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Testimony:

Good morning, Mr. Chairman and other Members of the Committee. I am Dr. Mark B. McClellan, Commissioner of Food and Drugs in the Department of Health and Human Services (HHS). I am pleased to be here today with my colleagues from two of our sister agencies, Dr. Julie Gerberding of the Centers for Disease Control and Prevention (CDC) and Dr. Elias Zerhouni of the National Institutes of Health (NIH). The Food and Drug Administration (FDA or the Agency) appreciates the opportunity to discuss some of FDA's counterterrorism activities and to discuss the biodefense workforce issues raised in the recent report by the Partnership for Public Service entitled, Homeland Insecurity: Building the Expertise to Defend America from Bioterrorism.

In my testimony today, I will first briefly describe FDA's role in counterterrorism activities. Second, I will address a significant omission in the report and describe the food safety and food security responsibilities of the FDA. Third, I will discuss the development and availability of countermeasures and the Administration's Project BioShield initiative. Finally, I will describe FDA's actions to improve our ability to recruit and retain the types and numbers of staff necessary to defend against terrorist attacks.

FDA's Role in Counterterrorism Activities

FDA is the Federal agency that is responsible for ensuring that 80 percent of the food supply, all foods except meat, poultry, and certain egg products, are safe and sanitary; that human and veterinary drugs, biological products, medical devices, and radiological products are safe and effective; and that cosmetics are safe. With more opportunities but more costs and complexity than ever in the development of better medicines and foods, FDA must increasingly focus on ways to reduce the high cost, time, and uncertainty of the process of translating scientific breakthroughs into safe and effective products that can be produced reliably. FDA is also responsible for assuring that the health consequences of foods and medicines are accurately and honestly represented to the public, so that they can be used as effectively as possible to protect and improve the public health.

FDA's primary mission is to protect the public health. Ensuring that FDA-regulated products are safe and secure is a vital part of that mission. FDA plays a central role in the nation's defense against terrorism. First, terrorists could use an FDA-regulated product, such as food, as a vehicle for biological, chemical, or radiological agents. Second, FDA-regulated products, such as human and animal drugs, vaccines, tissues, blood, and blood products, will play a central role in countering or preventing the effects of terrorism. It is FDA's responsibility, working closely within HHS and with other Federal agencies, state, and local governments, industry, and the public, to reduce the chance that an FDA-regulated product is misused to terrorize Americans and to help ensure that the nation's public health system is prepared to deter a potential threat and is ready to respond to an act of terrorism.

FDA's Food Safety and Security Responsibilities and Activities

Now, I would like to address a significant omission in the Partnership's report and describe FDA's food safety and food security programs.

The section in the Partnership's report entitled "The Threat to Our Food Supply" fails to mention the FDA's significant responsibilities for safeguarding the food supply. FDA regulates 80 percent of the national food supply—practically everything we eat except for meat, poultry, and certain egg products, which are regulated by our colleagues at the U.S. Department of Agriculture (USDA). FDA's responsibility also extends to live food animals and animal feed.

Food safety and food security continue to be top priorities for this Administration. The events of September 11, the discovery of terrorist cells in Europe, the potential threat of a terrorist attack on the nation's critical infrastructure – all of this means that our mission must include protecting Americans from those who would harm us through our food supply. A terrorist attack on the food supply could pose both severe public health and economic impacts, while damaging the public's confidence in the food we eat.

And so FDA's mission today is not only about food safety – it is fundamentally about food security as well. The changes in food security that we are implementing now amount to the most fundamental enhancements in our food safety activities in many years. Yesterday, Secretary Thompson and I issued a report entitled "Ensuring the Safety and Security of the Nation's Food Supply." The report outlines a clear and comprehensive approach to protecting the safety and security of our food supply.

In these new efforts, FDA has many partners. We are working closely with our Federal partners such as the U.S. Department of Agriculture (USDA), the new Department of Homeland Security, and the Homeland Security Council at the White House. I would like to call special attention to our close working relationships with CDC, our sister public health agency, Customs and Border Protection in the Department of Homeland Security, and USDA's Food Safety and Inspection Service, our counterpart agency responsible for meat, poultry, and certain egg products. Some of our other Federal partners include USDA's Animal and Plant Health Inspection Service, USDA's Foreign Agriculture Service, Army Veterinary Services, Department of Commerce's National Oceanic and Atmospheric Administration, the Environmental Protection Agency, and the Department of Treasury's Alcohol and Tobacco Tax and Trade Bureau.

Implementation of the Bioterrorism Act

As you know, Title III of the Public Health Security and Bioterrorism Preparedness and Response Act of 2002 (Bioterrorism Act) provided the Secretary of Health and Human Services with new authority to protect the nation's food supply against the threat of intentional contamination and other food-related emergencies. FDA is responsible for implementing these food security provisions. Let me commend you, Mr. Chairman, for your leadership, as well as that of the Ranking Member and other Members of the Committee, in enacting this landmark legislation.

The Agency is working hard to implement this law effectively and efficiently. We have already published four proposed regulations to implement some of the provisions of the Bioterrorism Act. These regulations address four provisions of the law: registration of domestic and foreign food facilities, prior notice of imported food shipments, the

establishment and maintenance of records, and administrative detention. We intend to publish final regulations on two of these provisions in October of this year and the remaining two in December. These new authorities will enable FDA to act quickly in responding to a threatened or actual terrorist attack.

Vulnerability and Threat Assessments

In addition to implementation of the Bioterrorism Act, FDA has been engaged in numerous other food security activities. As part of our efforts to anticipate threats to the food supply, we have conducted a scientific vulnerability assessment of different categories of food, determining the most serious risks of intentional contamination during various stages of food production and distribution. This assessment utilized an analytical framework called Operational Risk Management (ORM) that considers both the severity of the public health and economic impacts of a potential attack on our food supply and the likelihood of such an event taking place.

FDA also awarded a task order to the Institute of Food Technologists (IFT) to conduct an in-depth review of ORM and provide a critique of its application to food security. This review validated FDA's vulnerability assessment and provided additional information on the public health consequences of a range of scenarios involving various products, agents, and processes. FDA also contracted with Battelle Memorial Institute to conduct a "Food and Cosmetics, Chemical, Biological, and Radiological Threat Assessment." The assessment affirmed the findings of the ORM assessment. It also provided an additional decision-making tool for performing risk assessments. Further, the Battelle assessment made a number of recommendations that addressed research needs, the need for enhanced laboratory capability and capacity, and the need for enhanced partnerships between Federal, state, and local governments to ensure food security.

FDA is conducting additional assessments regarding the vulnerability of FDA-regulated foods to intentional contamination with biological, chemical, and radiological agents.

These assessments use processes adapted from techniques developed by the U.S.

Department of Defense for use in assessing the vulnerabilities of military targets to asymmetric threats. Results of the assessments will be used to develop countermeasures, identify research needs, and provide guidance to the private sector.

Emergency Preparedness and Response

FDA has established an Office of Crisis Management to coordinate the preparedness and emergency response activities within FDA and with our Federal, state, and local counterparts. Over the past two years, FDA has participated in and conducted multiple emergency response activities. Frequently, these exercises are coordinated with other Federal and state agencies. For example, FDA and USDA's Food Safety and Inspection Service have focused on strengthening their working relationships by the joint testing of several response plans in an exercise environment.

In May of this year, FDA participated in the TOPOFF2 counterterrorism exercise. This was a national, full-scale, fully functional exercise intended to simulate two separate terrorist attacks: detonation of a "dirty bomb" in Seattle and aerosol release of plague in Chicago. The ensuing response involved participation from 17 Federal Departments and Agencies, the state governments of Washington and Illinois, the local governments of the affected cities, and the Canadian Government.

FDA's response was coordinated from our Emergency Operations Center on an around-the-clock basis throughout the exercise. FDA performed duties as if this were a real

event. At the Seattle venue, FDA's Center for Devices and Radiological Health (CDRH) monitored the dispersion of the radioactivity from the blast site. The Center for Food Safety and Applied Nutrition (CFSAN), in conjunction with other Federal and state officials, formulated a plan for sampling contaminated sites and developed recommendations regarding the shipment and consumption of potentially contaminated foods. In addition, the Center for Drug Evaluation and Research (CDER) provided guidance on the availability of medical countermeasures that would have been effective in this situation. The Center for Biologics Evaluation and Research (CBER) developed draft guidance on blood and tissue donor deferral for radiation exposure. In the TOPOFF2 Chicago venue, representatives from CBER and CDER worked with CDC to provide guidance on medical countermeasures and their availability. CDRH provided information on diagnostic kits for plague in addition to ventilator inventory information. FDA's Center for Veterinary Medicine (CVM) issued guidance on animal species susceptible to plague and worked with USDA's Animal and Plant Health Inspection Service to develop an emergency vaccine to prevent continued transmission of the disease. In September 2002, FDA led an exercise to test our draft biological and chemical agent response plan and to test our Agency's coordination and communication. In January 2002, FDA led another emergency response exercise with representatives from CDC, USDA, the Federal Bureau of Investigation, the Department of Defense, state agencies, and others. The purpose of this exercise was to improve coordination of responses among various agencies, so that those responses are smooth and appropriate and so that all needed parties are involved. Other exercises are being planned. We have also reviewed food security and rapid response and recovery procedures with industry groups and trade associations.

Laboratory Enhancements

An additional step in enhancing our response capability is to improve our laboratory capacity. A critical component of controlling threats from deliberate food-borne contamination is the ability to rapidly test large numbers of samples of potentially contaminated foods for a broad array of biological, chemical, and radiological agents. We have been working with CDC to augment our "surge capacity" by working to expand the nationwide Laboratory Response Network and the Food Emergency Response Network (FERN) to include a substantial number of counterterrorism laboratories capable of analyzing foods. We are accomplishing this expansion in capacity through agreements with other Federal and state laboratories. As of June 2003, there were 63 laboratories representing 27 states participating in FERN, including five Federal laboratories. Participation continues to grow. By working together with our Federal and State partners, we will have the ability to test a much higher than normal volume of samples. With CDC, we recently announced grants that states can use to buy special laboratory equipment and reagents and to develop skills to ensure there is a national network of laboratories that are ready to assess and respond to a food security emergency.

We also are expanding Federal, state, and local involvement in our eLEXNET system by increasing the number of laboratories around the country that participate in this electronic data system. eLEXNET is a seamless, integrated network that allows multiple agencies engaged in food safety activities to compare, communicate, and coordinate findings of

laboratory analyses. It enables health officials to assess risks and analyze trends, and it provides the necessary infrastructure for an early-warning system that identifies potentially hazardous foods. At present, there are 95 laboratories representing 48 states that are part of the eLEXNET system. We are continuing to increase the number of participating laboratories.

Research

We have embarked on an ambitious research agenda throughout the Agency to address potential terrorist threats. To enhance food security, FDA has significantly redirected existing research staff to ensure that appropriate resources are focused on priority food safety and security issues. For example, research sponsored by FDA's CFSAN is aimed at developing the tools essential for testing a broad array of food products for a multiple number of biological and chemical agents. We are actively working with our partners in government, industry, and academia to develop such methods. FDA's work with the Association of Official Analytical Chemists on validating analytical methods for the detection of biological, chemical, and radiological agents in foods is considered the "gold standard" against which other validations programs are judged. Likewise, the FDA's research on microbial genomics and analytical chemistry is widely recognized for its importance to other Federal agencies charged with forensic investigations of terrorism events. In compliance with Section 302 of the Bioterrorism Act, we will soon be submitting a report to this Committee that will provide additional details about the research that is underway.

Operation Liberty Shield and Industry Guidance

In March 2003, the Federal government launched Operation Liberty Shield to increase security and readiness at a time of elevated risk for terrorist attack. Operation Liberty Shield is a comprehensive national plan designed to increase protections for America's citizens and infrastructure while maintaining the free flow of goods and people across our border with minimal disruption to our economy and way of life. FDA's Office of Regulatory Affairs (ORA) conducted a number of targeted inspections of domestic and imported products as part of this initiative. ORA also increased joint activities with Federal, state, and local partners. Also as part of Operation Liberty Shield, we issued guidance documents for the food industry on the security measures it may take to minimize the risk that food under their control will be subject to tampering or other malicious, criminal, or terrorist actions. We have issued such guidance for food producers, processors, and transporters, for importers and filers, for retail food stores and food service establishments, and for cosmetic processors and transporters. In addition, we just recently issued specific security guidance for the milk industry.

Additional Counterterrorism Employees

The Fiscal Year 2002 supplemental counterterrorism funds enabled FDA to hire about 800 employees. Most of these additional employees were hired by ORA to address food safety and security issues, primarily at the border. With these additional employees, we have expanded FDA's presence at ports of entry, increased surveillance of imported foods, increased domestic inspections, and enhanced our laboratory analysis capacity. More specifically, within the last two years, we have more than doubled the number of ports that have an FDA presence from 40 to 90 ports. We have more than quintupled the number of food examinations at the border. So far this year, we have performed 62,000 food import examinations compared to 12,000 two years ago. We surpassed our goal of

48,000 import examinations this year due to increased surveillance of imported food products during Operation Liberty Shield when the nation was at a heightened security alert status.

Medical Countermeasures and Project BioShield

Today, the U.S. is better prepared than ever to meet the threat of terrorist attack with a biological, chemical, radiological, or nuclear agent. FDA plays a critical role in the response to a terrorist act. A primary responsibility is the expeditious development and licensing of products to diagnose, treat, or prevent outbreaks from exposure to bioterrorist agents. FDA scientists guide the products through the development and marketing application review processes, which include review of the manufacturing process, pre-clinical testing, clinical trials, and the licensing and approval process.

FDA has been engaged in an accelerated effort to help to develop and make available better countermeasures. For example, in recent months, FDA has taken major steps to make available safe and effective treatments for certain nerve gases and radiological agents, and the Government has enhanced the national stockpiles of vaccines and treatments for smallpox and other possible agents of biowarfare. FDA also has sought data to provide the regulatory basis for defining the safety and efficacy of medical countermeasures. In addition, FDA has initiated collaborations with industry to utilize any additional data it may possess.

In effect, FDA's actions eliminate preliminary steps in the approval process for certain medical countermeasures. For example, during the anthrax crisis in 2001, FDA reviewed available data and safety information to conclude that two approved drugs not typically considered indicated for treatment of anthrax exposure, doxycycline and procaine penicillin G, could be safely used to treat anthrax exposure without any additional clinical trials. More recently, FDA reviewed the data on treatments for radiation exposure and determined that Prussian Blue was safe and effective in treating people exposed to radioactive elements such as cesium-137. After a review of the published literature, FDA determined that 500 mg Prussian Blue capsules would be safe and effective for the treatment of patients with known or suspected internal contamination with radioactive thallium, non-radioactive thallium, or radioactive cesium. FDA's guidance to industry and approved labeling for Prussian Blue products gives manufacturers critical information necessary for producing an FDA-approved product that will be an important medical countermeasure.

In reviewing the lessons learned after the anthrax attacks, we identified the need for additional mechanisms for healthcare providers and the general public to report their outcomes or product-related adverse events to the FDA. To address this need, FDA and CDC have created a working group to define mechanisms, processes, and training needed to integrate Federal, state, and local follow-up activities. In addition, FDA participates in a number of interagency working groups to address laboratory surge capacity, prophylactic countermeasures, and novel pathogens.

CBER is working closely with industry and other government agencies in an effort to assure an adequate supply of products for immunization against anthrax, smallpox, and other substances that might be used by terrorists and to evaluate adverse experiences reported after administration of anthrax vaccine in order to optimize its safe use. With the FY 2002 supplemental counterterrorism funds, CBER was able to hire 97 full-time equivalent (FTEs) employees to assist in the regulation of the development and licensure

of new biological products including vaccines, blood, and blood products. Current workforce data indicate that CBER has approximately 200 FTEs dedicated toward counterterrorism activities.

CDER has created a specific counterterrorism office to facilitate the product development of medical countermeasures. In addition to the numerous Center review staff, more than 30 employees are dedicated full-time to facilitating the identification of promising products. These employees assist both external and internal groups in defining and developing the science and databases necessary to move products toward full approval as a medical countermeasure.

CDER has leveraged its science-based regulatory mission by pooling its resources with other Federal agencies to fund homeland defense research to develop medical countermeasures. This research has addressed the need for drugs to treat plague, the safety of long-term antibiotic use, and the use of medical countermeasures in special populations, such as children, the elderly, and pregnant women. The research has also included the development of animal models to test drugs for biological threats. For example, working with other Federal agencies such as the Department of Defense, NIH, and CDC, FDA has developed the following research activities:

- Monkey studies involving numerous antibiotics for the treatment of plague;
- Human trials in plague-endemic areas; and
- Small animal models in viral hemorrhagic fevers.

The pro-active approaches described above have facilitated the development and availability of safe and effective treatments. The national stockpile of medical countermeasures is large, and getting more extensive all the time, but more needs to be done.

Earlier this year, President Bush proposed Project BioShield to enable the government to develop, procure, and make available countermeasures to chemical, biological, radiological, and nuclear agents for use in a public health emergency that affects national security. Enactment of the Project BioShield legislation is a priority for the Administration.

Unfortunately, the medical treatments available for many pathogens have improved little in decades. For example, some treatments for radiation and chemical exposure have not changed much since the 1970s and some diseases, such as Ebola, have never had an effective medical countermeasure.

Some diseases lack effective or modern treatment in part because there are no clear financial rewards for developing valuable new treatments that can save and improve lives. By contrast, the treatment of the vast majority of common, naturally occurring illnesses has improved dramatically as a result of continuing innovations from biomedical research and development. Heart attacks were often fatal in the 1970s, but they are much less likely to be fatal today. And better detection and therapeutic options have significantly improved survival rates for many kinds of cancer over the last 20 years. We must bring that sort of progress to the rare yet deadly threats posed by bioterrorists. Pharmaceutical research and development historically have focused on development of products likely to attract significant commercial interest. Many countermeasures for potential agents of terrorism realistically have no market other than the government and thus have not generated a great deal of manufacturer interest. Because the market for developing countermeasures is speculative, without government interest, private

companies have not invested and engaged in developing the countermeasures that may be needed. However, in the vaccine development area, representatives of the pharmaceutical industry have stressed that they will meet the challenge if the Federal government can define its vaccine requirements and assure up front that the requisite funds will be available to purchase the vaccines.

Project BioShield would speed up research and approval of vaccines and treatments and ensure a guaranteed funding source for their purpose. More specifically, the BioShield legislation would:

- Ensure that sufficient resources are available to procure the next generation of countermeasures;
- Accelerate NIH research and development by providing more flexibility in the contracting process, procurement authorities, and the issuance of grants for critical biodefense work; and
- Make promising treatments available more quickly for use in emergencies by establishing new emergency use authorization procedures at the FDA.

FDA's Workforce

Now, I would like to respond to workforce issues raised in the recent report by the Partnership for Public Service. A key component of FDA's strategic plan is to assure a high-quality professional workforce. Capable personnel with the appropriate expertise are critical for the success of FDA and for the Agency's ability to maintain a high level of public trust in its activities. FDA's responsibilities require a very special workforce, one that can keep up with rapid changes in the industries that it regulates and that is capable of developing and implementing effective and innovative public health measures. Our workforce includes a solid cadre of experienced physicians, toxicologists, chemists, microbiologists, statisticians, mathematicians, biologists, pharmacologists, veterinarians, and other highly qualified and dedicated professionals. FDA currently has 10,695 employees. Of these, there are almost 1,500 professionals with Ph.D.'s and well over 400 with medical degrees. As FDA Commissioner, one of my foremost goals is to make sure that FDA's working environment attracts and retains top-quality scientists and encourages creativity, efficiency, and superior performance.

Through training and education, FDA has expanded the scientific knowledge of its staff. For example, FDA has acquired and made available to its staff information on the characteristics of a wide range of biological, chemical, and radiological agents. FDA has hired additional personnel with specific expertise to assist us in our counterterrorism efforts. These areas of expertise include, but are not limited to, the use of select agents, law enforcement, intelligence, security, and risk assessment. FDA also has cross-trained existing scientists and consumer safety officers to meet the new challenges of food security and medical countermeasures. We have had to revise, expand and re-engineer investigation, laboratory, and compliance procedures and policies to bring them in line with classified information gathering, facility and procedure security, and personnel security to accomplish these tasks. This new direction has also required the acquisition of secure storage and secure workstations. Further, FDA has redoubled its collaboration with Federal intelligence partners through our own Office of Criminal Investigations so that we are better prepared, are working on consistent priorities, and have regular and effective lines of communication with other law enforcement and intelligence agencies in the event of a biodefense situation.

FDA began an Agency-wide strategic workforce planning initiative in 2001 to examine the workforce challenges of the future. In 2002, we expanded the initiative to identify the types and numbers of positions needed to enhance our counterterrorism readiness. The initiative also looked at the aging of the workforce, the attrition rate, succession planning, and leadership development. We identified ways to recruit, develop, and retain personnel. Two key outcomes of this initiative have been a heightened awareness among the FDA leadership of the importance of workforce planning and integration of workforce planning into the Agency's strategic planning process.

For your information, our data indicate that 26 percent of our total workforce will be eligible to retire in the next five years. For some of our key occupations, 20 percent of our medical officers, 24 percent of our microbiologists, and 36 percent of our chemists are eligible to retire in the next five years. Our data seem to conflict with the Partnership's report data that indicate 52 percent of medical field employees and 51 percent of employees in the biological sciences will be eligible for retirement in the next five years.

FDA has created many new human resources policies to attract and keep high-caliber employees. I'd like to mention a few of these initiatives to recruit and retain staff:

- FDA has created a national program that allows academic and esteemed individuals to spend time at FDA to inject innovative thinking into the current regulatory science and review process.
- FDA has established partnerships with universities and colleges. These partnerships provide opportunities for joint research, for recruitment of students, and for sabbaticals for FDA employees.
- FDA has established occupational retention allowances for hard-to-fill and hard-to-retain positions such as medical officers, clinical pharmacologists, and mathematical statisticians. We are able to pay employees in these categories an additional 10% of their salary.
- FDA has created a student loan repayment program. We can pay up to \$6,000 a calendar year with a career maximum of \$40,000 per employee.
- FDA has created a recruitment referral award for an employee who helps the Agency recruit new talent by referring external applicants. The cash awards range from \$500 to \$1,000 per referral for hard-to-fill positions.
- FDA has created a pay banding schedule for scientific, supervisory, and managerial positions. Using the flexibility offered by Title 42 of the U.S. Code, we are allowed to set salaries of up to \$200,000 per year for our scientific workforce.

In addition, employees can take advantage of flexible work schedules, including an "any-80" program that enables employees to work any 80-hour schedule over the two-week pay period so they may better balance their professional lives with their family lives.

About one-fifth of our employees take advantage of our flexi-place program, which permits telecommuting. We also have a child-care subsidy program for lower-grade employees. We offer transit subsidies for employees who use public transportation.

These measures seem to be working. In a recent survey conducted by the Office of Personnel Management to gauge how Federal employees feel about their jobs, FDA did very well compared to other agencies and the private sector. About 73 percent said they found FDA a friendly place to work, 82 percent said their supervisor supports their need

to balance work and family issues, and 65 percent said they would recommend FDA as a place to work.

In addition, a November 2001 report by the National Academy of Public Administration entitled "A Work Experience Second to None: Impelling the Best to Serve" cited FDA's flexible work environment as a successful employee retention practice in the competition for talent.

To further assist in our recruitment efforts, FDA has taken steps to expedite the hiring process. FDA piloted the automated application system called Quick Hire. HHS has now adopted Quick Hire for the human resources consolidation effort. Quick Hire is a web-based on-line application system. The computer automatically rates and ranks the applicants based on pre-determined weighted questions developed by managers. In the past, we used a manual process of reviewing applications. Due to the pilot, we were able to hire 673 Consumer Safety Officers within the last fiscal year. We rated and ranked over 5,000 applications for 90 different field locations and had the lists of the best-qualified candidates to the managers within two weeks; one month after the initial advertisement. Under the old manual system, this task would have taken several months to complete. Management officials have reported that they have been pleased with the quality of the applicants.

FDA recently demonstrated its ability to hire, train, and utilize counterterrorism personnel quickly. The FY 2002 supplemental funding that Congress provided for counterterrorism activities enabled us to hire 800 additional personnel. Of these employees, 655 were hired by FDA's ORA. The remaining employees were hired by CDER, CBER, and the Office of the Commissioner to handle counterterrorism issues. Of the employees hired by ORA, 612 were hired as investigators and analysts, 33 were hired as Special Agents in the Office of Criminal Investigations, and 10 were hired as supervisors and compliance officers. The majority of these were allocated for food safety and security activities. Using the Quick Hire automated system and other innovations, ORA was able to bring these additional employees on board in a short amount of time, less than a year. Through a new, more efficient, training program we were able to have the new hires doing "basic" work within three months of employment and becoming fully operational within 12 months. These additional employees have improved our ability to detect and respond to terrorist threats and attacks.

Conclusion

FDA plays a critical role in the nation's defense against terrorism. Although we are better prepared than ever before, we are continuously working to improve our ability to detect and respond to terrorist threats.

As part of this preparedness, we're building a strong workforce, and we intend to do even better. FDA has made significant progress in improving staffing for biological and medical sciences, and we will continue to do so. FDA has already implemented many of the suggestions in the Partnership report. We will continue to find additional innovative ways to support our workforce.

Thank you for this opportunity to discuss some of FDA's counterterrorism activities and our efforts to attract and retain high-quality personnel. I look forward to continuing to work with the Committee on security and workforce issues. I would be pleased to respond to any questions.