HOW EFFECTIVELY ARE FEDERAL STATE AND LOCAL GOVERNMENTS WORKING TOGETHER TO PREPARE FOR A BIOLOGICAL, CHEMICAL OR NUCLEAR ATTACK?

HEARING

BEFORE THE

SUBCOMMITTEE ON GOVERNMENT EFFICIENCY, FINANCIAL MANAGEMENT AND INTERGOVERNMENTAL RELATIONS

OF THE

COMMITTEE ON GOVERNMENT REFORM

HOUSE OF REPRESENTATIVES

ONE HUNDRED SEVENTH CONGRESS

SECOND SESSION

APRIL 2, 2002

Serial No. 107–167

Printed for the use of the Committee on Government Reform

Available via the World Wide Web: http://www.gpo.gov/congress/house
http://www.house.gov/reform

U.S. GOVERNMENT PRINTING OFFICE

85–125 PDF WASHINGTON : 2003

For sale by the Superintendent of Documents, U.S. Government Printing Office
Internet: bookstore.gpo.gov Phone: toll free (866) 512–1800; DC area (202) 512–1800
Fax: (202) 512–2250 Mail: Stop SSOP, Washington, DC 20402–0001

CONTENTS

HOW EFFECTIVELY ARE FEDERAL STATE AND LOCAL GOVERNMENTS WORKING TOGETHER TO PREPARE FOR A BIOLOGICAL, CHEMICAL OR NUCLEAR ATTACK?

TUESDAY, APRIL 2, 2002

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON GOVERNMENT EFFICIENCY, FINANCIAL MANAGEMENT AND INTERGOVERNMENTAL RELATIONS,
COMMITTEE ON GOVERNMENT REFORM,
San Francisco, CA.

The subcommittee met, pursuant to notice, at 10 a.m., in the Phillip Burton Federal Building and U.S. Courthouse, Ceremonial Courtroom, San Francisco, CA, Hon. Stephen Horn (chairman of the subcommittee), presiding.

Present: Representatives Horn and Honda.

Staff present: J. Russell George, staff director and chief counsel; Bonnie Heald, deputy staff director; and Justin Paulhamus, clerk.

Mr. HORN. A quorum being present, this hearing of the Subcommittee on Government Efficiency, Financial Management and IntergovernmentaL Relations will come to order.

On September 11, 2001, the world witnessed the most devastating attacks ever committed on U.S. soil. Despite the damage and enormous loss of life, the attacks failed to cripple this Nation. To the contrary, Americans have never been more united in their fundamental belief in freedom and their willingness to protect that freedom.

The diabolical nature of those attacks and then the deadly release of anthrax sent a loud and clear message to all Americans: We must be prepared for the unexpected. We must have the mechanisms in place to protect this Nation and its people from further attempts to cause massive destruction.

The aftermath of September 11th clearly demonstrated the need for adequate communications systems and rapid deployment of well-trained emergency personnel. Yet despite billions of dollars in spending on Federal Emergency Programs, there remain serious doubts as to whether the Nation is equipped to handle a massive chemical, biological or nuclear attack.

Today, the subcommittee will examine how effectively Federal, State and local agencies are working together to prepare for emergencies. We want those who live in the great State of California and the good people of San Francisco and San Jose and Long Beach, CA, to know that they can rely on these systems; should the need arise.

We are fortunate to have witnesses today whose valuable experience and insight will help the subcommittee better understand the needs of those on the frontlines. We want to hear about their capabilities and their challenges and concerns. We want to know what the Federal Government can do to help with what they may not be doing.

We welcome all of our witnesses and look forward to their testimony.

[The prepared statement of Hon. Stephen Horn follows:]

ONE HUNDRED SIXTH CONGRESS

Congress of the United States

House of Representatives

COMMITTEE ON GOVERNMENT REFORM

2157 RAYBURN HOUSE OFFICE BUILDING

WASHINGTON, DC 20515–6143

MAJORITY (202) 225–5074
MINORITY (202) 225–5051
TTY (202) 225–6852

Opening Statement
Chairman Stephen Horn
Subcommittee on Government Efficiency,
Financial Management and Intergovernmental Relations
April 2, 2002

A quorum being present, this hearing of the Subcommittee on Government Efficiency, Financial Management and Intergovernmental Relations will come to order.

On September 11, 2001, the world witnessed the most devastating attacks ever committed on United States soil. Despite the damage and enormous loss of life, those attacks failed to cripple this nation. To the contrary, Americans have never been more united in their fundamental belief in freedom and their willingness to protect that freedom.

The diabolical nature of those attacks and then the deadly release of anthrax sent a loud and clear message to all Americans: We must be prepared for the unexpected. We must have the mechanisms in place to protect this nation and its people from further attempts to cause massive destruction.

The aftermath of September 11th clearly demonstrated the need for adequate communications systems and rapid deployment of well-trained emergency personnel. Yet despite billions of dollars in spending on federal emergency programs, there remain serious doubts as to whether the nation's public health system is equipped to handle a massive chemical, biological or nuclear attack.

Today, the subcommittee will examine how effectively federal, state and local agencies are working together to prepare for such emergencies. We want those who live in the great State of California and the good people of San Francisco and San Jose to know that they can rely on these systems, should the need arise.

We are fortunate to have witnesses today whose valuable experience and insight will help the subcommittee better understand the needs of those on the front lines. We want to hear about their capabilities and their challenges. And we want to know what the federal government can do to help.

We welcome all of our witnesses and look forward to their testimony.

Mr. HORN. We are delighted to have with us today Representative Michael Honda from the San Jose area, former mayor. He will be the ranking Democrat.

We will do as we do in Washington, that the witnesses and especially those at the State and local level and the first responders, will have a summary of their written statement. I have read them all and they are excellent. Don't read them to us because we just don't have the time.

The General Accounting Office goes with us everywhere because they are our arm for research and what we want to do is get the essence of it because your statement is automatically in the record when I call on you. Give us the best points. If we had GAO, we would have a 40-page presentation or so and they have done 50 studies on the subject. Hopefully there will be more that will help many of you.

With that, I will swear you in following Mr. Honda's opening statement. I now call on him for up to 5 minutes on an opening statement.

Mr. HONDA. Thank you, Mr. Chairman. I would like to begin by thanking my colleague Congressman Steve Horn for calling this field hearing, and especially for his tireless work throughout the past decade in Congress.

I would especially like to recognize the expertise and dedication in the area of information security, an issue that is closely related and closely impacts my Silicon Valley District as well as the entire Nation. Congressman Horn is retiring from Congress this year, and, on behalf of the entire California Delegation, I would like to thank him for his service, his dedication, and vision.

I would like to compliment the Chair for bringing such a diverse group of Federal, State, and local officials together, and especially for allowing these State and local representatives to speak early in this program.

Local civil servants, firemen, law enforcement, personnel, healthcare workers, and many others are on the frontlines in the event of a terrorist attack. We in Washington must do our best to ensure that they are adequately equipped and trained to handle any such crisis. That is why it is essential that Congress maintain an open dialog with our first-responders and be responsive to their concerns.

States and counties are struggling financially to meet their homeland security needs. In the first 2½ months since September 11th, California local governments have encountered budget overruns of 13 percent in public safety. Cities and counties in California alone estimate over $1 billion in additional one-time and ongoing funding needs for 2002.

On numerous occasions, local officials have expressed to me the difficulty in adequately preparing their communities and in equipping their first-responders. Many have been forced to double and sometimes triple their expenditures for everything from 911 operators to police overtime.

Emergency response forces that were once considered more than adequate are now finding themselves under funded and overworked often forcing local agencies to delay maintenance and training, or defer the purchase of new equipment.

Cities and local municipalities are facing a squeeze on many levels. As they spend more on police overtime and security, they face lower revenue due to an economic slowdown. States are facing similar challenges. This means that localities are not receiving as much funding as they have in the past in the State budget. As local agencies try to improve their capabilities by increasing training for first-responders, building better Emergency Response Systems, and making other needed improvements, they are forced to tap into an ever-decreasing budget.

The tragic and sudden events of September 11th, and the almost constant state of alert that all levels of government have been forced to maintain thereafter, have caused a reexamination of homeland security throughout the Nation. It is vitally important that the Federal Government understand this and act to meet unfulfilled and growing local needs.

I hear people throw around the term "homeland security" as if it were term, a mainstay of America's vocabulary. But in truth, "homeland security" is a fairly new term, and its use denotes a comprehensive and coordinated approach to domestic defense.

Just as the term is new, so is an effort of this magnitude, urgency, and expense.

Last, I would like to share that those of us in Congress understand, at least the Chair and I understand our role and we are here to hear from the locals as to the kinds of needs that you are faced with on a daily basis.

If we are going to develop and implement a comprehensive approach to homeland security that can deal with catastrophic events like biological, chemical or nuclear attacks, we must be sure to work closely with our colleagues at the State and local level to create an integrated response that maximizes all resources in our portfolio by minimizing delays and lack of coordination.

I look forward to your testimony this morning. Thank you.

[The prepared statement of Hon. Michael M. Honda follows:]

U.S. Congressman Mike Honda
Opening Statement
Government Efficiency Financial Management and Intergovernmental Relations Subcommittee
Field Hearing on Homeland Security
San Francisco, CA
April 2, 2002

- I would like to begin by thanking my colleague Congressman Steve Horn for calling this field hearing, and especially for his tireless work throughout the past decade in Congress.

- I would particularly like to recognize his expertise and dedication in the area of information security, an issue that closely impacts my Silicon Valley District as well as the entire nation. Congressman Horn is retiring from Congress this year, and, on behalf of the entire California Delegation, I would like to thank him for his service, dedication, and vision.

- I would also like to compliment the Chair for bringing such a diverse group of federal, state, and local officials together—and especially for allowing these state and local representatives to speak early in this program.

- Local civil servants-- Firemen, law enforcement personnel, health care workers, and many others are on the front lines in the event of a terrorist attack. We in Washington must do our best to ensure that they are adequately equipped and trained to handle any such crisis—that is why it is essential that Congress maintain an open dialogue with our first responders and be responsive to their concerns.

- States and counties are struggling financially to meet their homeland security needs. In the first two and a half months since September 11th, California local governments have encountered budget overruns of 13% in public safety. Cities and counties in California alone estimate over $1 billion in additional one-time and ongoing funding needs for 2002.

- On numerous occasions, local officials have expressed to me the difficulty in adequately preparing their communities and in equipping their first responders. Many have been forced to double and sometimes triple their expenditures for everything from 911 operators to police overtime.

- Emergency response forces that were once considered more than adequate are now finding themselves under funded and overworked—often forcing local agencies to delay maintenance and training, or defer the purchase of new equipment.

- Cities and local municipalities are facing a squeeze on many levels. As they spend more on police overtime and security, they face lower revenue due to an economic slowdown. States are facing similar challenges—this means that localities are not receiving as much funding as they have in the past in the state budget. As local agencies try to improve their capabilities by increasing training for first-responders, building better emergency response systems, and making other needed improvements, they are forced to tap into an ever-decreasing budget.

- The tragic and sudden events of September 11, and the almost constant state of alert that all levels of government have been forced to maintain thereafter, have caused a reexamination of homeland security thought the nation. It is vitally important that the federal government understand this and act to meet unfulfilled and growing local needs.

- I hear people throw around the term "homeland security" as if it were always a mainstay of America's vocabulary. But in truth, "homeland security" is a fairly new term, and its use denotes a comprehensive and coordinated approach to domestic defense.

- Just as the term is new, so is an effort of this magnitude, urgency, and expense.

- We should therefore not be surprised that the federal government is still working through the difficult process of defining our security challenges and allocating available resources as necessary.

- As a Vice-Chair of the Democratic Homeland Security Task Force, I worked with many of my colleagues in the House of Representatives to author 2 bills that comprehensively address real and urgent security needs here at home.

- In doing so, we took a bottom-up approach: identifying problems on the ground faced by local agencies, and then developed solutions on the federal level to help solve them.

- We've also taken steps to improve postal safety, responding to the postal service's demand with over $1 billion in new technology and training for postal employees. Included among this is scanning technology to detect chemical and biological contaminants as well as sanitation equipment to neutralize any threats.

- Lastly, we've enhanced interagency coordination through better use of network and wireless technology, in hopes of avoiding duplication of effort and intelligence lapses

- Unfortunately, Congress has yet to pass comprehensive homeland security legislation. We must work together in a bipartisan fashion, to finish the job legislatively and pass a strong, comprehensive bill to bolster the ability of state and local governments to respond to a crisis.

- Ultimately, if we are to develop and implement a comprehensive approach to homeland security that can deal with catastrophic events like biological, chemical, or nuclear attacks, we must be sure to work closely with our colleagues on the state and local level to create an integrated

response that maximizes all the resources in our portfolio, while minimizing delays and lack of coordination.

- I look forward to hearing your testimony.

Mr. HORN. I thank you, gentlemen. Now, as you know, since it is an investigative committee of the House we swear in all witnesses. That includes your staff also. If they are going to whisper to you in the question period, we may as well get everybody involved.

[Witnesses sworn.]

Mr. HORN. The clerk will note that the six witnesses accepted the oath. We are delighted to have you here and we thank you. You have submitted wonderful statements and we are going to use those for a basic report to the House of Representatives.

Then, as I said earlier, we would appreciate it if you would, in the 5 or 6 or 7 minutes, hit the high-points of what you have put in for the record. Let us start now with Mr. Canton, the Director of the Mayor's Office of Emergency Services in the city of San Francisco.

We are delighted to have you here, Mr. Canton.

STATEMENTS OF LUCIEN G. CANTON, DIRECTOR, MAYOR'S OFFICE OF EMERGENCY SERVICES, CITY OF SAN FRANCISCO; GEORGE VINSON, SPECIAL ADVISOR TO THE GOVERNOR ON STATE SECURITY, STATE OF CALIFORNIA; JOHN F. BROWN, M.D., M.P.A., F.A.C.E.P., ATTENDING PHYSICIAN, SAN FRANCISCO GENERAL HOSPITAL, ASSISTANT PROFESSOR, UNIVERSITY OF CALIFORNIA, SAN FRANCISCO; DR. FRANCES WINSLOW, DIRECTOR OF EMERGENCY SERVICES, CITY OF SAN JOSE; MARIO H. TREVINO, CHIEF OF DEPARTMENT, SAN FRANCISCO FIRE DEPARTMENT; PRENTICE SANDERS, ASSISTANT CHIEF, SAN FRANCISCO POLICE DEPARTMENT; RONALD W. COCHRAN, LABORATORY EXECUTIVE DIRECTOR, LAWRENCE LIVERMORE NATIONAL LABORATORY

Mr. CANTON. Good morning. My office represents a strategic capability for the Mayor of San Francisco. Our job is to coordinate interagency planning and to stimulate departments talking to each other and dealing with incidents that require the services of more than one department.

I think one of the points I would like to make this morning is that terrorism is not new to San Francisco. We have experienced this over the years in the 1960's and 1970's. We saw shootings. We saw bombings. It is not something that we don't think about.

However, even with that background, even with our history, without the use of Federal funding that we received from the Nunn-Lugar-Domenici funding in 1996, it is more than likely that we would not have been able to develop the capacity that we have today.

From that point of view, Federal funding was absolutely essential to getting us interested and getting us started and providing us with the political will to do things.

The other thing is that this particular program had a lot of benefits for us as a city. Even though the funding is small and had some things we had to commit to doing, it allowed us to increase our capability to respond. It also allowed us to work together better as a team so there were a lot of good that went beyond just what the funding provided for.

That, however, should not be taken as an indicator that we are prepared for a terrorist attack. I think you will hear from my colleagues that, we better than anybody, understand how much more we still have to do.

One of the concerns that we had about the funding that was provided was that it really was for first response. A first response without a followup capability, the ability to deal with the victims of a particular incident really doesn't do much. We realized that the type of incident that we were looking at would involve all hospitals and ambulance services, not only in San Francisco, but throughout the Bay Area.

Our concern really was that the funding was a good start, but it was not really enough for everything we needed. One of the problems we had was that funding was based on a needs assessment done at a national level. They never really came down to us, they never asked, "What do you need at the local level?" A lot of things we consider very important to the area, our mutual aid programs, our ability to respond and work together, our ability to assist other jurisdictions, were not considered.

The issue of hospitals and the problems we have within the San Francisco Bay Area were not addressed in any of the funding. Essentially, we took the money that was provided and took the capabilities we had existing, and tried to do as much as we could with what we had. Again, I don't think we should look at the funding received under Nunn-Lugar as meeting all the needs for the city of San Francisco. I think it's a good start. I think we've come a long way but there is still a lot more to be done.

Part of the problem that we've experienced with the funding is, again, that it is scattered through a number of different Federal agencies. The application processes that are involved, the reporting requirements that are involved vary from agency to agency. In many cases we don't know when grant funds are available until the last possible minute and it is difficult for us to apply for them.

In many cases the type of requirements that are put on us to get those grant funds are really completely onerous compared to the amount of funding that we are going to be provided. In many cases we have to look and say, "Is the little bit of money we are getting appropriate for the level of work we are going to have to commit to this?"

One of the other things that we found is a number of programs that have been preexisting have been diminishing in funds over the years. I mention in my statement about the Emergency Management Preparedness Improvement Grant. That money has seen a substantial decline in the city of San Francisco over the last few years.

The other thing that we've noticed is that a lot of the requirements for the funds that we are provided with are restrictive. For example, one of our teams wanted an extra laptop computer. That was not allowed under a particular funding program and we had to submit other items. We get grant funds but we are not really able to make decisions about how we use those funds.

We feel we need funding that allows us the flexibility to respond to what we feel are our needs. Part of the problem that we have here is the city like all the other jurisdictions in the United States

right now, is undergoing a budget crunch. We are looking at a significant shortfall that is going to affect our ability to respond and it is going to make it very difficult for us to do contingency planning.

Consequently, Federal funds are important but we need to decide what areas those can be used in. For us in many cases it is easier for us to get things through our budget, to justify single expenditures or capital expenditures, than it is for us to add additional positions for planning and for doing the sort of administrative work that some of these programs require.

It's very important that as we look at how we can stimulate things, we look at the flexibility at the local level to be able to say, "I want to use this much money for this purpose and this much money for that purpose," and give us that flexibility.

What do we envision we would need? A block grant that's from a single source, somebody that we can deal with. We are more than happy to be held accountable for funds that are provided to us. We've been doing that for years. That's part of our job. What we would like to see are those requirements reduced to the point where they are manageable and we can give you some concrete evidence of what we've done.

On the other side of the coin, there are other things that you will hear my colleagues speak about such as intelligence sharing. One of the problems that we have is it is very difficult for us to know exactly what's going on and what is happening in the intelligence community. That is even to the point where some of our senior law enforcement officials are not cleared to receive the type of information they need.

There's very little intelligence that actually reaches us through the emergency management community. The State of California has tried to fill the gap for us but it is very difficult because there is no preexisting condition.

The last thing I would like to mention is that we really do need some national priorities. What is it you expect us to be able to do at the local level? What is it we should be focusing on? What is important to us? Also to remember as we do this, as we set these priorities that we are committed at the local level to multi-hazard planning. We cannot forget that we have things like earthquakes and tsunamis that we have to deal with on a day-to-day basis. Any capability we develop must be able to be used for multi-hazard planning. Thank you.

[The prepared statement of Mr. Canton follows:]

Testimony before the Committee on Government Reform's Subcommittee on Government Efficiency, Financial Management and Intergovernmental Relations
April 2, 2002

My name is Lucien Canton and I am the Director of Emergency Services for the City and County of San Francisco. In this capacity, I am responsible for the coordination of City interagency response plans. With me today is our Fire Chief, Mario Treviño, our Assistant Chief of Police, Prentis Sanders, and the Medical Director of our Emergency Medical Services Agency, Dr. John Brown. We share the responsibility for protecting the citizens of San Francisco against potential terrorist attacks. While our work to date has raised the City's level of preparedness, we have been hampered by the lack of significant funding from the State and Federal governments.

San Francisco is no stranger to terrorism. In the 60's and 70's we had direct experience with groups such as the Symbionese Liberation Army, the Black Guerilla Family, and the Zebra killers. We had bombs explode outside police stations and random shootings of police officers and citizens. Major events such as presidential visits, the celebration of the 50th Anniversary of the United Nations Charter, and the Millennium Celebration have offered attractive targets and required detailed security planning. The international reputation of the City itself guarantees that any terrorist attack in San Francisco would receive worldwide attention. Consequently, our emergency planning has always included provision for terrorist attack. However, until recently, a terrorist attack was considered to have a very low probability of occurrence and our response capacity was limited to the standard response we would make to any incident involving multiple casualties.

Domestic Preparedness Program - Use of Initial Funding

In late 1996, San Francisco was selected as one of the jurisdictions to receive Federal funding under the Nunn-Lugar-Domenici bill to develop a response capability to weapons of mass destruction. City planners were initially skeptical because of the small amounts of money involved ($300,000 for equipment and $300,000 for training) versus the large workload required and because terrorism was still perceived as a low-probability threat. However, we felt that participation in the program would enhance our capability to respond to a large-scale release of hazardous materials, a type of incident that is certainly very possible in a large city, particularly following a major earthquake. Without the Federal funding, it is unlikely we would ever have been able to do the detailed planning needed to develop this response capability.

To manage the project we formed 'steering committee of senior representatives from the fire and police departments, the Department of Public Health, the District Attorneys Office, the City Attorneys Office, the Sheriffs Department, and the Mayor's Office of Emergency Services. This steering committee deals with policy issues and oversees the work of an operations subcommittee comprised of experts from various City agencies. The subcommittee develops and maintains our concept of operations and other technical documents used by our metropolitan medical strike team.

The strike team is an inter-agency team that is assembled in response to an actual or threatened use of a weapon of mass destruction. We designed this team around existing department units, such as the fire department's hazardous materials team and the police bomb squad. The team is trained to work together to minimize loss of life, rescue victims, and coordinate any criminal investigation resulting from the incident.

In addition to developing this multi-agency strike team, it was also essential to train City personnel who would first come into contact with a weapon of mass destruction. This meant developing and providing basic awareness training to all first responders. We also developed training for supervisors who would have to make the initial decisions at the scene and for the senior level personnel who would have to manage the incident. This required a considerable commitment of City resources, all of which was absorbed by the City departments involved.

The Domestic Preparedness Program has had a number of very positive outcomes for the City. The development of the strike team gave us an added capacity to deal with a large-scale hazardous materials release and an increased capacity to deal with mass casualties. However, the single most important benefit of this program has been to increase our ability to work together on complex incidents. As we developed and trained the strike team, the personnel involved gained a better understanding of each other's capabilities and limitations. The result has been a significant improvement in inter-agency operations. Police and fire units train together on a monthly basis and we are seeing more joint exercises among City agencies.

Chiefs Treviño and Sanders can address the development of the strike team in more detail.

Domestic Preparedness Program - Non-funded Critical Issues

It was immediately apparent to our planners that development of the strike team was not in itself enough for us to deal with an incident involving a weapon of mass destruction. The strike team would need to be supported and we would need a system that could handle the follow-on care of the victims. Consequently, we evolved the concept of a metropolitan medical response system that would include the strike team and the supporting medical system. This system recognizes the importance of public and private ambulance services and of local and regional hospitals in supporting the initial response efforts. In addition, our planners recognized that some victims would self-evacuate to local hospitals and that there would be an influx of persons experiencing hysterical symptoms without any actual exposure. It is critical, therefore, that hospitals have the capability to triage, decontaminate, and treat patients affected by a weapon of mass destruction. However, no funding has been provided for this purpose and few hospitals have developed plans or conducted exercises on mass decontamination.

A further concern for us has been our limited capacity to deal with bio-terrorism. Our funding so far has been dedicated to the development of the metropolitan medical strike team with very little going to the development of our public health system. Leaving aside the risk of terrorism, our public health system would be stretched to cope with an outbreak of infectious disease. Dr. Brown will address these issues in greater detail in his remarks.

Our ability to assess threats has also been hampered by a fragmented intelligence system. Many Federal agencies are unable or unwilling to share intelligence with high-ranking members of our police department owing to agency restrictions on the release of information. Offices of emergency services are provided with even less information and there is no formal mechanism

for providing us with the limited information we do receive. Information is frequently released to the media before being made available to local government, leaving us at a disadvantage in dealing with the media and the public. There also seems to be considerable confusion between situational intelligence, that is information regarding the general threat, and operational intelligence, information that is part of an active investigation. Chief Sanders will speak to some of these issues in his testimony.

Our initial funding was based on a formula derived at the national level and not on our local needs. In fact, it was only within the last year that we received funding to conduct a risk assessment. Consequently, while the work we have done is a good first step, we can by no means claim to be fully ready for a terrorist attack. We have built on existing resources and use the synergy of multi-agency response but program administration, equipment, and personnel training have all been limited by available funding. In addition, without the support of a full metropolitan medical response system to provide long-term patient care and increased capacity in our public health system to deal with bio-terrorism, a first response team is limited in what it can accomplish.

The selection of the cities to receive funding was also done with limited threat assessment and did not take into account our operating relationships and mutual dependency in the Bay Area. In essence, it created a system of haves and have-nots. Under our State's Master Mutual Aid Agreement, we are expected to support other California jurisdictions in times of emergency. No Bay Area county would withhold a resource from a sister county in need. However, we were told that under the Federal program our strike team was not intended for use outside our jurisdiction. Consequently, there was little standardization built into the program and no funding to develop a deployment capability for a response outside the City. This severely hampers our ability to deploy multiple teams from different jurisdictions to respond to a large emergency. This contrasts considerably with the highly successful urban search and rescue program administered by FEMA in which interoperability was a prime concern.

A major problem for us was the fragmentation of funds among different federal agencies. Our initial funding was provided directly by the Department of Defense and the US Public Health Service, each of which had separate application and reporting requirements. Additional funds were late provided to us through the State of California. All this funding was extremely focused on specific items or activities and did not allow for flexibility at the local level. In some cases, items we felt we needed for our strike team, such as laptop computers, were denied. No funding was provided for program administration; all such work had to be done in addition to the already heavy workload of agency planners. Since funding is so fragmented, it is often difficult to know what grants are available.

I believe that many of the problems we have experienced are common to other jurisdictions involved in this program and that you will hear the same observations over and over. I respectfully refer the committee to Dr. Amy Smithson's book, "Ataxia: The Chemical and Biological Threat and the US Response". Dr. Smithson, a researcher at the Henry L. Stimson Center, has done an excellent job of summarizing the problems local jurisdictions have had with the Domestic Preparedness Program.

Emergency Management Preparedness Grant

In addition to funding received from the Domestic Preparedness Program, all our offices receive Federal funding from other programs that can be used in full or in part for preparing for terrorist attacks. In the case of the Mayor's Office of Emergency Services, we receive an annual Emergency Management Preparedness Grant from FEMA. Over the past five years, we have seen the grant requirements shift from very restrictive, with onerous reporting requirements, to a block grant with simplified reporting. This has made the program much more useful to us, allowing us to apply the funds where we think the need is greatest. On the other hand, we have also seen the amount of funds provided to local government shrink, both because of decreased Federal funding and because of a revision to the State funding formula. Since the grant is administered through the State of California, a large portion of the grant is used by the State to support the work of the Governor's Office of Emergency Services. In San Francisco, we have seen a decrease in funds from over $200,000 in FFY 97 to less than $99,000 in FFY 02.

The International Association of Emergency Managers, the National Emergency Managers Association, and the US Conference of Mayors all support the standardization and funding of integrated emergency management programs and agree that local offices of emergency services should serve as the integrating element of homeland security. However, local funding is limited and many of my colleagues rely heavily on the Emergency Management Preparedness Grant. Reduction of these grant funds has meant loss of personnel or reduction in programs. In the case of San Francisco, we have been able to absorb these reductions but in these austere financial times, with the City facing a $130 million dollar shortfall, there is no additional funding for terrorism planning. Any resources we devote to this type of planning must be reallocated from other programs administered by my office. Increased funding to local offices of emergency offices is absolutely essential.

Physical Security

One of the issues that we have been wrestling with since September is the issue of physical security. Even a major jurisdiction such as San Francisco does not have a single office responsible for security of public facilities. Some of these needs can be met through our police and sheriffs department but even here our resources are limited. There is little funding available for the purchase of consulting services or security hardware in our austere budgets. There is also tremendous confusion over what constitutes acceptable levels of physical security at the local government level. Many such standards already exist within Federal agencies but are scattered and not readily accessible. There is clearly a need for a clearinghouse for infrastructure protection information and for funding for infrastructure protection.

Recommendations

Our first priority must be to get funds into the hands of local governments with a minimum of delay. We are the first line of defense and the ones who will bear the brunt of a terrorist attack. We need a single source of funding that consolidates all the various agency programs and streamlines the application process. Ideally, what we would like to see is an unrestricted block grant that allows us to decide the priorities for funding. I believe that as you hold these hearings around the country you will find a consistency among requests, both from individuals and from the organizations that represent us. We need the following:

- Funding for local response agencies. Such funding should be in the form of unrestricted block grants to local Offices of Emergency Services that can be dispersed to local response agencies.

- Funding for significant improvements to the public health system.

- Funding for training and exercises. Our Domestic Preparedness Program was effective because of instructor training and supplies provided by the Department of Defense and contractor assistance in developing our initial exercises.

- Development of realistic standards for equipment, training, and response protocols for first responders and for physical security measures for both the public and private sector.

- Aggressive research, development, and deployment of new technologies such as chemical and biological detection equipment. Currently we are at the mercy of vendors who make claims that we are not equipped to verify.

- A single release point for accurate and timely information on threat analyses, response protocols, etc. The multiplicity of government websites makes it difficult to obtain information to develop adequate plans or to respond to citizen inquiries.

- Cooperative intelligence sharing with local law enforcement and offices of emergency services.

Mr. HORN. Well, thank you. That's well said and well done. Since you mentioned the intergovernmental problems here on information, I am going to put in the record at this point after your testimony the letter that Mr. Shays, who is Subcommittee on National Security, Veterans Affairs and International Relations. I joined him in that, or he joined with me.

That is the letter to Mr. Sensenbrenner, the chairman of the Committee on Judiciary, and we will have that come up when we get back from the District where he gets H.R. 3483, the Intergovernmental Law Enforcement Information Sharing Act of 2001. I talked to Mr. Sensenbrenner before I left and came out here and he said that should have been done months ago and we are going to do it. The FBI is being very helpful on this.

Let us go on now to the people that are really on the firing line. That's Mario H. Trevino, the Chief of the Department of Fire for the city of San Francisco.

Mr. TREVINO. Good morning. Thank you, Mr. Chairman. I would like to begin by thanking you for the invitation to testify before you. But mostly to thank you for continuing to take the potential threat of terrorism as seriously as you obviously do.

The events of September 11th, as you stated previously, have very dramatically illustrated the responsibility that we in the fire service will bear in the event of a domestic terrorist attack.

Our fire department here in San Francisco has since participated in a number of preparedness efforts and drills in conjunction with other local State and Federal agencies which I would be happy to describe for you more fully once we get the microphones straightened out.

Most significantly what we've done is we have redirected our planning and training efforts to focus on terrorism type incidents. For example, in the event of a bomb-type situation we need to focus on training our people to be aware of the potential for secondary devices and to maintain the security of our personnel since we know that we will be unable to help anyone if we ourselves become injured. We are doing everything we can to harden the city and county of San Francisco against such potential threats.

At the Federal level there is expertise, I think, located in various different components around the country. It seems that the most important message we would like to extend to you is what is necessary for us is a single point of contact for emergency agencies to deal with through the Federal Government so that we can not only provide input, but also receive information. As my companion, Lou Canton, has indicated, it is essential that we get up-to-the-minute intelligence information as it is allowed to be received by agencies such as ours.

A second point that, I think, is very important is in the issue of grant funding. We are encouraged by the level of funding that is making its way through Congress at this time, the $900 million in fire grants and the potential for $3.5 billion for homeland security.

The point that I would like to make is it is essential that those funds, if past through the States, as I understand they will be, that process is done so without any redirection of those funds so that as much of the money as possible comes to the aid of the emergency agencies that will be responding.

We know, and I know after 29 years of experience in the fire service, that in the event of such a disaster the first responders that you see represented here today will be alone and work the disaster until other assistance arrives and that could be anywhere from hours to days.

I would also like to make a point of the fact that I am a member of the Terrorism Committee of the International Association of Fire Chiefs.

We work very diligently to try and preplan not only for our individual fire departments, but for fire departments across the country and bring those messages back to them to help them identify funding, help them identify strategies, and to direct whatever efforts they can to make them as solvent and as effective as possible. I am prepared to answer any questions you may have.

[The prepared statement of Mr. Trevino follows:]

Federal Assistance to Local Public Safety Agencies for Terrorism Preparedness

Statement by Mario H. Treviño
Chief of Department
San Francisco Fire Department

Presented to

Subcommittee on Government Efficiency, Financial Management and Intergovernmental Relations

of the

Committee on Government Reform

U. S. House of Representatives

April 2, 2002

San Francisco Fire Department
698 Second Street · San Francisco, CA 94107

Good Morning, Mr. Chairman. I am Chief Mario Treviño of the San Francisco Fire Department. I would like to start by thanking the Committee for inviting me to testify before you today.

The issue of preparedness for terrorism is one in which the San Francisco Fire Department has an abiding interest, as do all fire departments across the nation. For years, I have for years been personally involved in domestic terrorism preparedness efforts, both as a fire chief and as a member of the Terrorism Committee of the International Association of Fire Chiefs.

The events of last September demonstrated very dramatically illustrated the responsibility we in the fire service will shoulder when such incidents are perpetrated against our communities. Federal efforts aimed at helping us prepare have gotten off to a good start in past several years. Our fire department has participated in training programs provided by the Departments of Defense, Health and Human Services, Justice and the Federal Emergency Management Agency. The training programs offered by these agencies have been very beneficial, and will provide an excellent basis for our response capabilities. We have also received limited equipment grant funding that has enabled us to begin the process of outfitting our personnel with the necessary personal protective, detection and communications equipment.

However, as both a participant and an observer of our national effort to prepare states and local communities for the threat of terrorism in America, I believe that further steps need to be taken by both Congress and the administration to craft a more well-ordered national strategy. It has been my experience, shared by many of my colleagues in other jurisdictions, that efforts undertaken to-date at the federal level, while in themselves valuable, would greatly benefit from an increased level of coordination and accountability. Efforts that may be duplicative, or worse, contradictory, lead to confusion at the local level and expend precious federal resources unnecessarily. Efforts underway at the federal, state and local levels of government ought to be better synchronized for the benefit of public safety.

The sum of human effort is greater than the individual parts. If none of us can quantify, or even find, the parts, it is more likely that the sum total of our national preparedness effort will be diminished. In my view, a more focused effort would be more effective. A suitable example is the coordinated effort here in San Francisco between the Fire, Police, E.M.S., Health Community, State, and Federal agencies.

At the federal level, there is certainly expertise located in different agencies that should be leveraged to create the most effective preparedness effort possible. It seems to me, and to many of my colleagues in the fire service, that this could be better accomplished by designating one federal official with responsibility and authority to coordinate and deliver these programs. We have in the past requested a single-point-of-contact in Washington that we can access for answers and provide input to as we move forward. Toward that end, we were pleased to learn that Congress approved and funded the Office for National Preparedness at the Federal Emergency Management Agency last fall.

Quantifying our efforts is also an issue. We as a nation have thus far not attempted to define, quantifiably, what an acceptable level of preparedness is. Without clear, attainable preparedness goals, it is difficult to make progress in any arena. In the fire service, we have a good idea of what it takes to support a measurable level of service to our communities. Standard fire protection, for example, requires a level of preparedness that includes arbitrary response times. More importantly, we know what equipment and staffing we must bring to the fireground to put the fire out. We also have a clear understanding of the tasks that fire fighters must be able to perform to succeed.

The International Association of Fire Chiefs' terrorism committee is comprised of fire chiefs from across the country, all of whom have decades of experience in responding to and mitigating public emergencies of all kinds. It is our view that an overarching plan should be adopted that would better define local preparedness for response to terrorist incidents.

I would suggest that our efforts coincide with a plan that would facilitate and encourage both interagency coordination and the development of performance objectives that clearly define the tasks that first-responding agencies need to perform in order to mitigate a terrorist incident. Institutionalizing this approach, in all fifty states, leaves plenty of room for experimentation and innovation by state and local officials. It provides for flexibility that would ensure better preparation among local first responders by focusing on those areas in which a particular community's level of preparedness is deficient when measured against these performance objectives.

A comprehensive national strategy should provide a framework that avoids the one-size-fits-all approach that has to an extent been employed in the past. Such a plan would consider existing local, state, regional and federal response assets and require their inclusion in a local planning effort.

Existing assets would include local Hazardous Materials response teams, Emergency Medical Services and Metropolitan Medical Response Systems, where available. State assets would include any assets available to state governments, including National Guard and other assets that may be available to a particular state. Regional assets would include Urban Search and Rescue teams, located in the various FEMA regions, and the National Guard Civil Support Teams that are being stood-up around the country. Federal assets are too numerous to name completely, but include the FBI's HazMat Response Unit, and the Defense Department's recently created Joint Task Force for Civil Support. These are all examples of existing assets that should be included in the overarching plan.

Grant funding should be used to assist first responder agencies in meeting performance objectives developed to identify those actions which must be taken to mitigate a terrorist incident. It must also be borne in mind that training efforts must be renewed constantly to maintain adequate proficiency. Perhaps most importantly, the overarching plan should provide us with not only a clear set of goals, but should also define the most important goal of all: adequate domestic preparedness.

Hinging grant funding on local interagency planning that includes appropriate state and federal response agencies would contribute markedly to our national preparedness effort. When communities have demonstrated a willingness to work in partnership with each other, they should then be assisted with means to address the performance objectives that need to be met to ensure public safety in the event of an incident of terrorism.

Grant funding made available to first responders has, until recently, been administered directly to local governments. Congress has chosen henceforth to deliver aid, through-the-states, to "state and local" first responders. It is incumbent upon Congress and the administration to take the necessary steps to ensure that whatever funding is available for the purpose of preparing communities for incidents of terrorism be passed through state agencies to local agencies without being diverted for other purposes.

I know that this and other congressional Committees have heard testimony from fire chiefs in the past. We as a group have emphasized the role of local public safety personnel, particularly fire fighters, in responding to incidents of terrorism. When emergencies occur, time is a critical factor. I know, through 29 years of experience in the fire service, that local emergency personnel will work alone in the crucial hours immediately following an event. I can not emphasize this point enough.

In explaining ourselves to Congress we have asked for assistance in training and equipping fire fighters to deal with what is being called "Weapons of Mass Destruction" terrorism. We have spoken of the need to enhance existing capabilities rather than creating new ones.

I say this to make a final point. Federal assistance provided toward that end is important. It has been used to help us in our national effort. In San Francisco, like other local agencies in communities around the country, we have spent far more in local tax revenues on terrorism preparedness than we have received from other sources. Local expenditures here in San Francisco will continue for as long as a threat exists. My point is that the character of terrorism warrants an orderly, focused national effort that should enhance, and not replace, the local one.

Mr. Chairman, thank you again for inviting me to testify today. I am happy to answer any questions the Committee may have.

Mr. HORN. Thank you. We will now move to the Assistant Chief of the San Francisco Police Department, Prentice Sanders.

We are glad to have you here, Mr. Sanders.

Mr. SANDERS. I am very honored to be here, sir, and certainly want to thank you and your committee for having the interest in our first-responders and the people who are going to be on the frontlines in dealing with a new phenomenon in our American system of government.

We have, as law enforcement, had to switch to an entirely new job. We are beyond not only keeping our traditional job of fighting crime in our streets. We are now set with a job of preparing for and deterring acts of violence similar to those of war.

We are also looking at new systems of how we are to respond to massive damage. In 1996 the Nunn-Lugar bill responded to Washington. I responded to Washington with a team, and the team that you are looking at here at the table, to attempt to cope with something that is totally out of the American—we didn't have any experience at it.

However, San Francisco, based on some prior natural disasters, we had a little bit of a head start. San Francisco received some Federal grants and we started to see where best to use those Federal grants, even though they were not adequate to cover all the things that we needed.

What have we done to this point? In 1998 San Francisco purchased some protective equipment. Being police officers we will almost always be the first-responders when there is trouble, and certainly as depicted in our heros and brothers and sisters in New York and Washington, DC, we are the ones who have to run toward whatever is going on that is a catastrophe. We started to look at how we can protect those individuals and receive the type of equipment and protective clothing they would need.

We also formed a Metropolitan Medical Task Force and a team where all safety personnel, medical personnel, and those persons who will be responsible for handling the very first stages after an event. We put together that team and started to setup systems to deliver services and stabilize situations wherever they may happen. And certainly keeping in mind weapons of mass destruction both chemical, biological, radiological and other highly explosive systems.

What do we need? Certainly, I was very happy when I learned that you brought your committee here. We need funds. The greatest ideas in the world can't be consummated without having adequate funding. We are looking at the funding that we have and looking at the system of delivering that funding.

We would like to work with our State and Federal people to see that we can get that funding in an adequate fashion so that we can have in place an adequate system of responding to the kinds of catastrophes that our world now tells us that exist.

That is an overview of what we have done. Let's talk about what we've planned. Law enforcement is in an entirely new learning mode. The San Francisco Police Department developed the five-phase program to begin to answer mass casualty incidents. We also have been holding tabletop exercises and drills with the other members of our team so that we learn to work as a team. Like any

other good team, each party knows their part in the play and carries that part out.

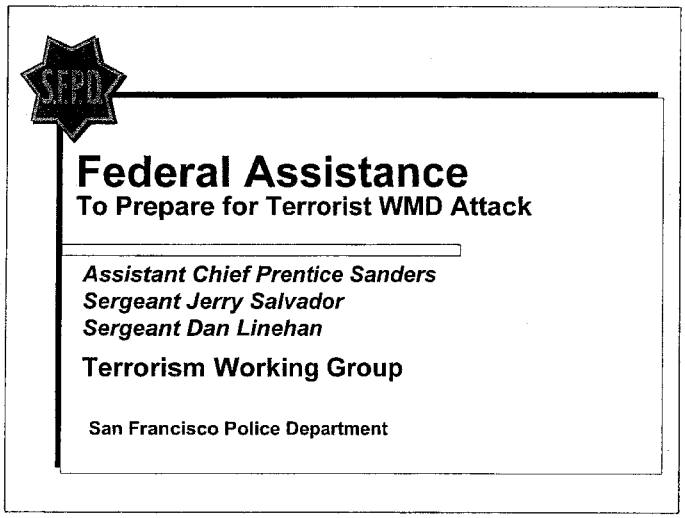
We focused a great deal on schools because if there would be a catastrophe there, whatever catastrophe may happen in our city, we want to be sure that our young people are able to, first of all, be safe and able to coordinate a system that can reunite them with their families at the earliest possible time.

The responsive procedures we are setting-up, and we're certainly learning from one another, our extension of our police procedures and handling of violent mass casualty incidents. We have coordinated among all of the other jurisdictions, public safety jurisdictions within our jurisdictions and neighboring jurisdictions.

What's up now? Deterrents and response. Deterrents have now become, as I pointed out—there are people among us who would bring this upon us. We have setup deterrents and then created a response form methodology for responding to it.

I will be happy to answer any questions, and certainly inside of the document that I gave you is a detailed look at the plans for San Francisco. Again, we appreciate you coming and showing interest in our city.

[The prepared statement of Mr. Sanders follows:]


SFPD
Federal Assistance
To Prepare for Terrorist WMD Attack
Assistant Chief Prentice Sanders
Sergeant Jerry Salvador
Sergeant Dan Linehan
Terrorism Working Group
San Francisco Police Department

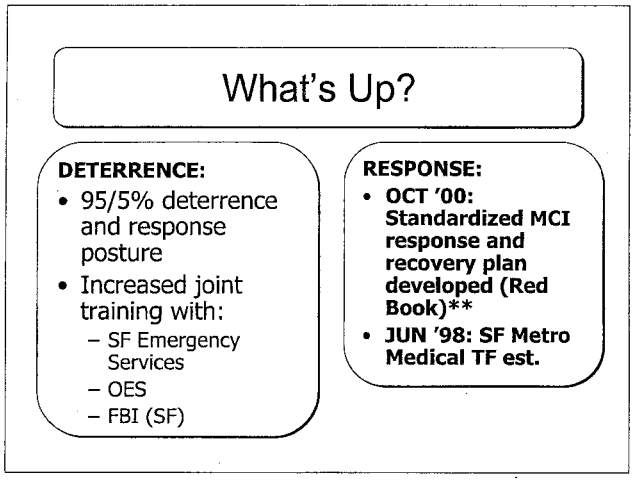
Overview

- What's been done
- What's planned
- SFPD Capabilities
- Problems
- Priorities
- Recommendations

SFPD Violence and Mass Casualty Incident project.

- 5-phase program begun addressing mass causality incidents (MCI) on February 2000
- Focused on schools and high-rise structures
- Response procedures executed during the NY/DC WMD attacks on SEP 11th*

* Pre-selected victim evacuation and recovery sites were activated in the event of attack as part of the rapid consequence management procedures.



DETERRENCE

SF Emergency Services:

Fire/EMS

Dept. of Public Health

Office of Emergency Services:

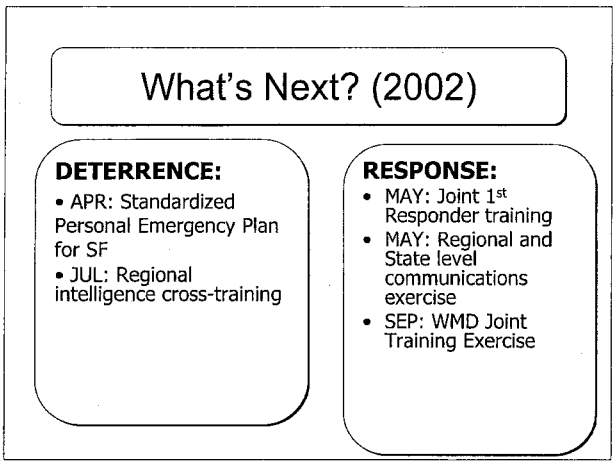
San Francisco

Coastal Region

State

RESPONSE

** 911-REDBOOK (www.sfgov.org/police/public/crisis)



DETERRENCE:

Personal Emergency Plan. Standardized plan of how to report emergencies, or suspicious occurrences and how to contact family members during a crisis. The plans will be made available for SF community, schools, and workplace.

Regional intelligence cross training. Specialized training for local Bay Area law enforcement agencies outlining gathering, analysis, and dissemination of Criminal and Situational intelligence.

RESPONSE:

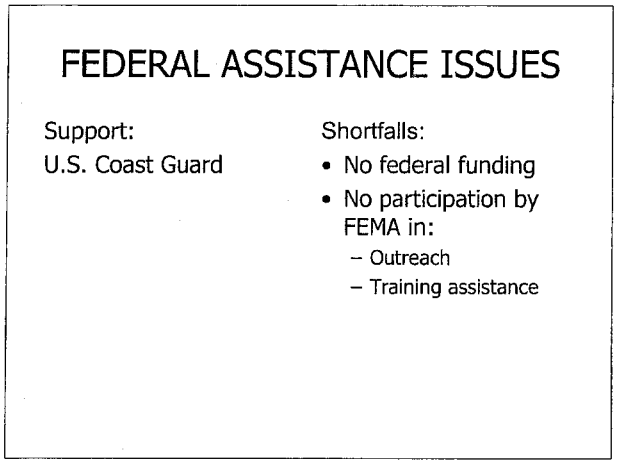
Joint 1st Responder Training. Training of 1st response level police officers to stop or resolve MCIs and work in a joint operations environment with fire and EMS services. Objective is 2000 emergency personnel trained in a 5-month period.

Regional and State level communications exercise. Local, Regional, State, and Federal level exercise to assess compatibility of existing radio/telecommunications and information flow.

Airport joint training exercise (WMD). Assessment of 1st and specialized response to a WMD attack. The exercise will involve SFPD, FBI, Airport, SF Emergency Services and address inter-agency command, control, communications, and intelligence capabilities.

SF Police Capabilities

Posture	Operational Imperatives	Status
Deterrence	Criminal Intell (Regional level gathering/analysis)	IN DEVELOPMENT
Deterrence	Criminal Intell (Dissemination local/state/fed)	IN DEVELOPMENT
Deterrence	Risk management	IN DEVELOPMENT
Response	1ST Response	IN DEVELOPMENT
Response	Command & Control	MISSION CAPABLE
Response	Radio compatibility (Regional)	IN DEVELOPMENT
Response	Specialized 1st Response (WMD / MMTF)	ADDITIONAL DEVELOPMENT REQ'D
Response	Initial consequence Mgt.	MISSION CAPABLE



SUPPORT:

The U.S. Coast Guard has increased its involvement and support to San Francisco WMD related operations and training.

Federal Funding/Support Sources

Source	Status	Rating
FEMA	None	No involvement
Office of Justice Program (DOJ)	None	
1122 Program New equipment	Active	Limited – must be narcotics related
1032 Program Used equipment	Acitve	Limited – must be narcotics related

FEMA:

•Office of the National Preparedness Group (Terrorism)

•No outreach

•No presence at exercises

Office Justice Program (DOJ):

•Lengthy procurement process yields obsolete equipment

•Cumbersome

- 3-year forecast required
- Excessive details required (i.e. gloves sizes and NSNs)

1132 Program:

•$500,000 provided to SFPD over the past 5 years for equipment

• No training funds for basic training, joint training, equipment, or sustainment training funds available

State Priorities:

- Intelligence sharing
- Threat analysis
- Risk management
- 1st response

Regional needs assessment based on existing threat assessment of the Bay Area

COMMAND

- Increased training for on-scene incident command (ICS) for 1st responders
- Funding training of a full-service department operations center (DOC)

CONTROL

- Personnel trained, equipped in 1st Response
- 1. Primary 1st responders
  - Rapid response, control, assessment and actions to resolve or mitigate the of MCI.
  - Rapid coordination with fire/EMS services.

  2. Specialized secondary responders (Metro Medical TF)
  - Additional/updated specialized equipment and training
  - Rationalization of assets and protocol
- Sustainment training program for personnel and their equipment
- Increased funding for air operations
  - Command platform
  - Communications/radio repeater platform

COMMUNICAITONS

Acquisition of equipment to integrate radio frequencies of emergency service during multi-agency operations.

INTELLIGENCE

Increased training to local law enforcement agencies in the areas of criminal and situational intelligence, it's use and restrictions.

- Regional-level, facility and staff to improve criminal and situational intelligence.
  - Gathering, analysis, classification, and dissemination of criminal information to other state LEA regions and federal agencies.
  - Networking with existing law enforcement intelligence networks to expand early warning capabilities to the public.
- Sustainment training

Summary

- What's been done
- What's planned
- SFPD Capabilities
- Problems
- Priorities
- Recommendations

Mr. HORN. We thank you now only for your oral statement but your written statement as well. That was very helpful.

We now go to Dr. John Brown, the Attending Physician for the San Francisco General Hospital and Assistant Professor at the University of California, San Francisco. For those that didn't know they had a campus in San Francisco, they have one of the world's greatest medical schools in dental, I guess, and nursing is still there. I remember seeing it when Earl Warren was still Governor and that was one of his great contributions. Thank you for coming.

Mr. BROWN. Thank you, Representative Horn and Representative Honda. I appreciate the opportunity to talk with you. I am Dr. John Brown, the medical director of the San Francisco Emergency Medical Services System. I also work as an attending physician at the Emergency Department at San Francisco General Hospital.

I would just like to highlight a few areas of the testimony I've submitted to you. First, I want to say that we have come a long way in the 4-years of our participation in the Metropolitan Medical Response System Process. We have established the multidisciplinary Metropolitan Medical Task Force to upgrade our abilities to respond in the field to any terrorist attack or event.

We have a very detailed concept of operations and response plan for biological threats. We have trained a large number of personnel, most is medical and public safety, including the hospital personnel. And we have conducted some major drills in that area and distributed a level of decontamination equipment and personal protective equipment to all the hospitals in our system.

We, do need however, to sustain this effort and we have a dire need for continuing funding of the MMRS program. We need sustained funding for the areas of our pharmaceutical cache of equipment and supplies in case of—to be able to respond immediately in case of a terrorist attack.

We need to enhance our ability to take care of large numbers of casualties in the field quickly. We need to enhance our training of public safety and healthcare providers. We need improved decontamination equipment for our personnel and a cache of equipment and supplies at the treatment facilities themselves.

Finally, we need to expand our drills and exercises to include drills within our region and increasing and improved drills without State and Federal partners.

I would like to concentrate most of my testimony on the current status of our healthcare system. The healthcare system, especially the emergency-care system, is very stressed and has little excess capacity to deal with the large number of casualties that an attack of weapons of mass destruction might generate.

I think without our funding levels being preserved, we will be sliding backward to the level of preparation where we were 2 or 3 years ago which was not as good. We will obviously do the best we can with what we have in any circumstance, but years of cost-cutting at the Federal and State levels in healthcare and healthcare-training programs have left us with little in reserve for large-scale emergencies.

Currently, I am recommending that we develop a surge capacity in San Francisco to be expanded in order to handle a weapons of mass destruction incident. We do rely on our regional partners, the

other hospitals, and healthcare systems in our region to assist us in time of disaster.

However, the American Hospital Association did a report in 1999 that found a decrease of 8.1 percent in the number of emergency departments nationwide since 1994. In that same period there's been a decrease in total in-patient hospital beds of 15.6 percent. Our capacity is diminishing throughout the country.

During the attacks on the World Trade Center and Pentagon of September 11, 2001, San Francisco had a peak hospital bed availability of 198 in-patient beds. This meant that with optimal notification and time for mobilization, which is approximately 3 to 4 hours, a total of 198 hospital beds were available in all 10 of our hospital facilities to treat any victims from an attack if we had had an attack in San Francisco on that day. While these are in-patient beds only, not emergency department treatment spaces, we have a lot more of those. Emergency departments face similar constraints.

Ambulance diversion rates, which are a marker for how busy emergency departments are, have been going up slowly over the past several years. We average in San Francisco 6 percent ambulance diversion during the summer months and 12 percent during the winter. Any terrorist attack that were to take place during this high diversion period would mean very little capacity available to treat additional victims.

We do rely on only one level-one trauma center which is San Francisco General Hospital which adds vulnerability to our system. We have no permanent medical helicopter landing facilities in San Francisco that we could utilize to transfer patients rapidly.

With appropriate funding, disaster hospital capabilities can be incorporated into the current system by several mechanisms; increasing the current stock of hospital beds, increasing the size of current emergency departments, opening new emergency departments, having a disaster hospital capability constructed and the ability to utilize that rapidly, being able to convert sub-acute facilities such as skilled nursing facilities, skilled nursing beds into acute beds, and then developing a Federal disaster hospital response such as the hospital ships or fleet hospitals that are in the military system.

I thank you for your time and attention. I would be happy to answer questions.

[The prepared statement of Dr. Brown follows:]

LOCAL GOVERNMENT AND EMERGENCY MEDICAL SERVICES (EMS) PREPARATION FOR TERRORIST ATTACK UTILIZING A WEAPON OF MASS DESTRUCTION
TESTIMONY BY JOHN BROWN MD, MEDICAL DIRECTOR, SAN FRANCISOC EMS SYSTEM AND ATTENDING PHYSICIAN, SAN FRANCISCO GENERAL HOSPITAL EMERGENCY DEPARTMENT TO THE SUBCOMMITTEE ON GOVERNMENT EFFICIENCY, FINANCIAL MANAGEMENT AND INTERGOVERNMENTAL RELATIONS HEARING IN SAN FRANCISCO ON TUESDAY, APRIL 2, 2002

Thank you, Representative Horn, and members of the Committee for the opportunity to speak with you today about our preparation for a potential terrorist attack using biological, chemical or nuclear agents. I have been involved in disaster preparation for the City and County of San Francisco since assuming my duties as Medical Director of the EMS System in December of 1996, and specifically with our preparation for a WMD attack since the initiation of the Metropolitan Medical Response System in 1998.

I would like to make three broad summary statements concerning our preparedness, and then further discuss each point in detail. First, we have come a long way in the four years of our participation in the MMRS process. We have greatly improved our ability to work among departments at the City level, and with our regional partners such as the FBI and the State Department of Health on an intergovernmental level.

Second, we are in danger of loosing much of the ground we have gained, specifically ability to maintain local caches of supplies and equipment, and the training of personnel that are our front line responders (including hospitals in the case of bioterrorism) without sustainment funding of the system currently in place. I predict that within 2 to 3 years we will fall back to our previous, lower level of preparation without such funding.

Third, our emergency health care system is currently very stressed and has little excess capacity to deal with the large numbers of casualties that a WMD attack by terrorists would likely rapidly generate. We will do the best we can with what we have, but years of cost-cutting at federal and state levels in health care and health care training programs have left us with little in reserve for large scale emergencies. Your immediate attention in terms of improving health care resource allocation, continued funding of the MMRS program, providing opportunities for local governments to obtain critical health infrastructure improvements, and enhanced training and hospital preparation

requirements is needed to make us truly prepared for a terrorist attack on the domestic front.

1. Improvements Achieved to Date in EMS/Department of Health Disaster Preparation

- Establishment of the multi-disciplinary Metropolitan Medical Task Force with detection, extraction, decontamination and WMD patient treatment capability
- Training provided to public safety personnel (police, public works, transit, firefighter, dispatch, Emergency Medical Technician (EMT), paramedic, nurse, physician and hospital safety personnel
- Development of the Bay Area Terrorist Working Group, a regional entity with representatives of federal, county, city and health care organizations meeting regularly to update members on current threats and response activities
- Production of the Metropolitan Medical Response System Concept of Operations and the Bio Response Plan and training of responding personnel in these plans
- Major drills involving fire, transit, police, hospital, local government, department of public health, and US Army Reserve testing scenarios for major explosions, chemical and radiological contamination, biological attack and loss of local health infrastructure
- Establishment of local equipment and pharmaceuticals cache to initiate treatment of victims of a WMD attack
- Public education efforts for disaster preparation to include potential WMD threats (home and office preparation, establishing a health care provider relationship, local sources of information, etc.)

2. Need for Maintenance of MMRS Program Funding

- Current MMRS funding opportunities are inadequate to maintain our capability ($50,000 contract extension offered to develop a 5-year MMRS plan)
- Sustainment funding is needed for the following areas:
  - Personnel support for system administration/development
  - Replacement and expansion of pharmaceutical and supply/equipment caches as they reach expiration dates and new medical recommendations occur
  - Enhancement of Multi-casualty treatment capacity, e.g. Field Care Clinics, Multi-Casualty Care Units (mobile stocks of medical care equipment and supplies)

- Training of public safety and health care providers
- Decontamination equipment and supplies for health care facilities
- Development of caches of pharmaceuticals and medical equipment/supplies at health care facilities
- Drills and exercises involving local, state and federal assets including Disaster Medical Assistance Teams, and the National Pharmaceutical Stockpile

- Continue the advantage of MMRS direct Federal-to-Local government contracting, i.e. more money reaches the first responder level, which is where lives will be saved in any terrorist attack (6, 12 or 24 hour response intervals are too long)
- Continue to provide federal assistance to states to improve the public health infrastructure, such as regional public health laboratories and state-wide drills and exercises

3. Improve Hospital Capacity

- Current emergency care capacity in San Francisco is insufficient for handling a WMD incident
- During the attacks on the World Trade Center and the Pentagon of 9/11/01, San Francisco had a peak hospital bed availability of 198 beds. This meant that with optimal notification and time for mobilization (approximately 4 hours) a total of 198 hospital beds were available in all 10 of our Hospital Facilities to treat any victims that might have come from a terrorist attack.
- While these were inpatient beds only (not Emergency Department treatment spaces), Emergency Departments face similar constraints.
- Ambulance Diversion rates, which are defined as the amount of time per month that Emergency Departments are at their maximum capacity and turn away ambulances, are a marker for the capacity of the system to take patients at any moment in time.
- Ambulance Diversion rates in San Francisco range from 6 % during the summer to 12% during the winter.
- A terrorist attack that took place during a high-diversion period would result in minimal care being available for victims.
- San Francisco has only one Level 1-trauma center prepared to treat the most severely injured of any such attack.

- There are no permitted medical helicopter landing facilities in San Francisco, making patient transfer to regional medical facilities more difficult.
- With appropriate funding, disaster hospital capabilities can be incorporated into the current system by several mechanisms:
  - Increasing current stock of hospital beds
  - Increasing size of current emergency departments
  - Opening new emergency departments
  - Having disaster hospital capability constructed and kept in reserve (models of this include Utrecht Disaster Hospital in the Netherlands, a 100-bed facility constructed in a former fallout shelter, and the Canadian emergency hospital system, with over 80 field hospitals stored throughout the county in semi-tractor trailer trucks)
  - Having the ability to rapidly convert sub-acute hospital beds into acute care disaster beds, e.g. in-hospital skilled nursing facilities to acute medical/surgical ward beds
  - Developing a federal disaster hospital response, e.g. via hospital ships or military field hospitals or their equivalents. The problem here is the likely several hour or days' response interval

Again, I appreciate the opportunity to speak to you about our preparatory efforts, and would be happy to answer any questions you might have. I refer you to our EMS Agency website, www.dph.sf.ca.us/ems for further information on our system status, disaster policies and procedures and for contact information. Thank you.

Mr. HORN. Thank you very much. We will get into a lot more of this because you've made a whole series of good points in your written paper and we will be working that one over for questions.

We now go to Dr. Frances Edwards-Winslow, the Director of Emergency Services for the city of San Jose.

Dr. EDWARDS-WINSLOW. Good morning, Representative Horn and Representative Honda. It's an honor to be here with you this morning to share some information about my city, San Jose, the capitol of Silicon Valley and the largest city in the Bay Area.

We have a long history of involvement in civil defense in San Jose going back to the 1950's and the cold war period. We have continued to develop our capabilities and emergency preparedness from that time forward looking at dual use as an important focus for us.

San Jose is aware of many natural disasters. This is earthquake month and, in fact, at this moment California is holding a duck-and-cover drill throughout the State, sponsored by the Office of Emergency Services, to remind all of us that disasters can come with no notice.

Because of this basis, we were able to rapidly join the Nunn-Lugar-Domenici program to create some new capacities in the city of San Jose building on our existing capacities. We had existing Neighborhood Watch programs, Community Emergency Response Team, and Safe School Initiatives all in place in 1997 when we, like San Francisco and 26 other American cities, were invited to join the Nunn-Lugar-Domenici program and begin receiving Federal assistance to enhance our capabilities for emergency response, especially for explosions, chemical attacks, and biological attacks related to terrorism and other hostile actions.

The Nunn-Lugar-Domenici program provided direct funding to the 27 selected cities. This money came to us through contractual arrangements and other agreements with our Federal partners. We performed specific work and in exchange they gave us financial and other kinds of support so that we could, as my colleagues have already described, establish the Metropolitan Medical Task Force to respond at the field level, a Metropolitan Medical Response System to care for patients, including physicians offices and hospitals, as Dr. Brown has described.

We received training, equipment, and supplies. However, at this point we have no promise of sustainment of these efforts we have bought at such a great expense. The city of San Jose spent $1 million in police overtime alone in the first year of our participation in this program. In order to be a very active partner with our Federal colleagues, we need to ensure that the Federal Government continues to be our partner with us in this extremely important multi-use effort.

Our biggest expense at this time is the cost of training our personnel. Police and fire personnel generally cannot receive adequate training in an on-duty mode. They need to be in an off-duty environment which usually means overtime is paid either to the student sitting in the classroom or someone in the field back-filling for that student.

In addition, we have developed pharmaceutical stockpiles which have been described by my colleagues to some degree. My testi-

mony includes a larger list. This material generally has a shelf-life of about 5 years. We have estimated that we will need $300,000 every 5 years to sustain our existing level of pharmaceuticals which is not actually adequate for the size of our community.

It is barely adequate for the immediate emergency response needs. We recognize and appreciate the development of the National Pharmaceutical Stockpile by our colleagues at the Department of Health and Human Services. But for 12 hours, at least, we will be on our own.

The Push Package will then arrive with the help of the National Guard. We hope to get that distributed efficiently but then the larger longer-term care requires the deployment of the National Pharmaceutical Stockpile which has to come from a vendor managed inventory at various places in the United States. Local preparedness is what will save lives. Patients must be rescued and treated in the first few hours in order to make a significant difference in the outcome for them.

Furthermore, to make this kind of patient care possible, requires two levels of surveillance and epidemiology. Explosions, radiological events, and chemical events are self-announcing. We know immediately that the event has happened and roughly how many victims we have to deal with. Biological events will be stealth events, unknown until victims begin to be ill because many of the illnesses present as flu-like symptoms initially.

Dr. Brown and his colleagues will be challenged to differentiate between flu season events, for example, and an outbreak of something that was induced by a hostile partner. We, therefore, need to greatly enhance our surveillance and epidemiology capacity not only in the event of terrorism, but also to improve the public health of our country and citizens.

We need to find ways to support emergency preparedness of our hospitals. Dr. Brown has touched on that but I want to emphasize that our hospitals today are not prepared. They are not prepared for an earthquake. They are not prepared for a bad hazardous materials accident. They are definitely not prepared for a terrorist attack.

We have no surge capacity left in our system. Here in California as a former member of the Seismic Safety Commission, I want to remind you that in 2010 we will close still more hospital facilities because of their seismic weaknesses. We need some Federal assistance in finding the right answer for balancing current needs, potential disaster response needs, and catastrophic events that we all surely hope will not happen.

Medicare and insurance currently give no money to hospitals to provide "Environment of Care" activity to ensure that disasters can be appropriately responded to and this needs to change.

Finally, I want to emphasize the very, very difficult position that our elected officials are in at the local level in California. Because of Proposition 13 they are already dealing with very straightened budget available to them. The demands from the community for many types of services continue to exist. Neighborhood services, traffic calming, and environmental issues go on and develop as our communities enlarge.

We are the capital of the Silicon Valley. Our colleagues in San Francisco are also very involved in high-technology. We all hope to continue to work with our colleagues at the Federal level so that we can provide community services and support for this vibrant part of our national economy. Thank you.

[The prepared statement of Dr. Edwards-Winslow follows:]

Preparing for WMD/NBC Events in San Jose

By Frances Edwards-Winslow, Ph.D., CEM
Director, San Jose Metropolitan Medical Task Force
City of San Jose Office of Emergency Services
855 N. San Pedro Street, San Jose, CA 95110
408-277-4595 frances.winslow@ci.sj.ca.us

The City of San Jose has a history of preparedness for emergencies and disasters. Starting with the Civil Defense program of the 1950's the City of San Jose has cooperated with national and statewide disaster preparedness programs. The city's original emergency operations center was built with matching federal funding during the Cold War. Dedicated emergency management staff members were assigned to the Fire Department. Following the 1989 Loma Prieta Earthquake the City Council reassigned the emergency management function to the City Manager's Office and created an Office of Emergency Services with a fulltime professional emergency manager as director. In 1990 a new Emergency Operations Center was opened with modern communications and technology assets. This facility has been continuously improved to meet the evolving needs of emergency management in California.

Even before Freedom Corps San Jose's elected officials understood the importance of involving the community members in providing for their own safety. Programs like Neighborhood Watch, Volunteers in Policing and San Jose Prepared!, the community emergency response team, have support throughout the San Jose community. Over 1100 residents participate in San Jose Prepared!, for example. These residents take 16.5 hours of classes including home and personal emergency preparedness, disaster fire fighting, disaster medicine and psychology, and light search and rescue techniques. Upon completion of their training they are awarded a uniform of a hard hat vest and waist pack in a distinctive green that identifies them to community members and first responders.

In 1997 the City of San Jose was selected as one of the first 27 cities in the Nunn-Lugar-Domenici Domestic Preparedness Program. San Jose is the eleventh largest city in the United States, the Capital of the Silicon Valley, and the #1-#3 dollar value exporter. San Jose is the home of a well-known sports venue, an international airport, and a major university. Materials for WMD/NBC activities are readily available locally. Toxic gasses and industrial hazardous materials are used throughout the industrial areas of the Silicon Valley, and biological materials are available in research facilities.

In May 1997 the Project Officer from Department of Health and Human Services (DHHS) met with City staff for the first time to begin the development of the San Jose Metropolitan Medical Task Force (MMTF). The DHHS program required the creation of a response plan specific to a WMD/NBC event. The Director of the Office of Emergency Services was assigned as the MMTF Director and lead for the San Jose Domestic Preparedness effort. She assembled a committee that represented all the professions needed to create and staff the Metropolitan Medical Task Force. The original members included City staff members from Fire (Operations, Hazardous Incident Team, Emergency Medical Services, Public Information Officer and Training), Police (Field

Operations and Training) and the Office of Emergency Services. County partners included the Public Health Officer, Medical Examiner/Coroner, Emergency Medical Services staff and a Public Health nurse. Private industry representatives were the ambulance company with the emergency response contract and a representative of the local Hospital Council.

Once the MMTF Committee was formed, the City Council signed a contract with the DHHS to create a plan, and to develop a list of needed pharmaceuticals, equipment and supplies. The San Jose MMTF selected the enhancement model, using all on-duty personnel as MMTF members, and developed a plan based on the Incident Command System and the Standardized Emergency Management System, required for State reimbursement of emergency response costs in California. The Fire Department's existing hazardous materials response plan became the basis for the MMTF Response Plan. Related plans incorporated by reference into the MMTF Response Plan included the San Jose Emergency Operations Plan, the San Jose Fire Department response manuals and Field Operations Guide, the San Jose Police Department response plan, the countywide Multiple Casualty Incident Plan, and the County Disaster Medical/Health Plan. These supporting plans detail patient care and standard operating procedures in the field. In addition, California has statewide master mutual aid agreements for fire and law enforcement resources, and a state coordinating plan for medical resources.

Following the week long Department of Defense train-the-trainer classes, the MMTF Committee selected the suite of supplies and equipment needed to augment existing materials for response to a WMD/NBC event. All supplies and equipment had to be dual use because new items that could be integrated into regular use would be familiar to the first responders, and routinely maintained in good working order through constant use and regular review. DOD provided $300,000 worth of training materials to support the on-going delivery of WMD/NBC response training to the first responder community. San Jose shared the cache with the other hazardous materials teams in the County, as these teams are essential mutual aid partners for San Jose. The funds available through the DHHS contract were used to purchase decontamination equipment and equipment storage and transport trailers, so that all the MMTF equipment can be rapidly moved where needed.

San Jose's effort was assisted by the development of two users groups. Under the guidance of the Region IX DHHS project officers, a MMTF Cities Group was developed that meets quarterly. The group includes MMTF cities and the DHHS project officers, as well as State health and emergency medical services staff members, Office of Emergency Services staff, and National Guard representatives; and federal partner agencies, such as the Army Reserve and the Coast Guard. These meetings provide a platform for the exchange of ideas, consultation on plan development problems, and presentation of unique solutions that could be replicated in other jurisdictions. Through this mechanism draft plans and pharmaceuticals purchase lists were also shared.

The second key users group is the Bay Area Terrorism Working Group, BATWING. Under the leadership of the FBI's Bay Area Terrorism Coordinator,

representatives of fire, law, emergency medical services and emergency services meet quarterly. Meetings include presentations by State officials, federal resource personnel, and subject matter experts, such as staff from the Monterey Institute. It is the only arena where all four MMTF professions regularly meet together to share intelligence about WMD. Critical issues in the recent past have included appropriate response plans for anthrax events.

The San Jose Response Plan was the first ICS-compliant written plan, and after it was completed the DHHS issued a contract extension to pay for enhancements to the biological attack response planning elements. All areas of the plan were enhanced, and whole new chapters were written to detail response guidelines for all phases of biological terrorist attack response: surveillance, epidemiology, medical diagnosis, site and non-site response, and community recovery. Annual review and updating by the MMTF Committee coincides with the twice-yearly exercises of the plan, which include tabletop exercises and full-scale field exercises.

The major problems encountered are related to sustainment funding. First, training time for existing city staff members is very expensive. Since the San Jose MMTF is an on-duty task force, all Fire and most Police field operations staff members have to receive WMD/NBC training and refreshers. Second, sustainment of the pharmaceutical cache over time is a planning and budgetary problem that is only partially overcome through the hospital agreement. The pharmaceuticals carried on the fire apparatus have to be replaced every three to five years by the department at considerable cost, and with little beneficial use for the old material. Third, hospitals are not financially capable of active involvement in becoming prepared for WMD/NBC events. They see the high cost of staff training, and space requirement for equipment storage. In addition, severely limited budgets and competing priorities at the City level challenge the elected and appointed officials to determine the appropriate level of financial and staff support for emergency preparedness in general and terrorism preparedness in particular. So many more immediate needs demand attention, such as neighborhood service needs, traffic calming, crime prevention and environmental issues, all of which compete with the MMTF for funding. Yet every week news articles demonstrate the reality of the continuing WMD/NBC threat and the need for response capabilities.

The San Jose MMTF is sent to the County mutual aid partners, other California MMTF cities, and State and Federal partner agencies. The plan is available to law enforcement agencies on the secure LEO website, and to MMTF/Response System community members through the secure DHHS website. Electronic versions are provided on request to fire and law enforcement agencies, medical/health/mental health agencies, and emergency services offices.

Dr. Winslow is on the Harvard Executive Session on Terrorism, the Stanford Biological Warfare Working Group, the National Academy of Sciences Institute of Medicine MMTF Evaluation Committee, and represented emergency services on the five night "Bio War" series on ABC News Nightline with Ted Kopple.. She is a frequent speaker at professional meetings and conferences, and the author of chapters about terrorism in two books, and numerous articles. The San Jose MMTF has been featured in the Wall Street Journal, *the New York* Times, *the Los Angeles* Times, *the AP wire, the Sacramento* Bee, *the Boston* Globe *and other newspapers.*

San Jose:One of First 27 Cities Threat Analysis

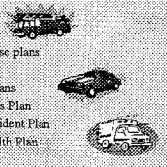
- 11th largest city in US, 3rd in California
- #1-3 dollar value exporter in US
- Capital of Silicon Valley
- Major sports venue
- International airport
- Regional rail hub
- Ready supply of NBC materials

Metropolitan Medical Task Force

- Committee Members
  - Director, OES
  - Fire: BFO, HPT, EMS, PIO, training
  - Police: BFO/special operations, training
  - Public health officer
  - Public Health Nursing
  - ME/Coroner
  - EMS
  - Ambulance
  - Hospital Council
- Federal Partners
  - Department of Defense training/equipment
  - Department of Health and Human Services project officer, equipment, supplies, pharmaceuticals
  - Federal Bureau of Investigation: special agent, BATWING, equipment

MMTF Model: Enhancement

- On-duty personnel: PD/FD/OES/EMS
- Existing plans
  - ICS/SEMS
  - HIT Plan, Fire response plans
  - Police response plans
  - Master Mutual Aid plans
  - Emergency Operations Plan
  - Multiple Casualty Incident Plan
  - Disaster Medical/Health Plan



Dual Use Supplies

- $300,000 training equipment from DOD
- $250,000 medical supplies and equipment DHHS
- $450,000 police equipment DOJ
- Antidotes: Pelican cases, County hospital
- KI: BET/EMS
- Antibiotics: County hospital – infectious disease clinics, ED

Users' Groups

- Region IX MMTF Cities Group
  - DHHS Project Officers
  - MMTF Cities
  - State health
  - State OES
  - National Guard
  - Army Reserve
  - Coast Guard
- BATWING
  - FBI Regional Terrorism Coordinator
  - Law
  - Fire
  - EMS
  - OES
  - State agencies
  - Federal agencies

Major Problems Encountered

- Training time costs
- Sustainment of pharmaceutical stockpile
- Development of adequate surveillance & epidemiology capability
- Lack of financial support for emergency preparedness in hospitals
- Challenge of budget limitations and competing demands for scarce City funds
  - Neighborhood services
  - Traffic calming
  - Environmental issues

Mr. HORN. Thank you. You have given us a lot of things to think about and we will work that into questions.

Our last presenter on panel one is Ronald W. Cochran, the Laboratory Executive Director of the Lawrence Livermore National Laboratory, our friends across the Bay.

Mr. COCHRAN. Thank you, Mr. Chairman and Congressman Honda. It's a privilege for me to be here with you today to talk about some of the things that Lawrence Livermore is doing to help State and local governments.

I will discuss that but I also want to shift a little bit in the direction of deterrence and early detection. If we can deter these weapons of mass destruction events or get rapid detection if there is the start of an event, say a biological attack, then we can minimize the response problems that people are going to have.

I think that my colleagues here have identified a great capability to respond to disastrous events, and that's very important. However, if we can prevent them from happening, that may give us an even greater leverage in being prepared for the future.

Most of you know, I think, about Lawrence Livermore as a nuclear laboratory but in recent years we have also expanded into the areas of biological and chemical weapons and threats. The terrorists have now demonstrated that they hope to use what I call our infrastructures against us—our aircraft, our computer systems, entry into our borders, ports and so forth.

By investing in technology I think that we can continue to enjoy the freedoms that we have by being better able to deter or prevent and detect these threats.

Starting with the nuclear area, our Nuclear Threat Assessment Program is readily available to all States. That is the program which evaluates threat letters, for example, to determine whether they represent a viable threat or not. We have been doing that now for about 20 years.

We also have membership in all of the emergency search team activities for nuclear events. We have in particular for the local areas a radiological assessment program where we provide technical and operational expertise to agencies in the event of a radiological incident or emergency. We do things like respond to the situation if someone has a threat of a truck, for example, that has been triggering radioactive alarms. We can go in and tell them whether or not that's a valid problem.

We even have a rapid deployment capability called "HOTSPOT" where we can be deployed to any location by military aircraft to provide local radiological field support. We have developed a lot of sensors for detecting and tracking nuclear materials. We actually were working with the county of Los Angeles to do a potential test for being able to track the movement of radioactive materials in case there were a terrorist threat.

Turning to the bio-terrorism area, we have actually developed some very interesting biological detection instrumentation. It's based on looking at the DNA signatures of the materials, the pathogens, that would be a threat. We are developing the DNA signatures of all the threat pathogens that one might be interested in and working with the Center for Disease Control and prevention to

validate those. Then we will distribute them to the public health agencies.

Additionally, we made a technology breakthrough in that we now have handheld instruments that can detect within a very few minutes whether you have a biological threat or not.

In the past, in fact in the somewhat distant past, the only way to detect this was to watch people and see if they were getting sick or not. Then more recently there have been ways to detect it within a day or two. These current units actually are units that the first responders can take into the field and know within a few minutes whether they are faced with a real biological threat or not.

We are developing a system called BASIS which is Biological Aerosol Sentry and Information System which was actually used at the Salt Lake City Olympics for checking in the air to get rapid detection of any biological release that might be threatening to the people there.

Now, at the Salt Lake City Olympics we hadn't automatized it yet. We've still got some work to do, but the device actually works so you can get rapid detection of any contaminants in the air of that type.

I will talk some more about some of the technology for prevention, but we also provide support to State and local agencies in the area of atmospheric releases. We have a capability called the Atmospheric Release Advisory Capability which we operate at Livermore. It is available to track the movement of toxins anywhere in the world at any time. State agencies can call on this capability if they have concerns about a release. We've actually tracked toxins in rivers as well as toxins in the air. This is something that is provided as a service.

Additionally, we have a forensic science center which can do analysis of chemicals and biological agents to tell whether or not there is a real anthrax threat, for example. We can do that very, very quickly.

Turning back to some of the things that we still need in the prevention area, there's a pressing need for technologies to improve the screening of passengers, baggage, and cargo at airports and ports. We are looking at a wide variety of technologies including computer tomography, x-ray scanning, gamma-ray imaging, neutron interrogation, and ultrasonic and thermal imaging to be able to do this.

As you know, at present there are techniques for checking baggage and checking people and, to a limited extent, checking cargos at shipping ports, but they still have great limitations. We need to improve those and we are working to do that.

We are establishing at Livermore a national test bed so that companies, for example, who are developing capabilities for checking cargo containers would have a place to checkout the performance, the advantages and the limitations of their equipment. We will be operating that based on direction from the Department of Energy to provide that capability for the Nation.

We have developed some other technologies which I think are useful to first responders. For example, we developed a micropower radar device which can see through up to about 30 feet of rubble. We actually tested that at the World Trade Center. If there

is someone still alive under the rubble, it can detect movement from breathing. It may make it possible to find people that you can't locate otherwise very easily.

We also have remote monitoring instruments that analyze the hazardous gases coming off a location like the World Trade Center. We have these mounted on aircraft and we have used those to let first responders know what they were getting into.

For the State of California, we have done a great deal of vulnerability and risk assessment looking at bridges, dams, and other structures. Based on some of our analyses, steps have been taken to protect the bridges that weren't taken before.

We have helped the California Highway Patrol find ways to stop large tanker trucks filled with fuel which are mobile missiles. This has been a recent development. We are very pleased with some of the steps that have been taken there.

In summary, effective defense against terrorism is going to require the integration of science and technology with the operations, because the stuff we develop is no good unless the people who need to use it can use it. You must be certain that you can take it into the field, it will work, it won't fall apart, it will be durable, and give you accurate answers. That is what we are working on.

The events of September 11th have lent a new urgency to our efforts. We are working even harder to try to get these instruments, which have been in development for some years into the field and into commercial hands. As more money becomes available with the Nation's response to the attacks, we will be able to move faster. Thank you very much.

Mr. HORN. Thank you. We will now start the question period. I will take the first 5 minutes. Mr. Honda will take the next 5 minutes. We will do that until we are worn out or thereabouts.

On this issue of x-rays in particular, Customs has major needs for these containers. I happen to have both the biggest ports in the United States, Long Beach and Los Angeles. Together they equal Singapore which is the world's largest.

But in those containers we never know. It's about 2 percent now. It was 1 percent and now it's 2 percent. In other words, 100 containers come off and they look at one or two. Is there a body in there? With that Chinese gang in Shanghai where they have charged $30,000 to get one of these young people into the United States, obviously they don't have $30,000 but the labor crowd in this country in the garment industry, in restaurants, so forth.

What they do is they have an indentured servant and they make up the $28,000 and the person works it off. Where our Labor Department has been for the last 10 years I will never know but they ought to be going in there. I happen to have been an assistant to the Secretary of Labor under Eisenhower and when we saw those conditions, we moved right in. We saw it in migrant workers.

My boss came out and personally got rid of the lousy conditions they had in the Central Valley. What we need is to let the Customs official know there is somebody who has a body there so nobody makes a terrible mistake. When you are talking about 1.6 million containers in the Alameda corridor between those two ports, Long Beach and Los Angeles, and every 4 months it's 1.6 million, that's a lot of containers moving all over America. Do you have any

thoughts on that, where we are getting, and how we can have Customs use it? What else could Customs use?

Mr. COCHRAN. Yes, sir. As you point out, that's a very, very difficult problem. People are working on that. At present the best thing that they have is basically an x-ray machine which they can use and can see under many circumstances. In other words, if the container is not fully loaded, for example, and if you have a good person who can interpret the signal they are getting back on the TV screen, they can catch things like people or other illicit materials coming in.

Those are in the early stages of being on the commercial market but you can buy those. They are somewhat expensive at present. I think that cost will come down. They do require a very highly skilled operator to monitor what they see going through and to be able to interpret it.

The direction that we are trying to go is to leap beyond that, to go to something which will not only give you a good interrogation when the container is not fully loaded, but get to one that will actually check the hardest thing we can check. For example, a container that is fully loaded and perhaps has a nuclear weapon in the middle of it could be reliably detected.

Those are harder. You probably can only do those with high-energy neutrons. That is one of the things we are looking at to see if we can accomplish it. We plan to have a test unit within the next few months to actually see if we can reliably do a chemical analysis of what's in the container without damaging either people or other things that might be in the container. At present the x-rays are about the best we have.

Mr. HORN. Well, thank you on that. I want to move to another question. I particularly want to know how law enforcement is doing it in San Francisco. When we started this series of hearings in Nashville, Tennessee, it was very clear that with the great military forts that are in Tennessee and with their helicopters and hospitals with the very fine medical school, Vanderbilt, what faulted was that the frequencies didn't work. They can't communicate with each other. How much of that—I've heard from many chiefs of both fire and law enforcement that apparently a lot of the frequencies are still sitting around with the Federal Communication Commission.

I remember 10 years ago, or 15 at the university where I was president, we had exercises in Los Angeles County. Guess what? We couldn't get it because all of the frequencies were in the east. Some of that finally got to the west.

Commissioner Kelly of Customs unfortunately didn't stay there long enough because he knew the situation and now he's back in the police department of New York. We need to do something. I just wondered what the chiefs are doing.

Mr. SANDERS. At this time communications is a tremendous problem throughout law enforcement, because historically we are very jurisdictionalized in the United States. The city next to us, for example, there are times when we can't contact them. This is an urgent issue, not only here in San Francisco but on the boards and panels that I participate in statewide.

Communications is an intelligence at the top of the list. Certainly there is technology and I join Mr. Cochran in integrating technology with human resources. We have much of that technology available but in order to take advantage of it, again, it comes back to funding. Finding a way to find the necessary moneys to integrate technology so that we can talk to one another.

In our tabletop exercises over the past several years we have found this to be a recurring problem and there has been some plans put forward that work. Again, when you go to do upgrade work on old communication systems and to integrate them into what we need in modern times, we do need the additional funding and we hope that we can certainly tie in a partnership with the Federal Government.

Mr. HORN. Any other thoughts on that?

Mr. TREVINO. Yes, sir, Mr. Chairman. Let me add that as you may know, police and fire here in San Francisco operate using what is called the 800 megahertz radio frequency, very commonly used across the country. We also know that in the event of a disaster such as an earthquake the 800 megahertz system can get overloaded and will go down. That has been demonstrated in several cases.

There is also the potential for different agencies whether they be law enforcement, emergency medical services, fire, or others to use different radio frequencies and, thus, as you said, limit our potential ability to communicate.

Now, radio in reputability systems do exist primarily based on military technology but once again, just to echo Chief Sander's statement, they are expensive. The one that I am thinking of, the TRP–1000, is $50,000 for one unit.

Once again, funding remains an issue and I think it's important to note the fact that the City and County of San Francisco spent a lot more money for preparing for terrorism situations than we ever receive in from any other source. That does, again, speak to our hope for Federal funding.

Mr. HORN. Mr. Canton, you want to comment on that?

Mr. CANTON. If I could just add to that. It's more than just a problem of procuring radios locally or different sets. There is the issue of no national standards on how we would use these radios, no set frequencies that we would use that were all on a common band.

I think probably the best example of how something can work is the system that the European government is using now called TETRA. If we look to that as sort of a model, that's where we would like to be able to get to, where, while we work individually on our own radio frequencies day to day, in the time of an emergency there are common frequencies that we can share with any law enforcement agency from any State, from the Federal Government, from any outside agency.

We really don't have that right now. Even if we were to all procure the same radios, we operate on different bands, different frequencies, different talk groups, and there are no national standards and no idea of when we are going to get the types of frequencies we need.

Mr. HORN. Chief Sanders.

Mr. SANDERS. Yes, Congressman Horn. To show you the seriousness of this problem, next month, in May, San Francisco is holding a regional and State level communications exercise in order to evaluate very precisely where we are and then take a look where we can go and maybe connect and make some connections that we can solve this problem until we find a universal solution to the problem.

Mr. HORN. Mr. Cochran, you want to comment on that?

Mr. COCHRAN. I have very little to add to what they have said already. I think that the problem is one that has been around for quite a while. There are improvements that can be made in going to a standard frequency.

Perhaps that is something we can help in a little bit. I think there are commercial companies who could actually do that. Perhaps Congress should encourage them to focus in on this because this is something that is needed throughout the country. It's not just a problem here. Thank you.

Mr. HORN. I now yield 10 minutes to my colleague. Oh, Dr. Brown.

Dr. BROWN. If I just might add one comment. In the healthcare field we have also realized the need for this communication. One of the first actions we took after the 11th was to issue emergency communication policies that utilized our current communication systems between hospitals.

We have a computer that links the hospitals called HART. It also links us with San Mateo County and our regional partners there. We have now required 800 megahertz radios in all ambulances both public and private. We conduct regular communication drills. In the case of the hospitals, communication drill compliance is tracked on a weekly basis and we provide that feedback to the hospitals. I am pleased to say that before we started this, we had about 20 or 30 percent compliance. Now we are heading up to 100 percent compliance. I think we also can use the tools that we have in a better fashion to lick this communication issue.

Mr. HORN. Thank you. Now 10 minutes for my colleague.

Mr. HONDA. Thank you, Mr. Chair. I think Dr. Brown probably answered one of my concerns, is that you talked about the lack of hospital beds in the case of an emergency or a spike in needs. Yet, the daily cost of maintenance of a hospital is based upon how much it cost to maintain a system. There's got to be a balance.

What I heard you say is there's a system already in place that you developed in the case of an emergency that you would be able to deploy and utilize other hospitals pretty much like what the fire fighters do in terms of mutual assistance in deploying first responders, medical personnel, and those kinds of things that are to address the rescue triage in attendance of victims. Is that correct?

Dr. BROWN. That's correct, sir. What we have done is to develop our emergency care plans or multi-casualty incident plans to take into account the utilization of regional resources. It is also important to note that we have developed the capacity to deploy field resources so we can setup field treatment centers or field-care clinics that will provide a level of minimum care, but at least that care will be available to the patients that are triaged to be needing less

care. That can be deployed from within the city relatively rapidly in the order of a few hours.

We have tested that. During our millennium celebrations, New Year's Eve 1999 through 2000 we partnered with several groups including the U.S. Army Reserve in deploying field-care clinics. We had eight of them throughout the city. We had them utilizing austere standards of care, testing our supply and resupply procedures, our communications, and so forth. We do have some capacity to increase our level of low treatment or treatment of less injured individuals.

The problem we run into is, of course, the patients that need higher levels of care, emergency surgery, intensive care unit care, that type of thing. We don't have any substitute for the fixed facilities or the current hospitals and they have very little capacity.

Mr. HONDA. But that's an ongoing issue, though.

Dr. BROWN. That's correct, sir.

Mr. HONDA. You mentioned Y2K. Probably that activity was based upon Chairman Horn's work on Y2K, so you do get to see the fruit of your work, Congressman.

The other question, I guess, relative to that is pre-incident, and that is the identification of an incident. Someone talked about the difference between a nuclear attack where it is immediately self-evident versus a biological attack or cyber.

In the area of healthcare I understand that there are some tests or experiments going on to monitor intakes of patients over a period of time to see the incidence of folks coming in with cold symptoms which would equate to probably gathering information quickly using that kind of information technology to determine whether there may be an attack with anthrax.

I guess my concern is, have you thought about systems that could be put in place that would meet the needs of the kinds of attacks that could occur through, say, smallpox which is very infectious and anthrax, which is not infectious? It takes some time and it has a different epidemiology I guess you would call it. That's one end. The other end is the integration of services with, say, other first-responders, fire fighters, and the police department. Has there been work in that area?

I guess my ultimate question really is if that is done, what is the cost of it? Can you share that with us so that we can put it in place because I think we need to percolate it from the bottom-up rather than from top-down and say, "We are going to allocate $10 million for you all and this is how you are going to spend it." I hear that is another area of concern. Sure. There were a lot of areas covered in your question. It's kind of complex but let me break it down into two answers and then——

Mr. HONDA. That's why we have this hearing so that we can break it down and then put it back together again.

Dr. BROWN. And then if my answers don't fit your needs, let me know and I will certainly go into other areas.

There are two types of systems that we have in place. The question boils down to what works and what doesn't. A good example is New York City has a rather extensive active surveillance system of their EMS system where they are monitoring things like ambu-

lance calls, emergency department transports, and those type of things.

This system was in place during the anthrax attacks on the East Coast and it did not pick-up the anthrax attacks. The anthrax attack was picked-up by an infectious disease physician who was consulted to the Florida case, the gentleman that was working at the media outlet in Florida.

It is our belief that simply doing a surveillance of one thing or another may not be what we need to have an effective system. What we are pursuing is a sentinel events system so that we have direct notification of the local health authorities as well as the State and national authorities if a small number of cases appear. That would be a situation similar to the anthrax attacks that we have already had. It is my belief that the likelihood of a bio-terror attack is that there will be a large number of victims. We won't have trouble telling that there is something afoot. What we might have trouble doing is narrowing down among the various types of syndromes or pathogens, as several of my colleagues have mentioned, to figure out what it is and what is the best way to treat it and get that treatment out quickly.

To that end, we have developed in San Francisco an emergency communication system for physicians as well as for hospitals and we tested this on September 11th as well, a way to notify all the community physicians of any specialty in any practice setting that there was a situation that was occurring that they needed to be reporting actively to us what was happening so they had the latest information on how to advise and treat their patients.

In a large scale attack, we have a communication system. The way the surveillance system will pick that up we believe is through the emergency departments and the reporting systems that we have already in place for the diseases of concern in a bio-terrorist attack which, as I am sure you know, has recently—the reporting requirements have recently been expanded to include all those diseases including smallpox.

Dr. BROWN.

I think in the case of a highly contagious disease such as smallpox the real problem will be a logistics problem of deploying all of the researchers to identify who is at risk and who needs a vaccination and getting the vaccinations out rapidly and then tracking the effectiveness of the vaccination and the further health needs of the public. We have developed these plans. We are in the process of operationalizing them. We need to drill them.

The question about the funding, we recently presented to our local governing body, the Board of Supervisors, what we felt it would take to sustain the Metropolitan Medical Response System at a bare-bones minimum. We came up with $5 million in recurring annual costs and $3 million in a one-time cost.

It's only for San Francisco. I imagine in other communities that are larger such as San Jose and other California communities, Los Angeles and San Diego, that would be a larger amount, but that was specifically for the MMRS, not for any issues of improving hospital capacity and other things that I have addressed.

Mr. TREVINO. Mr. Chairman, if I may, I would like to buttress the doctor's statements. Post September 11th the city and county

of San Francisco did acquire two detection devices capable of picking up anthrax. Unfortunately, even though those devices are expensive and we consider them state-of-the-art, their effectiveness is only about 50 percent of the time. That means that we still have quite a few question marks during a response.

Just to quantify exactly the kind of workload that we have been under since the September attacks, during the month of October, which was during the anthrax attacks on the East Coast, our hazardous materials team in the fire department went from an average of six calls per month, which is our normal day-to-day business, up to 220 for the month of October alone, so that gives you an indication of just what kind of a strain that puts on our resources here.

Mr. HORN. I want to go back to Mr. Brown for a minute on the smallpox which was a good dialog. Do we have any use for the smallpox vaccines we had 30, 40, 50 years ago? Does that help us if you have some rogue country dumping smallpox.

Dr. BROWN. I will give a brief answer, yes. I will have to qualify my statement by saying my expertise is in emergency medicine and not in infectious disease. I am sure the Centers for Disease Control and other Federal resources would have a more specific answer for you.

My understanding of the use of the smallpox vaccine is that it has been tested recently and found to contain its potency. In other words, it will still be effective in treating smallpox cases. I do know from my studies that it will be effective or useful for up to a week after the exposure.

However, as Congressman Honda has pointed out, there are often latent periods during which time we are not aware of all of the people that have been affected by an attack so it will become very critical to correctly identify those who are at risk and get the treatment to them within a short period of time.

Mr. HORN. We have, I believe, testimony that we have quite a few vaccines there. Ten years ago or 5 years ago it was a mess in terms of the warehousing. They didn't know what they were doing and they didn't get it out around the country. I just wonder, you might be in emergency medicine and all but what do you know about it from your standards on whether it is smallpox or anything else?

Dr. BROWN. From my perspective for treating a smallpox attack the crucial factor will be to setup quickly the emergency treatment centers and prophylactic treatment centers that we would need to treat a large number of people and to equip those centers with everything they need to provide the immunization and to collect the information from the patients, potentially draw blood, etc., that they would need to track the epidemic or the attack.

I know from our planning that we are prepared to do that. We do need to have the drilling to actually put it in place and see the timing that it will take for it to occur.

Then all of this, of course, is predicated upon our getting the vaccine from the national pharmaceutical stockpile rapidly so that we can utilize it to treat the patients.

Mr. HONDA. Just a quick comment. I guess the difference between anthrax and smallpox is that smallpox is infectious and con-

tagious so the drill would probably have to be different. Well, the drill may be the same but the response may be different in terms of trying to isolate folks and create a concentric shell around the point of identification so that we can prevent a mass epidemic.

Dr. BROWN. That is an excellent point. Each of these agents that could be used in an attack have their own challenges, but in the case of small pox, it is not only the identification of the people at risk that might be difficult.

It is also the fact that those people can then potentially spread the virus, although the most infectious cases of smallpox are people that have the full-flown syndrome. With this communication system that we can notify all of the physicians, all of the healthcare personnel in the community to be looking for the syndrome. Hopefully we will be able to identify those infectious—excuse me, contagious patients rapidly and put them in some type of protection on quarantine status.

Mr. HONDA. Mr. Chair, just to close then on my part, what you are saying is that we've got pieces of the jigsaw puzzle. We have some ideas where the missing pieces are. It's a matter of putting them together. The glue that we have to have is the revenue. That is No. 1. The flow of revenue is not perfect. That's why I ask if there are some cost estimates that can come from local up and then some suggestions on how that can be distributed once it is authorized and allocated.

It seems to me there are some counties that are quite capable of being the direct recipients of funds where the State can be bypassed and the State can be utilized where counties may not have the full breathe of technical assistance or technical folks to be able to—or full breathe of services where they would need a State coordination where you could combine States together.

That is one impression. What I hear you also saying is that needs for training and equipment is ongoing but there is initial cost such as you stated. But then there is also what you didn't mention is the cost of substitutes while people are in training. It seems to me an ongoing cost.

What I am hearing also is the stovepipe effect of all our eight different agencies including the feds. There is nothing lateral to communicate between you so that you have a national system of communication of distribution of materials or meds and things like that. That would be help for us to hear from you and how you can put this together so that the plan can move forward and up. I was hoping for some sort of quick response.

Mr. HORN. Dr. Winslow.

Dr. EDWARDS-WINSLOW. I think that we had a good beginning with the Nunn-Lugar-Domenici program where six specific agencies were tasked to work directly with the cities.

Through the Department of Health and Human Services the MMTF cities across the United States have a contract right now to develop sustainment cost estimates, and that's what Mr. Canton referenced earlier, that San Francisco has been working on the project and so has San Jose.

Within just a few months there will be information from the original 27 cities who have had almost 5 years experience now in

this field. That information, I think, could become a very useful paradigm because I doubt there will be a great deal of difference.

I think also the cooperative spirit that we experienced in San Jose among those six Federal partners was a key contributing factor in our local success. I think that needs to be nurtured and encouraged at the Federal level through legislative support and funding so that the appropriate Federal agencies can each contribute the expertise that they have but in a collegial manner.

The single point source for funding is really critical because, as my colleagues have pointed out, grant writing is time consuming and expensive for the local government. Then the reporting requirements that go along with the grants and the contracts often cost a significant percentage of the money that is received and that needs to stop.

We need to create sensible Web-based reporting that can be done electronically that minimizes the use of staff time, but yet gives the Federal Government the appropriate methods for monitoring the fact that we should be extremely responsible in the way that we handle this scarce funding.

Mr. HORN. Thank you. We are going to have on panel two the question to answer that I'm going to now give to you because some of you are on national committees of your relevant associations. I would be just curious if this discussion would be there, especially on our massive lack of health facilities given Medicare and all the rest.

I wonder has anybody talked about the Veterans Administration Hospitals or the military hospitals and are they in on this? Do we know has somebody done an inventory which if something happened in Texas or in California would there be beds? Would we have to draw on from the VA or the military?

Dr. BROWN. I can give you a partial answer to the question. The VA is an integral part of the National Disaster Medical System and this is a system that will be able to evacuate patients to centers of care where there is capacity to treat them from a zone that is heavily impacted such as a city that is under attack.

We have been working with our local VA, the Fort Miley facility, and working with them in terms of developing a disaster hospital capability. What looks most promising currently is the ability to rapidly convert beds that they have in a skilled nursing facility on their campus to disaster acute care beds.

Now, admittedly the entire facility of that skilled nursing facility only has 100 beds but to have 100 beds available within a few hours makes a tremendous difference. And then to have the national disaster medical system bring in other assets such as the disaster medical assistance teams, volunteer teams of medical personnel.

I happen to serve on California 6, the Bay Area disaster medical assistance team. To have those teams come in within 6 to 12 hours to setup additional facilities and additional care will be invaluable in any disaster scenario.

Mr. HORN. That's very helpful.

Mr. Canton.

Mr. CANTON. I would just like to point out that the response mechanism in the United States is actually fairly robust and works

fairly well. My previous job was with the Federal Emergency Management Agency and I think in the time I was there I saw the Federal Response Plan go from something that was just a concept to something that really does work in the field.

Our entire emergency response in any operation is based on support to the lowest level. Our emergency operation center supports the field people that are working on a problem. The State Office of Emergency Services then supports my operation. Then the Federal Government overlays that.

I think where the problem comes in is that many of the agencies that are involved in these different plans don't always work together. They don't spend time doing exercises, as Dr. Brown mentioned. In many cases they are developing plans in a vacuum and very independently from some of the other agencies that are involved.

I think the real issue becomes what do we use as the linchpin for all these different plans that are out there. I think that's where you have to eventually come back to the emergency management community.

I don't think we've been as good a player as we could have been. I don't think at some of the State levels that the offices are sufficiently funded to provide the oversight they need. I think in many cases it really depends on which executive arm of the government is willing to give the authority to offices of emergency services to coordinate that work.

We are not first responders but our job is to get the first responders to come together and look beyond just their individual plans and to make sure the plans mesh together. I think ultimately we end up being the linchpin and I think ultimately at the Federal level that brings you back to the Federal Emergency Management Agency.

Mr. HORN. In your testimony you stated that while reporting requirements for FEMA grants for the emergency management preparedness have been simplified, the amount of grants have decreased, however. With all the additional Federal money that is being made available, do you anticipate that trend will change next year for San Francisco?

Mr. CANTON. We are certainly hoping so. We are certainly heartened by all the money, as Chief Trevino, we see moving through Congress. We are also a little disheartened that this far from the event of September 11th we still haven't seen any Federal funds down here. We are still working out of our own departmental budgets. We are reassigning priorities. In many cases we are cutting programs so that we can put additional money into these things. Very little money has reached us.

I would like to hold up that particular program from FEMA as sort of an example of how things can work well. When that program first started many years ago, it was designed to stimulate the formation of local offices of emergency services. It was primarily a program to fund personnel.

Over the years that became very restrictive. There were a number of other things that were layered over that. The reporting requirements got very onerous. Then several years ago FEMA had a

revision of the program where they said, "Look, local governments know how to make best use of their funds."

It became, in essence, a block grant. We have a very simple program where at the beginning of the fiscal year we provide a work plan. We check in at mid-year and at the end of the year we do a final report. In turn the amount of money that we get we are free to use as we designate in our work plan.

The problem comes in—it is two fold. One is that the Federal Government has reduced the amount of funding available in that program. The second was to a certain extent a self-inflicted wound where we in the State of California redesigned our funding formula so that less money went to some jurisdictions and more went to other jurisdictions. I think it is a combination of things but we are certainly hoping that more money will be put in this program in the next fiscal year.

Mr. HORN. There is a lot more things we could ask but let me ask you one about the national stockpile we have been talking about on medications. How would they be distributed throughout the San Francisco Bay region? We do have a CDC witness in the next panel but has there been any planning on how that would happen?

Dr. BROWN. Yes, sir. There has been. I sit on the advisory committee for the EMS authority and the Office of Emergency Services on the national pharmaceutical stockpile. Very briefly stated what would happen is the material would arrive at a distribution point somewhere near the communities involved. It would have to be requested by the Governor through a mechanism of declaration of emergency.

It would also be potentially in competition with other requests by other communities in other States. If we had an attack of a contagious agent such as smallpox, it is quite conceivable that many, many communities would be affected and so decisions would have to be made to triage the material.

Once the material arrived at the site, it would be broken down by assistance of State assets, and potentially Federal assets, the National Guard and so forth, and then distributed to the communities.

We have in San Francisco several distributionsites that we have designated. Again, we have in our plan and in our training of our personnel indicated how this material would be accessed quickly and transitioned to put into patients' hands.

Dr. BROWN.

Again, the limitation is that we have not drilled that with our Federal and State partners and we need to be doing that rapidly.

Mr. HORN. Chief Sanders, I think you wanted to comment on some of these questions.

Mr. SANDERS. Thank you very much, Congressman. As I have listened to my colleagues and to your questions, a major incidence has come up of deterrence. Thirty-eight years of law enforcement has taught me that even in our traditional law enforcement prevention of crime is extremely important.

Here in San Francisco we have taken that into consideration in this circumstance in developing a personal emergency plan, standardize plan on how to report emergencies, train the citizens on

what to do and have themselves ready to respond for a period of time until the official forces can get to them.

One of the other areas we look at in deterrence is regional intelligence cross-training. I know that in law enforcement if there is a bank robber on the East Bay, I know that when he or she runs out of the bank there, they will come over here. We need to share our law enforcement information both horizontally and vertically.

I do know of some bills in Congress to get that done so we can break down some of the old barriers so that we could share information. To join Mr. Cochran, there is a piece of technology I recently have reviewed called a threat detector where we actually look for people.

These bombs and devices of destruction are placed there by people. Certainly we know from the intelligence coming since September 11th that there are cells of these anti—actually, they are warriors. They think of themselves as warriors in a world war against whomever they regard as an enemy.

We need to track these individuals just as we track other criminals around our country and around the world. There is technology, again, available for that. We are able to check people at the airports. I am going to have to deploy troops at my own police offices at the San Francisco International Airport to replace the National Guard.

Also, I would like to have those officers rather than just stand there and watch and respond to just physical incidences in their area, provide them with information that can be given to them by technology. This threat detector can check every wanted person in nanoseconds.

For example, all 19—as I am informed, all 19 of the highjackers in the September 11th event were on watch lists. That information never got to local law enforcement. We would like to work with all of the governments, State, local, and Federal to work out a system where we can share that information and be able to respond to it. You are absolutely correct.

I mentioned the letter I wrote to Chairman Sensenbrenner of the Judiciary and the bill number of mine is H.R. 3483, the Intergovernmental Law Enforcement Information Sharing Act of 2001. I would hope if enough chiefs of police and fire and all the rest would support that, we could deal with it.

The FBI has been very good without legal part. This should have been in the earlier and Mr. Sensenbrenner realized that. He's going to move that as fast as he can.

Mr. SANDERS. Thank you, sir. That would be very, very helpful, again, in law enforcement helping us to do the new job that we've been assigned to in homeland security.

Mr. HORN. Yes.

Mr. CANTON. Chief Sanders touched on one area that I think is very important that we sometimes overlook, and that is what do we tell the public? What do we want the public to do?

One of the things we felt after September 11th here in San Francisco was that we really didn't have a good message initially to answer when people asked us, "What should we be doing about this?" A lot of our effort in the first week was to develop just such a message.

We have national programs for crime prevention. We have national programs for a variety of different things, emergency management, but we really aren't seeing yet a national program that answers that question for people "what should they be doing?"

Again, I think there are models out there if you look at how Great Britain deals with terrorism, with how Israel does. There are posters. There are flyers. There are Web sites. There are things that tell people how they can empower themselves. I think that should be part of any program, too. You have to remember the public needs to be a partner in this.

Certainly by providing intelligence information to the police, by being alert to the signs of a potential terrorist attack, they can, in fact, play a role. I think we need to stress that we are all in this together and we need their help as much as we need the help of the emergency services.

Mr. HORN. Well said.

Mr. Cochran, before we close this out, you mentioned on the x-ray machine that it can, in fact, see or think there is a human lift under the rubble. Are these devices available to local police and fire departments and, if so, at what cost?

Mr. COCHRAN. There were two things. The x-rays were looking at containers and the radar devices were looking through rubble. The radar devices are just starting to be made available. They are very inexpensive. I don't know what the exact cost would be but no more than a few hundred dollars at most. They can be made available to first responders over the course of the next several months or year.

Mr. HORN. That would really be helpful to a lot of people that felt that maybe it couldn't be done.

Mr. COCHRAN. There are always issues that we've got to work our way through and sometimes you get blocked but then there are usually work-arounds and you have to find those. Thank you.

Mr. HORN. Well, thank you. We'll have additional questions. If you wouldn't mind, there are a few key things from both the majority and the minority. We will put them in the record at this point. We would like to have your ideas on it.

We have taken a lot of your time and we thank you for coming in here. We are now going to start with panel two and we dismiss panel one. If you are staying around and you see something crazy that we're dealing with in panel two, you are certainly welcome to speak-up as you are going to the door.

OK. Panel two. Dr. Burton, Mr. Riordan, Ms. Cherry, Ms. Dalton, Mr. Mefford, Dr. Bice, and our person that is following us across America, Mr. Ron Castleman. We are glad to see him always.

STATEMENTS OF DR. RICHARD BURTON, ASSOCIATE DIRECTOR, CALIFORNIA DEPARTMENT OF HEALTH SERVICES; RAY RIORDAN, EMERGENCY PREPAREDNESS OFFICER, EAST BAY MUNICIPAL UTILITY DISTRICT; JANET CHERRY, ASSOCIATE, THE CADMUS GROUP, INC.; PATRICIA DALTON, DIRECTOR, STRATEGIC ISSUES, U.S. GENERAL ACCOUNTING OFFICE; LARRY A. MEFFORD, ASSOCIATE SPECIAL AGENT IN CHARGE, SAN FRANCISCO FIELD OFFICE; DR. STEVEN BICE, DIRECTOR, NATIONAL PHARMACEUTICAL STOCKPILE, CENTER FOR DISEASE CONTROL AND PREVENTION; AND RON CASTLEMAN, REGIONAL DIRECTOR, REGION VI, FEDERAL EMERGENCY MANAGEMENT AGENCY

Mr. HORN. You've probably heard how we go about this. That is, we do swear in all witnesses so if you will stand and raise your right hand and affirm the oath.

[Witnesses sworn.]

Mr. HORN. Thank you. It will be seven witnesses and the clerk will note that. We will start this down the line as we have it in panel two's agenda and that will be with Dr. Richard Burton, the Associate Director of the California Department of Health Services.

Dr. BURTON. Thank you, Chairman. I appreciate the opportunity to come and share some thoughts this morning from the California Department of Health Services. In my previous experience, I've been working with the California Department of Health Services for the last month and a half. About 10 years before that I was a local health officer here in California and before that about 10 year's experience as a flight surgeon with Marine Corps.

Since the aftermath of September 11th we have refocused a lot of our energies in California in our partnership with State and local public health officials, the public health officials were tasked with the primary responsibility of coordinating public health responses in the State. We do that in conjunction with our partners in law enforcement, OES fire, and George Benson, the special adviser on State preparedness here for the Governor.

At the local level they are also coordinating with the first-responders that were represented on the first panel and in conjunction with their multiple private sector of medical care providers.

I think what we would like to highlight in today's testimony is the appreciation we have for the funding that has been made available from the Federal level for public health preparedness and for hospital preparedness.

That funding has been in just the last month or so from the Center for Disease Control and HRSA has come to California and we are currently in the process of preparing the applications that were required by Federal oversight in order to receive the full extent of those funds and make them available to enhance our preparedness.

The issues that have come up so far as preparedness from the first panel relating to planning and readiness assessment, surveillance, or public health, intelligence gathering, and epidemiology capacity or laboratory capacity that we need to have in order to assess biologic agents, and also the potential threat they have to a community dealing with risk communication and information technology, and also in dealing with education and training both within

the public health field and with our partners that are first-responders in law enforcement fire, OES, EMS.

All of those issues are parts of the planning process and application process that the Center for Disease Control and HRSA have incorporated into their funding allocations.

In order for us to be successful at addressing all of those issues and recognizing our partnership with the local jurisdictions, there are 61 independent public health jurisdictions in the State of California.

The Department of Health Services has developed focused area work groups with representation from local public health jurisdictions and expertise from academia along with the expertise within the State Health Department. If flushed out, the assessments and needs and where we can best enhance our ability to serve the residents of California and that has informed the application that is currently being put together. I guess in closing, on these comments I would be happy to answer any questions. We have heard a number of presentations this morning that have referenced new and emerging technologies that can be of great benefit to us and our ability to detect a threat and also to manage it once an occurrence has taken place. Those technologies are very promising.

I know what I've heard from my local colleagues in public health and the State colleagues in public health that while we make use of these emerging technologies, we need to assure that we have the human intelligence and professional capability to manage the technologies, interpret the technologies, and make the policy recommendations that will best serve the constituents and the residents in California. Thank you, sir.

[The prepared statement of Dr. Burton follows:]

Testimony by Richard Burton, M.D., M.P.H., Associate Director,
California Department of Health Services

The House Committee on Government Reform, Subcommittee on Government Efficiency, Financial Management, and Intergovernmental Relations
April 2, 2002

"How Effectively are Federal, State and Local Governments Working Together to Prepare for a Biological, Chemical, or Nuclear Attack?"

Good morning, Chairman Horn and Committee members. Thank you for inviting me to testify on this critical issue of biological and chemical terrorism and public health preparedness in California. My name is Richard Burton and I am the Associate Director of the California Department of Health Services, with responsibility for developing the Department's bioterrorism and response activities. Prior to my joining the Department, I served as the Health Officer of the Placer County Department of Public Health, one of California's 61 local health departments. As a Navy Commander, I also served as a flight surgeon with the United States Marine Corps. I appreciate this Committee's ongoing interest in and support of public health programs.

In the aftermath of the tragic events of last September 11th, there has been heightened awareness of potential biological, radiological, and chemical threats to our communities. Here in California, Governor Gray Davis has led the creation of the California Anti-Terrorism Center, which will enable all law enforcement agencies to share information on terrorist threats and activities. The Governor appointed former FBI Agent, George Vinson, as the Special Advisor on State Security. Mr. Vinson advises the Governor on anti-terrorism efforts in California and also serves as a liaison with the federal Homeland Security Office. Additionally, reporting directly to the Governor, the Office of Emergency Services (OES) is the State's lead agency for managing the consequences – preparedness, alert, warning, response, and recovery – of terrorism at the state level.

The California Department of Health Services is the State agency responsible for coordinating statewide disaster public health assistance in support of local

operations. The Department has primary responsibility for public and environmental health operations, and has a major supporting responsibility to the Emergency Medical Services Authority for disasters involving mass casualties. Through its disease control and surveillance, laboratory and environmental monitoring programs, the Department plays a central and critical role in rapidly detecting and appropriately responding to chemical, radiological, and biological threats of terrorism.

Our existing federal Cooperative Agreement for bioterrorism response planning from the U.S. Centers for Disease Control and Prevention (CDC), now in its third year, has been instrumental in assisting us to build upon the State's emergency and disaster response systems. This Cooperative Agreement is now being supplemented by new federal appropriations made available by the Emergency Supplemental Act of 2002. The supplemental CDC Cooperative Agreement and the new Health Resources and Services Administration (HRSA) Cooperative Agreement allocated approximately $100 million to California to broaden bioterrorism preparedness and response planning activities to the public health and medical care systems. The breakdown for these new funds is as follows:

1. HRSA Cooperative Agreements for hospital planning and preparedness:
    - California Department of Health Services, $9,962,905
    - Los Angeles County, $3,659,172
2. CDC Cooperative Agreements for enhanced Public Health Preparedness:
    - California Department of Health Services, $60,816,245
    - Los Angeles County $24,591,171
3. U.S. Department of Health and Human Services (DHHS), funds 7 cities for a total of $2.2 million. These cities will develop metropolitan emergency bioterrorism preparedness for regional preparedness planning as part of the Metropolitan Medical Response System (MMRS) Initiative.

The HRSA hospital funds are new and are being implemented in two phases. The Department is partnering with the State's Emergency Medical Services Authority to develop a state plan for the HRSA hospital funds. The purpose of the Phase I planning effort is to foster the preparedness of the state's hospitals and health care system to respond to bioterrorist events through a statewide assessment of unmet hospital needs. A primary focus area will be the implementation of bioterrorism preparedness plans and protocols for hospitals. Phase II HRSA funds will be utilized to benefit hospitals in California so that they can address their specific needs and the special needs of their communities. Development of statewide models, including regional hospital planning, is being encouraged during this phase, as is collaboration with other states and national organizations.

California has not experienced a biological terrorism incident in its long history of natural and human-made disasters. It has, however, experienced several outbreaks of infectious diseases – *influenza, tuberculosis, hantavirus, and* sexually transmitted diseases, to name a few. The supplemental CDC Cooperative Agreement places an emphasis on rebuilding public health systems so that they can rapidly identify and control infectious disease outbreaks, including those stemming from a bioterrorist event. The public health system will be a strong player in the event of such an incident. And we recognize that, if such an event were to occur, California's law enforcement and the medical community stand ready to assist us. Our public health system is much farther along in being ready to respond to a bioterrorism threat than are many other states. The guidance of the CDC and its expert staff has contributed significantly to our efforts.
This exchange of expertise is not a "one way" street. The Department's Dr. Michael Ascher, Director of the California Microbiol Diseases Laboratory, is now working on national terrorism planning with the U.S. Department of Health and Human Services. This sharing of our state's expertise has been arranged through an inter-governmental personnel agreement in response to a request from Dr. D.A. Henderson, Director of the Office of Public Health Preparedness within DHHS.

Acquiring and sustaining an adequate response to bioterrorism requires thoughtful analysis and carefully integrated planning by federal, state, and local public health agencies. This, frankly, is one of our most daunting challenges. The CDC Cooperative Agreement calls for state-local public health agency collaboration in all phases of the preparedness planning. It also requires participation from a broad base of interested constituencies and stakeholders. The Department has ensured participation of our local public health partners, the California Conference of Local Health Officers and the County Health Executives Association of California, as well as other public and private sector partners in our planning efforts for these resources. To further ensure the state-local collaboration, in February of this year, I joined the Department as a senior member of our bioterrorism preparedness planning team through an inter-governmental agreement between the Department and Placer County.

It is my understanding that the committee is interested in the Department's anti-terrorist activities as they relate to California's public water systems. The Department is responsible for the oversight and regulation of California's 8500 public water systems. Local health jurisdictions participate in the oversight and regulation process.

Shortly after September 11, 2001, the Department's Division of Drinking Water and Environmental Management staff met with representatives of public water systems and other state and federal agencies in both Northern and Southern California to discuss actions and plans that must be in place to protect the State's water systems. The water systems that participated in these meetings provide drinking water to approximately 90 percent of California's population.

In these meetings we jointly discussed emergency response plans -- specifically, the Department's staff are working with the Department of Water Resources and the Metropolitan Water District of Southern California to develop a response strategy in the event of a terrorist action against the State Water Project and Metropolitan's water sources, treatment facilities, and distribution system. Once

this is completed, it can be applied to other large water utilities. The Department is also working with water utility laboratories and the Department of Water Resources to develop analytical methods for chemical agents and to develop a laboratory mutual assistance strategy.

This brings me to my final observation. Perhaps, as no other program before, all of the bioterrorism programs, including the HRSA program for hospitals, the CDC program for public health, the MMRS program for cities, and any new funding being contemplated at the federal level require close coordination through shared goals and integrated activities.

It is critical that the federal agencies - the Federal Emergency Management Agency, the Departments of Justice and Defense, the Environmental Protection Agency, and the Department of Health and Human Services and its sub-agencies -- the Centers of Disease Control and Prevention, the Food and Drug Administration, and the National Institutes for Health -- coordinate and provide leadership and organizational direction for the federal budget, policy and program implementation related to this important area. Close ties and coordination between all of these federal agencies and departments will be paramount in addressing the consequences of terrorist incidents.
In closing, the threat of bioterrorism presents tremendous challenges to public health agencies. The Department has been gratified by federal efforts to rapidly disburse funds to state health agencies, and we have been appreciative of efforts to allow us the flexibility to address our unique state needs. We rely on our partners in the federal Department of Health and Human Services, as well as our local public health partners and the medical community to get the job of protecting public health and safety before us done. Without question all parts of the public health system will require your continued support to further strengthen our capabilities and operating capacity to address the threat of bioterrorism.

This concludes my prepared statement. I will be happy to answer questions from the committee members. Thank you.

Mr. HORN. Thank you.

Mr. Riordan.

Mr. RIORDAN. Thank you, Mr. Chairman, Representative Honda for inviting us. My name is Ray Riordan, the Emergency Preparedness Officer for East Bay Municipal Utility District. I have been an emergency manager for city and county agencies for the last 16 years, the last 9 years being with East Bay Municipal Utility District.

East Bay MUD is a large water and waste water utility in the State of California. We serve 1.3 million water customers and 685,000 wastewater customers. While I'm here representing the District, I am also making commentary with many of the other water utilities we coordinate with in the Bay Area and the smaller water utilities in the State of California.

Water systems have several key critical priorities that they must pay attention to as a water manager. First and foremost is public health right in line with balancing fire fighting. The fire fighters want the wet stuff to put on that red stuff as a way of managing the public safety.

We also pay strong attention to our multi-hazard responsibilities here in the State of California with the many seismic events, as well as the technological or other natural events that we have to face.

In the State of California alone, again, because we are a large water utility, I don't want to sway one direction or the other. There are over 10,000 water systems in the State of California licensed with the State Department of Health. There are many water utilities in the State of California that are both public and private and may serve to store water, provide water supply, transport water, treat water, or provide distribution.

We at East Bay MUD are large enough to be able to work with large agencies. Since 1952 we have been part of California Utilities Emergency Association. Since 1998 we have been part of the FBI's National Structure Protection Commission.

Large utilities like ourselves are able to respond effectively to large events such as the terrorism events. We took immediate actions as did many other water utilities. For the first time in our history we limited access to our water supply reservoirs from recreators. We had to close down our reservoirs for the first time in our history because conventional wisdom indicated that there would be a large concern for the water supply or the structural integrity of the dams if something were placed outside those dams.

Immediately after the event we began response by looking at our systems and even conducting a preliminary vulnerability assessment reflecting on what is our real risk versus what is our perceived risk within the media and the public.

We instituted new corporate procedures including how we provide public information. One of the key issues that we have as a water industry is just how much information do we have to have or provide easily to the public in the Freedom of Information Act. This is a significant issue for us.

We increased our security procedures and our vendor systems to the point of more than doubling the cost of operational contracts as well as looking at the future cost of capital improvement.

Because of the lack of coordination or information immediately available on the terrorism threat we began to work closely with six other public water utilities within the Bay Area, the San Francisco Bay Area representing over 6 million water customers.

We formed an ad hoc committee called the Bay Area Security Information Collaborative [BASIC], as a way of sharing information on the threat, the risk, providing educational information and coordination. We did this in conjunction with information that we did receive from the FBI and the EPA who have provided invaluable support.

To this point I mentioned our security contracts. We have increased our security contracts from $1.4 million to over $2.3 million, almost doubling our budget.

We see that EPA funds are available for $125,000 at this time are only for the large utilities and we need to pay attention to the smaller utilities as well. It is estimated that we will have $20 million in improvements necessary for capital improvements. This is waging a significant impact on our capital resources.

We need Federal support on the science of detection. Right now we rely on looking at health information from hospitals, how many people have become ill at hospitals? We respond to a need by testing our water system on a regular basis. We need to have a better understanding of what it is we are testing for.

We need support on the science of detection.

We also need support and Federal resources on response coordination. It is very difficult to get a single source of information for the water systems as to how to respond. We also have to pay attention to when a water system does become a target for a terrorist event, that it becomes a crime scene, and we have to understand better how to respond to that situation.

In closing, a key issue that we have paid attention to and have discovered is that you don't have to actually contaminate a water system. You just need to affect public confidence in the water system, convince the media or the public the water system has been contaminated. That would be enough of a crisis for water systems to respond to.

It is a large psychological effect. Last our concern is on confidentiality. If we do the security vulnerability assessments, how much of that information do we have to publish because then we are putting out the information for the potential terrorists to use back against us as a water system.

We in California have done a lot of work on natural and technological preparedness and we would like to see some additional funding for the security event without additional regulations that we already see in our emergency preparedness programs we currently hold. Thank you very much for the time.

[The prepared statement of Mr. Riordan follows:]

EAST BAY
MUNICIPAL UTILITY DISTRICT

DENNIS M. DIEMER
GENERAL MANAGER

March 28, 2002

Honorable Stephen Horn
Chairman, Subcommittee on Government Efficiency
2157 Rayburn House Office Building
Washington, D.C. 20515-6143

Re: Federal Assistance in Local Government Terrorism Preparedness
April 2, 2002 Field Hearing, San Francisco, California

Dear Honorable Mr. Horn:

Thank you for the invitation to participate in the April 2, 2002 Field Hearing on Federal Assistance in Local Government Terrorism Preparedness. East Bay Municipal Utility District (EBMUD) is a public water and wastewater utility located on the eastern shore of the San Francisco Bay Area that serves approximately 1.3 million water customers and 685,000 wastewater customers. The District appreciates the opportunity to participate in a forum with other distinguished presenters on the topic of terrorism. Mr. Raymond Riordan, EBMUD Emergency Preparedness Officer, will be available to present verbal testimony based on the following information. A hard copy of this transmittal will be copied for distribution at the hearing, as requested.

Since Presidential Directive Decision 63 was promulgated in May 1998, EBMUD has participated in the federal terrorism assessment and planning programs, including the Federal Bureau of Investigation's (FBI) National Infrastructure Protection Commission (NIPC) efforts to identify the potential for physical, chemical, biological, radiological and cyber sabotage. Today the Environmental Protection Agency (EPA) facilitates communication to the NIPC. Similarly, EBMUD has participated in the water industry's preparedness responsibilities through the American Water Works Association (AWWA) and Association Metropolitan Water Agencies (AMWA). The valuable collaboration between the federal, state and local governments with industry-specific organizations has produced tremendous information and planning resources to initiate terrorism preparedness.

While the water industry has long believed that sabotage of physical systems is more likely than contamination, the contamination issues raise the greatest concern among the public. The limited and sometimes conflicting information that has been disseminated about how terrorists could disrupt public water systems complicates how a water utility responds to the ever-changing conditions presented by the threat of terrorism. Public trust and confidence are paramount for water utilities. All parties involved with response and notification of the public need to work together to continue to promote a high level of confidence in the safety of our water. With this goal, the federal, state and local water utilities have endeavored to work closely with their respective levels of law enforcement and terrorism response entities, resulting in the realization that more work is needed.

375 ELEVENTH STREET . OAKLAND . CA 94607-4240 . (510) 287-0101

In preparation for this Field Hearing on how the federal government is assisting state and local governments to protect against potential terrorist attack, staff prepared this written statement. The material is organized to address what has been accomplished and what still needs to be addressed in the following issues: response to 9/11, detection, response coordination, and future federal resources.

Response to 9/11

As the enormity and shock of the events that occurred on September 11, 2001 unfolded, EBMUD immediately contacted the FBI and local law enforcement to determine the threat to the local area. The District prepared to take previously unprecedented actions to secure its water resources and ensure the public safety of its customers. For the first time in its history, EBMUD stopped recreational use at its water storage facilities and began implementing increased security at every critical facility. The District Emergency Operations Center was activated along with an ad hoc special security team whose responsibility included forming new corporate security strategies and procedures that involved a combination of employees and outside security vendors. In response to ongoing concern for cyber intrusion, the District removed information once available on the web. Finally, The District embarked on an initial vulnerability assessment to determine how to best re-allocate committed resources and initiate capital improvements.

These swift actions pointed out critical areas of concern. No standards existed in how to conduct a security vulnerability assessment or how to monitor for potential contamination. The EPA in conjunction with AWWA and the American Water Works Association Research Foundation (AwwaRF) provided guidance, workshops and additional training resources in a national campaign on assessments. In light of the lack of guidance, the water utilities in the San Francisco Bay Area formed the Bay Area Security Information Collaborative (BASIC) to share information on potential threats to the water systems, distributing warning information, and discussing how to respond consistently to the same threat conditions. All along, the utilities have integrated knowledge supplied by various law enforcement networks dealing with terrorism response.

The impact on the financial resources of the District has been significant. Security contracts increased from $1.4 million to 2.3 million. While the EPA is offering grant funds of approximately $125,000 to conduct vulnerability studies, the District expects to spend nearly $1 million, including $540,000 in professional services and $400,000 in staff costs. Capital improvements to address the vulnerabilities are estimated at nearly $20 million.

Detection

The Center for Disease Control (CDC) has committed resources to providing information on how to detect potential water contamination, and the water industry is in need of this state-of-the-art information on known and emerging biological, chemical and radiological contaminants. Prior to 9/11 information was to be published regarding these topics, but it has since been deemed classified and not readily available. EPA is working with CDC to provide a pre-identified and confidentially published list that would identify the potential contaminants, the

necessary lethal and sub lethal concentrations, and the associated physical characteristics of the contaminated water (color, smell, pH, dissolved oxygen, chlorine residual depression, electrical conductivity, and oxygen reduction potential, etc.). This information would be vital for responding to an event.

As the data is released, the processes and equipment needed to detect these potential water borne contaminants must be available. The prescribed treatment modalities or antidotes should be pre-identified for the various contaminants. Once the treatment process is known, modeling systems and in-line monitoring devices need to be identified and developed. Then the equipment and process improvements must be implemented, which may require physical improvements.

Response Coordination

Detection and knowledge lead to effective response. The federal resources from the FBI, EPA and Office of Homeland Defense are working together to develop credible threat notifications and protocols. What is not readily noticeable, is the creation of a centralized point for disseminating the threats or collecting information in real events that have impacted water systems. Collecting information on response to past events helps utilities and other responders evaluate effective strategies and shape the response to future events. This body of knowledge also provides credibility in handling media inquiries into reasonable and prudent action.

Response protocols for an event are critical, particularly when state and federal resources are notified or asked to assist in the response. It is not clear what federal resources can be deployed for a water system contamination event. Coordination between local, state and federal resources needs to be carefully planned and practiced in drills.

Future Federal Resources

From the initial assessments and newly-organized trainings on the threat of terrorism on water systems, it is clear that federal resources are needed for: increasing detection capabilities; reducing water system vulnerabilities; coordinating response plans; and facilitating warning systems. The water industry has taken great strides to better secure, detect, and respond to potential water system terrorism. The use of federal resources without the burden of additional regulation to address these areas is critical.

The science of detection must include the creation of new studies to investigate how to treat various contaminants and provide practical information on how to deal with potential terrorist events. Federal resources must help address how water utilities can monitor systems given the current state of technology and what future technology needs to be developed. Because a water utility cannot defend against all potential terrorist events, and given the fact that financial resources are limited, it is important to identify how current technology can detect previously unknown contaminants. The information on detecting contaminants must address how the physical and chemical characteristics of the contaminant impacts common surrogates. On the other hand, as new technology is available for detecting contaminants, funds are needed to install the new technology to protect the public health.

The EPA grants now available only for vulnerability assessments are vastly under-funded to undertake the capital improvements needed to improve water system security across the nation. Coordinated response plans must be developed, along with better warning systems, to notify the water industry that a threat has been received. Training on issues related to contamination monitoring and how to respond must be developed. Drills that exercise activation of local, state and federal resources must be developed and executed.

As EBMUD has begun to address the warning, monitoring, planning and response issues locally, it has become apparent that a regional approach to response makes sense and is practical. The local utilities saw great synergy in creating the BASIC work group in an effort to regionalize the efforts collaborate on how to implement information gathering techniques, how to respond to warnings, and how to deploy resources and manage the water system in response to an emergency.

The frequency of natural disasters and technological events (such as hazardous materials emergencies) in California lead to an increased level of improved emergency preparedness. California utilities also live with the most stringent hazardous materials handling regulations in the nation. Given the nature of the existing regulations on emergency planning and hazardous materials management, California utilities are well regulated for response to emergency events, including terrorism. While federal grants are needed to help offset the costs for capital improvements to secure the water system, additional regulatory requirements on security assessment, planning or response are not necessary.

Conclusion

Managing the crisis unfolding since September 11, requires cogent input, clear communication and decisive action. We appreciate the Federal Government's effort to rally the collective ideas from the water industry and Federal Government resources to identify collaborative methods to address the growing public interest in how the water industry responds.

If you have questions regarding this submittal or the District's interest in fostering the ideas that come from the meeting on April 2nd, please call upon EBMUD. Ray Riordan, Emergency Preparedness Officer, is available at (510) 287-1327 during normal business hours.

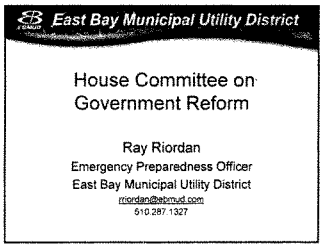
Sincerely,

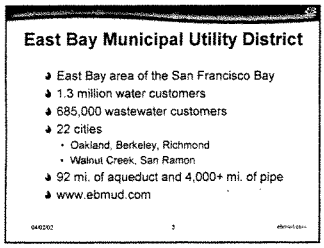
Dennis Diemer
General Manager

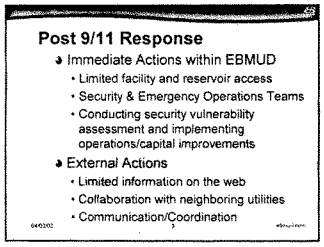
DMD/MJW/RAR:rar

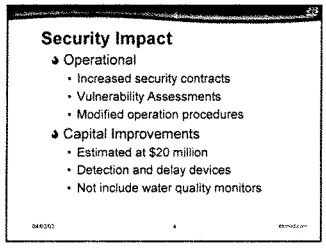
Riordan

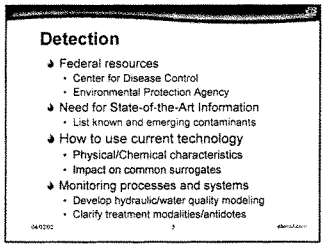
April 2, 2002

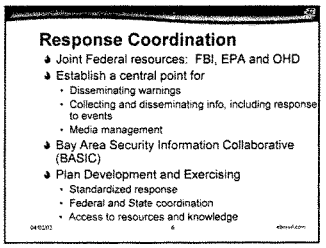


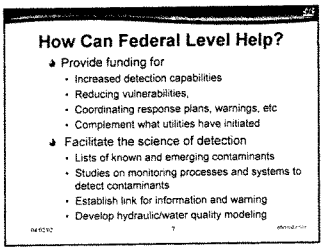


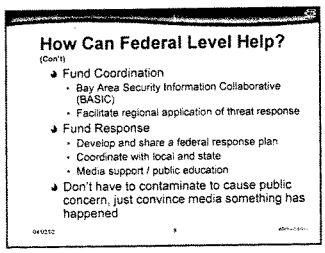


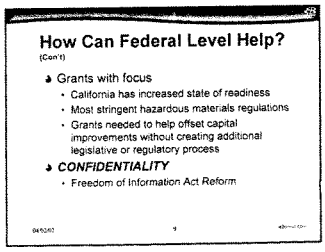

Security Impact
Operational
Increased security contracts
Vulnerability Assessments
Modified operation procedures
Capital Improvements
Estimated at $20 million
Detection and delay devices
Not include water quality monitors


Detection
Federal resources
Center for Disease Control
Environmental Protection Agency
Need for State-of-the-Art Information
List known and emerging contaminants
How to use current technology
Physical/Chemical characteristics
Impact on common surrogates
Monitoring processes and systems
Develop hydraulic/water quality modeling
Clarify treatment modalities/antidotes


Response Coordination
Joint Federal resources: FBI, EPA and OHD
Establish a central point for
Disseminating warnings
Collecting and disseminating info, including response to events
Media management
Bay Area Security Information Collaborative (BASIC)
Plan Development and Exercising
Standardized response
Federal and State coordination
Access to resources and knowledge


How Can Federal Level Help?
Provide funding for
Increased detection capabilities
Reducing vulnerabilities,
Coordinating response plans, warnings, etc
Complement what utilities have initiated
Facilitate the science of detection
Lists of known and emerging contaminants
Studies on monitoring processes and systems to detect contaminants
Establish link for information and warning
Develop hydraulic/water quality modeling


How Can Federal Level Help?
(Con't)
Fund Coordination
Bay Area Security Information Collaborative (BASIC)
Facilitate regional application of threat response
Fund Response
Develop and share a federal response plan
Coordinate with local and state
Media support / public education
Don't have to contaminate to cause public concern, just convince media something has happened


How Can Federal Level Help?
(Con't)
Grants with focus
California has increased state of readiness
Most stringent hazardous materials regulations
Grants needed to help offset capital improvements without creating additional legislative or regulatory process
CONFIDENTIALITY
Freedom of Information Act Reform

Mr. HORN. Well, thank you.

We now go to Janet Cherry, Associate of The Cadmus Group. We put your very fine—we will put it in again, but we got it when we were in Albuquerque so your record is in there. Go ahead because we didn't have you there. We just had the paper.

Ms. CHERRY. Mr. Chairman and Congressman Honda, thank you for the opportunity to testify today. My name is Janet Cherry and I am a registered professional engineer for The Cadmus Group, Inc. The following testimony is intended to address the need for examining the vulnerability of public water systems, particularly small water systems, to acts of terrorism.

Money has already been appropriated for the large water systems to perform vulnerability assessment, but small water systems have been neglected.

Large water systems are prepared technically, financially, and managerially to address security issues in small water systems. Large water systems possess the necessary professionals to identify security issues and the funds to implement the appropriate measures to maintain security.

Small systems often lack both the financial means and personnel to identify and reconcile security issues. Small water system treatment plants are very vulnerable since some of the treatments plants do not have personnel onsite 24-hours a day, 7 days a week making vandalism or other acts of destruction easy to perform when staff are not present.

Small water systems are often located in rural or remote areas again making these systems easier targets than the systems located in metropolitan areas. To provide an idea of how many small water systems exist, there are approximately 426 water systems that serve fewer than 10,000 people in the San Francisco area alone.

Water systems use the multiple barrier approach to prevent contamination or loss of service. This approach includes selecting the highest quality and least vulnerable source water, protecting the source, installing the appropriate treatment, and providing water through properly designed and maintain infrastructure.

Even with this multiple barrier approach being practiced by water systems, unintentional contamination still occurs such as water-borne disease outbreaks. When water-borne disease outbreaks occur, there is a time lag between the time of exposure and when an outbreak is recognized by the public health community.

For instance, on September 3, 1999, the New York Department of Health received reports of at least 10 children hospitalized with bloody diarrhea or E. Coli infection in counties near Albany, New York. E. Coli is a pathogen that naturally occurs in the environment and is harmful to humans if ingested.

All children had attended the Washington County Fair near Albany, NY held between August 23rd and August 29th. In total 65 people were hospitalized, 11 children experienced kidney failure, and 2 people died. This example illustrates the typical chain of events for an E. Coli outbreak. Now, E. Coli is regularly tested by approved laboratory methods and the symptoms are promptly recognized by the medical community. It was still up to 11 days before the outbreak was known by public health officials.

If small water systems were to be intentionally contaminated by unknown pathogens or chemicals, the strain on the public health and medical community would be immense. As we start to address the vulnerability and resulting security measures for small water systems, we must not treat it as a new or complex concept. Conversely, security should be treated as an extension of the system's public health plan to deliver safe drinking water reliably and consistently.

State public health departments have developed a sanitary survey process to assist water systems in delivering safety drinking water reliably and consistently. This process assess the adequacy of a water system's multiple barriers to prevent contamination or loss of service.

A sanitary survey consist of an onsite visit to evaluate all areas of the water system. Its primary concern is to identify areas where inadvertent contamination or service interruption could occur, but it also includes an element of security. Sanitary surveys have typically focused on vandalism and theft in the past, but they could be modified easily to address any risk deemed relevant including terrorism. The key to successfully addressing vulnerability of small water systems is to buildupon an existing process, the sanitary survey process familiar to small water systems and State and Federal officials.

The sanitary survey is an established process and all federally regulated public water systems are required to have a sanitary survey conducted every 3 to 5 years.

Also, it is important that the vulnerability and security of small water systems receive attention as Federal lending agencies such as the EPA Drinking Water State Revolving Fund and the Department of Agriculture Rural Utility Service continue to invest in water system upgrades and improvement and expansions. It is only logical that these investments be properly protected. Thank you.

[The prepared statement of Ms. Cherry follows:]

TESTIMONY OF JANET CHERRY, P.E., ASSOCIATE
ON BEHALF OF THE CADMUS GROUP, INC.

SUBMITTED TO THE
HOUSE SUBCOMMITTEE ON GOVERNMENT EFFICIENCY, FINANCIAL MANAGEMENT AND INTERGOVERNMENTAL RELATIONS:
OVERSIGHT HEARINGS ON DRINKING WATER SYSTEM SECURITY
COMMITTEE ON GOVERNMENT REFORM
U.S. HOUSE OF REPRESENTATIVES

April 2, 2002, San Francisco, California

The Cadmus Group, Inc. is offering the following information for the subcommittee to consider as it evaluates vulnerability assessments of drinking water systems. Cadmus is an environmental consulting firm that has specialized in issues of drinking water supply for the past 19 years. Cadmus is the largest contractor to the EPA Office of Ground Water and Drinking Water, providing support in a variety of areas including economics and health benefits of proposed regulations, and evaluations of the capacity and condition of the nation's drinking water infrastructure.

- **The most significant security issues in water supply are found in small water systems, not large systems.** Large systems understand vulnerability assessment and security. They have the resources and expertise to take appropriate action. Smaller systems (for example, those serving up to 50,000 persons) generally lack the expertise and financial means to properly assess risks and implement security programs.

  Cadmus engineers and scientists have conducted site visits and evaluations of hundreds of small- and medium-sized systems across the continental United States and in Alaska, Hawaii, Guam, the Northern Marianas, Puerto Rico and the Virgin Islands. Our experience has convinced us that smaller systems are most vulnerable to accidental and intentional contamination and disruption of service. Most of these system are ill prepared and poorly equipped to deal with terrorism or other security issues. For example, in 1998 the Neenah, Wisconsin water treatment plant was almost vandalized by a group of teenagers who planned to contaminate the filters and ignite enough firecrackers to equal 10 sticks of dynamite. Floors were to be slicked with soap and trip wires set to impede responders. The attack could have injured or killed operating staff, extensively damaged the facility, and released chlorine or ammonia gas to the atmosphere. Fortunately, one of the plotters revealed the plan to the police, who intercepted the group en route to the plant. This incident illustrates how vulnerable small water systems are.

  Conventional wisdom seems to be that only larger water and wastewater systems are at risk because large population centers could be affected. We believe that targeting multiple smaller systems could have equally devastating effects on the nation's public health and emergency response systems—at much less risk to the perpetrators. Perhaps

even more important, such attacks would indicate there are no safe havens and, thus, could have a major psychological impact on the public. For instance, the Metropolitan Water District (serving the Los Angeles area) and the East Bay Municipal Utility District (serving the San Francisco area), have adequate means to protect their water. But, according to EPA's Safe Drinking Water Information System database, there are about 615 small community water systems near Los Angeles and 426 near San Francisco. Terrorist attacks on these small systems would have psychological impacts on the millions of people living and working in and around Los Angeles and San Francisco. To address this concern, more attention should be paid to vulnerability assessments for small drinking water systems.

- **Traditionally, water systems have protected public health and ensured safe water by implementing a "multiple barrier" approach to preventing contamination.** In this approach systems place as many "barriers" as reasonably possible between the risks (such as contaminants or loss of service) and the consumer. The approach includes selecting the highest quality and least vulnerable source(s), implementing source water protection, installing treatment appropriate to water quality, and providing water through sound, properly designed, and well-maintained infrastructure. It also includes operation, maintenance, and management by committed and well-trained staff. In some respects, this approach parallels the classic physical security triad: "Detect, delay, respond." Ultimately, the key to providing safe drinking water lies in systems' abilities to maintain an uninterrupted multiple barrier system of public health protection.

  The vulnerability of smaller systems has been shown by past waterborne disease outbreaks. Between 1984 and 1994, nine outbreaks of cryptosporidiosis were documented in public water systems. Seven of the nine systems served fewer than 100,000 persons. A total of 285 persons were diagnosed with cryptosporidiosis and more than ten thousand were estimated to have been infected.

- **Waterborne diseases can take time to detect and identify.** On September 3, 1999, the New York Department of Health received reports of at least 10 children hospitalized with bloody diarrhea or *Escherichia coli* (*E. coli*) O157:H7 infection in counties near Albany. All of the children had attended the Washington County Fair, which had been held between August 23 and 29. As of September 15, 921 persons reported diarrhea after attending the Washington County Fair. Sixtey-five were hospitalized, 11 children experienced kidney failure, and 2 persons died. The outbreak was linked to one shallow well that was used to serve part of the fair. This particular well was not chlorinated. Initial cultures from the well yielded high levels of coliforms and *E. coli*. This outbreak illustrates the long delay between detecting and identifying a waterborne disease. *E. coli* is readily identified by approved laboratory methods. But if systems were to be contaminated with an unknown pathogen or contaminant, the strain on the medical community would be immense. In addition, if several small water systems were contaminated with different unknown pathogens or contaminants, the impact on public health providers and government officials would be enormous. The psychological

impacts on the public would be wide-spread, and many Americans served by public water supply systems would question the safety of their water.

- **It is a mistake to treat security as a completely new and unfamiliar mission for drinking water systems and regulatory agencies**. The types and extent of contamination and the health effects resulting from physical acts of terrorism are often – but not always – similar to the consequences of traditional system contamination that concern water system managers every day. The emergency planning needs and response actions for the two types of threats are similar. Security should be treated as an extension of the systems' public health mandate to deliver safe water reliably and consistently. Treating security as a new and unfamiliar problem will ensure that system managers give it low priority. This will be true especially among small water systems. Beset by complex regulations, short on trained operators and engineers, and limited in their ability to stretch budgets, small systems will invest in minimal security improvements, such as installing fences around raw water reservoirs. Although visible to the public, such measures provide little real protection. Small systems with limited budgets may also be faced with financing capital improvements to continue delivering drinking water. They simply may lack the ability to fund security-related improvements.

- **To address a water system's capability to deliver safe drinking water reliably and consistently, State public health departments have developed and refined the Sanitary Survey methodology.** This process assesses the adequacy of a water system's multiple barriers to prevent contamination or loss of service. It consists of an on-site analysis of a system's vulnerability to contamination or loss of service, concentrating on several areas that cover all areas of concern, from the source to the customer. A sanitary survey focuses on risks associated with sources, transmission, treatment, distribution, storage, water quality monitoring, operation, maintenance, and administration. Its primary concern is inadvertent contamination or service interruption, but it also includes an element of security. Sanitary surveys typically have focused on vandalism and theft rather than terrorism, but they can be modified easily to address any risks deemed relevant. In addition to the state of the physical plant, a sanitary survey assesses the adequacy of staffing levels and the training and proficiency of system personnel; operating and maintenance procedures; and management's commitment to water quality, security, and the adequacy of financing to support water protection. These are all central concerns in guarding against terrorist threats. In the long run, they may be more important and affordable than physical safeguards.

∃ **By addressing security as an extension of the public health process, the federal and state governments will place the subject squarely within system managers' fundamental mission**. The public health tradition already accommodates the kinds of analysis, planning, and response necessary to counter a deliberate attack. While some aspects of the threat and the response are new, the framework in which they should be considered is familiar to water system managers and operators as well as state regulatory agencies and the U.S. EPA. Many of the security-related issues with which sanitary surveys deal are absent in the vulnerability assessment tools now being developed in response to 9/11. Sandia Laboratories' RAM-W [Risk Assessment Methodology-Water] tool, for example, is excellent at assessing the threat of physical damage to facilities. But it does not comprehensively address the risk of water contamination; nor does it look at the "soft" side of water system operations, such as staffing, training, standard operating procedures, management, and financing. The new tools are important and valuable because they uncover physical vulnerabilities and highlight the linkages between water systems and other infrastructure such as power and communications. But they should be incorporated into the public health framework, not held apart from it.

In closing, Cadmus believes that small water systems are more vulnerable than large ones, and targeting small systems can result in the same devastating effects on the nation's public health and emergency response systems. Including vulnerability assessments in routine sanitary surveys would be a great asset to small water systems.

Respectfully submitted,

Janet Cherry, P.E.
The Cadmus Group, Inc.
2620 Colonial Drive, Suite A
Helena, MT 59601
406-443-9194

Mr. HORN. Thank you.

We are going to rearrange the schedule a little here because I am calling on Ms. Dalton of the GAO at the end and I want to move you to the end. Then you can do the statement and we will see what is missing. I begin with Larry A. Mefford, the Associate Special Agent in Charge of the FBI, San Francisco Field Office.

Mr. MEFFORD. Thank you, Mr. Chairman, Congressman Honda. Thank you for the opportunity to talk about this very important topic today.

As you know, the FBI is undergoing a significant shift in how we approach counterterrorism and our responsibilities in that arena. Clearly we are focused on attempting to improve our ability to collect relevant intelligence data under the constitutional parameters that we work under to interpret that data and disseminate it to the agencies and to the general public that have a need to know, to conduct joint training opportunities and efforts with these agencies, and to conduct joint investigative activities.

In the Bay Area the methods that we are using to employ this strategy is basically two-fold. In 1997 we formed the Bay Area Joint Terrorism Task Force, which since September 11th has expanded to include a total of 25 law enforcement agencies; and today consist of the largest law enforcement agencies in this region, consisting of about 65 investigators that are focused fulltime on investigating and preventing acts of terrorism in this region.

Concurrently at the same time working with California OES we developed the Bay Area Terrorism Working Group, which is a group of consequence management and disaster agencies that are focusing on the post-incident response capabilities of all the agencies. In the area of intelligence development, we are attempting to develop improved methods of communication with the various law enforcement and disaster agencies, and the general public throughout this region. One of the methods that we have employed is the development of a Web page which is code-word accessed for all law enforcement agencies in this region.

This is maintained by the Bay Area Joint Terrorism Task Force; and on this Web page we place relevant intelligence data, background information, and other intelligence information that they would need to do their jobs. We also have a corresponding Web page that we operate in conjunction with the Bay Area Terrorism Working Group so that the consequence management and disaster agencies can also have access to some of this data.

We are in the process of developing an interagency training initiative so that we can go to various police departments and disaster agencies and provide on-scene training by members of the Joint Terrorism Task Force. Not only FBI personnel, but outside agency personnel also. We can explain and hopefully educate the agencies regarding what factors to look for.

For example, we have studied the 19 terrorists responsible for the acts on September 11th. We've looked at their methods of operation very closely, and we would like to relay that information because we think it would be helpful in preventing potential future acts.

Internally we have also taken steps in the FBI in San Francisco to develop an in-house capability. We have a 30- agent evidence re-

sponse team that has received specialized training in the area of terrorism, crime scenes, and responding to acts of chemical, biological, or radioactive terrorism.

As part of this team we have an eight-agent hazardous material response team that has actually developed the in-house capability to operate and to collect evidence in the contaminated crime scene. Working with other disaster agencies in the Bay Area we have developed the capability to respond to the scenes and to complete the mission of the FBI should such an act occur.

Finally, our special weapons and tactics team, which consist of 46 special agents in this region, they have all been trained to operate in a contaminated environment. We see this as an augmentation to local disaster agencies and obviously gives us the ability to perform at another level that historically we have not yet had to perform, fortunately.

Finally, we have a weapons of mass destruction coordinator, as every FBI Field Office does; and these individuals are assigned specifically to enhance our capabilities and our ability to interface with other disaster agencies in the region. In the area of intelligence we are working closely with the State of California. Their anti-terrorism information center, which was formed in San Francisco, we hope to create an intelligence terrorism center as part of our JTTF in the Bay Area, interfacing with the State system so that we can get relevant terrorism threat data to the first responders of any incident.

Clearly, in conclusion, our mission has changed from one of prosecution to one of prevention and we are devoting considerable resources to try to improve our capabilities in that area. Thank you very much.

[The prepared statement of Mr. Mefford follows:]

Testimony of

LARRY A. MEFFORD
ASSOCIATE SPECIAL AGENT-IN-CHARGE

SAN FRANCISCO DIVISION OF THE FBI

before the

HOUSE COMMITTEE ON GOVERNMENTAL REFORM, SUBCOMMITTEE ON GOVERNMENTAL EFFICIENCY, FINANCIAL MANAGEMENT AND INTERGOVERNMENTAL RELATIONS

APRIL 2, 2002

Good morning, Chairman Horn, Members of the Subcommittee, and distinguished Members of the California Delegation. I value the opportunity to appear before you and discuss terrorism preparedness, including threats posed by attacks involving biological, chemical or nuclear agents, as well as measures being taken by the FBI and our law enforcement partners to address these threats.

Introduction

The mission of the FBI's Counterterrorism Program is to detect, deter, prevent, and swiftly respond to terrorist actions that threaten the U.S. national interests at home or abroad, and to coordinate those efforts with local, state, federal, and foreign entities as appropriate. The counterterrorism responsibilities of the FBI include the investigation of domestic and international terrorism. As events during the past several years demonstrate, both domestic and international terrorist organizations represent threats within the borders of the U.S.

The FBI defines domestic terrorism as the unlawful use, or threatened use, of violence by a group or individual based and operating entirely within the U.S. or its territories, without foreign direction, committed against persons or property, to intimidate or coerce a government, the civilian population, or any segment thereof, in furtherance of political or social objectives.

International terrorism involves violent acts dangerous to human life that are a violation of the criminal laws of the U.S. or any state, or that would be a criminal violation if committed within the jurisdiction of the U.S. or any state. Acts of international terrorism are intended to intimidate or coerce a civilian population, influence the policy of a government, or affect the conduct of a government. These acts transcend national boundaries in terms of the means by which they are accomplished, the persons they are intended to intimidate, or the locale in which perpetrators operate.

The FBI has developed a strong response to the threats posed by domestic and international terrorism. Between fiscal years 1993 and 2003, the number of Special Agents dedicated to the FBI's Counterterrorism Program grew by approximately 224

percent (to 1,669 Agents-nearly 16 percent of all FBI Special Agents). The FBI has strengthened its Counterterrorism Program to enhance its abilities to carry out its objectives.

The San Francisco Division of the FBI

The San Francisco Division of the FBI encompasses the entire jurisdiction of the United States District Court, Northern District of California, consisting of 15 counties located along the North and Central Coast of California. Approximately 7.5 million people live in this region, the majority residing in the six counties located in the San Francisco Bay Area. The Bay Area has a large impact on the economy of the United States and the Pacific Rim. Multiple industries, oil refineries, biotechnology companies, financial services, and Internet providers are located throughout the region. The Port of Oakland ranks the fourth largest in the United States and twentieth in the world in terms of annual container traffic. Three international airports located in San Francisco, Oakland, and San Jose support the booming tourism industry in Northern California. The Lawrence Livermore National Laboratory, located in the East Bay, is a premier scientific center and a key element of our national security infrastructure.

The headquarters office for the Division is located in San Francisco with satellite offices, or Resident Agencies (RAs), located in the cities of Eureka, Santa Rosa, San Rafael, Oakland, Hayward, San Jose, Palo Alto, and Watsonville. The Division personnel resource staffing level for Special Agents is 307 with 37 management staff positions. The authorized support complement for the division consists of 256 employees.

Since September 11, 2001, the San Francisco Division has made personnel changes to address the emerging international terrorism threat. Approximately 30 Agents have been reassigned to the Counterterrorism Program. This doubles the number of Agents conducting terrorism related investigations. The reassigned agents are predominately from organized crime and drug squads that have extensive experience in identifying, disrupting, and dismantling criminal networks. The reorganization resulted in terrorism squads being located in the major metropolitan areas of San Francisco, Oakland, and San Jose. The geographical placement of these squads enhances the Counterterrorism Program's abilities to address the terrorism threat throughout the region.

The San Francisco Division is the sixth largest FBI division with regard to the number of personnel. As such, it has considerable resources available, especially in the matter of responding to a terrorist attack. The San Francisco Evidence Response Team (ERT), consisting of approximately 30 Special Agents, is a highly skilled team that specializes in the recovery of evidence from crime scenes. ERT Agents have training in post-blast scenarios and work closely with the Division's Special Agent Bomb Technicians to deal with a bombing crime scene. Sixteen of San Francisco's ERT Agents have traveled or will travel to New York to work at the World Trade Center scene. The Division also has a Hazardous Materials Response Team (HMRT) consisting of eight Special Agents. These Agents have undergone 160 hours of training to obtain Technician-level certification. The HMRT is tasked with the collection of evidence at a scene where weapons of mass destruction (i.e. chemical, biological, radiological, and nuclear weapons) have been employed. The San Francisco Division HMRT gained invaluable experience when it was deployed to the East Coast in response to the release of anthrax in September and October

of 2001. With regard to tactical deployments, the San Francisco Division is one of nine field offices with an enhanced Special Weapons and Tactics (SWAT) Team. The team's 46 operators are trained and equipped to fold into the FBI's elite Hostage Rescue Team, if necessary, for domestic or international deployments. As a result of specialized training, the SWAT Team is able to operate in a variety of environments including those with chemical, biological, and radiological contamination.

Joint Terrorism Task Forces (JTTFs)

Cooperation among law enforcement agencies at all levels represents an important component of a comprehensive response to terrorism. This cooperation assumes its most tangible operational form in the joint terrorism task forces (JTTFs) that are established in 44 cities across the nation. These task forces are particularly well-suited to responding to terrorism because they combine the national and international investigative resources of the FBI with the street-level expertise of local law enforcement agencies. This Agent-to-Officer cooperation has proven highly successful in preventing several potential terrorist attacks.

Given the success of the JTTF concept, the FBI has established 15 new JTTFs since the end of 1999. Contingent upon the FBI's 2003 budget request for funds to expand the JTTF program, the FBI plans to have established JTTFs in each of its 56 field divisions by the end of 2003. By integrating the investigative abilities of the FBI and local law enforcement agencies these task forces represent an effective response to the threats posed to U.S. communities by domestic and international terrorists.

The San Francisco Division formed its JTTF in 1997. Currently, it is comprised of 25 federal, state, and local agencies. The federal agencies participating in the JTTF include: the Bureau of Alcohol, Tobacco, and Firearms, the Drug Enforcement Administration, the Federal Aviation Administration, the Federal Bureau of Investigation, the Federal Protective Service, the Immigration and Naturalization Service, the Internal Revenue Service, the United States Coast Guard, the United States Department of State, the United States Department of Treasury, the United States Marshal's Service, the U.S. Customs Service, the United States Office of Export Enforcement, the United States Postal Service, and the United States Secret Service.

The local agencies include the Alameda County Sheriff's Department, California Department of Justice, the California Highway Patrol, the Contra Costa County Sheriff's Department, the Oakland Police Department, the San Jose Police Department, the San Francisco Police Department, the San Mateo County Sheriff's Department, the Santa Clara County District Attorney's Office, and the Santa Clara County Sheriff's Department.

Enhancing the intelligence capabilities of the JTTF is a priority of the FBI. To aid this task, the California Anti-Terrorism Information Center (CATIC) has been integrated into the JTTF. CATIC, administered by the State of California Department of Justice, is tasked with providing law enforcement agencies in the state with timely and valuable intelligence support for the purpose of combating terrorism. CATIC analysts will work side-by-side with FBI analysts in order to share information on domestic and international terrorist threats. This partnership will form the backbone of the San Francisco FBI Terrorist Intelligence Center. This Center will generate a first-rate terrorist intelligence product that can be

disseminated rapidly and effectively to appropriate local, state, and federal agencies.

In order to improve local information sharing, the San Francisco Division has taken the initiative to develop and maintain a JTTF website. This code-word protected website is an effective tool to disseminate law enforcement sensitive material in a rapid fashion to JTTF member agencies and local law enforcement agencies. Immediate threat advisories, case updates, and relevant articles are available for review on the site. With the integration of CATIC into the JTTF, the quantity and quality of material will increase. This website will likely serve as a model for other JTTFs throughout the United States.

The FBI is presently working with the U.S. Department of Justice to ensure that the JTTFs are coordinated with the newly created Anti-Terrorism Task Forces located in the offices of U.S. Attorneys throughout the country. This coordination is crucial to avoid duplication of effort and enhance the exchange of information and overall counterterrrorism objectives.

National Infrastructure Protection Center and InfraGard

Because of its relevance to the topic of this hearing, specifically the threat to nuclear and chemical facilities, I would like to briefly discuss the National Infrastructure Protection Center (NIPC), which was created in 1998. The NIPC is an interagency center housed at FBI headquarters that serves as the focal point for the government's effort to warn of and respond to cyber intrusions, both domestic and international. NIPC programs have been established in each of the FBI's 56 field divisions, including the San Francisco Division. Through a 24-hour watch center and other initiatives, the NIPC has developed processes to ensure that it receives information in real-time or near-real-time from relevant sources, including the U.S. intelligence community, FBI criminal investigations, other federal agencies, the private sector, emerging intrusion detection systems, and open sources. This information is quickly evaluated to determine if a broad-scale cyber attack is imminent or underway.

On January 16, 2002, the FBI disseminated an advisory via the National Law Enforcement Telecommunications System (NLETS) regarding possible attempts by terrorists to use U.S. municipal and state web sites to obtain information on local energy infrastructures, water reservoirs, dams, highly enriched uranium storage sites, and nuclear and gas facilities. Although the FBI possesses no specific threat information regarding these apparent intrusions, these types of activities on the part of terrorists pose serious challenges to our national security.

The NIPC also has a role in preventing terrorist acts. The focus of NIPC's "Key Asset Initiative" includes physical asset identification and protection, in addition to the prevention and detection of computer intrusions. Assets include the major electrical, communications, water facilities, transportation hubs, energy plants and other infrastructure which are instrumental in supporting societal activities and which, if attacked, would represent a major loss or disruption to California and the United States. Computer intrusions not only may be used to gain illegal entry into government or military agencies, but also have a significant impact on the business community and the U.S. economy. Computer terrorists may also conduct clandestine communications via computers located in educational institutions or elsewhere without the knowledge of the computer system's sponsor.

With computer technology in mind, coupled with the desire to prevent computer attacks and intrusions, the San Francisco Division participates in the InfraGard Program. This program incorporates business, governmental, and military communities into a system similar to a Neighborhood Watch. Together with the FBI, the group conducts meetings to discuss awareness of computer issues and operates a self-warning system.

Threat Warning Systems

Because warning is critical to the prevention of terrorist acts, the FBI has also expanded the Terrorist National Threat Warning System (NTWS) first implemented in 1989. The system now reaches all aspects of the law enforcement and intelligence communities. Currently, sixty federal agencies and their subcomponents receive information via secure teletype through this system. The messages are also transmitted to all 56 FBI field offices and 44 legal attaches. If threat information requires nationwide unclassified dissemination to all federal, state, and local law enforcement agencies, the FBI transmits messages via the National Law Enforcement Telecommunications System (NLETS). In addition, the FBI disseminates threat information to security managers of thousands of U.S. commercial interests through the Awareness of National Security Issues and Response (ANSIR) program. If warranted, the expanded NTWS also enables the FBI to communicate threat information directly to the American people. Since the terrorist attack of September 11, 2001, the FBI has disseminated 37 warnings via the NTWS. The FBI also has issued more than 40 "be on the lookout" (BOLO) alerts via the NLETS system. BOLO alerts provide the names of individuals who are of investigative interest to the FBI.

Bioterrorism and Weapons of Mass Destruction

The FBI Counterterrorism Division's Weapons of Mass Destruction Countermeasures Unit (WMDCU) plans and conducts Weapons of Mass Destruction (WMD) training exercises which address the specific needs and objectives of state and local emergency responders. State and local emergency management officials may request this assistance through their respective FBI WMD Coordinators who forward the request to WMDCU. Every FBI Field Division, including the San Francisco Division, has a WMD Coordinator. WMDCU fully integrates state and local planning officials into the exercise planning process to ensure their requirements are specifically met. WMDCU also co-chairs the InterAgency Board (IAB) for Equipment Standardization and Interoperability. Comprised of over 48 separate local, state and federal organizations, the IAB is responsible for the creation of the Standardized Equipment List and is recognized as the leading authority in the area of WMD response equipment.

The bioterrorism threat has risen to a new level. The federal government, in partnership with state and local law enforcement agencies, has always taken threats concerning the intentional release of biological agents seriously. However, until recently, neither the federal government nor state and local responders have been required to utilize their assets to coordinate a response to an actual release of anthrax. The intentional introduction of anthrax into our infrastructure has resulted in significant alarm concerning our health and safety. I would like to comment on the manner in which the law enforcement community responds to a suspected act of terrorism involving biological agents, and reinforce the cooperative effort that is in place between the federal government

and the myriad of first responders who provide guidance, assistance and expertise.

The response to a potential bioterrorist threat can be broken down into two different scenarios: overt and covert releases. The distinction between the two involves the manner in which the biological threat agent is introduced into the community and the nature of the response. Regardless of whether a biological release is overt or covert, the primary mission of law enforcement and the public health community is saving lives.

An overt scenario involves the announced release of an agent, often with some type of articulated threat. An example of this would be the receipt of a letter containing a powder and a note indicating that the recipient has been exposed to anthrax. This type of situation would prompt an immediate law enforcement response, to include local police, fire and emergency medical service (EMS) personnel. As noted earlier, each FBI field office is staffed with a WMD Coordinator whose responsibilities include liaison with first responders in the community. Due to this established relationship with first responders, the local FBI WMD Coordinator would be notified and dispatched to the scene.

Depending on the magnitude of the threat, the response protocol would involve securing the crime scene and initiating the FBI's interagency threat assessment process. The FBI's WMD Operations Unit of the Counterterrorism Division at FBI Headquarters, coordinates this threat assessment, which is designed to determine the credibility of the threat received, the immediate concerns involving health and safety of the responding personnel, and the requisite level of response warranted by the federal government. The FBI obtains detailed information from the on-scene personnel and input from the necessary federal agencies with responsibility in the particular incident. In a biological event, the Department of Health and Human Services (DHHS), including Centers for Disease Control and Prevention (CDC), and the Food and Drug Administration (FDA), as well as the United States Department of Agriculture (USDA), are the key agencies called upon to assist FBI personnel in assessing the particular threat. Based upon the assessment, a determination is made as to the level of response necessary to adequately address the particular threat, which could range from a full federal response if the threat is deemed credible, to collection of the material in an effort to rule out the presence of any biological material if the threat is deemed not credible. In the event of a chemical, nuclear or radiological threat, a similar threat assessment would occur. All procedures are designed to support and enhance local first responders' capabilities and safety.

The FBI Headquarters Counterterrorism Division interaction with the field and the WMD Coordinators, along with other internal and external agencies, has improved the threat assessment process and allowed federal, state, and local agencies to provide a measured response, greatly enhancing efficiency. In many cases, the situation is handled with minimal publicity, therefore limiting the impact of the terrorist objective. The process has been effective in saving the federal government, and the state and local communities, time and money, and has allayed the fears of victims in rapid fashion on numerous occasions.

The method of collecting suspect material is established by protocols set forth by the FBI's Hazardous Material Response Unit (HMRU), assigned to the FBI Laboratory. These protocols, recognized and followed by state and local Hazmat teams, are necessary to ensure that sufficient evidentiary samples are collected, screened and packaged according to scientific safety guidelines for

transportation to the appropriate testing facility. Over 85 State Health Laboratories perform this analysis on behalf of HHS/CDC and belong to a coordinated collection of facilities known as the Laboratory Response Network (LRN). (Four of these Laboratories are within the San Francisco Division of the FBI. They are: the California Department of Health Services, located in Berkeley; the Santa Clara County Public Health Laboratory; the Humboldt County Public Health Laboratory; and Lawrence Livermore National Laboratory.) Once the testing has been completed, results are provided to the FBI for dissemination in the appropriate manner. The results of the analysis are then disseminated to the exposed person or persons, local first responders and to the local public health department. Additionally, results will be forwarded to the CDC in Atlanta, GA.

A covert release of a biological agent invokes a different type of response, driven by the public health community. By its nature, a covert introduction is not accompanied by any articulated or known threat. The presence of the disease is discovered through the presentation of unusual signs and/or symptoms in individuals reporting to local hospitals or physician clinics. In this situation, there is initially no crime scene for law enforcement personnel to investigate. The criminal act may not be revealed until days have elapsed, following the agent identification and preliminary results obtained from the epidemiological inquiry conducted by the public health sector. Contrary to an overt act where law enforcement makes the necessary notification to public health, in a covert release, notification to law enforcement is made by the public health sector. The early notification of law enforcement in this process encourages the sharing of information between criminal and epidemiological investigators. Once an indication of a criminal act utilizing a biological agent is suspected, the FBI assumes primary authority in conducting the criminal investigation, while public health agencies maintain responsibility for the health and welfare of the citizens. At the local level, involving the FBI WMD Coordinator and the state or local public health department, and at the national level between FBI Headquarters and the CDC, an effective coordination has been established to address the requisite roles and responsibilities system of each agency.

The response to an actual threat or one that is later determined not to be credible, or a hoax, is indistinguishable. This includes deployment of a Hazmat team, thorough examination of the potentially contaminated area (including situations where a telephonic reporting is received) and the disruption of the normal operations of the affected entity. Additionally, the individuals potentially exposed to the WMD may experience extreme anxiety/fear due to the reported release. Potential victims may have to be decontaminated or transported to a medical facility. The first responders must treat each incident as a real event until scientific analysis proves that the material is not a biological agent. To both the responding entities and the potentially exposed victims, the presence of powder threatening the presence of a biological agent is not a hoax, or something to be taken lightly. The individuals perpetrating such an activity must be held accountable for their actions.

WMD Coordinators are in constant communication with members of the law enforcement, fire, emergency management, and medical communities. That partnership was clearly evident in the cooperation during the time period after September 11, 2001, when persons bent on further disrupting our society initiated numerous anthrax hoaxes in California. In addition to those hoaxes, well-meaning citizens reported hundreds of suspicious packages and other items. Since October 2001 the FBI nationwide has responded to over 16,000 reports of use or threatened use of anthrax or other hazardous materials. The anthrax

cases in Florida, New York and New Jersey also required significant supporting investigative attention by San Francisco Division resources.

The WMD program for the San Francisco Division is extremely successful. Since 1997, a collaborative effort between the FBI and the California Office of Emergency Services resulted in the formation of the Bay Area Terrorism Working Group (BATWG). BATWG is a forum of local, state, and federal crisis and consequence management agencies that address WMD contingency planning and training. Quarterly meetings are held at various locales around the Bay Area in order to encourage participation in BATWG. The FBI maintains the BATWG website which immediately and effectively disseminates WMD information to law enforcement, fire services, and public health personnel. WMD Coordinators in the San Francisco Division regularly attend meetings and participate in exercises hosted by local, state, and other federal agencies.

The FBI Laboratory Division is also a key component in dealing with incidents involving the release of biological, chemical or nuclear agents. The FBI Laboratory has developed a response capability to support counterterrorism investigations worldwide. The FBI's mobile crime laboratory provides the capability to collect and analyze a range of physical evidence on-scene, and has been deployed at major crime scenes, including the World Trade Center bombing, Khobar towers, and the East African embassy bombings. The mobile crime laboratory contains analytical instrumentation for rapid screening and triage of explosives and other trace evidence recovered at crime scenes.

The FBI Laboratory also provides the capacity to rapidly respond to criminal acts involving the use of chemical or biological agents with the mobile, self-contained fly-away laboratory (FAL). The FAL consists of twelve suites of analytical instrumentation supported by an array of equipment which allows for safe collection of hazardous materials, sample preparation, storage, and analysis in a field setting. The major objectives of the mobile crime laboratory and the FAL are to enhance the safety of deployed personnel, generate investigative leads through rapid analysis and screening, and to preserve evidence for further examination at the FBI laboratory. In addition, the laboratory has developed agreements with several other federal agencies for rapid and effective analysis of chemical, biological, and radiological materials. One partnership, the Laboratory Response Network (LRN), is supported by the CDC and the Association of Public Health Laboratories for the Analysis of Biological Agents.

Conclusion

Terrorism represents a continuing threat to the U.S. and a formidable challenge to the FBI. In response to this threat, the San Francisco Division of the FBI has developed a broad-based Counterterrorism Program that is integrated into the local and state law enforcement and first responder network. The goal of the San Francisco Division is to disrupt terrorist activities using the capabilities of its JTTF prior to an incident. While this approach has yielded many successes, the dynamic nature of the terrorist threat demands that our capabilities continually be refined and adapted to continue to provide the most effective response.

Within the San Francisco Division, all of the FBI's aforementioned investigative responsibilities are conducted jointly with other law enforcement agencies and often with the appropriate fire, emergency response, and medical agencies. It is impossible for the FBI to conduct investigations and obtain intelligence without the assistance of all the region's federal, state, and local agencies.

Communication and coordination is exceptional in all areas and the San Francisco Division consistently strives to maintain and improve that cooperation.

Chairman Horn, this concludes my prepared remarks. I would like to express appreciation for this subcommittee's concentration on the issue of terrorism preparedness and I look forward to responding to any questions.

Mr. HORN. Thank you. It is very helpful.

We now will go to Dr. Steven Bice, the Director of the National Pharmaceutical Stockpile, Center for Disease Control and Prevention. We are delighted to have you here.

Dr. BICE. Thank you, sir. Good morning, Mr. Chairman, Mr. Honda. I appreciate you inviting me here. Speaking for all the men and woman of my agency, thank you for sponsoring these kinds of field hearings and raising important issues and for allowing us to take part.

Like all other Americans we at CDC were horrified and saddened by the events which took place in New York, Washington, and Pennsylvania last fall. But as the Nation's Disease Control and Prevention Agency we were also immediately galvanized to action to provide assistance to our partners in the affected cities and States.

In my oral comments, I'll provide a brief overview of CDC's activities related to September 11th and the subsequent anthrax attacks and how we are working to better prepare our Nation's States and cities for threat of public health emergencies including, of course, terrorism.

The terrorist events of September 11th and later events related to anthrax have been defining moments for all of us and they have greatly sharpened the Nation's focus on public health. The events created the greatest public health challenge in CDC's history requiring an unprecedented level of response. CDC has deployed 588 employees since September 11th in response to the World Trade Center event and the anthrax investigation.

Within 10 minutes of the second plane crashing into the World Trade Center we initiated an emergency operation center that functioned 24-hours a day, 7 days a week. While all commercial aircraft were grounded after the attack, CDC's National Pharmaceutical Stockpile Program was able to arrange transportation of its emergency response personnel to New York.

For the first time ever CDC deployed the National Pharmaceutical Stockpile sending push packages of medical material to New York City and to Washington, DC. In response to the cases of anthrax exposure, our program was also used to deliver antibiotics for post-exposure prophylactics to employees in affected buildings, postal workers, mail-handlers, and postal patrons.

Within 4 hours of the attack on the World Trade Center CDC health alert network was activated and began transmitting emergency messages to the top 250 health officials throughout the Nation. Over the next 16 weeks 67 health alerts, advisories, and updates were transmitted ultimately reaching an estimated 1 million frontline public and private physicians, nurses, laboratorian, and State and local health officials.

The Epidemic Information Exchange [Epi-X]—public health's established, secure communications network—immediately developed a secure conference site for State epidemiologists and local CDC investigative teams for posting information on surveillance and response activities, including HHS reports, CDC health advisory information and health alerts, and reports from State health departments.

The Morbidity and Mortality Weekly Report [MMWR], CDC's scientific publication, published reports on an urgent basis and delivered these reports electronically to over 500,000 healthcare providers.

During the height of the Nation's anthrax crisis in October, CDC experienced larger than normal traffic on its Web site and conducted daily press and telephone briefings, fielded thousands of press inquiries, and was featured in television interviews reaching hundreds of millions of viewers.

At the peak of the anthrax response, CDC had more than 200 personnel in the field assisting State and local partners and hundreds more personnel at headquarters assisting in the effort.

Over all there was a total of 22 cases of anthrax with 11 being cutaneous or skin form of the disease and 11 being inhalation.

While we deeply regret each illness that occurred, we are very encouraged by the fact that none of the approximately 10,000 persons who were given antibiotic prophylactics developed anthrax despite significant exposure to anthrax spores. Last fall's events revealed serious gaps in our Nation's public health defenses against biological, chemical, and radiological threats. These gaps include inadequate epidemiologic and laboratory search capacity, an insufficient knowledge base concerning sampling and remediation, and lack of information concerning infectious dose and host susceptibility.

In addition, the public health system needs to improve its ability to convey information and to provide treatment and preventive measures to large numbers of persons and a way of assuring compliance with treatment regimes.

This will require extensive preparedness planning, cooperation across agencies and between Federal, State, and local counterparts. It will also require that we work closely with partners in the emergency response community, law enforcement, clinical medicine, academia, and private industry.

CDC will continue to support State and local government officials in preparing and responding to public health emergencies including terrorist events by providing assistance and technical guidance in conducting problem assessment, evacuation, and relocation decisions, proper treatment of victims, epidemiological surveillance, disease control measures, and studies of exposed populations.

At the request of the State, CDC will deploy trained and rapid response teams who can assist in protecting the public's health in the event of a public health emergency. CDC response teams have experienced an expertise in medical management, disease prevention strategies, assessing needs, first responder procedures, site safety, environmental sampling strategies, sampling equipment, and disease and injury surveillance.

All States and localities must be prepared to address these threats and mount an effective response. In late January HHS announced a total of $1.1 billion in funding would be provided to States to assist them in their bio-terrorism preparedness effort.

On January 31st Secretary Thompson notified each Governor of the amount his or her State would receive to allow them to initiate and expand planning and building the necessary public health infrastructure.

In California the State received $60.8 million in funding from the Center for Disease Control.

In conclusion, CDC is committed to working with other Federal agencies and partners, State and local health departments, and the healthcare and first-responder communities to ensure the health and medical care of our citizens. Although we have made substantial progress in enhancing the Nation's capability to prepare for and respond to a terrorist episode, the events of last fall demonstrate that we must accelerate the pace of our efforts to assure an adequate response capacity. A strong and flexible public health system is the best defense against any disease outbreak or public health emergency. Thank you.

[The prepared statement of Dr. Bice follows:]

Testimony
Before the Subcommittee on Government Efficiency, Financial Management, and Intergovernmental Relations, Committee on Government Reform
United States House of Representatives

CDC Efforts to Assist State and Local Government Preparedness for Terrorist Attacks

Statement of
Steven D. Bice
Director, National Pharmaceutical Stockpile Program,
National Center for Environmental Health
Centers for Disease Control and Prevention,
U.S. Department of Health and Human Services

For Release on Delivery
Expected at 10:00am

on Tuesday, April 2, 2002

Good morning, Mr. Chairman and Members of the Committee. I am Steve Bice, Director of the National Pharmaceutical Stockpile Program in the National Center for Environmental Health, Centers for Disease Control and Prevention (CDC), U.S. Department of Health and Human Services. Let me thank you for the invitation to participate in today's hearing on how the Federal government is assisting State and local governments to prepare for a potential terrorist attack involving biological, chemical or radiological agents, and for the ongoing interest of the subcommittee in this issue. Today I will be discussing CDC's public health response to the threat of terrorism, and how we are working with our state and local partners to strengthen the nation's capacity to address these threats and improve our response in the future.

The terrorist events of September 11th and later events related to anthrax have been defining moments for all of us – and they have greatly sharpened the Nation's focus on public health. These events created the greatest public health challenge in CDC's history, requiring an unprecedented level of response. CDC has deployed 588 employees since September 11th in response to the World Trade Center event and the anthrax investigation. Within 10 minutes of the second plane crashing into the World Trade Center, we initiated an Emergency Operations Center that functioned 24 hours a day, seven days a week. While all commercial aircraft were grounded after the attack, CDC was able to arrange transportation of its emergency response personnel to New York. For the first time ever CDC deployed the National Pharmaceutical Stockpile, sending push packages of medical materiel to New York City and Washington, DC. In response to the cases of anthrax exposure, this program was also used to deliver antibiotics for

post-exposure prophylaxis to employees in affected buildings, postal workers, mail handlers, and postal patrons. Within four hours of the attack on the World Trade Center, CDC's Health Alert Network was activated and began transmitting emergency messages to the top 250 public health officials throughout the Nation. Over the next 16 weeks, 67 health alerts, advisories, and updates were transmitted, ultimately reaching an estimated 1 million frontline public and private physicians, nurses, laboratorians, and State and local health officials. The Epidemic Information Exchange (*Epi-X*)–public health's established, secure communications network–immediately developed a secure conference site for state epidemiologists and local CDC investigative teams for posting information on surveillance and response activities, including HHS reports, CDC health advisory information and health alerts, and reports from state health departments. The Morbidity and Mortality Weekly Report (MMWR), CDC's scientific publication, published reports on an urgent basis and delivered these reports electronically to over 500,000 health care providers. During the height of the nation's anthrax crisis in October, the number of visitors to CDC's website increased from 4 million per month to more than 9 million per month. In addition, CDC conducted daily press telephone briefings and fielded thousands of press inquiries, resulting in more than 8,000 mentions in newspapers across the country. CDC has been featured in television interviews reaching hundreds of millions of viewers.

Prior to the September 11th attack on the United States, CDC had made substantial progress in defining and developing a nationwide framework to increase the capacities of public health agencies at all levels–federal, state, and local. Since September 11th, CDC has dramatically increased its level of preparedness and is developing and implementing plans to increase it even

further.

The best public health strategy to protect civilians against any health threat is the development, organization, and enhancement of public health systems and tools at all levels of government—federal, state, and local. Priorities include:

- a fully staffed, fully trained, and properly protected public health workforce,
- strengthened public health laboratory capacity,
- increased surveillance and epidemiological capacity,
- secure, up-to-date information systems, and
- solid health communication capabilities

—all supported by flexible policies and preparedness plans that enable the public health system to respond to any type of health emergency.

These priorities represent the elements of the public health infrastructure. They are the foundation of all our work—both the known risks we face today, as well as the unknowns we may face tomorrow. And with all this responsibility to bear, the public health infrastructure must be strong. The unprecedented level of funding provided to States for bioterrorism and public health preparedness in FY 2002 and requested in FY 2003 will help us develop a robust public health system.

A recent survey indicates that we are on our way to achieving this goal. According to an October 2001 survey to assess local preparedness for bioterrorism conducted by the National Association

of County and City Health Officials:

- 20% of local public health agencies already have comprehensive response plans in place.
- 75% of local health officials indicated they were fairly or somewhat prepared for the many roles they are now being expected to play;
- Only 9% indicated that they were not prepared at all.

hospital capacity?

The survey also provided evidence that effective communications systems and reliable and timely information are also key to a prepared public health workforce.

In your view, how does CA public health systs compare to other states?

Our state and local health department partners are the core of the public health system. They must be ready and able to respond to all public health threats and emergencies. Our ability to respond as a nation is only as strong as the weakest health department—if any of us is at risk, we are all at risk. Bolstering state and local health departments' infrastructure strengthens every public health action. We have a historic opportunity to continue building that strength right now.

CDC will continue to support state and local government officials in preparing and responding to public health emergencies, including terrorist events, by providing assistance and technical guidance in the following areas:

- problem assessments
- evacuation and relocation decisions
- proper treatment of casualties
- epidemiological surveillance
- disease control measures

- studies of exposed populations.

is CDC capable of responding to multiple small emergencies? how many?

At the request of the state, CDC will deploy trained rapid response teams who can assist in protecting the public's health in the event of a public health emergency. CDC response teams maintain expertise on medical management, disease prevention strategies, assessing needs, first responder procedures, site safety, environmental sampling strategies, sampling equipment, and disease and injury surveillance.

The events of last fall demonstrate that we must move much more rapidly to expand our capacity to respond to all public health emergencies. We must assure that all states and localities are adequately prepared to address terrorist threats–including biological, chemical, and radiological threats–to their populations and can mount an effective response. In late January, HHS announced that a total of $1.1 billion in funding would be provided to states to assist them in their efforts to prepare for bioterrorism, other infectious disease outbreaks, and other public health threats and emergencies. On January 31st, Secretary Thompson sent a letter to the governor in each state detailing how much of the $1.1 billion his or her state would receive to allow them to initiate and expand planning and building of the public health systems necessary to respond. State proposals outlining these plans are due to HHS by April 15th. The funds will be made available through cooperative agreements with State health departments–and several large metropolitan area health departments–to be awarded by CDC and the Health Resources and Services Administration, and through contracts awarded by the Office of Emergency Preparedness with cities for the Metropolitan Medical Response System Initiative.

The funds are to be used for development of comprehensive public health emergency preparedness and response capabilities; upgrading infectious disease surveillance and investigation; enhancing the readiness of hospital systems to deal with large numbers of casualties; expanding public health laboratory and communications capacities; education and training for public health personnel, including clinicians, hospital workers, and other critical public health responders; and improving connectivity between hospitals and local, city, and state health departments to enhance disease detection. The State of California received $60.8 million in funds from CDC. States will be permitted to begin immediately spending up to 20 percent of their allotments, so as to avoid delay in starting preparedness measures. The remaining 80 percent of the $1.1 billion in state funds will be released once complete plans have been received and approved.

how?

In addition to funding for states, the National Pharmaceutical Stockpile has increased the number of 12-hour push packages from 8 to 12, increasing the number of separate events and the number of impacted people who can receive antibiotics and emergency medical/surgical items during a terrorist event. This means that, coupled with the NPS Vendor Managed Inventory, up to 20 million people can begin treatment for anthrax exposure. Vaccines for smallpox and anthrax are being procured and will be a fully functional component of the Pharmaceutical Stockpile as soon as those vaccines are available. In addition, state and local deployment plans are in development so that all state public health systems will be prepared to accept and distribute the Stockpile in the event of a terrorist attack. This planning is a required part of the state cooperative agreements.

#8 to increase to 12

In conclusion, CDC is committed to working with other federal agencies and partners, state and local health departments, and the health care and first responder communities, to ensure the health and medical care of our citizens. Although we have made substantial progress in enhancing the nation's capability to prepare for and respond to a terrorist episode, the events of last fall demonstrate that we must accelerate the pace of our efforts to assure an adequate response capacity. The best public health strategy to protect the health of civilians against biological, chemical, or radiological terrorism is the development, organization, and enhancement of public health systems and tools. Priorities include a strengthened public health laboratory capacity, increased surveillance and outbreak investigation capacity, and better health communications, education, and training at local, state, and federal levels. Not only will this approach ensure that we are prepared for deliberate terrorist threats, it will also ensure that we will be able to recognize and control naturally occurring new and re-emerging disease threats. A strong and flexible public health system is the best defense against any disease outbreak or public health emergency.

all of the improvements must be made, which is the greatest challenge?

Once again, let me thank you for the opportunity to be here today. We look forward to working with you to address the health and security threats of the 21st century.

At this time, I will be happy to answer any questions you may have.

Mr. HORN. Thank you.

Mr. Castleman, Ron Castleman, has been at two or three hearings with us. That's Regional Director in Region VI, Dallas, of the Federal Emergency Management Agency, FEMA. They do a great job. We thank you.

Mr. CASTLEMAN. Thank you. Good morning, Mr. Chairman and Congressman Honda. I am Ron Castleman, Regional Director, Region VI, of the Federal Emergency Management Agency. It is a pleasure to be here today to discuss how FEMA is assisting State and local governments to prepare for potential terrorist attacks.

FEMA's mission is to lead the Nation in preparing for, responding to, and recovering from disasters. Our success requires close coordination with local, tribal, State, and Federal agencies as well as volunteer organizations.

The Federal Response Plan outlines the process by which Federal departments and agencies respond as a cohesive team to all types of disasters in support of State, tribal, and local governments.

This plan has been tested on numerous occasions since its inception in 1992 and the Federal Response Plan again worked well in response to the terrorist events of September 11, 2001.

FEMA's preparedness provides financial and technical planning, training and exercise support to State and local and tribal governments. These programs are designed to strengthen capabilities to protect public health, safety, and property both before and after disasters occur.

On May 8, 2001 the President tasked FEMA Director Joe Allbaugh with creating the Office of National Preparedness [ONP], within FEMA. The ONP mission is to provide leadership in the coordination and facilitation of all Federal efforts to assist State and local first-responders and emergency management organizations with planning equipment, training, and exercises to build and sustain their capabilities to respond to any emergency or disaster including a terrorist incident.

The President's formation of the Office of Homeland Security further improves the coordination of Federal programs and activities aimed at combating terrorism. FEMA is working closely with Director Ridge, the OHS, and other agencies to identify and develop the most effective ways to quickly build and enhance domestic preparedness for terrorist attacks.

In January of this year the President took another important step to strengthen first-responder efforts to prepare for and respond to incidents of terrorism. The first-responder initiative in the President's 2003 budget calls for $3.5 billion most of which would be distributed to States and local jurisdictions for planning efforts, critical equipment, and to train and exercise personnel.

FEMA's Office of National Preparedness will administer these grants. ONP will also work with our Federal and State partners to coordinate all terrorism related first-responder programs. To begin addressing some of the lessons the first responder community learned on September 11th, ONP will develop national standards for inner-operability and compatibility in a number of areas including training, equipment, mutual aid, and exercising.

The first-responder grants coupled with these standards will balance the needs for both flexibility and accountability at the State and local level.

With respect to California, we continue to work very closely with the Governor's Office of Emergency Services and other State offices. Our mechanism for providing support in the past has been the Nunn-Lugar 120 cities initiative. Recently through our Terrorism Consequence Management Preparedness Assistance Grant Program we have been able to fund terrorism and weapons of mass destruction preparedness activities at the local level.

Our funds are provided to the Governor's Office of Emergency Services and they in turn provide them to the California State Strategic Committee on Terrorism. The areas of focus for the committee includes cyberterrorism, equipment, training, intelligence and early warning systems, medical, health, resource allocation, and others.

FEMA has also participated in senior official workshops, chemical weapons, tabletop exercises, as well as biological weapons tabletop exercises in the city of Long Beach and other California cities.

FEMA is well prepared and equipped to respond to terrorist disasters. We are strengthening our preparedness efforts now so that State, tribal, and local governments and first-responders are well prepared for disasters and emergencies including incidents of terrorism.

Continued coordination among all levels of government will ensure a safer America. Thank you for your time.

[The prepared statement of Mr. Castleman follows:]

STATEMENT OF

RON CASTLEMAN

REGIONAL DIRECTOR

REGION VI

FEDERAL EMERGENCY MANAGEMENT AGENCY

BEFORE THE

SUBCOMMITTEE ON GOVERNMENT EFFICIENCY, FINANCIAL MANAGEMENT AND INTERGOVERNMENTAL RELATIONS

COMMITTEE ON GOVERNMENT REFORM

U.S. HOUSE OF REPRESENTATIVES

APRIL 2, 2002

Introduction

Good morning, Mr. Chairman. I am Ron Castleman, Regional Director, Region VI of the Federal Emergency Management Agency (FEMA). It is a pleasure for me to be here today to discuss the pressing matter of how FEMA is assisting State and local governments to prepare for a potential terrorist attack involving biological, chemical or nuclear agents. I will describe how FEMA works with other agencies and our State and local partners, our programs related to terrorism, and new efforts to enhance preparedness and response.

FEMA's Coordination Role

FEMA is the Federal Agency responsible for leading the nation in preparing for, responding to and recovering from disasters. Our success depends on our ability to organize and lead a community of local, State, and Federal agencies and volunteer organizations. We know whom to bring to the table when a disaster strikes in order to ensure the most effective management of the response. We provide management expertise and financial resources to help State and local governments when they are overwhelmed by disasters.

The Federal Response Plan (FRP) forms the heart of our management framework and lays out the process by which interagency groups work together to respond as a cohesive team to all types of disasters. This team is made up of 26 Federal departments and agencies, and the American Red Cross, and is organized into interagency functions based on the authorities and expertise of the members and the needs of our counterparts at the State and local level.

Since 1992, and again in response to the terrorist events of September 11, 2001, the FRP has proven to be an effective and efficient framework for managing all phases of disasters and emergencies. The FRP is successful because it builds upon existing professional disciplines, expertise, delivery systems, and relationships among the participating agencies. FEMA has strong ties to the emergency management and fire service communities and we routinely plan, train, exercise, and operate together to remain prepared to respond to all types of disasters.

State and Local Relationship

Much of our success in emergency management can be attributed to our historically strong working relationship with our State and local partners. Through our preparedness programs we provide the financial, technical, planning, training, and exercise support to give State, local and Tribal governments the capabilities they need to protect public health, safety and property both before and after disaster strikes. Our programs foster the partnerships that are so critical to creating a strong comprehensive national emergency preparedness system. Terrorism consequence management is just one component of our

overall emergency management effort. For example, after September 11, Governor Ridge and Director Allbaugh agreed that there was a need to quickly assess State capabilities to effectively respond to acts of terrorism. FEMA assembled an interagency team with members from Department of Defense, Department of Education, Health and Human Services, Department of Justice and Environmental Protection Agency to visit the 50 States and territories to assess their readiness against 18 criteria and to identify priorities and shortfalls. We examined several categories such as critical infrastructure, personnel, plans, equipment and supplies communications and related capabilities. The results were provided in a classified report to Governor Ridge right before Thanksgiving.

Meeting The Challenge Ahead – Creating the Office of National Preparedness

On May 8, 2001, the President tasked the Director with creating the Office of National Preparedness within FEMA to "coordinate all Federal programs dealing with weapons of mass destruction consequence management within the Departments of Defense, Health and Human Services, Justice, and Energy, the Environmental Protection Agency, and other federal agencies." Additionally, the ONP was directed to "work closely with state and local governments to ensure their planning, training, and equipment needs are met."

The mission of the Office of National Preparedness (ONP) is to provide leadership in coordinating and facilitating all Federal efforts to assist State and local first responders (including fire, medical and law enforcement) and emergency management organizations with planning, training, equipment and exercises. By focusing on these specific areas, we can build and sustain our nation's capability to respond to any emergency or disaster, including a terrorist incident involving chemical, biological or nuclear weapons of mass destruction and other natural or manmade hazards.

FEMA has made the following changes to support this expanded mission to support the Office of Homeland Security:

- Realigned preparedness activities from the Readiness, Response and Recovery Directorate to ONP;
- Realigned all training activities into the U.S. Fire Administration to allow greater coordination between training for emergency managers and training for firefighters;
- Moved the authority for credentialing, training and deploying Urban Search and Rescue teams from the Readiness, Response and Recovery Directorate to the U.S. Fire Administration.

ONP Organization

The ONP is organized in FEMA Headquarters under a Director (reporting directly to the

FEMA Director) and supported by a Management Services Unit and four Divisions to carry out key its functions to coordinate and implement Federal programs and activities aimed at building and sustaining the national preparedness capability. The divisions and their functional responsibilities include the following:

- **Administration Division** – Provide financial and support services, and management of the grant assistance activities for local and State capability building efforts.
- **Program Coordination Division** – Ensure development of a coordinated national capability involving Federal, State, and local governments, to include citizen participation, in the overall efforts to effectively deal with the consequences of terrorist acts and other incidents within the United States.
- **Technological Services Division** – Improve the capabilities of communities to manage technological hazard emergencies- whether accidental or intentional-and leverage this capability to enhance the capability for dealing with terrorist attacks.
- **Assessment and Exercise** – Provide guidance, exercise, and assess and evaluate progress in meeting National goals for development of a domestic consequence management capability.

We continue to work with all 55 states and territories and Federally recognized Indian Tribes and Alaskan Native Villages to implement our current and other grant programs to assist State, Tribal and local government to enhance their capabilities to respond to all types of hazards and emergencies such as chemical incidents, incidents involving radiological substances, and natural disasters.

The Approach to Biological and Chemical Terrorism

We recognize that biological and chemical scenarios would present unique challenges to the first responder community. Of these two types of attacks, we are, in many ways, better prepared for a chemical attack because such an incident is comparable to a large-scale hazardous materials incident.

In such an event, EPA and the Coast Guard are well connected to local hazardous materials responders, State and Federal agencies, and the chemical industry. There are systems and plans in place for response to hazardous materials, systems that are routinely used for both small and large-scale events. EPA is also the primary agency for the Hazardous Materials function of the Federal Response Plan. We are confident that we would be able to engage the relevant players in a chemical attack based on the hazardous materials model.

Bio-terrorism, however, presents the greater immediate concern. With a covert release of a biological agent, the 'first responders' will be hospital staff, medical examiners, private physicians, or animal control workers, instead of the traditional first responders such as police, fire, and emergency medical services, with whom we have a long-term relationship. While I defer to the Departments of Justice and DHHS on how biological

scenarios would unfold, it seems unlikely that we would have much forewarning of a calculated strike in this realm.

In exercise and planning scenarios, the worst-case scenarios begin with an undetected event and play out as widespread epidemics, rapidly escalating into a national emergency. Response would likely begin in the public health and medical community, with initial requests for Federal assistance probably coming through health and medical channels to the Centers for Disease Control and Prevention (CDC).

DHHS leads the efforts of the health and medical community to plan and prepare for a national response to a public health emergency and is the critical link between the health and medical community and the larger Federal response. FEMA works closely with the Public Health Service of DHHS as the primary agency for the Health and Medical Services function of the Federal Response Plan. We rely on the Public Health Service to bring the right experts to the table when the Federal Response Plan community meets to discuss biological scenarios. We work closely with the experts in DHHS and other health and medical agencies, to learn about the threats, how they spread, and the resources and techniques that will be needed to control them.

By the same token, the medical experts work with us to learn about the Federal Response Plan and how we can use it to work through the management issues, such as resource deployment and public information strategies. Alone, the Federal Response Plan is not an adequate solution for the challenge of planning and preparing for a deadly epidemic or act of bioterrorism. It is equally true that, alone, the health and medical community cannot manage an emergency with biological causes. We must work together.

In recent years, Federal, state and local governments and agencies have made progress in bringing the communities closer together. Exercise Top Officials (TOPOFF) 2000 conducted in May 2000 involved two concurrent terrorism scenarios in two metropolitan areas, a chemical attack on the East Coast followed by a biological attack in the Midwest. This was a successful and useful exercise and we continue to work to implement the lessons learned.

In January 2001, the FBI and FEMA jointly published the U.S. Government Interagency Domestic Terrorism Concept of Operation Plan (CONPLAN) with DHHS, EPA, and the Departments of Defense and Energy, and these agencies have pledged to continue the planning process to develop specific procedures for different scenarios, including bioterrorism. The Federal Response Plan and the CONPLAN provide the framework for managing the response to an act of bioterrorism, but we need to continue to practice our response to events of this kind.

The Approach to Nuclear Terrorism

There are 63 commercial nuclear power plant sites in the United States, located in 33 States. These states and their local governments have radiological emergency response

plans for the 10 miles surrounding the plants and 36 states have plans for the 50 miles radius surrounding the plants.

The Federal response to a nuclear power plant incident is documented in the Federal Radiological Emergency Response Plan (FRERP), which has 17 Federal agency signatories. The Nuclear Regulatory Commission (NRC) is the lead Federal agency for coordinating the overall response and FEMA is responsible for coordinating non-radiological support.

The FEMA Radiological Emergency Preparedness (REP) Program also routinely tests and evaluates the individual site plans, the 10-mile plans for the 63 sites are tested at biennial exercises (approximately 32 exercises per year) and the 50-mile plans for the 36 States are exercised once every six years (approximately six exercises per year).

The events of September 11 have now horrifically demonstrated that these plans needed to be expanded further. When September 11 showed us how a commercial jetliner can be used as a weapon of mass destruction, the NCR and FEMA began to work jointly on the preparation of protocols and procedures for dealing with the consequences of a similar attack on a nuclear power plant – a scenario previously not addressed. While some amendments to the emergency response plans may result from this review, it is important to note that the current plans are a valid approach to any nuclear power plant incident, regardless of the cause: terrorism, human error, technological failure, or a natural hazard.

The Federal Radiological Preparedness Coordinating Committee (FRPCC) has also conducted tabletop exercises of the FRERP in order to determine Federal agency resources for responding to a terrorist attack, or multiple attacks, with a radiological component. In addition, the FRPCC is evaluating the nuclear/radiological threat posed by Improvised Nuclear Devices and Radiological Dispersal Devices and the preparedness of FRPCC member departments and agencies to deal with these threats.

In addition, the Federal Response Subcommittee of the FRPCC has developed information on radiological terrorist devices--such as radiological dispersion devices, improvised nuclear devices, and radiological exposure devices--for the use of the Federal Bureau of Investigation as background and public information.

Finally, FEMA's Technological Services Division of the Office of National Preparedness has asked the FEMA Regions to provide (1) information on what the Region has done to review and modify State and local REP plans for a response to a sudden catastrophic event; (2) recommendations on improving the realism of REP exercises; and (3) recommendations on how to improve/enhance public education within the REP planning zones. This request is due by April 15, 2002.

We are also working with our Canadian neighbors through *the Agreement between the Government of the United States of America and the Government of Canada on*

Cooperation in Comprehensive Civil Emergency Planning and Management. In the past, our collaboration under this agreement has focused on natural and technological hazards. The Agreement does, however, include language regarding "deliberate acts" and "undeclared hostilities including armed enemy attack".

Since September 11, both countries are applying the broadest interpretation of those aspects of the Agreement. The United States Government and Canada seek to strengthen cross border planning and management against the possibility of future chemical, biological, radiological, nuclear events and/or incendiary attacks targeted on either of our countries or on both of our countries simultaneously. To that end, FEMA participated in a US Department of State-Canada Solicitor General sponsored Senior Level Workshop that was held in Ottawa on 4-5 February 2002. FEMA is also working with Canada's Office of Critical Infrastructure Protection and Emergency Preparedness (OCIPEP) to help improve existing communications and operational levels for all disaster situations including terrorism.

Conclusion

It is FEMA's responsibility to ensure that the national emergency management system is adequate to respond to the consequences of catastrophic emergencies and disasters, regardless of the cause, and that all catastrophic events require a strong management system built on expert systems for each of the operational disciplines.

Terrorism presents tremendous challenges. We rely on our partners in Department of Health and Human Services to coordinate the efforts of the health and medical community to address biological terrorism, as we rely on EPA and the Coast Guard to coordinate the efforts of the hazardous materials community to address chemical terrorism and the NCR to address nuclear events. And we relay on our partners at the state and local level. Without question, they need support to further strengthen capabilities and their operating capacity.

FEMA must ensure that the national system has the tools to gather information, set priorities, and deploy resources effectively in a biological scenario. In recent years we have made tremendous strides in our efforts to increase cooperation between the various response communities, from fire and emergency management to health and medical to hazardous materials. And now, we need to do more.

The creation of the Office of National Preparedness and our emphasis on training, planning, equipment, and exercises will enable us to better focus our efforts and will help our nation be better prepared for the future.

Thank you, Mr. Chairman. I would be happy to answer any questions you have.

Mr. HORN. Thank you. We now move to Ms. Dalton. Patricia Dalton is the Director of Strategic Issues of the U.S. General Accounting Office. For some people that don't really understand what GAO does, they don't just sit around and audit. That sort of went out 30 years ago. When Clarence Cannon died and Speaker Rayburn died they blocked us all the way in terms of doing programmatic research.

The General Accounting Office began in 1921 and they have done a splendid job in the last 30 years under a number of fine Comptroller Generals of which none is finer than Mr. Walker, the current Comptroller General of the United States, the person with the best term in Washington, 15 years and you can't touch him. He works for Congress and he works for the American people.

Ms. Dalton, not only on your statement but I think I counted about 50 different terrorism things you have put together with your colleagues. Go ahead and tell us if we have missed something this morning.

Ms. DALTON. Thank you, Mr. Chairman. We appreciate your very kind remarks. Mr. Chairman, Congressman Honda, I appreciate the opportunity to be here in San Francisco to discuss issues critical to national preparedness.

GAO has called for the development of a national strategy that will improve our overall preparedness. The creation of the Office of Homeland Security under the leadership of Tom Ridge is an important and potentially significant first-step.

As it comes together, we believe there are three key aspects of the national strategy that should be included. First of all, a definition and clarification of the appropriate rules and responsibilities of Federal, State, and local entities on which we have heard a considerable amount here this morning at this hearing. Second, the establishment of goals and performance measures to guide our national preparedness efforts. Finally, a careful choice of the most appropriate tools of government to best implement the national strategy and achieve appropriate goals.

I would like to very briefly discuss each one of these points. First, the roles and missions of Federal, State, and local entities need to be clarified. Although the Federal Government appears monolithic to many, in the area of terrorism prevention and response it has been anything but and we have certainly heard about that this morning. There are more than 40 Federal entities that have a role in combating and responding to terrorism and 20 Federal entities alone in the bio-terrorism area.

Concerns about coordination, fragmentation and Federal preparedness efforts are well founded. There has been no single leader in charge of the many terrorism related functions conducted by different Federal departments and agencies.

This lack of leadership has resulted in the Federal Government's development of programs to assist State and local governments that often are similar and potentially duplicative.

This has created confusion at the State and local level. State and local response organizations believe that Federal programs designed to improve preparedness are not well synchronized or organized and have called for a single focal point, a one-stop center in some cases.

The second aspect the national strategy that we believe needs to be addressed is that performance and accountability measures need to be included in the strategy. Numerous discussions have been held about the need to enhance the Nation's preparedness but national preparedness goals and measurable performance indicators have not yet been developed.

Clear objectives and measures are critical to a sustainable strategy that provides a framework for defining our roles and our responsibilities.

Finally, appropriate tools need to be selected for designing Federal assistance. Our previous work on Federal programs suggest that the choice and design of policy tools have important consequences for performance and accountability.

Governments have at their disposal a variety of policy instruments such as grants, regulations, tax incentives, and regional coordination and partnerships that they can use to motivate or mandate other levels of government and private sector entities to take action to address security concerns.

For example, the Federal Government often uses grants to State and local governments as a means of delivering Federal programs. Grants can be designed to: one, target the funds of State and localities with the greatest needs; two, discourage the replacement of State and local funds with Federal funds through maintenance of effort requirements that recipients maintain their level of previous funding; and most importantly, three, strike a balance between accountability and flexibility to the grantees of State and local governments.

Intergovernmental partnerships and regional coordination will also be important, particularly with respect to information sharing and mutual aid agreements. National preparedness is a complex mission that requires unusual interagency, interjurisdictional, and interorganizational cooperation. We have certainly heard some of the difficulties at the local level in this area.

An illustration from the Federal perspective of the complexity of the issues that are being dealt with can be seen at the sea ports. At least 15 Federal agencies alone have some responsibility for our ports. Primary are the Coast Guard, Customs, and the Immigration and Naturalization Service, but there are many others.

Local officials have emphasized the importance of regional coordination. Mutual aid agreements provide a structure for assistance and for sharing resources among jurisdictions in response to an emergency. They will be critical in any response to emergencies.

Mr. Chairman, in conclusion, as increasing demands are placed on budgets at all levels of government, it will be necessary to make sound choices to maintain physical stability. All levels of government and the private sector will have to communicate and cooperate effectively with each other across a broad range of issues to develop a national strategy to better target available resources and to use all of our available resources to address the urgent national preparedness needs.

This completes my prepared statement. I would be pleased to answer any question.

[The prepared statement of Ms. Dalton follows:]

United States General Accounting Office

GAO

Testimony

Before the Subcommittee on Government Efficiency, Financial Management, and Intergovernmental Relations, Committee on Government Reform, House of Representatives

For Release on Delivery
Expected at 10:00 am PST, on
Tuesday, April 2, 2002

COMBATING TERRORISM

Intergovernmental Cooperation in the Development of a National Strategy to Enhance State and Local Preparedness

Statement of Patricia A. Dalton
Director, Strategic Issues

GAO-02-550T

Mr. Chairman and Members of the Subcommittee:

I appreciate the opportunity to be here in San Francisco to discuss issues critical to successful federal leadership of, assistance to, and partnerships with state and local governments in the area of preparedness for terrorist events. As you know, Mr. Chairman, federal, state, and local governments have a shared responsibility in preparing for catastrophic terrorist attacks. But the initial responsibility falls upon local governments and their organizations—such as police, fire departments, emergency medical personnel, and public health agencies—which will almost invariably be the first responders to such an occurrence. For its part, the federal government historically has principally provided leadership, training, and funding assistance. In the aftermath of the September 11th attacks, for instance, about one-quarter of the $40 billion Emergency Response Fund was dedicated to homeland security, including funds to enhance state and local government preparedness.

Because the national security threat is diffuse and the challenge is highly intergovernmental, national policymakers must formulate strategies with a firm understanding of the interests, capacity, and challenges facing those governments in addressing these issues. My comments today are based on a body of GAO's work on terrorism and emergency preparedness and policy options for the design of federal assistance,[1] as well as on our review of many other studies.[2] In addition, we draw on ongoing work for this subcommittee; pursuant to your request we have begun a review to examine the preparedness issues confronting state and local governments in a series of case studies. We will examine the state and local perspective on these issues and thereby help the Congress and the executive branch to better design and target programs and strategies.

In my testimony, I reiterate GAO's call, expressed in numerous reports and testimonies over the past years, for development of a national strategy that will improve national preparedness and enhance partnerships between federal, state, and local governments to guard against terrorist attacks. The creation of the Office of Homeland Security under the leadership of

[1] See attached listing of related GAO products.

[2] These studies include the Advisory Panel to Assess Domestic Response Capabilities for Terrorism Involving Weapons of Mass Destruction, *Third Annual Report* (Arlington, VA: RAND, Dec. 15, 2001) and the United States Commission on National Security/21st Century, *Road Map for Security: Imperative for Change*, February 15, 2001.

Tom Ridge is an important and potentially significant first step. We recognize that the President, in his proposed 2003 budget, has announced that the Office of Homeland Security will propose such a plan later this year. As it comes together, we believe that key aspects of this strategy should include:

- A definition and clarification of the appropriate roles and responsibilities of federal, state, and local entities. Our previous work has found fragmentation and overlap among federal assistance programs. Over 40 federal entities have roles in combating terrorism, and past federal efforts have resulted in a lack of accountability, a lack of a cohesive effort, and duplication of programs. As state and local officials have noted, this situation has led to confusion, making it difficult to identify available federal preparedness resources and effectively partner with the federal government.
- The establishment of goals and performance measures to guide the nation's preparedness efforts. The Congress has long recognized the need to objectively assess the results of federal programs. For the nation's preparedness programs, however, outcomes of where the nation should be in terms of domestic preparedness have yet to be defined. Given the recent and proposed increases in preparedness funding as well as the need for real and meaningful improvements in preparedness, establishing clear goals and performance measures is critical to ensuring both a successful and a fiscally responsible effort.
- A careful choice of the most appropriate tools of government to best implement the national strategy and achieve national goals. The choice and design of policy tools, such as grants, regulations, and partnerships, can enhance the government's capacity to (1) target areas of highest risk to better ensure that scarce federal resources address the most pressing needs, (2) promote shared responsibilities by all parties, and (3) track and assess progress toward achieving national goals.

Since the attacks of September 11th, we have seen the nation unite and better coordinate preparedness efforts among federal, state, and local agencies, as well as among private businesses, community groups, and individual citizens. Our challenge now is to build upon this initial response to further improve our preparedness in a sustainable way that creates both short- and long-term benefits. We applaud the subcommittee's interest in addressing this issue now and urge that it continue its efforts to oversee the efficiency and effectiveness of these key intergovernmental relationships to define and best achieve the necessary level of national preparedness.

Background

Because of such emergencies as natural disasters, hazardous material spills, and riots, all levels of government have had some experience in preparing for different types of disasters and emergencies. Preparing for all potential hazards is commonly referred to as the "all-hazards" approach. While terrorism is a component within an all-hazards approach, terrorist attacks potentially impose a new level of fiscal, economic, and social dislocation within this nation's boundaries. Given the specialized resources that are necessary to address a chemical or biological attack, the range of governmental services that could be affected, and the vital role played by private entities in preparing for and mitigating risks, state and local resources alone will likely be insufficient to meet the terrorist threat.

Some of these specific challenges can be seen in the area of bioterrorism. For example, a biological agent released covertly might not be recognized for a week or more because symptoms may only appear several days after the initial exposure and may be misdiagnosed at first. In addition, some biological agents, such as smallpox, are communicable and can spread to others who were not initially exposed. These characteristics require responses that are unique to bioterrorism, including health surveillance, epidemiologic investigation, laboratory identification of biological agents, and distribution of antibiotics or vaccines to large segments of the population to prevent the spread of an infectious disease. The resources necessary to undertake these responses are generally beyond state and local capabilities and would require assistance from and close coordination with the federal government.

National preparedness is a complex mission that involves a broad range of functions performed throughout government, including national defense, law enforcement, transportation, food safety and public health, information technology, and emergency management, to mention only a few. While only the federal government is empowered to wage war and regulate interstate commerce, state and local governments have historically assumed primary responsibility for managing emergencies through police, firefighters, and emergency medical personnel.

The federal government's role in responding to major disasters is generally defined in the Stafford Act,[3] which requires a finding that the disaster is so

[3] *The Robert T. Stafford Disaster Relief and Emergency Assistance Act*, (P.L. 93-288) as amended establishes the process for states to request a presidential disaster declaration.

severe as to be beyond the capacity of state and local governments to respond effectively before major disaster or emergency assistance from the federal government is warranted. Once a disaster is declared, the federal government—through the Federal Emergency Management Agency (FEMA)—may reimburse state and local governments for between 75 and 100 percent of eligible costs, including response and recovery activities.

There has been an increasing emphasis over the past decade on preparedness for terrorist events. After the nerve gas attack in the Tokyo subway system on March 20, 1995, and the Oklahoma City bombing on April 19, 1995, the United States initiated a new effort to combat terrorism. In June 1995, Presidential Decision Directive 39 was issued, enumerating responsibilities for federal agencies in combating terrorism, including domestic terrorism. Recognizing the vulnerability of the United States to various forms of terrorism, the Congress passed the Defense Against Weapons of Mass Destruction Act of 1996 (also known as the Nunn-Lugar-Domenici program) to train and equip state and local emergency services personnel who would likely be the first responders to a domestic terrorist event. Other federal agencies, including those in the Department of Justice, Department of Energy, FEMA, and Environmental Protection Agency, have also developed programs to assist state and local governments in preparing for terrorist events.

The attacks of September 11, 2001, as well as the subsequent attempts to contaminate Americans with anthrax, dramatically exposed the nation's vulnerabilities to domestic terrorism and prompted numerous legislative proposals to further strengthen our preparedness and response. During the first session of the 107th Congress, several bills were introduced with provisions relating to state and local preparedness. For instance, the Preparedness Against Domestic Terrorism Act of 2001, which you cosponsored, Mr. Chairman, proposes the establishment of a Council on Domestic Preparedness to enhance the capabilities of state and local emergency preparedness and response.

The funding for homeland security increased substantially after the attacks. According to documents supporting the president's fiscal year 2003 budget request, about $19.5 billion in federal funding for homeland security was enacted in fiscal year 2002.[4] The Congress added to this

[4] "*Securing the Homeland, Strengthening the Nation.*" For the complete document, see the Web site: http://www.whitehouse.gov/homeland/homeland_security_book.html.

amount by passing an emergency supplemental appropriation of $40 billion dollars.[5] According to the budget request documents, about one-quarter of that amount, nearly $9.8 billion, was dedicated to strengthening our defenses at home, resulting in an increase in total federal funding on homeland security of about 50 percent, to $29.3 billion. Table 1 compares fiscal year 2002 funding for homeland security by major categories with the president's proposal for fiscal year 2003.

Table 1: Homeland Security by Major Funding Categories for Fiscal Year 2002 and Proposed for Fiscal Year 2003

Dollars in millions

Major funding category	FY2002 enacted	Emergency supplemental	FY2002 total	The president's FY2003 budget request
Supporting first responders	$291	$651	$942	$3,500
Defending against biological terrorism	1,408	3,730	5,138	5,898
Securing America's borders	8,752	1,194	9,946	10,615
Using 21st century technology for homeland security	155	75	230	722
Aviation security	1,543	1,035	2,578	4,800
DOD homeland security	4,201	689	4,890	6,815
Other non-DOD homeland security	3,186	2,384	5,570	5,352
Total	**$19,536**	**$9,758**	**$29,294**	**$37,702**

Source: FY 2003 president's budget document, "Securing the Homeland, Strengthening the Nation."

A National Strategy Is Needed to Guide Our Preparedness Efforts

We have tracked and analyzed federal programs to combat terrorism for many years and have repeatedly called for the development of a national strategy for preparedness. We have not been alone in this message; for instance, national commissions, such as the Gilmore Commission, and other national associations, such as the National Emergency Management Association and the National Governors Association, have advocated the establishment of a national preparedness strategy. The attorney general's Five-Year Interagency Counterterrorism Crime and Technology Plan, issued in December 1998, represents one attempt to develop a national strategy on combating terrorism. This plan entailed a substantial interagency effort and could potentially serve as a basis for a national preparedness strategy. However, we found it lacking in two critical elements necessary for an effective strategy: (1) measurable outcomes and

[5]2001 *Emergency Supplemental Appropriations Act for Recovery from and Response to Terrorist Attacks on the United States*, (P.L. 107-38).

(2) identification of state and local government roles in responding to a terrorist attack.[6]

In October 2001, the president established the Office of Homeland Security as a focal point with a mission to develop and coordinate the implementation of a comprehensive national strategy to secure the United States from terrorist threats or attacks. While this action represents a potentially significant step, the role and effectiveness of the Office of Homeland Security in setting priorities, interacting with agencies on program development and implementation, and developing and enforcing overall federal policy in terrorism-related activities is in the formative stages of being fully established.

The emphasis needs to be on a national rather than a purely federal strategy. We have long advocated the involvement of state, local, and private-sector stakeholders in a collaborative effort to arrive at national goals. The success of a national preparedness strategy relies on the ability of all levels of government and the private sector to communicate and cooperate effectively with one another. To develop this essential national strategy, the federal role needs to be considered in relation to other levels of government, the goals and objectives for preparedness, and the most appropriate tools to assist and enable other levels of government and the private sector to achieve these goals.[7]

Roles and Missions of Federal, State, and Local Entities Need to Be Clarified

Although the federal government appears monolithic to many, in the area of terrorism prevention and response, it has been anything but. More than 40 federal entities have a role in combating and responding to terrorism, and more than 20 federal entities in bioterrorism alone. One of the areas that the Office of Homeland Security will be reviewing is the coordination among federal agencies and programs.

Concerns about coordination and fragmentation in federal preparedness efforts are well founded. Our past work, conducted prior to the creation of

[6] See U.S. General Accounting Office, *Combating Terrorism: Linking Threats to Strategies and Resources*, GAO/T-NSIAD-00-218 (Washington, D.C.: July 26, 2000).

[7] Another important aspect of enhancing state and local preparedness is risk management. Risk management is an important tool for prioritizing limited resources in the face of uncertain threats. For more information on risk management, see U.S. General Accounting Office, *Homeland Security: Risk Management Can Help Us Defend Against Terrorism*, GAO-02-208T (Washington, D.C.: October 31, 2001).

the Office of Homeland Security, has shown coordination and fragmentation problems stemming largely from a lack of accountability within the federal government for terrorism-related programs and activities. There had been no single leader in charge of the many terrorism-related functions conducted by different federal departments and agencies. In fact, several agencies had been assigned leadership and coordination functions, including the Department of Justice, the Federal Bureau of Investigation, FEMA, and the Office of Management and Budget. We previously reported that officials from a number of agencies that combat terrorism believe that the coordination roles of these various agencies are not always clear. The recent Gilmore Commission report expressed similar concerns, concluding that the current coordination structure does not provide the discipline necessary among the federal agencies involved.

In the past, the absence of a central focal point resulted in two major problems. The first of these is a lack of a cohesive effort from within the federal government. For example, the Department of Agriculture, the Food and Drug Administration, and the Department of Transportation have been overlooked in bioterrorism-related policy and planning, even though these organizations would play key roles in response to terrorist acts. In this regard, the Department of Agriculture has been given key responsibilities to carry out in the event that terrorists were to target the nation's food supply, but the agency was not consulted in the development of the federal policy assigning it that role. Similarly, the Food and Drug Administration was involved with issues associated with the National Pharmaceutical Stockpile, but it was not involved in the selection of all items procured for the stockpile. Further, the Department of Transportation has responsibility for delivering supplies under the Federal Response Plan, but it was not brought into the planning process and consequently did not learn the extent of its responsibilities until its involvement in subsequent exercises.

Second, the lack of leadership has resulted in the federal government's development of programs to assist state and local governments that were similar and potentially duplicative. After the terrorist attack on the federal building in Oklahoma City, the federal government created additional programs that were not well coordinated. For example, FEMA, the Department of Justice, the Centers for Disease Control and Prevention, and the Department of Health and Human Services all offer separate assistance to state and local governments in planning for emergencies. Additionally, a number of these agencies also condition receipt of funds on completion of distinct but overlapping plans. Although the many federal assistance programs vary somewhat in their target audiences, the potential

redundancy of these federal efforts warrants scrutiny. In this regard, we recommended in September 2001 that the president work with the Congress to consolidate some of the activities of the Department of Justice's Office for State and Local Domestic Preparedness Support under FEMA.[8]

State and local response organizations believe that federal programs designed to improve preparedness are not well synchronized or organized. They have repeatedly asked for a one-stop "clearinghouse" for federal assistance. As state and local officials have noted, the multiplicity of programs can lead to confusion at the state and local levels and can expend precious federal resources unnecessarily or make it difficult for them to identify available federal preparedness resources. As the Gilmore Commission report notes, state and local officials have voiced frustration about their attempts to obtain federal funds and have argued that the application process is burdensome and inconsistent among federal agencies.

Although the federal government can assign roles to federal agencies under a national preparedness strategy, it will also need to reach consensus with other levels of government and with the private sector about their respective roles. Clearly defining the appropriate roles of government may be difficult because, depending upon the type of incident and the phase of a given event, the specific roles of local, state, and federal governments and of the private sector may not be separate and distinct.

A new warning system, the Homeland Security Advisory System, is intended to tailor notification of the appropriate level of vigilance, preparedness, and readiness in a series of graduated threat conditions. The Office of Homeland Security announced the new warning system on March 12, 2002. The new warning system includes five levels of alert for assessing the threat of possible terrorist attacks: low, guarded, elevated, high, and severe. These levels are also represented by five corresponding colors: green, blue, yellow, orange, and red. When the announcement was made, the nation stood in the yellow condition, in elevated risk. The warning can be upgraded for the entire country or for specific regions and economic sectors, such as the nuclear industry.

[8] U.S. General Accounting Office, *Combating Terrorism: Selected Challenges and Related Recommendations*, GAO-01-822 (Washington, D.C.: September 20, 2001).

The system is intended to address a problem with the previous blanket warning system that was used. After September 11th, the federal government issued four general warnings about possible terrorist attacks, directing federal and local law enforcement agencies to place themselves on the "highest alert." However, government and law enforcement officials, particularly at the state and local levels, complained that general warnings were too vague and a drain on resources. To obtain views on the new warning system from all levels of government, law enforcement, and the public, the United States Attorney General, who will be responsible for the system, provided a 45-day comment period from the announcement of the new system on March 12th. This provides an opportunity for state and local governments as well as the private sector to comment on the usefulness of the new warning system, and the appropriateness of the five threat conditions with associated suggested protective measures.

Performance and Accountability Measures Need to Be Included in National Strategy

Numerous discussions have been held about the need to enhance the nation's preparedness, but national preparedness goals and measurable performance indicators have not yet been developed. These are critical components for assessing program results. In addition, the capability of state and local governments to respond to catastrophic terrorist attacks is uncertain.

At the federal level, measuring results for federal programs has been a longstanding objective of the Congress. The Congress enacted the Government Performance and Results Act of 1993 (commonly referred to as the Results Act). The legislation was designed to have agencies focus on the performance and results of their programs rather than on program resources and activities, as they had done in the past. Thus, the Results Act became the primary legislative framework through which agencies are required to set strategic and annual goals, measure performance, and report on the degree to which goals are met. The outcome-oriented principles of the Results Act include (1) establishing general goals and quantifiable, measurable, outcome-oriented performance goals and related measures, (2) developing strategies for achieving the goals, including strategies for overcoming or mitigating major impediments, (3) ensuring that goals at lower organizational levels align with and support general goals, and (4) identifying the resources that will be required to achieve the goals.

A former assistant professor of public policy at the Kennedy School of Government, now the senior director for policy and plans with the Office

of Homeland Security, noted in a December 2000 paper that a preparedness program lacking broad but measurable objectives is unsustainable.[9] This is because it deprives policymakers of the information they need to make rational resource allocations, and program managers are prevented from measuring progress. He recommended that the government develop a new statistical index of preparedness,[10] incorporating a range of different variables, such as quantitative measures for special equipment, training programs, and medicines, as well as professional subjective assessments of the quality of local response capabilities, infrastructure, plans, readiness, and performance in exercises. Therefore, he advocated that the index should go well beyond the current rudimentary milestones of program implementation, such as the amount of training and equipment provided to individual cities. The index should strive to capture indicators of how well a particular city or region could actually respond to a serious terrorist event. This type of index, according to this expert, would then allow the government to measure the preparedness of different parts of the country in a consistent and comparable way, providing a reasonable baseline against which to measure progress.

In October 2001, FEMA's director recognized that assessments of state and local capabilities have to be viewed in terms of the level of preparedness being sought and what measurement should be used for preparedness. The director noted that the federal government should not provide funding without assessing what the funds will accomplish. Moreover, the president's fiscal year 2003 budget request for $3.5 billion through FEMA for first responders—local police, firefighters, and emergency medical professionals—provides that these funds be accompanied by a process for evaluating the effort to build response capabilities, in order to validate that effort and direct future resources.

FEMA has developed an assessment tool that could be used in developing performance and accountability measures for a national strategy. To

[9] Richard A. Falkenrath, *The Problems of Preparedness: Challenges Facing the U. S. Domestic Preparedness Program* (Cambridge, Mass: John F. Kennedy School of Government, Harvard University, December 2000).

[10] It was recommended that this index be classified so as to avoid calling attention to the country's most vulnerable areas.

ensure that states are adequately prepared for a terrorist attack, FEMA was directed by the Senate Committee on Appropriations to assess states' response capabilities. In response, FEMA developed a self-assessment tool—the Capability Assessment for Readiness (CAR)—that focuses on 13 key emergency management functions, including hazard identification and risk assessment, hazard mitigation, and resource management. However, these key emergency management functions do not specifically address public health issues. In its fiscal year 2001 CAR report, FEMA concluded that states were only marginally capable of responding to a terrorist event involving a weapon of mass destruction. Moreover, the president's fiscal year 2003 budget proposal acknowledges that our capabilities for responding to a terrorist attack vary widely across the country. Many areas have little or no capability to respond to a terrorist attack that uses weapons of mass destruction. The budget proposal further adds that even the best prepared states and localities do not possess adequate resources to respond to the full range of terrorist threats we face.

Proposed standards have been developed for state and local emergency management programs by a consortium of emergency managers from all levels of government and are currently being pilot tested through the Emergency Management Accreditation Program at the state and local levels. Its purpose is to establish minimum acceptable performance criteria by which emergency managers can assess and enhance current programs to mitigate, prepare for, respond to, and recover from disasters and emergencies. For example, one such standard is the requirement that (1) the program must develop the capability to direct, control, and coordinate response and recovery operations, (2) that an incident management system must be utilized, and (3) that organizational roles and responsibilities shall be identified in the emergency operational plans.

Although FEMA has experience in working with others in the development of assessment tools, it has had difficulty in measuring program performance. As the president's fiscal year 2003 budget request acknowledges, FEMA generally performs well in delivering resources to stricken communities and disaster victims quickly. The agency performs less well in its oversight role of ensuring the effective use of such assistance. Further, the agency has not been effective in linking resources to performance information. FEMA's Office of Inspector General has found that FEMA did not have an ability to measure state disaster risks and performance capability, and it concluded that the agency needed to determine how to measure state and local preparedness programs.

Appropriate Tools Need to Be Selected for Designing Assistance

Since September 11th, many state and local governments have faced declining revenues and increased security costs. A survey of about 400 cities conducted by the National League of Cities reported that since September 11th, one in three American cities saw their local economies, municipal revenues, and public confidence decline while public-safety spending is up. Further, the National Governors Association estimates fiscal year 2002 state budget shortfalls of between $40 billion and $50 billion, making it increasingly difficult for the states to take on expensive, new homeland security initiatives without federal assistance. State and local revenue shortfalls coupled with increasing demands on resources make it more critical that federal programs be designed carefully to match the priorities and needs of all partners—federal, state, local, and private.

Our previous work on federal programs suggests that the choice and design of policy tools have important consequences for performance and accountability. Governments have at their disposal a variety of policy instruments, such as grants, regulations, tax incentives, and regional coordination and partnerships, that they can use to motivate or mandate other levels of government and private-sector entities to take actions to address security concerns.

The design of federal policy will play a vital role in determining success and ensuring that scarce federal dollars are used to achieve critical national goals. Key to the national effort will be determining the appropriate level of funding so that policies and tools can be designed and targeted to elicit a prompt, adequate, and sustainable response while also protecting against federal funds being used to substitute for spending that would have occurred anyway.

Grants

The federal government often uses grants to state and local governments as a means of delivering federal programs. Categorical grants typically permit funds to be used only for specific, narrowly defined purposes. Block grants typically can be used by state and local governments to support a range of activities aimed at achieving a broad national purpose and to provide a great deal of discretion to state and local officials. Either type of grant can be designed to (1) target the funds to states and localities with the greatest need, (2) discourage the replacement of state and local funds with federal funds, commonly referred to as "supplantation," with a maintenance-of-effort requirement that recipients maintain their level of previous funding, and (3) strike a balance between accountability and flexibility. More specifically:

- Targeting: The formula for the distribution of any new grant could be based on several considerations, including the state or local government's capacity to respond to a disaster. This capacity depends on several factors, the most important of which perhaps is the underlying strength of the state's tax base and whether that base is expanding or is in decline. In an August 2001 report on disaster assistance, we recommended that the director of FEMA consider replacing the per-capita measure of state capability with a more sensitive measure, such as the amount of a state's total taxable resources, to assess the capabilities of state and local governments to respond to a disaster.[11] Other key considerations include the level of need and the costs of preparedness.
- Maintenance-of-effort: In our earlier work, we found that substitution is to be expected in any grant and, on average, every additional federal grant dollar results in about 60 cents of supplantion.[12] We found that supplantation is particularly likely for block grants supporting areas with prior state and local involvement. Our recent work on the Temporary Assistance to Needy Families block grant found that a strong maintenance-of-effort provision limits states' ability to supplant.[13] Recipients can be penalized for not meeting a maintenance-of-effort requirement.
- Balance accountability and flexibility: Experience with block grants shows that such programs are sustainable if they are accompanied by sufficient information and accountability for national outcomes to enable them to compete for funding in the congressional appropriations process. Accountability can be established for measured results and outcomes that permit greater flexibility in how funds are used while at the same time ensuring some national oversight.

Grants previously have been used for enhancing preparedness and recent proposals direct new funding to local governments. In recent discussions, local officials expressed their view that federal grants would be more effective if local officials were allowed more flexibility in the use of funds. They have suggested that some funding should be allocated directly to local governments. They have expressed a preference for block grants,

[11] U.S. General Accounting Office, *Disaster Assistance: Improvement Needed in Disaster Declaration Criteria and Eligibility Assurance Procedures*, GAO-01-837 (Washington, D.C.: August 31, 2001).

[12] U.S. General Accounting Office, *Federal Grants: Design Improvements Could Help Federal Resources Go Further*, GAO-AIMD-97-7 (Washington, D.C.: December 18, 1996).

[13] U.S. General Accounting Office, *Welfare Reform: Challenges in Maintaining a Federal-State Fiscal Partnership*, GAO-01-828 (Washington, D.C.: August 10, 2001).

which would distribute funds directly to local governments for a variety of security-related expenses.

Recent funding proposals, such as the $3.5 billion block grant for first responders contained in the president's fiscal year 2003 budget, have included some of these provisions. This matching grant would be administered by FEMA, with 25 percent being distributed to the states based on population. The remainder would go to states for pass-through to local jurisdictions, also on a population basis, but states would be given the discretion to determine the boundaries of substate areas for such a pass-through—that is, a state could pass through the funds to a metropolitan area or to individual local governments within such an area. Although the state and local jurisdictions would have discretion to tailor the assistance to meet local needs, it is anticipated that more than one-third of the funds would be used to improve communications; an additional one-third would be used to equip state and local first responders, and the remainder would be used for training, planning, technical assistance, and administration.

Regulations

Federal, state, and local governments share authority for setting standards through regulations in several areas, including infrastructure and programs vital to preparedness (for example, transportation systems, water systems, public health). In designing regulations, key considerations include how to provide federal protections, guarantees, or benefits while preserving an appropriate balance between federal and state and local authorities and between the public and private sectors (for example, for chemical and nuclear facilities). In designing a regulatory approach, the challenges include determining who will set the standards and who will implement or enforce them. Five models of shared regulatory authority are:

- fixed federal standards that preempt all state regulatory action in the subject area covered;
- federal minimum standards that preempt less stringent state laws but permit states to establish standards that are more stringent than the federal;
- inclusion of federal regulatory provisions not established through preemption in grants or other forms of assistance that states may choose to accept;
- cooperative programs in which voluntary national standards are formulated by federal and state officials working together; and
- widespread state adoption of voluntary standards formulated by quasi-official entities.

Any one of these shared regulatory approaches could be used in designing standards for preparedness. The first two of these mechanisms involve federal preemption. The other three represent alternatives to preemption. Each mechanism offers different advantages and limitations that reflect some of the key considerations in the federal-state balance.

Tax Incentives

To the extent that private entities will be called upon to improve security over dangerous materials or to protect vital assets, the federal government can use tax incentives to encourage and enforce their activities. Tax incentives are the result of special exclusions, exemptions, deductions, credits, deferrals, or tax rates in the federal tax laws. Unlike grants, tax incentives do not generally permit the same degree of federal oversight and targeting, and they are generally available by formula to all potential beneficiaries who satisfy congressionally established criteria.

Intergovernmental Partnerships and Regional Coordination

Promoting partnerships between critical actors (including different levels of government and the private sector) facilitates the maximizing of resources and also supports coordination on a regional level. Partnerships could encompass federal, state, and local governments working together to share information, develop communications technology, and provide mutual aid. The federal government may be able to offer state and local governments assistance in certain areas, such as risk management and intelligence sharing. In turn, state and local governments have much to offer in terms of knowledge of local vulnerabilities and resources, such as local law enforcement personnel, available to respond to threats and emergencies in their communities.

The importance of readily available urban search and rescue was highlighted in the Loma Prieta earthquake in October 1989 that collapsed the Cypress section of the Nimitz Freeway in Oakland and structures in San Francisco and Santa Cruz. In late 1989, the Governor's Office of Emergency Services developed a proposal to enhance urban search and rescue capabilities in California, and the cornerstone of this proposal was the development of multidiscipline urban search and rescue task forces to be deployed in the event of large-scale disasters. A parallel effort was undertaken by FEMA at that time to upgrade urban search and rescue efforts nationwide. FEMA's national urban search and rescue response teams provide a framework for structuring local emergency personnel into integrated disaster response task forces. FEMA has 28 urban search and rescue teams, with 8 of those teams positioned in California. Twenty of FEMA's 28 teams were deployed to New York in the aftermath of the

tragedy, and five teams were deployed to Washington to help in search and rescue efforts at the Pentagon.

Since the events of September 11th, a task force of mayors and police chiefs has called for a new protocol governing how local law enforcement agencies can assist federal agencies, particularly the FBI, given the information needed to do so. As the United States Conference of Mayors noted, a close working partnership of local and federal law enforcement agencies, which includes the sharing of intelligence, will expand and strengthen the nation's overall ability to prevent and respond to domestic terrorism. The USA Patriot Act provides for greater sharing of intelligence among federal agencies. An expansion of this act has been proposed (S.1615, H.R. 3285) that would provide for information sharing among federal, state, and local law enforcement agencies. In addition, the Intergovernmental Law Enforcement Information Sharing Act of 2001 (H.R. 3483), which you sponsored Mr. Chairman, addresses a number of information-sharing needs. For instance, this proposed legislation provides that the United States Attorney General expeditiously grant security clearances to governors who apply for them, and state and local officials who participate in federal counterterrorism working groups or regional terrorism task forces.

Local officials have emphasized the importance of regional coordination. Regional resources, such as equipment and expertise, are essential because of proximity, which allows for quick deployment, and experience in working within the region. Large-scale or labor-intensive incidents quickly deplete a given locality's supply of trained responders. Some cities have spread training and equipment to neighboring municipal areas so that their mutual aid partners can help. These partnerships afford economies of scale across a region. In events that require a quick response, such as a chemical attack, regional agreements take on greater importance because many local officials do not think that federal and state resources can arrive in sufficient time to help.

Mutual aid agreements provide a structure for assistance and for sharing resources among jurisdictions in response to an emergency. Because individual jurisdictions may not have all the resources they need to respond to all types of emergencies, these agreements allow for resources to be deployed quickly within a region. The terms of mutual aid agreements vary for different services and different localities. These agreements may provide for the state to share services, personnel, supplies, and equipment with counties, towns, and municipalities within the state, with neighboring states, or, in the case of states bordering

Canada, with jurisdictions in another country. Some of the agreements also provide for cooperative planning, training, and exercises in preparation for emergencies. Some of these agreements involve private companies and local military bases, as well as local government entities. Such agreements were in place for the three sites that were involved on September 11th— New York City, the Pentagon, and a rural area of Pennsylvania—and provide examples of some of the benefits of mutual aid agreements and of coordination within a region.

With regard to regional planning and coordination, there may be federal programs that could provide models for funding proposals. In the 1962 Federal-Aid Highway Act, the federal government established a comprehensive cooperative process for transportation planning. This model of regional planning continues today under the Transportation Equity Act for the 21st century (TEA-21, originally ISTEA) program. This model emphasizes the role of state and local officials in developing a plan to meet regional transportation needs. Metropolitan Planning Organizations (MPOs) coordinate the regional planning process and adopt a plan, which is then approved by the state.

Mr. Chairman, in conclusion, as increasing demands are placed on budgets at all levels of government, it will be necessary to make sound choices to maintain fiscal stability. All levels of government and the private sector will have to communicate and cooperate effectively with each other across a broad range of issues to develop a national strategy to better target available resources to address the urgent national preparedness needs. Involving all levels of government and the private sector in developing key aspects of a national strategy that I have discussed today—a definition and clarification of the appropriate roles and responsibilities, an establishment of goals and performance measures, and a selection of appropriate tools—is essential to the successful formulation of the national preparedness strategy and ultimately to preparing and defending our nation from terrorist attacks.

This completes my prepared statement. I would be pleased to respond to any questions you or other members of the subcommittee may have.

Contacts and Acknowledgments

For further information about this testimony, please contact me at (202) 512-6737, Paul Posner at (202) 512-9573, or JayEtta Hecker at (202) 512-2834. Other key contributors to this testimony include Jack Burriesci,

Matthew Ebert, Colin J. Fallon, Thomas James, Kristen Sullivan Massey, Yvonne Pufahl, Jack Schulze, and Amelia Shachoy.

Related GAO Products

Homeland Security

Homeland Security: Challenges and Strategies in Addressing Short- and Long-Term National Needs. GAO-02-160T. Washington, D.C.: November 7, 2001.

Homeland Security: A Risk Management Approach Can Guide Preparedness Efforts. GAO-02-208T. Washington, D.C.: October 31, 2001.

Homeland Security: Need to Consider VA's Role in Strengthening Federal Preparedness. GAO-02-145T. Washington, D.C.: October 15, 2001.

Homeland Security: Key Elements of a Risk Management Approach. GAO-02-150T. Washington, D.C.: October 12, 2001.

Homeland Security: A Framework for Addressing the Nation's Issues. GAO-01-1158T. Washington, D.C.: September 21, 2001.

Combating Terrorism

Combating Terrorism: Considerations for Investing Resources in Chemical and Biological Preparedness. GAO-01-162T. Washington, D.C.: October 17, 2001.

Combating Terrorism: Selected Challenges and Related Recommendations. GAO-01-822. Washington, D.C.: September 20, 2001.

Combating Terrorism: Actions Needed to Improve DOD's Antiterrorism Program Implementation and Management. GAO-01-909. Washington, D.C.: September 19, 2001.

Combating Terrorism: Comments on H.R. 525 to Create a President's Council on Domestic Preparedness. GAO-01-555T. Washington, D.C.: May 9, 2001.

Combating Terrorism: Observations on Options to Improve the Federal Response. GAO-01-660T. Washington, D.C.: April 24, 2001.

Combating Terrorism: Comments on Counterterrorism Leadership and National Strategy. GAO-01-556T. Washington, D.C.: March 27, 2001.

Combating Terrorism: FEMA Continues to Make Progress in Coordinating Preparedness and Response. GAO-01-15. Washington, D.C.: March 20, 2001.

Combating Terrorism: Federal Response Teams Provide Varied Capabilities; Opportunities Remain to Improve Coordination. GAO-01-14. Washington, D.C.: November 30, 2000.

Combating Terrorism: Need to Eliminate Duplicate Federal Weapons of Mass Destruction Training. GAO/NSIAD-00-64. Washington, D.C.: March 21, 2000.

Combating Terrorism: Observations on the Threat of Chemical and Biological Terrorism. GAO/T-NSIAD-00-50. Washington, D.C.: October 20, 1999.

Combating Terrorism: Need for Comprehensive Threat and Risk Assessments of Chemical and Biological Attack. GAO/NSIAD-99-163. Washington, D.C.: September 7, 1999.

Combating Terrorism: Observations on Growth in Federal Programs. GAO/T-NSIAD-99-181. Washington, D.C.: June 9, 1999.

Combating Terrorism: Analysis of Potential Emergency Response Equipment and Sustainment Costs. GAO-NSIAD-99-151. Washington, D.C.: June 9, 1999.

Combating Terrorism: Use of National Guard Response Teams Is Unclear. GAO/NSIAD-99-110. Washington, D.C.: May 21, 1999.

Combating Terrorism: Observations on Federal Spending to Combat Terrorism. GAO/T-NSIAD/GGD-99-107. Washington, D.C.: March 11, 1999.

Combating Terrorism: Opportunities to Improve Domestic Preparedness Program Focus and Efficiency. GAO-NSIAD-99-3. Washington, D.C.: November 12, 1998.

Combating Terrorism: Observations on the Nunn-Lugar-Domenici Domestic Preparedness Program. GAO/T-NSIAD-99-16. Washington, D.C.: October 2, 1998.

Combating Terrorism: Threat and Risk Assessments Can Help Prioritize and Target Program Investments. GAO/NSIAD-98-74. Washington, D.C.: April 9, 1998.

	Combating Terrorism: Spending on Governmentwide Programs Requires Better Management and Coordination. GAO/NSIAD-98-39. Washington, D.C.: December 1, 1997.
Public Health	*Bioterrorism: The Centers for Disease Control and Prevention's Role in Public Health Protection. GAO-02-235T. Washington, D.C.: November 15, 2001.* *Bioterrorism: Review of Public Health and Medical Preparedness. GAO-02-149T. Washington, D.C.: October 10, 2001.* *Bioterrorism: Public Health and Medical Preparedness. GAO-02-141T. Washington, D.C.: October 10, 2001.* *Bioterrorism: Coordination and Preparedness. GAO-02-129T. Washington, D.C.: October 5, 2001.* *Bioterrorism: Federal Research and Preparedness Activities. GAO-01-915. Washington, D.C.: September 28, 2001.* *Chemical and Biological Defense: Improved Risk Assessments and Inventory Management Are Needed. GAO-01-667. Washington, D.C.: September 28, 2001.* *West Nile Virus Outbreak: Lessons for Public Health Preparedness. GAO/HEHS-00-180. Washington, D.C.: September 11, 2000.* *Need for Comprehensive Threat and Risk Assessments of Chemical and Biological Attacks. GAO/NSIAD-99-163. Washington, D.C.: September 7, 1999.* *Chemical and Biological Defense: Program Planning and Evaluation Should Follow Results Act Framework. GAO/NSIAD-99-159. Washington, D.C.: August 16, 1999.* *Combating Terrorism: Observations on Biological Terrorism and Public Health Initiatives. GAO/T-NSIAD-99-112. Washington, D.C.: March 16, 1999.*

Disaster Assistance	*Disaster Assistance: Improvement Needed in Disaster Declaration Criteria and Eligibility Assurance Procedures. GAO-01-837. Washington, D.C.: August 31, 2001.* *Federal Emergency Management Agency: Status of Achieving Key Outcomes and Addressing Major Management Challenges. GAO-01-832. Washington, D.C.: July 9, 2001.* *FEMA and Army Must Be Proactive in Preparing States for Emergencies. GAO-01-850. Washington, D.C.: August 13, 2001.*
Budget and Management	*Results-Oriented Budget Practices in Federal Agencies. GAO-01-1084SP. Washington, D.C.: August 2001.* *Managing for Results: Federal Managers' Views on Key Management Issues Vary Widely across Agencies. GAO-01-0592. Washington, D.C.: May 2001.* *Determining Performance and Accountability Challenges and High Risks. GAO-01-159SP. Washington, D.C.: November 2000.* *Managing for Results: Using the Results Act to Address Mission Fragmentation and Program Overlap. GAO/AIMD-97-156. Washington, D.C.: August 29, 1997.* *Government Restructuring: Identifying Potential Duplication in Federal Missions and Approaches. GAO/T-AIMD-95-161. Washington, D.C.: June 7, 1995.* *Government Reorganization: Issues and Principals. GAO/T-GGD/AIMD-95-166. Washington, D.C.: May 17, 1995.*
Grant Design	*Grant Programs: Design Features Shape Flexibility, Accountability, and Performance Information. GAO/GGD-98-137. Washington, D.C.: June 22, 1998.* *Federal Grants: Design Improvements Could Help Federal Resources Go Further. GAO/AIMD-97-7. Washington, D.C.: December 18, 1996.* *Block Grants: Issues in Designing Accountability Provisions. GAO/AIMD-95-226. Washington, D.C.: September 1, 1995.*

Mr. HORN. Thank you. We will now go to questions and I've got a few just to wrap up the last panel and this one.

Mr. Riordan, we understand that the Department of Defense has a list of biological agents that it is unwilling to share with water districts. Is that true?

Mr. RIORDAN. There was a published report that there was a list of available agents that we could use as a tool for detecting contamination in water systems. It was published prior to September 11th and then right after September 11th, obviously, everyone started stepping-up the procedure to start figuring out what we need to test for. We went to the same Web sites and all that information was stripped off.

The same access to that information was now gone because it was considered classified information. While it was available prior to that, there wasn't enough preparedness efforts taking care of prior to September 11th to give that information out or disseminate it. When people were aware of it they went to look for it again and they discovered that it was now considered confidential or classified so we couldn't get that same information.

Mr. HORN. Now, we have very fine laboratories at Walter Reed. We have the Food and Drug, we have the CDC. I just wonder what is your feeling on that, Dr. Bice, the Director of the Stockpile, but you are a major employee of the Center for Disease Control and Prevention. What do you think about this business of not sharing biological agents with water districts?

Dr. BICE. Mr. Chairman, that is a tough question for me to answer. Let me just say that I am fully aware of the complexities after September 11th of classifying data and what we thought was public information prior to that time that we all are now concerned about that information getting into the wrong hands.

At the same time we are a public health and prevention agency. We go out of our way to share as much data as we possibly can with our colleagues in water districts, as well as any other health related arena.

But there is a classic dilemma when it comes to sharing information which could potentially be useful to terrorists and sharing that same information with our colleagues to help them better prepare. Guidelines in this regard would be exceedingly helpful and I know that Governor Ridge's Office is moving in that direction.

Mr. HORN. OK. That's helpful Would you go back to the smallpox issue which we were talking about. Are those 30-year-old vaccines still potent?

Dr. BICE. Yes, sir. They are.

Mr. HORN. They are? So they can be used?

Dr. BICE. That's affirmative. Yes, sir. They can.

Mr. HORN. Have we played out this thing with some of the countries that have that and how many vials of the vaccines do we have and if you were a foreign power or whatever, that would take how many and have we got enough in the warehouses now?

Dr. BICE. Sir, the answer to that question is somewhat complex. I'm not an intelligence expert and so, Mr. Mefford, I will defer that aspect of an answer to colleagues in FBI and other intelligence agencies.

With respect to the vaccines that are either being produced today under contract to HHS or that are in stockpiles, we will by the end of this calendar year buy enough vaccine to vaccinate the citizens of the United States should that become necessary.

Mr. HORN. OK. Let's see if we have any little roundup things to get this.

Mr. Mefford, I think we were sort of surprised to hear that there is still a communication gap when it comes to intelligence. I know the FBI is doing a lot to do it and I agree with them that if you are going to give it to somebody in a police department or whatever, you are going to check that person out so that they are not under pressure and they are not giving out data. I just wondered here tell us a little on where the FBI is going on this.

Mr. MEFFORD. Yes, Mr. Chairman. In San Francisco we have developed a program where every member, non-FBI member of the Joint Terrorism Task Force receives a top secret clearance. In addition, their agency can designate other officers from all of the 24 additional agencies that participate in this task force. We are undergoing, right now, a number of security classification background investigations to give designated personnel and all of the participants of the task force the necessary security clearances to receive the raw data.

Having said that, as you know, much of the information can be distilled and we can release it in a public form. Clearly we look for opportunities to do that. Our problem is we need to better enhance our capabilities to make rhyme or reason of the vast amount of intelligence data that is out there.

Sometimes we are overwhelmed with information. As you know, we are struggling with an archaic computer system within the FBI; but we need to do a better job of analyzing the data and determining exactly what is relevant; and then getting that threat information to the local and State agencies that have a need to know. We have a ways to go, but the Director has identified our weaknesses; and we are moving, I think, as rapidly as we possibly can to improve.

Mr. HORN. That's good.

I now yield 10 minutes to my colleague, Mr. Honda.

Mr. HONDA. Thank you, Mr. Chairman. I want to thank the witnesses for testifying today also.

One of the concerns that came up earlier in the first panel was funding and grant processes. To both Mr. Castleman and Ms. Dalton, perhaps you can respond to the question. Will there be a one process or one stop mechanism for grants and flow of revenue for the Federal down to the local government?

Mr. CASTLEMAN. We are still developing the mechanism which we hope to be very practical and user friendly for that process. We've been in the business of grants management for some time. Most recently another subject, fire grants, we were able to do that over the Internet to make it easier for local fire departments to apply for grants. We are hoping for something simple and easy to use for first provider grants as well, but that is still under development.

Mr. HONDA. So it is work in progress?

Mr. CASTLEMAN. Yes.

Mr. HONDA. The flow of the revenues, would that be done functionally or is it structural meaning will it go through State, county, local, or will it go to entities that are more complex that could go directly versus counties that need help from the State?

Mr. CASTLEMAN. It will go to the State for determination down to the local level from the State.

Ms. DALTON. One of the issues that will need to be addressed is that there are multiple sources of funding. There are a number of Federal agencies that are involved in giving money to the State and local governments. FEMA does have a primary responsibility. One of the things I believe the States and local governments are seeing is not just one face to the Federal Government but multiple faces.

There are some models within the Federal Government in terms of distribution of funds. For example, in our training and employment programs there has been a move toward one stop centers to funnel out services and that certainly would be a possible model to be examined.

What FEMA alone is doing is a good step in the right direction but we have to look at the total government and present that single face and hopefully the national strategy that Governor Ridge is developing will start addressing some of those issues. It certainly is a problem that we need to be dealing with.

Mr. HONDA. So what I hear you saying is that FEMA has just put one tree in the forest.

Ms. DALTON. Yes, sir.

Mr. HONDA. In your report you indicated there are many agencies with many grant sources. Have you suggestions on how that can be put out there electronically so that people that want to write grants can look at a myriad at once and pull from various sources so that they don't have to go through a lot of repetitious work? Is there a way to make it simple?

Ms. DALTON. Certainly I think there are ways to make it simpler than what it is. It will take a concerted and coordinated effort on the part of the Federal Government, the Congress, and the executive branch in order to address this issue.

Mr. HONDA. So you are saying you can identify it but it is not your purview to correct it? It's up to somebody else to sort of figure out how to do that?

Ms. DALTON. Right. I think the national strategy should address some of these issues through the budget process. Hopefully there will be some solutions. There are, as I said, some models within the Federal Government alone of trying to integrate the delivery of services and I think that is what we are talking about here.

Mr. HONDA. I heard you use that term national strategy. Is that term applicable to a variety of things that we need to do within the context of counterterrorism?

Ms. DALTON. The national strategy we believe will at least put a framework and define roles and responsibilities, not just for the Federal Government but should be State, local, and private sector.

Mr. HONDA. OK.

Mr. RIORDAN. Just one additional item is typical of most grant applications you have to reveal a report of some sort. I think it is

very important to maintain the security of the information that is presided or presented in any reports that do come out of grants.

That is one of the concerns we did have initially of the EPA grants that came up for water systems, vulnerability assessments. We don't want to release a lot of information on what our vulnerabilities are. I think that is very critical as well is whatever grant process is decided upon.

Mr. HONDA. There has been a term out there called national threat risk assessment. Is that being done? If so, by whom? If we are doing it, when will it be ready? Does anybody know?

Mr. RIORDAN. Well, I do know for the process for the EPA grants, EPA worked closely with Sandia National Labs on applying their risk assessment model to the water industry.

They just finished eight different workshops across the Nation trying to provide this information to the water utilities on how to apply this risk assessment model to the water industry which presents a huge issue for us as a water industry because our system spans such a large area, maybe 90 miles worth of facility.

It is not like trying to secure one facility. It may be a multitude of facilities over a long or large area which creates a major concern for us because you can't apply the same information. I do know that is one risk model that is being presented out there.

Mr. HONDA. Are there other models?

Ms. DALTON. Yes, there are. Usually the risk assessment models are targeted toward a specific sector. Currently there are a number of different models that are being used at the Federal level for the various agencies. As Chairman Horn pointed out, the General Accounting Office has some 60 reports in these various areas, some of which are dealing with the risk assessments.

Mr. HONDA. Thank you. I think it was Dr. Bice that answered the question that you have sufficient vaccines for this country for smallpox. When you answered yes for everyone in this country, then I assume that you are saying that by the end of the year there would be approximately 340 million vaccines available?

Dr. BICE. That is approximately the case. Yes sir.

Mr. HONDA. And the deployment of the vaccines to local hospitals and health centers, how will that be done?

Dr. BICE. Well, sir, it will be held in a repository—several repositories around the United States. It is a policy decision at the congressional level. At HHS it is above my pay grade, sir, to answer the question but, the truth is, we will have the vaccines. How we will distribute it in an emergency we have those plans that we've drawn up in the National Pharmaceutical Stockpile Program, but the truth of the matter is there are policy decisions that have to precursor that.

Mr. HONDA. Such as cost of distribution and cost of acquisition? Is that also part of that? Is there a cost to local government on that?

Dr. BICE. There would definitely be a cost. Not so much of acquisition but a cost of storage and distribution. Once it hit a State level airfield, a State level facility for them to further distribute it out to people they would incur human resource costs and transportation costs and others. Yes, sir.

Mr. HONDA. You said that the stockpile is still viable. The new stock is it more viable or equal viability?

Dr. BICE. I guess the easiest way to answer the question is that they are both viable vaccines. They both can be used, the new vaccines as well as the vaccine that is in storage.

Mr. HONDA. So you are saying they are of equal viability and use even though they have been stored for a couple of decades?

Dr. BICE. A number of years. Yes, sir.

Mr. HONDA. I guess, Ms. Cherry, did you have a comment?

Ms. CHERRY. Yes. Thank you. I would like to add a little bit on the Sandia Lab vulnerability assessment tool being used by water systems. This model was originally developed for our nuclear power facilities and then it was modified to be applied to water systems.

I think it is a good model and has applications for our larger water systems but it lacks the analyses of the soft side of water systems being management, operation, and administration. It is important that whatever model be applied to water systems, that it look at all aspects of the water systems, not just the infrastructure and water system components.

Mr. HONDA. What did you mean by soft?

Ms. CHERRY. The model looks at the physical infrastructure of the water system, pumps and pipelines and treatment, and it doesn't get into the specifics of management, operation, and administration.

Mr. HONDA. Thank you, Mr. Chair.

Mr. RIORDAN. We would concur as a large water utility we found the same thing. Even though we all attended that same training there were a lot of issues not covered by that assessment process.

Dr. BURTON. If I could, I would just share a comment on the smallpox discussion. Dr. D. A. Henderson and the Office of Public Health Preparedness has convened a group under the Center for Disease Control and Advisory Immunization Practices Group that will be specifically looking at recommendations and policy implications of how best to use the smallpox vaccine as it becomes available. The timeline he set for that is that the recommendations will be out of that group, national cross-disciplinary group, by sometime late summer but before the vaccine will be fully available so we will be ready to use it as best we can.

Mr. HORN. Well, I want to thank this panel and the first panel. It's been a very useful and, I think, very realistic matter. Thank you for taking your time out. You all have a lot of things to do. All of these things don't happen unless a lot of people relate to this.

Our subcommittee staff is headed by the gentleman in the back there, J. Russell George, Staff Director and Chief Counsel. To my left for this particular hearing is Bonnie Heald, the Deputy Staff Director, Justin Paulhamus, the Majority Clerk, is that very high guy that comes and gets things done. Thank you, Justin.

Earl Pierce had to stay at home. He was the professional staff member who was not here today but helped coordinate everyone's testimony. Then from Congressman Honda's office, Ernest Baynard is the Communications Director and we appreciate all of his help. Speaking of communications director, David Schwaegler of the Lawrence Livermore National Laboratory also was very helpful on the communications. We are very grateful to the judge of this

court, Judge Patel and her staff. We appreciate very much what we could do and couldn't do and did. We also have the General Services Administration, James Lew, Property Manager, and Ian Keye, Operational Analyst.

And the court reporters are George Palmer and Susan Palmer. That's a tough job with all the people and different things as we go across the country. Thank you all. With that, we are adjourned.

[Whereupon, at 12:35 p.m., the hearing was adjourned.]

○