

Testimony provided to the **Senate Subcommittee on Oversight of Government Management, the Federal Workforce, and the District of Columbia** for the hearing entitled *“Agro-Defense: Responding to Threats Against America’s Agriculture and Food System.”*

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Chairman Akaka, Ranking Member Johnson and Members of the Subcommittee, thank you for giving the National Center for Food Protection and Defense, a Department of Homeland Security funded Center of Excellence, based at the University of Minnesota (NCFPD), the opportunity to discuss our nation’s preparedness to defend our food supply system and our population from intentional attacks on that system. The continued global integration of the food supply chain and our increasing dependence upon imported food products requires that we continue to develop our extensive food safety system and aggressively deploy and mature our food defense capabilities. The National Center for Food Protection and Defense is honored to have the opportunity to provide one perspective on the progress and continuing needs in the ongoing effort to protect the nation’s food supply infrastructure from intentional attacks on the food system.

The use of food as a weapon of war through contamination, destruction or insufficient access dates backs thousands of years. Sadly, such events remain in the news even today. The availability of sufficient and safe food is key to the health and stability of any nation. Food is one infrastructure you cannot opt out of. You can live without electricity, you can stop flying in planes or ride in trains, you can stop using banks but you must eat to survive. Insuring food safety and defending the food system from intentional and criminal acts are a joint responsibility of government and industry. This dual mission of safety and defense, collectively Food Protection, must have the same standing and dedication of resources as protecting any other infrastructure. The hearing today addresses this vital sector and our successes and current gaps in protecting this vital infrastructure.

Before I discuss what I believe are the key unresolved issues, I would like to address the significant recent progress that is improving important aspects of both food safety and our defense posture. During the 1990’s, there were several efforts intended to protect the nation from the effects of weapons of mass destruction. These include the 1996 Nunn-Lugar-Domenici Domestic Preparedness Initiative, which built upon the goals of the original Nunn-Lugar Act to improve our ability to respond after an attack by a weapon of mass destruction, including biological agents, and the 1998 Presidential Decision Directive/NSC 63, entitled Critical Infrastructure Protection. It must be noted that these efforts did not specifically recognize the nation’s food supply system as a critical infrastructure and little effort was directed to its protection and sustainment in the face of an attack directed to food or that exploited the food system. As a result, once HSPD-7 designated Food and Agriculture as Critical Sectors and HSPD-9 delineated the initial strategic guidance and food defense tasks for government in early 2003, this infrastructure faced a substantial task catching up with those sectors that had five plus years of protective efforts already. This was a huge challenge not just for government but also for the industry. The development of the National Infrastructure Protection Plans, to include the sector specific plans from FDA and USDA, has provided the states and industry with additional useful food protection guidance. Both FDA and USDA published their own commodity or product chain specific food defense guidance as well. The Department of Homeland Security, working with its partners in the various federal agencies and with state local, tribal and territorial government agencies has made substantial

progress in developing capabilities to aid the sector in responding to both potential criminal or terrorist act. While we are by no means fully prepared, government and industry can mobilize substantial resources to respond when needed, once an event is identified and the investigation of the potential product involved begins. Unfortunately for traditional foodborne illness events, given that physicians and emergency rooms are the initial detection system, recent experience suggests that source identification often takes weeks to months.

Other progress of note is the development and institutionalization of the sector coordinating bodies, pioneered by the Food and Agriculture sector. For the government agencies, there is the Food and Agriculture Government Coordinating Council or FAGCC. On the private sector side is the Food and Agriculture Sector Coordinating Council or FASCC. These bodies have proven to be an effective means of collaboration between government and the private sector in the area of Homeland Defense. They are, therefore, useful in our national food defense coordination efforts. The Department of Homeland Security also reached out to academia and actively engaged the education and research communities in the effort to protect our critical infrastructures. The National Center for Food Protection and Defense, hosted at the University of Minnesota, is a multi-university consortium that is engaged in efforts to create and transition to use within the sector new tools for protecting our food infrastructure and to aid the various federal agencies in fulfilling their roles and missions. Others of note are the Centers of Excellence for Zoonotic and Animal Disease Defense hosted at Texas A&M and Kansas State University. Examples of recent work include new diagnostic tools, advanced risk assessment tools designed specifically for the food and agriculture sector, food architecture studies and food system component criticality tools, such as the Food and Agriculture Sector Criticality Assessment Tool (FASCAT), to more effectively focus protective efforts. Indeed, the use of FASCAT, a National Center for Food Protection and Defense developed tool, has enabled the states, for the first time, to add critical food system components to the DHS Level Two Critical Asset listing.

Key provisions of HSPD-9 have been implemented with varying degrees of success. The success or stagnation of some efforts under the provisions of HSPD-9 has most often been influenced by the fractured nature of government responsibilities within the areas addressed, such as in the arena of surveillance and detection where agency interests and concerns around unintended consequences has hampered the development of an effective information sharing environment.

The passage of the 2011 FDA Food Safety Modernization Act may prove to be the most substantial change to food safety and food defense in 50 years. This act, combined with the aforementioned progress will aid in further improvements in our ability to respond to accidental or intentional foodborne illness events. While no additional funding was provided for its implementation, FDA is striving hard to develop the implementing regulations and guidance to the states and industry to facilitate the achievement of the act's goals. Yet components of this law present substantial challenges to industry that may prove impossible obstacles to its full deployment. It now places the burden of protection of the infrastructure, and the food products it provides, against intentional act, to include terrorism and the potential use of weapons of mass destruction that exploit our food supply system, upon the private sector. This is a new responsibility for the sector that has many potential unintended consequences that must be considered before a reasonable implementation of the act can be fully complete. For example, what will be the insurance consequences of this act? How will a firm have any ability to reasonably foresee an intentional act? How does a private sector firm know where the critical point of protection against an intentional act will be when there are currently only limited means to gather, assess and share such threat information between government and the private sector? What components of a firm's operation are subject to the act and what falls under another agency and may

not fall under the provisions of this act? Where are the optimum points for deploying additional surveillance and detection to aid in early event recognition? Here we begin to see significant gaps in our progress towards truly protecting this infrastructure. The truth is that we do not know what the impact on the nation's food infrastructure or the future cost of food will be until several key provisions of this act are fleshed out. The desire on the part of everyone is, I believe, to very carefully and wisely implement these provisions through interagency and public-private cooperation. Yet serious challenges confront the sector as this effort moves forward.

A key problem in deploying and maturing an effective food defense capability is the responsibility matrix distributed vertically and horizontally across our food safety agencies. By that I mean the inconsistencies, overlaps, gaps and fractured responsibilities in food safety that exist at state and local levels and up through and across the federal agencies. For operators small and large within the private sector, multiple agencies have jurisdiction over various aspects of their activities, whether in food production, processing or distribution and retail. The 2011 FDA Food Safety Modernization Act addresses only that portion of this problem that falls within the purview of FDA.

With such a fractured and disjointed system of food safety governance in place as a foundation, it will be very difficult to build a comprehensive and effective food defense capability. Even with the lofty goals sought under the 2011 FDA Food Safety Modernization Act, when, at some point in the future, the effort is funded and all required regulations are in place, this challenge is not necessarily solved as there is no one authority in charge of all aspects of the system. There are many who have statutory responsibilities for various parts and functions within the overall food safety community. But there is no coherent, clearly delineated line of authority over the broader system at the federal level and the situation is often even more complicated at the state level. I am reminded of the state of coordination and organization within the Defense Department in the 1980s when Army radios could not communicate with Navy radios. Processes within FDA differ from those within USDA/FSIS. Those differ from NOAA and other federal agencies with some role in food protection. The same is true within governments at the state, local, tribal and territory levels. Even in the case of the food and agriculture components of the National Infrastructure Protection Plans, originally FDA and USDA developed separate Sector Specific Plans as guidance to the states under the NIPP. I have often asked a simple question of my colleagues in the various federal agencies responsible for some aspect of protecting this vital infrastructure. That question is "Who is in charge." The answer is always something like "Well, actually no one is in charge of it all!" Even with the recent investment in response, our capability is modest and handicapped by this leadership gap.

At present we also have a vast difference in capability between the states. Many have advanced human disease surveillance programs in place that focus on early detection of key diseases and a very few have aggressive foodborne illness detection programs. Even those programs, however, remain focused upon emergency department reporting based upon an agent specific reporting list and a time to report schedule. Others have very little capability in either area. Regulations across states vary in content and standards. Local and state laboratory capabilities and capacities differ. Food safety rules, requirements and other aspects of the food and public health system vary across the states. This confused regulatory environment makes both compliance and innovation in food protection difficult for private industry that owns and is directly responsible for 80% of this infrastructure.

In the area of system surveillance and early event detection, a priority of the 2011 Food Safety Modernization Act, there is still a long way to go. Effective surveillance and detection, at an early enough stage in the evolution of such events to be preventive instead of forensic, has been difficult for

reasons that vary from fractured responsibilities across government agencies to proprietary information protection to liability issues and the sheer difficulty of implementing an effective system that does not unnecessarily drive up the cost of food. To complicate this lack of emergent event awareness and preparedness shortcomings that result, there is an extraordinary level of everyday foodborne illness in this country. Dr. Robert L. Scharff recently stated in his "Health-Related Costs from Foodborne Illness in the United States" for the Produce Safety Project at Georgetown University that his estimate of the annual cost of foodborne illness in the United States is \$152 billion. He reported that some, however, attribute much higher overall costs to the annual impact of such outbreaks, even as high as \$1.4 trillion once private sector and related costs are included! Whatever the potential cost range, these are big numbers, particularly given the current state of the economy in the United States. These regularly occurring events strain our overall disease detection, emergency response and overall health care system to a point where there is little resilience to deal with any major insult to our health. Even with the latest health care and food safety legislation there is only modest effort to improve our ability for early detection of such events or to reduce their incidence and scale. At the state level, the impact of these all too frequent foodborne illness events is most acutely felt. They undermine our confidence in our food, they are expensive to respond to and mitigate. They result in hardships for victims, financial burdens for the firms involved and can lead to significant job losses for their employees. To date the implementation of HSPD-9 and the broad acceptance and deployment of the concepts and provisions or the NIPP within the nation's food supply infrastructure have not yet been successful. The National Bio-Surveillance Integration Systems, called for under Paragraph 10 of HSPD-9 has not delivered the sought-after capabilities for a variety of reasons, with shared understanding of mission and inconsistent cooperation among agencies the main issues.

These challenging aspects of effective surveillance and detection, and the related responsibility and liability questions, are not new. They have also challenged the private sector, where many are actually expanding their internal quality control, surveillance, detection and threat assessment efforts to meet new insurance requirements, the statutory requirements of Sarbanes-Oxley, and the expected requirements of the 2011 FDA Food Safety Modernization Act. Yet they have had little effective reach, in most cases, beyond their own internal programs and results are rarely shared with commercial partners or the government for the reasons mentioned above. FDA and USDA face similar challenges and have historically taken a response, compliance and enforcement approach because that has been their mandate. These challenges are, in fact, a key component of the background that led Congress to enact the FSMA. But what is not in the FSMA is the "how" and, where cooperation with key threat information providers is needed, the identification of the "who." FDA is struggling with these new requirements and the approach to their implementation.

The unfortunate truth is that we, as a nation, lack effective surveillance for emergent, high consequence biological events, domestic as well as global. This is particularly true for high consequence foodborne illness events. At present, our primary detection capability is the emergency room. As a result, our existing detection capability is effectively a "detect to respond" capability. Relying primarily on a response focused detection system is expensive, both in terms of financial impact and human suffering. Further, it adds to our overall national health cost problem. Adding to this burden is that the utility of food as a modality to facilitate crime, whether as a means to illicit gain or terrorism, is well demonstrated by recent events. In the past few years we have seen criminal acts targeting food products such as the Economically Motivated Adulteration (EMA) of milk products from China with melamine. We have also seen law enforcement personnel in Iraq targeted by terrorists with contaminated food. Events such as the contamination of green peppers with *Salmonella* St. Paul from Mexico and the recent green sprout contamination with *E Coli* O104:H4 in Germany both demonstrate

the large geographic impact footprint, extensive casualties and political cost where just a limited quantity of one product in international trade is involved. This is not lost on our potential Jihadist adversaries. As an example of that the following is a translation provided by The Counter Agro Terror Research Center (CATRC) in Israel of a recent post to a Jihadist internet forum:

“I say, and may Allah help us to success, the qualities of the E. coli, as well as the ability to develop it into biological weapon, bio-engineered in a laboratory, make the E. coli a most attractive candidate and a significant element in biological warfare, spreading violently, and killing silently, irritating the enemies and tearing their guts apart.”

If we are to achieve the level of protection and response we owe the American public, we need to solve these fundamental surveillance and detection challenges. I submit that we need a new approach. We must understand unfolding events early enough that a “detection” of an emergent threat or contamination/adulteration events, whether accidental or intentional, enables analysis, confirmation and intervention in sufficient time to reduce or eliminate liability, proprietary information losses and supply chain disruptions while also protecting the public from a high consequence event. This is both desirable and possible. But it will require a larger leadership commitment and broader government and private sector engagement. Quite simply what we need is to move the surveillance focus and the points of detection much earlier in the event evolution timeline. There are two detection points that need to become our objective capabilities. First, the more easily developed – with commitment, appropriate senior leadership emphasis and modest resourcing – is “detect to protect”. This goal not yet achieved even given the significant efforts to date, is to detect emergent events early enough in their evolution to protect most of the population who might otherwise be exposed under current capabilities. This would mean that with just a few exposed and a limited number of geographic locations involved, we are “cued” to the event and can intervene earlier than today. This would effectively reduce potential casualties and our health care cost load.

Ultimately, we need a “*Detect to Prevent*” capability where: 1- food supply chain surveillance detects contaminated/adulterated products before they are consumed; 2- emergent events in foreign countries are detected, whether in food or human populations, before there are consequences in the U.S. and we can take preventive measures (whether embargoes, recalls or arriving international passenger screening); 3- supply chain, environment and animal population surveillance that detects pathogen or contamination events before they are problems in the human population. Hence “*Detect to Prevent*” is the ultimate goal, but it is a long way in the future, given current realities, and in some cases, technologies. This approach would be an additional modest investment that could provide an even more substantial reduction on health care costs.

The FBI, FDA and the USDA investigate and conduct enforcement actions that are structured for successful prosecutions after events since that is their mandate. To the extent they have been given the resources, they are working toward early detection, intervention and event mitigation, but there is much yet to do. We need to be thinking about the form and nature of this threat today and what it will be ten years from now. Who has that task today? It has not been demonstrated that FDA, USDA or even the nation’s intelligence community has tackled this task for the entirety of the food and agriculture sector. It is obvious that not only is there no one charged with this task, but there has been little, if any, thought on how to establish such a capability. The FSMA is worded, from the perspective of many in the sector, so as to place this task and the overall strategic food system defense burden on the private sector itself, where there is little chance that such firms currently have a capability to fulfill this role.

Finally, in assessing these risks to our vital food supply system, our new environment is rapidly changing the very nature of the risk. For example, we are now in a period of “hyper empowered individuals” where a single individual or a small group is empowered with information, technologies and freedom of movement that enables a heretofore unknown freedom of action. It means that these individuals can exploit information, technologies and their innate creativity with consequences far in excess of their capacity just 10 years ago. In the arena of food system protection, this prospect is indeed frightening. It is also important to understand that we now have the ability, as do our potential adversaries (and even the lone wolf) to have heightened situational awareness on almost any topic, to include the functioning of our food supply systems. This is because both the media and government now approach the concept of openness in a manner that further empowers anyone by providing extraordinary access to information on almost any supply chain and near real time commodity trading data. Another major concern for the sector is our increase on cyber reliance across government and industry. Because our adversaries have proved to be formidable cyber criminals, there is an increased risk of proprietary data compromise and broadened situational awareness about even the most mundane operations, from processing to transport, across the food sector.

The context of this risk is further complicated by the scale of even unintentional food contamination or criminal, but not terrorist, adulteration (EMA) events in our global supply system. The scale of these events seem to increase with almost every new food safety or economically motivated adulteration event. Today these events are of an order of magnitude greater than just twenty years ago and the prospects are that their reach and severity will only expand. Given the vast transportation networks supporting the food supply chain and the just in time nature of inventory management within the sector, the speed with which these events unfold and impact our national population now often place our public health, emergency response and law enforcement activities outside the sphere of influence over the events for weeks to months. This was dramatically demonstrated by two recent events in the United States. The first was the *Salmonella* St. Paul contamination of peppers imported from Mexico where it took four months to recognize the actual nature of the event and the actual culprit food item involved. In this case the event impacted all but six states before any real intervention was initiated. The second event was the contamination of peanut paste at a Georgia peanut plant that impacted every state in the nation, and where 18 months was required to track down all of the food items affected. This is clearly not lost on our adversaries.

With the existent level of everyday foodborne illness “noise” in this country, combined with the growing reliance upon food imports from nations with substandard public health oversight and lax standards within their food production systems and the routine presence of economically motivated food contamination events, how will we know an actual terrorist attack has taken place as opposed to just another “routine” foodborne illness event? In fact it may not be weeks but months, given our current capabilities for detection and our lack of appropriate surveillance and intelligence information gathering to appreciate such an event is unfolding. Worse, such delay will mean that our ability to intervene appropriately and to mitigate the event will be insufficient to prevent the terrorist from attaining their mortality and morbidity goals.

Any effective public-private bio-surveillance program requires an open and broadly accessed information sharing environment where key local, state and federal agency staff, practicing clinicians, industry and the public can be informed and can inform. Imagine a time where a clinician goes on duty, where a veterinarian starts his clinical day, or where a food, agriculture or related food industry Quality Assurance / Quality Control specialists can access a web site to learn what are the current biological events or threats, whether disease or foodborne illness related (often we do not know the causative

agent until well into an event) in his/her area (the current situation), what may be expected to impact his/her area in the near future (the forecast) and what may become a problem in the distant future (horizon scan), as well as historical data on biological events, adjusted for cultural, population and environment shifts at the three and five digit zip code level. How can such a trusted, open and comprehensive capability come into being?

The risks involved in our failure to solve these challenges are great. First, the aforementioned cost of foodborne illness to the United States combined with the thousands of deaths and millions sickened each year is unsustainable and unacceptable. Second, there is little doubt, as I mentioned earlier, that those who would do us harm will study recent disease and foodborne illness events as they plan future attacks on the United States and our allies. Recent EMA events, as well as events such as the *E Coli* outbreak in Germany this year, provide roadmaps for potential attack scenarios.

So who will provide the early cuing to emergent events? How will government agencies charged with protecting our food supply, or the food production and service firms across this nation know about these emergent events, particularly if they are foreign in origin? A disturbing fact is that few in the United States Intelligence Community actually work the issue of indicators and warning of emergent or imminent risks within the global food and agriculture sector and within the food system focused public health communities. The Office of the Director of National Intelligence has stated often, this is the result of two circumstances. First, it is not a priority because these Critical Infrastructure sector issues are not generally viewed as strategic risks to the nation. Second, and perhaps even more consequential in the eyes of the Office of the Director for National Intelligence, there are no relevant indicators of any emergent risk to these sectors, beyond, of course, the potential for influenza pandemic. Even that risk is seen as adequately addressed by current HHS initiatives from the US perspective. The result is, unfortunately, that we will, as we have been in the past, be blindsided by the next "event," If that event is minor, there will be few, if any, consequences from a strategic perspective. But if it is significant, well then, we may be in deep trouble. The fact is that we are not looking, not assessing and not aware to the level we should be. Therein lays a significant emergent event detection or early warning gap.

While we have put increased focus on so called "select agents," the fact is that the criminal elements who regularly conduct economically motivated adulteration of products target and employ common food products with commonly available adulterants. Similarly, those who are intent on conducting bio-warfare can easily and reliably exploit common food pathogens, such as *E. coli* or *Salmonella*, or commercially available toxins as the contaminant. Use of these common agents, given our current surveillance, detection and response posture, may well delay our recognition that the event is an overt attack as opposed to another routine foodborne illness event. Finally, use of such pathogens in an attack via the food supply system has a greater chance of successfully creating high numbers of morbidity and mortality over a larger geographic area than employment of a more sophisticated, but complex bio-warfare weapon that requires unique handling and delivery modalities. The result may well be, given our current posture for detection, mitigation and response, substantial casualties before an intentional foodborne illness outbreak is detected much less recognized as an intentional act. A major intentional food based attack on this nation could crush any financial recovery and deal a devastating blow to the psyche of the nation. It could have a decades long impact on our national economy, productivity, national security, as well as our own food security. Many of the recent food system events in the U.S. and globally, from contaminated California spinach, to contaminated imported Mexican peppers to the intentional use of Melamine in dairy products and wheat gluten, provide

detailed studies of how such events unfold and they provide planning guidance clues for any future food based attack.

We had no early warning on any of these recent events. Yet, in hindsight, there were indicators of most, but we did not have an effective integrated early surveillance and detection capability in place and we were not employing our available international event indicator information collection capabilities in a focused and effective manner. In fact the Chinese had actually employed melamine as early as 2004 in exported products and were detected in Europe and Australia, yet there was no warning through any channel, public or private, that we might expect the arrival of such intentionally adulterated products in the United States, and then we had the 2007 pet food contamination event in Canada and the United States. In retrospect, the rising production levels from 2002 to 2006 of processed dairy products within certain Chinese dairy firms could not be sustained by domestic Chinese raw milk production or imports. Something was wrong with the economics and the export levels, but we were simply not looking and, as a result, had no warning. What if this event had been intended to be more malevolent? It is important to note that the melamine contaminated Wheat Gluten surrogate that was found in pet food was permitted to be imported into the United States as a human food grade product.

Any food or agriculture system based terrorist attack presents substantial strategic risks to the United States. These risks fall into four categories. First, there are the substantial human health risks to the American Public. Second, there are the potentially catastrophic damages that a foreign animal disease could bring to the nation's domestic food supply chain and our global trading ability. Third, there is the severe economic damage to our nation's economy that would result. Lastly, there are strategic risks to America's ability to project its power to protect our international interests and /or those of our allies. If we are to achieve the goals set forth in HSPD-9, and the 2011 FDA Food Safety Modernization Act, then what we need are new approaches to the surveillance and detection problem. We need additional food and agricultural subject matter expertise introduced into the intelligence community. We need to invigorate the focus and effort within this community on agricultural and food system risks. We need new tasking based upon new, more sector risk appropriate questions given to this community to explore and answer on a daily basis. We need to look deeper into social changes, economic shifts, infrastructure and production performance, social disruption/disturbance and public health events globally to watch for tests, rehearsals and indicators of the use of attack like agents and modalities. We need to look closer at the purchase patterns of agents (biological and chemical), pre-cursors, laboratory equipment, unusual deployments of food processing or agricultural equipment and for the movement and activities of known suspect individuals within areas and in organizations of interest as part of our strategic risk analysis. Then we need to have appropriate, two way sharing mechanisms that engage both government and the private sector.

If we can combine substantially improved emergent event indicators and warning information flow improvements in early detection and recognition and reductions in the national incidence of foodborne illness, we may have that long sought capability to not only detect, but to effect early intervention in any biological attack on this nation that employs our vast and complicated food supply chain. To bring about such a level of food protection also means that we need to implement the capability to differentiate evolving accidental events from those which may be intentional. We need to develop event diagnostic tools to aid in profiling food characteristics, typical food system function, indication of irregular production system operations, import export profiles, cultural characteristics, irregular food movement transactions or combinations and even to detect unusual orders, shipments or stocks of identified high risk food or ingredients. Current food risk modeling in development with the DHS Centers of Excellence can be of substantial help in developing these tools.

In summary, what we need in place is a capability to monitor global events for indicators that some individual or group of individuals (or even a nation state) is moving towards such an attack, regardless of who the targeted population may be. And we must have the private sector inside the detection and surveillance information sharing environment so that their internal supply chain surveillance and detection results can be integrated into the overall surveillance effort. We need the ability to detect, identify and intervene early in the event evolution cycle of these events. This is the only way we reduce the impact of these events, reduce the scale and cost of response and maintain public confidence in our food supply system.

This is an attainable goal but it will require focus, a modest shift of resources and a senior leadership commitment to reduce the background of current foodborne illness within this country. Even if the new FDA Food Safety Modernization Act does reduce the incidence of accidental food contamination via increased food facility inspection/re-inspection alone, there remains the problem of early detection of emergent international intentional EMA or terrorism related events. And there remains the issue of assuring that the sector is informed in some manner so that events become, at some level, “foreseeable” and detectable. Only then will intervention, mitigation and response cost, both in terms of lives and treasure, be sustainable. As many in the food and agriculture sector often state, food is the ultimate weapon of mass distribution and agriculture is the ultimate weapon of mass unemployment. Food and agriculture attacks and system failures indeed present major strategic risks to the nation and this strategic risk begs a new focus and new approach to system surveillance and early detection. These are risks we ignore at our peril.

Thank you for this opportunity to present my thoughts on our food defense posture.
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