AUTHENTICATED
U.S. GOVERNMENT
INFORMATION
GPO

HEARING TO REVIEW THE NATIONAL ANIMAL IDENTIFICATION SYSTEM

JOINT HEARING

BEFORE THE

SUBCOMMITTEE ON
LIVESTOCK, DAIRY, AND POULTRY

OF THE

COMMITTEE ON AGRICULTURE

AND THE

SUBCOMMITTEE ON
EMERGING THREATS, CYBERSECURITY, AND
SCIENCE AND TECHNOLOGY

OF THE

COMMITTEE ON HOMELAND SECURITY
HOUSE OF REPRESENTATIVES

ONE HUNDRED ELEVENTH CONGRESS

FIRST SESSION

MAY 5, 2009

Serial No. 111–12
(COMMITTEE ON AGRICULTURE)

Printed for the use of the Committee on Agriculture
agriculture.house.gov

U.S. GOVERNMENT PRINTING OFFICE

52–882 PDF WASHINGTON : 2009

For sale by the Superintendent of Documents, U.S. Government Printing Office
Internet: bookstore.gpo.gov Phone: toll free (866) 512–1800; DC area (202) 512–1800
Fax: (202) 512–2104 Mail: Stop IDCC, Washington, DC 20402–0001

COMMITTEE ON AGRICULTURE

COLLIN C. PETERSON, Minnesota, *Chairman*

TIM HOLDEN, Pennsylvania, *Vice Chairman*
MIKE McINTYRE, North Carolina
LEONARD L. BOSWELL, Iowa
JOE BACA, California
DENNIS A. CARDOZA, California
DAVID SCOTT, Georgia
JIM MARSHALL, Georgia
STEPHANIE HERSETH SANDLIN, South Dakota
HENRY CUELLAR, Texas
JIM COSTA, California
BRAD ELLSWORTH, Indiana
TIMOTHY J. WALZ, Minnesota
STEVE KAGEN, Wisconsin
KURT SCHRADER, Oregon
DEBORAH L. HALVORSON, Illinois
KATHLEEN A. DAHLKEMPER, Pennsylvania
ERIC J.J. MASSA, New York
BOBBY BRIGHT, Alabama
BETSY MARKEY, Colorado
FRANK KRATOVIL, JR., Maryland
MARK H. SCHAUER, Michigan
LARRY KISSELL, North Carolina
JOHN A. BOCCIERI, Ohio
SCOTT MURPHY, New York
EARL POMEROY, North Dakota
TRAVIS W. CHILDERS, Mississippi
WALT MINNICK, Idaho

FRANK D. LUCAS, Oklahoma, *Ranking Minority Member*
BOB GOODLATTE, Virginia
JERRY MORAN, Kansas
TIMOTHY V. JOHNSON, Illinois
SAM GRAVES, Missouri
MIKE ROGERS, Alabama
STEVE KING, Iowa
RANDY NEUGEBAUER, Texas
K. MICHAEL CONAWAY, Texas
JEFF FORTENBERRY, Nebraska
JEAN SCHMIDT, Ohio
ADRIAN SMITH, Nebraska
ROBERT E. LATTA, Ohio
DAVID P. ROE, Tennessee
BLAINE LUETKEMEYER, Missouri
GLENN THOMPSON, Pennsylvania
BILL CASSIDY, Louisiana
CYNTHIA M. LUMMIS, Wyoming

PROFESSIONAL STAFF

ROBERT L. LAREW, *Chief of Staff*
ANDREW W. BAKER, *Chief Counsel*
APRIL SLAYTON, *Communications Director*
NICOLE SCOTT, *Minority Staff Director*

SUBCOMMITTEE ON LIVESTOCK, DAIRY, AND POULTRY

DAVID SCOTT, Georgia, *Chairman*

JIM COSTA, California
STEVE KAGEN, Wisconsin
FRANK KRATOVIL, JR., Maryland
TIM HOLDEN, Pennsylvania
LEONARD L. BOSWELL, Iowa
JOE BACA, California
DENNIS A. CARDOZA, California
BETSY MARKEY, Colorado
SCOTT MURPHY, New York
WALT MINNICK, Idaho

RANDY NEUGEBAUER, Texas, *Ranking Minority Member*
BOB GOODLATTE, Virginia
MIKE ROGERS, Alabama
STEVE KING, Iowa
K. MICHAEL CONAWAY, Texas
ADRIAN SMITH, Nebraska
DAVID P. ROE, Tennessee

CHANDLER GOULE, *Subcommittee Staff Director*

COMMITTEE ON HOMELAND SECURITY

BENNIE G. THOMPSON, Mississippi

LORETTA SANCHEZ, California
Vice Chair
JANE HARMAN, California
PETER A. DEFAZIO, Oregon
ELEANOR HOLMES NORTON, District of Columbia
ZOE LOFGREN, California
SHEILA JACKSON-LEE, Texas
HENRY CUELLAR, Texas
CHRISTOPHER P. CARNEY, Pennsylvania
YVETTE D. CLARKE, New York
LAURA RICHARDSON, California
ANN KIRKPATRICK, Arizona
BEN RAY LUJÁN, New Mexico
BILL PASCRELL, JR., New Jersey
EMANUEL CLEAVER, Missouri
AL GREEN, Texas
JAMES A. HIMES, Connecticut
MARY JO KILROY, Ohio
ERIC J.J. MASSA, New York
DINA TITUS, Nevada

PETER T. KING, NEW YORK, *Ranking Minority Member*
LAMAR S. SMITH, Texas
MARK E. SOUDER, Indiana
DANIEL E. LUNGREN, California
MIKE ROGERS, Alabama
MICHAEL T. MCCAUL, Texas
CHARLES W. DENT, Pennsylvania
GUS M. BILIRAKIS, Florida
PAUL C. BROUN, Georgia
CANDICE S. MILLER, Michigan
PETE OLSON, Texas
ANH "JOSEPH" CAO, Louisiana
STEVE AUSTRIA, Ohio

SUBCOMMITTEE ON EMERGING THREATS, CYBERSECURITY, AND SCIENCE AND TECHNOLOGY

YVETTE D. CLARKE, New York, *Chairwoman*

LORETTA SANCHEZ, California
LAURA RICHARDSON, California
BEN RAY LUJÁN, New Mexico
MARY JO KILROY, Ohio

DANIEL E. LUNGREN, California, *Ranking Minority Member*
PAUL C. BROUN, Georgia
STEVE AUSTRIA, Ohio

CONTENTS

	Page
Clarke, Hon. Yvette D., a Representative in Congress from New York, opening statement	5
Prepared statement	6
Lungren, Hon. Daniel E., a Representative in Congress from California, opening statement	7
Neugebauer, Hon. Randy, a Representative in Congress from Texas, opening statement	4
Submitted material	77
Peterson, Hon. Collin C., a Representative in Congress from Minnesota, opening statement	10
Prepared statement	11
Scott, Hon. David, a Representative in Congress from Georgia, opening statement	1
Prepared statement	3
Submitted material	75
Thompson, Hon. Bennie G., a Representative in Congress from Mississippi, opening statement	8
Prepared statement	9

WITNESSES

Clifford, D.V.M., John R., Deputy Administrator for Veterinary Services and Chief Veterinarian, Animal and Plant Health Inspection Service, U.S. Department of Agriculture, Washington, D.C.	12
Prepared statement	14
McGinn, D.V.M., Thomas, Chief Veterinarian, Office of Health Affairs, U.S. Department of Homeland Security, Washington, D.C.	19
Prepared statement	23
Smith, D.V.M., David C., Assistant Director, Division of Animal Industry, New York State Department of Agriculture and Markets, Albany, NY	54
Prepared statement	55
Gillespie, D.V.M., Ph.D., Jerry R., Former Director, Western Institute for Food Safety and Security, University of California, Davis, Hopland, CA	57
Prepared statement	59
Kirk, Kevin M., Special Assistant to the Division Director, Animal Industry Division, Michigan Department of Agriculture, Lansing, MI	61
Prepared statement	63

SUBMITTED MATERIAL

Carter, Brandy Executive Director, Kansas Cattlemen's Association, submitted statement	81
Eckerly, Susan, Senior Vice President, Public Policy, National Federation of Independent Business, submitted statement	83
Submitted questions	84

HEARING TO REVIEW THE NATIONAL ANIMAL IDENTIFICATION SYSTEM

TUESDAY, MAY 5, 2009

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON LIVESTOCK, DAIRY, AND POULTRY,
COMMITTEE ON AGRICULTURE,
JOINT WITH
SUBCOMMITTEE ON EMERGING THREATS, CYBERSECURITY,
AND SCIENCE AND TECHNOLOGY,
COMMITTEE ON HOMELAND SECURITY
Washington, D.C.

The Subcommittees met, pursuant to call, at 2:10 p.m., in Room 1300, Longworth House Office Building, Hon. David Scott [Chairman of the Subcommittee on Livestock, Dairy, and Poultry] presiding.

Members present from the Subcommittee on Livestock, Dairy, and Poultry: Representatives Scott, Costa, Kagen, Holden, Boswell, Baca, Markey, Minnick, Peterson (*ex officio*), Neugebauer, Goodlatte, Rogers, Conaway, Smith, and Roe.

Members present from the Subcommittee on Emerging Threats, Cybersecurity, and Science and Technology: Representatives Clarke, Richardson, Luján, Thompson (*ex officio*), Lungren, and Broun.

Staff present from the Subcommittee on Livestock, Dairy, and Poultry: Claiborn Crain, Alejandra Gonzalez-Arias, Chandler Goule, Scott Kuschmider, April Slayton, Patricia Barr, John Goldberg, Tamara Hinton, Pete Thomson, and Jamie Mitchell.

OPENING STATEMENT OF HON. DAVID SCOTT, A REPRESENTATIVE IN CONGRESS FROM GEORGIA

The CHAIRMAN. Good afternoon. This joint hearing of the Subcommittee on Livestock, Dairy, Poultry and the Committee on Homeland Security Subcommittee on Emerging Threats, Cybersecurity, Science and Technology to review the National Animal Identification System will come to order.

I would like to welcome you once again to the Committee on Agriculture Subcommittee on Livestock, Dairy, and Poultry. We have the pleasure of being joined today by the Committee on Homeland Security Subcommittee on Emerging Threats, Cybersecurity, and Science and Technology. So I welcome Chairwoman Clarke from the great City of New York and the Members of her Subcommittee, as well.

We are here today to continue our examination of the National Animal Identification System, known as NAIS. This hearing comes

on the heels of the recently released benefit-cost analysis conducted by Kansas State University and others at the behest of the Animal and Plant Health Inspection Service. So I am certain that this report will be a large part of the discussion today.

However, as I mentioned earlier, we also have with us Members of the Committee on the Homeland Security and a witness from the Department of Homeland Security.

So I am greatly interested in hearing their perspectives on the issue of animal ID, as well.

I was struck on the way into Washington this week, as I was driving to the airport in Atlanta, that in order for me to operate a motor vehicle lawfully in the State of Georgia, I am required by the government to purchase liability insurance, which, of course, necessitates me paying an insurance premium.

I think this is the case in most states. And I certainly do not plan to be in an automobile accident any time soon, knock on wood, I do everything in my power to avoid them. I drive the speed limit, I use my turn signals, and I always check my mirrors when I am changing lanes.

And assuming I have safe driving habits, and the people around me act responsibly and are not in an accident, I will never realize the benefits of that insurance. In terms of paying for my health costs, replacing my vehicle, or the income support provided by my coverage, I will never recoup the up-front, out-of-pocket expenses I have to pay in order to obtain this insurance.

Yet, I have decided that I want to drive, and so I paid for the government's mandated insurance, knowing that I may never need it, but also knowing that, if I do need it, I will be protected.

That, in my opinion, is the essence of a National Animal Identification System. It is a producer's insurance against the potentially devastating economic impacts of a widespread animal disease epidemic. In the event of an outbreak, other countries will certainly close their borders to United States animals.

Just as there are up-front losses when you are in a car wreck—*i.e.,* the loss of your vehicle and perhaps missed work, *et cetera*—a robust animal ID system with full traceability provides protection by helping to preserve some of that market access. It will allow us to more quickly insulate and isolate problem animals and stop the spread of illness.

This, in turn, will allow us to demonstrate to other nations that the United States' herd is safe and reopen those markets to U.S. goods. However, unlike car insurance, NAIS is far from being simply a response mechanism. NAIS has the potential to offer prospective benefits, as well.

We have already seen corporations use an animal ID system to demonstrate the safety of its products to the public and aid in its marketing. And we are seeing retailers require its suppliers be able to trace the animals it purchases from them, ostensibly to maintain integrity of its merchandise and protect its reputation. Activities such as this have the up-front potential to offset the costs of compliance for the producer.

Last, I would like to echo Chairman Peterson's sentiments from the last hearing on this issue in saying that it will be difficult, if not impossible, to convince Congress to provide economic support

for producers should we have an animal disease outbreak if they are not participating in NAIS.

In other words, producers should not assume that the Federal Government will be there as an insurance policy if they continue to be unwilling to pay their premium.

[The prepared statement of Mr. Scott follows:]

PREPARED STATEMENT OF HON. DAVID SCOTT, A REPRESENTATIVE IN CONGRESS FROM GEORGIA

Welcome once again to the Committee on Agriculture, Subcommittee on Livestock, Dairy, and Poultry. We have the pleasure of being joined today by the Committee on Homeland Security, Subcommittee on Emerging Threats, Cybersecurity, and Science and Technology. So I welcome Chairwoman Clarke and the Members of her Subcommittee as well.

We are here today to continue our examination of the National Animal Identification System (NAIS). This hearing comes on the heels of the recently released benefit-cost analysis conducted by Kansas State University and others at the behest of the Animal and Plant Health Inspection Service (APHIS). So I am certain that this report will be a large part of the discussion today. However, as I mentioned earlier, we also have with us Members of the Committee on Homeland Security and a witness from the Department of Homeland Security. So I am greatly interested in hearing their perspectives on the issue of animal ID as well.

I was struck on the way into Washington this week, as I was driving to the airport in Atlanta, that in order for me to operate a motor vehicle lawfully in the State of Georgia I am required by the government to purchase liability insurance which of course necessitates me paying an insurance premium. I think this is the case in most states. I certainly do not plan to be in an automobile accident any time soon, knock on wood; and indeed I do everything in my power to avoid them . . . I drive the speed limit, I use my turn signals and I always check my mirrors when I'm changing lanes. And assuming I have safe driving habits and the people around me act responsibly and I am not in an accident, I will never realize the benefits of that insurance in terms of paying for my health care costs or replacing my vehicle, or the income support provided by my coverage. Moreover I will never recoup the up-front out-of-pocket expense I have to pay in order to obtain this insurance. Yet, I have decided that I want to drive and so I pay for the government mandated insurance; knowing that I may never need it, but also knowing that if I do need it I will be protected.

THAT, in my opinion, is the essence of the National Animal Identification System. It is a producer's insurance against the potentially devastating economic impacts of a widespread animal disease epidemic. In the event of an outbreak, other countries will certainly close their borders to U.S. animals . . . just as there are up-front losses when you are in a car wreck, *i.e.,* the lost use of your vehicle and perhaps missed work, *etc.* . . . However a robust animal ID system with full traceability provides protection by helping to preserve some of that market access, because it will allow us to more quickly isolate problem animals and stop the spread of illness. This in turn will allow us to demonstrate to other nations that the U.S. herd is safe and reopen those markets to U.S. goods.

However, unlike car insurance, NAIS is far from being simply a response mechanism. NAIS has the potential to offer prospective benefits as well. We have already seen corporations use an animal ID system to demonstrate the safety of its product to the public and aid in its marketing. And we have seen retailers require its suppliers to be able to trace the animals it purchases from them, ostensibly to maintain the integrity of its merchandise and protect its reputation. Activities such as this have the up-front potential to offset the costs of compliance for the producer.

Last, I would echo Chairman Peterson's sentiments from the last hearing on this issue, in saying that it will be difficult if not impossible to convince Congress to provide economic support for producers should we have an animal disease outbreak if they are not participating in NAIS. In other words, producers should not assume that the Federal Government will be there as an insurance policy, if they continue to be unwilling to pay their premium.

The CHAIRMAN And now I would like to yield for an opening statement to our distinguished Ranking Member, the gentleman from Texas, Mr. Neugebauer.

OPENING STATEMENT OF HON. RANDY NEUGEBAUER, A REPRESENTATIVE IN CONGRESS FROM TEXAS

Mr. NEUGEBAUER. Well, thank you, Mr. Chairman.

And let me extend my own greeting to the Members of the Homeland Security Subcommittee, and I appreciate Chairwoman Clarke and Ranking Member Lungren joining us today and the Members of their Subcommittee.

At the March 11th hearing to review the USDA's implementation of the National Animal Identification System, Chairman Peterson referred to a briefing he had with representatives of DHS who offered an economic impact assessment resulting from a hypothetical introduction of foot-and-mouth disease into the United States.

Since that time, I have been able to review the information from that briefing, and I believe that the introduction of foot-and-mouth would be devastating and that all reasonable steps should be made—must be taken to prevent an introduction of this or any other foreign animal disease into the United States.

Dr. Clifford and Mr. McGinn will testify that animal identification can provide information to assist animal health professionals in managing, and ideally minimizing, the spread of foreign animal disease once it has crossed over the border defenses.

Dr. McGinn will comment about his experiences in North Carolina, where the state implemented a highly successful voluntary animal identification system. The system in North Carolina was developed around the commitment that information required from producers would be protected from public disclosure.

These are two very important elements that I have advocated for in any national program, information protection and voluntary participation. While the testimony today will focus on the potential benefits of an animal identification system in the event of a foreign animal disease introduction, I am more interested in hearing about the systems DHS has in place to prevent the introduction in the first place.

In 2002, we transferred the Agricultural Quarantine Inspection Program from USDA to DHS. Since that time, we have seen considerable deterioration in the morale of the agricultural inspectors. More problematic has been a culture at DHS that has relegated the mission of protecting American agriculture to the back burner.

To quote our Committee Investigator, "In the battle for resources to fight bugs, drugs and thugs, bugs always lose."

We hear concerns about USDA's use of $140 million spent since the 2004 implementation of animal ID, which I agree has been nothing short of wasteful. But it is important to consider the hundreds of millions of dollars transferred each year from USDA to DHS to carry out the Agricultural Quarantine Inspection Program and the effectiveness of that program.

I hope the Agriculture Committee will consider these issues in future hearings, as well.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you very much, Mr. Neugebauer.

Now it is, certainly, my pleasure to recognize and, of course, welcome the Chairman of the full Committee of Homeland Security with us for this important hearing.

But it is my pleasure to recognize at this time and hear from the distinguished chairwoman of the Subcommittee on Emerging Threats, Cybersecurity, and Science and Technology, the gentlelady from New York, Ms. Clarke.

OPENING STATEMENT OF HON. YVETTE D. CLARKE, A REPRESENTATIVE IN CONGRESS FROM NEW YORK

The CHAIRWOMAN. I would like to thank the distinguished Chairman, Chairman Scott, and Ranking Member Neugebauer——

Repeat that for me one more time.

Mr. NEUGEBAUER. Neugebauer.

The CHAIRWOMAN.—Neugebauer of this Subcommittee for inviting the Homeland Security Subcommittee on Emerging Threats, Cybersecurity, Science and Technology to share the gavel on this very important topic today.

It is extremely timely and appropriate, in light of the recent national concerns regarding outbreaks of pandemic diseases and illnesses, that we look at our current animal agro-defense measures to ensure we have the appropriate infrastructure in place to mitigate risks.

The potential for those who want to do harm to us, and decide to use the animal agriculture industry to carry out their ill-gotten plans, is very real. And it is clear that animal identification is and should be a tool of the U.S. Department of Agriculture. The USDA is certainly the appropriate and most capable Federal agency for safeguarding, preventing, controlling, and monitoring animal health.

However, the Department of Homeland Security is responsible for coordinating interagency efforts to address national animal disease outbreak. In the event of a national catastrophe, DHS must be able to communicate with an effective and informed Department of Agriculture that can rapidly identify disease and exposed animals.

Our Committee's assessment of this issue is that, in the event of such an outbreak, it is essential that we have a functioning system in place to allow for the immediate identification and assessment of the problems. The ultimate goal is to create a national system of traceability, and animal ID is a key component of this.

I want to stress that our ability to effectively assess and respond to an animal disease outbreak remains limited until we have a functioning animal ID system in place. This issue requires urgent attention.

I am particularly concerned that at this point it appears that we can only identify and trace about 35 percent of our U.S. livestock and poultry premises. In order to respond quickly and effectively to an animal disease event, animal health officials need to be able to accurately identify infected and non-infected animals where they are located, when they were there, and what other animals might have been exposed.

Our inability to rapidly and accurately trace disease in exposed animals increases the likely spread of disease and hinders our ability to adequately respond to the threat.

USDA must take the appropriate steps now to implement a biosecurity system for livestock. In USDA's zeal to promote animal

health and safety, it is critical that they are just as vigilant in stressing animal agriculture defense and security.

The first step in this process is the legitimate establishment of an animal identification system. It is also important that the livestock industry fully participate in the animal identification system in order for it to be truly effective.

I look forward to hearing from both panels. The Federal Government witnesses and the state animal health experts and administrators can give us better insight on the problems with our current animal identification system, and help prescribe key elements for a more effective system.

[The prepared statement of Ms. Clarke follows:]

PREPARED STATEMENT OF HON. YVETTE D. CLARKE, A REPRESENTATIVE IN CONGRESS FROM NEW YORK

I would like to thank the distinguished Chairman and Ranking Member of this Subcommittee for inviting the Homeland Security Subcommittee on Emerging Threats, Cybersecurity, and Science and Technology to share the gavel on this very important topic today.

It is extremely timely and appropriate in light of the recent national concerns regarding outbreaks of pandemic diseases and illnesses, that we look at our current animal agro-defense measures to ensure we have the appropriate infrastructure in place to mitigate risks. The potential for those who want to do harm to us and decide to use the animal agriculture industry to carry out their ill-gotten plans is very real.

It is clear that animal identification is and should be a tool of U.S. Department of Agriculture. The USDA is certainly the appropriate and capable Federal agency for safeguarding, preventing, controlling and monitoring animal health.

However, the Department of Homeland Security is responsible for coordinating interagency efforts to address national animal disease outbreaks. In the event of a national catastrophe, DHS must be able to communicate with an effective and informed Department of Agriculture that can rapidly identify diseased and exposed animals.

Our Committee's assessment of this issue is that in the event of such an outbreak, it is essential that we have a functioning system in place to allow for the immediate identification and assessment of the problems. The ultimate goal is to create a national system of traceability, and animal ID is a key component of this.

I want to stress that our ability to effectively assess and respond to an animal disease outbreak remains limited until we have a functioning animal ID system in place. This issue requires our urgent attention.

I am particularly concerned that at this point, it appears that we can only identify and trace about 35% of our U.S. livestock and poultry premises.

In order to respond quickly and effectively to an animal disease event, animal health officials need to be able to accurately identify infected and non-infected animals, where they are located, when they were there, and what other animals might have been exposed.

Our inability to rapidly and accurately trace diseased and exposed animals increases the likely spread of disease, and hinders our ability to adequately respond to the threat.

USDA must take the appropriate steps now to implement a biosecurity system for livestock. In USDA's zeal to promote animal health and safety, it is critical that they are just as vigilant in stressing animal agriculture defense and security. The first step in this process is the legitimate establishment of an animal identification system.

It is also important that the livestock industry fully participate in the animal identification system in order for it to be truly effective.

The CHAIRWOMAN. It is now my honor to recognize the Ranking Member of the Subcommittee on Emerging Threats, Cybersecurity, and Science and Technology, the gentleman, Mr. Lungren.

OPENING STATEMENT OF HON. DANIEL E. LUNGREN, A REPRESENTATIVE IN CONGRESS FROM CALIFORNIA

Mr. LUNGREN. Thank you very much, Chairwoman Clarke.

And thank you very much, Chairman Scott and Ranking Member Neugebauer.

Let me begin by thanking all of the witnesses for being here. Your work towards the monumental task of securing our nation's food supply has not gone unnoticed by either of the Committees here today.

I thank the Agriculture Subcommittee on Livestock, Dairy, and Poultry for hosting us and for recognizing the central responsibility our Homeland Security officials have in managing robust and coordinated research, preparedness, and response activities in the food and agriculture critical infrastructure sector.

Reports of *Salmonella* in our produce, *E. coli* in our meats, or now even talk of the H1N1 virus in humans, are sober reminders of the need for vigilance in our agriculture and our health monitoring systems, and that this need has not subsided. If anything, such instances seem to be on the rise. Perhaps it is just they get more publicity today.

In any event, we do depend on our Federal officials, our colleagues in the state government, and our researchers in academia to tackle these problems and to help us find new ways to keep us safe from outbreaks, whether they be terrorist-driven, naturally occurring, or even the result of the very way in which we grow our food.

The issue of a National Animal Identification System is, frankly, new to our Subcommittee. And while we have often examined emerging threats to agriculture and to human health, this particular facet of agricultural security is one we have not yet studied.

Coming from California, I understand the importance of agriculture both to our state and to the Federal economy. We do about $10 billion in livestock and poultry business every year. Our dairy industry, we believe, is second to none in terms of size and economic importance.

But it is clear to me that we must be fully prepared to respond to a large-scale disaster that would impact animal lives and human livelihoods.

So what does it mean to be able to track any given animal's movement through the production chain? How does the capability enhance our food security and overall security of our homeland?

What would happen if we had a major incident and did not have a national animal ID system in place? And, also, we cannot forget, what are the costs involved? And any program we come up with, how do we make sure that it is, in fact, cost-efficient?

I have a passing interest in the cattle industry, and I know what costs could be with respect to identification in the system. And if those are costs to be borne, we have to make sure that they are appropriate to the circumstances, they do the job we want to do, and we have to make sure it doesn't destroy a particular industry in the process.

A National Animal Identification System has to be a Federal-state-private partnership. Having all of these witnesses here before us at the same table is an excellent opportunity to discuss what is

going right and what is going wrong, where we must be going, what we need to do to be going, and what efforts will get us there.

And in so doing, we must keep in mind the need to balance cost to the producer, and privacy of their data, with the need to mitigate disease spread to keep our health secure and our markets viable.

One of the amazing things about our agricultural system is it gives us the greatest abundance and opportunity to enjoy foods of any country in the history of the world. But at the same time, the very means that we use to produce those make us vulnerable to the terrorists of the world.

And we have to understand that, and we somehow have to respond to it in a reasonable, effective and efficient way that does not undo the greatness of this agricultural system that we have today.

So I look forward to hearing from each of our witnesses on these important issues. And I thank both of the chairs of our Subcommittees, the Ranking Members and my colleagues. Thank you very much.

The CHAIRMAN. Thank you, Ranking Member Lungren. We appreciate your remarks.

As I mentioned, we are very pleased to have the Chairman of the Homeland Security Committee here with us, my good friend, Chairman Bennie Thompson, who, I might add, has just done an extraordinary job in leading this Congress in helping to keep and make sure our homeland is secure.

Chairman Thompson?

OPENING STATEMENT OF HON. BENNIE G. THOMPSON, A REPRESENTATIVE IN CONGRESS FROM MISSISSIPPI

Mr. THOMPSON. Thank you, Chairman Scott.

And I would like to compliment you on this hearing, but I would also like to say it is coming back home. As a couple of Members on the Committee know, until I became Chairman, I was a Member of this very prestigious Committee. And to say, "I miss you," would be an understatement, but I understand people don't miss you for long.

[Laughter.]

Mr. THOMPSON. So I am privileged to both you, Chairman Scott and Chairwoman Clarke, and the Ranking Members of those respective Subcommittees, for your leadership on this issue.

While we know that the most recent H1N1 incidents are in no way linked to the U.S. animal agriculture, the emergence of new viruses further demonstrates our need to not only be prepared to react to disease outbreaks, but to also undertake the necessary mitigation and research efforts that allow us to stay one step ahead.

We are fortunate to have the luxury of this hearing before something bad happens, rather than examining this issue as a knee-jerk overreaction that could lead to bad biosecurity policy.

I am pleased that we were able to bring the two Committees together to look at this issue appropriately as not only one of animal agriculture, but also one of homeland security. Our supply of animal agriculture is an attractive target to folks who want to do harm to the United States.

As the various professional animal industry groups get caught up in fighting over whether animal ID should be voluntary or mandatory, we must not lose sight of the fact that animal identification is a part of U.S. biosecurity. Animal identification is the first step in being able to trace animals and respond to animal health emergencies.

I have confidence that USDA is well positioned to manage animal health and the National Animal Identification System, but I am not satisfied with the pace at which the National Animal Identification System has come along.

Absent greater levels of participation, the effectiveness of a national animal ID system is compromised. USDA and DHS must ensure that the missions of food safety and food security are achieved. That way, we will be able to mitigate the consequences associated with such a catastrophe and coordinate Federal assets to prepare for and respond to the incident.

Our two panels can offer great insight. I want to know whether our current mitigation and coordination mechanisms will be sufficient. And I am also interested in learning what they believe should be done to increase participation in the national animal ID system.

Again, thank you, Mr. Chairman. I look forward to the testimony.

[The prepared statement of Mr. Thompson follows:]

PREPARED STATEMENT OF HON. BENNIE G. THOMPSON, A REPRESENTATIVE IN CONGRESS FROM MISSISSIPPI

While we know that the most recent H1N1 incidents are in no way linked to the U.S. animal agriculture, the emergence of new viruses further demonstrates our need to not only be prepared to react to disease outbreaks, but to also undertake the necessary mitigation and research efforts that allow us to stay one step ahead.

We are fortunate to have the luxury of this hearing before something bad happens rather than examining this issue as a knee-jerk overreaction that could lead to bad biosecurity policy.

I am pleased we were able to bring the two Committees together to look at this issue appropriately as not only one of animal agriculture, but also one of homeland security. Our supply of animal agriculture is an attractive target to folks who want to do harm to the U.S. As the various professional animal industry groups get caught up in fighting over whether animal ID should be voluntary or mandatory, we must not lose sight of the fact that animal identification is a part of U.S. biosecurity. Animal identification is the first step in being able to trace animals and respond to animal health emergencies.

I have confidence that USDA is well-positioned to manage animal health and the National Animal Identification System, but I am not satisfied with the pace at which the National Animal Identification System has come along. Absent greater levels of participation, the effectiveness of a national animal ID system is compromised. USDA and DHS must ensure that the missions of food safety and food security are achieved. That way, we will be able to mitigate the consequences associated with such a catastrophe and coordinate Federal assets to prepare for and respond to the incident.

Our two panels can offer great insight. I want to know whether our current mitigation and coordination mechanisms will be sufficient. I am also interested in learning what they believe should be done to increase participation in the national animal ID system.

The CHAIRMAN. Chairman, thank you, Chairman Thompson.

And now we will hear from the distinguished Chairman of the full Committee, Chairman Peterson. And I might add that Chairman Peterson has been doing an extraordinary job in providing

leadership on the whole issue of food safety. And he has made animal ID a top priority of this Committee.

Chairman Peterson?

OPENING STATEMENT OF HON. COLLIN C. PETERSON, A REPRESENTATIVE IN CONGRESS FROM MINNESOTA

Mr. PETERSON. Thank you very much, Chairman Scott and Chairwoman Clarke, for calling today's Subcommittee hearing.

And I also want to thank my good friend, Bennie Thompson, for being here today and for working with our Committee to examine this vital animal, food and economic security issue.

The House Agriculture Committee held a hearing earlier this year on the status of the National Animal Identification System, which was established by USDA in 2004 in order to enhance its animal health protection efforts.

We looked at why over $100 million has been spent so far to provide an effective traceback system in the event of an animal disease outbreak with very little in the way of real results and getting premises registered or animals identified.

Last week, USDA's NAIS Administrator—the administrator of NAIS released a benefit-cost analysis to comprehensively assess the merits of a mandatory ID system. The research conducted by several academic institutions gives us the best analysis to date on what could result if NAIS is fully adopted.

This analysis was instructed because the persistent criticism of those opposed to a mandatory system was that the costs are easier to quantify than the benefits. Well, the analysis was released. It is hardly the final word on the subject. It does raise a couple of interesting points that I would like to highlight.

With respect to industry, not implementing NAIS may result in significant losses due to reduced market export market access. The shutting down of export markets is a near certainty in the case of a major outbreak here without a mandatory system.

In addition, the analysis found that the system's cost-effectiveness rises as participation levels rise, which seems sensible.

We should remember that a mandatory ID system is not intended to prevent an animal disease outbreak. It is simply a tool to help us trace, track and quarantine animals and herds in the event of such an outbreak occurring.

Such a tool could effectively regionalize or localize a disease in order to help control it faster, which can keep the markets moving, while mitigating economic losses.

We need a better system for controlling an animal disease outbreak. It took over 100 days to find a cow in this country infected with BSE. According to APHIS, it takes 199 days on average to trace an animal with tuberculosis, as well as all the other herd mates with our current animal identification system, despite millions of dollars that have been spent on it.

What takes us a few months to do have and has been done by other countries with mandatory systems in a matter of days or weeks. Clearly, our current traceback system isn't working like it should.

Despite these troubling statistics, those who have gone to USDA and have asked it to apply to the World Organisation for Animal

Health, or OIE, for negligible BSE risk categorization for U.S. cattle, at the same time, the meat interests stand opposed to a mandatory ID system.

In my opinion, you can't have it both ways. Our trading partners already have mandatory systems. A negligible BSE risk determination is not going to happen here without one, in my opinion.

And I will say this, once again, to those who oppose the mandatory system: if we have a severe market disruption—outbreak—and it is just a matter of time when something like that is going to happen—and you continue to have this position that you don't want this kind of a system, then I would ask you not to come to me looking for support for any kind of bailout, or other economic assistance, because of the damage and the risk that you have undertaken because you don't want to have a system like this.

I am sure you can find some sympathetic ears in the Congress. And, you know, it will probably happen. But I just want to let you know that you won't find one here.

So I hope that for those—will be helpful in demonstrating the importance of an effective identification system and the economic consequences of maintaining the *status quo* will be pointed out.

I want to thank those witnesses for being here. I look forward to the testimony and, again, thank our friends and the Chairman from the Homeland Security Committee for participating in this hearing with us.

I yield back.

[The prepared statement of Mr. Peterson follows:]

PREPARED STATEMENT OF HON. COLLIN C. PETERSON, A REPRESENTATIVE IN CONGRESS FROM MINNESOTA

Thank you, Chairman Scott and Chairwoman Clarke, for calling today's joint Subcommittee hearing. I also want to thank Representative Bennie Thompson, full Chairman of the Homeland Security Committee, for working with our Committee to examine this vital animal, food, and economic security issue.

The House Agriculture Committee held a hearing earlier this year on the status of the National Animal Identification System, which was established by USDA in 2004 in order to enhance its animal health protection efforts. We looked at why over $100 million has been spent to provide an effective traceback system in the event of an animal disease outbreak with very little in the way of real results in getting premises registered or animals identified.

Last week, USDA's Animal and Plant Health Inspection Service, the administrator of NAIS, released a "Benefit-Cost Analysis" to comprehensively assess the merits of a mandatory identification system. The research, conducted by several academic institutions, gives us the best analysis to date on what could result if NAIS is fully adopted. This analysis is instructive because a persistent criticism of those opposed to a mandatory system is that the costs are easier to quantify than the benefits.

While the analysis that was released is hardly the final word on the subject, it does raise a couple of interesting points that I would like to highlight. With respect to industry, not implementing NAIS may result in as much as $13.2 billion in losses due to reduced export market access. The shutting down of export markets is a near certainty in the case of a major outbreak here without a mandatory system. In addition, the analysis found that the system's cost effectiveness rises as participation levels rise.

We should remember that a mandatory animal identification system is not intended to prevent an animal disease outbreak. It is simply a tool to help us trace, track and quarantine animals and herds in the event of such an outbreak.

Such a tool could effectively regionalize or localize a disease in order to help control it faster, which can keep the markets moving while mitigating economic losses.

We need a better system for controlling an animal disease outbreak. It took over 100 days to find a cow in this country infected with BSE. According to APHIS, it

takes 199 days on average to trace an animal with tuberculosis as well as all of its herdmates with our current animal identification system despite the millions that have been thrown at it. What takes us a few months to do can and has been done by other countries with mandatory systems in a matter of days or weeks. Clearly, our current traceback system does not work.

Despite these troubling statistics, there are those who have gone to USDA and have asked it to apply to the World Organisation for Animal Health, or OIE, for a negligible BSE risk categorization for U.S. cattle. At the same time, these interests stand opposed to a mandatory identification system. You cannot have it both ways. Our trading partners already have mandatory systems. A negligible BSE risk determination is not going to happen here without one.

And I will say this once again to those who oppose a mandatory system: If we have a severe market disruption due to a disease outbreak, do not come to me looking for support for a bailout or any other form of economic assistance. I'm sure you can find some sympathetic ears in this Congress, but you won't find one in me.

I hope that today's joint hearing will be helpful in demonstrating the importance of an effective identification system and the economic consequences of maintaining the *status quo*. I thank today's witnesses for being here and I look forward to their testimony. I yield back my time.

The CHAIRMAN. Thank you very much, Chairman Peterson.

I would like to ask for unanimous consent that opening statements by other Members be submitted for the record so that witnesses may begin their testimony and to ensure that there is ample time for questions.

I have a white paper here that is written by Peter Bailey of the Australian Government to be inserted in the hearing record.

[The document referred to is located on p. 75.]

The CHAIRMAN. As Chairwoman Clarke said a few minutes ago, nothing is more vitally important to the American people than we are making sure that their food supply is safe and the sources of that food is safe. And we have that responsibility to do here in Congress.

I would like to now welcome our first panel of witnesses to the table. First, we have Dr. John R. Clifford, Deputy Administrator, Veterinary Services, Animal and Plant Health Inspection Service, United States Department of Agriculture, Washington, D.C.

Thank you, and welcome, Dr. Clifford.

We also have Dr. Tom McGinn, Chief Veterinarian, U.S. Department of Homeland Security here in Washington.

Thank you for being with us, sir.

Dr. Clifford, you may begin.

STATEMENT OF JOHN R. CLIFFORD, D.V.M., DEPUTY ADMINISTRATOR FOR VETERINARY SERVICES AND CHIEF VETERINARIAN, ANIMAL AND PLANT HEALTH INSPECTION SERVICE, U.S. DEPARTMENT OF AGRICULTURE, WASHINGTON, D.C.

Dr. CLIFFORD. Good afternoon. Thank you for the opportunity to testify before the Subcommittees today.

I am Dr. John Clifford, the Chief Veterinary Officer for animal health for the U.S. Department of Agriculture.

As we all know, animal health emergencies and foreign animal disease outbreaks can have a major impact on the nation's agricultural infrastructure, animal and public health, food security, economy, and export markets.

USDA's animal health safeguarding systems have largely stayed ahead of evolving risk and have been highly effective in preventing

the introduction into the United States of serious animal diseases such as foot-and-mouth disease.

We also have had a strong domestic surveillance infrastructure in place to detect any animal diseases that could slip past our prevention measures. But even with the best safeguards available, a serious disease event can still occur. That is why USDA has specific emergency response guidelines for foot-and-mouth disease and many other foreign animal diseases that pose a significant threat to the United States.

To ensure maximum speed and effectiveness, APHIS has rapid response teams stationed around the country ready to travel to detection sites to coordinate Federal containment and eradication efforts. We also manage a corps of more than 720 veterinarians and animal health technicians who can be federalized and deployed during an animal disease event. And we maintain a national veterinary stockpile of vaccines and other critical veterinary supplies.

While we have done a great deal to prepare for foot-and-mouth disease or other foreign animal disease outbreaks, there is more we can do to strengthen our capabilities. In a disease emergency, animal health officials are called to make vital, real-time decisions. To make these decisions, we need the ability to quickly and reliably determine what animals are carriers of the disease, what animals are at risk, and what animals are unaffected.

This information is the backbone of a rapid and effective response. The most important tool at our disposal in this regard is the National Animal Identification System.

There is no question that an effective animal ID system is essential to our work to protect U.S. animal health. A number of studies have looked at this issue and found that a short traceback time is key to reducing a disease's negative effects. Providing animal traceability, NAIS can minimize the number of animals affected by an outbreak and reduce the economic strain associated with animal disease.

It can also demonstrate that certain areas of the U.S. are free of disease, limiting market closures and preserving the marketability of animals.

Today, as a result of our efforts, we have a strong NAIS infrastructure in place consisting of premises registration, animal identification, and animal tracing. Unfortunately, a disappointing rate of producer participation—currently at over 35 percent—hampers our ability to achieve animal traceability. This is particularly true in cattle.

In order for NAIS to be successful, we need a minimum critical mass of producers onboard. We estimate this would be 70 percent of the animals in specific species sectors that could be identified and traced to their premises of origin.

While 70 percent would provide some measure of traceability, I must emphasize that we really need to achieve higher participation rates, as high as 90 percent, to ensure the benefits of the system.

So how do we achieve a 90 percent participation rate? I am sure you want to know whether I support a mandatory NAIS to reach this goal. Like Secretary Vilsack, I am committed to exploring all available options and working collaboratively with industry to address their concerns before making this decision.

Whether NAIS is, ultimately, voluntary or mandatory, the important thing is, is that it is successfully implemented and meets the needs of both producers and animal health officials.

NAIS is a long-term investment in emergency preparedness and response with our ongoing disease control and eradication programs, the international competitiveness of our livestock sector, and consumer confidence in our food supply. And effective NAIS will prepare us to respond successfully to foreign animal disease outbreaks, natural disasters, and agro-terrorism.

I believe it is imperative that we make this program a success. USDA recently released a benefit-cost analysis for animal ID, and I would like to submit that for the record.

[The document referred to is retained in Committee files, and can be viewed at *http://animalid.aphis.usda.gov/nais/naislibrary/documents/plans_reports/Benefit_Cost_Analysis_NAIS.pdf.*]

Dr. CLIFFORD. Thank you. And I would be happy to answer your questions.

[The prepared statement of Dr. Clifford follows:]

PREPARED STATEMENT OF JOHN R. CLIFFORD, D.V.M., DEPUTY ADMINISTRATOR FOR VETERINARY SERVICES AND CHIEF VETERINARIAN, ANIMAL AND PLANT HEALTH INSPECTION SERVICE, U.S. DEPARTMENT OF AGRICULTURE, WASHINGTON, D.C.

Chairman Scott, Chairwoman Clarke, Ranking Members Neugebauer and Lungren, and Members of the Subcommittees, thank you for holding this hearing today. I am Dr. John Clifford, Deputy Administrator for Veterinary Services with the Department of Agriculture's (USDA) Animal and Plant Health Inspection Service (APHIS). In this position, I also serve as USDA's Chief Veterinary Officer for animal health.

I appreciate the opportunity to testify before you regarding USDA's National Animal Identification System (NAIS) and our extensive efforts to protect U.S. agriculture from foreign animal disease threats such as foot-and-mouth disease (FMD). We have a comprehensive and effective safeguarding system that is designed to keep diseases like FMD out of our country, look carefully for any signs of the disease in our nation's herd, and, should we diagnose it here, respond quickly to minimize spread and economic impacts.

The backbone of any effective emergency response is the ability to quickly and reliably ascertain what animals are carriers of disease, what animals are at risk, and what animals are unaffected. With this information, we can make decisions in real time regarding the boundaries of the quarantines that we should put in place, what movement of animals and products can be supported from a risk standpoint, when it is needed to use vaccine, and which animals must be depopulated to curb and eventually end the spread of the disease.

These are difficult decisions to make, especially in the midst of an emergency situation. The most important thing needed to make these decisions and protect our nation's producers, communities, and economy from a major disease event like FMD is timely, current information that tells me which animals have been infected or exposed.

Today, because the livestock industries are so integrated and animals move regularly from location to location for feeding, sale, breeding, and the like, it is absolutely essential, in the event of a contagious disease like FMD, to have this sort of usable information at a moment's notice. The most important tool at our disposal in this regard is the National Animal Identification System (NAIS).

USDA, states, and industry have been working cooperatively to develop a unified NAIS for several years. This work assumed greater urgency when we witnessed the heavy losses associated with the FMD outbreak in the United Kingdom in 2001. In 2003, a group of approximately 100 industry and government representatives—the National Identification Development Team—drafted the U.S. Animal Identification Plan. The detection of a case of bovine spongiform encephalopathy (BSE) in the United States on December 23, 2003 accelerated our implementation of NAIS.

We have expended significant effort and resources on NAIS and today have a strong infrastructure in place, consisting of premises registration, animal identification, and animal tracing. Premises registration—the foundation of NAIS—estab-

lishes a contact list for all locations in the United States that manage or hold livestock or poultry. A registered premises provides a key link for a disease investigation—allowing for a targeted response. Animal identification provides producers with a uniform numbering system for their animals, and links livestock and poultry to their premises of origin. Animal tracing, the final component of NAIS, allows producers to choose a private or state animal tracking database and report animal movements that may pose a significant risk of disease transmission. USDA maintains only the premises registration information needed to enable effective traceback or notification in animal disease situations, as well as distribution/termination records of official identification devices, and will not have direct access to the private and state animal tracking databases which contain animal movement records.

Unfortunately, we have faced many challenges as we have worked to develop a robust NAIS. Most producers, industry groups, and state officials see NAIS' value, but the debate continues over how to implement it. This has led to a disappointing participation rate of about 35 percent of the estimated number of our nation's livestock and poultry premises. Some state legislators have sought to restrict participation in the program. Further, we at USDA have made adjustments in the direction of NAIS, resulting in some confusion regarding producer participation. In May 2005, USDA announced a Draft Strategic Plan that included timelines for a mandatory program by January 2009. The April 2006 Implementation Plan stated that the program was voluntary with a contingency that USDA would consider regulations that would require participation if voluntary participation levels were not adequate to have an effective program. Although our NAIS implementation strategies have always been based upon continuous producer and stakeholder assessment and input into workable solutions, this strategy shift, combined with producer concerns, appears to have reduced producer focus on the importance of animal disease traceability and preparedness.

Despite these challenges, I believe we have turned an important corner in the development of NAIS. All components of the system have been developed, integrated, tested, and made operational. Secretary Vilsack has signaled his clear support for developing a system that will work efficiently and effectively, and that accommodates the unique needs and perspectives of the diverse array of stakeholders involved. Implementation of an effective NAIS is my top priority. There is no question that an effective animal identification system is essential to our work to successfully protect U.S. animal health.

With that, let me turn to examining the risks we face today, our approach to preparedness and response, and how NAIS effectively complements these critical efforts.

The Risks Posed by Foreign Animal Diseases

As you well know, foreign animal disease incursions, as well as other animal health emergencies, can have a major impact on the nation's agricultural infrastructure, animal and public health, food security, economy, and export markets. For example, there are many animals susceptible to FMD in the United States, including over 94 million cattle, 67 million swine, and almost nine million sheep and goats. A recent study conducted by USDA's Economic Research Service simulated a FMD outbreak in small hog operations in the Midwest, estimating losses between $2.8 and $4.1 billion.[1] Another study, based on a hypothetical FMD outbreak in California, projected a cost of between $8 and $14 billion.[2]

USDA has numerous safeguards in place to prevent the introduction of FMD, and has successfully kept the disease out of the United States since the last outbreak in 1929. However, we also recognize that no system is 100 percent foolproof. That said, should we be faced with a significant animal disease event in the United States, the key to reducing its impact is our ability to swiftly contain and eradicate it. The way we can achieve this is by having an effective system in place that allows animal health officials to quickly identify all potentially affected animals and stop them from further spreading the disease. Again, this is exactly what we are trying to achieve with NAIS. NAIS can have significant, positive effects on our ability to limit the number of animal owners impacted by an outbreak, reduce the economic strain on owners and affected communities, demonstrate that certain areas of the United States are free of disease, limit export market closures, and preserve the marketability of animals for domestic markets.

---

[1] Paarlberg, Lee, and Seitzinger. (2008). *Economic Impacts of Foreign Animal Disease.* Washington, D.C.: USDA ERS.

[2] Ekboir, Javier. (1999). *The Potential Impact of Foot and Mouth Disease in California: The Role and Contribution of Animal Health Surveillance and Monitoring Services.* Davis, Calif.: Agricultural Issues Center.

The U.S. Animal Health Safeguarding System

USDA safeguards the nation's animals and animal products by preventing, controlling, and/or eliminating animal diseases, and monitoring and promoting animal health and productivity. We have made significant investments—totaling more than $405 million of annual appropriated funding in FY 2008—towards preventing, controlling, and eradicating animal diseases. USDA's animal health safeguarding systems have largely stayed ahead of evolving risks and have been highly effective in preventing the introduction of serious animal diseases such as FMD into the United States.

Prevention Measures

Our agricultural safeguarding system in the United States consists of a comprehensive, interlocking set of programs that work together to protect U.S. livestock from foreign pest and disease risks. USDA does not allow animals or animal products to be exported to the United States from an area of the world where FMD is known to exist or where a determination of disease status cannot be made. Our import regulations are science-based and are designed to keep susceptible animals and their products out of the United States. To ensure that these regulations are followed, USDA works in tandem with the Department of Homeland Security (DHS) to address the risk of foreign pests and diseases entering the country at ports of entry, either through the movement of people or commodities. APHIS also operates animal import centers with veterinary personnel who screen imported live animals.

Recognizing that every single import cannot be inspected, APHIS provides an additional layer of protection from foreign threats through our Smuggling, Interdiction, and Trade Compliance (SITC) program. SITC teams, in cooperation with DHS' Customs and Border Protection, the USDA Food Safety and Inspection Service, and other Federal partners, vigilantly seek out any animals or animal products that might be smuggled into the United States from another country. SITC teams also conduct secondary market and warehouse inspections and conduct a full investigation on smuggled goods to identify and eliminate illegal pathways.

Surveillance and Detection

The components of our safeguarding system are designed to protect against damaging and potentially costly introductions. But we know we must have a strong domestic surveillance infrastructure in place to detect any animal diseases that could slip past our prevention measures. Early detection is essential to preventing disease establishment in the United States and can help reduce the cost to industry of lost product and lost markets. To that end, APHIS conducts a number of surveillance activities so that we can detect an intrusion as early as possible.

APHIS scientists perform diagnostic testing of samples collected from U.S. livestock that are showing clinical signs consistent with an exotic disease, as well as test animal products and live animals being imported into the United States to ensure that unwanted diseases are not accidentally introduced through importation. APHIS scientists have the capability to diagnose more than 30 exotic animal diseases and perform thousands of diagnostic tests each year. They also prepare diagnostic reagents, distribute them to laboratories throughout the world, and work to improve techniques for the diagnosis or control of foreign animal diseases.

The National Animal Health Laboratory Network supports USDA's animal health testing efforts, enabling rapid, accurate detection and reporting of possible occurrences of significant animal disease. The Network includes 38 laboratories which are approved for testing diagnostic samples for FMD, providing for early detection and the surge capability needed in the case of an outbreak.

In addition, APHIS trains veterinarians, scientists, professors, and veterinary students on the recognition of clinical signs and pathological changes caused by foreign animal diseases. This training provides the backbone of APHIS' animal disease surveillance and safeguarding programs. These foreign animal disease diagnosticians are located throughout the country, and we estimate that they can be on-site to conduct an investigation and collect samples within 4 hours of receiving a report of a suspected foreign animal disease. About 500 active state and Federal animal health officials have received this training and are ready to respond to suspicious animal disease cases. Based on their assessment of the situation and prioritization of the threat, APHIS can then take appropriate steps to protect the U.S. livestock industry. All of these surveillance efforts are a crucial part of USDA's overall agricultural safeguarding system.

Emergency Preparedness and Response

Although our preventative measures have successfully protected the United States from FMD and other animal diseases, it is only prudent to assume that, even with

the best safeguards available, a serious disease event will still occur. Accordingly, now more than ever, preparedness is critical and response plans need to be in place ahead of time, rather than waiting for a disease outbreak to occur.

USDA has specific emergency response guidelines for FMD and many other foreign animal diseases that pose a significant threat to the United States, as well as guidance for state and local responders. They include detailed checklists and standard operating procedures that cover such topics as disease etiology and ecology, surveillance objectives, diagnostic sample testing, quarantine and movement control, vaccination, and continuity of business planning. We have developed these response plans in conjunction with our Federal, state, and local partners, with whom we conduct exercises to test our preparedness.

Another essential part of planning includes identifying those Departments and Agencies that will support and partner with USDA in responding to emergencies and how roles and responsibilities will be divided or shared. A primary partner for APHIS is the Department of Homeland Security (DHS). In working with DHS during animal health emergencies, APHIS leads the animal disease incident response, coordinates incident management teams, manages public relations, and takes measures to control and eradicate the disease for the Agriculture and Food Sector. DHS, on the other hand, coordinates Federal-to-Federal support as outlined in the National Response Framework, mobilizing resources through DHS components (*e.g.,* Federal Emergency Management Agency, Customs and Border Patrol) to mitigate impacts of incidents.

To ensure maximum speed and effectiveness, APHIS has rapid response teams stationed around the country ready to travel to detection sites to coordinate Federal containment and eradication efforts. These teams use an incident command approach to emergency response, enabling members from local, state, and Federal agencies to communicate with each other clearly and effectively when working an emergency and to tap into a wider network of resources. APHIS also manages the National Animal Health Emergency Response Corps (NAHERC) of over 720 veterinarians and animal health technicians who can be federalized and deployed as needed. APHIS also has access to personnel through the International Animal Health Emergency Response Corps, comprised of veterinarians and technicians from Australia, New Zealand, Canada, the United Kingdom, and Ireland.

Additionally, APHIS continues to enhance the nation's repository of critical veterinary products, known as the National Veterinary Stockpile (NVS), to ensure that we can deliver vaccines and other critical veterinary supplies to the site of a dangerous animal disease outbreak within 24 hours. To accomplish this critical mandate, the NVS has defined the agents of greatest interest to animal health and has prioritized its resources accordingly. This disease list, led by FMD and highly pathogenic avian influenza (HPAI), is one of the key influencers of our emergency management priorities. The NVS currently holds or has systems in place to provide:

- Personal protective equipment (PPE) for 310 responders for 10 days in a high-risk environment;
- Further PPE to protect 3,000 responders for 40 days;
- Anti-viral medications for 3,000 responders for 6 weeks; and
- Satellite data and voice equipment that is portable and capable of establishing temporary command posts.

Vaccines are another potentially critical tool in our emergency response arsenal. APHIS is the custodian of the North American FMD Vaccine Bank (owned by Canada, Mexico and the United States), which stores concentrated FMD antigen that can be formulated into a vaccine if a FMD introduction occurs. We have developed guidelines regarding the use of FMD vaccine, including distribution if the vaccine were limited or if time constraints prevented establishment of a current livestock population estimate, and have a rating system in place to prioritize vaccine delivery within the vaccination zone. To strengthen our response capabilities, USDA and DHS are also working on the development, testing, and licensing of FMD vaccines that can be safely manufactured on the U.S. mainland.

While we have made great strides in preparing for a FMD or other foreign animal disease outbreak, there is always more we can do to strengthen our capabilities. For example, USDA is currently working on a model to better estimate how many personnel would be needed to manage a large scale FMD outbreak, and expect to complete it in 2010. On the diagnostic side, APHIS and USDA's Agricultural Research Service continue to try to improve our capabilities, and are currently working on rapid diagnostics that can be used pen-side. We also regularly test our emergency response capabilities through simulation exercises with local, state, Federal, and international partners, so that we can identify needed improvements and ensure

that all participants understand their roles. For example, we conducted NVS deployment exercises with four separate states during the past year, and plan to conduct a FMD exercise with 13 states and Canada this summer.

The Need for an Effective National Animal Identification System

With all that we have done to prepare for a FMD or other significant disease incursion, we cannot afford to be complacent; we must always be doing more and improving our capabilities and preparedness to respond. And, again, we can only respond effectively if we know what animals are affected, where they are located, and if they have had contact with other animals to spread the disease. Based on the worst case scenario—FMD—we have found that being able to trace back from infected animals within 48 hours is vital to quickly containing and eliminating an incipient disease outbreak.

In fact, a number of studies have looked at this issue, and found that a quicker response equates to a significant decrease in negative effects from an outbreak. For example, in a study that examined the impacts of a simulated FMD outbreak in California, researchers found that a shorter traceback time is key to reducing the scope of a disease, as indicated by the study's finding that in its simulation, "a 1 week delay in starting depopulation could increase the proportion of infected premises from 18% to more than 90%."[3] A more recent study that examined the value of traceability in a simulated FMD outbreak in Kansas found that "as the level of surveillance and ability to trace cattle increases, the number of animals that have to be destroyed and related costs decrease."[4] Clearly, there are benefits to be had from enhancing our traceback capabilities.

USDA has long recognized the benefits of animal identification and for much of the second half of the 20th century used this tool in long term eradication programs for diseases like brucellosis and tuberculosis. While certainly not the modern, standardized system we envision with NAIS, those systems did provide us with a solid base for traceback. However, the success of those programs led to a dramatic decline in the number of premises and animals registered in any identification program. This, coupled with the incompatibility of the different Federal and state systems, leaves us today without sufficient traceability in the U.S. livestock sector in the event of an animal health emergency.

To achieve a level of animal traceability in the United States that meets the needs of our producers, USDA in 2003 began planning for a National Animal Identification System that would provide rapid animal tracking for prompt and effective disease containment. The efforts of the last 5 years have enabled us to build and link all the IT components of the system, standardize numbering systems so that we and our state partners have common frames of reference, and test and deploy strategies for increasing traceability in key sectors of the livestock industries. To date, USDA has obligated approximately $120 million for NAIS. However, while we have a strong infrastructure in place, participation in NAIS has been disappointing. Currently, just over 510,000 premises are registered, which, as we mentioned before, equates to approximately 35 percent of the estimated number of our nation's livestock and poultry premises.

While we have very high levels of traceability in the swine, poultry, and sheep sectors, we have much work to do in terms of traceability for cattle. In order for NAIS to be successful, we need a minimum critical mass of producers onboard, which we estimate would be 70 percent of the animals in a specific species/sector that could be identified and traceable to their premises of origin. While 70 percent would provide some measure of traceability, I must emphasize that we really need to achieve higher participation rates, perhaps as high as 90 percent, to ensure the benefits of the system.

Various groups within the beef cattle industry have voiced a number of concerns with NAIS that we believe contribute to the industry's low participation rate, currently estimated at 25 percent. One of the greatest concerns we have heard is with the costs associated with a mandatory NAIS, particularly for small producers. Data from a benefit-cost analysis conducted by Kansas State University show that annual estimated costs for implementing NAIS today throughout the livestock (food animal) industries could range from roughly $143 million for a bookend approach (the point of origin and last premises of livestock) with 90 percent participation, to $228 mil-

[3] Ekboir, J.M., L.S. Jarvis and J.E. Bervejillo. 2003. *Potential Impact of FMD Outbreak in California,* in Sumner, D. (ed.), Exotic Pests and Diseases: Economics, Science and Policy, Iowa State University Press.

[4] Pendell, D.L. and Schroeder, T.C. (2007). *Value of Animal Traceability Systems in Managing a Foot-And-Mouth Disease Outbreak in Southwest Kansas.* Kansas State University Agricultural Experiment Station and Cooperative Extension Service.

lion for full pre-harvest traceability with 100 percent participation, with other options falling in between. Over 90 percent of the industry costs for such a system would be associated with the cattle sector, and equates to approximately $5.97 per animal. This is largely due to the individual animal identification required, whereas swine, sheep, goats, and poultry can often be sufficiently traced using premises and group lot identification.

Concerns have also been raised by industry about whether producer information will be released and used against them, such as for food safety liability purposes. I want to emphasize that we take producer confidentiality very seriously. When developing NAIS, USDA intentionally limited the type and quantity of information collected and maintained by the Federal Government. We generally treat producer information as confidential, applying Freedom of Information Act exemptions as appropriate to protect personal information and confidential business information provided by NAIS participants. Furthermore, I would like to emphasize that we have not designed NAIS to be used for liability purposes, nor do we believe that it would be appropriate to use it in this manner. Should Congress determine that we need additional statutory assurances of confidentiality, we would be happy to work with you.

Secretary Vilsack and I believe strongly that we must work collaboratively with industry to address their concerns and move forward with an effective NAIS—whether it be a mandatory system, or a system based on voluntary participation. In fact, on April 15, 2009, the Secretary held a roundtable with stakeholders representing the full spectrum of views on NAIS. This meeting kicked off a larger listening tour to gather feedback on concerns and, more important, to identify potential solutions to help USDA and the U.S. livestock sector move forward with the program. The Secretary's listening initiative will include substantial opportunities for stakeholders to share their thoughts on NAIS in person and in writing. Our goal is to work collaboratively to resolve their concerns and achieve the overall goal of enhanced animal traceability.

Conclusion

As I stated at a hearing before the Subcommittee on Livestock, Dairy, and Poultry in March, it took an average of 199 days to complete 27 recent bovine tuberculosis investigations. Can we really afford to spend 199 days tracing back animals if we have a FMD outbreak? I absolutely do not think we can, which is why I strongly believe that we need an effective National Animal Identification System in the United States.

NAIS is a long-term investment in emergency preparedness and response, in the success of our ongoing disease control and eradication programs, in enhancing the competitiveness of our livestock sector in international markets, and in advancing consumer confidence in our food supply. An effective NAIS will not only prepare us to respond to an outbreak of FMD, but also other foreign animal disease incursions, natural disasters, and agro-terrorism. We understand that NAIS implementation is not cheap. But when we compare this with the estimated billions of dollars in losses we would suffer from a FMD outbreak, the case, to me, for a robust NAIS is compelling. We must not be complacent because we have not had a FMD outbreak in recent times.

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

The CHAIRMAN. Thank you very much.

Dr. Tom McGinn?

STATEMENT OF THOMAS MCGINN, D.V.M., CHIEF VETERINARIAN, OFFICE OF HEALTH AFFAIRS, U.S. DEPARTMENT OF HOMELAND SECURITY, WASHINGTON, D.C.

Dr. MCGINN. Good afternoon, Chairman Peterson, Chairman Thompson, Chairman Scott, Chairwoman Clarke, Ranking Members Neugebauer and Lungren and Members of the Subcommittees.

Thank you for inviting me to testify before your Subcommittees today on the homeland security implications of catastrophic animal disease outbreaks and how a National Animal Identification System could mitigate the effects of such outbreaks.

My name is Tom McGinn, and I serve as the Chief Veterinarian for the Department of Homeland Security. As Chief Veterinarian,

I am responsible for advising the Secretary, the Chief Medical Officer, and Department officials on food, agricultural, and veterinary issues.

Prior to my work at DHS, I served as the Assistant State Veterinarian and the Director of Emergency Programs for North Carolina.

And later in this testimony, I have been asked to present slides on how North Carolina utilized its animal identification system during past incidents.

At DHS, we work side by side with our partners. We coordinate Federal resources to protect the nation's food, agriculture, human, and animal health in the face of all-hazards as a central tenet of the DHS mission.

DHS does not duplicate or replace the efforts of other Federal agencies that focus on food and agricultural security and defense. Rather, DHS has multiple successful partnerships with the U.S. Department of Agriculture and others that include infrastructure and border protection, intelligence research, education, and national preparedness and response.

For example, USDA is one of several key members, and a vital contributor, to the National Biosurveillance Integration Center, which our office oversees. The partnership, through NBIC, allows us to take pieces of information from DHS, USDA and other Federal partners and put them together to determine what, if anything, poses a problem to the nation's food and agriculture.

Past experiences illustrate that a single point of failure during an incident, such as a levee breaking, has vast consequences that may turn an incident into a catastrophe.

A number of disease and emergency management processes can be a single point of failure during an intentional foot-and-mouth disease outbreak, infecting upwards of 30 states.

For disease management, the points of failure include: surveillance, tracing, quarantining, testing, removal of infection, and decontamination.

For emergency management, the points of failure include: rapid assessment, planning, response, and recovery.

All the examples I have just mentioned represent single points of failure that can be mitigated by an effective National Animal Identification System.

The implementing of an effective National Animal Identification System poses many challenges. The first challenge is the need for significant compliance and participation in the system. At the current participation level, it could take months to locate exposed animals, increasing the spread of disease through the nation.

The second challenge is the type of information that will be collected and how it will be protected. We support USDA's efforts to address the private sector's concerns.

The third challenge is determining what information needs to be provided to state and Federal officials. Currently, there are numerous databases in both the public and private sector. Rapid and effective data integration, and retrieval and analysis cannot wait until an incident is underway. We must address this now.

Numerous studies and recent testimonies affirmed that, based on today's information management, we would not be able to get in

front of an outbreak given the speed of commerce and disease spread.

During the March 11th hearing before the House Agricultural Subcommittee, Chairman Scott, you stated, "We are far past the time for this system to be fully up and running. Our food safety system needs to be protected now, not somewhere down the road in the future."

USDA testified that the current National Animal Identification System is ineffective to address a catastrophic incident. DHS supports USDA in their reinvigoration of this process.

An effective National Animal Identification System supports homeland security efforts to: first, agree on the potential single points of failure during an agricultural catastrophic incident; second, identify our current national and state baseline capabilities to address these points of failure; and, third, routine exercise of these essential capabilities, including the development of an improvement timeline and implement measured goals.

I was asked to present a few slides that demonstrate the benefits of an animal identification system implemented during my time in North Carolina. My background includes farming. Before I went to veterinary school, I worked on a dairy, I was a herdsman in a second dairy, and I managed a 150 cow/calf-beef operation.

I spent 20 years in North Carolina in disease and emergency management, including development of an animal identification system. This slide, *Slide 1*, depicts 15,000 premises in the system by 1992, 15,000 premises by 1992. This animal identification system linked data from laboratories, farms, movements, floods, soils—and emergency management into hundreds of fields of data.

Most of the data was collected during disease control and eradication programs. The data was housed in a state government program that was connected to private databases. The data was protected in 1992 by legislation which dictated that the information would be shared only for animal health reasons.

Establishing an animal identification system is doable, and identification should be a part of every disease program. Waiting for a catastrophic disease outbreak to give us the impetus to collect the data is too late.

This slide, *Slide 2*, represents the movement of animals from North Carolina to 27 other states and countries. Three thousand swine moved out of North Carolina every day. Kansas moves 50,000 head of cattle each day.

Imagine what this map would look like if it contained movement data from all 50 states. Farmers in California supply food for New York residents and *vice versa.* We cannot stop the movement and continue to feed our nation.

An effective identification system would facilitate the continued movement of uninfected national herds, and facilitate the viability of the critical infrastructure through a national emergency.

This slide, *Slide 3*, depicts a single FMD case represented by the single yellow dot in the center of this Scotland County map. This FMD case is surrounded by a 6, 15, and 20 mile zone. Poultry farms are depicted with blue dots, swine farms with red dots, and dairies with green dots.

Imagine trying to trace and communicate with the 900 swine farms and the 570 poultry farms in these zones on the day of an outbreak. Imagine this same situation in many states, and then imagine that it is not just one farm in each of these states, but hundreds to thousands of farms. This is a catastrophe.

Crimson Sky, Slide 4, was a 2003 national exercise that depicted the potential spread of foreign animal or FMD originating in five strategic locations represented by the red dots on this simulation. There is an evolving time clock in the lower left corner.

If a stop movement was to occur within 8 days, it would still be estimated that 23 million animals would be lost in approximately 30 states. This is thousands to hundreds of thousands of premises that would need to be traced and managed.

Deploying individuals to obtain each premises' information at the time of a catastrophic outbreak is beyond the resources of animal health officials. This model used actual state movement data depicted by these arrows.

This is a single point of failure, when we know that USDA exhausted its workforce and utilized another 1,000 veterinarians to manage the three-state Exotic Newcastle Disease outbreak in 2003. Imagine the challenge of tracing, surveillance, testing, movements, new contamination, and disposal, and how to get emergency management engaged to maximize their assistance to resource constrained health officials.

Animal identification is both a homeland security and agricultural concern.

North Carolina produced this circle letter, *Slide 5*, to provide graphic information and analysis to producers in disease programs. When a new positive case is represented in the center here, was diagnosed in the laboratory, not only was the infected premises contacted within minutes to hours—within minutes to hours—but all farms within the circle were notified with the same information during the same timeframe.

This was possible because the samples were geocoded with premise information. Notification originally occurred in the start of this program by phone, then by fax, and then, as technology progressed, it was in protected databases on the Web.

This is the speed of information integration, analysis and communication required to contain a rapidly spreading disease. Producers want to be a part of this database because the information provided during an outbreak informs them on enhanced biosecurity. The state uses the aggregated data to effectively use limited resources and accurately communicate risk to other states.

While dealing with the catastrophic FMD scenario, in which hundreds to thousands of herds are being traced, the ability to rapidly communicate with producers to manage surveillance, tracing and testing prior to animal movements cannot be done without this data.

This slide, *Slide 6*, depicts—excuse me, this slide depicts quarantined farms as small red triangles and non-quarantined farms as small green triangles. The farms' circulating the virus have a yellow or pink halo around them.

The other light blue circle identifies the inside area that vaccination for the disease occurs around virus-circulating farms. Targeted

vaccine reduces government and producer costs. Without this system in place at a time of virus circulation, we would not have been able to rapidly analyze where to put the ring vaccination zone. That could or would be an essential component of a widespread FMD incident.

My last slide, *Slide 7*, details two maps of critical infrastructure, including animal production data around a nuclear power plant and a state zoo. The nuclear incident map depicts a 50 mile ingestion pathway with an—indicating human and animal populations and critical infrastructure at risk.

Such an incident needs readily available information about all critical infrastructures and systems in the area. The state zoo has its own critical concerns. Eleven of the last global emerging diseases originated from animals. If such a disease comes into our country, via humans or animals, and is diagnosed near or at the zoo, it is essential to protect the human and animal populations both at the zoo and within the surrounding area.

This slide could just as easily depict chemical spills, industrial or forest fires, droughts, or snow storms, all-hazards. However, the conclusion remains the same: It is essential to have protected data prior to an incident in order to prepare, plan and response your cover effectively.

In the State of North Carolina, agriculture is the number-one revenue producer. Agriculture is a $1.3 trillion national critical infrastructure. We cannot afford to lose our nation's farmers to unmitigated disasters when solutions are available.

Thank you for the opportunity to discuss agricultural and homeland security issues with you today. And I am happy to take any questions.

[The prepared statement of Dr. McGinn follows:]

PREPARED STATEMENT OF THOMAS MCGINN, D.V.M., CHIEF VETERINARIAN, OFFICE OF HEALTH AFFAIRS, U.S. DEPARTMENT OF HOMELAND SECURITY, WASHINGTON, D.C.

Good afternoon, Chairman Scott, Chairwoman Clarke, Ranking Members Neugebauer and Lungren, and Members of the Subcommittees. Thank you for inviting me to testify before your Subcommittees today to discuss the homeland security implications of catastrophic animal disease outbreaks and how a National Animal Identification System could mitigate the effects of such outbreaks.

I. Introduction

My name is Tom McGinn and I serve as the Chief Veterinarian for the Department of Homeland Security (DHS). As Chief Veterinarian, I am responsible for advising the Secretary of Homeland Security, the Chief Medical Officer (CMO), and Departmental officials on food, agriculture, and veterinary issues. My office, which sits within the Office of Health Affairs (OHA), works collaboratively across the interagency and with state, local, tribal and private sector partners to further DHS's mission to protect the nation's critical infrastructure relating to food, agriculture, and veterinary resources.

Prior to my work at DHS/OHA, I served as the Assistant State Veterinarian and Director of Emergency Programs for North Carolina. I led efforts to establish a state-wide animal identification/information system that was used to provide critical disease control information in the face of catastrophic incidents.

II. Why is DHS at the table to discuss a National Animal Identification System?

When most Americans think about threats to homeland security, they think of nuclear explosions, bombings, or similar threats. Few would point to animal disease outbreak as a homeland security threat.

Those of us in the agricultural field know better. The effects of a major animal disease outbreak, such as foot-and-mouth disease (FMD), would extend well beyond

the nation's farm economy. A disease outbreak could halt domestic commerce, hinder international trade, and threaten the nation's food supply. It would have cascading effects and eventually impact every sector of our society, from food production to our financial system. Today, we are facing the threat of a novel 2009–H1N1 influenza outbreak. It has already begun to impact U.S. pork trade, even though there is currently no evidence to suggest that this virus has been found in pork in the United States, and consuming pork has not been associated with human illness caused by this virus.

This is why DHS is at the table—animal disease outbreak can be a far-reaching homeland security issue that requires DHS coordination to ensure that the full resources of the Federal Government are brought to bear to tackle this challenge.

III. DHS's Role in Agro-Security and Food Safety

Protecting the nation's food, agriculture, human and animal health in the face of all hazards is a central tenet of the DHS mission. DHS does not duplicate or replace the efforts of other Federal agencies that focus on food and agricultural security and defense on a daily basis. Rather, DHS recognizes that catastrophic incidents affect the fabric of the nation, all parts of our economy, and international relations. DHS works to mitigate the consequences associated with catastrophic incidents and coordinates and integrates Federal assets to prevent, protect against, prepare for, respond to, and recover from incidents.

Homeland Security Presidential Directive 9: Defense of United States Agriculture and Food (HSPD–9), establishes DHS as the coordinator of all Federal efforts to protect agriculture and food critical infrastructure and key resources. Limiting the spread of disease by restricting the movement of infected and exposed animals is essential to mitigating the impacts of a disease outbreak. DHS, through OHA, continues to work with other agencies to trace, monitor, and track outbreaks; a robust animal identification system would facilitate and support multiple aspects of animal health emergency preparedness and response serving as a tool to assist planners, responders, and modelers.

IV. The Threat and Why a System Is Necessary

The Federal Government has developed a number of exercises and scenarios to understand and mitigate the consequences that a catastrophic animal disease outbreak would have on the nation's critical infrastructure and key resources. In 2003, the *Crimson Sky* exercise was held to examine the impacts of FMD and how it could potentially spread through the domestic livestock population. Participants included Federal, state, local, tribal and private sector stakeholders. The exercise demonstrated that an intentional introduction of FMD could rapidly infect livestock in 30 states in a relatively short time-frame. Early in an incident, the ability to recognize the total impact, whether it is a local event or a catastrophic incident, is critical to mitigating effects. During a disease outbreak in the animal population, food and agriculture products will have to continue to enter the marketplace to ensure that the nation has an adequate food supply. A complete database with the capability to identify and track the movement of the infected and exposed animal population will support decision-makers' efforts to respond, limit the spread of the disease, and ensure unaffected animals remain isolated from the infected and exposed animal population.

V. National Animal Identification System

In 2004, USDA announced it would begin the implementation of an animal identification system, referred to as the National Animal Identification System (NAIS). We applaud USDA, as well as state, local, tribal, and private sector entities, for their efforts to date to implement NAIS. USDA has developed the infrastructure to replace the multiple disparate systems used over the years and put in place data standards that are imperative to achieve compatibility of information systems across state and Federal databases. USDA has estimated that of the 1.4 million livestock farms in the nation, over 510,000 animal premises have been registered in NAIS. Given this level of participation, if FMD was introduced into the domestic livestock population today, we could use NAIS to obtain situational awareness but we would be limited in determining which animals may have been exposed or infected with the disease, potentially limiting our ability to contain it. From DHS's perspective, NAIS will be helpful during incidents supporting multiple aspects of animal health emergency preparedness and response.

VI. What DHS Needs From an Animal Identification System/Homeland Security Benefits of an Animal Identification System

The 15 National Planning Scenarios (NPS) are tools that provide the nation guidance in planning for terrorist attacks, natural disasters, and other man-made events

(FMD is one of the 15 NPS). Past experiences have illustrated that a single failure during a disaster has vast consequences that may turn an incident into a catastrophe. During a disease incident that affects the domestic livestock population, a National Animal Identification System would be an extremely helpful tool to trace the spread of the incident through the animal population. During an outbreak, the inability to rapidly identify infected and non-infected animals, their premises, and the animals they came into contact with during transport could become a single point of failure.

During Hurricane Katrina in 2005, the breaking of the levees was the single point of failure. Their failure had significant cascading consequences to all response and recovery efforts. The inability to rapidly and completely identify infected and exposed animals, their premises, where they move to and from, and what animals they come into contact with could become a single point of failure in controlling an animal disease outbreak. This inability could also result in a number of other failures such as: the inability to adequately prepare, mitigate, surge epidemiology and lab needs, assess risk, conduct ongoing permitting and transportation of the negative herd, countermeasure management, disposal, and decontamination efforts.

An animal identification system will support five critical emergency management functions including: adequate preparedness, rapid assessment, effective planning, immediate emergency management surge, and viable recovery.

Adequate Preparedness: There are risk mitigating resources that are in place to protect homes and businesses that are determined by the size and location of these critical assets. An effective animal identification system will provide similar risk mitigating strategies to adequately plan, build, and maintain an animal health system that has response and lab capability sized to protect critical assets. Developing these risk mitigating strategies is dependent on knowing where critical assets are located and an effective National Animal Identification System would provide such information.

Rapid Assessment: Early on in a FMD incident, the ability to recognize the number of states, herds, animals and meat production and transportation facilities that are affected by the incident is essential to ensure continued surveillance and operational response. This initial assessment must be accurate and quick, since responders will determine emergency management needs, such as logistics, operations, financial requirements, and administration. The rapid assessment is also used to develop the communication and containment strategy that is essential to an effective outcome. Attribution is a key component of the rapid assessment. In an incident that is intentional, and especially one the can involve repeated attacks (reload), attribution is an essential component of the forensic epidemiology needed to protect assets, reduce national fear, and identify the party responsible for an intentional contamination or infection. An effective National Animal Identification System will enhance our ability to effectively respond to the homeland security implications of such an event.

Effective Planning: The ability to test an animal or a farm to determine its disease status, return these results to the producer, analyze the results, and communicate risk reducing strategies during a animal disease incident is critical to the effective containment of the incident. Premises information layered with test information, flooding information, soil information, and access to resources are all examples of how a near real-time information system supports planning and operations efforts. How much vaccine is needed, where to place control zones and monitor movements, and how many and what types of human and equipment resources are needed can all be determined quickly and at a speed that provides emergency management the ability to provide support to contain the spread of an animal disease.

Immediate Emergency Management Surge: The ability to rapidly mobilize resources during a biological incident requires full situational knowledge. Such information can come from a National Animal Identification System. The need to identify the impact zone and all components therein determines the pace at which an animal disease will spread. How much, what type and where epidemiology, lab testing, vaccination, biological security enhancement, decontamination and disposal will be needed is determined by knowing details of the magnitude of the disease outbreak. The required human resources and concurrent logistical support for permitting, disease quarantine boundary controls *etc.,* are essential to an effective planning and mobilization response. The ability to cooperatively utilize resources between agencies and the private sector depends on being able to provide clear guidance as to where the premises are and where the animals have moved during an outbreak.

Viable Recovery: The ability to identify infected animals in a system can immediately determine the disease status of a premise and provide information on the risk associated with movement of animals. Once the location of the infected and exposed population is identified, the movement of unexposed animals can continue.

Identifying the location of the outbreak will also rapidly determine at-risk premises and steps required to reduce potential exposure limiting the spread of the disease. Facilitating the movement of the negative herd(s) through rapid assessment of their status and the combined disease status of the area from which they originate greatly effects their ability to move animals in commerce.

The five detailed critical emergency management functions are all important for an adequate and proper response during a disease outbreak in the animal population. There are a number of significant benefits to homeland security and such information could be integrated with other data to provide decision makers with a complete biological picture before, during, and after incidents. The Office of Health Affairs's National Biosurveillance Integration Center (NBIC) provides enhanced situational awareness to senior leaders and decision makers regarding natural disease outbreaks, accidental or intentional use of biological agents, and emergent biohazards that impact the bio-related domains of human health, animal, plant, food and water or that impact the infrastructure or key assets of the United States. NBIC integrates and analyzes information from over 350 open source and classified information feeds as well as information from twelve (12) participating Federal agencies (including agencies within DHS) to provide senior leaders and decision makers with an integrated biosurveillance common operating picture (BCOP). The 12 Federal agencies that participate in NBIC include the Departments of Agriculture, Health and Human Services, State, Interior, Defense, Commerce, Transportation, Justice, Veterans Affairs, Homeland Security, the United States Postal Service, and the Environmental Protection Agency. In coordination with our Federal partners, NBIC analysts use the information to complete a daily Situational Report. This report is provided to all participating agencies. USDA has been a formal NBIC participant since February 2007 and is in the process of completing an Interagency Agreement with the Department to provide a full-time, on-site detailee to facilitate interagency coordination as well as development of NBIC biosurveillance integrative analytical capabilities. In the future, we expect that USDA will provide biosurveillance data to DHS during incidents that affect the animal population to ensure all appropriate biological data is presented in the BCOP.

VII. Challenges

Implementing an effective National Animal Identification System is an important endeavor, but comes with many challenges. The first issue is the need to promote significant compliance and participation in an animal identification system. At the current participation level (which is approximately 30 percent), it could take months to identify and locate exposed animals, increasing the likely spread of the disease.

The second issue that should be addressed is what information will be collected and how information will be protected. Knowing the location and type of animals in a given area and supporting a tracing capability will help determine the proper response to an outbreak. Once this information is collected in databases, protections must be in place to ensure that the data will be used for the intended purpose. We support USDA's efforts to address the concerns of private sector stakeholders.

A third issue that should be addressed is what information is necessary to provide tracing capabilities to state and Federal animal health officials. During an outbreak, aggregate data would be used at all levels of government to inform the decisions to limit spread and contamination. The ability to trace a disease to its origin will enable decision-makers with the capability to determine the number of animals that could possibly be infected or exposed in a given area. This information would be critical during a disease outbreak in the animal population, such as FMD, due to the speed of contamination. A fast and accurate response will likely reduce the impact of the outbreak and keep it from becoming a catastrophic event. NAIS is voluntary and has a limited number of participants. Without a more comprehensive and complete system in place, we do not have adequate tracing capabilities.

VIII. DHS Supports USDA's Outreach to Stakeholders

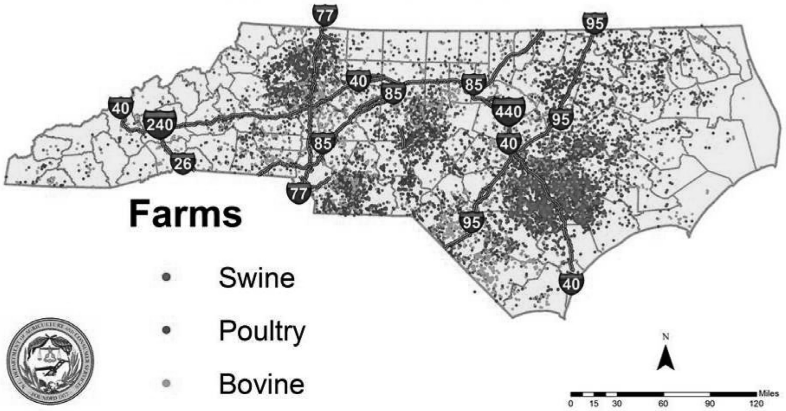
We support USDA's commitment to creating an animal identification system that incorporates and addresses state, local, tribal, and private sector stakeholders' needs and concerns. The development of an effective animal identification system must be a partnership between all users and participants. Some states have implemented their own identification systems. Working with the states that have adopted or mandated more stringent requirements for animal identification and incorporating collected data, to the greatest extent possible, into a National Animal Identification System is critical to having a complete and comprehensive system in place as soon as possible.

IX. Conclusion

Based on the scenarios I have presented in this testimony, contagious disease can spread throughout the animal population quickly. Determining and identifying the location and type of animals in a given area and having an adequate tracing capability serve as the mechanism to limit the spread of a contagious disease. From a homeland security perspective, it is beneficial to have the highest participation rate possible in an identification system and any method used to encourage enrollment and participation would be beneficial. Thank you for the opportunity to discuss agriculture issues with you today. I would be happy to answer any questions that you may have.

ATTACHMENT

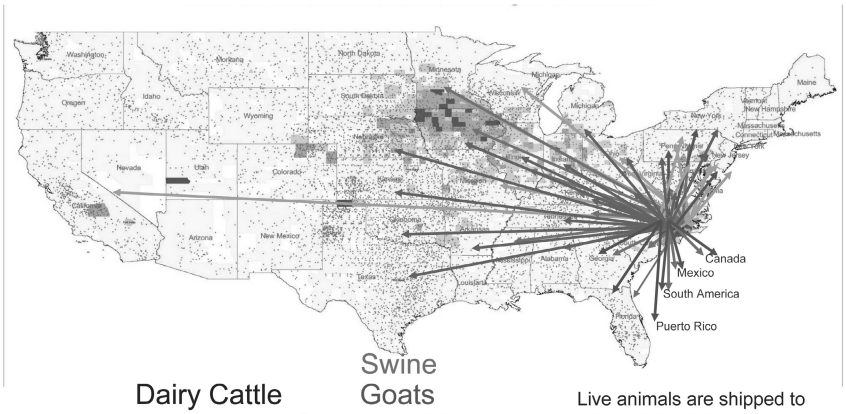
Swine, Poultry and Bovine Farms North Carolina



Homeland Security

1

ID Essential for Interstate Movement



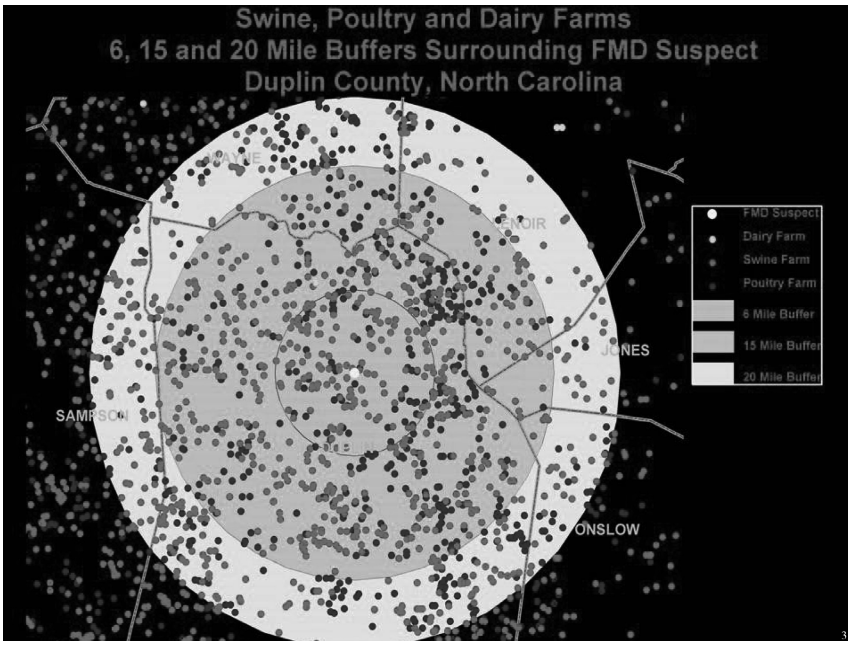
Dairy Cattle

Swine
Goats
Sheep and Lambs
Poultry

Live animals are shipped to a total of 27 states, Puerto Rico, Mexico, Canada and South America!

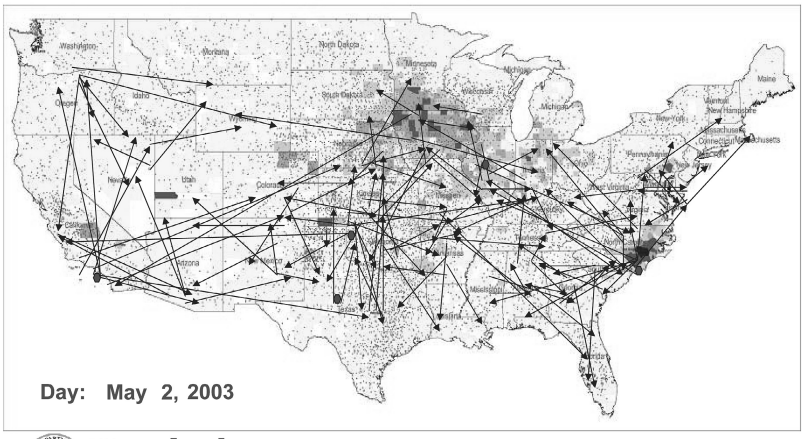
Homeland Security

2



Crimson Sky Exercise 2003

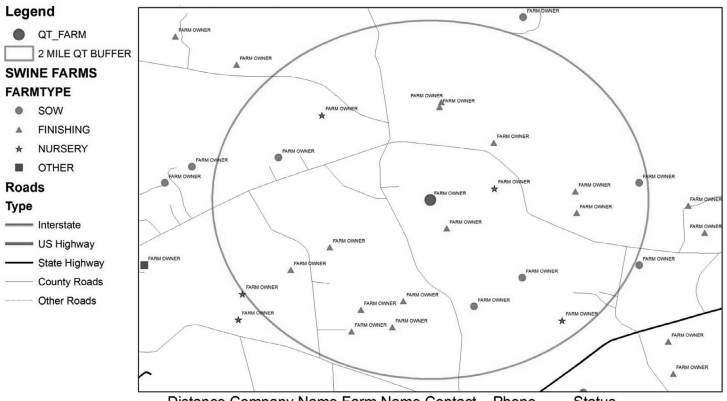
Crimson Sky Outbreak Spread Pattern



Homeland Security

4

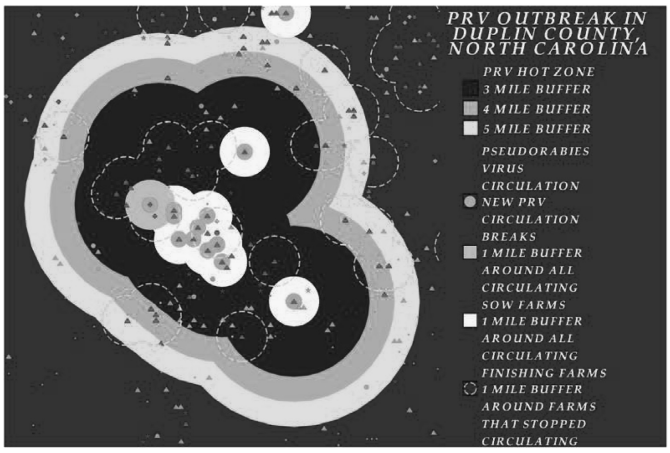
Rapid Information Notification Requires ID and Reduces Impact



Distance	Company Name	Farm Name	Contact	Phone	Status
0.46	Swine Company	Joe Farmer	John Doe	999-999-9999	SIV
1.25	Local Company	John Smith	John Smit	999-999-9999	
1.52	Swine Company	Joe Farmer	John Doe	999-999-9999	
1.83	Swine Company	Joe Farmer	John Doe	999-999-9999	
1.95	Local Company	John Smith	John Smit	999-999-9999	

5

ID Essential for Disease Management: Vaccine Buffer Zone

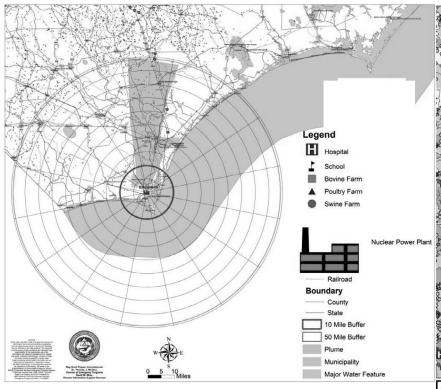


Homeland Security

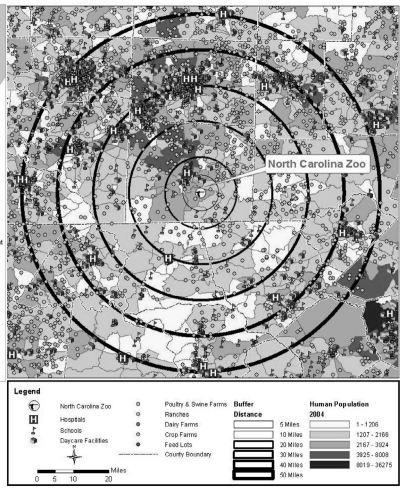
6

ID Essential to Management of All Hazards

Critical Information around a Nuclear Power Plant



Critical Information around the State Zoo



Homeland Security

The CHAIRMAN. Thank you very much. Both of your testimonies have been very, very, very beneficial, and we certainly appreciate you taking the time in coming before us.

Dr. McGinn, I will start the questions. Let me start with you. First of all, your slides with the information you just presented was very, very revealing, eye-opening, and presents the imminent—the danger we are in.

I would like to ask you just a series of quick questions. First of all, Dr. McGinn, is this country—is our nation prepared for a highly contagious disease, whether it is a naturally occurring disease or intentionally introduced as an act of terrorism? If not, what do you believe needs to be done to ensure our preparedness for such an attack, an outbreak?

Dr. MCGINN. Well, as Dr. Clifford said, as it relates to foreign animal disease, a foot-and-mouth disease outbreak, we are not adequately prepared to address that with our animal identification system.

Having said that, we have made incredible progress as a nation, over the last few years, in recognizing that these potential threats to the protection of our system are imminent. We have made progress both on the national level and in the protection of our borders, in the research that we are doing, the modeling that we are doing, and building of capabilities, and also at the state and local level, and in the private sector, in the biosecurity that they have put in place to enhance the protection of the food industry.

Having said that, two key areas that could be effective in increasing that capability would be, first, the ability to measure, accurately measure, the capability at the state and local level.

The state and local level is where the response is going to primarily take place. They have to have the capability to do this response. We need to be able to measure how much capability they have and then what it takes to advance what capability is necessary for them to respond.

The second place would be also single points of failure, as I mentioned earlier. We have to be able to clearly agree upon these single points of failure, and then be able to understand where we measure those and actually build additional capability; whether we are talking about research, or we are talking about education, or actually the capability at the Federal level or at the state or local level.

The CHAIRMAN. So the answer to the question is, we are not prepared.

Dr. MCGINN. We are better prepared, but we are not as prepared as we need to be if we were going to face this kind of situation.

The CHAIRMAN. Dr. McGinn, I know you have mentioned in your statement why you are here today, but let me ask you, in your statement you said you are here to help in the event we have an animal disease occurrence. But there are others who have said that you are here today because you want to take jurisdiction away from the USDA, the Department of Agriculture, on this issue.

Can you speak to this issue, please, and clear this up?

Dr. MCGINN. My mission is to protect the nation and protect freedom at the Department of Homeland Security. And, honestly, the food supply is critical. The food supply is critical to protection of our nation.

Having said that, USDA has the technical lead, it has the authority to know what we need to do as it relates to food and agriculture. They have 150 years of experience.

We are here to support that—their efforts and their expertise, similar to what you see with the current H1N1 flu situation. HHS is in the lead for human health; USDA is in the lead for animal health. DHS is in a position to coordinate the national response, as you have seen going forward.

So in other words, there is no way that we are in any way, shape or form looking to change the jurisdiction. Actually, we are very happy to see these Committees working together to the common ends of protecting our food supply.

The CHAIRMAN. Thank you.

As we would see from the attendance of our Subcommittee, there is great interest on both sides of the aisle on this issue. I will forego any more questions at this time and yield to our Ranking Member, Representative Neugebauer.

Mr. NEUGEBAUER. Thank you, Mr. Chairman.

Dr. Clifford, in the APHIS fact sheet associated with your benefit-cost analysis, it states that one of the challenges or the limitations with the study was that the costs listed were probable and the benefits were potential. Isn't that kind of the whole crux of this issue, is that the uncertainty of what the benefits are now, and the unknown of what the costs are?

Dr. CLIFFORD. Congressman, yes, we have a lot of confidence in what the benefit-cost analysis said. Obviously, when you look at the benefit side of the study from the ten professors that worked on this particular issue from four universities, they used a lot of data and input on the benefits side of this.

You know, we recognize that there are always ifs and buts when it comes to the benefits. For example, with H1N1 flu, right now, we have countries that are taking action, inappropriate actions with regards to our exports of pork. Those things always are a factor.

But, from a standpoint of animal ID, without an effective traceability system in place, we would not be able to reopen markets as quickly.

Mr. NEUGEBAUER. Your benefit-cost analysis suggests that the traceability aspect of animal ID is a benefit because it can be used to shield producers from liability. But, doesn't the data that shields one producer from liability also make another producer have some liability; and what might be a benefit for one might be a liability to the other? I mean, how do you differentiate that when you look at those numbers?

Dr. CLIFFORD. I don't try to differentiate as far as that particular question. What I would say with regards to liability, we know that producers are very concerned about NAIS with regards to confidentiality, liability and the cost.

And we recognize that, Secretary Vilsack recognizes that, and the Secretary is committed. He wants to have an effective system, and we are reaching out—he is reaching out, actually, to small farmers, small producers, and minority producers to try to come up with solutions to address all three of those issues.

Mr. NEUGEBAUER. You know, one of the things that is brought up is that, if the traceback capability is a valid benefit, then why is it when the Canadians had the BSE issue that, even though they had the ability to traceback, many markets continue to remain closed to the Canadians. And so they bore the cost, but they didn't realize a lot of benefit from that.

Dr. CLIFFORD. Actually, if you were to ask the Canadians, the Canadians would tell you that traceability with animal ID did help them reopen markets both in the Middle East and with Japan.

Mr. NEUGEBAUER. It didn't happen too much with Japan, though, did it?

One of the things that, when you look at the analysis, it appears that a little segment of the industry takes a pretty heavy hit. I believe that the cost to the beef cattle industry is like—I think it is $200 million a year. Is that correct?

Dr. CLIFFORD. About 90 percent of the total cost is with the cattle sector.

Mr. NEUGEBAUER. And I believe that would make it about $200 million.

Dr. CLIFFORD. It would depend upon the level of participation. With a bookend system, which is where animals are identified at the premises of origin and then that data is collected at the time of death—for cattle, the system at 90 percent participation would cost $140 million of the total cost of $143.5 million.

For 100 percent participation, it would cost $165 million out of the total $169 million. So it is a substantial level of the cost. Most of that cost is directly associated with the tagging costs.

Mr. NEUGEBAUER. When was the last outbreak of hoof-and-mouth in this country?

Dr. CLIFFORD. It was in the 1920s.

Mr. NEUGEBAUER. When?

Dr. CLIFFORD. It was 1929.

Mr. NEUGEBAUER. And what was the probability that that could happen again, based on that history?

Dr. CLIFFORD. We are always trying to keep out foot-and-mouth disease, as we are with other foreign animal diseases at the same time. The probability still exists that these type of things can happen.

For example, this country was free of Exotic Newcastle Disease. Just a very short while ago, we had an outbreak of Exotic Newcastle Disease in the State of California that was also found in additional states. It took us about a year to eradicate that disease from the U.S.

The CHAIRMAN. The gentleman's time has expired.

I now recognize the Chairwoman, Ms. Clarke, for 5 minutes.

The CHAIRWOMAN. Thank you, Mr. Chairman.

As we are seeing from the H1N1 influenza outbreaks, tracing disease transmission quickly has been crucial to the mitigation efforts. In the case of human beings, we have much more information available to us than with many animals, because we need to register over and over again with birth certificates, driver's licenses, passports, *et cetera*.

Tracking documents are the ways of tracking movements, as well. Although this system is not perfect, it does provide informa-

tion that is useful to help authorities when there are disease outbreaks. Obviously, this is not the case with animals, but they, too, become exposed to various diseases.

When we do not know where they are, where they have been moving, how many there are, *et cetera*, we run the risk of more illness and deaths than would be the case if we had more information.

And my question to you, Doctors, is, is pork safe to eat and handle?

Dr. CLIFFORD. Yes. I will answer that first. It absolutely is safe to eat and handle pork. Our Food Safety and Inspection Service conducts antemortem and postmortem inspection at our food facilities to look at these animals, but the fact is, H1N1, the current H1N1 virus, is not a food safety issue.

All products, though, including both meat and poultry, should be safely handled and cooked properly.

The CHAIRWOMAN. Well, thank you very much. I just wanted to get that out of the way.

We know of a report where the virus was found in swine in Alberta, Canada, on an Alberta, Canada, farm. Using this very real example, under our currently designed system, how quickly could we track and trace swine?

Dr. CLIFFORD. Well, if the swine were moved from that operation, a NAIS system would give you the locations from where the animals left, which would be the premises of origin in Alberta, to other locations where they have been moved within Canada or other countries, for that matter.

The CHAIRWOMAN. So we would be able to track it fairly simply?

Dr. CLIFFORD. Yes, especially on an electronic-based system. When we talk about 48 hour traceability, it is critically important, because of the speed of commerce and the way livestock move in our country.

The CHAIRWOMAN. So if we had a major animal disease outbreak today, in your professional judgment, using the current NAIS infrastructure, how much time would it take to traceback cattle, swine and poultry?

Dr. CLIFFORD. For cattle, it depends upon the issue. But, if you have a disease—right now, like tuberculosis, we traced 27 cases of TB, and it took us 199 days. On average, it is 187 days to do that tracing.

That is entirely too long. If you look at that for a disease like foot-and-mouth disease, it would be all over the country before you get it contained.

The CHAIRWOMAN. How much faster could we track diseases if we had a comprehensive animal ID system in place?

Dr. CLIFFORD. Well, when you say a comprehensive system, if it is one that is based on the speed of commerce, that is electronically based, we believe we could trace those animals and have real-time information, if the information is in the database, within hours and then be getting information out to producers within a day or 2 of that notification, based on that system.

So we could be tracing, and then we would have to—depending upon the situation of the animals—we would have to deploy personnel to those locations.

The CHAIRWOMAN. My time is winding down, but I did want to ask one more question. How much time and money would it take for us to be able to identify and track down an animal illness outbreak within 24 hours?

Dr. CLIFFORD. It is going to depend upon the situation. There are a lot of variables there, a lot of variables.

The CHAIRWOMAN. Well, I thank you, gentlemen, and I thank you both for your testimony. I am sure we will get back and ask some more questions.

The CHAIRMAN. Thank you very much, Chairwoman Clarke.

As you may know, we have just had a call for two votes. These will be the last votes of the day. What the chair's intention is, this is an extraordinarily important hearing, every Member is urged to please come back.

What we propose to do, in the time allotted now, is to hear from Chairman Thompson and, if time permits, we will then move to Ranking Member Lungren. And then the chair will dismiss the Committee for a very short period of time. We will return and get to other questions.

And, again, this is an extraordinarily important hearing, very, very timely. People of the country are very much interested in this. So I urge every Member to please return as soon as we vote.

Chairman Thompson?

Mr. THOMPSON. Thank you, Mr. Chairman. I appreciate your, again, holding this hearing.

Dr. Clifford, I wanted to know whether our current system of mitigation and coordination are robust enough, in your mind, should something break out that we could in short order deal with it?

Dr. CLIFFORD. Chairman Thompson, as Dr. McGinn previously stated, we have made a lot of progress with regards to our preparedness. Areas that we have made progress include greater coordination with the states. We have deployed, across the nation, emergency coordinators that work both with the states, as well as with FEMA.

We have a National Animal Health Laboratory Network that is throughout the U.S. that includes laboratories within almost every state, and, in fact, 38 of these laboratories can test for FMD virus.

We have increased capacity for modeling. We have a national veterinary stockpile that has helped us better prepare.

The fact is, while we say that, we can continue to do more. Our animal ID traceability is inadequate for a disaster such as foot-and-mouth disease.

Mr. THOMPSON. So we have done all this, and if we had to rate this on a scale of 1–10, 1 being low, 10 being high, in your professional opinion, where are we now?

Dr. CLIFFORD. Well, for all the other things I have mentioned, I would probably put us at about a 7–8. For animal ID, I would probably, for the cattle industry, rate it at a 1–2.

For the pork industry, we have a higher degree of traceability because of the way they are managed, and the same with the poultry industry. So they would be probably, again, at that 6–7 level.

Mr. THOMPSON. Dr. McGinn, on the security side of what we are talking about, what country in the world would you say has gotten it right with respect to what we are talking about now?

Dr. MCGINN. Chairman Thompson, there is not a country in the world that looks exactly like ours, in the terms of make-up of the production, the producers, and the government. But at the last hearing about animal identification, Australia and Canada both presented excellent programs, and we have a lot that we could learn from those programs.

One of the things that Australia does that answers the Chairwoman's question, as well, is that they exercise that capability. Cowcatcher, they call them Cowcatcher Exercises, where they actually stress or they test the system. The last time, they put out 300 tags, and they wanted to see how much time it took them to actually do the tracing.

So not only did they actually put this kind of a system in place, but they also exercised the system to see—to measure exactly what you are asking for, where are we on that 1–10 scale? And so they put together these kinds of exercises to do that kind of a——

Mr. THOMPSON. So you are saying Australia——

Dr. MCGINN. Australia has some great examples. Canada has some great examples. Their systems are not exactly like ours, but we are not reinventing the wheel here, in terms of moving forward with this identification system.

USDA has spent a lot of time working in their partnerships with these countries that have systems in place to take the best practices and bring them back home.

Mr. THOMPSON. Dr. Clifford, on this data that we collect, whose responsibility is it to maintain this data so that it can't be boosted?

Dr. CLIFFORD. Mr. Chairman, there is actually a number of components to that. The premises identification numbers, as well as the animal identification numbers, are housed by states. And then the state would have access to those, as well as in a Federal database. So we have those, as well.

The animal tracking component is where data would be collected for animals after they leave their premises of origin and to the point in which they would be slaughtered or die. That information on the animal tracking component would be kept in private systems or in a state system where we would only have access, if necessary, during an animal health event.

So we have very little of the actual data within the Federal Government as far as the tracking and movement.

Mr. THOMPSON. Thank you.

Thank you, Mr. Chairman.

The CHAIRMAN. As I said, we have votes. We will pick up with Mr. Lungren when we return from voting. This panel is in recess for 15 minutes. Thank you.

[Recess.]

The CHAIRMAN. The Subcommittee will come back to order. Thank you for your patience.

And we will begin where we left off, with Mr. Lungren.

Mr. LUNGREN. Thank you very much.

Dr. Clifford, thank you much for your presentation and also for your service.

I would take it from a little different perspective than the other panel or the other Committee. When I heard you say APHIS, it reminds me of the Automated Fingerprint Identification System that I dealt with a long time, so I have to understand when we are using these different words here—what they mean.

And I also look at this from the perspective of the potential for terrorism. As I understand it, the introduction of an episode of foot-and-mouth disease would not be that difficult from a technical standpoint. Is that correct?

Dr. CLIFFORD. Congressman, I am not sure I would totally indicate that it wouldn't be that difficult from a technical aspect. We know about the disease. We know what we need to do to control and eliminate the disease.

Mr. LUNGREN. Well, let me put it this way: It is not out of the imagination that that could be what one would want to do if one wanted to cause some disruption in our food supply.

Dr. CLIFFORD. I am sorry. I misunderstood your question. Yes, that is certainly a possibility.

Mr. LUNGREN. So I look at it from a standpoint of that potential. But at the same time, I look at the cattle industry, which has, I guess the least amount of participation, a voluntary identification program. And if I am a cattleman, I would look at it and I would say, "What are the chances that my herd would be involved with that when we haven't had an outbreak of this since" when——

Dr. CLIFFORD. It was in 1929.

Mr. LUNGREN.—"the 1920s." And I have to calculate that from a standpoint of, what are the chances of that happening, number one? Of course, then you have to introduce the possibility of someone actually intentionally causing it, as opposed to what has happened over the last decades.

But, second, then I would look at the benefit-cost analysis. And you were talking about other programs, and our other guests were talking about other programs. And you mentioned Australia and you mentioned Canada, as I recall.

And yet I have been informed that we have gotten a bigger cut of the market in Japan than either of those two countries. Even after the closures that have occurred in the past in terms of—so, again, as someone who is from the cattle industry, I would say—not that I am, but, I mean, someone would say, "Wait a second. We are already being able to introduce our beef into Japan in a better way or increasing way compared to Australia and Canada. And the argument that they have better systems than we do doesn't seem to dissuade the Japanese from the entry of our beef to the market."

So how do we try and quantify that? And how do we try and convince, for instance, the cattle industry that it is in their best interest to do this, either on a mandatory basis or at least more participation in terms of the voluntary side of things?

Dr. CLIFFORD. Well, Congressman, let me first start by responding in this way. I think there are multiple advantages to having an effective animal ID and traceability system in place, number one.

And it is just not about an FMD outbreak. It is about animal health in general. It is about diseases that may emerge within our own populations. It is about other diseases that can be introduced.

It enhances our ability to do effective surveillance and disease control and eradication. It will also reduce the economic cost of a disease outbreak by minimizing the spread of that disease. It does ease the market restriction component.

And while I understand the issues around competitive advantage for markets, today——

Mr. LUNGREN. Just making a profit.

Dr. CLIFFORD. I am sorry?

Mr. LUNGREN. Or just trying to make a profit.

Dr. CLIFFORD. In trying to make a profit, and I understand that. I want them to make a profit. Because if they don't make a profit and we don't have effective animal health programs that producers can make a profit, you don't need me in my current position.

So in coming from a farm background myself and having part of my family members still in farming, it is very important for me, as well.

So from the competitive advantage side, right now, most countries are not saying, "You have to have a traceability system that's holistic." However, we are starting to see those competitive advantages being used by countries like Australia and other countries in their trade, as well as the European Union starting to move in that direction, and requiring it.

And I would say, within the next 5 years, it is going to move more and more in that direction. So, we are going to lose markets in the future if we don't have an effective traceability system. And in order for us to have an effective animal health system—other countries know that we are trailing them on this issue.

Mr. LUNGREN. I have another question from the standpoint of homeland security. Oftentimes we come upon the question of, when we attempt to do certain things, the people that are affected by them are concerned about the misuse of the data, the misuse of the information that is obtained from them; either the government later on deciding they will use it for another purpose, or it goes to others that make them vulnerable from a competitive standpoint or a liability standpoint.

What do we have to protect against that—I would ask both of you—in this scenario?

Dr. CLIFFORD. Congressman, we have a long history of being very concerned in protecting producers' private information and private business information. We have had a long history in APHIS of protecting that information. Recently, we have had five FOIA requests for information on the current premises identification numbering system, as well as the animal identification numbering system. And based upon FOIA law, FOIA exemptions, we have used those exemptions to deny all five of those requests.

Mr. LUNGREN. Was that information shared with DHS?

Dr. CLIFFORD. As far as which information?

Mr. LUNGREN. The——

Dr. CLIFFORD. The FOIA request or the animal ID?

Mr. LUNGREN. No, the animal ID.

Dr. CLIFFORD. No, sir, it is not—it is shared only with state and Federal animal health officials within USDA, the Federal level at APHIS, and with our state animal health officials.

Mr. LUNGREN. So the National Biosurveillance Integration Center doesn't receive that information?

Dr. CLIFFORD. No, sir, but we are very much a part of that system. And we would provide them information on biosurveillance. We believe that the biosurveillance information that is needed there for everyone to adequately be able to monitor activities, to look for emerging disease issues, to look for possible threats, that is surveillance data and information that does not necessitate the specificity down to a premises or an animal. We do not feel that information is necessary in that database to do proper analysis.

Mr. LUNGREN. So by that I would conclude that we ought not to be concerned about what procedures, or lack of procedures, DHS has with protecting that information, since they don't get it in the first place? Is that right?

Dr. CLIFFORD. That is correct.

Mr. LUNGREN. Thank you very much, Mr. Chairman.

The CHAIRMAN. Dr. McGinn, let me ask you, and Dr. Clifford, just for the record, just so we can get this information out, how vulnerable is our food supply from an outbreak as a result of not having the animal ID?

I guess what I am asking, the animal ID is basically designed to capture quickly the origination of the disease affecting the animal. To have our food supply—how long would we have for an outbreak before a product gets to a human, to the consumer, the consumer eats that and contracts the disease?

Dr. CLIFFORD. Well, Mr. Chairman, that is a pretty comprehensive question that you are asking, and it has a lot of pieces and parts to it. So, obviously, it depends upon, first, whether the issue and disease is a human health concern and a food safety concern.

Foot-and-mouth disease is not a human health concern or a food safety concern, so it has to be specific to a disease that we are talking about. So——

The CHAIRMAN. Mad cow disease wouldn't affect them?

Dr. CLIFFORD. Well, again, mad cow disease we would handle not through surveillance, but basically by removal of specified risk material. So if you are asking, how long does it take for animals to move from premises to slaughter and get into the food chain, it depends upon the particular species, but you are talking a matter of a few days to weeks, depending upon the product, from the time that it leaves the premises to the time it is slaughtered to the time it is consumed.

The CHAIRMAN. Any difference on that, Dr. McGinn?

Dr. MCGINN. No, I would agree with Dr. Clifford on that analysis.

The CHAIRMAN. Okay, well, I think, with that——

Dr. CLIFFORD. Mr. Chairman?

The CHAIRMAN. Yes.

Dr. CLIFFORD. I would just like to add one thing, and it goes to the timing question. Without an effective animal ID system, if we have an introduction of foot-and-mouth disease, and we are delayed 1 week, a study completed by Ekboir in California indicated that with 18 percent of the premises initially infected, the premises at risk would increase from 18 percent to 90 percent affected.

The CHAIRMAN. Okay. That is sort of where we need to try to get some definitive handle of the direct threat to our food supply, or the failure of not having an animal ID in place. We need to get a handle on that.

We will now hear from Mr. Broun of Georgia—is he—oh, I am sorry. Mr. Goodlatte was here? I didn't see him come in. I looked down there and I knew Mr. Broun was here. My apologies to my present good friend and former Chairman.

Mr. GOODLATTE. And I am still a good friend. Thank you, Mr. Chairman. I appreciate the opportunity to speak to the witnesses, and I thank them for being here and for their testimony.

No one, so far as I can tell, so far today has said anything about assuring the American public that there is little risk of contracting swine flu from eating pork. And I wonder if the two good doctors could tell us something about what those risks are in this country today right now.

Dr. CLIFFORD. Congressman, I will respond first, and if Dr. McGinn wants to add anything.

First and foremost, this is not a food safety issue. You are not going to get H1N1, this novel virus, from eating pork. And as we indicated earlier, with all meat and poultry products, they should be handled properly and cooked properly.

Mr. GOODLATTE. And yet, notwithstanding that fact, which I know and I actually heard others with the Department make that statement, the price of pork has dropped, what, $5 a pound. It has just plummeted through the floor. It is a disaster for the American pork industry.

I wonder if each of you could tell us what your respective Departments—Dr. McGinn, yours is responsible for keeping the animal-borne diseases out of this country. And yours certainly is responsible for meat safety.

And I fully concur with your analysis, Dr. Clifford, but I am not seeing the United States Government do a whole lot to help the industry, when you guys want to see increased government regulation, to help them out. I don't know that they are doing anything right, or wrong right now, and yet they are facing a dramatic decline in the price of their product because the American people aren't being told on a frequent, regular and aggressive basis that, as long as the pork is handled properly, they don't face any risk from contracting swine flu from that.

They are far more likely to get it from the person sitting next to them than they are from anything they eat. And I wonder if you could explain to us why the government hasn't done more to be much, much more aggressive about avoiding—we have talked about potential losses to the beef industry if hoof and mouth disease were to get introduced in this country, but the pork industry right now is losing hundreds of millions, if not billions of dollars right now. What is being done to educate the public about that?

Dr. CLIFFORD. Congressman, I will go first. Secretary Vilsack has been very active in his message that pork is safe. And, in fact, he has also been a very stern supporter of changing the name from swine flu to *novel H1N1*.

Also, I think WHO—we have reached out as a nation to WHO, to OIE, and FAO to encourage them to change the name. And, in

fact, WHO has changed the name of this from swine flu to H1N1. That is in——

Mr. GOODLATTE. The media sure hasn't picked up on that, have they?

Dr. CLIFFORD. No, sir, nor has, as the news media changed the name of mad cow disease when it is really bovine spongiform encephalopathy. So once they kind of stick——

Mr. GOODLATTE. There is a lot of misinformation about how that is spread, too. I am sure, Dr. Clifford, you would agree with me when I say that all these countries that have closed off their markets to American beef cattle because we have had two cases of BSE found in cattle in the United States, are not using sound science to address that, are they?

Dr. CLIFFORD. They are not using sound science, no, sir. Nor are they using sound science when it comes to H1N1.

Mr. GOODLATTE. Well, I happen to believe that, while it is very important to be able to track animals—and if the Chairman allows me, I will ask a question, too, about that, even though my time is elapsing—but it is also very, very important that the government agencies that are responsible for food safety and for securing our borders from things coming into our country do more than they have done to shame the news media into getting this right and to educate the public. It has been devastating to a lot of family farmers in this country, with what has occurred as a result of the misuse of a name and the failure to assure the public about the nature of this disease and how it is spread.

I wonder if you would care to respond, Dr. McGinn.

Dr. MCGINN. I totally agree with you and just would add that Secretary Napolitano, in her first address to the nation on this issue, also said that pork was safe. So we have continued to repeat that message from Homeland Security, even though it is probably a message for USDA. And we appreciate the media guidance they have given us on how they would like us to communicate that.

The pork industry is part of the critical infrastructure that is feeding this country. And so we are very concerned that the protection of that critical infrastructure be in place, because we don't want to find ourselves, in this country, in a situation where we are no longer able to maintain these critical infrastructures and growing our dependency on foreign food production to feed our people.

Mr. GOODLATTE. Thank you, Dr. McGinn.

Mr. Chairman, I know that my time has expired. If you do another round, I might have a few questions about the animal ID system and where we stand with that today.

The CHAIRMAN. We certainly will—might have another round, so we will look forward to your question on that.

And, as you can see, this issue of the mislabeling of the swine flu has really gotten the interest of Congress and on this Committee. Ms. Clarke talked about it earlier, now with Mr. Goodlatte.

I just want to put my two-cents into this, answer this one question. Has the Agriculture Department or the head of the Agriculture Department or the Homeland Security sent any missive, any official communications to the media to officially ask them not to refer to this as swine flu?

Dr. CLIFFORD. I would have to check on that for the record to see if there has been an actual communication. But there certainly has been a lot of communication to the media indicating our concern.

Secretary Vilsack has been and continues to be actively engaged in countering misperceptions connected to the H1N1 virus. He has pointedly stressed the need in all his interviews and discussions with the media, as well as with trading partners, to use the accurate term *2009–H1N1 influenza* and that using the term *swine flu* is inaccurate and misleading.

The CHAIRMAN. I think that might be helpful to indicate specifically why we have not. I mean, you may take that back from the Committee that—we are doing it on our own, and it might be good for USDA and Homeland Security to do.

It has been devastating to the pork industry. There is not much we can do to make up. We can certainly stop it from here and educate and disseminate the proper information to the public so that we can prevent this rush to labeling in the future, should we, unfortunately, have such an another occurrence, which might be relative to that.

Let me now turn to Mr. Minnick. I think you are next. Did you have any questions, Mr. Minnick? Are we set?

All right. Let's see if we cannot go to a second round quickly, for those who may want to ask any specific questions.

And I want to start with mine. I want to try to get into the issue of re-routing and what steps are being taken to make sure that transportation is protected from going into, in fact, impacted areas and into the workplace. Do we have a re-routing system in place for transportation of the product?

Dr. CLIFFORD. Actually, Mr. Chairman, what we have been doing is working closely with the private sector and other associated groups to look at continuity of operations and working with them to develop those strategies.

One particular area we have been working on a lot is on the avian side with regards to poultry and poultry products, and especially eggs; in an event such as a catastrophic event or a highly pathogenic avian influenza or Exotic Newcastle Disease event that would prohibit movement.

So this is an area we are working on. We have a lot of work left to do, but it is a critical component. And what we have done is reach out to the industry. We have worked with the dairy industry about the movement of milk products, how to move those products safely and mitigate those risks in order for product to move and move safely.

The fact is, if you shut down the movement of these products—for example—in a foot-and-mouth disease outbreak, in a lot of these cases there is going to be a lot of issues of people going out of business if you can't safely reopen and re-route those products that are safe to move.

The CHAIRMAN. Dr. McGinn, do you have anything to add to this?

Dr. MCGINN. Yes, Mr. Chairman. Producers have the ability to re-route if they know where a particular infectious agent is. And so, again, the national animal will help us—identification system will help USDA be able to indicate the corridors that would be at

decreased risk if we did have a situation like we have shown in some of these things.

Transportation is a method by which disease is spread, so we have to look very carefully at that. And we are working with USDA on a project where we are actually looking at transportation and the different corridors and how they impact the spread of the disease.

Having said that, transportation is also interlinked into every aspect of our food system, from the animals all the way through processing to the restaurants, and into our homes. And so part of what we have to be able to do is understand that there could be an issue with transportation, but then there could also be an issue—it could create a problem for agriculture or food, as well.

So those are the main sorts of critical infrastructures, and the ability to deal with it in that way is critical.

The CHAIRMAN. Let me move to another area, right quick. First of all, you both support mandatory animal ID, correct?

Dr. CLIFFORD. I support an effective animal ID system. And the Department hasn't made a decision yet on mandatory, and we would not do so until we have reached out again, over the next couple of months we have developed listening sessions to reach out to small farmers, producers, to be able to see if we can come up with ideas and strategies to alleviate some of the concerns around cost, liability and confidentiality.

The CHAIRMAN. But doesn't that put our food supply system in great jeopardy not to have it mandatory, if you let—I mean, just looking at it, if this farm down the road has it, the other one doesn't, it doesn't matter if he has it or not. It can only be effective—wouldn't it be—if we have all of the system mandatory?

Dr. CLIFFORD. If you could have more producer participation, you can have a very effective system without being mandatory if you have a high level of producer participation.

The CHAIRMAN. Suppose there is one that doesn't have it. I mean, doesn't that jeopardize the others that do? I mean, it just takes one.

Dr. CLIFFORD. Well, in a mandatory system, Mr. Chairman, the likelihood of having 100 percent participation is still not very likely, because there is always cause for making sure that people abide by those rules.

The CHAIRMAN. All right. Let me just get right—the last one of my questions is—apparently, the opposition to it being mandatory, a big part of that is cost, correct?

Dr. CLIFFORD. Yes, sir, that——

The CHAIRMAN. From the information I have, the total cost for implementing NAIS in the cattle sector, as described in this study, is $179 million annually and that is a 90 percent participation level. Although this is significant, the cost is less than 0.5 percent of the retail value of U.S. beef products.

Wouldn't you think that the safety of the food chain is certainly worth 0.5 percent in putting a mandatory program in place?

Dr. CLIFFORD. I think having an effective system is needed in this country, and so does Secretary Vilsack. The cost factor—while that is a large number, I agree with you, as it is compared to the total value of the product in the market. From a small producer

standpoint, there are a lot of concerns for some of these small producers with the additional cost. So I think——

The CHAIRMAN. Is it that you all at USDA have not ruled out it being mandatory? Are you just waiting to get further information about the impact on the small farmers?

Dr. CLIFFORD. Yes, sir.

The CHAIRMAN. All right.

Mr. Neugebauer?

Mr. NEUGEBAUER. Yes, and, Mr. Chairman, I was going to suggest the—I ask unanimous consent that—there is a number of questions we are probably not going to have time to get to, and that Members be allowed to submit questions to this panel and their responses be made a part of the permanent record.

And with that, I think we still are in the initial round for Dr. Broun, so I will yield to him.

The CHAIRMAN. You got here first, Mr. Broun. You had stepped out and then—and to your question, we would be glad to do that, no question about it.

Mr. Broun?

Mr. BROUN. Thank you, Mr. Chairman.

When I was farming—I have had dairy cattle. I have had—and as a producer, I was competing in an international market with farmers all over the world that had government subsidies for their crops and for their agricultural products.

And I believe in free and fair trade. And, one of the greatest hindrances to fair trade in America is government regulation.

I also believe very strongly that the nation cannot feed itself, cannot clothe itself, who is not energy independent, or we are not a secure nation. And that is where we are today.

And as we proceed down this road to more regulation on the producers, I am just very concerned that not far off down the road, we are going to be in a position where it is not going to make any difference, because we are not going to have any animals to identify in this country.

So I have a great concern about the cost of this being placed on a producer.

And, Mr. Chairman, I understand your concern about animal identification. I am not sure that that is going to really solve the problems that we face from a national security perspective. And if we cannot feed ourselves, we are certainly not secure as a nation, because we are held hostage by whoever those producers are and also about getting those products here to feed ourselves.

So I am sorry I haven't been here for your whole testimony, but I would like for you all both to reassure me that there is not going to be extra burdens placed upon producers by increasing the identification of animals. And particularly it seems that there is a tremendous push towards mandatory identification.

Please tell me how I can be assured, as somebody who used to farm—I wish I could go back, but I can't afford to now—how those producers in Georgia where I live are going to be protected from having more regulatory burdens placed on them to make them less competitive in the international market.

Both of you. One dive in, please.

Dr. CLIFFORD. I will go first, Congressman. I think that is a very important point. It is one that I very much care about, as well, because we care about the producers in this country. We want our producers to be competitive, and we want them to survive, both large and small.

So, this is one of the reasons why Secretary Vilsack wants to reach out to the small farmers in the U.S. and make sure that he has heard from them, as well as others, to see if we can find solutions to some of these concerns.

Now, I understand, looking at these costs, that these can look pretty dramatic, especially to the producer out there that is trying to make a living. The tag cost for an RFID can range from anywhere to $3 to $5, depending upon the size of that herd.

However, as participation increases, the cost decreases. It is just like when a new technology comes in, and we all are buying the newest fad, oftentimes in the beginning, they are very expensive. And as we go on, those costs decrease.

Some of the things we are looking at have a number of factors. One thing we could consider is cost-sharing initially to help those producers get started.

A lot of producers today, as part of their management, use animal identification. The problem is, is that the animal ID that they use is not unique. We have no way to trace that using that ID back to the premises of origin and through the commercial chain that they are moving through.

So we are looking at different ways of doing that. Also, we are proposing that, while we need a system of full traceability, that we begin with a bookend approach in order to implement the system first—from the bookend approach—and move it in that direction before we move to a full traceability system.

Mr. BROUN. I certainly hope you do. My time is about up, and so I just wanted to make a statement that I am very concerned about—most of these guys and gals are just eking out a living and just barely making ends meet.

And they work from dawn to—from can to can't. And adding an extra burden on them is going to be a tremendous burden that is going to make it very difficult for us to continue to produce food in this country.

Mr. Chairman, I yield back.

The CHAIRMAN. I thank you very much, Mr. Broun.

Chairwoman Clarke, you are recognized for a second round.

The CHAIRWOMAN. Thank you very much, Mr. Chairman.

I have quite a few questions, gentlemen, so if you could just keep your comments as crisp and as concise as possible, that would be helpful.

Dr. Clifford, how could the NAIS help in tracebacks on animal or zoonotic disease?

And, Dr. McGinn, what would this tool mean to DHS?

Dr. CLIFFORD. This tool is critical in traceability. When an animal is found to be infected with a particular disease, it is just not that animal you are concerned about. It is that animal plus any other animals that that animal has been in contact with, when it was either incubating or became clinical for that disease.

And another way you can effectively do that, especially in points of concentration, is to know when it was there, the identity of that animal, as well as the identity of the other animals and where they are going.

The CHAIRWOMAN. Dr. McGinn?

Dr. MCGINN. Just to add to what Dr. Clifford said, it is essential to be able to trace in order to be able to find herds that are infected that can continue to spread the disease.

More and more herds, that can't be found, continue to spread the disease, that is how you get a catastrophic situation like we have described, because you don't have the ability to go out there at the time and actually find these herds. You don't have the resources in place to actually—to do that.

And so what turns out to be an incident can then progress into something that is catastrophic.

The CHAIRWOMAN. So let me just add—how would the USDA and DHS respond in a case where there was an animal or zoonotic disease? How would your agencies respond?

Dr. CLIFFORD. Well, it would depend upon the specific disease and whether we can be effective in that response or not. So, for example, West Nile virus entered this country. We were all aware of that particular virus. We assisted in that effort.

It was mainly related to public health, but on the animal health side, we helped develop a vaccine and get that vaccine approved for our equine species. So it really is disease-dependent.

The CHAIRWOMAN. Okay.

Dr. CLIFFORD. But speaking of that, and with regards to zoonotic diseases—and this recent H1N1, as well as the avian H5N1, are perfect examples of why we need comprehensive surveillance systems. We need to be able to monitor and find these emerging diseases and get in front of them before they become a real issue or a real problem.

The CHAIRWOMAN. Well, could you please explain the interaction between the APHIS, the FSIS, and DHS that is at the borders, and specifically with regards to imported livestock, as it comes through the border?

Dr. CLIFFORD. As far as our livestock, as it passes through the border, it will be directed to Animal and Plant Health Inspection Service employees. These are veterinarians and animal health technicians that look at those particular live animals and ensure that they are healthy.

All animals, with the exception of animals that cross directly from Mexico and Canada, that enter this country go through one of our quarantine facilities.

The CHAIRWOMAN. And how long are they held in quarantine?

Dr. CLIFFORD. It depends upon the species and where they came from and the diseases of concern. For example, we do not allow live animals to be imported from a foot-and-mouth disease-infected country.

The CHAIRWOMAN. Okay. Does the USDA and DHS have responsibility—excuse me, we know that you do have—you both have responsibility or jurisdiction over port inspections. How many ports do we allow live animals to be imported through?

Dr. CLIFFORD. We have quite a few ports of entry on both the Canadian border, as well as the Mexican border.

There are 26 U.S. ports through which live animals can be imported.

The CHAIRWOMAN. Okay. And do you think the goal of 90 percent premise registration is attainable under our current voluntary process?

Dr. CLIFFORD. Not under our current system.

The CHAIRWOMAN. And is animal identification the only method by which to track and trace animals? What alternatives are there, if any?

Dr. CLIFFORD. You know, it is really the most effective system to be able to trace and track animals. There are other systems, one is branding that is used in the West. And some of the states have very good brand laws.

We have worked with some of these branding states to see if we can put that in a form that is more usable. The problem is, it takes experts to be able to read those brands, and all states are not consistent with the brand laws.

For example, in the State of Texas, you can have the same brand in one county that exists in another. So it is not unique, where some states like New Mexico or one of the Dakotas, those brand laws are very effective with regards to having a single brand in that state.

The CHAIRWOMAN. But you would then say that the most consistent, most efficient and effective way would be through an animal ID system?

Dr. CLIFFORD. Yes, but we would also look—and we have worked with those brand states to incorporate some of those of type activities as appropriate. So we have been reaching to try to find ways that we can work together on that.

The CHAIRWOMAN. Thank you very much. My time has run out.

The CHAIRMAN. Thank you very much.

Mr. Goodlatte, you have another line of questions to this panel.

Mr. GOODLATTE. Yes, thank you very much, Mr. Chairman.

Dr. McGinn, I was interested in your North Carolina study. What participation did you have in that? What percentage of the livestock owners who were studied participated in that?

Dr. MCGINN. I shared earlier that we designed it primarily around the disease programs that were being conducted during that period in time. Primarily, those were in the poultry and the swine areas. So we had close to 100 percent participation in both poultry—and dairy cattle, as well, because——

Mr. GOODLATTE. You had beef cattle in that study, too——

Dr. MCGINN.—there was a much smaller participation. Really, it wasn't—the level of program and diseases in place at that time and, of course, if there had been, I think there would have been the kind of participation that we saw, as well, with the others.

These species are intertwined where they are located in our state. And so one of the challenges, if there was a contagious or infectious disease that impacted multiple species, then the ability to move those species in our state would be jeopardized——

Mr. GOODLATTE. I guess my question is, first, if you had 100 percent of hog producers and dairy producers and poultry producers, you don't need a mandatory system for that, do you?

Dr. MCGINN. We had at that time systems which we can demonstrate the benefit, and there were lots of benefit——

Mr. GOODLATTE. Why can't you demonstrate—if you convinced them of the benefit of participating in that, and you are here dedicated to convincing us of the benefit of what you are doing now, why can't you convince beef cattle producers and all those other producers of the benefit of voluntary participation?

Because it seems to me that, if they thought that you could do a good job and they thought your estimates of the cost and so on were accurate, that you would get them to voluntarily participate.

Dr. MCGINN. From my experience in North Carolina, one of the things it takes is it takes producers talking to producers and working together to solve those problems. It is obviously—there are lots of factors associated with this, international trade, cost-benefit.

Mr. GOODLATTE. You have pretty good evidence that you cited the two best countries for mandatory animal identification as Australia and Canada. And yet my personal experience is that the United States has gotten back into the Japanese market.

Japan is one of the toughest customers to deal with when it comes to these animal safety issues. I don't think they apply sound science very well, but nonetheless they are pretty strict about keeping us out and others out. And we got back into that market 2 years before the Canadians did.

And now that we are back in the market, I was over there and saw the evidence of how they are displacing—our product is displacing the Australians' product.

So I don't think you are going to convince them based upon what other countries are doing. You have to convince them on the basis of the soundness of having an animal identification system.

And I, quite frankly, agree. We need to have a better animal identification system. But I also think you need to sell people on the merits of the idea, not stuff it down their throat.

Dr. MCGINN. I would totally agree with you on that. And I would say that there are merits that could be seen in some of the states, as well, that do have these systems in place. And, I remember from Dr. Clifford's last testimony that 13 states have more than 50 percent identification in place.

So it is going to take states working with states, as well as looking at some of the best practices they put in place, as well as some of the best practices in these other countries.

I am certainly not saying that all these other countries or these states have all the answers. I was trying to communicate that there are best practices that we can utilize from there.

One of the best practices in Australia that was very helpful was the way they test their system. The Cowcatcher exercises that they did, those—they are an excellent way of being able to test the system to see where we are, in terms of——

Mr. GOODLATTE. And you did that in the United States. You did it in North Carolina, and you showed how it would spread to the rest of the country, and you did it on a voluntary basis.

I mean, I think that is a good thing to do, but, frankly, I am not convinced that the government is going to get it right when we mandate exactly how you are going to do it. Nor am I convinced they are going to get it right in terms of what the cost is going to be. Nor am I convinced that you are going to get it right in terms of assuring people that their data will be protected.

These voluntary systems have a variety of different ways of protecting the data. And the government has been recalcitrant in agreeing to some of those systems because you want to control the data from start to finish; and yet there is plenty of evidence of government-controlled data getting out and into the hands of people who aren't entitled to have it.

And so there is much more work that needs to be done convincing people of the benefits of this system, and in terms of the fact that they will be protected in the process if they trust the government.

And I don't think that has occurred to this point. I certainly do agree with you, both of you, that the improved participation in an animal identification system is a good idea. But I am not convinced that mandating it is going to get it right, nor is it going to enhance their cooperation, or their effective participation, in making a system that will work for everybody.

There are lots of other things out there that could influence them, including international trade, including companies that say they want to have animals that are produced under an animal identification system. That is going on right now, and I think that will lead to a build-up in participation and more effective participation than simply us sitting here and guessing the best way to mandate it.

Thank you, Mr. Chairman. I appreciate it.

And I welcome either one of you commenting on that. I didn't mean to preclude that possibility. I wanted to get my thoughts out there.

The CHAIRMAN. Well, thank you very much, Mr. Goodlatte. Your thoughts have provoked my thoughts, as well. And I concur with you in raising these issues, there are a lot of questions out there.

But time is not on our side here. I asked the question earlier, how long it will take between an incident of a breakout getting right to the kitchen table and the American people getting sick and dying because we failed to act.

And we know now in their voluntary system, at best, it takes 199 days to find the cattle with the disease. So I agree with you; there are some questions.

But I do think we need a greater sense of urgency to get this system up and running. And I just think that there are all dimensions.

One dimension that we really haven't dealt with as much is this—the issue that this is, indeed, a national security issue. I think it is a national security issue.

Take the fact that the Homeland Security has made some very, very excellent points and it is clear that our food supply is one of our weakest elements and is—becoming more and more attractive as a potential terrorist attack.

Mr. GOODLATTE. Would the gentleman yield?

The CHAIRMAN. Yes, I would yield.

Mr. GOODLATTE. I would just urge you to point out, at the same time you do that, that the United States has right now, without the mandatory animal identification system, the safest food supply in the world.

And, quite frankly, I want to keep it that way, but I think that the urgency here should be in convincing people who keep that supply safe, and the United States Government makes a contribution to that. But, it is like the difference between a ham and an egg, the pig and the chicken make a ham and egg breakfast. You know, the chicken makes a contribution, for the pig, that is real commitment.

And the real commitment for the safety of our food comes from the producers and the processors and the distributors. And you have to have full buying into that. And simply saying we are going to mandate it and we are going to make you do it is not the best way.

I think we should have a great sense of urgency on the part of our government, on the part of these agencies in educating the public and in educating the producers about how this system would work and get their participation, not stuff it down their throat.

Thank you, Mr. Chairman. I appreciate your letting me get back up on my soapbox.

The CHAIRMAN. Mr. Goodlatte continues to make excellent points. But let me point out that we just had a *Salmonella* scare from peanuts in Georgia. Quickly, we had to move to correct that and to move to kind of put things in place.

But let me point out, a part of the reason for that was laxity in response in inspections, willful disobeying what edicts we had, and not having the proper government response in place.

Currently, a month-and-a-half later, we had the H1N1 that has been mislabeled, and the only point I am making is that we have had incident after incident that shows that things could have been stopped if we had moved earlier to put preventive measures in.

And I am not discounting for one moment the points you are making. There are certain questions of confidentiality that need to be made. There are issues of costs which we have brought in, the export issue that has been brought in.

And here is another one that I want to put in for that, and that is national security. And I want to take a little moment to get to that, because it is beginning to be more of a national security issue.

We had an excellent presentation put before us by the Homeland Security gentleman here before our screens which really illuminated and was an eye-opener to hear how rapidly these things spread. And we do not have an adequate system in place.

And the longer we wait not to do that, the more vulnerable the American people are, and being placed in and subjected to.

Now, the point I wanted to make—and I will get right to you on the national security—not just on the terrorist possibility. But I do want to try to find out if we have run any scenarios on that.

At what level have we given the possibility that one of our animals might be purposely injected? Second, our ability to maintain our Armed Services, hundreds of thousands of our troops are stationed overseas, many of them and most of them in hostile areas.

And I went to Iraq and Afghanistan. Each time I go, I try to make a point of eating with our soldiers. And I assure you, our soldiers eat well. They get the steaks. They get the meats. But they get them from here. We did not allow our soldiers to ingest food from other places.

So it is a national security issue in many respects that I would like to get your response to. With my giving that up, I will yield now to——

Mr. BROUN. Mr. Chairman?

Mr. SCOTT.—Mr. Broun.

Mr. BROUN. I just want to point out, you bring up the issue about peanuts and peanut butter. I just wanted to remind the Chairman that we already had regulatory controls in place that just were not followed in that case. And it was willful neglect, willful disobedience of those regulatory burdens that are already placed upon those producers and I believe was criminal, actually, of how that was done.

So the point I want to make is that just having the regulations put in place, having something made mandatory is not necessarily in itself going to make our food supply safe.

And I want to associate myself with Mr. Goodlatte, my good friend. And I am—as a physician, just as concerned as you are, my dear friend, about the safety of our food chain—and I agree with you. It is a national security issue.

But mandating it to our producers is going to make it more difficult for the producers to stay in business. And thus we are going to be more dependent upon foreign producers to supply the beef that we need, to supply the pork and chickens that we need.

And so putting more and more of a mandatory burden on our producers when they are already strained as they are today, it is going to be counterproductive. I think we are going to go to a point where we don't have any chickens, pigs and cows here in this country to even be concerned about identifying.

So I am just very deeply concerned about this mandated process, and particularly without having any sort of mechanism to help the producers. We have to get the regulatory burden off of the producers so that they can make a living and continue to produce the foods that we need in this country.

And that is a national security issue that we are not even—in this hearing or anything else. So——

Mr. GOODLATTE. Would the gentleman yield on that point?

Mr. BROUN. Certainly. I will be glad to yield.

Mr. GOODLATTE. I thank you for yielding. The Administration has asked for $1.5 billion to deal with this H1N1 outbreak. And, obviously, we are all very concerned about it. We are pleased that so far it seems to be taking the course of other types of flu epidemics, which happen all the time.

But that is the contrast. Our farmers see the government stepping in, spending $1.5 billion on this, however serious it may be. They don't see the government stepping in and saying, "Okay, we are going to take care of your problems with this situation." And they have no indication that they are going to get anything other than a mandate, that they are going to be told that they have to

pay for this to address the concerns that have been expressed here today about what, potentially, could happen.

And yet we are being told by the Chairman and others that this is a problem that exists for all of us and everybody is at stake in the risk. But the cost of it is going to be strictly borne by our producers. And that is a pretty serious concern that we have and that—it doesn't help in terms of building up the trust to get their participation in this system.

And I will yield back, Mr. Chairman. Thank you for yielding to me, sir.

The CHAIRMAN. All right.

I recognize Mr. Lungren.

Mr. LUNGREN. I just have one question, because we have discussed the proposal on the table and how that would benefit in some ways if we could work out the problem of cost and privacy.

But just if any average American happened to watch this hearing, Dr. Clifford, could you tell them what the state of the security of—and the safety of the food chain, food supply in America is today?

Dr. CLIFFORD. I think, as far as our food supply goes, it is one of the safest in the world.

And at the same time, though, we are, from an animal health perspective, at risk with regards to an inefficient animal ID system for traceability.

Mr. LUNGREN. And the only thing I would say is, from a homeland security standpoint, we have to now calculate into the risk the possibility of someone wanting to introduce a disease into the animal population or in some way attack our supply.

It is something that we haven't had that we are concerned about in the future, we ought to be concerned about it now.

And, Mr. Chairman, I think there is an urgency to be concerned about that now. And I know we need to get our next panel, so I will not ask any more questions.

The CHAIRMAN. Thank you very much.

And this has been very, very beneficial, very, very helpful. And as you can see from the questions and the interests of the panel, a very, very, very important subject. We are all committed to making sure our food supply and the source of our food supply is safe beyond any question.

Your testimony has been very helpful in provoking the questions and thought. We have a lot to do, and you have helped us to move down that road a little quicker. And we thank you for taking the time to share with us your information.

And we are going to excuse this panel. Please bring on our second panel. Thank you.

Thank you very much. We are delighted to have, first of all, Dr. David C. Smith, Assistant Director, Division of Animal Industry, New York State Department of Agriculture and Markets of Albany, New York. Thank you for being with us.

We have Dr. Jerry Gillespie, former Director of the Western Institute for Food Safety and Security, University of California, Davis, Hopland, California.

And Mr. Kevin Kirk, Michigan Department of Agriculture, Lansing, Michigan.

Thank you all for being here with us, and thank you for your patience today.

Dr. Smith, we will begin with you.

STATEMENT OF DAVID C. SMITH, D.V.M., ASSISTANT DIRECTOR, DIVISION OF ANIMAL INDUSTRY, NEW YORK STATE DEPARTMENT OF AGRICULTURE AND MARKETS, ALBANY, NY

Dr. SMITH. Chairman Scott, Chairwoman Clarke, Ranking Member Neugebauer, Ranking Member Lungren, thank you very much for this opportunity today. I am honored to speak before your Committees.

My name is David Smith. I serve as the Assistant State Veterinarian for New York State. I have responsibility in that position with the oversight of animal identification activities in the State of New York.

New York uses a dedicated team of veterinarians and inspectors to protect animal health. But as these men and women go about their duties, one of the most important tools they have is a system of animal identification.

Effective animal ID is the key to every successful animal disease investigation, the key to minimizing the impact of serious animal disease outbreaks, and the key of ensuring the health status of animals as they move up the interstate and internationally.

This is why my agency participates in the National Animal Identification System and why we have our own system based in our own state. We believe that, every day, livestock ID methods must fit into existing herd and livestock management systems that are being used by producers.

We encourage the use of technology, such as RFID, whenever it does work out to fit into the producer's management system. We also encourage that technology is used when there is an overarching need for that technology in a regulatory system, such as a disease outbreak.

While we value RFID technology, we also value the low cost of traditional methods of identification. One example I have here is the official metal tag. We can acquire those metal tags at a cost of about 6¢ each. At that price, we are able to distribute those tags to farmers, veterinarians, livestock dealers and livestock markets at no cost to them. And that goes a long way towards keeping the cost of identification down.

Now, those IDs aren't as useful as RFID devices. I have worked at ports of entry, and I have inspected, personally, loads of cattle coming into this country. And with a metal ear tag, it takes a lot longer to read those cattle, but you can get it done.

With an RFID device, the work goes really quickly. And it is easier on the animals. It is easier on the people. The RFID is a superior technology. But metal ear tags work, too.

The metal ear tags are also well accepted by our producer groups. They are used to them. We have used them for generations. Most states recognize them as valid, official ID.

The problem that we currently have with that form of ID and, indeed, all of our ID programs is that we have had too much success in our programs for disease control, specifically tuberculosis

and brucellosis. As we have brought those diseases under control and actually move them towards eradication, we have managed to drive down the official testing that is done and official vaccinations that are done.

Normally, when these animals were tested for those diseases, they would receive official ID. And now that we have so few animals getting tested as we near eradication, we have a lot fewer animals with official ID on them.

Now, this rising proportion of animals without official ID comes at a time when our speed of commerce is rapidly increasing. And we all heard Dr. McGinn's presentation about how big a threat the way that animals move across this country under the continual exposure of diseases from around the world, that it is always a possibility for introduction. So we need to be careful to have a system that can respond quickly to a disease outbreak.

Now, the best benefits of a system of animal identification is that, in the event of a disease outbreak, we can really limit the damage done to our food producers; specifically, we can limit the financial cost.

One estimate came out earlier this year. It showed that, if there is a foot-and-mouth disease outbreak, we can reduce the cost of that outbreak to producers by many billions of dollars with an effective tracing system that allows us to quickly find the infected animals and trace the exposed animals. So this is yet another reason why we need to have effective animal ID.

One of the elements that we need to support in an ID system is an effective system of record-keeping. And in New York, we currently keep a lot of records on paper in file folders. And that is just not acceptable in the 21st century.

The CHAIRMAN. I am going to have to ask if you could wrap that up. We want each of you to have 5 minutes. I wasn't clear on that at the very beginning, so if you could wrap it up, and then we will proceed with 5 minutes each. Thank you so much.

Dr. SMITH. I just want to point out the risk of nonparticipation. If we had a substantial number of producers that do not participate in an ID program, it is just not going to work.

[The prepared statement of Dr. Smith follows:]

PREPARED STATEMENT OF DAVID C. SMITH, D.V.M., ASSISTANT DIRECTOR, DIVISION OF ANIMAL INDUSTRY, NEW YORK STATE DEPARTMENT OF AGRICULTURE AND MARKETS, ALBANY, NY

Chairman Scott, Chairwoman Clarke, Ranking Member Neugebauer, Ranking Member Lungren and Members of the Subcommittees, thank you for the opportunity to testify before your Committees this afternoon. My name is David Smith and I serve as Assistant State Veterinarian for the State of New York. Prior to becoming Assistant State Veterinarian, I worked for 18 years as a veterinarian in USDA's Food Safety Inspection Service and USDA's Animal and Plant Health Inspection Service. Currently, I have responsibility for oversight of animal identification activities in my state's Department of Agriculture and Markets.

Many people across the U.S. think of Manhattan Island when New York State is mentioned, but with 36,600 farms operating on 7.1 million acres of land, New York is most definitely an agricultural state. The 5,700 dairy farms in New York produced nearly 12½ billion pounds of milk in 2008, making us the number three dairy state. Livestock production of all kinds generally contributes over $2 billion a year to our state's economy. New York has a big stake in safeguarding animal health in the United States.

My agency, the Division of Animal Industry, is part of the New York State Department of Agriculture and Markets and is responsible for protecting and improving the health of livestock and other animal species in New York. Our veterinarians, animal health inspectors and support staff work every day to prevent and control animal disease and are on the front lines when livestock disease outbreaks occur in our state.

Under the leadership of our State Veterinarian, Dr. John Huntley, New York developed groundbreaking programs such as our New York State Cattle Health Assurance Program, which helps cattle producers adopt best practices to protect the health, welfare, and productivity of their herds. We have a unique program for Avian Influenza surveillance and control that has done a remarkable job of reducing the threat of a catastrophic influenza outbreak in commercial poultry flocks in the eastern U.S.

As our vets and inspectors perform their duties, one of the most important tools they must have is an effective system of animal identification. Effective animal ID is the key to every animal disease investigation, the key to assuring the health status of animals when they move interstate or internationally, and the key to minimizing the impact of serious disease outbreaks when they occur. This is why my agency participates in USDA's National Animal Identification System and why we also have our own state program. Although both programs share the common goal of protecting animal health, there are a few differences in approach.

The New York Department of Agriculture and Markets recognizes that everyday livestock ID methods must fit into existing herd and flock management schemes. Right now, dairies are selling milk at prices lower than the cost of production. In New York and many other states an increasing number of farms strive to meet the growing demand for food from local and community-based agriculture. Government must be mindful not to create regulations or requirements that push struggling farms over the edge or that smother small farms as they endeavor to satisfy consumers' desire for food from a local source.

We appreciate the strengths of technologies like Radio Frequency Identification Devices and we encourage the use of advanced ID technologies whenever it makes sense for the livestock owner, but we also value the cost effectiveness of the official metal eartag. Metal ear tags have been the backbone of animal ID in New York and other states for generations. They generally work well and are well accepted by most of our food animal industry. Thanks to standardization put in place decades ago, they are recognized across the U.S. as acceptable official ID. We can acquire metal tags for about 6¢ per tag, making it possible to provide them to farmers, veterinarians, livestock markets and livestock dealers at no cost. The problem we currently have is that due to the success of programs to eradicate tuberculosis and brucellosis, fewer animals receive official tests or vaccinations and as a result fewer receive the official ID tags that would have been applied at the time of a herd test or vaccination. The rising proportion of animals without official ID slows down disease investigations and increases the risk of serious damage to New York farms and animal agriculture industries when disease outbreaks occur.

It is important to realize that the increase in animals without official ID comes at a time when the speed of commerce is rapidly increasing. Thanks to our interstate highways, livestock can travel coast to coast in 3 days. Animal products are traded globally. And the current H1N1 influenza situation reminds us that people travel the world more quickly than ever before. This speed of commerce combined with the fact that foot-and-mouth disease (FMD) and other serious livestock diseases are endemic in many countries around the world means that U.S. farmers, veterinarians and animal health officials must always be alert for the possible introduction of these diseases. We must also be ready to respond. Should FMD or another serious animal disease appear in the U.S., the ability of state governments and the Federal Government to quickly control it will hinge on how fast we can identify infected animals, and trace out exposed animals. Studies estimate that the financial damage caused by an outbreak such as FMD can be reduced by many billions of dollars if a viable animal ID and tracing program is in place. Such a program can work only if supported by an efficient record-keeping system.

Since the early 20th century, my agency has handled the need for maintaining basic health information on animal herds by keeping paper records in file folders. Although I am continually amazed by how quickly some of our staff can retrieve such records, no one flipping through file folders is a match for the searching power and versatility that can be achieved with a well built and maintained electronic database. Transitioning from paper to electronic records is a logical progression to improve efficiency and effectiveness. We support NAIS's goals to create standards for such databases and we hope the Federal Government will continue to help states as we modernize these record-keeping systems.

Along with the utility of electronic record-keeping comes the responsibility to guard the information within such systems. Regardless of what becomes of NAIS, producers' information must be handled as confidential. The New York Department of Agriculture and Markets considers farms and related industries as critical infrastructure and we expect that information pertaining to farms and food producers will be afforded strong protection.

The last point I'd like to mention is the cost of non-participation. If significant proportions of livestock owners do not participate in NAIS or some similar program to improve animal ID, then animal disease outbreaks will take longer to control. In the face of such outbreaks, the cascading results could be as simple as a few farms not being able to resume operations quickly or as complex as multi-state eradication efforts and the loss of significant export markets costing billions of dollars.

I thank the Committees for this opportunity and in conclusion I wish to say that from my perspective, NAIS and similar programs are about protecting agriculture in the U.S. When a disaster such as a serious disease outbreak strikes, government will have to act to stop the disease, and reopen markets. If we are to do this task well, we need sound animal identification and information systems.

The CHAIRMAN. Great. Thank you. Thank you very much. And we will certainly learn more when we have our Q&A. We want to try to save as much of our time as we can towards that.

Now we will recognize Dr. Gillespie.

STATEMENT OF JERRY R. GILLESPIE, D.V.M., PH.D., FORMER DIRECTOR, WESTERN INSTITUTE FOR FOOD SAFETY AND SECURITY, UNIVERSITY OF CALIFORNIA, DAVIS, HOPLAND, CA

Dr. GILLESPIE. Thank you, and good afternoon, Chairman Scott, Chairwoman Clarke, Ranking Members Lungren and Neugebauer, and the other distinguished Members of the Committees.

I am pleased to discuss with you the importance of a comprehensive, national animal identification recording system as it relates to food safety and defense.

I intend to limit my presentation to how the identification system will be an essential part of eliminating dangers to our national security. I will specifically discuss how a comprehensive animal identification system can reduce risk of major losses to our nation by confronting major incidents either of natural disasters—for example, floods, earthquakes, and fires—and by intentionally caused events—deliberately executed harmful acts by a terrorist attacking the food system.

In my brief presentation, I will make the case that a National Animal Identification System is really an essential part of an all-hazards approach preparedness. And one of the things that has not yet been emphasized in the testimony today is the interconnectivity of hazards in all sectors and that, if something happens to our animals in this nation, it enhances disasters in other sectors.

In 2004, the Western Institute for Food Safety and Security at the University of California, Davis, was awarded a competitive grant from the U.S. Department of Homeland Security to prepare and to deliver a curriculum to communities and to industries nationwide to enhance their preparedness for agro-terrorism or other major food-system disasters.

Until January 2009, I was the principal investigator of this grant and subsequent grants funded by the Department of Homeland Security and by other resources.

Over the past, nearly, 5 years, the Institute has delivered all or portions of the six-course curriculum in 250 sites across our nation

and in 34 states. This experience has provided us with insights into the widely diverse vulnerability of our food systems in different communities, in various industries, and in the portion of different types of foods.

The vulnerability is made all the more challenging with the rapidly growing globalization of the food systems. Our food supply and our food producers' markets are increasingly dependent upon a functioning, secure, international food production and marketing systems. These global systems are complex and change rapidly, making food safety, defense, and security extraordinarily complicated.

Certainly, a reliable National Animal Identification System has very important implications for enhancing our export market of food animals and food products. It is conceivable that terrorists could attack our domestic food system with the goal of disrupting our foreign markets.

And one of the things I would like to emphasize is that, in going from parts—different parts of the country, the vulnerability of the food system is different in different parts of the country. And it is very important for this Committee, and for those considering how we would go forward, to understand the different scenarios that can happen in different parts of the country and their widespread implications.

And I would encourage the Committee to, in a nonpublic setting, explore some of those implications.

The challenge of tracking the spread of H1N1-type virus infectious diseases is a good example of how we lack not only in our country, but internationally the tracking systems needed.

After preparing this presentation, two things happened over the weekend that are very noteworthy. One of them was an interview with Dr. Larry Brilliant in *The Wall Street Journal* in which he talked about the nation's security, and particularly as it relates to biosecurity.

And he made the very points that have been emphasized here, the importance of having improved tracking systems throughout our food and agriculture, as well as health systems.

The other important issue that was brought up by his interviews both here and in *Science* magazine was the importance of the increasing numbers of zoonotic diseases. And one of the things that has happened and has caused the production of CDC's journal, *Emerging Infectious Diseases,* is that the number of diseases that affect both animals and humans is increasing. Those are primarily zoonotic diseases.

And, again, one of the things we need to make sure to account for is the implications of how an animal identification system could enhance our security in this area.

In his article, he made the point of emphasizing the principles of preparedness, which are really to prevent the event and to mitigate the harm should our defenses be transgressed. And——

The CHAIRMAN. Dr. Gillespie, I am going to ask you to kind of wrap it up real quick, as well.

Dr. GILLESPIE. Yes, I will.

Let me just use an example that really helped open our eyes to the need for a tracking system. In 1999, we conducted a study of

tracing the cull dairy cows and where they went in California. And the idea was to find out what their contribution was to *E. coli* in beef.

What we found was that cows that left areas in California were soon found across the United States. But more shocking than that, we had no idea how they got there. And further, we identified those animals that left farms, and we soon found that we were unable to trace many of them.

I think I illustrated the point how really poorly we are able to identify where animals go. Certainly we learned a lot of lessons going through the Exotic Newcastle Disease outbreak in California.

[The prepared statement of Dr. Gillespie follows:]

PREPARED STATEMENT OF JERRY R. GILLESPIE, D.V.M., PH.D., FORMER DIRECTOR, WESTERN INSTITUTE FOR FOOD SAFETY AND SECURITY, UNIVERSITY OF CALIFORNIA, DAVIS, HOPLAND, CA

Introduction

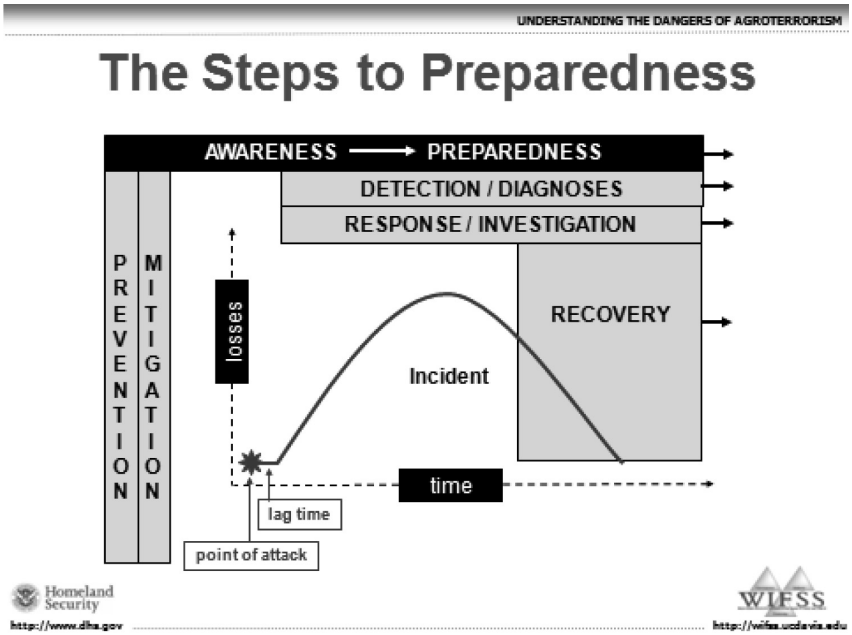
Good afternoon, Chairwoman Clarke and Ranking Member Lungren, and distinguished Members of the Subcommittees. I am pleased to discuss with you the importance of a comprehensive national, food-animal identification and recording system (NAIS)[1] as it relates to food and agriculture safety and defense. I intend to limit my presentation to how the NAIS will be an essential part of enhancing our nation's security. I will specifically discuss how a comprehensive food-animal identification system can reduce the risk of major losses to our nation in confronting a major incident caused by either a natural disaster (*e.g.,* floods, earthquakes, fires) or by an intentionally-caused event (*e.g.,* deliberately executed harmful act such as a terrorist attack on a food system). To the extent possible in my brief presentation, I will make the case that a NAIS will greatly assist us in accomplishing our task of reducing harm from any hazard, *i.e.,* NAIS should be a part of our nation's "all-hazards" approach to preparedness. While I view them as being important, I do not intend to discuss the technical aspects of animal identification and recording systems, the NAIS' foreseeable benefits to food safety, or the potential economic benefits of the system to food-animal producers, processors, food retailers and ultimately consumers.

The Need for NAIS To Enhance National Security

In 2004, the Western Institute for Food Safety and Security (WIFSS), University of California Davis, was awarded a Competitive Grant from the U.S. Department of Homeland Security (DHS) to prepare and deliver a curriculum to communities and food industries, nationwide, to enhance preparedness for agro-terrorism or other major food-systems disasters. Until January 2009, I was the principal investigator of this grant and subsequent grants funded annually from DHS. Over the past nearly 5 years, the Institute has delivered all or portions of the six-course curriculum in over 250 sites in 34 states. This experience has provided us with insights in the widely-diverse vulnerability of our food systems in different communities, in various industry segments and in the production of different food types. The vulnerability is made all the more challenging with the rapidly growing globalization of food systems. Our food supply and our food-producers' markets are increasingly dependent upon a functioning, secure, international food production and marketing systems. These global systems are complex and change rapidly making food safety, defense and security extraordinarily complicated. Certainly, a reliable National Animal Identification System has very important implications for enhancing our export market of food animals and food-animal products. It is conceivable that terrorists could attach our domestic food systems with the goal of disrupting our foreign markets. To the extent that we can document that our animals are free of and have not been exposed to important infectious diseases or zoonotic agents, we will be able to better assure and stabilize our foreign markets. At the same time, if we have a functional NAIS, the United States is in a strong position to expect equivalency from our foreign trading partners for imported animals or food products. At this time, it is important that we acknowledge the expanding and complex global food systems and their implications on how we introduce measures to enhance the safety

[1] NAIS denotes National Animal Identification System.

and security of our domestic food systems. The challenge of tracking the spread of H1N1-virus infections/disease (*swine flu*) illustrates the difficulty of monitoring and tracing diseases around the world in a timely manner. These points were made extraordinarily well in two articles that I came across over the weekend; the first was an interview with Dr. Larry Brilliant in *Science* magazine, 24 April 2009, and the second was an article by Dr. Brilliant in the May 2 & 3 *Wall Street Journal.* He emphasized two points in these articles that underscore the importance of NAIS to our national security: (1) the need for effective tracking systems for disease, and (2) the importance of animals and zoonotic diseases as both increase in occurrence—caused mainly by the increased comingling of people and animals—both domestic animals and wildlife. Dr. Brilliance also emphasized the two aims of preparedness against harmful events; prevention and mitigation.



Preparedness for any major hazard (threat) to the food systems has two overarching aims of ***preventing the event from causing harm*** to the food supply (safety of all food types or preventing economic disruption in the food/agricultural sectors and beyond) and if the event breaches our defenses, then having measures to ***mitigate the harm*** (*i.e.,* lessen the losses). Fundamental to preparedness are the following principles; (a.) awareness (understanding the threats), (b.) systems for *rapid* detection/diagnosis, (c.) *rapid*, directed response to the event, and (d.) measures planned and *rapidly* implemented for recovery from all losses (including recovery of all systems involved in food production). **All of these principles of preparedness are enhanced by a well documented, real-time, tracking system (*e.g.,* NAIS).** I have highlighted ***rapid*** in my text because **early** detection, response and recovery are essential to forestalling major losses due to an event.

When communities, states and industries undertake planning and implementing preparedness measures for food and agriculture security, almost without exception they are frustrated by the lack of understanding of how different parts of their food systems operate, *i.e.,* specifically, what is the interdependence of the different segments in the system and how does each segment work. This same lack of specific knowledge of inter-segment connectivity is, in my judgment, the most important reason for failure of foodborne disease and animal-disease investigations. In brief, it is the inability to trace a specific food-item (or animal) upstream or downstream through the food continuum (*i.e.,* the steps from production unit to consumer) that too often frustrates investigation of causes of food contamination or animal diseases. These failures make rapid and precise intervention to prevent further illness in humans or diseases in animals impossible and leaves a great deal of uncertainly on what measures can be taken to prevent similar disasters in the future. Specific to

animal disease, investigators are still unable to specifically and unequivocally trace the origin and spread of *food and mouth disease* in the 2001 outbreak in the United Kingdom. Recent animal disease investigations in this country (*e.g.,* 2002 Exotic Newcastle Disease in Western U.S. and Bovine Spongiform Encephalopathy [BSE or Mad Cow Disease] in Washington State and Texas) have been hampered by lack of a functional NAIS. These incidents are all difficult to investigate thoroughly and arrive at an unequivocal epidemiological conclusion without the tracking data envisioned for the NAIS.

The widespread, rapid and seemingly random (unpredictable) movement of livestock was driven home to us when we attempted to trace the movement of cull dairy cows from California dairies. Briefly, we found these cows in markets and feed-yards across the nation within days and weeks of leaving the dairies.[2] In most instances, we were not able to trace specifically how they were moved to their new destination. More often than not within days, we lost track of animals identified on California dairies as they moved somewhere across the nation.

It is important to understand that a terrorist bent on causing devastating harm to this nation could devise a plan of introduction and spread of an animal or a zoonotic disease that would be primarily unnoticeable, unfathomably merciless, genuinely resourceful and far more difficult to contain than our usual "naturally occurring" foodborne or animal disease outbreaks. The DHS, U.S. Department of Agriculture (USDA) and others have developed scenarios to illustrate the potential harm of an agro-terrorism attack. In my judgment, we could add an extremely powerful tool to our armament against agro-terrorism by enhancing our NAIS and other food-tracking systems, which among other things would increase our ability for early detection of these diseases and lead to our pinpointing sooner the location(s) of introduction (there may be multiple points of introduction by terrorists).

The variation in our nation's livestock rearing environments and the movement of these livestock and wildlife, nationwide, provide a challenging environment for disease control in response to a wide spectrum of potential terrorism incidents. In addition to the potential food shortages (complicated by public uncertainty of food safety), human and animal illnesses, and death associated with these events, the potential for economic disruption and loss could be extraordinarily large and long-lasting. That said, while NAIS is not the only remedy, it is a much needed tool to enhance our animal disease and zoonotic disease prevention and control, and it could go a long way in preventing or mitigating major losses.

Thank you.

The CHAIRMAN. Thank you very much, Doctor. We will get more into that during the Q&A period. We appreciate it.

Now, Mr. Kirk?

STATEMENT OF KEVIN M. KIRK, SPECIAL ASSISTANT TO THE DIVISION DIRECTOR, ANIMAL INDUSTRY DIVISION, MICHIGAN DEPARTMENT OF AGRICULTURE, LANSING, MI

Mr. KIRK. Thank you, Chairman Scott and Chairwoman Clarke, as well as the Ranking Committee Members and other Committee Members present. I appreciate the fact that you are holding both Committees meeting this afternoon.

I am Kevin Kirk, a Special Assistant to the State Veterinarian for the Michigan Department of Agriculture. And I appreciate the opportunity to make comments about Michigan's electronic identification program.

It was implemented back in August 2001. It started as an identification tracking system for our bovine tuberculosis eradication program. It appeared in 11 counties originally, as well as two additional parts of counties. The project was funded by the United States Department of Agriculture grants that we retained.

It was soon that the merit of the electronic database system was easily and immediately realized from the fact that, during the TB testing process, the time involved at the front-end where the ani-

[2] 1999 Study conducted by six-university consortium led by the University of California, Davis.

mals were tagged with the radio frequency identification tags that it cut down 50 percent of the work, both for the producer and the veterinarians.

Shortly after that, installation of the EID system, one positive TB cow was diagnosed, traced back to the herd of origin. That particular cow met all the TB testing movement requirements, out of the infected zone.

Not only that, we knew the history of all the other—from that farm of origin. And we were able to trace that through the database within 15 minutes. Without the EID database and system in place, that process would have taken several weeks.

The EID system has also enabled MDA to develop a Web-based movement permit system for cattle, where producers at home can go online, get movement permits to move cattle out of the TB-infected zone. They can either print it at home, get it faxed, or receive it by the mail.

April 19, 2004, USDA established two different TB split zones for the state. June 1, 2004, we initiated that all cattle of all ages moving out of Modified Accredited Zone had to be, number one, had to have an RFID tag, as well as had to have a movement permit.

And, quite frankly, as producers said at the time, that was heavy regulation by the government, but since that time, their attitude has changed because it also maintained open markets within the rest of the State of Michigan.

The Michigan Department of Agriculture offered the service at 50/50 cost-share program with producers in the Upper Peninsula so that we could approach USDA to move the Upper Peninsula to free status. Our project started in August of 2004. Over 600 producers bought 65,000 tags to help get that cost-share program, but also to help us obtain free status, which we did receive in 2005.

January 9, 2006, the Michigan Commission of Agriculture adopted a policy mandating RFID cattle in Michigan, effective March 2007, all cattle, all ages, in order to move off the farm to the system, market system, had to be identified with an RFID tag.

This was done with the support of all the stakeholder groups, and they also were involved with developing what we call the communication process that moved forward over the next nearly 15 months. Meetings across the state were held. There were over 60 meetings held. The producers attended, over 3,000 producers. We had a summer educational tagging demonstration, general handling demonstration both July 2006, July 2007, at our Ag Expo summer event, and nearly 1,000 producers attended those presentations.

March 1, 2007, 90 percent to 98 percent, depending on which market you were at, cattle came to the markets tagged with a new RFID tag. And that enabled producers to move forward with the program, but also we allowed the producers that were, number one, not able to catch their animals and tag them at home or were against the program for religious beliefs, to come to the market, have their animals tagged there, and really kept the system going.

Later on, October 2007 of that same year was when the milestone, the first million RFID tags were purchased by Michigan producers, which was quite an accomplishment.

Also, during this whole RFID program, we would have readers installed at all the markets in Michigan. And from April 2006 to December 31, 2008, we had over 480,000 cattle that have been read at the markets, while at the same time there are readers installed in eight kill plants in four Midwest states. That represented 332,000 head of cattle being tagged and able to trace them back to the farm of origin.

Simply put, the success of Michigan's mandatory cattle identification program can be attributed to the partnership established between producers, agricultural businesses, state and Federal Government agencies.

Michigan's accomplishments have built a foundation for which other states can build on in developing their cattle traceability programs. And I highly think that USDA, as well, could take a look at the program and possibly implement it on a national basis.

The EID program has created efficiencies on the farm, in the Department, and allows staff within Michigan to focus on public safety.

Thank you.

[The prepared statement of Mr. Kirk follows:]

PREPARED STATEMENT OF KEVIN M. KIRK, SPECIAL ASSISTANT TO THE DIVISION DIRECTOR, ANIMAL INDUSTRY DIVISION, MICHIGAN DEPARTMENT OF AGRICULTURE, LANSING, MI

Animal identification has been an integral part of Michigan's animal disease eradication programs for decades. In August 2001, the Michigan Department of Agriculture (MDA) initiated an electronic cattle identification tracking system as part of its bovine Tuberculosis (TB) Eradication Program. Electronic identification was initially used to individually identify and track the movement of cattle in a TB high-risk area/infected zone (Modified Accredited Zone [MAZ]), which was comprised of 11 counties and two partial counties in northeast Michigan. This project was funded in part by United States Department of Agriculture (USDA) grants to assist Michigan's Tuberculosis Eradication Program.

The merit of the electronic based ID system was immediately realized: the TB whole-herd testing time was reduced by as much as 50% once cattle were tagged with radio frequency identification (RFID) tags. Additionally, tracking cattle with an electronic identification (EID) system provides assurance that all mechanisms of control, monitoring, and surveillance are employed to their fullest capabilities.

Since the initiation of the EID system, one TB positive cow was diagnosed and traced back to the herd of origin. This particular cow had met the TB movement requirements and had been moved legally out of the infected zone. The herd of origin's TB testing history, and all cattle movements after the index cattle departed, **were traced in less than fifteen minutes.** Without the use of EID and the electronic database, this process could have taken weeks.

The EID system has also enabled MDA to develop a web-based movement permit system for cattle. The web-based system allows MDA to issue a movement permit online if all testing requirements have been met. Producers can then print the permit or receive it by fax or mail.

On April 19, 2004, USDA established two separate zones with different TB risk classifications in Michigan—the Modified Accredited Zone (MAZ) and the Modified Accredited Advanced Zone (MAAZ). Beginning on June 1, 2004, all cattle of all ages were required to have electronic identification and a movement permit before leaving a premises within the MAZ and all cattle were tagged with EID during TB testing.

As part of its effort to obtain TB Free Status for the Upper Peninsula, MDA expanded its EID program to include the Upper Peninsula. MDA offered a 50/50 cost-share program in August 2004 to cattle producers in the Upper Peninsula who wished to obtain EID tags to identify cattle leaving the farm in support of the free status application. Over 600 producers ordered over 65,000 tags during the cost share program. The Upper Peninsula was granted TB Free Status in September 2005.

On January 9, 2006, the Michigan Commission of Agriculture adopted a policy mandating RFID for cattle in Michigan effective March 1, 2007. MDA, in partnership with industry and stakeholder groups, was charged with developing an implementation plan. Cattle are the only species of farm animals required to be identified electronically in Michigan.

A communication strategy was developed and implemented which targeted key audiences to develop their understanding of the role RFID plays in the Bovine Tuberculosis Program. The communication strategy addressed the concerns of the farming community as MDA moved from a free identification ear tag to a producer purchased RFID tag. The communication strategy focused on how RFID tags can improve animal health, human health, and food safety.

The communication strategy recognized the importance of sharing information with all producer groups and other interested persons. All livestock producers were sent a letter explaining the RFID requirements and a *Question and Answer* document. Livestock markets assisted with outreach to inform their clientele about the identification program. MDA produced a brochure and fact sheet which were distributed at county fairs.

Nearly 60 educational workshops and industry meetings were held across the state. Outreach, both at the grass roots level and through statewide marketing, was vital to the success of the EID project. Well over 3,000 cattle producers attended the meetings which allowed MDA to disseminate a positive message about the program to producers from key leaders.

MDA sponsored cattle handling and ID tagging demonstrations at the July 2006 and July 2007 Ag Expo. Six informational seminars/tagging demonstrations were presented during the 3 day events. Nearly 1,000 people participated in the presentations.

By March 2007, 90–98% of cattle coming into Michigan livestock auction markets were tagged with RFID tags. MDA's program allows for cattle producers who are unable, or object to RFID tags, to bring cattle to the markets untagged. Untagged cattle are tagged at the markets and the producer is charged a fee. This procedure allows MDA to maintain the integrity of its animal identification program while respecting the views of some producers who object to the program on religious or other grounds.

By October 5, 2007, Michigan cattle producers had purchased over one million RFID ear tags. Over 11,000 Michigan premises supported this milestone. In addition, there are over 19,400 premises in Michigan registered in the Standard Premises Registration System (SPRS).

Between April 2006 and December 31, 2008, 15,661 cattle producers have ordered 1,718,593 RFID tags. All Michigan livestock markets and eight slaughter facilities are equipped with stationary panel readers or wand readers capable of reading any RFID ear tag. As of December 31, 2008, livestock markets had scanned 480,776 tags and slaughter facilities had scanned 332,888 tags.

The success of Michigan's mandatory cattle identification program can be attributed to the partnership established between producers, agricultural businesses, and state and Federal Government agencies. Michigan's accomplishments have built a foundation on which other states can build in developing their cattle traceability programs. Michigan would highly encourage other states and the Federal Government to use Michigan's model for cattle traceability to improve animal health. The EID program has created efficiencies on the farm and in the Department and allows staff to focus on public safety.

Dated: April 28, 2009

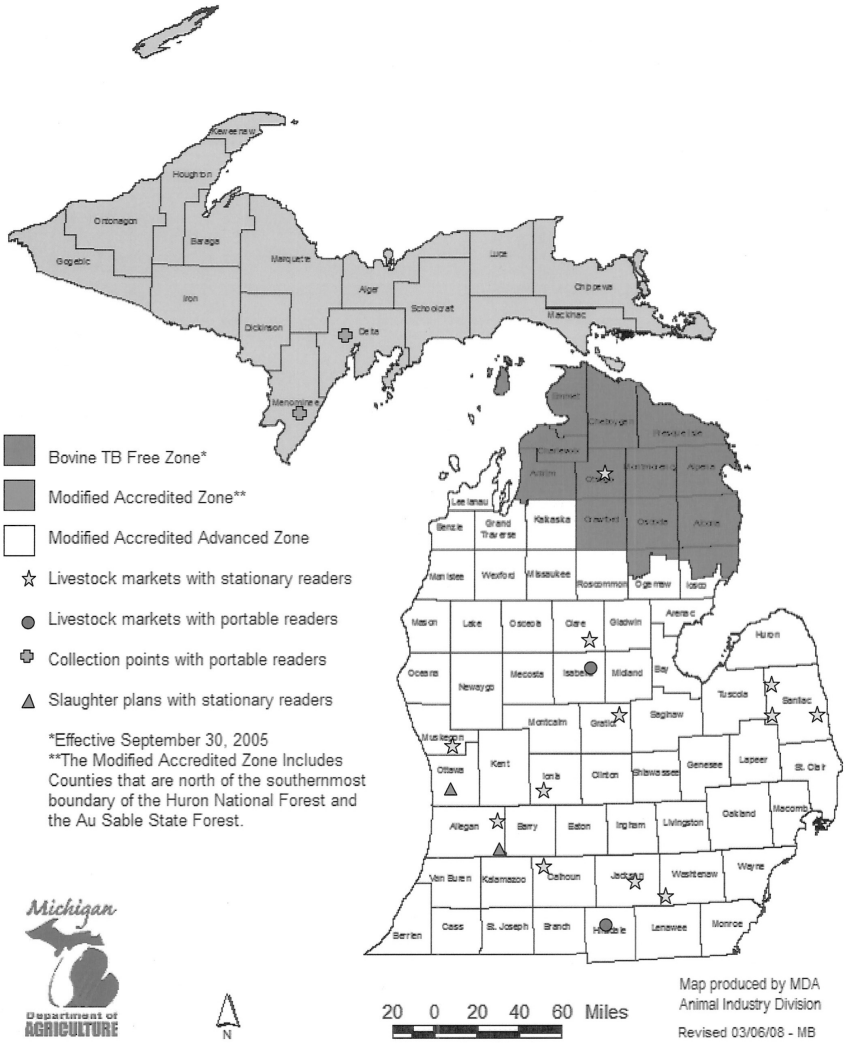
Submitted by:

KEVIN KIRK,
Special Assistant to the Division Director,
Michigan Department of Agriculture,
Animal Industry Division.

ATTACHMENT

Michigan Bovine Tuberculosis Zones

Livestock Markets, Collection Points, and Slaughter Facilities



The CHAIRMAN. Thank you very much. Thank you to each of you.

Let me start the questioning off with just getting—from each of you. I happen to believe that the longer we wait to put a national animal ID system in place, the greater at risk we place the American people. Do you all agree or disagree with that?

Dr. SMITH. I think, for American producers, the longer we go without a national ID system and an effective tracing system, we definitely are at greater risk of severe economic losses from a foreign animal disease.

The CHAIRMAN. Yes, absolutely.

Dr. GILLESPIE. I would agree with that.

The CHAIRMAN. Okay, thank you.

Dr. GILLESPIE. The longer we delay, the higher and greater the risk of a devastating event.

The CHAIRMAN. Thank you.

Mr. KIRK. I definitely agree that the longer we wait it is going to impact consumers, and it is going to put producers out of business. And, there will be countries around us that will step in and take over our markets.

The CHAIRMAN. Thank you. I am glad I asked that question. I am glad that got on the record.

Now, I want to just go to you right quick in Michigan. I think you might have been here when the latest round went, and the—one of the objections to the mandatory ID system was the cost. Could you tell me, in your system in Michigan that you talked about, what impact that had? And did you have any of those producers go out of business as a result of it?

Mr. KIRK. Mr. Chairman, when we moved from a free metal tag program, much as what they do in New York, to a RFID tag, the tag cost $2. That is a major change.

In looking back over the last, nearly, 3 years now, I would say that we have not lost producers because of the cost of the tag. A year ago, we lost producers of all types because of the cost of energy, fuel, and the high price of grain.

I would not say that at $2 a tag—and that is what it cost our producers—that the $2 is not costing them to make a decision to leave the business. I think that they have now accepted it, they recognize it opens markets within Michigan and other states.

The CHAIRMAN. Thank you. I am going to reserve the balance of my time and turn to Ranking Member Neugebauer.

Mr. NEUGEBAUER. Thank you, Mr. Chairman.

Mr. Kirk, why hasn't the State of Michigan extended its mandatory livestock reporting to all commercial animals?

Mr. KIRK. At the current time, we are only concerned about our impact with bovine tuberculosis, which is with cattle, and so we are focused strictly on the cattle. And we are working really with a disease program much like Dr. Clifford talked about earlier in his presentations. And so we have a disease problem in Michigan.

Mr. NEUGEBAUER. But don't you have other livestock in your state?

Mr. KIRK. Pardon me?

Mr. NEUGEBAUER. Don't you have other kinds of livestock in your state?

Mr. KIRK. Oh, yes, yes. We have all species, just like every state.

Mr. NEUGEBAUER. All right. I think the question is, is if—a good program, I mean, and you made it mandatory on cattle. I am a little perplexed why, if it is as good as you say, you haven't made it mandatory for all livestock.

Mr. KIRK. We haven't chose to go that route at the present time. The swine industry has a lock program that they have been using on a voluntary basis. Our sheep and goat program follows the USDA Scrapies program. And our producers have raised sheep and goats, one with their tagging program, as mandated by USDA.

Mr. NEUGEBAUER. You mentioned you have a cost-sharing program. Did you say it was 50/50? Is that right?

Mr. KIRK. Yes, we did that for the producers in the Upper Peninsula to help——

Mr. NEUGEBAUER. But not all producers?

Mr. KIRK. That is correct.

Mr. NEUGEBAUER. And so that program is the——

Mr. KIRK. That program was only for one short period of time——

Mr. NEUGEBAUER.—cost of the program now?

Mr. KIRK. The producers are bearing the cost of the tags themselves right now.

Mr. NEUGEBAUER. Dr. Smith, in your testimony, you mentioned the importance of maintaining the confidentiality of livestock producers' data. In New York, what laws are in place to prevent the disclosure of this data?

Dr. SMITH. We currently have a bill pending in our state legislature to protect the confidentiality of producer information. We do receive requests for producer information under FOIA, and we routinely deny those requests. And we have been successful in denying the requests based on the fact that it is proprietary information and it should not be out there for commercial or public use.

Mr. NEUGEBAUER. One of the questions in this argument is that when we talk about national security, and we talk about whether this is a national security issue, we then talk about the cost. If this is a national security issue, if you are using that as an argument, then whose responsibility then is it to bear the cost of this program?

Mr. Gillespie? Dr. Gillespie?

Dr. GILLESPIE. Well, I think that is a very good and important question. And I do think it is something that needs to be shared between governmental agencies and the agriculture production systems. It is in both of their best interests to preserve the safety and the security of our food system.

Mr. NEUGEBAUER. I was a small-businessman. And, I had limited resources, and so I had to allocate my resources where I had the best return. And so when I look at this issue, I say, "Okay, where do we get the best return? Can we get the best return in an aggressive program to make sure that these illnesses don't come into our country through other animals or other sources? Or do I spend my resources on trying to find out, if they do get in, where they are?"

And, from my perspective, if I was looking at it, and you want to spend your resources making sure that you know that those diseases don't get into this country, because if I spend money every

year and build up this huge infrastructure, should I have spent my money on infrastructure for detection rather than traceback?

And that would be my final question. And, Dr. Smith, and Dr. Gillespie, and then Mr. Kirk, quickly, if you could kind of——

Dr. GILLESPIE. I will respond that I am not sure that you can seal off the border sufficiently to keep out animal diseases, zoonotic diseases. And, I think you need to have resources in the—procedures that will help you mitigate harm when it occurs.

And, from my experience in working with the courts in California, I just really now believe that we need to have a way of mitigating harm once it gets within our country.

Mr. NEUGEBAUER. And then to refine that question, Dr. Smith and Mr. Kirk—this way you can respond to that—first percentage being how much you would spend on detection, the second percentage you would spend on tracebacks. So 70/30 would be 70 percent spending on detection, 30 percent—so——

Dr. SMITH. I don't feel I am qualified to answer that question, sir. That is DHS's call for the border protection, and I just don't have sufficient information.

Mr. NEUGEBAUER. Okay.

Mr. Kirk?

Mr. KIRK. It is a hard question to come up with a specific answer that you are looking for. In Michigan, when we have tracebacks because of infected cows with TB, because the system was put in place. It has cut the time down, which involves cost of staff time, to find out where the animal came from and whether other animals could have been exposed.

And when we talk about—if I could back up for just a minute, when you talked about your activities as a small businessman, many small businesses, as I tell farmers over the years, buy insurance. And one of the things that nobody wants to do is ever use that insurance, but put that insurance in as a way to minimize our risk.

And that is one of the things that we talk about when we are using an animal ID tracking system, you minimize the risk of a producer's operation.

The CHAIRWOMAN [presiding.] I am going to now recognize myself for 5 minutes.

Our chair has had to step away for a moment, and so I will be chairing in the interim until he returns.

My first question is for you, Dr. Smith. How does your state animal ID program differ from the National Animal ID System?

Dr. SMITH. Well, first off, participation in our program is not voluntary, while NAIS's is voluntary. Participation in our system happens whenever a farm has an official test done or some official action done on that farm. So they are automatically in our system and——

The CHAIRWOMAN. Is that for all livestock?

Dr. SMITH. Yes, ma'am.

The CHAIRWOMAN. Okay. And what is it that moved the state to have a mandatory process in place?

Dr. SMITH. Well, it started back in the early part of the 20th century with tuberculosis eradication. And since then, we have kept records on the farms in New York and their health records.

The CHAIRWOMAN. Very well. Thank you very much, Dr. Smith.

Dr. Gillespie, do you believe a mandatory national animal ID system is necessary in order to deal with an ever-expanding and complex global food system?

Dr. GILLESPIE. I think it has to be comprehensive. And I was, until 3 months ago, a beef cattle producer in Nebraska and I own some other farms there, as well. I entered the program, because I saw it as a way of improving my leverage in the market.

Now, everyone doesn't agree with that approach. But I do think there are reasons for our industry, as a whole, to view this as a very important way to enhance their marketability of product. And so I am not sure it needs to be mandatory, but I do think it has to be comprehensive to be effective.

The CHAIRWOMAN. Do you believe that the current system embodies the principles necessary to prevent a severe animal outbreak? And if not, what do you think needs to be done to be improved—what do you think needs to be improved?

Dr. GILLESPIE. I think technically it is probably sound, but what it lacks is comprehensiveness, in terms of participation across different species, particularly in the cattle industry.

The CHAIRWOMAN. And without it being comprehensive, it just leaves vulnerability out there?

Dr. GILLESPIE. It does, because the introduction of a harmful agent can happen, as has been pointed out, at any farm. And if they happen to be nonparticipating, it makes a huge difference in how that scenario plays out.

The CHAIRWOMAN. Thank you very much.

Mr. Kirk, a great deal of concern has been raised on the economic hardship of an animal identification system which could cost individual livestock from—which could cost individual producers. Can you tell us if your system has caused individual producers to go out of business?

Mr. KIRK. To the best of our knowledge, we have lost no producers that have left the business because of their cost of the tagging program.

The CHAIRWOMAN. And has the Michigan animal identification system improved or made easier the marketing of livestock?

Mr. KIRK. It has not created any hardship in marketing livestock. What it has done is created an easy way of tracking the cattle that do show up at the market, because it is so much easier to scan a tag rather than get in front of an 1,800 pound bull and hold its ear while you try and read the metal tag.

The CHAIRWOMAN. You mentioned the impact the program has had on bovine tuberculosis control and elimination. Do you see it being effective for other animal diseases?

Mr. KIRK. Oh, yes, I definitely do.

The CHAIRWOMAN. I am going to reserve the balance of my time and have the gentleman from California, Mr. Lungren——

Mr. LUNGREN. Thank you very much, Madam Chairman.

And, Dr. Smith, I want to just make sure I got the facts straight on this. In terms of the mandatory nature of the program, it is mandatory if they go—if you go out to a farm or a herd for one of these official visits, correct?

Dr. SMITH. It could also be an official test that a private veterinarian does, sir.

Mr. LUNGREN. Right. But I saw your written testimony, and you said one of the problems is that you are having fewer—you are having more nonparticipation because fewer animals receive official tests or vaccinations. As a result, fewer receive official ID tags. Is that right?

Dr. SMITH. That is correct, sir.

Mr. LUNGREN. So even though we have a very relatively low price, right, a few cents you say for a tag?

Dr. SMITH. Yes, sir.

Mr. LUNGREN. You don't have the universal participation.

Dr. SMITH. No.

Mr. LUNGREN. And so it is not mandatory in the sense that all herds have to have that?

Dr. SMITH. We don't have the mandate that an animal must be identified when it leaves the farm of origin. We would like to have that some day, but we don't have that now.

Mr. LUNGREN. Right, right. I am just trying to get the dimensions of the program there.

And, also, I heard the testimony with respect to what is happening in Michigan, where they use the electronic identification device. A few cents *versus* a couple of dollars, would that work in New York, that is, if you went through the more expensive program?

Dr. SMITH. Actually, sir, we did receive a number of RFID tags through a cooperative agreement with USDA. And we have been getting those out to producers to introduce the technology and to get it out so people can see how it works and erase some of the myths about it.

And so far, it has been very well received. And, actually, what our dairy producers—the larger producers want that technology. It works with their automation—and it is actually really useful for them.

Mr. LUNGREN. But I am just looking at this from afar. It seems to me, in a perfect world, having a system by which you can identify, so you do traceback would make sense. But the question is, the capital investment, I guess, is what we are talking about.

And that is why, Dr. Gillespie, I would like to go to you. You made a decision with respect to your beef program, that you would go into this program, because you thought it would give you leverage in the marketplace.

What I am trying to figure out is, as one who believes we lack a sense of urgency with homeland security across the board, that 9/11 becomes dimmer and dimmer in our minds because we haven't had a successful attack on our shores, that it is difficult for us to get the public policy that we need to protect ourselves against a terrorist attack.

And since the last major terrorist attack dealt with airplanes flying into buildings as opposed to our food supply, it is difficult to get people to imagine that. But given the kind of devastating impact and successful attack, or I would say a series of attacks. If I were to be out there and write the scenario, it would be a series of attacks.

And we have already talked about the relative ease of technology to apply, or the introduction of, harmful agents to our food supply, particularly our animals, how do we raise the attention of the American people such that they understand the urgency of the matter so that our debate is how we solve the problem and bring the scale of cost down?

How do we make this real? Because, again, we haven't had a major outbreak of foot-and-mouth disease since 1929?

Dr. GILLESPIE. Correct.

Mr. LUNGREN. We have actually done a fairly good job, if you really look at it, we have done a fairly good job of identifying problems in our food supply. And it may take some time, but we have been able to—of the American people in the various instances we have had, "Here's what the problem was. It came about in this particular area, lettuce in—*Salmonella* with peanuts in Georgia."

I mean, the American people actually do have a confidence out there. And maybe because they have that confidence they don't have this sense that we need to do more.

With the studies that you have done at your Institute, can you give us some sense of how we make that real? Or is it not the problem that I think it is?

Dr. GILLESPIE. Well, I think it is the problem. And I think that is a problem—it is a different problem in different parts of our country. It can be a problem of a particular intermix you have with your livestock, wildlife, and other issues.

And there certainly is a variation in local preparedness across the country. What is very important is that I think it has to be a collaboration between industry, states and the Federal Government having some role.

And the examples that we have had from Michigan and New York are excellent examples to get this brought up, because what they are demonstrating is that it isn't the overwhelming cost that is often put out there.

In my own instance, our markets in Nebraska began to specifically reward those that would bring cattle to their markets that had a verifiable record of vaccination and of disease management. And that leveraged us up when we sold our cattle.

Now, our costs were greater than either of those mentioned here. It was closer to $5 a head. And we didn't make a lot of money by participating in the program, but we made money by doing it.

And what it did was reinforce things that we were already needing to do, and that is having an individual animal identification system that could be operated efficiently, because you need that for breeding purposes. You need it for health records and for age records. You need it for grazing records. You need it for all sorts of information if you are going to be competitive in the beef industry.

And like the—industry, they would not be without a way to really verify a cow's performance in the herd. So that is not going to be amicable to all sizes of units. And that is why I think state participation—programs that we have talked about today at the state level can help us leverage to such a comprehensive system.

The CHAIRMAN [presiding.] Thank you very much.

Let me ask just one question of you, Mr. Kirk. Does the Michigan Department of Agriculture feel that the ID program that you have helps the public's perception of animal disease control?

Mr. KIRK. No question about that. I think we are very obvious with what we are doing, and they see the importance of why we are doing it, because bovine TB, for the audience, is a transmissible disease from livestock to humans and *vice versa.* So they see that. They see the positive of what we are trying to do.

The CHAIRMAN. Okay. Thank you very much.

Chairwoman Clarke, you had one question?

The CHAIRWOMAN. Thank you for yielding.

My one question is, do each of you believe that your state will be prepared to handle a severe animal disease outbreak were one to occur today?

Mr. KIRK. I think we are in better position than we were 5 years ago, because we know where there are a number of the livestock operations are located, which we didn't know until now. And we know the types of animals that are out there.

And so, in essence, we can say that we are there to assist the farmers should something happen tomorrow or next week.

Dr. GILLESPIE. I think California is vastly improving its preparedness. I think there are issues that we still need to address.

We have a large number of wild animals that are in really remote places in California that offer a great challenge to really control animal disease.

Dr. SMITH. That is very much like Michigan, in that we have come a long way in the past few years. We do have a database that we are using now. We have a lot of the geocoding done. We have a lot of good information on many of our herds. But we still have a ways to go.

The CHAIRWOMAN. Thank you very much, Mr. Chairman. I yield back the balance of my time.

The CHAIRMAN. Thank you very much. And I think we are out of questions.

Let me just say, on behalf of the Committees, thank you. Thank you very much for taking the time to come before the Committees. Your testimony has been very, very helpful, very, very beneficial, and we appreciate it very much.

This is an extraordinary issue of timely importance. And we are charged with the responsibility of making this a priority, animal ID and specifically protecting our food supply chain. And you have been very helpful to us in providing valuable information. We look forward to working with you in the future, too. Thank you very much.

Mr. KIRK. I would ask that anybody from the Committees or staff, if you would like to come visit Michigan, on behalf of the Governor or the Director of Agriculture, we would be glad to have you come to Michigan and really go out and take a look at what we do out in the field and meet with producers.

The CHAIRMAN. I would be delighted to. And we are very, very interested in the success of your program, as you explained it in your testimony today.

The record of today's hearings will remain open for 10 calendar days to receive additional material and supplemental written re-

sponses from the witnesses to any question posed by a Member of this panel.

This joint hearing is hereby adjourned.

[Whereupon, at 5:35 p.m., the Subcommittees were adjourned.]

[Material submitted for inclusion in the record follows:]

MATERIAL SUBMITTED BY HON. DAVID SCOTT

National Livestock Identification System (NLIS)—Australia's System for Identifying and Tracking Cattle

Prepared by: Dr. TONY BRITT

Background

- In late 1995, Victoria's cattle industry was affected by a contamination incident where cotton plant material (known as cotton trash) that had been sprayed with a pesticide was fed to cattle in New South Wales and Queensland. Some contaminated cattle had entered Victoria but could not be tracked because of the limitations of the tail tag and paper based system in place at the time. Tail tags are strips of vinyl tape printed with the Property Identification Code (PIC) of the property of dispatch that are wrapped around the tails of cattle prior to transportation. Tail tags fall off within a few days of attachment.
- The cattle industry throughout eastern Australia had to introduce expensive testing procedures in response to the cotton trash contamination incident.
- Following this incident, Victoria lead a national government/industry working group that designed a 'whole-of-life' identification and tracking scheme for cattle based on the use of machine readable permanent identification devices. The scheme has subsequently become known as the National Livestock Identification System for cattle (NLIS (Cattle)). The working group also drafted the National Vendor Declaration (NVD) which is a form outlining the chemical treatment and exposure history of cattle that vendors throughout Australia routinely complete when consigning cattle for sale or slaughter.
- Victoria conducted an international tender for machine readable 'whole-of-life' identification devices in late 1997. The successful tenderer was Allflex Australia Ltd with its button ear tag. Each tag contains a half duplex (HDX) ISO11784/11785 compliant transponder encoded with a unique unalterable number that can be read in a fraction of a second by cattle producers and in saleyards and abattoirs using panel or wand readers.
- The first NLIS devices were released to Victorian producers who wished to use them on a voluntary basis in February 1999.
- In mid-1999, the EU advised Australia that the tail tag and paper based system in use nationally at the time was not sufficiently robust to enable cattle to be reliably tracked from an abattoir back to their properties of birth. As a consequence, it was agreed nationally that the NLIS should become mandatory for all cattle destined for processing for EU markets from late 1999. Use of NLIS devices remained voluntary for other classes of cattle.
- Following the Foot-and-Mouth Disease (FMD) outbreak in Europe in 2001, Victorian cattle industry organisations realised that the prompt tracking of animals that had been exposed to the virus would be critical if the disease is ever diagnosed in Australia. Aware of the consequences of a disease outbreak such as FMD or another issues similar to the 'cotton trash' incident, key industry organisations requested that the Victorian Government review whether the NLIS should remain as a voluntary system. In response, the then Victorian Minister for Agriculture convened the NLIS Implementation Advisory Committee, which includes representatives of all stakeholder organisations, to formulate an implementation plan and monitor the operation of the scheme. This Committee has subsequently met regularly, and provides advice on the operation of the NLIS (Cattle) in Victoria.
- In mid-2001, this Committee unanimously recommended that Victoria should progressively introduce legislation requiring that producers attach an NLIS device to the cattle they breed before these cattle leave their properties of birth. An amendment to Victoria's *Livestock Disease Control Act 1994* to facilitate the implementation of the NLIS was subsequently passed by Parliament in late 2001 with bipartisan support.
- Regulations have also been progressively introduced requiring that cattle be scanned at saleyards, abattoirs and knackeries, and more recently when they are moving directly between properties, and movements details registered on the NLIS database.
- In recent years Bovine Spongiform Encephalopathy (BSE) has been diagnosed in Japan, Canada and the U.S., resulting in food safety and the associated ability to locate potentially affected animal quickly and accurately emerging as major issues for livestock industries throughout the developed world. Mindful of these developments, in May 2004 Australia's Primary Industries Ministerial

Council (PIMC) recommended the progressive introduction of mandatory cattle identification and scanning arrangements in all Australian States and Territories. The NLIS (Cattle) is now mandatory in all Australian jurisdictions.

Data management

- Since the 1970s, the States/Territories have registered cattle producing properties and have allocated to each property a Property Identification Code (PIC). More recently the States/Territories have commenced registering pig, sheep and goat producing properties.
- Meat and Livestock Australia (a producer-controlled corporation created under the Commonwealth's *Meat and Livestock Corporation Act 1977*) operates the national NLIS database. The database holds information regarding an animal's history, it's movements from PIC to PIC throughout its life and a range of statices. Statices assigned to NLIS identified cattle and to cattle producing properties by the States/Territories can relate to specific disease or residue risks as well as to the eligibility of cattle for processing for certain markets such as the EU.
- The NLIS database is a web-enabled system allowing stakeholders to only access data they are entitled to view and to only make changes where permitted. Each stakeholder group has different access screens and different functionality. Information on the operation of the NLIS database is available at *www.nlis.com.au*
- Because NLIS devices can be read, and information stored and transmitted electronically via the Internet, manual recording and input of information into the database is minimal. Over 99% of all data into and out of the database is in electronic form.
- The NLIS database is currently receiving and processing details on approximately one million cattle movements per month. The States/Territories can retrieve this information for tracking purposes within a few seconds.
- Victoria's Department of Primary Industries (DPI) has recently gained access to a complete copy of cattle movement information held on the NLIS database. This data is updated on a daily basis, and could potentially be updated more frequently in a disease or food safety emergency. DPI is developing an innovative system to enable the visualisation and analysis of data held within DPI's property registration system complemented by NLIS information about the movement of cattle. This system will enhance Victoria's ability to respond to a disease or food safety emergency.

NLIS (Cattle) technology

- NLIS (Cattle) devices can take the form of either as ear tag, or alternatively a rumen bolus. Boluses are ceramic capsules with each containing a transponder. When administered orally, they lodge permanently in the animal's reticulum. Subcutaneous and intramuscular implanted transponders are not permitted as part of the NLIS (Cattle) because of the potential for them to contaminate beef products.
- Over 99% of the devices currently being used by producers to identify their cattle are ear tags.
- The transponders used in NLIS (Cattle) devices comply with relevant international standards for animal identification technology known as ISO 11784 and ISO 11785. These standards allow for two different forms of transponder known as full duplex (FDX–B) and half duplex (HDX). The transponders used in NLIS (Cattle) devices are all HDX due to the superior performance of this form of technology in relation to electronic reading on-farm and in saleyard and abattoir environments.
- NLIS devices must comply with a national standard which focuses on issues such as the field retention of devices, technology platform, transponder reliability, and colour and numbering arrangements. The standard is overseen by a national committee known as the NLIS Standards Committee.

Commercial opportunities

- While the main driver for the introduction of the NLIS (Cattle) is the need to protect and enhance Australia's reputation as a supplier of safe disease-free beef and dairy products, there are very significant on-farm benefits associated with the use of NLIS technology through the ability to establish the identity of individual animals quickly and accurately.

- The dairy industry in Victoria has embraced NLIS technology because of the opportunities the technology provides to enhance cow identification, improved and simplify herd recording and facilitate the operation of automated feeding and drafting systems.
- For beef producers, NLIS technology provides the opportunity to improve the efficiency and accuracy of data capture and herd information management. Information such as weight gain/loss, reproductive performance and veterinary treatment history can be easily collected and used for decision making.
- Feedlot operators and abattoirs are also benefiting from the NLIS through better inventory control and from the marketing opportunities associated with the integrity that the NLIS provides.
- Industry and government representatives from the U.S., Canada, Europe, New Zealand, South Korea, China and Japan are regularly visiting Victoria to inspect NLIS installations on farms, and in abattoirs and saleyards. Victoria is acknowledged as a world leader in the use of electronic cattle identification and tracing technology.
- DPI has produced a range of brochures and DVDs explaining the operation of the NLIS (Cattle) for the benefit of Victorian industry participants and overseas customers.

Cowcatcher II

- A national exercise to test the operation of the NLIS was conducted in mid 2007. The exercise was known as Cowcatcher II. A copy of the Cowcatcher report is available by visiting *www.daff.gov.au,* and then typing Cowcatcher into the search function.

MATERIAL SUBMITTED BY HON. RANDY NEUGEBAUER, ON BEHALF OF JUDITH MCGEARY, EXECUTIVE DIRECTOR, FARM AND RANCH FREEDOM ALLIANCE

The Farm and Ranch Freedom Alliance (FARFA) requests that Congress halt implementation of the National Animal Identification System (NAIS). Contrary to its stated purposes, NAIS will not address animal disease or food safety problems. Instead, NAIS imposes crippling costs and paperwork burdens on family farmers, which may lead to loss of these farms, increased consolidation of agriculture, and more reliance on foreign imports. This will ultimately lead to greater disease problems and reduced food security. This Statement will discuss some of the many problems with NAIS, and then suggest alternatives for improvements in animal health, food safety, and food security.

I. The design of NAIS is not scientifically sound

NAIS is based on the premise that we need 48 hour traceback of all animal movements for disease control. FARFA has submitted two Freedom of Information Act requests, the first in November 2006, asking for any scientific studies or analyses supporting the design of NAIS as a disease control program. USDA has failed to provide any scientific basis for the program.

The susceptibility of animals to disease and the likelihood of transmission differ greatly depending on the species of animal, the disease, and the conditions under which the animals are kept.[1] Some diseases spread in a matter of hours, while others take years. The attempt to track every movement of every animal violates epidemiological and risk-based principles.

Increasing tracking of animals cannot improve our ability to address animal disease because tracking is not the weak link in the chain of our animal health system. In 2005, the GAO analyzed the government's provisions for preventing agro-terrorism, assessing livestock diseases in particular. The GAO did ***not*** identify any deficiencies in current livestock tracking, or recommend that resources be allocated to programs such as NAIS. Rather, the GAO identified multiple deficiencies in other aspects of animal disease programs, including the lack of training for veterinarians

[1] The health problems caused by confinement or industrial management systems have been well documented in the scientific literature. *See, e.g.,* Cravener, T.L., W.B. Roush, and M.M. Mashaly, *Broiler Production Under Varying Population Densities*, POULT. SCI. 71(3):427–33 (1992); D. Herenda and O. Jakel, *Poultry Abbatoir Survey of Carcass Condemnation for Standard, Vegetarian, and Free Range Chickens,* CAN. VET. J. 35(5):293–6 (1994); T.G. Nagaraja and M.M. Chengappa, Liver *Abscesses in Feedlot Cattle: A Review,* J. ANIM. SCI. 76(1):287–98 (1998); T.G. Nagaraja, M.L. Galyean, and N.A. Cole, *Nutrition and Disease,* VET. CLIN. N. AM. FOOD ANIM. PRAC. 14(2):257–77 (1998); D.H. Tokarnia, J. Dobereiner, P.V. Peixoto, and S.S. Moraes, *Outbreak of Copper Poisoning in Cattle Fed Poultry Litter,* VET. HUM. TOXICOL. 42(2):92–5 (2000).

in foreign animal diseases, USDA's failure to use rapid diagnostic tools to test animals at the site of an outbreak, USDA's complex decision making process for deploying vaccines, and the decline in agricultural inspections at ports of entry.[2] The Federal Government should allocate its resources to these deficiencies.

II. NAIS is cost-prohibitive for small farmers

The costs of complying with NAIS will be unreasonably burdensome for small farmers. A 2006 Kansas State University report found that costs of an RFID-based system are significantly higher for people with smaller herds due to the expense of the electronic infrastructure.[3] The costs of NAIS go far beyond the tag itself, and include:

(a) premises registration database creation and updates;

(b) tags and related equipment, such as readers, computers, and software;

(c) 24 hour reporting requirements, imposing extensive paperwork burdens;

(d) labor for every stage of the program;

(e) stress on the animals; and

(f) qualitative costs, from loss of religious freedoms, privacy, and trust in government.

NAIS required tagging and reporting will disproportionately burden sustainable livestock operations and others that manage animals on pasture. Tag losses due to animals getting their tags caught on brush or fences will be higher than in confinement operations. Most small farmers will not qualify for a group identification number because their herds and flocks are comprised of animals from different sources.[4] If 100 laying hens are pastured in a movable shelter, or 200 sheep are grazed together, and the farmer finds the partial remains of an animal from predator attack, the farmer faces the nearly impossible task of individually identifying all of the remaining chickens or sheep in order to identify and report the one that was lost, as would be required to be compliant with NAIS.[5]

From an animal disease control perspective, pasture-based livestock operations are not the problem. While confinement operations present the ideal conditions for the spread of the disease, pastured operations, in which animals are kept in natural conditions on rotating pastures, have a far lower risk of developing or spreading diseases.[6] For example, in the 2004 outbreak of avian flu in Texas, the disease was found in a 6,600 bird commercial poultry operation; but no infected birds were found in any of the 350 nearby non-commercial flocks that were tested.[7]

III. NAIS does not increase food safety

In considering food safety and traceability, it is critical to distinguish between tracking live animals and tracking meat from the slaughterhouse to the consumer. Most foodborne illnesses are from bacteria such as *Salmonella*, *E. coli*, and *Campylobacter*, or a specific group of viruses called the Norwalk viruses.[8] These organisms contaminate food due to poor practices at slaughterhouses or in food handling. NAIS will **not** prevent these problems. And since NAIS tracking ends at slaughter, it will not improve the tracing of contaminated meats in the food chain.

Neither will tagging cattle prevent BSE from occurring or from entering the food supply. In last year's Hallmark/Westland beef recall, the packing plant's violation of existing regulations and USDA's failure to properly inspect the plant, allowed "downer" cows to be slaughtered. In the video from the Humane Society, every time there was a clear shot of a cow's left ear, one can see a tag.[9] Changing the type

---

[2] United States Government Accountability Office, GAO–05–214, *Homeland Security: Much is being done to protect agriculture from a terrorist attack, but important challenges remain* (Mar. 2005) (hereinafter "GAO Report on Agriculture") at p. 6–7.

[3] *RFID Cost.xls*—A spreadsheet to estimate the economic costs of a radio frequency identification (RFID) system, K.C. Dhuyvetter and D. Blasi, Version 7.6.06.

[4] *See* User Guide (Dec. 2007) at p. 24 (Group/Lot identification may be sued for animals that "move through the production chain as a group").

[5] *See* Program Standards and Technical Reference (Feb. 2008) at p. 7 (listing an animal event code for reporting "animal missing").

[6] See Exotic Newcastle Disease, Information from the Texas Animal Health Commission (Apr. 2004) ("In close confinement, such as commercial operations, the disease can spread like wildfire. . . . ***However, the virus is destroyed rapidly by dehydration and by the ultraviolet rays in sunlight.***") (emphasis added).

[7] News Release, Texas Animal Health Commission (Apr. 1, 2004).

[8] *See* Centers for Disease Control and Prevention, *http://www.cdc.gov/ncidod/dbmd/diseaseinfo/foodborneinfections_g.htm#mostcommon.*

[9] *http://www.youtube.com/watch?v=kaM7Hpu47FY.*

of tag to a NAIS electronic tag would do nothing to avoid similar problems in the future.

An immediate feed ban, that closes loopholes allowing things such as poultry litter in cattle feed, is the best way to prevent BSE from occurring in the first place. To address the human health risk, we should test cattle entering the food supply, as is done in Japan and Europe.

IV. NAIS will decrease homeland security

A. ***Increased consolidation threatens food security.***

Under the USDA's plans for NAIS, the default requirement is individual identification of each animal. Group identification would be allowed for "animals that typically move through the production chain as a group of animals of the same species . . . This practice is most common in the poultry and pork industries."[10] In practice, this means that companies who maintain ownership of the animals throughout their lives—as is done in vertically integrated confinement operations—will be relieved of most of the costs and paperwork burdens of NAIS. NAIS therefore creates significant incentives to further consolidate agricultural production.

Increased consolidation of our food supply creates greater risk. The 2005 GAO report on agriculture and terrorism noted that the concentration of our food supply makes it vulnerable to attack: "the highly concentrated breeding and rearing practices of our livestock industry make it a vulnerable target for terrorists because diseases could spread rapidly and be very difficult to contain."[11]

B. ***The use of electronic technology and databases create vulnerabilities.***

RFID technology is subject to problems that do not exist with traditional identification methods such as branding or tattoos. Depending on the security of the technology used, the microchips can be cloned or infected with computer viruses (which can then be passed to other chips through the scanner).[12] In fact, the specific type of RFID to be used in NAIS, the ISO 11784/11785 chip, is designed to be programmed in the field before is applied to animals or even *reprogrammed after application.* This problem with the ISO standard is well known in the technology community and has been debated for years.[13] It is impossible to reliably trace an animal if someone can change its identity at any time. Also, the databases will be vulnerable to accidental release of the information as well as hackers.

C. ***NAIS is not effective in addressing the issue of avian flu.***

Avian influenza, in particular the highly pathogenic H5N1 virus, is frequently raised as a homeland security issue that weighs in favor of implementing NAIS. The threat, however, comes from large commercial operations, because the density of the birds and the conditions they are kept under provide ideal conditions for the rapid spread and mutation of viruses.

An NGO report indicates that the spread of avian flu, including H5N1, is due to conditions in confinement poultry operations.[14] A later report states: "Studies indicate that highly pathogenic strains of bird flu evolve when low pathogenic strains of the virus, which circulate harmlessly among wild bird populations, are introduced into high-density poultry flocks. Once bird flu takes hold in a factory farm, the virus amplifies and spreads beyond the farm through a multitude of channels: trade in birds and eggs, people coming in and out, the elimination of waste, the use of litter in feed, etc."[15] For a domestic example, in the 2002 outbreak of avian influenza in

---

[10] User Guide at p. 24.

[11] GAO Report on Agriculture at p. 1.

[12] *See* Annalee Newitz, *The RFID hacking underground,* WIRED, *www.wired.com/wired/archive/14.05/rfid_pr.html;* John Markoff, *Study says chips in ID Tags are vulnerable to viruses,* NEW YORK TIMES (Mar. 15, 2006); Rieback, M.R., B. Crispo and A. Tanenbaum, *Is your cat infected with a computer virus?,* Vrije Universiteit Amsterdam, Computer Systems Group.

[13] In 1998, ISO received a formal petition calling for revisions or suspension of the standards, and identifying multiple flaws in the ISO 11784/85 standard, including the lack of unique ID codes. *See* letter from Gosstandrat of Russia, Committee of Russian Federation for Standardization, Metrology and Certification, to Rudolf Zens, Secretary, SC 19 (Mar. 2, 1998) at *http://www.rfidnews.com/images/3-2-98.gif. See also The Controversial ISO 11784/85 Standard, ISO 11784/85: A Short Discussion,* at *www.rfidnews.com/iso_11784short.html.*

[14] Genetic Resources Action International ("GRAIN"), *Fowl Play: The Poultry Industry's Central Role in the Bird Flu Crisis* (Feb. 2006) (hereinafter "GRAIN Report").

[15] *Bird Flu Crisis: Small farms are the solution, not the problem,* in SEEDLING, GRAIN (July 2006) at p. 26 (citing multiple scientific studies from around the world). **Although pastured poultry are exposed to wild birds, extensive testing of wild birds has only rarely found bird flu in a highly pathogenic form. "Furthermore, the geographic spread of the disease does not correlate with migratory routes and seasons. The pattern of out-**

Continued

Virginia, "farm equipment, vehicles and personnel" moved among commercial facilities caused transmission of the virus.[16] Even a USDA report found that, out of 45 outbreaks of H5N1 in the country of Laos, 42 of the outbreaks occurred in commercial operations.[17]

As with all of the disease issues, a one-size-fits-all approach of tracking every chicken in the country will not address avian flu. The agency should focus its efforts on the high-risk commercial operations and practices that can spread disease, such as feeding poultry litter.

V. NAIS cannot succeed because of the many practical barriers to implementation

NAIS is fundamentally impractical to implement. USDA's plans call for multiple public and private databases, capturing all of the reportable "events" for every animal, with the USDA creating a metadata portal to use for its purposes.[18] Establishing these databases will be a monumental task. There are almost a hundred million cattle in the U.S., and millions more chickens, sheep, goats, pigs, deer, elk, bison, and other livestock animals. These animals are taken to shows, sold in auction houses, sold in private transactions between individuals, slaughtered, and otherwise moved for myriad reasons. The NAIS reporting and tracking system has myriad potential failure points. Moreover, integrating databases is far from simple. Indeed, despite the emphasis on interagency cooperation since 9/11, the GAO's 2005 report on agriculture and terrorism noted that the Federal Government still had not integrated its own databases.[19]

The plans for NAIS assume that all people covered by the NAIS will have computers and web access to report within 24 hours after a reportable event. Based on 2007 Census, however, almost half of farmers do not have Internet access. Thus, state agriculture departments will have to accept written reports mailed to their agencies or telephone reports that will be transcribed. This creates two more failure points: human error in data input and the untimely recordation of events.

The massive databases themselves pose a barrier to successful traceback. Colorado researchers developed a mock data set and algorithms for using a NAIS-type database for tracing animal movements and the cohorts of diseased animals.[20] Although the research indicated that traceback of a diseased animal was quite rapid, the tracing of the cohorts (the animals that had come into contact with the diseased animal and then with other animals) took vastly longer, especially if the data was kept in more than one database. Their simulation of 100 million animals with the data held in multiple databases indicated that it could take **more than 39 *years*** to trace the cohorts.

The premise that 100% participation is necessary to address disease issues founders on the reality that there will never be full participation. If NAIS is adopted, it is inevitable that some livestock owners—whether for religious or economic reasons, or unwillingness to allow the government intrusion—will not comply. Since they will be acting illegally, they will be far less likely to seek a veterinarian's help should a disease problem arise. This black market will create disease problems, as evidenced by the outbreak of Exotic Newcastle Disease that occurred in Los Angeles in 2002. The outbreak was started and spread by cockfighting flocks that had been smuggled from Mexico because cockfighting is illegal in California.[21] NAIS will increase the probability of disease outbreaks by undermining the first line of defense:

---

breaks follows major roads and rail routes, not flyways." *Avian influenza goes global, but don't blame the birds,* THE LANCET Vol. 6: 185 (Apr. 2006).

[16] E-Digest Volume 2, Number 11, *Issues Faced in the 2002 VA AI Outbreak;* paper presented by Dr. Bill Pierson, at the 2002 Poultry Health Conference sponsored by the Ontario Poultry Industry Council.

[17] GRAIN Report (quoting USDA, *Laos: Poultry and Products—Avian Influenza,* U.S. Department of Agriculture (Mar. 16, 2005)).

[18] USDA, *Integration of Private and State Animal Tracking Databases with the NAIS* (released Apr. 6, 2006).

[19] GAO Report on Agriculture at p. 7–9.

[20] J.A. Scanga *et al., Development of computational models for he purpose of conducting individual livestock and premises traceback investigations utilizing National Animal Identification System-compliant data,* J. ANIM. SCI. 2007. 85:503–211.

[21] See R. Scott Nolen, *Exotic Newcastle Disease Strikes Game Birds in California*, JOURNAL OF THE AMERICAN VETERINARY MEDICAL ASSOCIATION NEWS (Nov. 15, 2002); News Release, Texas Animal Health Commission (Jan. 1, 2003) ("END likely was initially introduced into Southern California through illegal importation of infected birds."); Congressman Elton Gallegly, *Smuggling Cockfighting Roosters a Conduit to Bird Flu,* SANTA BARBARA NEWS-PRESS (Dec. 11, 2005).

the actions of private individuals and their veterinarians in quickly diagnosing and containing diseases.

VI. Ethical concerns: Conflicts of Interest in NAIS

The USDA's working groups for the design of NAIS were initially drawn from the working groups established by the National Institute for Animal Agriculture (NIAA). The NIAA is an industry trade organization, and the members of the working groups included many companies who stood to profit directly from the implementation of NAIS, such as tag manufacturers and database management companies. These conflicts of interest permeate the plan and have never been addressed.

Additionally, the use of private databases creates more conflicts of interest and leaves farmers and ranchers vulnerable to the misuse of their confidential information. The recent court decision finding that the NAIS premises registration information is exempt from FOIA does ***not*** address the potential for misuse of that information by private database managers or by those who obtain the information through illegal means such as hacking the databases.

VII. Alternatives to NAIS

We strongly urge Congress to stop implementation of the NAIS and focus efforts on these alternatives:

- Encourage decentralization of the livestock industry to reduce its vulnerability.[22]
- Improve training for veterinarians in recognizing foreign and emerging animal diseases.[23]
- Increase inspections of animals and agricultural products entering the U.S. or crossing state borders and refuse admittance of animals from countries with known disease problems such as BSE and Hoof and Mouth disease.
- Identify high-risk situations and quantify critical factors for livestock diseases of concern, such as the level of contagion, the means of transmission, and the severity of the diseases of concern. Based on the analysis of these factors and of existing programs, develop improvements to existing programs. Limit any such programs to non-electronic means of identification when the animal enters the stream of commerce.
- Improve enforcement and inspections of large slaughterhouses and food processing facilities.
- Address traceability of meat from the slaughterhouse to the consumer.
- Increase testing for BSE, or Mad Cow Disease.

We thank you for your consideration.

Sincerely,

JUDITH MCGEARY,
Executive Director,
Farm and Ranch Freedom Alliance.

SUBMITTED STATEMENT OF BRANDY CARTER, EXECUTIVE DIRECTOR, KANSAS CATTLEMEN'S ASSOCIATION

Mr. Chairmen and Members of the House Agriculture Committee and Homeland Security Committee,

I appreciate the opportunity to present Kansas Cattlemen's position on the facts as to why a mandatory National Animal Identification System (NAIS) should never be implemented. For as you know, through promotion of good health practices, controlling U.S. borders and enforcing human and animal decontamination processes, the U.S. can be proactive in preventing foreign animal diseases and protect the U.S. consumers' welfare. However, implementing a costly, ineffective NAIS is impractical and will drive independent producers out of business, and the end result will be more consolidation of our industry and less national security of our food supply.

The cost for implementing NAIS in the cattle sector as described in the *Benefit-Cost Analysis of the National Animal Identification System* is $175.9 million annually (at a 90 percent participation level). This study states that this significant cost is justified because it is less than ½ of a percent of the retail value of U.S. beef

[22] *See* GAO Report on Agriculture at p. 1.
[23] GAO Report on Agriculture at p. 6

products.[1] However: the cost incurred by NAIS is not by the packers or retailers, but by the producers who receive less than 50% of the retail value of beef. Beef operations with herds of less than 100 beef cows represent the majority of U.S. beef operations and account for nearly half the beef cows in the United States.[2] And yet, according to the Cost-Benefit Analysis, the smaller the operation, the more costly it will be for the producer. The cattle industry cost represents 91.5 percent of the total cost of NAIS, and identification tags and tagging cattle represent 75 percent of the cattle sector's annual adoption cost. These costs are unreasonable and a burden to all producers.

NAIS is not a disease prevention program. Therefore, it does not protect consumer health. Many states already have programs in place that provide animal identification and traceability. These programs include branding, brucellosis testing, and visual tagging of which a majority of producers utilize to identify their livestock. The Kansas Emergency Management Team, should outbreak occur, will immediately quarantine an infected area, notify proper personnel, and halt all movement of cattle throughout the State of Kansas.[3] Neither the USDA nor any state agriculture department has scientific proof that NAIS will improve disease control. NAIS does not address the cause, treatment, or transmission of disease in domestic or wild animals. It does nothing to significantly improve current methods for the identification and tracking of disease. And, to implement a 48 hour traceback through the NAIS is unproven, and with over 96.7 million head of cattle in the United States,[4] this traceback time-frame is unrealistic and unreasonable.

NAIS is not a food safety issue. Contamination of food with *E. coli* and other bacteria occurs at the slaughterhouse or afterward. NAIS tracking stops prior to processing beef. NAIS may help large corporations increase their profit margins by opening export markets.[5] It will also reduce competition in the U.S. cattle industry. It will consolidate the cattle industry through the market power of the packing industry, and market concentration will increase beef prices for U.S. consumers. However, NAIS was not intended as a marketing program. If increasing retail prices and maintaining and opening foreign markets is the intent, then NAIS should be used as a voluntary marketing program, and indicated as such. Instead, NAIS drives producers out of business and drives up the cost of retail beef for our consumers.

Instead of implementing a costly, ineffective, and unproven mandatory NAIS, which will not protect the health of the consumer in any way, Kansas Cattlemen's Association recommends that the U.S. Government adopt and implement a surveillance and identification program already in place. For instance, the current brucellosis program is widely used and administered by veterinarians. Traceability within this program can be conducted within a reasonable time-frame, sometimes within 48 hours. KCA also recommends that the database for storing information must be confidential and continue to be held and maintained by the state. Moreover, KCA recommends that the government enforce regulations to ban cattle from entering the U.S. from diseased countries, to enforce regulations to require TB testing of all imported cattle, to enforce proper human decontamination regulations at all international airports located in the U.S., and to promote good health and management practices for producers. These recommendations will help prevent, deter, and trace diseases. NAIS only inhibits production agriculture instead of helping it as it was intended.

---

[1] U.S. Department of Agriculture, Animal and Plant Health Inspection Service, *Benefit-Cost Analysis of the National Animal Identification System,* January 14, 2009. *http://animalid.aphis.usda.gov/nais/naislibrary/documents/plans_reports/Benefit_Cost_Analysis_NAIS.pdf.*

[2] U.S. Department of Agriculture, Economic Research Service, *Animal Production and Marketing Issues: Questions and Answers,* December 1, 2008. *http://www.ers.usda.gov/Briefing/AnimalProducts/questions.htm.*

[3] Telephone correspondence with George Teagarden, Kansas Livestock Commissioner, Kansas Animal Health Department, May 12, 2009.

[4] Iowa State University, *Iowa Farm Outlook,* February 5, 2008. *http://www.econ.iastate.edu/outreach/agriculture/periodicals/ifo/IFO_2008/ifo020108.pdf.*

[5] U.S. Department of Agriculture, *Animal and Plant Health Inspection Service, Benefit-Cost Analysis of the National Animal Identification System,* January 14, 2009. *http://animalid.aphis.usda.gov/nais/naislibrary/documents/plans_reports/Benefit_Cost_Analysis_NAIS.pdf.*

SUBMITTED STATEMENT OF SUSAN ECKERLY, SENIOR VICE PRESIDENT, PUBLIC POLICY, NATIONAL FEDERATION OF INDEPENDENT BUSINESS

Hon. DAVID SCOTT,
Chairman,
Subcommittee on Livestock, Dairy, and Poultry,
Committee on Agriculture;

Hon. RANDY NEUGEBAUER,
Ranking Minority Member,
Subcommittee on Livestock, Dairy, and Poultry,
Committee on Agriculture;

Hon. YVETTE D. CLARKE,
Chairwoman,
Subcommittee on Emerging Threats, Cybersecurity, Science and Technology,
Committee on Homeland Security,
Washington, D.C.

Hon. DANIEL LUNGREN,
Ranking Minority Member,
Subcommittee on Emerging Threats, Cybersecurity, Science and Technology,
Committee on Homeland Security,
Washington, D.C.

Dear Chairman Scott, Chairwoman Clarke, and Ranking Members Neugebauer and Lungren,

On behalf of the National Federation of Independent Business, the nation's leading small business advocacy organization, I am writing you in regards to the Animal and Plant Health Inspection Service (APHIS) proposed rule mandating the National Animal Identification System (NAIS) [Docket No. APHIS–2007–0096]. This rule would mandate domestic livestock be identified using animal identification numbers, which would cost small and family farms thousands of dollars to be compliant.

NFIB understands the importance of creating a system to respond to a national animal disease outbreak. Such an outbreak would not only severely hurt America's agricultural economy, but damage the economy as a whole. Cattle, swine, poultry and sheep are among the top exports of the United States, and we need to ensure that any government regulations don't reduce the competitiveness of our livestock industry.

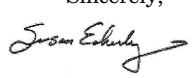
APHIS's recent report on the NAIS benefit-cost analysis concluded that the cattle industry would incur the highest cost on implementation. Cattle Fax reports there are over 800,000 ranchers and farmers in the United States that will be affected. The costs for individual radio frequency identification devices were estimated from between $2.00 to $2.60; for a farm of 500 animals that could cost up to $1,300, plus tagging cost and relevant software. Total cost to the cattle industry is estimated over $200 million. To include swine, sheep and poultry that number jumps to close to $230 million.

Instructing APHIS to fully mandate this program will create another layer of government bureaucracy, forcing ranchers and farmers to take time out of running their business to create new business practices, including filing more paperwork, which slows down operations. According to a 2003 NFIB Research Foundation Poll on *Paperwork and Record Keeping,* the estimated average per hour cost of paperwork and record-keeping for small businesses is $48.72.

NFIB has consistently fought against unnecessary government regulations. We have heard from many small business owners about how this regulation would adversely affect their businesses, and NFIB continues to support a voluntary NAIS program.

Please keep small and family farmers in mind when considering the impact of this program. We look forward to working with you on this important small business and agriculture issue.

Sincerely,



SUSAN ECKERLY,
Senior Vice President,
Public Policy.

SUBMITTED QUESTIONS

Response from John R. Clifford, D.V.M., Deputy Administrator for Veterinary Services and Chief Veterinarian, Animal and Plant Health Inspection Service, U.S. Department of Agriculture

Questions Submitted By Hon. Bennie G. Thompson, a Representative in Congress from Mississippi

Question 1. Do you think a goal of 90% premise registration is attainable under our current voluntary process?

Answer. Under the current voluntary NAIS program, I do not believe 90% premises registration is attainable. We either need to find new methods to encourage participation in the voluntary system or consider putting a mandatory system in place. That is why the Secretary is convening listening sessions across the country regarding this program. We have invited producers, large and small, to tell us what kind of system they feel would work and to talk about solutions to issues that are preventing them from participating in this program. With this feedback in hand, we will review the suggestions and evaluate the range of options for moving this important program forward.

Question 2. What can be done within the voluntary auspice to improve the current system?

Answer. Again, there are a range of options available to Secretary Vilsack to increase the rate of producer participation in the NAIS. But before committing to a course of action, the Secretary has been clear in his commitment to ensuring that USDA work collaboratively with producers, industry, and other stakeholders to address their concerns and move forward with an effective NAIS—whether it is a mandatory or voluntary system. On April 15, 2009, the Secretary held a roundtable with stakeholders representing the full spectrum of views on NAIS. This meeting kicked off a larger listening tour to gather feedback on concerns and, more importantly, to identify solutions that will help us engage producers, industry, and states to move this important program forward.

Question 3. Would having a mandatory process help achieve our goals and what is a realistic timetable by which a goal of 90% premises registered is indeed attainable?

Answer. Developing regulations that require producer participation in the NAIS is certainly one option for securing a high level of participation in the program. Having a critical mass of 70–90 percent is necessary for rapid animal disease tracking and disease containment. We anticipate that 90% premises registration of those operations that move livestock and poultry in commerce could be achieved within 12 months should we make the decision to require producer participation in the NAIS. But, again, before committing to that or another course of action, the Secretary wants to hear other ideas, solutions, and approaches from producers, which is happening now with our NAIS listening sessions.

Question 4. Describe the communication between APHIS and DHS in the event of an identified animal disease? Is there any communication, should there be and at what point?

Answer. Since the Department of Homeland Security (DHS) was formed in 2002, APHIS and DHS officials have worked to share information and clarify roles and responsibilities regarding the response to agricultural health events. These efforts have helped to ensure that each agency's role is well understood and to build partnership between agencies. Working collaboratively, APHIS and DHS have developed a three-tiered incident management response design.

In Tier 1, an incident is managed at the local and state levels. For animal production agriculture, the state could have Federal involvement but it is only those Federal assets stationed in that state. APHIS provides DHS with situational awareness in this tier. For example, during the recent H1N1 Flu incident, APHIS shared Situation Reports with DHS to keep them informed of APHIS activities.

In Tier 2, an incident is managed by the Food and Agriculture Sector, nationally. For animal production agriculture, the Food and Agriculture Sector consists of representatives from state agriculture, industry and industry associations and Federal partners including multiple USDA agencies, DHS, HHS and EPA. In this Tier DHS facilitates preparation for interagency support.

In Tier 3, the Food and Agriculture Sector has determined it requires more resources to coordinate the incident. APHIS and DHS' efforts have clarified that, in these situations, APHIS leads the animal disease incident response, coordinates incident management teams, manages public relations, and takes measures to control and eradicate the disease for the Food and Agriculture Sector. If necessary, DHS coordinates Federal-to-Federal support as outlined in the National Response Frame-

work, mobilizing resources through DHS components (*e.g.,* Federal Emergency Management Agency, Customs and Border Protection) to mitigate impacts of incidents.

APHIS is building a test exercise program that will include a functional exercise to test tier 2 and tier 3 response activities with DHS.

Additionally, APHIS worked with DHS and other Federal agencies to develop the "Federal Strategic Plan to Prevent, Protect Against, Respond To and Recover From Biological Attacks in the United States." This document synchronizes key national and homeland security strategies and actions, provides a unified approach to meet the challenges of protecting the nation and guides the development of subsequent Federal plans (Concept Plans, Operation Plans and Tactical planning efforts both horizontally across the Federal Government and vertically among Federal, state, local and tribal governments, as well as Non-Governmental Organizations, the private sector and international partners). As the next phase in this planning process, APHIS is working with DHS and other Federal agencies to develop the Concept of Operations Plan that specifically addresses the National Planning Scenario #14: Biological Attack—Foreign Animal Disease—Foot-and-Mouth Disease.

Response from Thomas McGinn, D.V.M., Chief Veterinarian, Office of Health Affairs, U.S. Department of Homeland Security

Questions Submitted By Hon. Bennie G. Thompson, a Representative in Congress from Mississippi

Question 1. Describe the communication between APHIS and DHS in the event of an identified animal disease? Is there any communication, should there be and at what point?

Answer. The Department of Homeland Security and the United States Department of Agriculture's (USDA) Animal and Plant Health Inspection Service (APHIS) work closely in preparing for and responding to animal disease outbreaks. During the initial stages of an event, DHS/OHA/Food, Agriculture, and Veterinary Defense Division stays in communication with APHIS for situational awareness, and to provide appropriate assistance as needed.

In addition, DHS communicates with APHIS during all phases of an event through the National Biosurveillance Integration Center (NBIC). As mandated by law, NBIC serves as the interagency information collaboration environment intended to provide the capability for consolidating diverse information impacting the health domain. NBIC is located within the Office of Health Affairs (OHA) in DHS. NBIC integrates information feeds from approximately 400 open-sources and analyzes information to provide a complete biological common operating picture to decision-makers regarding new and emerging and ongoing biological incidents. As an example, during the recent H1N1 flu outbreak, USDA was an active partner providing and receiving critical information regarding the health and infection rate of the nation's swine population.

U.S. Customs and Border Protection (CBP) within DHS also coordinates with APHIS through all phases of an identified animal disease outbreak. CBP Agriculture Specialists (CBPAS) are trained by APHIS in enforcement of USDA regulations governing the entry of foreign animal products and animal by-products into the United States. The mission of CBP's agricultural inspection is "to protect American agriculture and natural resources from the damage that comes from the entry and spread of animal and plant diseases, pests and noxious weeds" from both unintentional and intentional threats to our agriculture and food supply. In the event of an outbreak, CBP would respond at our ports of entry according to APHIS' protocol. Also, APHIS and CBP have an agreement that would make it possible for CBP to provide APHIS with CBPAS to assist APHIS in a foreign animal disease emergency and/or eradication program.

Question 2. How is animal id useful to DHS?

Answer. One of the primary missions of DHS is to protect the nation from catastrophic events. With a highly contagious disease such as foot-and-mouth disease (FMD), early detection is critical to limiting the spread of the disease and its impact on livestock production, related industries, and rural communities. USDA's National Animal Identification System (NAIS) is designed to facilitate rapid identification of animals that have been exposed to diseases of concern, as well as assist efforts to identify the origin or source of the initial outbreak. This information can enhance the ability of first responders to target mitigation efforts to maximize the impact on disease spread. Armed with this information, DHS would be in a better position, when needed, to support effective, targeted, and rapid response by Federal, state, and other partners, and understand potential cascading effects across critical infrastructure and sectors. Such a response, carried out at the Federal, state, local, and private sector levels, must protect the health of our nation's herds, while giving due

consideration to protecting the economic stability of nation's critical infrastructures, including the food and agricultural industry.

Question 3. Both present and absent an animal id system, describe the ability of DHS to coordinate Federal assets or to mitigate risk in an animal emergency?

Answer. Again, DHS and the Department of Agriculture's (USDA) Animal and Plant Health Inspection Service (APHIS) work closely in preparing for and responding to animal disease outbreaks in the United States. Since DHS was formed in 2002, APHIS and DHS officials have worked to share information and clarify roles and responsibilities regarding the response to agricultural health events. These efforts have helped to ensure that each agency's role is well understood and to build partnership between agencies. Working collaboratively, APHIS and DHS have developed a three-tiered incident management response design. In support of these efforts, DHS has several efforts underway to assist APHIS when needed and mitigate risk during an animal health emergency.

First of all, DHS through FEMA has initiated two efforts to provide states with an estimate of how many people and with what qualifications are likely to be needed to manage an animal disease outbreak. Both efforts are being undertaken by the National Preparedness Directorate (NPD) Incident Management Systems Integration Division (NPD–IMSI). IMSI has developed credentialing requirements for 15 Animal Emergency Response Positions, specific to the needs of animals during any all-hazards incident as well as an animal disease outbreak. IMSI has also developed resource typing definitions for seven Animal Emergency Response Teams that states have been required to inventory over the last 2 years. The combination of the credentialed animal emergency responders and the typed teams provides a basis for estimating the number of responders and teams needed to manage animal emergency response in any incident including disease outbreaks.

Second, DHS through the National Biosurveillance Integration Center (NBIC) provides enhanced situational awareness to senior leaders and decision makers in all agencies regarding natural disease outbreaks, accidental or intentional use of biological agents, and emergent biohazards that impact the bio-related domains of human health, animal, plant, food and water or that impact the infrastructure or key assets of the United States. NBIC integrates and analyzes information from over 400 open source and classified information feeds as well as information from twelve participating Federal agencies (including agencies within DHS) to provide senior leaders and decision makers with an integrated biosurveillance common operating picture (BCOP). The 12 Federal agencies that participate in NBIC include the Departments of Agriculture, Health and Human Services, State, Interior, Defense, Commerce, Transportation, Justice, Veterans Affairs, Homeland Security, the United States Postal Service, and the Environmental Protection Agency. In coordination with our Federal partners, NBIC analysts use the information to complete a daily Situational Report. This report is provided to all participating agencies.

○