacks. Of the kinds of catastrophes that could lead to mass numbers of ill persons, pandemic influenza and large-scale bioterrorist attacks would pose particularly severe problems given the prolonged duration of the crisis, the possibility for widespread geographic impact (even national impact in the event of pandemic), the fear of contagion to health care workers and their families, and the sudden demands on critical medical and material resources. Not all hazards should be of equal priority.

A sense of the impact of a catastrophe on the scale of a 1918-like pandemic on U.S. hospitals can be gained using CDC's FluSurge program. In a typical city in a pandemic of moderate duration, flu patients, at epidemic peak, would be predicted to require 191 percent of non-ICU beds, 461 percent of all of the available ICU beds, and 198 percent of all available ventilators. Hospitals are in no condition to deal with this level of catastrophe: 30 percent of U.S. hospitals are currently losing money; of those that are profitable, operating margins average 1.9 percent; 45 million Americans are uninsured, and hospitals provide \$25 billion per year in uncompensated care. There are shortages of healthcare workers of all kinds. The numbers of hospitals and Emergency Departments have all decreased in recent years despite nearly half of Emergency Departments being over capacity.

The following comments address questions of the subcommittee regarding the Federal Government's efforts to ensure the country can provide medical care for mass casualties:

- How should the recruiting, credentialing, training of Federal health providers be accomplished and organized? How should the Federal Government deploy health care providers in response to a national emergency?
- What is the most effective way to support a Federal medical response and which agency should take the lead?
- What steps should be taken to foster a more coordinated response built on a strong public-private partnership?

INCREASING THE HEALTH CARE VOLUNTEER WORK FORCE

Recommendations

(1) *Create an Office of Citizen Engagement within HHS, presumably within OPHEP.* A clearly designated office should have responsibility for the training, credentialing, liability, funding efforts of the Federal Government intended to increase the health care workforce in crisis.

- As top priority, the office should focus on developing local/state-based systems for recruiting, training, organizing volunteers to work in their own localities and States. Local volunteers would have pre-existing knowledge and commitment to their own communities, would not need to be transported to another region, would not need to be housed, etc.

- The office should also be responsible for the systems that would allow more efficient sharing, credentialing, movement of volunteers from region to region, given that some kinds of catastrophes could not be handled without influx of volunteers from outside the region.

- Will need plans to organize lay volunteers, not just health care professionals, to help hospitals provide mass medical care. Many of the things needed to run hospitals could be executed by lay professionals.

(2) *Increase funding and accelerate development of the state-based Emergency System for Advanced Registration of Volunteer Health Professionals (ESAR-VHP);* ESAR-VHP is intended to allow States to better utilize their own health care resources. The program should be expanded and accelerated. Clear public description and discussion of ESAR-VHP and other community volunteer programs (both health care worker and lay volunteer) should take place in advance of a crisis. Many healthcare workers do not yet see themselves as being a crucial part of public health or community response, but would likely be willing to engage if the means of participation were clearer. Some health care professionals have wondered whether signing on to ESAR-VHP would mean they could be involuntarily drafted in a health emergency—these kinds of misconceptions should be publicly addressed. One specific serious improvement would be for ESAR-VHP to induce States to use uniform credentialing guidelines across the country and to use databases that are compatible with each other to allow easier movement of volunteers across State lines should that be necessary.

(3) *Consolidate ESAR-VHP efforts and the Medical Reserve Corp (MRC) (whether or not this occurs in the new office of Citizen Engagement); Clarify role of MRC teams.* Currently HRSA has responsibility for ESAR-VHP, while the Medical Reserve Corp program office in the Surgeon General's office has responsibility for the MRC but no budget to fund the MRC units and offers no provision of liability protection for volunteers. These efforts should be consolidated. If MRC teams are meant to provide local augmentation of the health care workforce, then they should be explicitly training with hospitals where they work. If MRC teams are meant to provide a source of health care volunteers to other regions of the country, the MRC program needs a concept of operations, credentialing and liability process, administrative systems, processes, etc. to organize such movement of volunteers, and it should be clarified how the MRC will relate to the NDMS (see below).

(4) *Make liability protection in emergencies clear and national in scope.* If health care workers volunteer to work in a mass casualty catastrophe, they are potentially putting their own lives at some risk (and their families if the crisis involves a contagious disease). They should not also be exposed to the potential of being sued. The Federal Government should pass some form of Good Samaritan legislation that protects health care volunteers working with a State or federally sanctioned volunteer program—with the exception being gross negligence. Absent this kind of liability protection, many potential volunteers will be dissuaded from participating.

IMPROVING ORGANIZATION OF THE FEDERAL MEDICAL RESPONSE

Recommendations

(1) *HHS should be the Federal agency responsible for the Federal Medical Response to large-scale catastrophes.* There is significant confusion in the hospital and medical communities around the country regarding which agencies and programs are responsible for hospital preparedness. In the 2002 bill, the ASHPEP was given responsibility for this work, but he has not had the human resources or budget to accomplish the wide range of work necessary to prepare hospitals for the range of terror attacks, pandemics and catastrophes the Nation could face. Organizationally, matters were subsequently made worse when NDMS and the DMATS program were transferred to DHS. To fix this,

- HHS should be given unequivocal responsibility and accountability for all Federal medical response programs.
- Within HHS, the hospital preparedness program should be elevated in importance, visibility and resources, and it should be made quite clear who is the lead Federal official responsible for working with America's hospitals on hospital preparedness.

(2) *HHS hosp prep programs (and preparedness programs overall) would benefit from a stronger management structure and more senior managers.* HHS should be given an Undersecretary for Preparedness that would be responsible for coordinating the large number of preparedness programs residing in HHS within OPHEP, HRSA, AHRQ, CDC, ONCHIT, NIH, FDA, et al. (It would be logical to include perhaps two or three other Undersecretaries responsible for the other HHS portfolios.)

- An Undersecretary for Preparedness would raise profile, importance of all HHS public health preparedness programs—including medical surge; should also improve coordination of these various public health preparedness programs—most of which do not now report to the ASHPEP.
- Creating the Undersecretary for Preparedness might be best accomplished by elevating the ASPHEP or by combining the Surgeon General's position with the new Undersecretary.
- Whether or not an Undersecretary for Preparedness is created, HHS will need to substantially augment its senior management cadre with persons with extensive experience and contacts with the private health care system.

(3) *The National Disaster Medical Response System needs strategic re-consideration.* NDMS is in the Emergency Preparedness Directorate in DHS. Its mission is to support Federal agencies in coordination and management of the Federal medical response, to train voluntary disaster medical assistance teams from various parts of the country to "provide care under any conditions at a disaster site" and transport victims into participating definitive care facilities. A report written by senior advisor to the Secretary of DHS said that as of January 2005, the staff had been reduced from 144 to 57; there were few qualified medical personnel to develop doctrine or policies, and the agency lacked defined, unified medical capabilities.

If NDMS is going to continue to exist, or if its work is consolidated or moved to another HHS program, then its mission, structure, and resources will need to be re-baselined:

- It needs to be in HHS and integrated with other HHS programs on hosp and public health preparedness.
- It should have as a top mission the support of hospital operations in communities in the midst of a crisis—this is not currently the case. DMAT teams have utility in certain kinds of crises, but would do little or nothing in the face of large scale crisis when hospitals will have major roles to play. In setting whether there are major medical surge needs, doctors and nurses will be necessary but insufficient—patients will need a variety of common medications, ventilators, oxygen, food, beds, IV fluids; doctors and nurses may need personal protective equipment, security, etc. These cannot be provided by teams. The only realistic or sustainable way to deliver this complex set of needs is in hospitals.
- NDMS plans should be integrated with the HRSA program that now allocates hospital preparedness funds. They are now in 2 different agencies, entirely distinct efforts.
- NDMS should be coordinate with the ESAR-VHP and MRC programs—which are all now completely distinct.

STRENGTHENING THE PUBLIC-PRIVATE PARTNERSHIP WITH HOSPITALS

Recommendations

(1) *Congressional and Administration leaders should call America's hospital leaders to action.* Hospital leaders would be more convinced of the long-term commitment of the Federal Government to hospital preparedness and more clear on what was being asked of them if they were gathered directly by national leaders and asked to commit to a long-term partnership to prepare the country to deal with mass casualty attacks. Hospital leaders now see very little Federal Government engagement on this issue except for a grant program that grants money that is far too little to accomplish what is called for.

(2) *HHS needs to set more clear benchmarks for hospital preparedness and pandemic funding.* The 2004–2005 guidance for hospital preparedness grant awardees is 49 pages long. HRSA is developing guidance for this fiscal year, and it will be important to simplify the guidance, eliminate some of the indicators, sets more clear priorities in this next round. But the guidance is in the right ballpark—it's just that the funding that accompanies it would realistically pay for a tiny fraction of the work requested. The pandemic planning guidance recently issued by HHS for hospitals is reasonable, for the most part, but it needs more specificity, a clearer sense of top priorities, and a funding plan to meet the costs.

(3) *Increase funding for hospital preparedness.*

- The National Bioterrorism Hospital Preparedness Program (under HRSA) has provided funding to hospitals of approximately \$500 million per year nationally since 2002, and the fiscal year 2007 request is \$487 million. This comes to about \$100,000 per year per hospital though in reality it is less because some of the money is used by local health departments. In December 2005, Congress appropriated \$350 million for State and local public health departments for pandemic preparedness; however, none of this appropriation is specifically identified for hospitals.

- The Center for Biosecurity rough calculation of the minimum costs of realistic readiness for a severe (1918-like) pandemic indicates a need for at least \$1 million for the average size hospital (164 beds). The component costs to achieve minimal preparedness include:

- Develop specific pandemic plan: \$200,000
- Staff education/training: \$160,000
- Stockpile minimal PPE: \$400,000
- Stockpile basic supplies: \$240,000
- Total: \$1 million per hospital

- With approximately 5,000 general hospitals in the United States, the national cost for initial pandemic preparedness would be \$5 billion. There would be recurring annual costs to maintain preparedness, estimated to be approximately \$200,000 per year per hospital. These figures exclude stockpiling antivirals, since there is a separate national plan to acquire these drugs. In addition, no moneys are included for purchases of expensive equipment such as mechanical ventilators, since it is not clear that extra ventilators would be useful if there were no trained personnel to operate them. A rough estimate of the cost to double the number of ventilators in the country, using safe but inexpensive equipment, is \$1 billion.

(4) *Increase the priority of regional hospital coordination.* Many key health care system preparedness and response actions will require regional coordination: regional resource allocation, patient redistribution, and use of alternative care sites all require collaboration among hospitals, and among hospitals and public health

and emergency management agencies, both in planning and in response. PH Law of 2002 encouraged the development of regional coordination, but in 2006 there are only a few good examples of even nascent regional organizations. The United States has a highly fragmented, private, and competitive hospital sector with inherent disincentives for collaboration.

To qualify for hospital preparedness moneys, hospitals should be required to participate in Regional Hospital Coordinating groups. The essential functions of such groups would include:

- Standardizing planning and preparedness among the participating hospitals;
- Sharing of assets, staff, and patients among the hospitals during declared crises;
- Sharing situational awareness in disasters to elected officials and health leaders;
- Coordination of timing and means of surge processes (the expansion of patient capacity within individual hospitals while retaining near-normal practice standards) and supersurge processes (the further expansion of patient capacity involving use of alternative sites and/or significant alteration in practice standards);
- Facilitation of a communitywide approach to ethical and political challenges (e.g., altered standards of care);

(5) *Modify the Stafford Act to allow for direct reimbursement of hospitals for uncompensated costs and extraordinary hospital care in the event of major catastrophes.*

- Hospitals' revenues will decrease dramatically during a pandemic or in other catastrophes, even though they will be experiencing record-high patient volumes. Hospitals will need to provide care to many patients who are uninsured and/or unable to pay; at the same time operating costs will be extraordinarily high. According to the AHA, the average hospital has only 41 days of cash on hand. Many hospitals would have insufficient cash reserves to survive a severe pandemic or other crisis that significantly interrupts operations for weeks.

- Under current healthcare reimbursement schemes, hospitals lose money on nearly every illness-related hospital admission—especially those, like pneumonia, that are likely to result from flu. Normally, hospitals offset these losses with profitable elective procedures, but these elective cases will be among the first services to be canceled or deferred in an attempt to respond to the demands of flu patient care during an epidemic.

SUMMARY OF WRITTEN COMMENTS

Ensuring the capacity to provide medical care to mass numbers of sick Americans in the aftermath of a major regional or national catastrophe should be a top national security priority. The Public Health Security and Bioterrorism Preparedness Response Act of 2002 helped the country take a number of important initial steps toward that goal. But planning for a medical response to mass casualties remains the most neglected component of public health preparedness and homeland security.

RECOMMENDATIONS TO THE SUBCOMMITTEE

Increasing the Health Care Volunteer Work Force

(1) Create an Office of Citizen Engagement within HHS, presumably within OPHEP.

(2) Increase funding and accelerate development of the state-based Emergency System for Advanced Registration of Volunteer Health Professionals (ESAR-VHP).

(3) Consolidate ESAR-VHP efforts and the Medical Reserve Corp (MRC) (whether or not this occurs in new office of Citizen Engagement); Clarify role of MRC teams.

(4) Make liability protection in emergencies clear and national in scope.

Improving Organization of the Federal Medical Response

(1) HHS should be the Federal agency responsible for the Federal Medical Response.

(2) HHS hosp prep programs would benefit from a stronger management structure.

(3) The National Disaster Medical Response System needs strategic re-consideration.

Strengthening the Public-Private Partnership With Hospitals

(1) Congressional and Administration leaders should call hospital leaders to action.

- (2) HHS needs to set more clear benchmarks for hospital preparedness.
- (3) Increase funding for hospital preparedness.
- (4) Increase the priority on regional hospital coordination.
- (5) Modify the Stafford Act to allow for direct reimbursement of hospitals for uncompensated costs and extraordinary hospital care in the event of major catastrophes.

Mr. SERINO. First off, thank you for allowing me to be here today, probably the one that is most out of his element. I am used to being in the street, and recently in the last few days with the crane collapses and being first on scene at multiple shootings and bus crashes. This is a little bit out of my element.

Senator BURR. May I ask you to pull that microphone just a little bit closer? It is that Southern accent that I am having trouble with.

Mr. SERINO. Yes, I have a little bit of an accent, they tell me. I don't know, I think everybody else here does, but anyway, thank you for being here. I have a few remarks.

One of the things I heard people say that I want to echo is there was a Congressman that had some influence up here a few years ago by the name of Tip O'Neill, and Tip said quite often that all politics is local. My expertise and experience has told me that, in fact, all disasters are local, as well, and I think that that is important to remember.

Today, as you mentioned, I would like to focus on the 2004 Democratic National Convention, where we had over 70 different local, State, and Federal agencies that took part in planning for an event and some of the lessons that we learned from that event. In 2003, it was designated a National Special Security Event, an NSSE, and that is an important fact because when we led to the creation of the executive steering committee and 17 planning subcommittees, medical planning was not initially in the NSSE structure. There was nothing to look at, no medical component at all. As a result of local efforts, we established a medical subgroup as part of the consequence management committee and Boston EMS was designated as a lead for all medical consequence management planning.

The medical subgroup was composed of 39 different partner organizations, Federal agencies, private sector, local hospitals. As a result of this highly successful partnership of local expertise with Federal assets and agencies—the formation of the medical subgroup—it established a role for the medical community on the executive committee and represents one of the major successes. The event is actually having a medical voice with the law enforcement agencies, which doesn't exist even now as we move forward.

The primary task for the medical subgroup leading up to the DNC was to plan and prepare for major medical response issues. Our planning process addressed issues of surge capacity, hospital readiness, public health surveillance, requests for Federal assets, traffic impact—we don't have any traffic issues in Boston—and medical treatment of prisoners and protesters.

As a result of the subgroup's work, over 200 ambulances were available. Using DHS grant funding, we provided actually mini-grants to mutual aid providers that had not been able to get any sort of assets at all for the purchase of medical and basic personal protective equipment. We completed additional training exercises with the hospitals. Surgeries were canceled within the city for the

week. Also, throughout the week, we were able to maintain 500 free beds in the city of Boston, where in a normal week, we are lucky—almost every hospital in the city is on diversion with no beds.

We also prepared for a specific threat of a bioterrorism attack using caches of chem packs, emergency response packs, stocking hospitals with nerve agent medications and radiation treatments. Finally, the city of Boston prepared to activate the local Metropolitan Medical Response System Agreement, which is a mutual aid system. We have a memorandum of understanding guaranteeing the availability of hospital staff and resources to assist in response to an emergency. We have an MOU with all the different hospitals so we can bring staff and move them around as necessary from the hospitals.

The DNC proved to be a huge success in terms of emergency preparedness with few exceptions. The planning allowed for a successful blending of security and medical responding to threats during the DNC. Our success in medical planning came from bridging the gap between a well-integrated medical community and the public safety and Federal agency responsible for managing the event.

Well before the DNC, we had a lot of experience working with the Conference of Boston Teaching Hospitals to manage disaster plans in the city. It came time to plan for a major event. There was already a local group, local officials and private organizations that we have been working hand-in-hand with for years. Bringing them into the NSSE structure, the medical community, law enforcement, and Federal agencies were able to meet each other personally and understand each other's personal and specific needs.

As a result, planning for ambulances to access road closures, which turned out to be one of the major issues, as well as treatment of patients, deployment of resources were worked out in advance, and perhaps most importantly, the relationships developed and nurtured have carried forward today. Relationships are the key to developing them and fostering them is the greatest asset in a response. By establishing and carrying forward committees and organizations that addressed planning and response issues, the people who have to work together in a disaster already have to know each other.

Many of the same groups that were brought together for the DNC continue to meet, coordinate on medical issues. Furthermore, by including the medical community in the planning process, other agencies have learned how important that planning is, law enforcement and the public safety agencies, and that was a seat for the medical community on the U.S. Attorney's Anti-Terrorism Advisory Council. The medical community is now an integral part of Boston's homeland security planning. Every day, the impact is felt in Boston. As we prepared to receive victims from Hurricane Katrina, the same planning and staffing agreements that were refined during the DNC allowed us to plan for an unknown number of medical cases.

In less than 2 weeks, we will have the Boston Marathon coming to Marathon, the 125th, I believe—no, 110th running of the marathon, and we look at those incidents. We treat it as a mass casualty event and practice medical planning and volunteer integration, as

we were talking about earlier. We look at these events as a special event as a planned disaster in order to try all these different assets out. As a result of this integration, in Boston, we are trading business cards at the scene of a disaster, and not something that should be happening.

There is, however, much to be done. The lessons learned here must be brought to a national level. While medical issues are addressed in Boston, nothing in the guidance from the Department of Homeland Security addresses that the medical community needs to be included in everyday planning and coordination. While integration of the medical community in the NSSE structure in the DNC was a resounding success, the structure has not been formalized. These lessons must be learned nationally to address local planning and integration.

Again, thank you for giving me the opportunity to speak and I look forward to answering questions.

Senator BURR. Thank you very much.

Doctor.

Dr. BRESNITZ. Senator, thank you and thank you for inviting me to come to participate in this roundtable today. There is some written comments. Just a couple of highlights.

I want to say that we think that the guiding principles for reauthorization are some that have been already talked about earlier this morning. Certainly, an all-hazards approach is the way to go, but with the understanding that every—just like we talk about every event is local, every event is different. So, for example, dealing with influenza pandemic is different than dealing with an anthrax attack or plague or anything else or flooding.

We must have predictable and sustained funding. I think that those of us in the States have experienced sort of the ups and downs of funding and they have impacted on how we went about our preparedness efforts and we are facing additional reductions in the coming year because of shifting of priorities.

Workforce development, we have talked about the volunteers, but on the professional side, we need to really pay attention to that because the professionals, who are full-time, are the ones that are going to be assisting and guiding the volunteers.

And finally, there is the issue of accountability with the use of performance measures, which I know the CDC and HRSA have done a lot of in the last few years and I think that has helped us in terms of our preparedness efforts.

I have to emphasize, I know the focus today is sort of how the Federal Government can get better in preparing for an all-hazards approach, but really, a Federal response for health care is really built on a solid foundation of State and local preparedness and I think people have highlighted that this morning.

Secretary Leavitt has actually stressed in reference to a pandemic that the first response has to be local, and I can tell you that at the State level, we are not going to be waiting for the Federal Government to ride in on a white horse to save us because we don't think that is going to happen. I mean, every single community will be impacted. They may not be impacted exactly the same amount on any given day, but they certainly would be impacted over a few months' period and then perhaps in successive ways.

New Jersey has had the—in terms of preparedness, it has had the good fortune, I don't know necessarily in terms of outcome, but we have had a real bioterrorism attack back in 2001. We were the epicenter for the anthrax attack, although in DC., they may have thought they were the epicenter. The letters went through the Hamilton Post Office, and we did have a very significant local response. At that time, we had very little funds in the State for surveillance issues and for other response issues and we very much depended on the CDC and the epidemiologic SWAT team to come, if you will, to assist us, and they did assist us and it was mostly local response and I think overall, given that we had never experienced that before, we came through it very well despite not having lots of local resources.

Last year, we had a staged event. We had the TOPOFF III exercise. I don't think it went as well, as we did during the anthrax attack in 2001, as a staged event. We had some decisions—the bottom line is the decision was made to basically prophylax the entire State within 24 hours. Well, there are not enough people within the State or even at the Federal level to do that, so the solution was basically to deploy Federal workers as well as postal workers to come in and hand out antibiotics in post offices. Unfortunately, that really wasn't a workable decision, and nevertheless, that was a decision that was made, and so we had—for a virtual reality problem, we had sort of a virtual unreality solution that didn't really work.

One of the questions to us today is who should be the lead Federal agency. You asked that this morning. I don't think there is one lead Federal agency for all situations. I think for medical and public health events, it needs to be the Department of Health and Human Services. Similarly, at the local level or at the State level, it depends on the event. For something like influenza or a plague attack, it does have to be health. It is mainly a health issue, although clearly there are infrastructure implications, as well.

For an explosion, for an example, it may not be a health—I mean, clearly, health is involved, but there are other issues related. Health can usually handle that, but shouldn't necessarily be in the lead at that time except certainly to care for the individuals.

States have to take the lead on surge capacity issues. It is hospitals that provide the health care, but even in the pandemic, it depends on the pandemic because we don't know really how it is going to play out, but many people may be only mildly ill or moderately ill and not require a hospital. Hospitals will be overwhelmed. But we have to have other solutions to care for all those people.

Clearly, any health response has to be a State and local-based response. The Federal Government can only assist to a certain extent, but when you have a disaster all over the country, it can't just be a dependence on the Federal Government. It has got to be State and local.

And finally, I just have to comment, there was a question—I know today we are not talking about surveillance, but since the last panelist brought it up, I want to say that the States believe that surveillance is best done at the State and local level and not at the Federal level in terms of public health surveillance and epi-

demographic surveillance for reportable diseases, whether they are intentional or natural in nature.

With that, I thank you and will be happy to participate and answer any questions.

Senator BURR. I appreciate your insight and will assure you we got an earful last week as it related to the surveillance issue, and I think that is an area that we have now flagged to sort of take a second, third, and fourth look at as we go through.

[The prepared statement of Dr. Bresnitz follows:]

PREPARED STATEMENT OF EDDY A. BRESNITZ, M.D., M.S.

Mr. Chairman and members of the subcommittee, my name is Dr. Eddy Bresnitz, Deputy Commissioner for Public Health Services and State Epidemiologist in the New Jersey Department of Health and Senior Services, and Secretary-Treasurer of the Council of State and Territorial Epidemiologists (CSTE). Thank you for your invitation today to participate in a roundtable on All-Hazards Medical Preparedness and Response.

The questions before us today are: How do we, (Federal, State and local agencies) appropriately prepare for and respond to events that require Federal healthcare resources, using effective financial and logistical support, based on evidence-based best practices? At the outset, we would like to echo the statements of Dr. Leah Devlin and others, representing the Association of State and Territorial Health Officials, made recently before the Senate HELP Committee. The key guiding principles for State and Federal preparedness outlined in their testimony included an all hazards integrated approach, predictable and sustainable funding, workforce development, implementation of performance measures, and accountability.

It should be clear that an effective Federal response must be built on a solid foundation of State and local infrastructure consisting of well-trained public health (PH) personnel, state-of-the-art equipment, flexible healthcare surge capacity, comprehensive preparedness policies, plans and procedures, and sufficient operating funds to sustain capacities and capabilities. As Secretary Leavitt has stressed, a nationwide PH emergency, such as an influenza pandemic, could only be effectively addressed by comprehensive and sustained preparedness at the State and local levels as the Federal Government could not possibly provide direct healthcare support at the local level when the outbreak is occurring in every community. Predictable Federal funding is the key.

Two events last year, one real and one staged, highlight the disorganization in the Federal response to provide healthcare personnel for healthcare and prophylaxis. In Louisiana, where the infrastructure had virtually disappeared, there were many impediments to effectively mobilize and support needed healthcare personnel from other States. In New Jersey during TOPOFF 3, the Federal solution to mobilize personnel to distribute antibiotic prophylaxis was developed through an ad hoc approach and was unrealistic but imposed on the State despite expressed reservations on its likely effectiveness. The MRC and ESAR-VHP systems for recruiting trained healthcare providers are relatively early in their development and require better coordination and sustained efforts on the part of all parties to enhance recruitment and address the cross-state credentialing and liability issues. And States must be equal partners in personnel deployment decisionmaking.

Federal logistical support for local needs in a PH emergency must work through existing State and local command and control and emergency response infrastructure. The appropriate lead Federal agency should be determined by the event. For example, for biological PH emergencies such as an influenza pandemic or a plague attack, DHHS is the most appropriate agency to coordinate the medical and public health response. Similarly, State health departments have strong relationships with State Hospital Associations, in addition to their statutory regulatory oversight. The lead Federal agency must work through the State DOH, in conjunction with the State Hospital Association, to coordinate preparation and response to mass casualty events where Federal resources are required. In summary, the appropriate Federal healthcare response is one coordinated and led by existing State emergency response systems. Thank you.

Senator BURR. Doctor.

Dr. GOUGELET. Good morning, Mr. Chairman, and thank you for the opportunity to testify before your committee today. I have pre-

sented written comments that are included in your packet of information. I will be very brief so we can get on to some questions, I believe, considering the time.

I would like to discuss, just for a minute or two, that we are actually very concerned about surge capacity and widespread events overwhelming public health emergencies, surge capacity events. We have identified what I believe to be a significant gap in terms of the personnel needed for staffing for alternative care facilities and community-based health response, including immunization, prophylaxis, hospital bed surge capacity, isolation and quarantine.

We believe and have worked through some of the details related to sub-state regionalization and interstate regionalization, which I believe are very useful tools to enhance the response and to coordinate and efficiently bring resources together. We have an example of that through the Interstate Regionalization Program. The Northern New England Metropolitan Medical Response System brings the resources of Maine, New Hampshire, and Vermont together in a planning mechanism and response capacity which we feel is very successful and brings three primarily rural States together to have capabilities that they might not have otherwise.

In terms of the Federal Government's role in this, of course, they have multiple roles, but one of the most important roles I see the Federal Government to have is to provide concise planning and technical information to communities so that we can form within sub-state regions and within States' uniform capabilities, the framework that we need—the framework that we desperately need across the Nation that has similarities. There are differences between States and local communities, but there are common structures that I believe that we can incorporate into local communities so that there is a standardization, and maybe standardization isn't the right word, similarities between these structures from State to State so that staffing can move across borders, we can have common equipment and supplies, but more importantly, that we have a foundation for establishing performance standards that can reliably make up the Nation's response by adding all of these State and sub-state capabilities together.

The question came up of logistical support for a massive Federal response, and I believe there is a role for the Department of Homeland Security to control large-scale logistical support in cooperation with the Department of Defense. I would emphasize—having been a DMAT member since the late 1980s—that if any changes occur through the Federal response system and NDMS, that particular care be taken to maintain the services that are currently available and to let the many thousands of volunteers that currently do this work know that they are not only valued in their services, but those services are going to continue and that the work that they do has significant merit. I feel that is a very important notification that we should give to that group.

In addition to that, I think that at this point in time, with all of the potential shuffling around going on, that I would encourage both the Department of Homeland Security and the Department of Health and Human Services to look at each of their agencies' strengths and weaknesses and to bring those to bear to create a rapidly mobile and efficient response capability that can really be

preserved in the coming months for the hurricane season and other threats coming up.

And the last issue relates to the private health care delivery system. I think that there should be resources available for private sector facilities to participate in emergency response and planning as well as we should be aware that if penalties exist or loss of income exists, when private institutions help, that those should be discouraged at the Federal level and that in terms of involvement of private health care facilities, I think that the sub-state regions that we talk about in our documentation is a good way to get the private health care system into the planning table and to participate in the response capability of both the State and, therefore, the Nation.

Thank you.

Senator BURR. Thank you very much.

[The prepared statement of Dr. Gougelet follows:]

PREPARED STATEMENT OF ROB GOUGELET, M.D.

The Nation's ability to respond to a mass casualty national emergency is the inherent capability of the Federal Government to respond and the composite of each State's ability to respond. They each present with their own limitations.

The Federal Government has limited resources to respond to overwhelming and widespread natural events such as Hurricane Katrina or a Pandemic influenza event. Overwhelming and widespread terrorist events will further challenge the Nation's ability to respond, as there would be no advance warning, and there would be intentional attempts to injure as many civilians as possible including direct attacks on first responders, health care workers and medical facilities. Federal response to locally catastrophic events is limited by the time it takes for resources to arrive in a community. Many times death and injury occur during the event or within the first few hours of the incident, emphasizing the need for an appropriate local response. In these two cases, the Federal response should be to anticipate, plan for, provide guidance and technical support, communicate with, and efficiently respond to communities where these incidents occur.

Individual States also have limited capacity to respond to overwhelming events. Each State should be broken down into sub-state regions that can provide critical response capabilities. Each State's capacity to respond to an overwhelming mass casualty event is then a composite of capabilities of sub-state regions. A Regional Response System (RRS) is sub-state region described as a metropolitan area, a sizable town and its surroundings, or multiple towns in a rural setting. An RRS is determined on its ability to plan for and provide critical services during the time of an overwhelming mass casualty public health emergency. Although all towns currently plan for and respond to a wide variety of emergencies, critical response capabilities necessary to respond to mass casualty events can only be provided by smaller towns or regions working together. Some examples include setting up community-based mass prophylaxis and immunization sites, community-based hospital surge capacity beds, or isolation and quarantine facilities. The Nation's capability to respond at this sub-state level is where a critical gap exists between resources needed and resources available.

Hurricane Katrina in particular demonstrated how a catastrophic emergency can overwhelm local response and leave a critical gap in response efforts until massive Federal help arrived days to weeks later. During this gap in effective response, death, and suffering continued in an environment of hopelessness and chaos. Analyses of potential biological terrorist attacks involving tens of thousands of casualties predict a similar gap in response capabilities.

The timely and effective use of the vast, distributed regional response resources requires careful and practical planning among communities and States before the actual need arises. Once an incident occurs, it is too late to develop the relationships, policies, and procedures to figure out how to integrate and apply such diverse resources in a timely and effective manner.

The concept of using regional response resources is predicated on comprehensive planning for use of local, State, and Federal resources from within a region. This planning along with appropriate and realistic exercises is needed before a catastrophic emergency. During such an emergency, the local medical and emergency

first response resources would be the first line of defense. Any serious flaw in this first response would seriously jeopardize all of the following responses. The first responders must be able to quickly build the foundation by which outside resources are efficiently integrated and effectively utilized within the community. The use of regional resources is necessary because of their close proximity and they may possibly have sufficient numbers to effectively fill the gap between the local and State response and the subsequent Federal response.

Regional planning both interstate and intrastate can be useful tools for closing the gap between local State and Federal response.

The intrastate Regional Response System (RRS) can facilitate planning and response to catastrophic emergencies for all types of hazards. Man-made and natural disasters include a vast array of threats from fires, floods, hazardous materials releases, transportation accidents, earthquakes, hurricanes, tornadoes, pandemics as well as the terrorist arsenal of chemical, biological, radiological, nuclear, and high-yield explosive weapons. The development of Regional Response Systems (RRS), along with implementing actions in order to ready communities, States and, indeed, the entire Nation to respond effectively to *all-hazards catastrophic emergencies* will provide a long needed framework to incorporate local, State and Federal resources during the time of an emergency.

If each State's sub-state region or regional response system (RRS) is tasked with critical capabilities such as setting up an alternative care center, then we begin to form the building blocks for a true and reproducible national response.

Estimates or predications of casualties anticipated during different types of outbreaks, natural disasters or terrorist attacks are a necessary first step to determining the types, numbers, location and timing of responders necessary to deal with varying mass casualty events. The next step would be to determine the medical care necessary, and the resources needed to give that care.

For example, if hospital bed surge capacity is the response required, the first step is to define the role and limitations of hospitals during the event. Hospitals are the only resource other than field treatment that have immediate or near immediate health care capabilities. During a Pandemic event, it is anticipated that hospitals will be filled to capacity with seriously ill patients and also severely limited in their response capability by staff (and their families) illness and death. Hospitals will also be compromised by the loss of critical medical supplies and pharmaceuticals, and possibly even power and communications failures.

Community-based facilities extend the State's surge capacity beyond acute care hospitals. These facilities allow definitive health care for patients during mass casualty incidents that exceed hospital surge capacity. They also provide an alternative site for treatment should a hospital be evacuated or incapacitated. There are two different types of community-based facilities: alternative care facilities (ACF) and acute care centers (ACC).

Alternative care facilities are community-based medical facilities usually used for outpatient treatment that during the time of a mass casualty event, can be readily converted to care for patients needing hospitalization. An example of an ACF would be a nursing home or ambulatory surgery center.

Acute care centers are located buildings of opportunity. These are community facilities that simply provide space. Examples include armories, auditoriums, conference centers, and gymnasiums. The ability to provide treatment is dependent on all medical supplies and staffing being brought to the site. This type of facility would also be the receiving facility for outside Federal resources such as the Federal Medical Contingency Station.

Using this scenario, local Medical Corps personnel can plan for and staff an alternative care facility. NDMS, and commissioned corps personnel can later provide backfill upon arrival.

A large gap exists in trained health care workers to staff community-based health care facilities including alternative care centers, immunization and prophylaxis clinics and isolation and quarantine facilities.

To successfully recruit, train, exercise and sustain health care providers is a difficult task. Critical concerns by staff are very common sense and understandable:

- Am I safe, is my family safe?
- Where am I going to work and for how long?
- Am I protected from liability and workman's compensation issues?
- Am I trained to recognize and treat the disease or injury?
- If I take off work, will I be compensated?
- What is my specific job action, where do I fit within the chain of command?
- Am I qualified and trained to do the job?
- Do I have any physical limitations or restrictions that prevent me from responding?

Federal, State or private medical staffs that provide medical care as their full or part-time employment should be provided opportunities to train, exercise and drill for a wide variety of all hazards catastrophic events during the course of their employment.

One major objective for staffing would be to recruit volunteers before an incident occurs. This allows the opportunity to verify credentials, issue IDs, educate and train, and to participate in exercises and drills. The completion of the ESAR-VHP program would be valuable.

Interstate regionalization is also a tool for filling in the critical gap between local, State and Federal response.

To fill this gap in Northern New England, the Northern New England Metropolitan Medical Response System (NNE MMRS) functions as a coordinating resource for Maine, New Hampshire, and Vermont in preparing for and responding to the health and medical consequences of a mass casualty event affecting the tri-state region. When the national MMRS program was founded in 1996, the intention was to mitigate casualties from terrorist events using weapons of mass destruction by improving and coordinating planning efforts within metropolitan areas. Recent events, such as Hurricane Katrina and fears of an Avian Flu Pandemic, have underscored the need to improve planning and response efforts for natural disasters and disease epidemics nationally.

The population of the three States exceeds 3 million with 52.6 percent of residents residing in rural areas. Major population centers and seasonal tourist attractions within the region represent vulnerabilities for terrorist attacks. Furthermore, all three States share borders with Canada, necessitating close cooperation across an international boundary. Maine and New Hampshire both have active seacoasts, busy with commercial and leisure vessels.

In addition to the threats to northern New England, the region must be concerned with terrorism and disease epidemics occurring in southern New England. Due to geography, in the event of a mass casualty incident in the urban areas of southern New England, it is likely that the tri-state region will provide surge capacity for victims of the event. While some patients may be legitimately transported to northern hospitals, there is a distinct possibility that tens of thousands of individuals might flee the urban areas, overwhelming resources in the northern States and potentially spreading disease. There is also a need to be prepared to act on alerts from the Boston BioWatch program.

(1) A large gap exists in trained health care workers to staff community-based health care facilities including alternative care centers, immunization and prophylaxis clinics and isolation and quarantine facilities. Basic issues such as liability, workman's compensation, personal and family protection, education and training, motivation and sustainability are high priorities for this group of health care personnel.

Sub-state regionalization and inter-state regionalization are two useful tools that can fill the critical gap between local and State response, and the Federal response. Critical health care staff, medical equipment and supplies and pharmaceuticals may be available within neighboring communities or adjoining States. An example of interstate regionalization is the Northern New England Metropolitan Medical System which provides a planning mechanism and response capability for Maine, New Hampshire and Vermont.

The Federal Government should provide concise planning guidance and technical information to communities that outline critical response capabilities. Common structures within States and across State lines allows for familiarity and cost effectiveness. A common structure would allow for seamless integration of staff, equipment and supplies

(2) Significant logistical support for a massive Federal response should be through the Department of Homeland Security. This would enable close support of multiple agencies within DHS, as well as with DOD. DHHS and DHS should identify strengths and weaknesses within their agencies, and combine efforts to insure a rapidly mobile and competent medical response system. To optimally support the Federal response, a solid foundation in affected States and communities is needed to maintain an effective response capability. Strong medical direction at the senior level should direct the field deployment, response and logistical support.

(3) Private health care delivery systems should be utilized as resources during the time of emergency and incentives should be in place for preparing for and responding to these emergencies. There should not be penalties or loss of income for private healthcare systems participating in emergency response. Participation of private health care can be easily added at the sub-state and community level.

Senator BURR. Your written statements are invaluable to us and we have looked at those. I probably will stay away from some of that because there are some loose ends that I would like to wrap up in the 15 minutes that I have got with you.

I think that your membership on NDMS response entity is a unique opportunity that we have to better understand, not necessarily today, but as we go through this process, I hope you will make yourself available to us as we talk about this relocation and, more importantly, how it is then structured. I think that this is not simply another Washington attempt to redesign the deck chairs. It is to create a robust and responsive entity with its focus on health response, and the threat, and not to hope that on any given day with any given situation, that these different pieces sort of come together. It should be a planned response, because they are all part of one unit and it is merely a question of how much of that unit you turn on.

I am curious with the exercise you went through in New Jersey, given that you ended up with a distribution at the post offices, was the mail delivered that day?

Dr. GOUGELET. Well, as I said, it was a virtual reality event. Nothing was delivered that day—

Senator BURR. But had you not decided on post offices as the distribution point, the mail would have been delivered that day, wouldn't it?

Dr. GOUGELET. It may have been. I mean, certainly in some jurisdictions in the State.

Senator BURR. In all likelihood, you could have done the distribution given the choices you made, in 1 day, utilizing the same entity that you chose but utilizing it in a different capacity. Versus the post offices, you could have used the home delivery. I only point that out to you because I want to share that we have looked at every potential option that exists in this country for distribution. I think at the end of the day, we can come up with a consensus on a lot of the structural changes that are necessary and we will pass the test of workability.

The one question that I have yet to figure out the answer to is, under numerous situations, how do we distribute what it is that we have got, and have we explored the use of the U.S. Postal Service as it relates to national distribution? We have looked at Wal-Mart and Home Depot and Lowe's that do this with great proficiency. I think it is safe to say, we do not have the answer yet that gives us the assurance there is one thing that we can turn to that gives us the capacity to do that. I think we are convinced that we have to answer that question before we complete this reauthorization, if not in total, in part, and that there be a quest to fill in the rest of that gap, which I think probably will exist.

But I think many in the Federal Government have overlooked that capability that exists every day in this country, and that is that across the country, the mail is delivered every day, and in all likelihood, that person that delivers it, Richard, is the only one that knows actually how many people live in that house. It is not the Census Bureau, it is the postman.

Dr. BRESNITZ. If I could just make a comment on that, I got to know the local postal officials quite well during 2001 and I got an

education about the U.S. Postal Service and labor-management relationships in the U.S. Postal Service. It is sticky in many cases and I would only urge those at the top to understand that those who are the postal carriers and postal workers are not necessarily ones that have bought into such a system. I think that it is true that upper management has done that, but I am not so sure that at the local level, given the scenario that might play out in an attack, given that many of these carriers would require security and just that alone might give them hesitancy to participate in something like that. And so at the end of the day, even though postal leadership might think that this could work, I would want to know from the local people whether they would consent to doing something like that.

Senator BURR. Feel certain that we have drilled down to the point that we understand the challenges that even that as a distribution choice present to us. I think it is safe to say that for a pandemic model, where HHS would model in 35 or 40 percent of the individuals as no shows, all of a sudden, that choice is eliminated because you are looking for total coverage and that is conditional on a given person who shows up on a given day. You can fill in to a certain degree, but you can't fill in the 35 or 40 percent scenario that we have been presented. So I think we are truly trying to deal within the variances of the likelihood of what we are going to experience so a sufficient answer actually does meet the needs of whatever the threat is.

Let me—yes, sir?

Dr. INGLESBY. On that point, I think, just if I could endorse your potential enthusiasm for using the Nation's great distributors that already give these kinds of medicines and vaccines out on a regular basis, I think there is a lot of evidence that the leaders of the major retail chains in the country would be interested in doing this if it became more clear how they could get involved. They have the physical plants. They have the parking lots. They can provide some modicum of security and they give out medicines and vaccines all the time, every day, but they have not, for the most part, been included in any kind of strategic thinking on that. But if I had to put my nickel down on some new huge operation that already exists that we could tap, I think that would certainly be worth doing, to put my nickel on.

Senator BURR. I can safely assure you that we have looked—

Dr. INGLESBY. You have done it.

Senator BURR. We have left no stone unturned as it relates to at least exploring what our options are.

Let me ask you, if I can, what would be the greatest needs of a hospital in the event of a mass casualty incident?

Dr. INGLESBY. Well, the thing that would change the game entirely obviously would be vaccine. If we can't get vaccine, we jump down three or four levels to having to deal with a pretty terrible situation. So absent vaccine, hospitals are going to be in desperate need of the personal protective equipment that keeps health care workers—that gives health care workers the best chance to keep from being infected. They are going to need to have caches of antivirals, if they are available, and a communications system which tells them what is going on elsewhere in the State, what is going

on in the Governor's office, what is going on at CDC, because right now, most hospitals are pretty much autonomous entities which are competing across the street, which don't necessarily have a lot of connections. It depends on the State. New Jersey may be different. In some places, it may be stronger, but in many places, hospitals are entirely separate from the public health apparatus and have only kind of moderate personal connections.

So they need to know what is going on. They need to have situational awareness about what is happening, where the medicines are, is there more coming, where are the patients that are sick, what is the overall sense of the State leadership. You need to have personal protective equipment.

Senator BURR. Tom, the average hospital could last how long without being resupplied on the essentials?

Dr. INGLESBY. It depends on the kind of crisis, but I think some hospitals have already purchased Tamiflu and have purchased as many masks as they can get from Kimberly Clark or other suppliers. But there are sharp limits even now for hospitals who want to spend their own money on this.

Senator BURR. I guess I am drilling down to just the basics, the basic supplies that a hospital has. How long can they maintain the treatment of patients if there are not new supplies coming in the door?

Dr. INGLESBY. The basics? So if you had complete or interruption of the supply chain for the typical needs of a hospital, probably a couple of days at the most. Most of them operate in just-in-time in most different areas of infrastructure. And if they lose one of them, if they lose electricity like they did in Louisiana, or if they lose water, or if they lose medical gases, then parts of their operation go down completely.

Senator BURR. Rick, you talked about the surge capabilities designed for Boston, of 500 beds by a number of different methods, that the partnership was able to come up with. Did you ever model how long you could maintain that surge capacity to 500 beds?

Mr. SERINO. We have had numerous tabletop drills, ERT summits. The most recent was a couple of months ago when we had over 350 people all in the room. To answer that, I am actually going to go back to what you were just asking about—hospitals and an individual hospital. One thing that we have found is that the hospitals initially were individual, and what we have done is bring them together. We have looked at the medical community as the medical community, including EMS, hospitals, public health and community health centers, which prove to be a very great asset in the city and also in rural areas, having the local community health centers or whatever they are called in their area in order to be part of a system. Having that as part of a system, having a seat, as they do, on the city's Emergency Operations Center, one for each one of those sit together so that 2 days out, when supplies start to dwindle down and there aren't enough medications or medical supplies in the hospital, that it is not a hospital requesting that, that they go through a centralized, organized at the city level, and then bumping that up so it can then be distributed in an organized manner rather than one hospital asking for one thing, another hospital

asking for the same thing, somebody else asking for something else.

We have tested that. That has worked, and it is important in order to do that, and I think that probably the most critical asset in the hospitals is not necessarily the equipment that is going to run out in 2 days. I think it is the people—

Senator BURR. You have highlighted a couple of times this partnership that was created, not just within the family of medical. I would imagine that for the purposes of the DNC convention that that probably included law enforcement, it included—

Mr. SERINO. It included law enforcement at all levels and—

Senator BURR. Let me ask you, what were the most difficult problems that you encountered as you tried to set up the agreements between all these entities.

Mr. SERINO. Lawyers. I say that in a room full of lawyers, but—

[Laughter.]

I think that probably one of the problems, aside from the lawyers, was trying to actually get people to understand the concept of what we wanted to do, and once we got people, and especially the CEOs, because we had the disaster coordinators, the ER staff all brought into it and it was how we were going to get everybody into it and it was the mayor, Mayor Menino, who was actually able to bring, you know, the CEOs together and to say, this is a priority.

Senator BURR. I open this to anybody who would like to take a shot at it. I think everybody mentioned that there was a need, a necessity to tailor the needs of a response team to an area in which they are deployed and better integrate the Strategic National Stockpile with local responders. From the local perspective, how can we at the Federal level facilitate this increased integration? I think this is vital as we begin to create this framework that we know, what is the trigger?

Dr. GOUGELET. Well, you know, I believe the direction from the Federal Government in terms of what this framework should look like, should give a clearer understanding at the local level of what is expected in terms of response. For example, I think that when we did the smallpox planning several years ago, when we were given some specific criteria, you know, your total population immunized in 10 days, that was really the first time we got specific numbers and guidance and timeframe from the Feds in terms of what the local community should be doing, because obviously, with the smallpox epidemic or incident, the Federal Government wouldn't be involved in that. So this was the first time I think that the local responsibilities were thrust—or responsibilities were thrust upon the local communities.

So the guidance from the Federal Government would be important, and then performance criteria and funding follows that. So we are talking about basic structures only in local communities or regions of local communities to stand up a capability, and then by testing those and reinforcing that financially and everything, I think is a reasonable thing to do.

Senator BURR. Am I wrong to believe that we should create a public health floor that is the same in every community, not a ceiling, but a floor, that you need the confidence of knowing whether

you are in the town you are in or whether it is 30 miles down the road that the capabilities to some minimal level exist within the public health infrastructure in that community?

Dr. GOUGELET. Actually, I think you are correct in assuming that that is what we need. I mean, having this common framework doesn't necessarily—we tell them who is in charge in each community, what building to use, what is going to be the lead group, how many organizations should be at the table. I mean, those things are characteristics that the communities can determine on their own. But I really do believe we need that ground framework to get things going.

Dr. BRESNITZ. I would agree, as well, and I think most State and local health officials would, also. There are national public health practice standards, and we are not talking just about emergency preparedness but standards for public health in general. Those standards have been around for a few years. A number of States have taken those standards and adapted them to their own specific requirements at the State level.

In New Jersey, for example, we actually have regulations in place, adopted a couple of years ago, that require local health departments to do an assessment of their capabilities and the gaps and then basically develop plans to move forward with basically improving their public health capabilities. The issue always comes down to, okay, so we have identified the gaps. Now where are the bucks to actually fill the gaps?

Senator BURR. You see the difficulty that we have got in trying to create a national framework to operate within. If, in fact, community by community that public health piece changes from a standpoint of its capabilities, you can't plug it in in an overall template where it works the same or has some expanded capacity based upon local input, but there has got to be a minimal, as I see it, force to integrate them into any type of national model.

Dr. BRESNITZ. Agreed, and I would say that all public health agencies at the local level would like to be at that level, whatever that floor is, as you put it. The issue is, how do they get to that floor and beyond?

Dr. INGLESBY. Can I make a comment on that?

Senator BURR. Yes.

Dr. INGLESBY. You asked before, how can the Federal Government respond? I think, to local triggers in a crisis. At UPMC during Katrina—Pennsylvania was entirely unaffected by Katrina—the CEO and the leadership of UPMC attempted to put its entire fleet of helicopters, 500 medical personnel, and beds—like countless institutions across the country, a similar experience. Over a week, it could not figure out a way to get into the Federal Government or into local or State governments in Louisiana to give any of it. They tried to knock on every door they could get.

Now, maybe it was UPMC's own lack of familiarity with the government, but volunteering was too hard on an institutional basis and on an individual basis. There were volunteers around the country who wanted to—health care volunteers who wanted to get involved, but they saw multiple new systems being set up on the fly, multiple credentialing systems, complete uncertainty about whether they would be covered from being sued.

I think simple consolidation and clarity and simplicity in terms of what HHS could do. If you could find a way to say, this is where the volunteers should call. This is where interested institutions should call. There are a lot of things going on, but if we could kind of bring them together—ESAR-VHP, MRC, the Public Health Civilian Corps, the Commissioned Corps, I think there are just too many small pieces and they are too far out across government. They are in DHS. They are in CDC. They are in HHS. They are in HRSA. I think we could bring them together, make it more simple and say, one-stop shopping.

Senator BURR. Unfortunately, the clock has gotten me and I can assure you I could sit here for another hour and read through some questions. I hope you will allow me to do some, as well as other members, in writing.

I think that is the opportunity we have, to take all of those different pieces and, No. 1, figure out which ones could be moved, which ones are absolutely crucial to our capabilities to respond and should be moved, and then the last test will be is there a willingness to fight the battle of the impact of that on Federal agencies. When you move responsibilities, as you know, there is a budget that goes along with them and budgets are very protected in Washington within certain agencies.

Truly, this is an attempt on the part of the bipartisan subcommittee to look at how it should be designed and what the make-up should look like for us to respond in the best possible scenario. We will struggle between our inability to supply enough money—I think all of you know that—but I would refer to it a little bit differently. I would tell you that there is a short-term piece and there is a long-term piece.

Short-term will always be driven by the urgency of the threat, and I think it is evident as to the investment we have made in a very short period of time in pandemic anti-viral vaccine research, preparation, versus the known threats that we have got out there today where there is not that sense of urgency. Therefore, there is not that quick injection of cash.

My belief is, short-term as these threats or other threats emerge, we will respond to those short-term, and it is important that those dollars be used in a very effective way in the overall design of what it is we have put together. Long-term, we have to be a partner just like you are partners with local entities that make up that successful response capability. And in long-term successful partnerships, there has to be, No. 1, a clearly-defined goal, and there has to be accountability for how one uses the money to, in fact, accomplish it.

I sort of put you and everybody else on notice that I think one of the absolute essential requirements of this legislation and this subcommittee is to come up with the appropriate accountability piece that assures us that the right things are being invested in, and No. 2, ensures you and all the partners of the local entities that, over time, those resources that are needed for this function to take place will, in fact, be in place.

I alluded to the first panel that one of the striking differences that existed in the Gulf Coast was a State that chose to put the majority of their Federal dollars in their surge capacity and a State

that chose to put a majority of their dollars in their preparation and actual practice of their preparedness plan. As a result, you have two distinctly different outcomes between Mississippi and Louisiana.

That is not to fault one and to highlight another. It is to say that in that case, we provided the choice. In the case of one, they chose wrong. Surge did them no good when the facilities that they built up were no longer available. I think that there is a lesson there that the subcommittee will go down and look at first-hand so that we can try to figure out a way not to design choices that might not be appropriate long-term into the structure of what it is we think we need in place.

I will have on my wall, if you want to come by my office any time after today, "Volunteering was hard." You have termed what I have been trying to tell Federal agencies since Katrina and before Katrina. We almost make volunteerism for anything where the Federal Government is involved impossible, and I think Senator Hatch alluded to it. I think Senator Harkin was on the fringes of it. We have to figure out a way to make volunteerism easy. We have to figure out a way to recruit individuals to commit to volunteer. If not, we can handle some of the threats that our communities are going to be faced with, but I will assure you there is a handful of threats, many of which we don't know what they are today, that will come at us as a country and a world in the future that we will not be able to handle if, in fact, we have not answered that one specific challenge.

So on behalf of the subcommittee and the chairman and the ranking member, let me thank you for your willingness to be here. Hopefully, as this year goes on, we will consult with you on the product that we are trying to produce even more. Thanks.

Senator BURR. This hearing is adjourned.

[Additional material follows.]

ADDITIONAL MATERIAL

RESPONSE TO QUESTIONS OF SENATOR BURR BY RICHARD SERINO

Question 1. Effective medical response to a national catastrophe requires a sufficient number of medical personnel. Establishing alternative care sites will only be effective if they are staffed with trained health care providers. Currently, the Federal Government possesses several mechanisms to support this activity—NDMS, ESAR-VHP, Medical Response Corps, and the Commissioned Corps. How should the recruiting, credentialing, training, and managing of permanent and temporary Federal health care providers best be accomplished? How can the Federal Government best organize and deploy health care providers to assist in the response to a national emergency?

Answer 1. The staffing issues that will arise during a medical crisis are some of the most challenging surge planning issues that local, State and Federal officials face. The programs in place to address these challenges represent a good start in the effort to provide adequate trained staff, however these programs must be expanded and coordinated. Specifically, the National Disaster Medical System must be expanded and better supplied; the Emergency System for Advanced Registration of Volunteer Health Professionals must be fully implemented and expanded; and the Medical Reserve Corps must be fully funded and supported. Additionally, it is essential to promote and assist local efforts to address surge capacity needs.

The National Disaster Medical System must be expanded and adequately supported. The Disaster Medical Assistance Teams (DMAT) are primarily local and regional organizations that can be federalized during a crisis. For the most part, the DMATs are managed in States that face a regular need for medical surge capacity. While this often means that the teams are very well trained, it also means that during the time of a crisis teams are being pulled from locations where the personnel are still needed. For example, many of the Florida teams that responded to the Gulf Coast had just recently been involved in hurricane response in their own jurisdictions. Furthermore, the current structure of the DMATs, mandating a “three-deep” format, still does not provide adequate depth to insure full mobilization. The depth is not uniform across all specializations and thus leads to teams with significant gaps. The DMAT teams need to be expanded in numbers and in distribution. Through funding and other incentives, all States should be encouraged to help establish teams, and those teams should have sufficient depth to field well-rounded medical organizations during a crisis.

While federalized assets such as the DMATs provide one critical surge resource, volunteers will provide the bulk of any medical response during a sustained crisis. The credentialing and organization of these volunteers provides an ongoing and unique challenge. While programs such as the Emergency System for Advanced Registration of Volunteer Health Professionals (ESAR-VHP) are steps in the right direction, they have yet to make a significant impact on the local level. The program is only in its very initial stages of rollout and it does not address many of the broader credentialing issues likely to come up during a crisis. ESAR-VHP must be fully implemented and expanded in conjunction with the Medical Reserve Corps, but it must also be supplemented with a broader national initiative. The Federal Government must push for a way to achieve universal credentialing for medical professionals involved in disaster response. If there is even the slightest chance of responding to a crisis, the individual must have pre-existing credentials and these must be recognizable across local and State boundaries. A credentialing program could include a universal symbol added to a driver’s license or an additional national card issued during the time of initial credentialing.

Additionally, volunteer organization remains a distinct challenge. The Medical Reserve Corps must be completely funded. While surge capacity is a universally recognized issue, the funding for the Medical Reserve Corps is constantly threatened. The program must be expanded through more effective recruitment, advertising, and improved training. The program should also be organized in conjunction with further efforts.

Finally, in Boston, one of our great successes has been the Metropolitan Medical Response System staff sharing agreement. The MMRS agreement applies to staff and equipment and establishes that participating institutions cover liability and compensation for their staff, whether it is to help the city or another health care facility. Furthermore, the sending institution guarantees the staffs’ credentials. The agreement has been implemented three times, twice for immunization clinics for Hepatitis A outbreaks and once during Hurricane Katrina. Efforts like the MMRS agreement provide the basis for expanded surge capacity and can serve as a model for State and Federal efforts.

Once our volunteer programs are guaranteed long-term support, they need to be integrated into a comprehensive response plan. Those with experience, specifically the DMATs and the military will always best perform local response at the site of a disaster. Shelters and overflow hospitals are perfect places to incorporate ESAR-VHP and medical reserve corps volunteers. If leadership and organization can be incorporated from the various hospitals, as our MMRS staff sharing agreement has done in Boston, these groups will be up and running faster. Additionally, if we are to guarantee these volunteers will show and be able to perform to their maximum capacity then we must guarantee that their workers compensation and liability protection is covered. Finally, these groups can provide added service at vaccination clinics and during the reception of displaced persons.

Question 2. The medical preparation for, and response to disasters requires significant logistical support—medical supplies, pharmaceuticals, transportation, medical evacuation, etc. What is the most effective way to optimally support a Federal medical response? Which Federal agency should take the lead?

Answer 2. During a large-scale medical response to a crisis, the primary logistical challenge is not the initial one, but the immediate follow-on response. Specifically, in addressing the needs of the National Disaster Medical System and the Disaster Medical Assistance Teams, the medium term logistical support requirements must be re-examined.

DMATs are specifically designed to deploy with a 72-hr supply of materials. One of the great successes of the DMATs was the initiative to provide all teams with dedicated trailers for pre-packaged deployment. This, however, has not solved the issue of supply, both in terms of immediate needs and longer-term requirements. Many DMATs are unable to sustain sufficient supplies for many types of deployments. In particular, there remain outstanding equipment requirements that must be addressed. While these needs are specific to each team, for example some Massachusetts teams lack environmental control units for their medical tents, it creates a larger problem during a deployment, critical time is spent trying to acquire or borrow needed equipment. Furthermore, while the teams do deploy with a 72-hour supply, the follow-on for this supply is inadequate. One suggestion is to develop additional DMAT caches such that a replacement 72-hour cache is immediately deployed behind a DMAT team. This way, as a team runs out of supplies, they need not spend critical time tracking down specific items, but will always have a complete additional stock of supplies waiting to fill in needs.

Since the DMATs were incorporated into FEMA, logistics have improved: they now have emergency pharmaceutical caches, trucks, warehouse space, and a radio cache ready for deployment. However, there is still much to be done. For example, in the Katrina response, providers found that only certain antibiotics could be used for soft tissue wounds because of regional variation in the bacteria. FEMA logistics was unable to process this change from the usual antibiotic cache even after several weeks. Clearly, we need strong logistics, with a medical background.

Logistical needs are not confined to the DMATs. The Federal Government must find a way to better address equipment needs during a surge incident. The National Pharmaceutical Stockpile and the Strategic National Stockpile are critical assets, however, they are not well integrated into local response capabilities. While the need for confidentiality and security in these caches is understandable, they are only useful if the people who use the equipment know what they will find and are familiar with its use. Federal and local agencies must find a way to coordinate the security needs of these stockpiles with the practical needs of efficient deployment.

Question 3. National medical preparation and response to mass casualties is dependent upon integrating multiple components, including a largely private health care delivery system. What steps must be taken to foster a more coordinated response that includes a strong public-private partnership?

Answer 3. Federal, State, and local governments must pursue every opportunity to incorporate the medical community into planning and training. The worst possible outcome is for people to be exchanging business cards on the day of a crisis. It is only through ongoing coordination, exercises, and trainings that full integration is maintained. In Boston, we have had real success by insuring the medical community has a seat in homeland security planning and discussions, by including the medical community in regular exercises and drills, and by providing effective training that spans disciplines.

Locally, we have learned the value of existing relationships. Our successes in medical planning come from bridging the gap between a well-integrated medical community and the public safety and Federal agencies that play central roles in homeland security and emergency preparedness. As the result of extensive experience working with the Conference of Boston Teaching Hospitals to manage disaster

planning in the city as well as more mundane day-to-day emergency planning, there is an existing group of local officials and private organizations that have worked hand in hand for years. By establishing and carrying forward committees and organizations that address planning and response issues, the people who will have to work together in a disaster already know each other. Furthermore, by including the medical community in the planning process, many people have learned how important such planning is. There is now a seat for the medical community on the U.S. Attorney's Joint Terrorism Task Force and the Anti-Terrorism Advisory Council. The medical community is an integral part of Boston's Homeland Security planning, and while some formal structures are still missing, they now have a seat at the table.

One of our lessons learned is that the medical community needs to be considered part of the critical infrastructure. Communications, infrastructure protection, and integration into existing emergency management structures are all tasks that flow from this acceptance of the private medical infrastructure into the public response community.

RESPONSE TO QUESTIONS OF SENATOR BURR BY ELLEN EMBREY

Question 1a. Effective medical response to a national catastrophe requires a sufficient number of medical personnel. Establishing alternative care sites will only be effective if they are staffed with trained health care providers. Currently, the Federal Government possesses several mechanisms to support this activity—National Disaster Medical System (NDMS), ESAR-VHP, Medical Response Corps, and the Commissioned Corps. How should the recruiting, credentialing, training, and managing of permanent and temporary Federal health care providers best be accomplished?

Answer 1a. The medical response to a national catastrophe begins first and foremost with State and local first responders. The Federal Government must anticipate and be prepared to rapidly respond if State and local governments are not able to mount an effective response, even before a formal request for Federal assistance is received. The mechanisms to provide Federal health care provider resources are through the National Disaster Medical System (NDMS), the Emergency System for Advance Registration of Volunteer Health Professionals (ESAR-VHP), the Medical Reserve Corps, and the Public Health Service Commissioned Corps. However, the Defense Department, to the extent health care resources and providers are not deployed on other global missions, can provide additional health providers to supplement the workforce. DOD needs to synchronize these assets and capabilities with the overarching coordinating body. Specific recommendations include:

i. Recruiting

1. Recruiting from retired or currently unemployed but qualified volunteer providers within the community and State.
2. Making use of reserve military medical and nursing providers and other responders, as well as an expanded group of allied health professionals, such as veterinarians, dentists and dental auxiliary providers, pharmacists, and students in training.

ii. Credentialing

1. HHS, working with State government and specialty/professional associations, needs to continue to build a robust and comprehensive Federal health care providers database.
2. HHS needs to continue to research regulations to cross-credential Federal providers, including DOD providers during times of crisis/national emergency.
3. HHS needs to continue to develop ESAR-VHP and other databases to allow for online validation of credentialing requirements to facilitate rapid certification of medical professional volunteers.
4. HHS attorneys need to work with the States' Attorneys General to ensure federally credentialed providers do not require additional credentialing when deployed within any given individual State.

iii. Training

1. HHS needs to determine what types of providers are required in catastrophic events and provide guidance to the remainder of the ESF#8 partners and recommended training standards.
2. Train an expanded group of providers, such as veterinarians, dentists and other allied health professionals to provide "triage" and basic care requirements.
3. Create a system to train a pool of non-medical responders to support health and medical care operations (e.g., military personnel at sea are all trained in BLS and basic responder care to act as first responders). Note: Although the "best pos-

sible care” will be delivered during a mass casualty event, the “standards of care” may be different than what can be provided during daily routine scenarios.

4. Determine processes to reallocate providers from non-emergency care and non-emergency sites to emergency response assignments and from unaffected regions to affected regions (this will involve identifying skill sets of each practitioner group [such as paramedics and nurse midwives], so as to optimize reassignment potential).

Question 1b. How can the Federal Government best organize and deploy health care providers to assist in the response to a national emergency?

Answer 1b. Collectively, Federal agencies, including DOD, have many trained medical personnel who can be called upon to respond to a mass casualty event. The problem is a need for improved coordination, consistency in policies and procedures, and regular simulations/exercises. The National Incident Management System should be used to affect clear command and control and provide improved situational awareness to the healthcare situation at the site of the disaster. Specific recommendations include:

i. HHS should work with the ESF#8 partners, including DOD, to develop capabilities-based concepts vice pre-established units (e.g. Federal Medical Stations).

ii. DOD should include HHS, VA and DHS/FEMA and other ESF#8 partners in its determination of capabilities, including interagency deployable capabilities

iii. DOD should work the Services and the interagency partners to develop and more broadly apply Unit Type Codes (UTC’s) which identify capabilities, team readiness, and deployment status.

Question 2a. The medical preparation for, and response to disasters requires significant logistical support—medical supplies, pharmaceuticals, transportation, medical evacuation, etc. What is the most effective way to optimally support a Federal medical response?

Answer 2a. i. DHS/FEMA needs to provide the overall construct of logistical support to include the infrastructure available for public health and medical requirements.

ii. Establish an ESF#8 logistics coordinator (like the Strategic National Stockpile) that will:

1. Establish medical supply chains and support capabilities to prioritize, acquire, distribute, and redirect assets based on HHS guidance.

2. Monitor and report the status of critical medical materiel and items during emergency response operations.

3. Coordinate logistics support from commercial suppliers.

4. Assess emergency response capability.

5. Plan and build deployable sets.

a. Plan and coordinate return, re-use, or disposal of assets after the contingency is over.

iii. The idea of establishing a Federal Medical Materiel Coordination Group (FMMCG) was originally proposed as a result of Sept. 11, 2005 and the anthrax scare when one Federal agency negotiated their own contract price for antibiotics, but failed to include other Federal agencies. The FMMCG is designed to establish procedures for coordinating and allocating critical medical materiel items among the different Federal agencies seeking the same products in the event of an all-hazards catastrophe. Once established, this coordination group would represent the Federal agencies engaged in acquisition and management of medical materiel to support emergency operations. It would focus on defining criteria that elevates allocation decisions for medical materiel items across Federal agencies. This group would work to develop the above requirements to feed into the existing FEMA logistics management and distribution processes. The lessons learned from Hurricane Katrina for medical logistics could be resolved with this FMMCG.

iv. Patient movement and evacuation of displaced persons should be removed from this function and “managed” through ESF#1/Department of Transportation (DOT). All requests should come through the NRCC to determine the most efficient use of transportation assets, to include the use of pre-existing transportation contracts to move patients that do not require medical care during movement. A national (Federal, State, local) system for evacuee and patient transport, regulation, and tracking should be developed that begins at the incident site, follows the evacuee/patient to intermediary locations (e.g., hospitals, nursing homes, rehabilitation centers, etc.), to final disposition (e.g. home). Transportation assets at Federal, State and local levels need to be coordinated and visible, and related communication needs to occur throughout all levels.

Question 2b. Which Federal agency should take the lead?

Answer 2b. i. DHS/FEMA Logistics should develop standard processes to accomplish the above for all ESF's.

ii. DHHS should be the lead Federal agency, as detailed in ESF#8. DHHS should plan, exercise and coordinate a medical response. If the catastrophe is beyond their capability, DOD *could be* considered to assume the lead. However, this should be a Presidential decision based on:

1. the extent to which State and local first responders are effectively managing the situation,
2. the extent to which Federal civilian responders are able to effectively manage the problem,
3. the nature of existing relationships in the jurisdictions affected, and
4. the nature of existing relationships between the military and the States affected.

Question 3. National medical preparation and response to mass casualties is dependent upon integrating multiple components, including a private health care delivery system. What steps must be taken to foster a more coordinated response that includes a strong public-private partnership?

Answer 3. Steps begin with aggressive regional, State, and private sector coordination between the ESF#8 functional lead and appropriate parties. Lack of prevent planning can result in an ineffective, inefficient and dysfunctional response. Local healthcare providers and agencies should be knowledgeable of local requirements and assets available on scene. The Federal response should be geared to supporting those requirements and filling gaps at the State or regional levels, when requested.

Under the NORTHCOM model, Joint Regional Medical Planning Offices (JRMPOs) exist in peacetime to coordinate medical support to local and State civilian authorities. This effort is being expanded by FEMA and DHHS and should continue to be expanded to include all Federal agencies and the private sector.

i. Messages should be developed that clearly include the private health care industry as our partner.

ii. Incentives should be developed to recruit private industry and academia to provide assistance.

iii. Reimbursement strategies for loss of elective surgery (the main source of hospital income) need to be developed to ensure solvency.

iv. Legal considerations should be evaluated to ensure the ability to view all types of patient data, location, status, etc. during a catastrophic event.

v. HHS, in coordination with the other NDMS partners, should re-evaluate NDMS to potentially expand its functions to include the private sector and make recommendations on the adequacy and feasibility of utilizing the current NDMS structure to support catastrophic events. Inclusion of other ESF#8 supporting Departments/agencies within NDMS should be considered (e.g. DOT).

[Whereupon, at 12:07 p.m., the subcommittee was adjourned.]