

**AGRICULTURE, RURAL DEVELOPMENT, FOOD
AND DRUG ADMINISTRATION, AND RE-
LATED AGENCIES APPROPRIATIONS FOR
FISCAL YEAR 2011**

TUESDAY, MARCH 9, 2010

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10:03 a.m., in room SD-192, Dirksen Senate Office Building, Hon. Herb Kohl (chairman) presiding.
Present: Senators Kohl, Dorgan, Pryor, and Brownback.

DEPARTMENT OF HEALTH AND HUMAN SERVICES

FOOD AND DRUG ADMINISTRATION

STATEMENT OF DR. MARGARET HAMBURG, COMMISSIONER

ACCOMPANIED BY:

PATRICK McGAREY, DIRECTOR, OFFICE OF BUDGET, FOOD AND
DRUG ADMINISTRATION

NORRIS COCHRAN, DEPUTY ASSISTANT SECRETARY, OFFICE OF
BUDGET, DEPARTMENT OF HEALTH AND HUMAN SERVICES

OPENING STATEMENT OF SENATOR HERB KOHL

Senator KOHL. Good morning. We'd like to welcome each of you to our annual hearing on the budget for the Food and Drug Administration (FDA).

Dr. Hamburg, we thank you for being here today. We're pleased to have you testify in front of this subcommittee for the first time, especially now that you've had a little while to get settled in your position.

We also appreciate the participation of your colleagues, Mr. Patrick McGarey and Mr. Norris Cochran.

BUDGET INCREASES

The FDA has been at the receiving end of some fairly substantial budget increases over the past several years. Between fiscal years 2007 and 2010, the FDA budget, excluding user fees, went up by 50 percent. This funding was important. As we all know, the FDA is responsible for oversight of a wide array of consumer goods used by every American, often multiple times each day.

In fact, about 20 cents out of every dollar spent is on a product regulated by the FDA. This includes foods, drugs, medical devices,

cosmetics, dietary supplements, vaccines, animal drugs and foods, and most recently, tobacco.

The FDA's budget, for a long time, had not been representative of the task before the agency. This subcommittee, in recent years, has been working in a bipartisan manner to reverse that trend. This year's budget request again includes increased funding for the FDA, although it's been—about one-half of the increase provided in fiscal year 2010. While some believe this is a cause for alarm, it's a realistic reflection of the need for the government as a whole to slow down spending. As it is, even though the budget proposes a smaller increase for FDA than the past few years, it's still a larger increase than nearly all of the United States Department of Agriculture (USDA) and most of the Department of Health and Human Services (DHHS).

A brief review of the FDA budget would show that it includes increases in three overarching themes, which are: food safety, protecting patients, and advancing regulatory science. There are also proposals to save money through contract savings and the enactment of new user fees.

In food safety, increases are proposed for activities including the establishment of an integrated national food safety system, a modern import safety system, and additional and smarter surveillance and enforcement.

For patient safety, increases are proposed to improve the safety of imports and high-risk products, expand partnerships with public and private entities, and to slightly increase FDA's capacity to review generic drug applications.

The Advancing Regulatory Science Initiative includes proposed increases that will help strengthen the FDA's scientific leadership, staff, and scientific capacities in emerging technologies.

The increases are important, but we have concerns. We're concerned that, without adequate funding levels to maintain FDA scientists, inspectors, and reviewers, the performance goals that you list are not realistic and achievable. I want to repeat something said last week. I believe the goals for this subcommittee this year will be to produce a bill that protects the important gains we have made over the last few years, ensure that programs vital to the health and safety of Americans are adequately funded, and to do so in a way that shows fiscal restraint and responsible austerity.

The FDA is obviously vital to the health and safety of Americans, and it will be adequately funded this year. We won't allow the agency to lose the ground that we've made up in recent years. However, we all need to do more with less, and no one is exempt.

Senator Brownback and I will be looking closely at the budget and working in a bipartisan manner to make funding decisions. It will not be an easy job, but it's one that we must do right. I'm sure that you agree, Dr. Hamburg; and in that spirit, we are looking forward to continuing our work together.

We turn now to Senator Brownback.

STATEMENT OF SENATOR SAM BROWNBACK

Senator BROWNBACK. Thank you very much, Mr. Chairman. It's always a pleasure to work with you.

Senator Kohl and I like to talk about basketball too. Kansas has two top-ten teams in the NCAA basketball tournament, so we're hopeful we can move forward. And next to the wheat harvest, this is kind of the big season in Kansas.

Pleasure to have you here, Dr. Hamburg. It was good to visit with you last week in the office. I enjoyed that, and I look forward to your presentation here.

RARE AND NEGLECTED DISEASES

I want to follow up on the visit we had, because I've got some suggestions. I hope you're willing to look at, and that your staff has been willing to consider, about rare and neglected diseases, in particular, in the United States and around the world.

To help jumpstart this effort in rare and neglected diseases, I worked with the chairman to include a provision in the current year's appropriation bill that created two groups within FDA to review the agency's process for approving medical products for the treatment of rare and neglected diseases. When fulfilling the agency's requirements under this provision, I have some ideas that I hope you'll take into serious consideration, and I hope these teams will be meeting and reporting out fairly soon.

To date, approximately 7,000 rare diseases have been identified. These diseases affect more than 30 million Americans, but there are only FDA-approved treatments for approximately 200 of these 7,000 rare diseases. So, if you happen to be one of the 200 that has a FDA treatment, you've got something to work with. Those other 6,800 rare diseases are without treatments at all and are not benefiting from the progress. This is totally unacceptable. And it's 30 million total Americans that are in this category.

In addition to those suffering from rare diseases in the United States, there are billions of people worldwide suffering from diseases that are often ignored because there are no market incentives for engaging in the costly process of developing a product for FDA approval. According to the World Health Organization, one of every six people worldwide is affected by at least one neglected disease. One in six. This is particularly astonishing when you consider that only 1 percent of the drugs approved since 1975 were developed to treat such diseases that affect one in six people in the world. This, too, is unacceptable.

Now, solving these problems will involve many government agencies, and the cooperation of the private sector. Today, however, I'd like to talk with you about—something I think FDA can do to substantially impact this category. Specifically, I believe, and a lot of people agree, that FDA should work to demystify and simplify the review process for products to treat deadly rare and neglected diseases.

While it's my expectation that FDA always consider safety and efficacy while reviewing products, the agency must exercise flexibility when reviewing certain products. I believe the agency should establish a second track for product approval that takes into consideration the unique nature of the product being approved, including the ability of manufacturers to find large enough populations for clinical trials, the willingness of patient groups to knowingly accept certain risk, and the global public health benefit. Without

doing these things, I think it is highly unlikely we find treatments for these 6,800 rare diseases; I don't see how it happens. And I think we're probably stuck on this 1 percent figure of work in these neglected diseases that affect one in six people globally. That is completely unacceptable, and it doesn't need to be this way. And you are the person most well positioned to address this.

So, I hope you'll be able to look at this category of products. You've got a lot of other issues at FDA. I think this is amongst the top tier of most important.

Mr. Chairman, thank you for holding the hearing.

Senator KOHL. Thank you very much, Senator Brownback.

We turn now to Dr. Hamburg for your statement.

SUMMARY STATEMENT OF DR. MARGARET HAMBURG

Dr. HAMBURG. Thank you very much, Chairman Kohl and Senator Brownback.

I'm very pleased to present the President's fiscal year 2011 budget for the FDA.

And, as you note, Patrick McGarey, Budget Director for FDA, and Norris Cochran, Deputy Assistant Secretary for Budget at HHS, are with me this morning.

BUDGET REQUEST

My testimony outlines the fiscal year 2011 budget request. It also includes a summary of recent developments related to our new responsibilities to regulate tobacco products and other important FDA initiatives.

As you know, this is my first time before this subcommittee, and I look very much forward to working with you. I deeply appreciate the support that you've given to the FDA, and I know that you share my determination to make sure that we can count on, as a Nation, a strong, fully functional FDA. And, as you point out, FDA is a unique and important agency responsible for programs and activities that affect every American every day.

The fiscal year 2010 appropriation reflects your commitment to FDA and the health of the American public. Those funds will allow FDA to make progress across a wide range of public health priorities which are essential to the health, quality of life, safety, and security of all Americans. So, again, I thank you.

The proposed fiscal year 2011 budget includes \$4,000,000,000 for FDA programs, which is an increase of \$755,000,000, with \$601,000,000 in user fees, and \$154,000,000 in budget authority.

We're proposing three major initiatives in areas vital to our mission: transforming food safety, protecting patients, and advancing regulatory science. These initiatives are crucial for the modernization of the agency to the challenges presented by the 21st century.

TRANSFORMING FOOD SAFETY

The Transforming Food Safety Initiative reflects President Obama's vision of a new food safety system to protect the American people. And it's based on the principles of the President's Food Safety Working Group: prioritizing prevention, strengthening surveillance and enforcement, and improving response and recovery.

FDA proposes an increase of \$326,000,000 for transforming food safety, with \$88,000,000 in budget authority, and \$238,000,000 for new user fees, including \$200,000,000 for a food registration and inspection fee.

The fiscal year 2011 resources would allow FDA to establish a foundation for an integrated national food safety system focused on prevention. Key elements include setting standards for safety, expanding laboratory capacity, piloting track and trace technology, strengthening import safety, improving data collection and risk analysis for foods, and increasing inspections. This initiative will allow FDA to make the kind of changes needed to deliver the promise of improved food safety and reduce illnesses caused by contamination of the food supply in years to come.

PROTECTING PATIENTS

The Protecting Patients Initiative reflects FDA's pressing need to modernize our approach to patient safety and the safety of medical products. This is a time when science and technology offers new promise to improve disease prevention, diagnosis and treatment, as well as new protections for safety. This is also a time when an increasing number of drugs, devices, and biologics are being manufactured abroad. FDA must act as a strong and smart regulator, addressing medical product safety challenges in the years ahead.

The budget proposes an increase of \$101,000,000 for this initiative, including \$49,000,000 in budget authority. The balance is for two new user fees, generic drugs fees and fees for reinspecting medical product facilities.

The Protecting Patients Initiative focuses on four vital areas: import safety, high-risk products, partnerships for patient safety, and generic drug review. These activities will have a very significant impact on public health in the United States. This science-based strategy will build new and greater safety capabilities. The result will be fewer import safety emergencies and fewer serious adverse events with drugs, devices, and biologics.

FDA is proposing, in our budget, a new focus on advancing regulatory science, which is very important and exciting. It includes an increase of \$25,000,000 for this much-needed initiative. Regulatory science represents the knowledge and tools we need to assess and evaluate a product's safety, efficacy, potency, quality, and performance. It is fundamental to all of our work at FDA, from supporting the development of new food and medical technologies to bringing new treatments to patients. In many ways, it represents the gateway between discovery, innovation, and opportunity and actual products that people need and can count on. Building a strong, robust regulatory science capacity is vital to the health of our Nation—to the health of people, our healthcare system, our economy, and our global competitiveness.

During the past two decades, research has dramatically expanded our understanding of biology and disease, yet the development of new therapies has been in decline and the costs of bringing them to market have soared. New approaches and partnerships in the emerging field of regulatory science are urgently needed to bridge the gap between drug discovery and patient care, and, I

might add, to address some of the concerns that Senator Brownback just raised.

ADVANCING REGULATORY SCIENCE

Investing in regulatory science will yield better tools, standards, and pathways to evaluate products that offer promising opportunities to diagnose, treat, cure, and prevent disease. It will also improve product safety, quality, and manufacturing, more broadly, including new opportunities to better protect the food supply and support the development of healthy foods and food choices.

TOBACCO CONTROL ACT

On June 22, 2009, the President signed the Family Smoking Prevention and Tobacco Control Act into law. The act grants FDA important new authority to regulate the manufacture, marketing, and distribution of tobacco products. I'm pleased to report that, so far, FDA has met or exceeded the statutory deadlines in the Tobacco Control Act.

During fiscal year 2011, we will continue to implement the act, including overseeing and enforcing the reissuance of the 1996 rule to prevent smoking and smokeless tobacco use among young people and proposing graphic health warning labels for cigarette packages and advertising.

H1N1

Finally, I'd like to take the opportunity to report to the subcommittee on FDA's response to the 2009 H1N1 influenza pandemic. During the past year, key FDA accomplishments include the licensure of five different H1N1 vaccines in record time. These H1N1 vaccines faced the same stringent manufacturing, quality, and oversight processes as seasonal influenza vaccine, and now more than 70 million Americans have been safely immunized.

FDA also authorized the emergency use of antiviral drugs in circumstances for which they had not been licensed, but where they might save lives. These decisions were based on careful review of the scientific data for these products.

FDA also conducted an aggressive proactive strategy to combat fraudulent H1N1 products. We issued more than 80 warning letters, covering about 150 different products, and we achieved a very high compliance rate in response to these actions.

So, FDA's fiscal year 2011 budget contains important funding for vital public health priorities, including transforming food safety, protecting patients, and advancing regulatory science, as well as implementing the Tobacco Control Act and many other critical FDA programs and activities. Achieving all of this, and especially these identified priorities, is possible because of your support for the work of the Food and Drug Administration.

PREPARED STATEMENT

I thank you, and I'm happy to answer any questions you may have.

[The statement follows:]

PREPARED STATEMENT OF DR. MARGARET A. HAMBURG

INTRODUCTION

Chairman Kohl, Senator Brownback, and members of the Subcommittee, I am Dr. Margaret Hamburg, Commissioner of Food and Drugs. I am pleased to present the President's fiscal year 2011 budget request for the Food and Drug Administration (FDA or agency). Joining me at today's hearing is Patrick McGarey, FDA's Director of the FDA Office of Budget and Norris Cochran, Deputy Assistant Secretary for Budget at the Department of Health and Human Services.

My testimony outlines FDA's fiscal year 2011 budget request and the policy initiatives that we are advancing in our budget. I will also summarize recent developments related to FDA actions to implement the Family Smoking Prevention and Tobacco Control Act, FDA's response to the 2009 H1N1 influenza pandemic, and other initiatives at FDA.

FISCAL YEAR 2010 BUDGET

The funding that you appropriated for fiscal year 2010 shows the depth of your commitment to FDA's public health mission and the health of the American public. On behalf of all Americans who benefit from the work of the FDA, thank you for your support.

This funding allowed FDA to make progress in a wide range of areas.

For example, in the Foods Program, we are hiring and training new inspectors, improving our scientific and technical capacity, initiating a wide range of new State and international partnerships and—working with industry, consumer advocates, and others—laying the foundation for a shift to a food safety approach focused on prevention. We also started critical work on front of package labeling, an effort that will help American families better understand the nutritional content of foods.

Fiscal year 2010 funding allowed FDA to aggressively engage with our HHS partners and industry in the public health response to the 2009 H1N1 influenza pandemic. We supported the effort to rapidly develop and deploy safe vaccines, antiviral medicines, and diagnostic tests that were so vital in the public health response.

For drugs and biologics, we began the first phase of the Sentinel system, a distributed network of electronic health data that can track the safety of medical products once they reach the market and quickly investigate potential safety signals. For medical devices, we released key guidance defining a path for more efficient and effective clinical trials.

In the Tobacco Program, we established the new Center for Tobacco Products, implemented a ban on cigarettes with characterizing fruit and candy flavors, and established a program of registration and listing.

We also began a process that will make FDA much more transparent to the American public and to the industries that we regulate. The FDA Transparency Initiative responds to President Obama's Executive Order on open government and the transparency priorities that Secretary Sebelius is advancing.

As part of our Transparency Initiative, FDA held two public meetings, launched a transparency blog, and opened a docket—efforts that received more than 900 suggestions from the public.

In January, FDA launched "FDA Basics," the first phase of the Transparency Initiative. As one observer of the agency commented, "[t]he initiative can go a long way toward educating the public about what FDA does—and how—and also provide industry with realtime answers to their daily challenges, ultimately improving product quality and patient safety." Another said, "[i]t is really well put together, clear and works quite well. . . . The site is not only supportive of transparency, but is highly instructive and educational."

The next two phases of our transparency efforts are well underway, and our goal is to provide communication with the public and industry about FDA actions and the basis for FDA decisions.

We are also developing a major performance management initiative, which will provide additional access to Congress and the public about the activities and progress on more than 50 FDA offices.

FDA 2011 BUDGET REQUEST

Overview

The President's fiscal year 2011 budget includes \$4,000,000,000 for FDA programs to protect and promote public health. This represents an increase of \$756,000,000 for FDA programs, which includes \$601,000,000 for statutory increases for user fee programs in current law and four new user fees to support public health priorities.

DETAILS OF THE FISCAL YEAR 2011 BUDGET

Transforming Food Safety Initiative

For fiscal year 2011, FDA proposes an increase of \$326,300,000 for Transforming Food Safety. This increase includes \$87,800,000 in budget authority and \$238,500,000 for three new user fees related to food safety: Food Inspection and Registration User Fees, Reinspection User Fees for food facilities and Export Certification User Fees for food and feed products. The funding for Transforming Food Safety includes the budget amendment of \$8,000,000 that the Administration recommended on February 12, 2010.

The Transforming Food Safety Initiative reflects President Obama's vision of a new food safety system to protect the American public. The initiative is based on three core principles announced in July 2009 by the President's Food Safety Working Group: prioritizing prevention, strengthening surveillance and enforcement, and improving response and recovery.

The fiscal year 2011 resources for Transforming Food Safety demonstrate that food safety is a national priority. It reflects the consensus among consumers, industry and experts that our food safety system needs fundamental change to prevent illness and restore public confidence.

With the fiscal year 2011 increases, FDA will set standards for safety, expand laboratory capacity and pilot track and trace technology. FDA will also strengthen import safety and improve data collection and food risk analysis. Most importantly, the fiscal year 2011 resources allow FDA to establish a foundation for an integrated national food safety system focused on prevention.

During fiscal year 2011, FDA will hire 718 additional full time equivalent (FTE) staff to expand programs that protect America's food supply. The hiring by FDA food safety programs includes more than 425 new FTE in our field operations, of which 132 FTE will be new food inspectors in the field operations of our Office of Regulatory Affairs. Among those 132 FTE, 3 are funded by budget authority, 99 are funded by food registration and inspection user fees, and 30 are funded by reinspection fees.

When fully trained and deployed, the 132 new inspectors will annually conduct the following additional field activities, based on budget authority and user fee funding proposed for Transforming Food Safety:

- 1,900 domestic food safety inspections;
- 150 foreign food inspections;
- 1,000 domestic food and animal feed program reinspections;
- 200 domestic tissue residue inspections for illegal drug residues in meat and poultry; and
- 3,000 samples for analysis in FDA laboratories.

The Transforming Food Safety Initiative will also allow FDA to fund the cost of living pay adjustment for FDA professionals that conduct food safety activities and pay higher rent and related facility costs.

In addition to the priorities listed above, fiscal year 2011 resources for Transforming Food Safety support the following domestic and foreign activities that implement Food Safety Working Group priorities.

Prioritizing Prevention

FDA will issue guidances and establish new, binding standards to help prevent foodborne illness and reduce food risks. The standards include new controls to prevent food safety risks associated with fresh produce and other commodities, standards for food inspections, and standards for collecting and analyzing food samples.

FDA will conduct audits of its regulatory and public health partners. FDA audits will evaluate inspection, investigation, sample collection and analysis, enforcement, response, recovery, and outreach activities. The audits will measure performance against FDA food safety standards. FDA will also strengthen collaboration with foreign regulatory bodies to evaluate and leverage inspection data. FDA will begin to develop an updated inventory of foreign facilities to support more foreign inspections.

FDA will begin to establish a modern import safety program. FDA will develop standards to evaluate food safety systems in foreign countries. FDA will also continue third party certification efforts and develop a registry of all importers. When fully implemented, FDA's import safety program will result in greater oversight of imported foods and provide greater assurance they meet safety standards comparable to those required for domestically produced foods.

Strengthening Surveillance and Enforcement

FDA State liaisons will communicate essential information on food safety standards and priorities throughout the integrated food safety system. FDA will also develop and implement a national food inspection and sampling work plan. Working with the States, FDA will increase surveillance and sampling of feed and feed ingredients. FDA will improve its analysis of inspection results by establishing a system to electronically exchange inspection data.

FDA will improve risk analysis and research for food and feed safety. FDA will expand its ability to identify products at highest risk for contamination. FDA will use this information to better target and prioritize food and feed safety sampling and inspection. As one tool for food risk analysis, FDA will enhance the food registry used to report problems with foods.

FDA will expand the National Antimicrobial Resistance Monitoring System (ARMS). Expanding NARMS means more surveillance and monitoring of commodities such as seafood and animal feed. Working with CDC and USDA, FDA will also adapt NARMS to monitor emerging pathogens in food animals and retail foods of animal origin.

FDA will increase its laboratory capacity. FDA will establish a new forensic microbiological laboratory and conduct more food safety sampling and surveillance.

Improving Response and Recovery

FDA will conduct pilot studies with industry of track and trace technology.

FDA will improve response and recovery with expanded lab capacity. FDA will develop technology to reduce the time needed to screen for pathogens. We will focus our energies on priority pathogens and work to reduce screening time to one to two days, compared to the current 5 to 10 days.

FDA will invest in enterprise information technology (IT) systems to transform food safety. Funding for IT systems will also allow FDA to establish, collect and support the proposed new Food Registration and Inspection User Fees Program.

FDA will provide essential support to food program offices. This support will allow food safety programs to achieve priority public health objectives.

Results for Transforming Food Safety

Fiscal year 2011 funding for the Transforming Food Safety initiative will allow FDA to deliver the promise of improved food safety. With this fiscal year 2011 investment, FDA will steadily reduce illnesses caused by contamination of the food supply in the years to come. In summary, Transforming safety will allow FDA to:

- Reduce the number of foodborne illnesses by heightening the focus on preventing harmful contamination;
- Identify sources of risk in the food safety system through expanded data collection and analysis and collaboration with partners in other Federal agencies and with, States, international agencies, and industry;
- Improve industry compliance with food safety standards through more frequent inspection and expanded use of microbial testing and other modern tools;
- Reduce time to detect and respond to outbreaks through improved staffing and procedures and collaboration with the Centers for Disease Control and Prevention and State, local, and international colleagues;
- Establish stronger links between performance outcomes and resource investments by developing and tracking appropriate measures of progress on food safety;
- Better integrate Federal, State, local, and foreign food safety efforts by removing barriers to full collaboration, leveraging of information, and expanding current partnership efforts.

Protecting Patients Initiative

For fiscal year 2011, FDA proposes an increase of \$100,800,000 for Protecting Patients. This increase includes \$49,400,000 in budget authority and \$51,400,000 for two new user fees: Generic Drug User Fees and Reinspection User Fees for medical product facilities.

The Protecting Patients Initiative advances Obama Administration priorities for safe, quality healthcare for all Americans. The resources in this initiative support new tools and partnerships to enhance the safety of increasingly complex drugs, devices, vaccines, human tissues and America's blood supply.

This initiative will modernize FDA's approach to the safety of medical products at a time when the number of drugs, devices and biologics manufactured abroad is increasing dramatically. With these resources, FDA can act as a strong and smart regulator and address medical product safety challenges in the years ahead.

The Protecting Patients Initiative focuses on four vital areas: import safety, high-risk products, partnerships for patient safety, and generic drug review.

During fiscal year 2011, FDA will hire 215 FTE staff for programs that protect patients and support the safety and effectiveness of medical devices, human and animal drugs, and vaccines, blood and other biologics. This includes hiring 85 FTE in FDA field operations, of which 40 will be new ORA medical product inspectors. Among those 40 FTE, 13 are funded by budget authority, 21 are funded by reinspection fees, and six are funded by generic drug user fees.

When fully trained and deployed, the 40 FTE will annually conduct more than 600 foreign and domestic risk-based inspections. This includes more than 225 inspections funded by budget authority and more than 380 inspections funded by re-inspections and generic drug user fees. These include inspections of foreign and domestic drug, device, radiological health, and biologic manufacturers, as well as bio-research monitoring inspections to protect patients and ensure data integrity in clinical trials. The Protecting Patients Initiative funds the cost of living pay adjustment for FDA professionals that conduct food safety activities. The Initiative also funds higher rent and related facility costs and provides essential support to allow medical product programs to achieve their public health priorities.

In addition to the activities listed above, fiscal year 2011 resources for Protecting Patients support the following priorities.

Import Safety

Thousands of critical medical products are manufactured outside of the United States. Increased funding for import safety will allow FDA to better understand and respond to the growing challenge of foreign manufacturing and globalization, including counterfeit products.

FDA will launch an electronic drug registration and listing system to stop imports of illegal drug. FDA will also work more closely with trusted foreign regulators to monitor drug manufacturing facilities.

FDA will increase foreign inspections. FDA will identify and inspect the highest risk foreign facilities. FDA will also protect patients through increased inspections of human subject trials.

FDA will review and use third party International Organization for Standardization (ISO) audits of foreign device manufacturers. As a result, FDA will leverage device inspections conducted for foreign governments.

Safety of High-Risk Products

Drugs, devices and biologics are becoming increasingly complex. To protect the American public, FDA will develop additional capacity to assess the safety of these medical products.

FDA will improve the safety of the blood supply, vaccines, human tissues, and cord blood. To counter threats to the blood supply, FDA will improve the ability to prevent, detect and monitor for infectious agents. FDA will also improve its ability to analyze and respond to manufacturing deviations. FDA will also build additional capacity to identify and respond to adverse events and adverse reactions associated with biological products. FDA will improve vaccine safety through guidance for industry and better understanding mechanisms of adverse events.

FDA will begin to build a National Medical Device Registry. FDA will begin a pilot project to link unique identifiers for medical devices with electronic health data. The result will be improved patient safety by creating a National Medical Device Registry.

Partnerships for Patient Safety

To meet its public health responsibilities, FDA must interact and collaborate with many public and private entities in a medical system that is committed to safety.

FDA will expand postmarketing surveillance systems for medical product safety. This investment includes support for the next stage in FDA's Sentinel Initiative. The goal of the Sentinel Initiative is to use large databases to fairly and quickly assess the safety of medical products.

FDA will partner with public and private organizations to reduce unnecessary adverse events, with emphasis on special populations. FDA will also work with the private sector to reduce unnecessary medical radiation exposure.

FDA will improve pediatric drug and device safety. Working with international and domestic partners, FDA will identify medical products that are safe for children and those that pose special risks.

FDA will improve the safety of animal drugs. FDA will hire and train scientific staff to review adverse experience reports and require prompt corrective action.

Generic Drug Review

FDA will Increase its Capacity to Review Generic Drugs Applications: FDA will hire additional staff to support generic drug review.

Results for Protecting Patients

FDA's Protecting Patients Initiative will have a significant impact on public health in the United States. This science-based strategy will build new and greater safety capabilities, resulting in:

- Reduced number of import safety emergencies;
- Fewer serious adverse events linked to medical products; and
- Early identification of major safety problems with drugs, devices and biologics.

This initiative will permit FDA to rise to the challenge of protecting patients in the 21st century. The initiative supports critical international efforts, upgrades to FDA capacity, and essential partnerships with the private sector. With the fiscal year 2011 resources, the Protecting Patients Initiative will lead to:

- improved import safety program for medical products;
- increased capacity to conduct inspections;
- improved safety of blood, tissue, and vaccines;
- improved data collection and risk analysis for medical products; and
- enhanced assessments of postmarket safety.

Advancing Regulatory Science for Public Health Initiative

For fiscal year 2011, FDA proposes an increase of \$25,000,000 in budget authority for Advancing Regulatory Science. The Advancing Regulatory Science initiative is the backbone that supports all other FDA activities, including transforming food safety and protecting patients. At FDA, science is at the heart of everything we do from keeping the blood supply safe, protecting Americans from global and emerging infectious diseases, supporting the development of new food and medical technologies, to bringing new treatments to patients.

Advancing Regulatory Science for Public Health reflects President Obama's commitment to harness the power of science to benefit America. In his April 2009 address to the National Academy of Sciences, the President declared, "science is more essential for our prosperity, our security, our health, our environment, and our quality of life than it has ever been before."

During the past two decades, U.S. research investments have dramatically expanded our understanding of biology and disease. Yet the development of new therapies has been in decline, and the costs of bringing them to market have soared. As a result, we have experienced lost opportunities to improve the effectiveness of U.S. medicine and the success of the biotechnology industry.

Today, FDA is relying on 20th century regulatory science to evaluate 21st medical products. Regulatory science is needed to provide better tools, standards, and pathways to evaluate products under development. It also serves to create efficiencies in the development process, and improve product safety, quality, and manufacturing. The Advancing Regulatory Science initiative represents the first comprehensive effort to modernize regulatory science at FDA.

Stem cells and personalized medicine are two examples of areas that could change the way we treat many diseases. Stem cells offer hope for treating patients with neurodegenerative diseases, such as Parkinson's and Alzheimer's disease. For the promise of stem cells to come to fruition, FDA must develop standards for stem cell therapies so that they can be produced reliably and safely. In the area of personalized medicine, FDA must work collaboratively to identify markers that can predict whether a patient will respond to certain cancer therapies. FDA must use cutting edge science to validate these tests for use in clinical practice.

In addition to helping patients benefit from biomedical advances, improvements in regulatory science will also support better assessment of drug and device safety, better tools for food safety, and better understanding of how to reduce the enormous public health harm of tobacco products.

The Advancing Regulatory Science for Public Health initiative focuses on three broad themes: science leadership and coordination, core capacity, and modern standards for evaluating products.

Science Leadership and Coordination

FDA will strengthen scientific leadership. The Office of the Chief Scientist (OCS) will support FDA and its centers with dedicated and expert scientific leadership. OCS will work with the centers to prioritize, oversee, support and coordinate key scientific investments at FDA.

Core Capacities: Infrastructure, Workforce, Collaboration

FDA will build core scientific capacity in the field of nanotechnology.

Nanotechnology holds great promise in many areas. Examples include targeting drugs to where they can do the most good and least harm and making improved material for medical devices. Yet, nanoscale materials may interact very differently with biological systems and require special methods to assess safety and effectiveness. FDA will support science focused on the sound evaluation of nanotechnology-based products. The goal is to realize their promise while protecting patients and consumers.

FDA will support the development and evaluation of products from stem cell innovation. The FDA investment will support the transfer of stem cell discoveries from the bench to the bedside.

FDA will recruit next generation scientific staff. FDA will begin targeted recruitment in essential areas of emerging science where FDA has an expertise gap.

FDA will address science issues that support a National Medical Device Registry. FDA will begin a pilot project to link unique device identifiers with health-related electronic data to create a National Medical Device Registry. The Registry will improve our understanding of the risk benefit profile of higher risk devices.

FDA will promote scientific collaboration through the Critical Path Initiative.

Fiscal year 2011 investments in FDA's Critical Path Initiative will allow FDA to foster partnerships that transform product development and evaluation sciences, advance personalized medicine, support meeting unmet public health needs, and better predict and prevent safety risks early in development.

Medical Product Regulatory Standards

FDA will update review standards and provide regulatory pathways for biosimilars. FDA will establish regulatory guidance to provide a scientifically sound and safe pathway to characterize and develop biosimilars.

FDA will increase its ability to regulate animal biotechnology products. FDA will hire and train staff to strengthen our knowledge base and thereby support the review and potential approval of animal biotechnology products.

FDA will promote development of healthy foods and encourage healthy food choices. FDA will use data from well-designed studies to support a modernized food label to encourage Americans to eat healthier diets.

The Initiative also funds rent and related facility costs to conduct initiative activities and provides essential support to allow medical product programs to achieve their public health priorities.

Tobacco Control Act

On June 22, 2009, the President signed H.R. 1256, the Family Smoking Prevention and Tobacco Control Act (Tobacco Control Act), into law. The Tobacco Control Act grants FDA important new authority to regulate the manufacture, marketing, and distribution of tobacco products.

FDA's goals for the tobacco program include:

- preventing youth from using tobacco and helping adults who use tobacco to quit;
- promoting public understanding of the harmful and potentially harmful constituents of tobacco products;
- developing a science base for tobacco regulation; and
- beginning meaningful tobacco product regulation to reduce the toll of tobacco-related disease, disability, and death.

In September 2009, after a national search, I selected Lawrence Deyton, M.S.P.H., M.D., as Director of the Center for Tobacco Products. Dr. Deyton is an expert on veterans' health issues, public health, and tobacco control and prevention. He also is a clinical professor of medicine and health policy at George Washington University School of Medicine and Health Sciences.

During fiscal year 2010, FDA made substantial progress in establishing the tobacco program and implementing initial steps under the Act.

To date, FDA has met or exceeded the statutory requirements of the Tobacco Control Act, including:

- establishing the tobacco products user fee program to support FDA's tobacco program;
- issuing and enforcing a ban on cigarettes with certain characterizing flavors, including fruit and spice flavors;
- publishing a guidance document related to tobacco product establishment registration and product listing and began tobacco industry registration with FDA;
- publishing a guidance document describing the requirements for providing listings of all ingredients used in making cigarettes, smokeless tobacco, and certain other tobacco products and began accepting tobacco product ingredient and constituent listings;

- establishing an FDA program to assist small tobacco product manufacturers; and
- creating the Tobacco Product Scientific Advisory Committee.

FDA is in the midst of an aggressive recruitment and hiring program, with a goal of hiring 370 FTEs in the tobacco program by fiscal year 2011. I am pleased to report that FDA has met or exceeded the statutory deadlines in the Tobacco Control Act. During fiscal year 2011, FDA will continue to make progress in tobacco product regulation. We will learn from the successes of our international counterparts that also regulate tobacco. We expect to implement a number of key steps in the next year. These steps will include reissuing and enforcing the 1996 rule to prevent smoking and smokeless tobacco use among young people and proposing graphic health warning labels for cigarette packages and advertising.

New User Fees

The new user fees proposed in FDA's fiscal year 2011 budget will facilitate the review of generic drugs and enhance FDA's ability to register and inspect food and feed manufacturing and processing facilities. New user fees will also allow FDA to reinspect facilities that fail to meet good manufacturing practices and other safety requirements and allow FDA to collect fees when it issues export certifications for food and feed.

FDA RESPONSE TO THE 2009 H1N1 INFLUENZA PANDEMIC

I would also like to take this opportunity to report to the committee on FDA's response to the 2009 H1N1 influenza pandemic. As we reported to you last year, FDA established an incident command approach that allowed us to work across government, internationally and with the private sector to rapidly mobilize emergency response.

Key accomplishments include:

Licensing Safe and Effective Influenza Vaccines.—FDA worked to facilitate development, production, and availability of vaccines. FDA licensed pandemic influenza vaccines from all five U.S. licensed influenza vaccine manufacturers. These pandemic vaccines were subject to the same stringent manufacturing and quality oversight processes in place for seasonal influenza vaccines. More than 70 million Americans have been immunized with these vaccines, based on CDC's coverage survey estimates. Extensive safety review involving active surveillance systems that have captured information from approximately 4 million patients has found the vaccine to have the same excellent safety profile as the seasonal influenza vaccines.

Authorizing Emergency Measures.—Our physicians and scientists worked tirelessly to facilitate the availability of antiviral medications to patients. FDA authorized 13 laboratory tests, 3 drugs, and certain types or models of respirators, known as N95 respirators, to provide tools to doctors across the country to fight the novel H1N1 influenza. For example, FDA authorized the emergency of use of an unapproved intravenous antiviral drug, Peramivir, to treat certain hospitalized patients. FDA's work on dosing of Tamiflu in children under the age of 1 year was adopted by countries around the world. In addition, FDA authorized the use of antiviral medications that otherwise might have been thrown away because they were beyond their labeled expiration dates. Our efforts on expiring drugs helped prevent shortages of essential medicines for patients.

Cracking Down on H1N1 Fraud.—FDA established the 2009 H1N1 Consumer Protection Team that conducted an aggressive, proactive strategy to combat fraudulent 2009 H1N1 products. To date, the team has sent more than 80 Warning Letters to more than 85 Web sites, covering about 150 different products purporting to be dietary supplements, medical devices, drugs or biologics. These Warning Letters have resulted in a compliance rate of about 80 percent.

FDA is pleased to have worked so closely with its sister agencies under the leadership of the Department of Health and Human Services in the pandemic response. We will continue our work to pave the way for manufacturers to develop faster and more reliable vaccines, antiviral medications, and diagnostic test.

CONCLUSION

The FDA fiscal year 2011 budget of \$4,000,000,000 contains important funding increases for important public health priorities: Transforming Food Safety, Protecting Patients, Advancing Regulatory Sciences and Implementing the Tobacco Reform Act. Achieving these priorities is possible because of your support for the work of the Food and Drug Administration.

Thank you for the opportunity to testify. I am happy to answer your questions.

Senator KOHL. Thank you, for your fine statement, Dr. Hamburg.

You've been at the FDA for nearly a year now, and I assume that it has been fulfilling as well as challenging.

VISION FOR FDA

After a year, what have you learned about the FDA? What's working? What would you change? What is your vision for the agency, and where do you want it to be in 5 years and beyond? How does the Performance Manage Initiative you discussed in your opening statement play into this, Dr. Hamburg?

Dr. HAMBURG. There's a lot of questions—very, very important questions. I have found, since being here—it's been only about 8 months, but who's counting—that FDA is an extraordinary agency, you know, with an array of professional scientists, lawyers, policy analysts and support staff that, you know, are dedicated to the mission of protecting and promoting health.

I have been struck much more deeply, since I've been in this role, by how important and unique FDA is—that we are responsible for a vast array of regulated products, and products that affect every American every day, as you noted in your opening statement.

If we cannot do our job, and do it well, there are not other parts of government or other sectors of society that can step in and back-stop behind us. And that is why it is so important to have a strong, fully functional FDA.

As the new FDA Commissioner, I feel a tremendous responsibility to lead this agency fully into the 21st century. I think I must be a strong advocate for the agency, explaining to policymakers and the public about what we do, how we do it, and why. I believe that I must work to ensure trust and confidence in the work of the agency, and that includes being a responsible steward of the resources given to us, and tracking to make sure that we are using them widely and for the benefit of the American people.

SCIENCE

I believe that now is the time for us to act aggressively to strengthen science within the FDA, in partnerships with external partners, so that we can bring the best possible science to bear on our regulatory decisionmaking. And I believe we have to respond to the globalized world we live in, and recognize that products regulated by the FDA are coming in from all over the globe, and that we have to effectively extend our foreign presence, so that we can ensure safety.

Senator KOHL. Have you made any trips to any of these foreign countries?

INTERNATIONAL TRIPS

Dr. HAMBURG. I have made one international trip, so far, and we are planning additional—I've made two international trips—planning additional trips, as well. I've met with many of my counterparts from other countries on their visits here, as well, and have really made this area of strengthening our presence internationally a very high priority, because the world we live in is so increasingly complex and globalized. And the supply chains, whether it's food

products or medical products, go around the globe, and we know that this, potentially, entails serious safety concerns.

FUNDING INCREASES

Senator KOHL. Dr. Hamburg, as I said in my opening statement, and I'm sure you're fully aware, we have provided FDA with very large funding increases over the past several years. Your budget this year again includes one of the largest increases in our bill, but it's only about one-half of the increase that the Department has been receiving recently. How would you respond to concerns that this budget reflects a decrease in the priority the administration places on modernizing and improving the FDA?

Dr. HAMBURG. Well, I think we all recognize that these are very difficult economic times and we have to operate in that environment. I do think it's very, very important that we continue sustained investments in the FDA for the reasons I cited earlier, that we have a unique role to play, and it is one that matters deeply to every American. So, you know, we will continue to work, in every way possible, to perform the programs and activities that are on our plate and to address emerging new priorities. We hope that we will have the opportunity, in the fiscal year 2011 budget, to continue to expand in some key areas, as the budget reflects. And I'm eager to work with you and with others to ensure, in the upcoming fiscal year and in the years beyond, that we continue to support FDA in its crucial mission.

Senator KOHL. Thank you.

Senator Brownback.

Senator BROWNBACK. Thank you, Mr. Chairman.

Dr. Hamburg, let me show you a chart—and I think we've got one laid out in front of you—for what I was talking about in my opening statement of a bifurcation on the review process. It's what we visited about it in my office, and we went and took the liberty to give a couple of examples.

RARE DISEASES

I mentioned in my opening statement, there are some 7,000 rare diseases affecting nearly 30 million Americans, only 200 of which have any treatment at all. And what I'm suggesting to you is that your standard process which is well established; it's very expensive, I might add. I saw a 2005 review of it, and said that, by FDA's own report, it costs somewhere between \$800 million to \$1.7 billion to develop a new product. This is a 2005 FDA report.

Diseases like Tay-Sachs disease affects approximately 1 in 112,000 live births. There are no treatments for it. A child who's born with this—it's a genetic lipid storage defect—usually dies by age 4. No treatment, whatsoever. Small market potential for it.

Leigh's disease affects 1 in 36,000 live births. Individuals typically live anywhere from a few years to the mid-teens; and no treatment for it, whatsoever. The symptoms associated with this are usually a loss of early control—head control, walking, talking—becoming other problems, such as irritability, loss of appetite, vomiting and seizures, and there may be periods of sharp decline or temporary restoration of some function. Eventually, the child may

also have heart, kidney, vision, breathing complications. These are tough things, when they grab a family.

We all, as members, get people coming by our offices, representing these rare and neglected diseases, and they're always saying, "Look, we want you to put more money into the process," and we all want to do it, because you don't want to hear of anybody having to face any sort of struggle or circumstance like that. But, then the truth of the matter is, we develop very few products for them, even if we pump a bunch of money from here into it, because it's going to take \$800 million to \$1.7 billion to bring the product to market, and that market is this thin; it's just not going to happen.

And that's why I would ask you to seriously consider something that the FDA has done, on an ad hoc basis previously, but instead, let's make this a separate category of review so it's not just done on an ad hoc, "Well we like this one, we're not going to do that one. This one's important to us, or this one has political impetus to us, that one doesn't." Just create a separate category. Work with the disease population groups to see if they're willing, as groups, to consider going into this. Do a thorough review of it, and then set this truncated category up. And it's known, going into it, this isn't the same review that we're going to take on a common disease—arthritis, diabetes, something where there's a large, clear population.

I think you would get a huge amount of support for doing something like this. I think you would get a lot of people behind it. And I think it would stretch our dollars out to a point where you would get action in 6,800 categories that have no action now.

So, I'd ask how you would respond to that, please.

Dr. HAMBURG. Well, thank you very much for this proposal, and we will certainly look at it very seriously. And, you know, the issues you raise are ones that are very meaningful to me, personally and professionally, as well as to the agency. As I mentioned to you when I met with you at an earlier time, I shifted, in my career, from a career in academic medicine to public service, because of watching the AIDS epidemic develop while I trained as a medical student and became a resident in internal medicine. And at that time, we had no treatments to offer AIDS patients. And then new treatment options began to emerge, and I went to work at NIH—National Institute of Allergy and Infectious Diseases—to be part of that process of trying to develop new therapies and trying to get them to people who needed them.

You know, the opportunity that we have right now, in terms of advances in science, combined with the growing public health need for both rare and neglected diseases, I think, demands that we take action and that we be innovative, if not transformative, in how we approach it.

NEW REGULATORY PATHWAYS

So, I'm eager to work with you. I think that the program that you've already helped to establish within FDA in response to past legislation—section 740—has already gotten us on track, in terms of beginning to really, in a focused way, to look at: How do we develop new regulatory pathways? How do we leverage advances in

science and technology to make our regulatory oversight as efficient and effective as possible? And how do we think creatively, building on activities already underway, such as the Orphan Drug Program, to look at various incentives that exist or could be developed to try to, you know, really catalyze activity in areas where there are limited markets.

It's something that I know is of the highest priority within the White House, as well. President Obama spoke to this issue in his recent State of the Union Address, briefly, but he did talk about the importance of developing new products to address unmet public health needs.

So, we will work with you with enthusiasm. We will make sure that the group—that the groups within FDA working on implementing section 740 look very seriously at your proposal here, and continue to work with you and your staff and others to make, you know, real, meaningful, and sustainable progress in this important area.

Senator BROWNBACK. I can't think of anything you could do that would give more hope to a large group of people that don't have a whole lot of it right now. And it affects a lot of people.

I've got several other questions I'd like to ask, but, chairman, that's the primary issue, and I really hope—this is my last year in the Senate—I really hope we can make some progress on this. And I think it's within your power to move this forward, in developing a proposal, putting it forward. I think you would get a lot of support, and I'd love to be one right there with you to try to move that forward, to give hope.

Dr. HAMBURG. If I could just add, I think there's also a huge opportunity here to work with sister regulatory agencies around the world, because these are issues that do crosscut, clearly. And, you know, if we can bring new, innovative regulatory strategies and the best possible science to bear, and also, you know, fully define the markets that do exist and the incentives to bring the pharmaceutical and biotech industry into developing products in these areas, you know, we can make additional progress with that approach.

Senator BROWNBACK. Thank you.

Thank you, chairman.

Senator KOHL. Thank you, Senator Brownback.

Senator Mark Pryor.

Senator PRYOR. Thank you, Mr. Chairman.

And thank you for being here today, Dr. Hamburg. I appreciated our visit on the phone last week.

NANOTECHNOLOGY

Let me talk a little bit about nanotechnology, and I'd like to get your thoughts. I know that the FDA has proposed a \$7.3 million line item to build core scientific capacity for nanotechnology. I actually have a bill here that would do a total of \$25 million. And I guess my question for you—on that \$25 million—is, if we are able to get that bill passed and make that money available, could you all spend it wisely?

Dr. HAMBURG. Well, I have not seen that piece of legislation, but, you know, clearly nanotechnology is an emerging technology that

holds great promise, in terms of products—medical products, as well as cosmetics and food-related issues. It's one where we want to fully explore the opportunity, but we also want to study it carefully to ensure that safety issues are adequately surfaced and addressed.

We have a program that is moving forward in the nanotechnology area. As you may well know, the National Center for Toxicological Research in Arkansas is a very important hub in our nanotechnology research activities.

But, it cuts across every aspect of FDA work, in terms of our product centers. So, I think that, yes, you know, there—it's a very, very important emerging technology. We need to deepen our understanding. And it's key to many areas of FDA activities, so we would welcome the opportunity to work more with you to see what we can do and how we should best do it.

Senator PRYOR. Does FDA currently have the physical infrastructure it needs—the physical labs, buildings, space, and equipment, whatever that may be—to really, thoroughly study nanotechnology, or is that still a work in progress?

Dr. HAMBURG. You know, I think that we are always having to evolve our capabilities as emerging technologies also evolve. We do have a solid technical capability for nanotechnology, but I would hesitate to try to address whether we have all of the infrastructure that we need for our nanotechnology efforts. I can certainly tell you that we need to bring on board more expertise in the nanotechnology area. We also are working in partnership with outside experts in this important arena to strengthen our capacity. But, I think it's probably fair to say that one always needs to be dynamic in these kinds of programs, because the science itself is so dynamic.

SALMONELLA

Senator PRYOR. Let me change subjects on you, if I can.

In the last few weeks, there's been a salmonella outbreak, and apparently it was related to hydrolyzed vegetable protein. And my understanding is, the administration's budget adds money for—to identify such outbreaks. But, does FDA—are you—do you feel like you have the right resources and the right capabilities in place to monitor things like salmonella and these other type of outbreaks that you see in the food system?

Dr. HAMBURG. Strengthening food safety is a huge priority for FDA and for the administration and for the Nation. We have experienced the real-world implications of gaps in food safety and a food safety system that's oriented toward addressing problems once they occur, rather than preventing them in the first place, and that's what we are dedicated to doing.

Senator PRYOR. And not to interrupt you, but, as I understand, there's a President's Food Safety Working Group? Is that—

Dr. HAMBURG. Yes. That is—the Food Safety Working Group is very active. It was established by the President, I think actually at the same time that he announced my nomination. And they've identified a number of critical activities and also a focus on prevention, strengthening surveillance and enforcement, and response and recovery.

FOOD SAFETY

There is a piece of legislation that's pending, on the Senate side, to strengthen food safety, which we are very supportive of, because it would bring additional authorities and resources for the FDA to continue to develop our food safety programs and to truly transform our food safety system as it needs to be to address the challenges before us. But, even without that legislation, we are moving forward in key ways to reorient the system toward prevention, to enhance inspection, to try to really get a better handle on how to track and trace food-borne outbreaks, and working, importantly, in partnership with our counterparts at the State and local level, and also, again, working internationally, because import safety is such a concern. But, we do look forward to the consideration by the Senate of the food safety bill, because that would really dramatically enhance our position with respect to making the kinds of meaningful and enduring changes that we need for food safety.

Senator PRYOR. The last question I have, really, is about the National Center for Toxicological Research (NCTR). And I know that you've attempted to come down there previously, but—I don't remember if it was a snowstorm or whatever, but you couldn't make it, and we certainly would love for you to come down and see that again, whenever it works in everybody's schedule.

NCTR

But, is the FDA doing everything possible to assure that the high quality science at NCTR is relied upon by other FDA labs rather than duplicating the capabilities elsewhere?

Dr. HAMBURG. NCTR represents a very unique resource for FDA, and one that we rely on, and one that I certainly value. It enables us to build fundamental research capacity that has implications that cut across our various product centers and to do, you know, really cutting-edge scientific work in some key areas, whether it's the establishment of a genomics lab that's really helping us think about how we can use a deepened understanding of genetics and genetic traits to target therapies better and to understand the interaction of lifestyle factors and genetics as we think about medical products; some of the bio-imaging capabilities that have been developed there that can help us develop new kinds of markers to assess product effectiveness and to support activities across a range of programs at FDA—the activities that they're doing in terms of toxicology research, per se, and safety that are so important, especially as we're looking more deeply at a range of environmental exposures, issues like BPA; and, of course, you know, what we talked about with nanotechnology—they represent a key hub in those efforts. So, it's really a unique, highly valued resource.

I'm looking forward to my visit down there. But, in the meantime, I've been working closely with members of the NCTR staff and its director, and they are very much, while at a distance, integrated into our work at FDA.

Senator PRYOR. Thank you.

Thank you, Mr. Chairman.

Senator KOHL. Thank you very much, Senator Pryor.

Senator Byron Dorgan.

Senator DORGAN. Mr. Chairman, thank you very much.

Dr. Hamburg, welcome, and—

Dr. HAMBURG. Thank you.

Senator DORGAN. Dr. Hamburg, I want to visit with you about the issue of importation of prescription drugs, perhaps not a surprise to you.

IMPORTATION

Last December, I and Senator Snowe, along with 30 other co-sponsors, after working for a number of years, were preparing to have a vote on the importation of FDA-approved prescription drugs—only FDA-approved prescription drugs. And the day before the vote, you sent a letter to Senator Brownback and Senator Carper; and, in the letter, you indicated some concern about the legislation. You indicated, however, that the administration supports a program to allow Americans to buy safe and effective drugs from other countries, and you're beginning working with stakeholders to accomplish that.

This has been a long and tortured trail, probably 10 years, in which the pharmaceutical industry has prevented the American people from accessing FDA-approved identical drugs that are sold for a fraction of the price in most other countries in the world.

So, this is an issue, I think, of freedom for the American people. They don't want to buy tainted drugs or counterfeit drugs, but if Lipitor is made in Ireland and put in a sealed container and sent various places in the world, why should the American consumer be paying triple the price? Why should they not have access to that FDA-approved drug made in a plant inspected by the FDA, and so on?

So, I guess the first question is—you indicate you support a program to allow Americans to buy safe and effective drugs. Are you working to make that happen? And if so, what kind of work is underway at FDA to assure that that could be the case?

Dr. HAMBURG. Well, we do very much care about helping Americans get access to important drugs for their health, and we also care very much about ensuring safety. And, with you, we want to work toward finding better strategies. As I think you know, in fiscal year 2010, and again in the proposed fiscal year 2011 budget, money has been put aside—\$5 million each time—for developing strategies and examining and analyzing the safety issues with a broadened drug importation strategy. There are genuine safety concerns, and that's what we're trying to address.

Many of the drugs that we're talking about, in terms of importation, are not drugs that are identical. They're—

Senator DORGAN. Let's deal with identical drugs, however. Let's just talk about identical drugs.

LIPITOR

Dr. HAMBURG. Well, Lipitor is one example where it really is the same product, as I understand it. But, many of the drugs are not necessarily bioequivalent. They may have the same product name and be the same product class, but the formulation may not be bioequivalent, the dosing formulation may be different.

Senator DORGAN. I understand—

LABELING

Dr. HAMBURG. There are labeling issues. There are issues about our being able to really assure proper manufacturing practices. All of those things really matter, and so we need to have a program that is doable, that will enable us to be able to assure those kinds of issues for the American people.

Senator DORGAN. Dr. Hamburg, but in the second paragraph of your letter last December, you talked about, "Importing non-FDA-approved drugs represents four potential risks." No one is talking about importing non-FDA-approved drugs. And the things you've just raised, labeling and so on—our staffs met with the FDA and the FDA staff and said, "Identify any concerns and technical issues you've had." We dramatically changed our bill to address all of those issues.

And if you will just bear with me for a moment, let's take the drug that is identical. Let's reintroduce the bill, with only an identical drug, made, in this case, by an American manufacturer in an Irish plant and sent in various places of the world, and the American consumer has the opportunity to spend double or triple the price in order to access it.

Is there a way for us—in our legislation, we have batch lots, we have pedigree, things that don't now exist, even in today's drug supply. You're familiar with the Heparin issue, right? The tainted medicine—

Dr. HAMBURG. Of course.

HEPARIN

Senator DORGAN [continuing]. With Heparin that's made in pig farms in China that no inspector has ever visited. So, I understand all of the scare stuff that the pharmaceutical industry raises about this, but I'm talking about an identical drug made in an FDA-approved plant, with batch-lot and pedigree attached, and so on. Couldn't we agree that, at least in those circumstances, we could at least do a pretty good job that would assure the American consumer that they are—what they are buying is exactly what everyone else is purchasing, for a fraction of the price?

Dr. HAMBURG. You know, we share your concerns. We want to work to try to establish programs that can assure safety of drugs and medical products that are imported into this country. It's a hugely important issue and a high priority. There are, you know, real logistical concerns, very resource-intensive strategies that are outlined in the legislation that, you know, would be very, very difficult for the FDA to actually—to implement. But, I think that there are ways that we can approach these issues, and I think, you know, we need to work with you and others in order to really—as we pursue this planning effort, this—

PROGRAM TO IMPORT DRUGS

Senator DORGAN. Is there an end date on this effort? I mean, do you have a time by which you want to accomplish the goal—the administration's goal of allowing Americans to buy safe and effective drugs in other countries?

Dr. HAMBURG. Well, I think that we are moving forward, in terms of the work that we're doing—the analyses and the development of different types of strategies, and modeling those options for how much they would assure safety—trying to get a better sense of what are the issues, in terms of drugs that are being—while the drug may be approved for use in the United States, the drug that's coming in to people ordering these drugs on the Web site are not those drugs that are necessarily the FDA-approved drugs. That's—

Senator DORGAN. Well, that's a—

Dr. HAMBURG [continuing]. One of the huge concerns that we have.

And we know—you know, I was—

Senator DORGAN. Yeah, that—

Dr. HAMBURG [continuing]. Recently up at the border offices at JFK and saw, you know, the products coming in from all over the world, some of them with a Canadian maple leaf, you know, to suggest that they were coming from Canadian pharmacies, but they were not. And the quality cannot be assured.

So, it's a big issue. It's complicated. We ultimately want—our mission is to be able to provide Americans with access to safe and effective drugs in as timely and low-cost way as possible.

Senator DORGAN. Mr. Chairman, let me ask if we might—if the subcommittee might request of Dr. Hamburg that she submit to us what they are doing, with respect to this planning, and what the timeliness might be.

And let me say this. I—look I supported your nomination. I'm glad you're where you are. I think you are a terrific public servant, and you offering yourself to serve this country is an important thing. So, I—but I was upset in December, because, even in the last answer, you deftly changed the subject, and I don't want to lose an argument we're not having.

We're not having a debate about medicine that's coming in that might or might not be counterfeit. We're having a discussion about whether—and I'm using Lipitor just as an example—whether the company that produces Lipitor in a plant in Ireland, with a batch lot and a pedigree and the safety that ought to exist now for American consumers—whether those consumers ought to have the freedom to access that FDA-approved drug made in an FDA-approved plant—same pill, put in the same bottle, sent to three places, except the American consumer pays triple the cost.

This is not rocket science. Europe has done it for 20 years. If Europe can do it, we can do it. And I would hope that we—you and I and others—can approach this on the basis of saying, “How do we accomplish this with complete safety—which I think exists in our bill—for the American people?”

So, I'm very anxious to engage with you and your staff, and Senator Brownback and anybody else that has questions about this, so that we can support the American consumer, here, to be able to access FDA-approved drugs that are being sold around the world—in some cases, for one-sixth the price; in Lipitor, it's one-half to one-third of the price. And I just think it's an important issue.

So, thanks for indulging this discussion. You do a lot of other important things. It's very—and I appreciate the chairman's work and

the subcommittee's work with the FDA. We want to get you the funding you need. We want you to succeed.

Thank you very much.

SAFETY AND ACCESS

Dr. HAMBURG. Well, I appreciate that, and I do look forward to working with you and others on this important issue of safety and access.

Senator KOHL. Just to pursue that, are there powerful political interests and lobbying interests involved here that prevent us from bringing these drugs to the American public at prices that are being paid around the world—much, much less than what we're paying here? And, as you know, I'm sure, and as Senator Dorgan has said, and which he has pursued so well over the years, we're paying double and triple and quadruple the price for some of the most popular drugs here in the United States than people are paying all around the world. Now, I'm sure that that causes you great concern and arouses your strong interest. And as the head of the FDA, of course, you can play a pivotal role in helping us bring these drugs to the American consumer for the equivalent price that are being paid around the world. Is that one of your missions?

BIOEQUIVALENTS

Dr. HAMBURG. You know, very much front and center is—a mission—is to be able to assure access to safe and effective medicines for the American people. You know, this is a very, very challenging area, though, in terms of being able to assure safety. And for the FDA, that is, honestly, the issue that motivates our actions and concerns. I am not the first FDA Commissioner to raise these issues. FDA Commissioners, regardless of administration, over, you know, many years now, have echoed these same concerns. And it does reflect the complexity of trying to assure, especially in the world of Internet sales, that the products that are being purchased are what they purport to be, and being able to assure that, while a product may be FDA-approved for use in the United States, when that same product is actually manufactured elsewhere, it is not manufactured with the exact same specifications that it's manufactured for use in the United States, and that can have very important implications for patients. If it's a different formulation, it may have different bioequivalence, it may require a different dosing schedule, it may be formulated even with other components. And, of course, the labeling for use may be different from what FDA reviews and approves.

So, we need to have a program that can really get into that level of analysis to assure that patients get what they need, that their healthcare providers, as well as the patients, understand what may be different about these drugs, even though they have the same name, so that they're used properly.

COUNTERFEIT DRUGS

And then there's the problem of outright counterfeit drugs, which is an enormous problem, and it is growing. And so, I think, you know, that this whole arena of import safety could not be more im-

portant and pressing to the work of the FDA and to the safety and security of the American people, and I hope that we can work on all of this together, because it is such a huge and urgent challenge.

STATE COLLABORATION

Senator KOHL. Dr. Hamburg, I was happy, last August, that you were able to come to Wisconsin and visit with folks in my own State about food safety efforts, including people in Wisconsin government as well as academia. I believe it was a day that was well spent by you; and a major theme of that day, as you know, was collaboration.

States inspect millions of food establishments each year, and investigate thousands of food-borne illness outbreaks, and they are really our first line of defense. You talk about collaboration often in your statement, specifically mentioning State liaisons and working with States to increase surveillance. Could you expand on this? What additional roles do you see the States playing, in collaboration with the Federal Government, in the integrated national food safety system?

Dr. HAMBURG. Well, thank you very much for that question and for the opportunity to say how much I enjoyed that visit, and that I've never eaten so much cheese and ice cream in one day before. But, it was a wonderful day, and I was told if I'd stayed for another, I would have had an equal amount of beer and sausage.

But, you know, the partnership with States and localities is absolutely key to achieving our success in food safety, and I feel that very personally, having served for 6 years as New York City's health commissioner. I know, you know, that it's the States and localities that are on the ground from the time that a first case of food-borne illness appears until the last case goes away, and that the burden, in many ways, is borne at that level. And the opportunities to extend the reach of government and these important programs is so enhanced through collaboration.

We see working with the States as key. We see strengthening training as an important part of that, we see strengthening laboratory capacity as an important part of that. We need to really improve the IT infrastructure for better communication of information—outbreak results, et cetera.

And I really do think that—going back to some of your early questions and remarks—especially at this time of economic constraints—the need for partnership, the need to make sure that we're really utilizing the sources as best we can, and that we are sort of mutually supporting the whole spectrum of activities that are needed to support food safety—and especially, to put a focus on prevention is absolutely key. So, this is a priority. We work well with the States on our food-borne outbreaks, but there's, I think, room to grow, in terms of strengthening those working relationships. And, of course, we work with our partner, the Centers for Disease Control and Prevention (CDC) and the Department of Agriculture, as we address important food-safety issues, as well. So, it's a very important Federal-State-local partnership.

Senator KOHL. Thank you.

Senator Brownback.

Senator BROWNBACK. Thanks, Chairman.

If you're going to go to Wisconsin, you got to come to Kansas. We'll feed you bread and steaks. Really good.

The other thing I would like to invite you there to see is University of Kansas' Pharmacy School is one of the top rated. It's rated top one, two, or three in the country. And they've developed this high-throughput model to test drugs at an early stage. And they're starting to work more and more in Second and Third World disease category areas for review, as well. And I think it'd be interesting to you to be able to see how they're doing this now, on trying to review these products at a much faster pace with the process that they're using.

They're also at a point of being able to get a National Cancer Institute designation, with the Pharmacy School being one of the key aspects of it. So, it's drug delivery on cancers that they're working on. And I think it'd be an interesting thing for you to look at and to see as you think of ways to get more drugs to market—safe, efficaciously—but try to get this cost curve down, which is so important for us to be able to get some more of these categories covered. So, I hope you can—hope you come out and can take a look at that.

PARTNERSHIPS WITH ACADEME

Dr. HAMBURG. Well, I'd love to. And what you're describing, I think, fits very much with our strong new focus on advancing regulatory science, and that critically involves partnership with academe. We want to bring the best and the brightest minds to addressing these important issues of, how can we make the regulatory pathway more effective and efficient? How can we use the best possible science to help us rapidly identify products—

Senator BROWNBACK. Right.

Dr. HAMBURG [continuing]. With promise, and those that will fail, so that we can really focus our efforts on moving products through the pipeline to people who need them.

So, I'd be delighted to come out there. A few other people in the Department of Health and Human Services that care about Kansas, too. So.

Senator BROWNBACK. Good, good. There's a secretary there that cares about it, yes.

Thanks, Chairman.

Senator KOHL. Thank you very much, Senator Brownback.

Senator Pryor.

Senator PRYOR. No further questions, Mr. Chairman.

Senator KOHL. Senator Dorgan.

Senator DORGAN. Mr. Chairman, I would just repeat the previous discussion we had, so I think I'll—we'll do this at another time, but—

Dr. HAMBURG. All right.

Senator DORGAN [continuing]. Telephone or perhaps in person.

FOODBORNE ILLNESS

Senator KOHL. Dr. Hamburg, one the outcomes you hope to achieve with fiscal year 2011 funding is to reduce the time it takes to detect and respond to outbreaks of food-borne illness. You talk about collaboration with CDC. State, local, and international partners have long felt that, after prevention, a quick response to any

outbreak of food-borne illness is the most important way to prevent its spread.

Several years ago, we actually put funding in this bill for the FDA to create rapid-response teams throughout the country in order to do that. I understand that you have increased the number of these teams—hopefully, because you believe that they have been successful. Could you talk a little bit more about these teams and other collaborative efforts you use to respond to food-borne illness outbreaks in this country?

RAPID RESPONSE

Dr. HAMBURG. Well, the rapid-response teams have been an important success. And thank you for your leadership in making those happen. We have nine rapid-response teams, at present, and I think they have demonstrated their value, in terms of, as you say, being able to rapidly identify a problem and respond.

I think that, even beyond these nine teams, they provide a useful model as a strategy for how to achieve a more integrated approach to responding to outbreaks of food-borne illness, and the need to have a team that reflects a range of different disciplines and expertise so that you can understand, in a systematic way, the outbreak and what's needed to respond.

In addition to those rapid-response teams, we have been able to put in place a network of laboratories to enhance our emergency response, because you need to identify the food source, and confirm it, in order to really pursue the investigation and the appropriate response. And so, that's been very, very important, as well.

But, there—the elements of an integrated system, I think, are really starting to be put in place. You know, part of what I hope to be able to achieve is to continue to extend those important elements of our system—to institutionalize them, because, you know, one of the things that I have seen since I've been in this role is that the FDA has a sort of unfortunate history of sort of gearing up after there's been some kind of a crisis, and then the resources recede, and then there's another crisis, and we gear up again. I'd like to see us just continue with sustained support for key programs, such as the rapid-response teams, that do make a difference and matter to us all.

GENERIC DRUGS

Senator KOHL. Dr. Hamburg, I've been a strong supporter of the generic drug program for many years now. As you know, we've consistently provided increased funds for the Office of Generic Drugs, and yet, because of the number of applications, which are rising so quickly, we can't keep up, and the backlog is continuing to rise.

As you know, generic drugs provide an important opportunity to lower healthcare costs, which Senator Dorgan was referring to, and to which he is so much dedicated; and getting these drugs to market as quickly as possible is important, to respond to the high-priced drugs that we have on the market today.

The budget includes a proposal for user fees for generic drugs that would result in hiring nearly 80 new reviewers and inspectors of generic drug applications. Have you been talking with the industry about these user fees, which they have opposed in the past?

Can you give us an update on this? How soon can we hope to decrease, if not eliminate, the backlog in generic drug applications?

Dr. HAMBURG. Well, as you point out, generic drugs are very, very important in being able to get lower-priced, safe and effective drugs to people who need them. And thanks to the work of this subcommittee, you know, we have been able to increase our staffing and our opportunities in the Office of Generic Drugs and the review process. But, getting those generic user fees will make an enormous difference.

I, just a few weeks ago, addressed the Generic Pharmaceutical Association's annual meeting, and had the opportunity to meet with and speak with their leadership. I am optimistic that this time we're going to be able to sit down and work something out, in terms of the generic drug user fees. I certainly hope so. I think, you know, this is one of those arenas where industry and FDA both recognize that the present situation is unacceptable, and not serving the American people well, and that, you know, together we have to find a meaningful and real solution. So, we are starting to roll up our sleeves, and we're going to be working hard on that. And, as I said, I am optimistic.

Senator KOHL. What's your level of priority on this issue?

PRIORITIES

Dr. HAMBURG. On this issue, very high priority. Very high priority. You know, one of the challenges of this job is that I'm always juggling a lot of high-priority concerns, but this is very, very fundamental to what—we're trying to achieve with the President has set out to achieve through healthcare reform and other activities, what the Secretary wants to achieve—and certainly very fundamental to the mission of the FDA.

Senator KOHL. Could you talk a little bit about some of the foreign offices that you've opened. I understand you have one in Jordan. What have these foreign offices accomplished, and how have they increased the level of food safety for American consumers? And are you intending to pursue that by opening additional foreign offices?

FOREIGN OFFICES

Dr. HAMBURG. We do have a number of foreign offices, at the present time. Actually, Jordan hasn't opened yet, but it's slated to open in the upcoming year. This is very important to extending our foreign presence and our ability to really ensure the safety of imports, both food and medical products. We, importantly, have offices in China and India now; we also have offices in Mexico, Costa Rica, and Chile. We have a presence in Brussels, to work with our counterparts in the European Union and in London, our counterpart agency, the EMEA, which is the European Union's FDA. We're planning an office in Jordan, as indicated, and also one in Parma, Italy, where EFSA, the European Union's food safety agency is located.

And, you know, these offices are very, very important, working to extend our reach, in terms of international presence, working with sister regulatory agencies in those countries and in those regions, providing technical assistance to national regulatory authori-

ties to try to boost regulatory capacity in other nations, that have less sophisticated systems than we do, so that we can have greater confidence that products being developed in those countries are being developed in accordance with international standards and with the standards that we would apply.

So, I think, as we think about extending our global reach, we need, really, to have a very new approach, where our job isn't simply to inspect things at the border as they come over, but really to push back and try to assure safety; and again, you know, a preventive approach, to have standards and systems that are institutionalized, whatever country is producing the product, to enhance the safety of these products when they come into this country. And I think, you know, in many areas, we can provide an additional benefit by working with other countries to help them strengthen their regulatory capacity that will accrue to the people of those nations, as well as to the people of this country.

Senator KOHL. Thank you.

MEDICAL DEVICE REGISTRY

Could you talk a little bit about the medical device registry that you're working with?

Dr. HAMBURG. Well, this is an effort to try to really achieve a unique identifier system for medical devices, and a system that will allow us to link information about medical devices to electronic health records and to a overarching system where we can better monitor how medical devices are working in the real world, better track adverse events that may occur in relation to medical device use in the marketplace, and, if problems do emerge, to more swiftly and effectively respond.

Senator DORGAN. All right.

Well, I'd like to thank you so much for being here this morning.

Dr. HAMBURG. Thank you.

Senator KOHL. There are multiple votes that are starting on the floor, so we'll have to wrap this up.

You've done a great job.

ADDITIONAL COMMITTEE QUESTIONS

We're going to keep the record open until next Tuesday, for any questions, and I hope that you will respond to them by April 13—

Dr. HAMBURG. Okay.

Senator KOHL [continuing]. If you can.

Dr. HAMBURG. Certainly.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

QUESTIONS SUBMITTED BY SENATOR HERB KOHL

PAY COSTS

Question. The amount proposed to keep up with inflation for all of FDA's salaries and expenses is just under \$11,000,000, approximately \$30,000,000 below what was requested last year, although staffing levels have increased.

Will this amount fully fund all of the salary and benefit increases you will have to fund this year in order to retain staff?

Answer. The \$10,896,000 pay increase for FDA for fiscal year 2011 is not intended to cover the cost of higher benefits and other increases in payroll costs other than the annual pay adjustment. In addition, although the \$10,896,000 pay increase for FDA supports increased costs for the annual pay adjustment, it will not cover all of the FDA costs for the pay adjustment.

Question. If not, how much is necessary, and where will the additional dollars come from?

Answer. The Summary of Changes table on page 56 of the FDA fiscal year 2011 budget displays the fiscal year 2011 estimate for higher pay costs of \$66,382,000. This amount is based on the most recent PDUFA pay analysis. The August 2009 pay analysis for PDUFA determined that the average change in FDA cost for compensation and benefits per FDA FTE was 5.54 percent. The table on page 56 also shows the fiscal year 2011 pay change of \$10,896,000 and the estimated pay absorption of \$55,486,000. FDA will cover any shortfall during fiscal year 2011 due to the annual pay adjustment and other pay and benefit costs through a combination of strategies, including reducing operating costs and adjusting when it conducts hiring.

USER FEES

Question. If food safety legislation is passed and includes authorization of user fees as proposed in the budget, will there be any discretionary start-up costs? If so, how much?

Answer. The President's fiscal year 2011 budget includes \$220,200,000 for user fees to register food facilities, conduct additional inspections of both domestic and foreign facilities, and conduct expanded import review and product sampling. In addition, the budget proposes \$13,900,000 in food and feed reinspection fees and \$4,400,000 for food and feed export certification services.

If food safety legislation is passed and includes authorization of user fees as proposed in the budget, FDA could use existing resources to support the start up costs of setting up the new food safety related fees. Examples of startup activities include establishing a process to calculate the new food user fees, expanding FDA billings and collections capacity, and developing and implementing the new manufacturer and importer registration requirements. In addition, FDA would enhance its capacity to hire the new employees funded by the food user fees by expanding FDA efforts to develop, classify, and recruit the new positions in the foods program and efficiently bring the new employees on board to FDA.

Question. If legislation is passed to authorize any of the remaining proposed new user fees (including generic drugs), will additional budget authority be required to fund start-up costs?

Answer. In this scenario FDA could use existing resources to support the start up costs of setting up both fees.

Question. If a food safety bill isn't passed this year, and proposed registration fees can't be collected by FDA, how will this affect the agency? Do you have a contingency plan to allow FDA to keep moving forward without those additional dollars?

Answer. For fiscal year 2011, FDA proposes an increase of \$220,200,000 for food registration and inspection user fees. FDA also proposes an increase of \$87,800,000 in budget authority to support transforming food safety priorities. If Congress does not enact legislation for fiscal year 2011 that contains food registration and inspection user fees, FDA will have to rely on the \$87,800,000 budget authority increase to begin to transform food safety. Without the proposed fees, FDA will have a greatly reduced ability to implement the priorities announced by the President's Food Safety Working Group.

The affect on FDA will be a significantly reduced ability to implement President Obama's vision of a new food safety system to protect the American public. For example, FDA will not be able to hire 479 FTE to conduct important food safety priorities, including 99 consumer safety officers to perform food safety inspections. The result will be a reduction of the following food inspection activities compared to the level supported with proposed user fees: 1,900 domestic food safety inspections, 150 foreign food inspections, 200 domestic tissue residue inspections for illegal drug residues in meat and poultry and 3,000 samples for analysis in FDA laboratories.

Not receiving these fees will significantly undermine FDA's ability to implement the major activities to Transform Food Safety, beginning in fiscal year 2011. FDA will have a greatly reduced ability to set new standards for safety, expand laboratory capacity, pilot track and trace technology, strengthen import safety, improve safety data collection, conduct food risk analysis and most importantly establish a foundation for an integrated national food safety system focused on prevention.

FOOD SAFETY

Question. I understand that FDA has entered into cooperative agreements with more than 30 countries to share inspection reports and other information, so if they discover a problem, we can be on the lookout for it here. How long have these agreements been in place and are you working with additional countries for more?

Answer. FDA currently has 43 confidentiality arrangements with 39 agencies, including the World Health Organization and specific Directorates General of the European Commission. These confidentiality arrangements involve 20 countries. The first arrangement was signed with our counterpart in Switzerland in September, 2003.

Under these arrangements, FDA is not only able to share critical information with public health counterparts in other countries, but is also able to receive from our counterpart agencies important information about emerging safety and other issues and about foreign regulatory actions. These arrangements allow FDA to share otherwise non-public information, with the exception of trade secret and personal privacy information, with counterpart agencies. We believe we have arrangements now with most countries that are able to enter into and perform the tasks required in a confidentiality commitment, and which deal with public health and regulatory issues similar to ours. However, we continue to monitor our needs and add countries and agencies as the need arises. Most recently, we have added arrangements with counterpart agencies in Austria and Italy.

Question. In Dr. Hamburg's statement, she mentioned the importance of expanding data collection and analysis and removing any barriers to full collaboration with State, local and foreign food safety efforts. What specific barriers was she referring to, and what proposals do you offer?

Answer. Barriers to full collaboration with our State, local and foreign counterparts are predominantly barriers to data sharing between entities because of regulatory and technology constraints. To address these constraints, FDA has developed a new regulatory procedure designed to leverage more effectively the public health inspection data gathered by our State partners. Under this initiative, FDA will begin issuing Warning and Untitled Letters on the basis of State-gathered evidence. As a result of this enhanced cooperation, both FDA and our State partners will reap the benefits of translating State regulatory work directly into FDA regulatory action. FDA is also pleased that pending food safety legislation which passed the House of Representatives last year, H.R. 2749, would grant new legal authorities to allow more information sharing with our State, local and foreign counterparts.

The technology constraints to data sharing are being addressed in working groups that are part of the Integrated National Food Safety System efforts. FDA, the United States Department of Agriculture, and the Centers for Disease Control and Prevention are participating in those discussions with the States to seek out opportunities to make their respective data systems interoperable.

UNITED STATES PHARMACOPIA PARTNERSHIP

Question. Was FDA's recent partnership with the non-profit organization United States Pharmacopia to update standards for heparin and glycerin a successful one? Is this a model that can be replicated?

Answer. Yes, the recent partnership with the United States Pharmacopia, also known as USP, has been successful. At the request of FDA, USP has revised the monographs for heparin, glycerin, and propylene glycol to test for known contaminants. FDA hopes to continue working with the USP to evaluate the current monograph system and determine methods to ensure that monographs are modernized as manufacturing changes or technology improves.

Question. The FDA budget includes proposed funding to develop a standard for front of package labeling. Is FDA working with USDA in that effort?

Answer. FDA has been coordinating with the United States Department of Agriculture (USDA) on front-of-pack labeling in numerous areas. Our coordination includes, design, research and science to ensure that the resulting symbols are noticeable, understandable and useable. The USDA has supported FDA's research by providing design support for the food label formats that are being tested by FDA. Additionally, USDA and FDA, with the Centers for Disease Control and Prevention (CDC), are supporting the Institute of Medicine, also known as IOM, on issues related to panel on front-of-pack labeling. Jointly, USDA and FDA provided input to the IOM panel on the Federal goals for front-of-pack labeling, information on existing front-of-pack symbols and direction for the IOM activities. FDA will continue to collaborate closely with USDA to ensure that the resulting front-of-pack symbols provide consumers with the information they need to consume healthy diets.

VACCINE DEVELOPMENT

Question. Recently, Secretary Sebelius announced a major evaluation of our efforts to respond to pandemics and other health threats, including vaccine development. What will FDA's role be in this, and what was learned from the H1N1 outbreak?

Answer. A successful public-private partnership that preceded the 2009 H1N1 influenza pandemic facilitated the availability and approval of safe and effective H1N1 vaccines in record time. This success reflects years of preparedness efforts and a significant investment by the Federal Government to counter the pandemic threat.

However, we might not have been so fortunate if the public health emergency resulted from a pathogen other than influenza. Currently the Administration is conducting a comprehensive review of the HHS medical countermeasures development and distribution process, and FDA is actively working with others in HHS to provide input to this review. There is increasing awareness that the current approaches to developing and evaluating vaccines, diagnostics and other treatments needed to respond to the range of potential public health threats should take advantage of the latest scientific innovations. Reaping the benefits of our Nation's investment in biomedical research requires a complementary, strategic investment in regulatory science. FDA plays a central role to advance this type of science, which focuses on the tools to properly assess the safety, efficacy, and quality of medical products and to get them from concept to people efficiently. In fiscal year 2011, FDA seeks to enhance its own critically needed scientific infrastructure and augment its scientific collaborations to advance regulatory science, and to continue collaborating with our Federal partners and industry to transform public health preparedness.

PRESCRIPTION DRUG ADVERTISING

Question. I have become increasingly concerned with the lack of standards regarding direct-to-consumer advertising of prescription drugs and medical devices via the Internet. Specifically, I am concerned that the limited amount of drug information provided in advertisements on social networking forums or "microblogs" may pose a risk to consumers. I am hopeful that increased oversight of this issue will make Internet-based advertising safer and more reliable, but remain concerned about any attempt to reduce the safety and labeling information that consumers receive.

What restrictions does FDA currently place on Internet direct-to-consumer advertising by drug and medical device manufacturers? What information must be included in ads or "microblogs" about advertised treatments?

Answer. FDA's regulates all prescription drug promotion that drug companies issue or caused to be issued. FDA regulations require that such promotion be accurate, non-misleading, and present balanced information about both the risks and the benefits of the advertised product. FDA regulations do not specifically address Internet promotion of prescription drugs separately from the other types of promotion, but we have been regulating Internet promotion since drug companies first began using this medium. For example, we have sent numerous enforcement letters citing promotion on the Internet that failed to comply with the regulations, including promotion on company brand Web sites as well as promotion on search engine sites such as Google, third party sites such as cnn.com, and on newer social media sites such as YouTube.

FDA regulates promotional labeling of all medical devices but only the advertising of restricted medical devices. FDA regulations do not specifically address Internet promotional labeling or advertising for medical devices, as applicable, separately from other types of promotion or advertising. FDA has sent numerous enforcement letters based on promotional labeling, where statements made are not consistent with the FDA approved or cleared labeling, including statements about the intended use of the device. FDA has also sent enforcement letters in situations where it has considered statements made in advertisements for medical devices to be evidence of an intended use for which the device has not been approved or cleared.

Question. Are you concerned that incomplete drug advertising information on social networking sites like Facebook or Twitter may pose a risk to consumers, especially if the FDA logo is included in the ad?

Answer. Yes, we are concerned about drug advertising on social network sites and are committed to ensuring that prescription drug promotion accurately conveys product risks and benefits, regardless of the medium used for such promotion. We are also concerned about FDA's logo being used in any drug promotion. FDA held a Part 15 Public Hearing in November 2009 to obtain public input on "Promotion of FDA-Regulated Medical Products Using the Internet and Social Media Tools." Social media tools, as well as their expansion to applications such as mobile tech-

nology, have raised questions regarding how to apply existing regulations to promotion in these newer media. We are currently evaluating the information and data obtained during our Part 15 Hearing and in the related docket and plan to ensure that FDA has optimal policies in place for oversight of drug promotion using social networking tools.

Question. Does the Division of Drug Marketing, Advertising, and Communications have adequate resources to properly oversee this type of marketing? If not, what additional resources are necessary?

Answer. The Division of Drug Marketing, Advertising, and Communications, also known as DDMAC, has approximately 53 full-time employees. Currently, there are 24 staff in DDMAC focused on the review of direct-to-consumer advertising, including 13 reviewers. To get a sense of their workload, we note that DDMAC received 76,631 promotional pieces at the time of their first use during calendar year 2009. Of these, 15,998 were consumer-directed promotional pieces, which includes both direct-to-consumer ads and DTC promotional labeling pieces. Another 14,970 were “mixed” pieces. These are pieces directed to both consumer and professional audiences, which are typically Internet-based materials intended for all audiences. DDMAC can only review a fraction of these promotions. To most effectively address the increasing number of prescription drug promotional pieces that are produced each year, including the extremely rapid growth of Internet promotion, FDA has adopted a comprehensive risk-based strategy for triaging its substantial workload. This risk-based approach is designed to have the most impact in addressing misleading promotion and fulfill its goal of protecting consumers and healthcare professionals from misleading promotion of medical products.

ANTIBIOTICS

Question. The Agriculture Appropriations Subcommittee last year encouraged FDA’s Center for Veterinary Medicine to conduct a focused reassessment of Guidance Document No. 152 to review and update the current ranking of antibiotics according to their importance in human medicine as a framework for approving antibiotics for use in animals. What is the status of this reassessment?

Answer. FDA intends to update its guidance on the “Potential ranking of antimicrobial drugs/drug classes based on identified relevant factors” included in Guidance For Industry Number 152, “Evaluating the Safety of Antimicrobial New Animal Drugs With Regard to Their Microbiological Effects on Bacteria of Human Health Concern.” At this time, FDA is planning to seek expert advice and public input on any updates to this existing drug ranking.

Question. What is FDA’s timeframe for issuing regulations to implement the animal antibiotic use data collection provision that was included in the Animal Drug User Fee Act (ADUFA)?

Answer. Section 105 of the Animal Drug User Fee Amendments of 2008, also known as ADUFA, established additional requirements regarding the submission of sales and distribution data for antimicrobial active ingredients in new animal drugs approved for use in food-producing animals. The sponsors of such products are required by statute to submit the first report including this additional information by March 31, 2010. The issuance of regulations is not required to implement the new ADUFA Section 105 requirements. However, independent of implementing these new statutory requirements, FDA intends to pursue rulemaking in the near future to incorporate the new Section 105 requirements into the existing regulations regarding the preparation and submission of records and reports for new animal drugs.

Question. The FDA has been authorized for several years to review the non-therapeutic use of antibiotics in farms. In 2004 letters were sent from the FDA to manufacturers of drugs requesting more information related to resistance, but there is uncertainty regarding whether FDA received a response. To date, it appears FDA is still attempting to gather data on this issue.

At what point will this data gathering be completed? Will there be a point prior to that when FDA will have enough data to make an assessment?

Answer. FDA continues to be concerned about the use of medically important antimicrobial drugs, antimicrobial drugs that are important for therapeutic use in humans, in food-producing animals for non-therapeutic, production purposes. FDA does not believe that it is judicious to use these important drugs for such purposes in animals. Therefore, FDA is developing a strategy to address this important public health issue. Moving forward with the strategy to address this important public health issue is a priority for FDA. FDA is completing an initial review of the issue and intends to publish a document describing its current thinking in the near future.

REGULATION OF TOBACCO

Question. Recently the FDA began implementation of the Family Smoking Prevention and Tobacco Control Act. How is FDA working with interested parties, including the tobacco industry, consumer groups, and other agencies that have jurisdiction over tobacco products, in developing and implementing the regulatory process to ensure compliance?

Answer. FDA, through its Center for Tobacco Products, or CTP, is working in a number of ways with interested parties to implement the Family Smoking Prevention and Tobacco Control Act, or more simply, the Tobacco Control Act. In July 2009, FDA opened a public docket seeking input from the public and various stakeholders on the implementation of the new statute and subsequently extended the comment period from September 29, 2009 to December 28, 2009. Since then, public dockets have been opened for comment on a number of issues, including marketing descriptors to convey modified risk and product registration and labeling requirements.

FDA has developed a CTP Web site, located at www.fda.gov/TobaccoProducts. This Web site contains information about CTP's efforts to implement the Tobacco Control Act, a list of frequently asked questions and answers about the Tobacco Control Act, tobacco-related regulatory documents such as guidance documents and regulations, contact information, and other information about tobacco use and prevention.

In early August 2009, the Assistant Secretary for Health, the FDA Commissioner, and the Director of the Centers for Disease Control and Prevention hosted a conference call with more than 200 State and local officials to discuss collaboration in carrying out the Tobacco Control Act.

In September 2009, FDA held a series of listening sessions with a variety of stakeholders, including national tobacco control groups, State and local government organizations, Federal partners, and tobacco manufacturers, distributors, importers, and retailers to hear comments and concerns regarding implementation of the Tobacco Control Act.

In October and November 2009, FDA held two listening sessions to provide industry additional opportunities to make comments and raise concerns about the registration, product listing, and ingredient submission requirements.

Question. As of June 22, tobacco packaging will no longer be allowed to include phrases such as "Light" and "Ultra-Light". When will final guidance on this be issued to ensure maximum compliance?

Answer. Section 911 of the Tobacco Control Act prohibits the use of the descriptors "light," "mild," or "low" in the label, labeling, or advertising of tobacco products without an FDA order in effect. This statutory provision takes effect on June 22, 2010. In advance of the effective date of this prohibition, FDA intends to conduct outreach to retailers and manufacturers, reminding them of their responsibilities under the statute. FDA also plans to initiate a public education effort to increase public understanding about the prohibition of these terms. Once this provision takes effect, FDA intends to enforce it through a variety of means.

Section 911 also prohibits the use of "similar descriptors," such as descriptors similar to "light," "mild," or "low," without an FDA order in effect. FDA opened a public docket in January 2010 to solicit public input on how to define "similar descriptors," specifically requesting input on the use of numbers, colors, healthy images and terms like "smooth," "silver," and "natural." FDA is in the process of assessing the input received from the public, including comments from tobacco control advocacy organizations and tobacco companies and trade organizations.

STANDARDS OF IDENTITY FOR MILK

Question. Please provide an update on FDA's response to a petition filed last year regarding amending the standards of identity for milk as they relate to artificial sweeteners.

Answer. FDA received a citizen petition from the International Dairy Foods Association, also known as IDFA, and the National Milk Producers Federation dated March 16, 2009. The petitioners requested FDA to amend the standard of identity for milk in 21 CFR 131.110(c), to provide for the use of any safe and suitable sweetener in the optional characterizing flavoring ingredients and to similarly amend 17 other standards of identity for milk and cream products, including yogurts. Such a change to the milk standard would permit the use of non-nutritive sweeteners in flavored standardized milk. Currently, the standard of identity for milk provides for the use of only nutritive sweeteners under optional ingredients in 21 CFR 131.110(c)(2) in the characterizing flavor for flavored milks. FDA issued an interim response to IDFA on August 24, 2009 explaining that FDA had not reached a final

decision on the petition due to other priorities. FDA is currently considering how it will respond to the petition.

STATE CONTRACT INSPECTIONS

Question. During fiscal year 2009, what percentage of food and medical product inspections were carried out by State inspectors through a contract?

Answer. In fiscal year 2009, State inspectors carried out 23,913 unique food and medical product establishment inspections. These State contract inspections total 62 percent of domestic inspections carried out by FDA and the States.

STATE AUDITS

Question. Funding was provided in fiscal year 2010 to enhance FDA's audit program for State inspection programs. Please provide an update on how this funding was used, and whether State program audits have increased.

Answer. Of the 26 States currently enrolled in the Manufactured Food Regulatory Program Standards, also known as MFRPS, FDA completed program audits of five States during fiscal year 2009. These States are Missouri, North Carolina, New York, Oregon and Wisconsin. FDA expects to complete program audits in Massachusetts, Florida, Minnesota, Michigan, California and Washington during fiscal year 2010. These audits include a review of the States' self-assessment of their own programs against the standards described in FDA's MFRPS. The audits focus on a review of all manufacturing inspections accomplished by the States—both FDA contract and routine State inspections. The audits include reviews of the States' regulatory foundation, education and training files maintained for field investigators, inspection reports, self-audit procedures, compliance and enforcement actions, response and preparedness within the State, sample collection procedures, community outreach and the program's relationship with a regulatory lab.

In addition to creating the infrastructure to perform robust program audits and improve our performance in auditing State inspections performed under FDA contract, FDA is also creating the critical infrastructure to provide support, guidance and technical assistance to our State regulatory partners to better enable them to establish and sustain conformance to the MFRPS. The funding provided by Congress is being fully and effectively used to support our States' successful implementation of the MFRPS, a key component of an effective, integrated national food safety system.

QUESTION SUBMITTED BY SENATOR BYRON L. DORGAN

DRUG REIMPORTATION

Question. Please provide us with your timeline for setting up the process for drug reimportation.

Answer. The Administration supports a program to allow Americans to buy safe and effective drugs from other countries. The Administration has included \$5,000,000 in our fiscal year 2010 and 2011 budget requests for the Food and Drug Administration to begin working with various stakeholders to develop policy options related to drug importation and addressing some of the implementation challenges such as improving supply chain security.

FDA is currently conducting assessments of different drug importation approaches to inform legislative proposals and identify initial infrastructure needed to implement a program that assures patient safety. This work includes, among other things, conducting an economic and implementation analysis, evaluating policy options, identifying and enhancing IT infrastructure associated with drug importation, identifying and developing training programs, increasing sampling and laboratory capacity, enhancing collaboration with regulatory counterparts, and developing track and trace standards for supply chain security. Although we have not established a specific timeline for setting up the process for drug importation program we remain committed to ensuring that Americans have access to safe and effective drugs.

QUESTIONS SUBMITTED BY SENATOR RICHARD J. DURBIN

Question. Some individuals and interest groups have raised concerns that S. 510, the FDA Food Safety Modernization Act, expands the jurisdiction of the Food and Drug Administration into areas traditionally overseen by the United States Depart-

ment of Agriculture. Please provide the FDA perspective on how, if at all, legislation would expand FDA jurisdiction into areas traditionally overseen by the USDA?

Answer. FDA believes that these concerns are unfounded. The legislation makes it clear that the new provisions do not affect USDA's jurisdiction and, in many places, explicitly requires FDA consultation with USDA. With regard to new requirements, such as the produce safety standards, FDA is already working closely with USDA as we develop those standards. USDA also will be involved in the implementation of such standards, including an extensive outreach program to help the affected industry comply with the new standards. FDA recognizes the importance of working with USDA, with its expertise in agricultural production and its significant workforce, to help inform and implement the standards. FDA and USDA also are working together to ensure that our produce safety and quality activities are complementary and consistent and take into account the diversity of farming operations.

Question. The adverse event reporting (AER) system for dietary supplements created by the Dietary Supplement and Nonprescription Drug Consumer Protection Act (Public Law 109-462) has been in effect for over 2 years. The intent of the AER system was to assist FDA in enhancing its surveillance capability by authorizing it to collect data regarding illnesses related to the consumption of dietary supplements. How has data collected through the AER system been used by FDA to identify meaningful trends and aid in recalls?

Answer. The implementation of Public Law 109-462 resulted in a substantial increase in the number of adverse event reports about dietary supplements submitted to FDA. Additionally, the law mandated that product labels accompany mandatory serious adverse event reports. These factors have assisted FDA in two ways. First, the higher number of reports received enables FDA's clinical reviewers and statisticians to better detect unusual reporting patterns from clusters of adverse event reports, possibly providing evidence to better determine associations between products and adverse health effects. Second, product labels allow for better characterization of the products and their ingredients than may result from voluntary reports—typically from consumers—where the product may not be as clearly characterized and a label may not be included. Better description and characterization of the product helps FDA target specific products in support of FDA enforcement efforts. Analysis of adverse event reports, for example, led to FDA's warning to consumers and healthcare professionals about certain Hydroxycut-branded products because of serious reports of liver disease. The company producing the affected Hydroxycut-branded products—Iovate Health Sciences U.S.A., Inc.—voluntarily recalled those products in 2009.

Question. In January 2009, GAO issued a report on FDA's oversight of dietary supplements. In that report, GAO recommended that FDA issue guidance to clarify when an ingredient is considered a new dietary ingredient, what evidence is needed to document the safety of new dietary ingredients, and appropriate methods for establishing ingredient identity. In its comments on this recommendation, FDA said that it had developed draft guidance which was undergoing internal review. Can you provide me on an update on the status of this guidance?

Answer. FDA is developing a draft New Dietary Ingredient, also known as NDI, guidance that is under internal FDA review. We expect the draft guidance to discuss, among other issues, when FDA considers an ingredient to be an NDI, FDA's current thinking on the evidence needed to document the safety of NDIs, and recommendations on appropriate methods for establishing the identity and composition of NDIs.

In addition, FDA is developing a proposed rule to better define what a manufacturer or distributor must include in a NDI notification. Establishing more precisely the information that must be included in an NDI notification would improve the quality of the notifications being submitted to FDA and would expedite the review of NDI notifications. The amendments FDA intends to propose would also enable staff to evaluate the safety of new dietary ingredients in a more efficient manner with its limited resources. Both the draft guidance and the proposed rule are currently under review within FDA and appear to raise a number of complex issues.

Question. There have been numerous notification delays that resulted in schools unknowingly serving beef, peanut products and canned vegetables that have been recalled. For the last 5 years, the Food and Drug Administration and the United States Department of Agriculture have been drafting a Memorandum of Understanding related to the safety of food served in schools. The Memorandum of Understanding would set forth detailed notification procedures during the FDA's investigation of commodities intended for school meal programs. Have the two agencies finalized this memorandum of understanding? If not, what is causing the delay and what is the anticipated timeline for doing so?

Answer. FDA and the Food and Nutrition Service, also known as FNS, has collaborated with FDA to develop a Memorandum of Agreement, or MOA. Specifically, the MOA is between the Department of Health and Human Services, FDA and the following agencies within the United States Department of Agriculture: the Agricultural Marketing Service, FNS, and the Farm Service Agency. It is intended to strengthen and facilitate the exchange of information among the participating agencies during investigations and recalls that may involve USDA commodities such as those offered through the National School Lunch Program, and the Woman, Infants, and Children (WIC) Program.

The basic framework of the Memorandum of Understanding is complete and it is under review by the agencies. Final clearance will follow with a targeted completion date of summer 2010.

Question. In June 2010, several provisions of the Family Smoking Prevention and Tobacco Control Act (Public Law 111-31) will take effect, including new restrictions on cigarette advertising; new stronger warning labels for smokeless tobacco products; and a prohibition of terms such as “light,” “low,” and “mild” on cigarettes and smokeless tobacco products. How is FDA planning to educate the public about these changes, and ensure that industry complies with both the letter and spirit of the law?

Answer. Concurrent with the reissuance of the 1996 Final Rule, “Regulations Restricting the Sale and Distribution of Cigarettes and Smokeless Tobacco to Protect Children and Adolescents,” published in the Federal Register on March 19, 2010, FDA began educating the public. FDA has made available a variety of materials directed to retailers and consumers about the regulations. This effort includes information about what the regulations require, how to comply with them, and how to report violations. A dedicated Web page, www.fda.gov/protectingkidsfromtobacco, was created and will be updated with the latest information. As of now, it includes fact sheets to both retailers and consumers, a letter to retailers, and frequently asked questions. FDA has also used social media, such as YouTube, badges, and buttons to reach out to consumers. Additionally, FDA has established a call center to respond to questions from the public.

The Tobacco Control Act also directs the Secretary to contract with the States and Territories, to the extent feasible, to carry out tobacco retailer inspections and investigations to enforce the provisions of the reissued 1996 Rule. The goal is to enter into contracts with 75 percent of States and territories in fiscal year 2011.

In advance of the effective date of the provision prohibiting the use of terms such as “light,” “low,” or “mild,” FDA intends to conduct outreach to retailers and manufacturers, reminding them of their responsibilities under the statute. FDA also plans to initiate a public education effort to increase public understanding about the prohibition of these terms.

FDA is currently assessing what additional public education and outreach efforts would be appropriate in order to adequately inform the public when these provisions become effective on June 22, 2010.

QUESTIONS SUBMITTED BY SENATOR ARLEN SPECTER

Question. Last year, the FDA responded to the H1N1 threat with appropriate speed and while the process was not without challenges it was, in general, fast and efficient. I am concerned that this same urgency is not being applied to medical countermeasures being developed to prevent or mitigate threats that have been identified as critical national security priorities but have not yet materialized. The release of biological, chemical and radiological agents or the detonation of a nuclear device will come with little or no warning, we as a nation must have already developed and stockpiled safe and effective countermeasures if we are to respond to these types of threats. Does the FDA have the resources that it needs to prioritize responses to regulatory inquiries and submissions from companies that are under contract with the Federal Government to develop products the United States has identified as critical unmet needs?

Answer. Currently the Administration is conducting a comprehensive review of the HHS medical countermeasures development and distribution process, which has been a coordinated interagency effort by HHS’ Assistant Secretary for Preparedness and Response and includes the Centers for Disease Control and Prevention, the National Institutes of Health, and FDA. As part of this review, there have been discussions about the U.S. Government’s ability to ensure that medical countermeasure development is appropriately prioritized and resourced, and whether FDA has the resources and staff to robustly engage with partners throughout a product’s developmental life-cycle. The Administration will be briefing Congress of its findings and

recommendations once this comprehensive review is complete. Using existing resources and within the applicable regulatory framework, FDA prioritizes regulatory inquiries and submissions from sponsors and U.S. Government partners that are engaged in developing products that have been identified as meeting a critical unmet need.

Question. How extensively has the leadership of the FDA and the staff responsible for reviewing medical countermeasures been briefed on the national security threat assessments for CBRN agents? How many FDA employees that are involved in the review of medical countermeasures being developed under contract with BARDA, NIH or DOD have the appropriate security clearances necessary to allow them to receive classified threat briefings?

Answer. FDA leadership has been briefed and is very aware of the national security threat assessments for CBRN agents. FDA leadership is briefed by the HHS Office of Security and Strategic Information, and FDA has an employee assigned to that Office. In addition, FDA's Office of Criminal Investigations, within the Office of Regulatory Affairs, works with the Intelligence Community to obtain information and briefs FDA's leadership as needed. Across FDA's three centers that review medical countermeasure products, 106 employees that have been or in the future may be involved in medical countermeasure-related reviews have received special clearances to review classified documents related to product review submissions.

QUESTIONS SUBMITTED BY SENATOR SAM BROWNBACK

ACCESS ACT

Question. Dr. Hamburg, during our meeting last week we discussed a bill I've been working on since 2005 to create a new conditional approval system for drugs, biological products, and devices that is responsive to the needs of seriously ill patients. This effort, called the Access, Compassion, Care and Ethics for Seriously-ill Patients Act, or ACCESS Act, offers a new compassionate investigational approval system for treatments showing efficacy during clinical trials, for use by the seriously ill patient population. Under this new approval system, seriously ill patients who have exhausted all alternatives and are seeking new treatment options would be offered access to these treatments with the consent of their physician. I plan to re-introduce the bill during this session.

Answer. After our meeting, my staff provided a copy of this bill to FDA. Have you had a chance to review this legislation? Do you have any thoughts on the bill?

Question. I appreciate your interest in providing treatments to seriously ill patients and am committed to working with you on this important issue. We recognize the importance of providing access to patients who may benefit from an investigational drug and of providing seriously ill patients with a measure of autonomy over their healthcare options. My staff is continually engaged in efforts to increase the awareness of clinicians and patients about FDA's expanded access mechanisms. We are currently in the process of reviewing the legislation your staff provided and will give you feedback on the bill as soon as our review is complete.

Question. Would you be willing to work with me to find common ground on this issue?

Answer. I welcome the opportunity to work with you to find common ground on this issue. Once we have reviewed your bill, my staff will contact your staff to determine how we might continue to work together on this important issue.

COST OF DEVELOPING DRUGS

Question. In March 2004, FDA released a report, called "Innovation or Stagnation: Challenge and Opportunity on the Critical Path to New Medical Products", that addressed the challenges facing the drug industry in bringing a new medical product to market. In this report, FDA raised concerns about the high cost of product development, estimated in the report to be \$800,000,000 to \$1,700,000,000 per product, and the high failure rate of products before they reach FDA for review. This was particularly concerning to the agency given the government and private sector's increased investment in research and development over the same period of time.

Answer. It has been 6 years since FDA released this report and launched a new initiative to address this problem. What progress has the agency made in its quest to reduce the cost of drug development and provide more certainty that products will be viable beyond the research phase?

Question. *Answer.* Development of a drug takes many years, so it is too early to provide any specific metrics on cost and viability. However, I can certainly report progress in many Critical Path areas, some of which will have serious cost impacts. We have

a series of fairly advanced efforts under way that will ultimately make the collection, submission, and management of the data FDA receives totally electronic. This effort will bring significant cost savings for industry and FDA because it will make the collection and analysis of this data much more efficient.

An especially notable Critical Path success is the enormous support it has among industry, academia, and the public. There has been considerable enthusiasm to partner with us on Critical Path projects. In 2008 alone, Critical Path collaborations involved 84 government agencies, universities, industry leaders, and patient groups from 28 States and 5 countries on a raft of groundbreaking research projects. Critical Path has also stimulated the creation of numerous collaborations that are leveraging outside resources, with FDA serving in an advisory capacity. These collaborations are reporting substantial successes as well.

We are also making great strides in personalizing therapy. Increasingly, pharmaceutical developers are using pharmacogenetics and genomics data in drug development and submitting more of this type of data to FDA as part of their marketing applications. Since 2008, we have seen a 250 percent increase in the submission of genomic data included in marketing applications. To modernize our review process, FDA created a Genomics Group that uses an integrated review process, including discussions of genomics, pharmacometrics, and clinical pharmacology in the scoping meetings for all application submissions, including pediatric supplements. We are learning more and more about how to personalize treatments, making them safer and more effective.

GENERIC DRUG REVIEW

Question. Since the fiscal year 2008 appropriation, funding for the Office of Generic Drugs has increased by 23 percent. However, during this same time period, the median approval time for generic drugs has gone from 18.89 months to more than 26 months. How do you explain this decline in performance?

Answer. The number of new generic drug applications submitted to FDA remains at a high rate of over 800 per year. Increased resources recently provided by Congress enabled FDA to hire more scientific review staff members. As the complexity of applications increases, however, more time is required for review and approval of each application. There are a significant number of pending applications. However, in most instances, applications are approved when relevant patents or exclusivities expire. Even if the currently pending applications were otherwise approvable, over one-half of them could not be approved immediately because they are currently blocked by patents or exclusivities. Further, some applications are of lower quality and these take longer to review. In addition, the total time to approval includes time that the application is with the firm after the application has been reviewed and deficiencies have been communicated for the firm to address. Sometimes the firm does not respond to the deficiencies in a timely manner because of the firm's own priorities or perhaps lack of resources to address the deficiencies.

THIRD PARTY INSPECTION

Question. Many States have implemented "inspect the inspector" programs to help find efficiencies in their inspection budgets. FDA calls this third party inspection, and I understand that the agency has been looking into this kind of inspection program to augment FDA's foreign food inspections. Would you update me on FDA's efforts in this area?

Answer. In fiscal year 2009, FDA initiated a pilot program for aquacultured shrimp, under which it has audited more than 56 shrimp processors in six countries in an effort to evaluate the utility of third party programs to prevent problems with shrimp before export to the United States. Under the pilot, third parties will be certifying compliance of aquaculture shrimp with FDA's Seafood Hazard Analysis Critical Control Point (HACCP) regulations. If FDA finds that it can have confidence in such certifications, it may alter the import monitoring for those processors, freeing up resources to focus on higher risk processors.

FDA has been working with foreign regulators and third party certification bodies to enhance monitoring and oversight of processing sites. FDA expects that these activities will enhance FDA's regulatory oversight by leveraging resources and a shared mission with foreign regulators. These activities also have an educational outreach component that promotes foreign industry standards that are in line with FDA's expectations for imported food. In addition, the evaluation of the aquacultured shrimp pilot will provide valuable insight into the feasibility of using third party certification programs for foreign inspections.

Question. Have you considered a third party inspection program for domestic food inspections?

Answer. FDA is currently in the evaluation stage of our Voluntary third party certification pilot for imported aquacultured shrimp pilot. The goal of the shrimp pilot is to assist FDA to determine the infrastructure needs for managing third party systems and the process for evaluating third party certification programs, including evaluating the utility and feasibility of third party voluntary programs.

The pilot evaluated six participants—U.S. Government agency, foreign government, and private certification bodies—using the Guidance for Voluntary Third Party Certification Programs, published in the Federal Register in January 2009. The guidance was drafted in alignment with other existing benchmark attributes such as the Manufactured Food Regulatory Program Standards to ensure the same attributes are used for all third parties—States, foreign governments, and private certification bodies. The evaluation of the aquacultured shrimp pilot will provide valuable insight into the feasibility of using third party certification programs for both foreign and domestic inspections.

In the domestic arena, we are working with our State partners to build an integrated food safety system. This includes developing standards and training and auditing to those standards. With this approach, Federal and State inspections, sample collections and analyses will support an integrated food safety system that will result in more coordinated coverage of the domestic food industry.

MEDICAL PRODUCT SAFETY

Question. In December 2009, FDA notified healthcare facilities to discontinue the use of or transition away from using the STERIS System 1 sterilization device. The agency described this product as “misbranded and adulterated” in this notice, but proceeded to allow the product to be in use in healthcare facilities for over a year and a half. Is it common procedure for the agency to notify healthcare facilities of safety concerns and then allow the product to be in use for a long period of time?

Answer. The decision to allow the continued use of a product of concern is determined by several factors, including the availability and cost of alternate products and the time required for providers to safely put these alternative products in place. Other factors include the impact that a delay of treatment caused by transitioning to alternative products may have on patients.

For some devices, the immediate removal of the device may result in a device shortage or cause a delay in necessary medical procedures. In these situations, FDA works with distributors and healthcare providers to avoid shortages that might result in postponement of care.

FDA performed a shortage assessment for the STERIS System 1 Processor, also known as SS1, and determined that a sudden removal of the SS1 could disrupt operations at healthcare facilities, and that the risks of such a disruption would outweigh the risk of a measured transition to legally marketed alternative products.

FDA provided general information to healthcare facilities on steps to mitigate the risk associated with continued use of the SS1, including a document identifying FDA-cleared products available to sterilize or disinfect medical devices.

Question. Are healthcare providers required to notify patients that they are using a product that FDA has asked them to discontinue?

Answer. Unless healthcare providers are serving as medical device manufacturers or distributors, which would fall outside the practice of medicine, FDA typically does not ask them to notify patients that they are using product that FDA has asked them to discontinue. FDA communicates regularly with patients and healthcare providers about products of concern. For example, FDA has made a broad range of information available on its Web site that details FDA concerns with the STERIS System 1 Processor. FDA also looks to device manufacturers and distributors to provide notifications about their products to healthcare providers and patients.

CRITICAL PATH

Question. I have followed with a great deal of interest the agency’s critical path public private partnerships that were authorized in the Food and Drug Administration Amendments Act. I have been particularly impressed with how the Critical Path Institute has been able to leverage its relatively modest partnership funding from FDA by bringing additional funding from Arizona-based foundations and in-kind effort from the pharmaceutical industry to improve the methods used to test new drugs. I recently learned that the Critical Path Institute has been able to engage the Gates Foundation to work with the FDA on developing Tuberculosis drug combinations. As you know, the fiscal year 2010 appropriations bill included \$2,000,000 to address this serious global health threat. What do you think can be accomplished with the Tuberculosis funding and how does it fit into your priorities for regulatory science?

Answer. The tuberculosis funding is a critical first step in generating a program to accelerate the development of products for the diagnosis, treatment, and prevention of tuberculosis. The effort we envision is completely in line with FDA's new regulatory science initiative, planned for fiscal year 2011, which is designed to get better products to patients faster and more safely.

Under this initiative, FDA seeks to rebuild its own critically needed scientific infrastructure and capacity to meet the demands of the 21st Century and to enhance its scientific collaborations. We will use the TB funding to establish partnerships that can leverage the relevant expertise and resources to develop TB diagnostics and biomarkers, the lack of which is a critical obstacle to TB drug development. We will also focus on developing the scientific principles for selection of new drug combinations as well as approaches for identifying new compounds and existing drugs that have activity against TB. With regard to clinical trials, it will be important to identify and validate endpoints that can be used in the conduct of vaccine trials, as well as build a stronger clinical trial infrastructure for conducting high-quality studies where the disease is endemic.

QUESTIONS SUBMITTED BY SENATOR ROBERT F. BENNETT

Question. As you are aware, the user fee agreement negotiated between the FDA and the medical device industry and passed into law by Congress includes a series of goals that the FDA commits to meeting in return for the funds provided to the FDA by the industry. The FDA holds quarterly meetings with the device industry to report on the user fee program, funds being collected, and how goals are being met. However, it has come to my attention that for the first time in the history of the medical device user fee program, the FDA has failed to meet its two goals for PMA applications: 60 percent of applications have a decision in 180 days and 90 percent have a decision in 295 days. Neither goal is being met for 2008 applications and also will likely not be met for 2009 applications. Can you explain why FDA is not meeting these goals?

Answer. The goal to which you refer applies to non-expedited original premarket approvals or PMA and panel-track supplements. Our data currently indicates that FDA can still meet the 180-day decision goal, both for 2008 and 2009 applications. Our staff is striving to do so. You are correct that the 295-day decision goal was not met for 2008 applications and is unlikely to be met for 2009 applications, despite strong efforts by our staff.

It is important to recognize that the goals for 2008 and beyond are more challenging than for previous years. For example, the required performance level for the 180-day decision goal increased from 50 percent for 2007 applications to 60 percent for 2008 applications. FDA's performance on this goal for 2008 applications has already surpassed performance for 2007 applications, but the 2008 goal has not yet been met. Had the goal remained unchanged, FDA's performance would have already satisfied it.

Another contributing factor may be growth in the premarket review workload. The number of expedited and non-expedited PMA applications and panel-track supplements filed in 2009 was 15 percent greater than in 2007. Similarly, the number of 510K submissions was 12 percent greater. The same technical staff who review PMA applications also review 510K submissions, so it is important to consider the total review workload. In addition, the complexity of medical device technology is continually increasing.

FDA recognizes the importance to public health of promoting the rapid introduction of safe and effective medical devices. The user fee performance goals remain a high strategic priority, and the Center for Devices and Radiological Health, or CDRH, is taking steps to improve performance. The staff at CDRH are developing improvements to their review processes to increase efficiency, consistency, and transparency, such as the new "iReview" system—an electronic interactive review system for 510Ks. They have implemented intensified internal tracking and reporting procedures for submissions subject to user fee goals. They are also gathering information on missed goals to better understand the underlying causes and develop effective solutions.

Question. In your budget justification document you discuss a Medical Device Registry. As I'm sure you know, a provision to amend the FDCA to establish a medical device registry appeared in the House healthcare reform bill. This provision relied on manufacturer's proprietary sales data and certainly had the potential to be used for purposes unrelated to the FDA's mission. The concept was never discussed at any hearings in the committee of jurisdiction. Manufacturers raised a number of concerns about the intent behind the provision and answers to questions about its

purpose were not forthcoming from the Administration. Now your proposal seems straightforward and I just have a few questions:

What assurances can you offer that your proposal will not rely on manufacturers' sales information or other confidential data?

Answer. We do not anticipate that the effort to establish the National Medical Device Registry, also known as NMDR, will require manufacturer proprietary sales information or other confidential data. Rather, the aim is to develop and implement a national strategy for the best public health use of health-related electronic data that incorporates unique device identifiers (UDIs) and leverages existing procedure and device registries. To the extent any confidential commercial information is submitted to FDA, we can assure you that we will protect it in accordance with applicable disclosure statutes and regulations.

Question. What assurances can you offer that the purpose of this registry is to gather meaningful denominator data in an effort to improve the usefulness of the FDA's post market safety efforts?

Answer. The incorporation of UDIs into health-related electronic data will provide FDA with long-needed exposure—or denominator—information that is critical to the assessment of device safety. The purpose of the NMDR is to use the variety of disparate healthcare data sources, which will incorporate UDIs, to significantly augment FDA's postmarket safety efforts.

Question. How will you ensure that the registry and the information in it will not be used by CMS or other third party payers to make coverage and payment determinations?

Answer. The purpose of the registry is to develop and implement a national strategy for the best public health use of health-related electronic data that incorporates unique device identifiers (UDIs) and leverages existing procedure and device registries. FDA can not control how others use this data.

Question. As you know we have tried to support the Critical Path Initiative in your appropriations but we have not been able to come close to the amount the European Union has given to their Innovative Medicines Initiative, which I am told was created to directly compete with the FDA's critical path program. As the critical path initiative is very closely related and complimentary to your regulatory science program, how will you continue to support critical path?

Answer. The European Commission has committed large amounts of funding to the E.U. program, which is modeled on FDA's Critical Path Initiative, but the funding you have given FDA to support Critical Path Initiative, also known as CPI, has been put to excellent use. In 2006, 2007, and 2008, FDA reported on 40 to 60 specific CPI projects involving FDA and numerous collaborators. During fiscal year 2008, the year that Congress allocated \$8,000,000 to fund CPI projects, CPI collaborations involved 84 government agencies, universities, industry leaders, and patient groups from 28 States and 5 countries on a raft of groundbreaking research projects.

In 2009, we received \$16,000,000 in appropriations to support CPI. That year, we conducted an informal survey of CPI projects under way, including the congressionally funded projects, and found that numerous CPI projects are being worked on all across FDA to support regulatory science. CPI has been the prime engine driving much of the scientific work at FDA since 2006.

Advancing Regulatory Science is a broad, FDA initiative, with many cross-agency components, that is building on the Critical Path Initiative. Advancing Regulatory Science seeks to develop FDA's scientific infrastructure, enhance scientific collaborations with academia and other government agencies, and increase our Critical Path partnerships. With a focused agenda and a greater, more targeted investment of human and financial resources, we can expand our work with partners to transform the culture and science of product research, development, and evaluation. We plan to use these resources to continue efforts that speed therapies to patients, address unmet public health needs, protect our food supply, work toward modernizing toxicology and hazard assessment. With support from the Center for Tobacco Products, we hope to meet the many challenges to regulating tobacco.

SUBCOMMITTEE RECESS

Senator KOHL. Once again, we thank you and your colleagues for being here today.

And this hearing is now recessed.

[Whereupon, at 11:10 a.m., Tuesday, March 9, the subcommittee was recessed, to reconvene subject to the call of the Chair.]