HEARING TO REVIEW ANIMAL PEST AND DISEASE PREVENTION AND RESPONSE CAPABILITIES

HEARING

BEFORE THE

SUBCOMMITTEE ON LIVESTOCK AND FOREIGN AGRICULTURE of the

COMMITTEE ON AGRICULTURE HOUSE OF REPRESENTATIVES

ONE HUNDRED SIXTEENTH CONGRESS

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HEARING TO REVIEW ANIMAL PEST AND DISEASE PREVENTION AND RESPONSE CAPABILITIES

TUESDAY, MAY 21, 2019

HOUSE OF REPRESENTATIVES, SUBCOMMITTEE ON LIVESTOCK AND FOREIGN AGRICULTURE, COMMITTEE ON AGRICULTURE,

Washington, D.C.

The Subcommittee met, pursuant to call, at 11:02 a.m., in Room 1300 of the Longworth House Office Building, Hon. Jim Costa [Chairman of the Subcommittee] presiding.

Members present: Representatives Costa, Brindisi, Hayes, Cox, Craig, Harder, Carbajal, Panetta, Peterson (*ex officio*), Rouzer, Thompson, Hartzler, Comer, Marshall, Bacon, Hagedorn, and Conaway (*ex officio*).

Staff present: Emily German, Matt MacKenzie, Katie Zenk, Ashton Johnston, Patricia Straughn, Jeremy Witte, Dana Sandman, and Jennifer Yezak.

OPENING STATEMENT OF HON. JIM COSTA, A REPRESENTATIVE IN CONGRESS FROM CALIFORNIA

The CHAIRMAN. The Subcommittee on Livestock and Foreign Agriculture will now come to order. This morning, we have an opportunity to review animal pest and disease prevention response capabilities in last year's reauthorization of the farm bill that we all worked on together. There were some changes and we made efforts to better assist America's poultry industry, and the purpose of this morning's Subcommittee hearing on Livestock and Foreign Agriculture is, in fact, to determine how those changes are coming forth. I want to thank our witness today for joining us to review the challenges that faces American agriculture by animal pests and diseases, and the ability for the United States Department of Agriculture to control those challenges. It is an important topic that many of us have followed these issues on behalf of farmers and ranchers throughout the country, certainly in my district, and we in this Subcommittee take responsibility to oversee the United States Department of Agriculture's response to outbreaks that occur nationwide, and obviously, we take that role very seriously.

The livestock and poultry farmers throughout America are facing difficult times for a number of reasons. Obviously, the trade wars are having their impact: challenging markets. But some have even been faced with issues of natural disasters of floods and other kinds of impacts that they are facing. The last thing we need to do then, is to have to deal with another devastating animal disease outbreak. Clearly, that is something that we want to prevent at all possible costs.

The USDA APHIS Veterinary Services have traditionally and today play a critical role. Working with a host of stakeholders in preventing, monitoring, and responding to disease outbreaks, whether we are talking about livestock operations, large or small are a part of this effort. I am glad that we have Under Secretary Greg Ibach and Dr. Burke Healey with the Committee today to testify.

As we speak, poultry farmers in California, I can tell you from my own personal experiences, are dealing with an outbreak of virulent Newcastle Disease. This Newcastle disease, since May of 2018, over 400 cases of this disease has been confirmed by the USDA, with all but two having occurred in California flocks. Last week, I met with one of the effected egg farmer in my office who told me that they had over 100,000 chickens that had been contacted with the disease.

I think all of us fear that that can spread. Luckily, it was detected and we were able to stop that in the case of that outbreak in the San Joaquin Valley.

The poultry industry knows all too well what happens when a disease gets out of control. Remember, we are only a few years removed from the outbreak of avian influenza that claimed more than 50 million birds and cost farmers millions of dollars to eradicate in parts of our country. And by no means are poultry farmers the only ones at risk.

Around the world today, pork producers are concerned about the African Swine Fever, which has caused the loss of at least 20 percent of China's hog population, with more likely to come, we believe, based on estimates. That already exacerbates the hobbled demand for U.S. feedgrains in that country, which could wreak havoc on the U.S. if it reaches our shores.

We are also conscious of the constant calculating threats to cattle and other species, like foot-and-mouth disease, cattle fever ticks, screwworm, and others. All of these are potential causes of concern for our livestock industries.

As a conferee for the 2018 Farm Bill, it was a priority of mine to make sure that livestock and poultry producers had new tools to prevent these diseases, and the right resources to fight them if they ever did. During that process, we have created two new programs, and I am very interested this morning to hear about the efforts to implement these two new programs: the National Animal Disease Preparedness and Response Program, and the National Animal Vaccine and Veterinary Countermeasures Bank. We reauthorized the National Animal Health Laboratory Network. We think all of these tools are very, very important to ensure that we guard our livestock industries.

I am also proud of the bipartisan House-led effort to secure \$300 million in new funding for animal pest and disease prevention control. I want to thank former Chairman Conaway and certainly Chairman Peterson and others as we came together in a bipartisan effort to do just that.

Today, I look forward to hearing how implementation of this is going on, and those other important programs. I am going to be focused on your timelines in terms of implementation of these efforts within the USDA. I want to hear more on the status of APHIS' efforts to prevent and respond to threats that I have mentioned, as well as many others that keep America's farmers and ranchers up at night. If they keep them up at night, I can assure they keep Members of Congress up at night.

Members of Congress up at night. What is the USDA doing on the timelines to implement the changes in last year's farm bill? Very simply stated, what are you doing to implement the changes, and what are your timelines? What can you tell the Committee this morning?

I think this is critical work. I am committed to staying in touch with USDA. We will use this Subcommittee on a bipartisan basis to ensure that we provide the proper oversight for our livestock and poultry sectors to make sure that we get the strategy straight and on the right track, and that we support your efforts.

In closing, I would also like to get any thoughts that you might have with innovations that are taking place in biological technology. I think it shows promise and certainly, Dr. Healey, I would like to get your thoughts and what promise it shows and what the USDA is doing in that area of innovation as it relates to biological technology.

[The prepared statement of Mr. Costa follows:]

PREPARED STATEMENT OF HON. JIM COSTA, A REPRESENTATIVE IN CONGRESS FROM CALIFORNIA

Thank you for joining us today to review the challenges presented by animal pests and diseases, and the ability of USDA to respond to those challenges. It's an important topic and I have followed these issues on behalf of the farmers and ranchers in my district throughout my career. I take the responsibility to oversee USDA's response to these outbreaks nationwide very seriously in my role as Chairman of this Subcommittee.

Livestock and poultry farmers are facing tough times because of trade wars and challenging markets. Some have even been faced with natural disasters and other challenges. The last thing they need is to have to deal with a devastating animal disease outbreak. USDA-APHIS Veterinary Services play a critical role, working with a host of stakeholders in preventing, monitoring, and responding to disease outbreaks in livestock operations large and small nationwide, so I'm glad to welcome Under Secretary Greg Ibach and Dr. Burke Healey to the Committee today. As we speak, poultry farmers in California are dealing with an outbreak of virulent Newcastle Disease. Since May 2018, USDA has confirmed over 400 cases of the disease with all but two of these accomments in California is a confirmed over 400 cases of the

As we speak, poultry farmers in California are dealing with an outbreak of virulent Newcastle Disease. Since May 2018, USDA has confirmed over 400 cases of the disease, with all but two of those cases occurring in California flocks. I had one of the effected egg farmers in my office last week, who told me that he has lost more than 100,000 chickens to the disease.

Cases of the disease have appeared close to my home in the San Joaquin Valley, the heart of California's poultry industry but luckily it was detected and stopped. The poultry industry knows all too well what happens when a disease gets out of control. Remember we are only a few years removed from an outbreak of avian influenza that claimed more than 50 million birds and cost farmers millions to eradicate.

By no means are poultry farmers the only ones at risk. Around the world today, pork producers are concerned about African Swine Fever, which has caused the loss of at least 20 percent of China's hog population—with more likely to come—exacerbated the already hobbled demand for U.S. feedgrains in that country and which could wreak havoc on the U.S. if it ever reached our shores.

We are also always conscious of constantly circulating threats to cattle and other species like foot-and-mouth disease, cattle fever tick, screwworm, and others.

As a conferee for the 2018 farm bill, it was a priority of mine to make sure livestock and poultry producers had new tools to prevent these diseases from ever taking hold, and the right resources to fight them if they ever did. During that process, we created two new programs, the National Animal Disease Preparedness and Response Program, and the National Animal Vaccine and Veterinary Countermeasures Bank; and we reauthorized the National Animal Health Laboratory Network.

I'm also proud of the bipartisan, House-led effort to secure \$300 million in new funding for animal pest and disease prevention and control.

Today, I look forward to hearing how implementation is going on those and other important programs. I also want to hear more on the status of APHIS's efforts in preventing and responding to the threats I've mentioned, as well as the many others that keep America's farmers and ranchers up at night. This is critical work and I am committed to staying in touch with USDA and the livestock and poultry sectors to make sure we get our strategy right. With that I'll recognize my Ranking Member, the distinguished gentleman from

With that I'll recognize my Ranking Member, the distinguished gentleman from North Carolina, Mr. Rouzer, for any opening remarks he'd like to make.

The CHAIRMAN. With that, I would like to recognize the Ranking Member, the distinguished gentleman from North Carolina, Mr. Rouzer, for any opening remarks that he would like to make.

OPENING STATEMENT OF HON. DAVID ROUZER, A REPRESENTATIVE IN CONGRESS FROM NORTH CAROLINA

Mr. ROUZER. Thank you, Chairman Costa, for holding today's hearing to discuss the latest animal health issues affecting our nation's livestock industry, and to review the U.S. Department of Agriculture's animal pest and disease programs.

This is really, really a critical topic. I would like to say that food security is national security. There is no question that the animal agriculture sector faces pest and disease threats capable of devastating the rural economy and our nation's food supply, and I might add, our general economy as well.

In the lead-up to the 2018 Farm Bill, this Subcommittee held several hearings to discuss the known and unknown threats against the animal agriculture sector. Largely, as a result of the effort of us here in the House of Representatives and the body as a whole, along with the hard work by USDA and the livestock industry, we made an historic investment in the tools necessary for USDA and its state government and industry partners to identify, diagnose, and respond to potential outbreak as part of the 2018 Farm Bill.

In addition to the new authorities provided in the farm bill, other provisions within the Animal Health Protection Act affords the USDA broad authority to detect, control, and eradicate pests and diseases affecting the livestock industry. This robust animal health protection system will continue to be tested, and we must work hard to ensure that we rise to the challenge of combating threats like foot-and-mouth disease, African Swine Fever, avian influenza, PEDV, and many others.

Now, I would like to thank our witness here today, Under Secretary Greg Ibach, along with Associate Deputy Administrator Burke Healey for taking the time to be with us. We look forward to hearing an update on USDA's progress on these farm bill implementation issues, and your continued efforts to protect America's livestock industry.

Mr. Chairman, I yield back.

The CHAIRMAN. Thank you very much, my colleague. I would like to request that Members submit their opening statements for the record so that our witness may begin his testimony to ensure that we have ample time for questions for all of us. With that, I would like to welcome the United States Department of Agriculture Under Secretary for Marketing and Regulatory Programs, Greg Ibach. In this role, the Under Secretary has the oversight for Agricultural Marketing Service, and Animal and Plant Health Inspection Service, which includes, as we noted in our opening statements, the Veterinary Services team that we will be discussing today. I want to thank our witness for being here, and the Under Secretary, as I noted, is accompanied by Dr. Burke Healey, Associate Deputy Administrator for Veterinary Services for Animal and Plant Health Inspection Service, otherwise known as APHIS. Dr. Healey has firsthand experience in responding to animal disease outbreaks, and I look forward to his help in responding to questions that we may have for you.

We will now begin with the testimony. Mr. Under Secretary, you have 5 minutes. You know the rules here. When the light turns yellow, you have 1 minute left, and we would like you to focus on being concise and forthright, and we look forward to the questions.

STATEMENT OF HON. GREG IBACH, UNDER SECRETARY, MARKETING AND REGULATORY PROGRAMS, U.S. DEPARTMENT OF AGRICULTURE, WASHINGTON, D.C.; ACCOMPANIED BY BURKE HEALEY, D.V.M., ASSOCIATE DEPUTY ADMINISTRATOR, VETERINARY SERVICES, ANIMAL AND PLANT HEALTH INSPECTION SERVICE, USDA

Mr. IBACH. Thank you very much, Chairman Costa and Ranking Member Rouzer. Also, thank you to Chairman Peterson and Ranking Member Conaway for being here today as well.

Thank you for the invitation to be here today to give you an update on USDA's animal health efforts. I am Greg Ibach, the Under Secretary for Marketing and Regulatory Programs. With me today is Dr. Burke Healey, the Associate Deputy Administrator for APHIS' Veterinary Services Program.

All of us have an important mission: to help our farmers and ranchers provide high quality agricultural products to feed and clothe the world. To do this, we must keep foreign animal pests and diseases out of the country. Because our agricultural products are clean and free of disease, we are able to maintain and expand export markets.

Thankfully, USDA has a robust set of tools to fight these pests and diseases that we continually evaluate and strive to enhance. Our authority under the Animal Health Protection Act allows us to create a comprehensive system of overlapping safeguards. Before we allow anything into the country, USDA evaluates the disease risk and designs import protocols backed by the best possible science.

The Agriculture Quarantine Inspection Officers at U.S. Customs and Border Protection are on the frontlines of this prevention effort. They inspect cargo and passengers coming into the country to ensure these import protocols are met. If a pest or disease ever makes it into the country, our surveillance and detection programs allow us to identify it and swiftly begin a targeted containment, control, and eradication response.

These tools have served us well. Using them, we have kept serious animal diseases threats like foot-and-mouth disease out of the country for 90 years. Today, the animal disease that currently is most top of mind is African Swine Fever, or ASF. We have been monitoring outbreaks of ASF in Europe and Asia for a number of years. An outbreak in the U.S. would have severe economic consequences, especially considering there is no vaccine available.

While we are confident in the tools we have relied on in the past, I would like to outline several steps we have taken to enhance our safeguards against ASF.

Aside from our longstanding import restrictions, we have worked with CBP to focus inspections on cargo and passengers coming from high-risk areas. We are training 60 new detector dog teams that help sniff out any illegally imported products carried by passengers or in cargo. We are working to identify high-risk pathways for illegal products, trace the origin, and shut down those pathways. Simply put, we find smuggled items, including meat, meat products, and take enforcement actions to prevent bad actors from continuing to illegally move product into the United States.

We have worked with producer groups and veterinarians to stress the importance of biosecurity measures to protect their animals from outside visitors, and to remind them of symptoms to watch for and proper response activities if they suspect an infection.

If under some unfortunate circumstance the disease does come in, we will be ready. We have ramped up our diagnostic capabilities at facilities affiliated with the National Animal Health Laboratory Network. We have reviewed our response plans with our state and industry partners, and have tested those plans through exercises. We have more exercises planned in the coming months, which will include international considerations.

ASF continues to be a worldwide concern. We have met with and continue to work with our international partners. Just a few weeks ago, I participated in an ASF forum in Ottawa to further our efforts with Canada and Mexico, and to establish a coordinated North American approach to ASF.

In addition to our ongoing ASF prevention efforts, we are also actively working to combat virulent Newcastle Disease in California. I am sure many of you have been keeping a close eye on those efforts, and I am happy to answer any questions you might have.

Finally, we are very appreciative of the resources provided in the farm bill. As you know, the farm bill entrusted the Secretary with significant discretion to prioritize funding for what we call the three-legged stool. These three legs include the Laboratory Network, the Animal Disease Preparedness and Response Program, and the U.S. Vaccine Bank. We are evaluating all the possible implementation options in hopes of designing these programs for longterm success. We have met and continued to meet with interested stakeholders to gain insight and guidance from all segments of the industry to address these various disease concerns.

Mr. Chairman, this concludes my statement. I would be happy to answer any questions that you or Members of the Subcommittee may have.

[The prepared statement of Mr. Ibach follows:]

PREPARED STATEMENT OF HON. GREG IBACH, UNDER SECRETARY, MARKETING AND REGULATORY PROGRAMS, U.S. DEPARTMENT OF AGRICULTURE, WASHINGTON, D.C.

Chairman Costa, Ranking Member Rouzer, and Members of the Subcommittee, I am pleased to be before you today to discuss pressing animal health issues and provide an update on the U.S. Department of Agriculture's (USDA) efforts to address them. Secretary Sonny Perdue has charged all of us at USDA to "do right and feed everyone." It is a mission that I, in my role as Under Secretary for Marketing and Regulatory Programs (MRP), take to heart every day. At MRP we strive to help our farmers and ranchers produce high-quality plants, animals, and related products that are in demand all around the world, and to protect and preserve export markets to facilitate the clean, safe trade of those goods.

Central to those efforts is our ability to keep harmful foreign plant and animal pests and diseases out of the country. One of the two agencies I oversee, the Animal and Plant Health Inspection Service (APHIS) leads those important actions. Given today's hearing topic, my testimony will focus on APHIS' animal health function. Using its authority under the Animal Health Protection Act, the agency has created a comprehensive system of overlapping safeguards that protects U.S. agriculture from foreign animal pests and diseases.

APHIS, using the best available scientific research, identifies pests and diseases of concern around the globe and implements necessary mitigations to reduce risk prior to entry of animals or animal products into the United States. Upon entry, animals and animal products are subject to inspection to ensure that importers are meeting our rigorous animal health import requirements. APHIS trains specialists at its partner agency—U.S. Customs and Border Protection (CBP)—to identify and detect potentially problematic imports. Beyond import inspections, CBP also employs airport passenger inspection programs, which include the highly successful detector dog program, to help identify and intercept illegally imported meats and other products that may harbor disease.

Should pests or disease make it into the country, APHIS' surveillance and detection programs allow us to identify them and immediately initiate a targeted response program to swiftly eradicate the pest or disease.

The importance of these programs has been evident in recent years. The 2014–2015 outbreak of highly pathogenic avian influenza in the Midwest was our nation's largest ever animal health disease outbreak. The impacts to individual producers and taxpayers were significant, but ultimately, USDA and our state and industry partners were able to marshal all available resources to successfully combat the devastating disease. Our efforts eventually proved effective, but there were many lessons learned along the way—chief among them, the importance of proper biosecurity. While our priority is always prevention, when an outbreak does occur we can all work together to limit its spread and to reduce the size of the impact.

In a more recent example of a highly successful response effort, USDA was able to eradicate an outbreak of New World screwworm from the Florida Keys in 2017. As soon as the livestock pest was identified—the first identification in fifty years— USDA and its partners sprang into action. Working with state and local partners, we began active surveillance in the region to identify the pest's location and conducted inspections of animals and pets in the area and those passing through. To eradicate the pest, we used sterile insect technology, releasing over 150 million sterile flies that killed off the small population in a matter of months. Our swift efforts limited the spread and effects of this devastating pest while minimizing trade implications.

USDA is also in the midst of addressing an ongoing outbreak of virulent Newcastle Disease (vND) in Southern California. Until the outbreak began last May, we had not seen this disease in 15 years. Using his emergency authority under the *Animal Health Protection Act*, Secretary Perdue made available \$45 million in emergency funding to enhance our ability to fight this disease, which is mostly affecting backyard poultry. We are working closely with our state partners to enhance surveillance and detection activities and to ensure euthanasia of potentially exposed birds. This funding has also allowed us to work closely with commercial properties to strengthen biosecurity and to increase outreach to backyard producers to help slow the spread of the disease. APHIS has done a lot of work in recent years to promote regionalization with our foreign trading partners, and thankfully, that work seems to have paid off. Trade disruptions have been minimal with most of our trading partners limiting export restrictions to the county or regional level. Other than those directly affected by the outbreak, most poultry producers have seen little impact from this disease, thanks to our efforts.

African Swine Fever

Our overarching prevention strategies and lessons-learned from these and related response activities have informed USDA's efforts to address the growing threat of African Swine Fever (ASF). We have effectively protected against ASF thus far, but its continuing spread throughout Asia is of great concern. ASF is a highly contagious and deadly virus that affects domestic and wild pigs. However, it is important to note that this disease does not pose a risk to human health, and it is not a food safety concern.

Nevertheless, should the disease ever enter our country, the effects on individual producers, the thousands of businesses that support the swine industry in their local communities, and the economy at large, would be severe. There is currently no ASF vaccine, leaving depopulation of infected and potentially infected animals as the only viable method of eradication. A positive detection could have major implications on trade—likely resulting in the immediate shutdown of vital export markets. While we have worked hard to promote regionalization and would push our trading partners to limit trade restrictions, it would take time to fully restore these markets.

Despite these concerns, I want to provide some assurances. Even before the recent ASF detection in China, USDA was closely monitoring outbreaks of the disease throughout Europe and determining necessary actions to keep this devastating disease out of the country. We have a number of longstanding tools and processes in place that we continue to evaluate and enhance.

[•] First in our line of defense are our import restrictions. We currently do not allow pork and pork products into the country from China, and we have not in many years, due to the presence of other diseases such as classical swine fever and footand-mouth disease. We have kept these diseases out with the tools we have in place, and we believe we can do the same with ASF.

Second are enhanced inspections and travel notifications. We worked with CBP to ensure their focused attention on commodities and passengers coming from highrisk areas. CBP looks closely at cargo coming into the country from these areas to ensure no illegally sourced meat products are coming in. Additionally, passengers CBP deems at highest risk are subject to secondary agricultural inspections to ensure they are not carrying meat or meat products that could harbor the virus, or that other possible risks—such as on-farm visitation—are mitigated.

Through its National Detector Dog Training Center in Georgia, APHIS is training 60 additional beagle teams, up to a total of 179, for CBP's use during inspections to detect and identify agricultural commodities that may harbor pests and diseases, including ASF. These dogs are being deployed at airports and facilities around the country. We have also worked to notify international travelers—through voice announcements and signage at ports of entry—of the potential danger of bringing in seemingly harmless food items that may harbor and spread dangerous pests and diseases like ASF.

Additionally, APHIS, through its Smuggling Interdiction and Trade Compliance (SITC) program works to identify and close down high-risk pathways for smuggled goods and products. This includes efforts to track down meat and meat products smuggled into the country and illegally sold at ethnic markets, and to take enforcement action against those involved in those illegal activities.

Third, we have ramped up our ability to rapidly diagnose this disease. We have greatly expanded the number of facilities affiliated with our National Animal Health Laboratory Network (NAHLN) that can detect ASF. We now have 44 laboratories and 170 laboratory personnel approved to test for this disease allowing us the ability to review over 38,000 samples a day and providing the surge capacity to quickly diagnosis and swiftly eradicate the virus should it enter the country.

We have also worked closely with a variety of stakeholders to raise awareness of ASF. We have engaged producer groups regarding the importance of biosecurity and on-farm protocols to prevent the disease and mitigate farm-to-farm transmissions. Additionally, we have worked to ensure producers and veterinarians alike are familiar with ASF symptoms and are aware of the proper response actions should they suspect infection.

We continue to work closely with our counterparts in Canada and Mexico to strengthen and coordinate prevention and preparedness measures across North America. A few weeks ago, I attended the ASF Forum, an international event hosted by Canada that included animal health officials and agricultural leaders from around the world. We discussed common concerns about ASF and the ways we all need to work together to limit the disease's spread while still maintaining trade. We are committed to continuing these important discussions and keeping you and our industry partners apprised of their progress.

Finally, we have held and will continue to hold ASF response exercises with states, and we have reviewed and updated our ASF response plans to ensure our strategies for responding to ASF-which are similar to how we would respond to many other foreign animal diseases-are up-to-date and understood by everyone who would have a role in carrying them out.

The Farm Bill and Animal Health

While we have a robust set of tools to address ASF and other foreign animal pests

and diseases under our existing authorities, I was pleased to see and greatly appre-ciate the new tools Congress gave us as part of the 2018 Farm Bill. In addition to the increased support for the existing NAHLN, the bill created two new programs: the National Animal Vaccine Bank and the National Animal Disease Preparedness and Response Program (NADPRP). NADPRP will help us keep foreign pests and diseases out of the country. The enhancements to NAHLN will allow us to detect and diagnose disease to improve our response capabilities. The vaccine bank will help us recover from certain animal health diseases. Together, these three programs will work together, building off our existing authorities and tools, which enhances our ability to protect, preserve, and even expand, foreign trading markets for the high-quality animals and animal products our farmers and ranchers produce.

The vaccine bank, which is to be primarily focused on a vaccine for foot-andmouth (FMD) disease, will be an effective insurance policy should that disease strike. FMD vaccine would provide an additional tool to limit the spread of the disease and allow for a more rapid road to recovery on a path that reopens export markets

However, the vaccine bank will only be useful should the disease enter the country. Thankfully, as with ASF, we have proven steps in place to keep it out in the first place, and the NAHLN and the NADPRP program will go a long way to helping us identify and close any gaps in our animal disease prevention programs for FMD and other foreign animal diseases. As we envision the NADPRP program, states, universities, industry and other groups would suggest targeted projects and research that would advance our animal health mission. After an evaluation process, we would fund the most promising of those projects, relying on our partners to carry them out, thereby expanding our ability and knowledge with their expertise. We have had great successes with a similar plant health program, and I am confident that these new projects will prove equally as effective.

We recently held a listening session with stakeholders on these programs and were encouraged to hear tremendous support for each of them. Like you, we want them up and running as quickly as possible and are in the process of evaluating all possible implementation options. But as you know, the farm bill entrusted the Secretary with significant discretion as to how to carry out these programs, and we want to ensure we make the right decisions to set these programs up for long-term success. We certainly appreciate the flexibility provided by the farm bill and its noyear funding, and also your patience as we work through this important process.

Conclusion

Whether it's our focus on addressing the growing threat of ASF, or implementing the farm bill, USDA and our dedicated employees remain committed to supporting our farmers and ranchers by keeping foreign animal pests and diseases at bay. We have, and continue to build upon, a robust set of tools and strategies for preventing and combating ASF and other potential threats. These and similar efforts have proven effective for years. With your continued support—and that of our state, industry, and global partners-I am confident they will prove successful for years to come

This concludes my statement. I would be happy to answer any questions that you or the Members of the Subcommittee may have

The CHAIRMAN. Thank you very much, Secretary.

I would like to, at this time, defer to the Chairman of the Committee who has questions, and it is the appropriate protocol. Chairman Peterson, you are recognized.

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

Mr. PETERSON. Thank you, Mr. Chairman. Thank you, Mr. Ibach, for being here.

As you know, we had High-Path Avian Influenza in my district and we learned some lessons from that, and that is one of the reasons I was such a strong supporter of getting this mandatory money in place so you guys can plan for the future.

In my district, the hog producers are very concerned about this African Swine Fever issue, and I brought this up last week, and I appreciate the efforts that you guys are making to control the stuff coming in on the airplanes and so forth.

But what I am wondering is I have heard there is a lot of research going into finding a vaccine, and that is underway, as I understand it. But what other research or work are you doing at USDA to try to figure out how to control this stuff if it ever does get into the country and take a hold here? What kind of work are you doing to understand how the virus moves from herd to herd and how to clean up infected sites and all of those issues that we learn about with the high-path AI? I would assume the Chinese are dealing with this, so I just kind of wondered where you guys are at and what your strategy is to put this together so we are ready, God forbid, if this ever ends up in the United States?

Mr. IBACH. You are correct that there is a lot of research being done on all kinds of fronts with African Swine Fever. African Swine Fever has proven to be a tough disease to find a cure for, or a vaccine for, and even to understand completely how we can decontaminate or disinfect a premises once it becomes present in that building or facility.

On the vaccine side of things, we still believe we may be as long as 8 years from finding a vaccine that is effective. We are working on diagnostics right now in cooperation with Canada through ARS research to try to have different tools available to us to determine if the disease is present in a population.

Just as you mentioned with High-Path Avian Influenza, we learned at that time that biosecurity measures were key. And even though we thought we had good biosecurity measures in place, we learned as the disease progressed that maybe we didn't have quite the stringent measures that we needed to have in place. And so, that is one thing that we hope we learned from that experience that we are sharing with the swine industry, and trying to work through at this time to make sure not only do we have those biosecurity measures in place at the border, but that we are also working with individual swine producers across our country to make sure they are thinking about how they are protecting themselves from exposure from outside visitors that could bring the disease into their operations.

Mr. PETERSON. Are they engaged in this across the whole industry? I mean, are they really paying attention at the individual producer level?

One of the things we found out with the high-path avian issue, we had a whole bunch of people staying in one hotel or in one apartment building that were working at five different farms, and they were coming in at night and so forth and going back out. Is that kind of thing on the radar screen of the hog producers? Are they being informed about this, and is their industry focused on it?

Mr. IBACH. Yes. We are working very closely with the industry. I probably speak almost personally once a week with either a lead-

er at NPPC or one of their veterinarians on staff there. We continue to try to talk about all kinds of measures that we will take if the disease does become diagnosed here in the U.S., and so I think that we are very focused. The swine industry is very aware of the devastating economic impact it could have, not only on individual producers, but on their industry as a whole, and our economy would feel it if we had a widespread disease here in the U.S. I feel we are very focused on communication and working together.

Mr. PETERSON. Well, thank you, and thank you for what you are doing to put this together. I think you put it on the fast track, and hopefully nothing will come of it, but we are going to try to be ready in case something does. Thank you for your service.

Mr. IBACH. Thank you.

The CHAIRMAN. I want to thank Chairman Peterson for his focus and his efforts on behalf of this Subcommittee, and all the Subcommittees within our House Agriculture Committee.

Congressman Rouzer and I both, as I noted earlier, respect protocol, and I want to therefore defer to the Ranking Member of the House Agriculture Committee, Congressman Conaway.

OPENING STATEMENT OF HON. K. MICHAEL CONAWAY, A REPRESENTATIVE IN CONGRESS FROM TEXAS

Mr. CONAWAY. Well, thank you, Mr. Chairman. I appreciate you not saying you respect age or old age, whatever it is.

Greg, the veterinarians are a key part of everything that we do. Particularly in rural America, there is a shortage of livestock veterinarians that practice, I mean, we have some 43 counties in Texas that don't have a veterinarian, most of those are in south and west Texas; we have 6,600 veterinarians in Texas, and 180 of them practice in the livestock business. And so, a little shout out to Texas Tech University for fighting their way through the legislative process to establish a large animal vet program there at Texas Tech to begin to try to meet some of these shortages.

Are you seeing this same trend in other states besides Texas? And then also, what are the implications for local economies, animal health, and public safety if we don't have a requisite number of veterinarians who service livestock?

Mr. IBACH. As director of ag in Nebraska previous to coming to USDA, the shortage of large animal veterinarians was not lost on me in that position. In fact, we utilized some of the programs that Congress had authorized to be able to recruit and retain large animal veterinarians.

Part of the shortage is that being a large animal veterinarian puts you at odds with the elements in some of your practice at times, and as vet school-screened students to come into vet school, sometimes the students that are happy to be out on a ranch in blizzards or in cold weather, rain, sleet, and snow, aren't the same students that are going to score a perfect score in organic chemistry or some of those disciplines that I think have gained more emphasis in the selection process.

In order to also help address the problem, not only the programs that Congress has authorized, but also an emphasis on aligning and selecting students that want to really be large animal veterinarians is important. Mr. CONAWAY. In Texas, I am a CPA and we periodically go through, and the profession itself goes through, an analysis to say at entry level point, what are those qualifications? What are those deals that qualify folks? Is it a similar process for veterinarians across the United States that would look at those standards of what really is necessary to get somebody into vet school?

Mr. IBACH. I think there is a lot of variation between vet schools. Obviously, Texas Tech has taken a focus and looked at large animal as a specific need and sought to prioritize that. In other areas of the country in urban areas where small animal practices are important too, maybe that same focus isn't in place. I think that we need to look at the supply and demand of each category of veterinarian and try to see how we best meet that.

Mr. CONAWAY. I appreciate that.

Back on the African Swine Fever and the vectors by which it gets here. I understand we import a significant amount of organic feed from China. If that feed goes through some sort of radiation process, does that change the standard of organics, and what are we doing reference vectors other than meat that might be bringing that disease to us?

Mr. IBACH. Organic feed and soybeans specifically has been an issue or an area of concern for quite a while. And so, I actually on the AMS side have access to looking at those numbers of imports of organic products, and we have seen a real downturn in the amount of organic products coming from China, especially in the feedgrain side and the oilseed side of things.

That is something that we also are working very closely with the pork industry on, their concerns over that as well. And we had them in a few months ago and actually talked about 17 different areas of concern. Feed was one of them.

As we look at trying to address the concerns in feed, we don't have the same science to analyze the risk there that we have in some of the other vectors that we are seeking to control. And the swine industry is highly dependent on some imports from China, especially in the micronutrient area. And so, shutting down all imports of feed would actually hurt the swine industry. We have agreed to work very closely with them on research to try to determine what, if we did take measures to address the concerns there, would actually be based in science, and what actions we would take that would make a difference. And at this time, in agreement with the swine industry, we haven't taken any additional steps.

Mr. CONAWAY. Thank you, Mr. Secretary.

Mr. Chairman, I yield back.

The CHAIRMAN. All right. The gentleman yields back.

As I said in my opening comments, one of the focuses this morning I wanted to do is to see where you are in terms of getting the programs up and running as soon as possible. Can you tell us what the timeline currently is with the National Animal Disease Preparedness and Response Program, as well as the National Animal Vaccine and Veterinary Countermeasures Bank?

Mr. IBACH. We believe at USDA that all three legs of the stool are important and play a role in the steps we are taking.

The CHAIRMAN. No, I know. You said that, but what is the timeline?

Mr. IBACH. We are prepared to be able to meet our expectations to invest at least the first \$5 million in the preparedness effort before the end of the year. We are meeting regularly with not only the—

The CHAIRMAN. How about the countermeasures bank?

Mr. IBACH. The countermeasures bank, we are meeting with poultry as well as swine and beef to understand how we might balance that—

The CHAIRMAN. But you don't have a timeline there yet?

Mr. IBACH. We hope by the end of the year we might be prepared to advertise or put out an RFP to—

The CHAIRMAN. And with the changes that have been made to the National Animal Health Laboratory Network in the farm bill last year, where are you in terms of implementing those changes?

Mr. IBACH. We continue to invest money in the laboratory network. Most recently, we invested money to be able to increase the capability of that lab network to test for African Swine Fever, and we are going to continue to evaluate where we can bolster that network.

The CHAIRMAN. Well, many of us are hearing different things from the industry folks that are dependent upon that.

What alarms me, Mr. Secretary, is that the President's budget request for APHIS in the Fiscal Year 2020 does not show any overall increase in spending from the 2018 levels. That would be difficult enough, but in fact, it proposes to cut the National Animal Health Laboratory Network, as well as other key programs within your budget. The point of these new authorities and funding was not to reduce the funding in existing areas or to replace your current work. I guess what I am looking for, as well as Members of the Subcommittee, what assurances you can give me that the new mandatory money you are getting for the farm bill will actually be used to improve our preparedness and response capabilities, and not offset budget cuts in other areas?

You have been around long enough to know the President proposes and the Congress disposes, so we are working on the budget, but I hope that we are going to have a budget that allows you to implement the changes.

Mr. IBACH. As a livestock producer myself and a beef producer, I understand the importance of animal health at a producer level, as well as at a regulatory level. We look forward at APHIS to being wise stewards of whatever—

The CHAIRMAN. No, I understand that, and you are representing the Administration. I get that, but the bottom line is, I certainly don't expect you to do more with less. That wasn't why we made the changes last year.

Mr. IBACH. I understand that, sir.

The CHAIRMAN. And those are the things we are going to keep coming back to you on this to see how that is going.

Let me get a little local here. As I noted, we had the egg producers in here last week. Some folks got some nice omelets. But one of my local producers complimented the USDA in response to the outbreak, but they were frustrated that in terms of the indemnities because of the avian flu losses that we had in California, that they were based on prices that didn't reflect the markets in California, which were higher in terms of the reimbursement rates. Is there some way to make sure that indemnities better match market values?

Mr. IBACH. That is one of our constant struggles, and the indemnities is something that we have worked on to try to make them appropriate without making them attractive to have animals brought in to be able to take advantage of the indemnity.

When we look at production birds *versus* some of the exhibition birds that we are looking at, there can be a wide range in what producers deem the value of those birds to be.

The CHAIRMAN. No, I understand there is a dispute, but obviously, we would like you to work that out and so that the indemnity reimbursement is fair and equitable based upon regional markets, and that is the question there.

I have also got a question with regards to foot-and-mouth disease, which is a huge concern for cattle, sheep, and pork. The recent Government Accountability Office made many recommendations on how USDA could improve your preparedness. What actions have you taken?

Mr. IBACH. Yes. To improve preparedness against foot-and-mouth disease?

The CHAIRMAN. Right.

Mr. IBACH. I think that that is part of what we are leveraging at the border, how we work with CBP to identify countries that are of greater risk at perhaps being a vector for it to come into the United States.

The CHAIRMAN. Chairman Peterson asked if I would yield, and I would obviously always honor the Chairman's request.

Mr. PETERSON. Just 10 seconds.

I forgot to ask, on behalf of Mr. Vela and myself, we have been down looking at fever ticks in Texas. Would you give us an update? Mr. Vela sent you a letter, but I would like an update on what you are doing with fever ticks and how it is going to play into whatever you are doing with this new agency.

Mr. IBACH. Yes, fever ticks continue to be a pressure on our southern border, and we have worked very hard to try to maintain that permanent quarantine zone.

I am also pleased to report that with the change of Administration in Mexico, I had the opportunity to meet with some of the leadership there, and they pledged their support to try to do more on the Mexican side of the border, which would be very helpful if they help push back the fever tick populations from the border with what we want to accomplish there.

The CHAIRMAN. Was the gentleman from Minnesota's question answered?

Mr. PETERSON. We are good.

The CHAIRMAN. All right. I now would like to yield to the Ranking Member of the Subcommittee, Congressman from North Carolina, Congressman Rouzer.

Mr. ROUZER. Thank you, Mr. Chairman.

Obviously, African Swine Fever is a big topic of concern. Certainly, in my State of North Carolina, we have a lot of pork production in my neck of the woods. Can you walk us through what would happen if ASF is found in Mexico or Canada, and then follow up to that, do we have a coordinated North American strategy with Mexico and Canada on this issue?

Mr. IBACH. We are working on laying the groundwork to have a coordinated strategy in place here in North America. We have worked more closely with Canada up to this point in time because of the live animal movement that goes back and forth between Canada and the U.S., but Mexico is also a concern.

The first thing we would do if a disease was identified in one of those countries is, after consultation with the CVO in that country, decide what animal movement we needed to limit or regulate until we were able to determine if they had controlled and contained the spread of the disease in order to protect our U.S. swine industry.

Mr. ROUZER. Do those two countries have the resources? Do they have the apparatus in place to address it adequately, or is it woefully inadequate?

Mr. IBACH. Canada has a very similar network in place that we have in the United States. They have been very worried. Their producers have been very worried because the export market is a higher percent of their domestic production even than it is for us, so it is very scary to them, and they have worked very hard to be prepared.

Mexico, I know it is on their radar screen and they participated in a symposium in Canada as well. We aren't as familiar with where they are at, but do have confidence that we would be able to work with them if they did diagnose the disease.

Mr. ROUZER. You mentioned exports. Obviously, that is important for us. Hypothetically, worst case scenario we have an outbreak here in the United States. What do we have in place from a trade perspective in terms of mitigating that trade fallout?

Mr. IBACH. We are working on a regionalization agreement with Canada right now that would allow us to try to establish regionalization. As you know, in the poultry industry, we have outbreaks of low-path AI that result in trade implications, but because of regionalization agreements, we are able to keep those at the county level, in many cases, sometimes at the state level to those export restrictions. We want to be able to establish that with pork as soon as possible. A lot of it will depend on our early diagnosis, our ability to contain the disease, and our ability to assure trading partners that we do understand the nature of the spread of the disease.

Mr. ROUZER. Can you elaborate a little more on the surveillance measures that you have in place, not only for African Swine Fever, but the other diseases out there? What APHIS is doing in particular in coordination with state governments and private industry, and others?

Mr. IBACH. That is our major focus on surveillance as well as being alert and vigilant for symptomatic expression of the disease is very much reliant on our state partners. And so, we are communicating with them. Part of the hope in the disease preparedness portion of the farm bill that Congress identified is to be able to work even more closely with those state partners to give them more tools to develop a network that we can rely on. Mr. ROUZER. Is there a fairly large discrepancy between the states or disparity between the states in terms of what they have in place, and what are we doing to help equalize that?

Mr. IBACH. I think that the states have worked very hard, especially those states that have a large livestock populations that rely on them and are economically dependent on the livestock industry. They have worked very hard to be prepared.

USDA has worked very closely with them and continues to communicate with them to help them understand the importance of being prepared. We have had a number of exercises over the past decade, mainly focused on foot-and-mouth disease, but the principles are the same if we would have another disease. The same type of control and containment measures are universal.

Mr. ROUZER. Thank you. Thank you both.

Mr. Chairman, I yield back.

The CHAIRMAN. All right, the gentleman yields back.

The Chair will now recognize the gentleman from New York, Congressman Brindisi.

Mr. BRINDISI. Thank you, Mr. Chairman. [audio malfunction in hearing room] requirements are adequate to keep the U.S. safe?

Mr. IBACH. I believe so. They are requirements that we have relied on for years and decades, and for 90 years now we have been able to keep foot-and-mouth disease out of the U.S. using these protocols. In the face of the threat that African Swine Fever poses right now, we have even raised the protocols and the awareness of the protocols, our coordination with Customs and Border Protection to have them be a full partner with us is at an all-time high. And so, we are quite confident yet.

Mr. BRINDISI. Outside of your testimony, what other types of animal pests or diseases are of current significant concern to USDA?

Mr. IBACH. Classical Swine Fever probably wasn't part of my testimony. That is another disease that is prevalent in many countries across the world that we are concerned about. Foot-and-mouth, of course, is one of the diseases that we are concerned about. PRRS we have here in the United States, but it is more prevalent in other countries that we continue to be concerned about as well.

Mr. BRINDISI. I want to ask about something that is of concern to folks on the East Coast, the long-horned tick. It is an invasive pest from East Asia. It has been found in New Jersey and other East Coast states, and as a representative from New York with over one million head of cattle, that is very concerning to me as well. The pest reproduces asexually, which makes it particularly concerning to spread rapidly, and according to the literature, it can transmit a wide variety of diseases, especially for cattle.

What is the plan for making sure this tick doesn't become an important U.S. vector of livestock disease?

Mr. IBACH. We have some experience in dealing with ticks from our southern border and along Texas, and we will continue to see whether or not we need to put control measures in place in other portions of the United States to protect against other ticks that could be of interest.

There may be an endemic population in some areas already, and we need to do research to understand the threat that they might pose.

Mr. BRINDISI. Okay. I do want to just follow up a little bit on the Chairman's questions, because I am also very concerned about the President's budget request for Fiscal Year 2020, which reduces the activities of the National Animal Health Laboratory Network by over \$5 million per year.

Just outside my district is Cornell University, which is a level 1 lab located not too far from my district, and they do great work. With so many diseases of high concern present around the world, why would you request this decrease, especially after Congress strongly supported this function? Mr. IBACH. Some of the shift was to be able to make sure we had

funds available for the NBAF facility that is being built near Kansas State University. But we also do not take lightly the importance of the lab network, and the importance of having the proper diagnostic abilities located in all areas of the United States.

Mr. BRINDISI. Okay, and just really briefly, can you comment on what you are doing to encourage veterinary workforce training and recruitment in critical fields, because I am hearing a lot about shortages throughout the country.

Mr. IBACH. Well thanks to Congress, USDA has several programs available to it to be able to support especially large animal veterinarians, and we continue to work with states to be able to grant out those dollars and have them be effectively used.

Mr. BRINDISI. Thank you.

Mr. Chairman, I yield back my time.

The CHAIRMAN. The gentleman yields back his time, and the chair will now recognize the Congresswoman from Missouri, Congresswoman Hartzler.

Mrs. HARTZLER. Thank you. The CHAIRMAN. The "Show-Me State."

Mrs. HARTZLER. That is right, the "Show-Me State." I appreciate that, Mr. Chairman. I want to commend you for the new surveillance program for the African Swine Fever. That is very encouraging and very, very important, and I was interested to hear about the dog teams that you have secured. I was just wondering, how long will it take to get them trained and ready, and when can we expect them at the ports?

Mr. IBACH. There are several components that go into it. We are acquiring dogs right now. Some of those are shelter dogs, when we can find beagles in the shelters that are of the right age and health status to be able to incorporate into our program. We are also working with Customs and Border Protection to identify the handlers that get trained at the same time as the dogs, and we already have identified some teams to be able to put in place in the training program. And so, as they graduate from that training program, we will be deploying them periodically throughout the next year.

Mrs. HARTZLER. How long is the training, when they go into training?

Mr. IBACH. Six to 12 months, Dr. Burke says.

Mrs. HARTZLER. Okay, very good.

We have heard a lot of discussion here already about the ticks, and this is something that is devastating this whole country, but certainly my district, Lyme disease. I do believe it is an epidemic, and it is impacting many individuals with long-term health problems and as well as livestock. What efforts has USDA found to be successful in controlling tick-borne diseases in animals, and what experience does USDA have to lend to the U.S. as a whole in controlling the spread of Lyme and other tick-borne diseases, including to people?

Mr. IBACH. I might just make a few comments, and then I will let Dr. Healey maybe go into more depth on this question.

But this is one of the cases where Secretary Perdue's one USDA philosophy is very important to us. We work with ARS and REE to understand the science and have research to be able to base action at APHIS on.

Dr. HEALEY. Thank you. As you know, we have done several projects in the past, so cattle fever tick being the most visible one. That tick was throughout the South and was pushed back to that small strip in Texas.

The challenge that we are having today is the tools that we have used, and historically organophosphates and other types of tools and coming up with new mechanisms and new tools. And as the Under Secretary just identified, we are working with ARS to develop new tools that we can utilize. Some of those are vaccines that we can use. There are novel uses of current drugs that are out there that we can utilize, but even going into other types of materials that are not drugs, so essential oils and things of that nature have even shown some benefit.

Trying to develop those better tools and tools for the future that aren't going to be a challenge through the regulations at EPA and the other types of environmental issues that we can develop.

Mrs. HARTZLER. Great. I have an entrepreneur in Missouri that has developed a nutrition supplement that can be added to feed for deer, domestic deer at this point, and it repels ticks. And he shows a lot of promise there, so I may visit with you back about that, because that might be something we can utilize.

Just in the minute and a half left, I wanted to switch to the announcement last week that a Chinese firm has entered into a partnership with UK-based livestock genetics company to bring to Chinese markets gene edited pigs resistant to the PRRS virus, and also develop commercially available African Swine Fever resistant pigs. And since it is so hard to seek approvals from the FDA, it would place U.S. farmers at enormous risk and disadvantage if other countries can access these innovations, but U.S. producers can't. Can you detail what steps USDA has taken to engage with the FDA to make them aware of the needs of farmers, and has any work been done to try and find a more workable regulatory pathway so our pork producers and farmers have that same opportunity for those advanced genetics?

Mr. IBACH. I share your concerns that as we see the innovation being identified in many cases here in the U.S. at our research institutions, that we are seeing other countries as offering the pathway to commercialization. Horned dairy cattle are being commercialized in Canada. Brazil and Argentina have both invited in gene editing for projects that they are looking to commercialize. It could put U.S. producers at a disadvantage.

At the same time, gene editing offers a great opportunity to address some of the consumer concerns we have. If we can eliminate disease through gene editing, we don't have to use antibiotics to treat sick animals.

Some of the animal welfare concerns that are out there, if we can suppress sexual maturity so that we can eliminate castration, again is something consumers may find of value.

I think that gene editing is something that we do need to work on together with FDA. We have had some very cursory conversations with FDA to see what their vision for their path forward on gene editing is. Perhaps there is an opportunity for us to work together with FDA to find a solution similar to the one we found with cellular protein where we split that jurisdiction to work together to move it to commercialization faster.

The CHAIRMAN. Thank you, Mr. Secretary. The gentlewoman's time has expired. We thank you for your responses.

The chair will now recognize the gentleman from California, my neighbor, Congressman TJ Cox.

Mr. Cox. Thank you, Mr. Chairman, and thanks for calling the hearing today. Mr. Under Secretary and Dr. Healey, thanks for being here. I appreciate the Chairman bringing up the concerns of our California egg producers as they deal with the outbreak of Newcastle disease on one side, and then the other point that he brought up, looking for equitable indemnities for lost production.

As you well know, the disease is a major threat to our state's egg producers, and certainly once again, I want to reiterate the need to prioritize a response for eradicating this disease and certainly to look for the equitable indemnity payments to better reflect market value of our California egg prices, and certainly would like to see if you have something you have written about that to get over to the Committee and to our office.

With specific regard to the outbreak of Newcastle disease, I heard during your testimony that the USDA recently tapped \$45 million in existing funds to address the disease, particularly in California. Could you tell me just a bit more about how these funds are being used? When do you expect that they will run out, if they will, and given these new resources, why do we continue to see additional cases of the disease reported weekly?

Mr. IBACH. Newcastle in that area of California, the three southern counties that are mainly our focus area, we have had a few outliers, but we have been able to crush those before they spread outside of the areas in northern California, Utah, and Arizona. But it continues to be a problem in southern California.

We are partnering very closely with the California Department of Agriculture and the state vet. It is a joint project that we are working on together. In 2018 we supported the plan that California had in place to work through the problem, but we were unable to get our arms around it. Last fall in cooperation with CDFA as well as with the national poultry industry, we determined that a more 2003 modeled program that was used back then when we had the last virulent Newcastle outbreak was appropriate. We had some funding left in the high-path AI category that with the permission of the national poultry industry, we moved \$45 million of those dollars over to Newcastle. And so, we have begun a way more aggressive approach to Newcastle. As we have taken that more aggressive approach, we are going to identify more positive flocks. Hopefully as we identify those flocks and eliminate those flocks, as well as depopulate dangerous contact flocks in the area, we will see those diagnoses go down over time.

Mr. Cox. Great. From what I understand, the current USDA policy for virulent Newcastle Disease calls for a fallow period with no paid virus elimination funding, why would the USDA pay for virus elimination for avian influenza, but not for virulent Newcastle Disease?

Mr. IBACH. I will ask Dr. Healey to address that question.

Dr. HEALEY. The challenge is, as I am sure you are aware, being from that area, is the neighborhood issue. And so, we are finding very dense pockets of backyard birds, commercial birds, *et cetera*, and the fallow period is the way that virus moves, if we were to clean and disinfect and restock that premise while the disease is still circulating in the neighborhood, they would re-infect themselves and we would just have a never-ending cycle. We have to use the fallow period in order to have a break, if you will, in the disease cycle.

Mr. Cox. Great.

Under Secretary, you mentioned with APHIS you used the best available research to guide your decision making, and can you share just a bit on how APHIS decides what research is done internally and also share specific ways the agency works with other research areas at USDA, as well as universities and other external research organizations?

Mr. IBACH. I will defer to Dr. Healey.

Mr. Cox. Sure.

Dr. HEALEY. The research that we are doing is collaborative research, and bringing in through a variety of cooperative agreements and other mechanisms of that type that reach out to the states and universities to help assist us with those research protocols.

Mr. Cox. Great, thanks. Thank you so much.

The CHAIRMAN. All right, the gentleman is yielding his time, and the chair will now recognize the gentleman from Kentucky, Mr. Comer.

Mr. COMER. Thank you, Mr. Chairman, and Under Secretary Ibach, it is great to have you here today.

In a previous life, I was the Commissioner of Agriculture-----

Mr. IBACH. Commissioner, yes.

Mr. COMER.—in Kentucky, and you were in Nebraska. I appreciate your strong ag background and the work you are doing at USDA.

In Kentucky, we are major poultry producers. In fact, a lot of people don't realize this even in Kentucky, poultry is the largest agriculture crop in Kentucky by far. And all the poultry processors in Kentucky are in my Congressional district.

When I was Commissioner of Agriculture, we had an issue with disease outbreak in some poultry houses. It was actually West Nile virus outbreak, and with the state veterinarian's office eradicated the birds and we were successful in the eradication process, obviously, and the disease did not spread. But that is one thing that our producers know, but a lot of Americans don't know, that the prevention of livestock disease outbreaks is one of the biggest roles that USDA and State Departments of Agriculture play.

To go along with what Congresswoman Hartzler was saying with respect to gene editing and disease resistant animals, there has been a lot of roadblocks within the FDA from a regulatory standpoint to prevent this or to slow the process down. What are some things that we in Congress can do to get the roadblocks out of the way to where we can progress with this type of technological advancement?

Mr. IBACH. You have lots of options available to you, in Congress. I know that as far as USDA is concerned, we are very optimistic about what gene editing provides for in animals.

Earlier last year, a year ago in April, actually, the Secretary moved forward with talking about gene editing in plants where USDA has full regulatory authority, and we announced that as if it was something that could be done through a normal plant breeding process, but we could do it with less generations or without losing yield or other benefits through gene editing that we were not going to regulate that. And so, that is very consistent with the path that much of the Western Hemisphere is using in plant biotechnology, and actually very consistent with where large parts of the Western Hemisphere are landing on animal biotechnology as well.

Mr. COMER. Outstanding. My next question, I wanted to obviously give a shout-out to one of the livestock diagnostic labs in Kentucky is in my district. Murray State University has the brandnew Breathitt Laboratory that we are very proud of. I want to mention, as you know, but in the farm bill, we included enhanced funding for the National Animal Health Laboratory Network. I just wanted to say in my limited time that I look forward to working with you to see that these labs continue to succeed and stay at the forefront of playing that vital role of livestock disease outbreak. And I didn't know if you had any comments about that or anything that we could do to further ensure that these livestock diagnostic labs continue to exist and play the vital role that they serve in agriculture?

Mr. IBACH. As Director of Agriculture, again, I had the experience of working with USDA cooperatively to make sure that our lab in Nebraska was successful. But I also think it is important that we have the capability to match the species that are prevalent in the different states across the United States. Not every lab needs to be able to do every test, but we need to have the capability to match up with the threat, as well as the workload or species load that might be prevalent.

I think that is part of the reason why as we evaluate the three legs of the stool and how to divide those investments between, when there are competing priorities. There is also the need to be able to spread that initial investment that Congress made available over the first 4 years of the program and not exhaust it at the beginning, and be responsible with that. We are working very closely with industry, with universities to be able to understand how we make the right division of that funding to be able to have the greatest impact. Mr. COMER. Great. Thank you very much for your good work, Mr. Under Secretary. We look forward to working with you in the future.

Mr. Chairman, I yield back.

The CHAIRMAN. The gentleman yields back, and the chair will now recognize the gentlewoman from Minnesota, Congresswoman Craig.

Mrs. CRAIG. Thank you so much, and thank you, Under Secretary Ibach, for being here today, and thank you to the Chairman and the Ranking Member for holding this hearing.

The livestock industry is obviously incredibly important to the economy of greater Minnesota, and obviously, it is inextricably tied to animal health and disease prevention. In Minnesota, we rank number one in the nation for turkey production and number two in the nation for hog production.

Thankfully, this Committee demonstrated commitment to animal health in the 2018 Farm Bill, and I look forward to hearing about your agency's plan to fully implement those programs in a timely manner.

Mr. Ibach, as you know, in 2014 and 2015 Highly-Pathogenic Avian Influenza wreaked havoc on Minnesota poultry, resulting in the loss of over nine million birds in Minnesota. The losses in birds coupled with the impact on food processors, truckers, and consumers totaled an estimated loss of \$3.3 billion economy-wide. What is your agency doing to prevent a similar outbreak in the future, and how do you work with relevant state and industry partners? What lessons learned would you share with producers to improve biosecurity, as you mentioned in your testimony?

Mr. IBACH. Yes, I think that that was unfortunately a great opportunity for not only USDA and states to learn a lot about an animal disease outbreak, but try to learn from it as well. And so, we have worked very closely with the poultry industry to help them understand the risk factors that maybe contributed to the outbreak and the rapid spread of it, and try to help them understand and work with us as we try to help them increase biosecurity and prevention measures.

Mrs. CRAIG. Thank you.

To shift to swine for just a moment, we all know that African Swine Fever continues to be an imminent threat, especially of concern to my pork producers. Obviously, it would be devastating to the economy if it arrived in the United States. Can you tell us a little bit more about the work you are doing abroad to work with China and address their likely underreporting of ASF, and how could this impact the global management of the disease?

Mr. IBACH. As far as working with China, we have offered our APHIS veterinarians. We have international services officers in place in Beijing that do other important work with the import/export endeavors we have there, but we have offered them as technical experts to China. Up to this time, China has not accepted their assistance.

We have reached out in Vietnam and some of the research that we are doing in conjunction with Canada with looking at diagnostics for African Swine Fever. We are hoping to maybe have the opportunity to field test in cooperation with Vietnam to be able to verify that they are accurate or hone our accuracy of those tests.

We are reaching out and trying to learn from what is going on in China and Vietnam, and have had varying levels of success with that cooperation.

Mrs. CRAIG. Thank you.

Just one final question. Chronic wasting disease, I know it wasn't mentioned in your testimony, but it continues to threaten southeast Minnesota. And frankly, it is just a matter of time until we see it as severely as our neighbors in Wisconsin have.

The University of Minnesota continues to be a terrific partner in testing possible cases. Can you quickly comment on the work your agency is doing to contain CWD and prevent the spread into areas like my district in southeastern Minnesota?

Mr. IBACH. Our statutory authority is largely focused on those captive herds, and we just released some protocols to put in place, new protocols to be more responsive in those captive herds. We are also working in cooperation with the greater population to be able to do research to understand the disease better and look for if not cures, ways to limit the spread of the disease.

Mrs. CRAIG. Thank you so much, and Mr. Chairman, I yield back the remainder of my time.

The CHAIRMAN. The gentlewoman yields back the remainder of her time, and the chair will now recognize the gentleman from Kansas, Congressman Marshall.

Mr. MARSHALL. Thank you, Mr. Chairman, and welcome, Under Secretary. It is always good to see you.

I am going to start off this conversation about one of my favorite topics, and that is the Silicon Valley of bio agro-defense research, which is Manhattan, Kansas, and we are so proud of NBAF and what is going on there, that we are on time and maybe even under budget. That is exciting. I am looking forward to USDA doing a lot of research there.

Of course, folks back home are concerned about the funding of it, and there is traditional funding through ARS, the cooperative agreement, but we think there are other opportunities as well, collaborative opportunities leveraging that knowledge.

How does USDA see those opportunities beyond the traditional funding?

Mr. IBACH. Actually, we are quite excited about those opportunities as well at USDA, and APHIS and ARS work very closely together with dividing up our animal disease responsibilities in APHIS that occur in NBAF with the research opportunities that ARS is in control of.

Actually tomorrow, Mr. Crosswhite sitting behind me is going to go participate in a program that ARS is sponsoring that we are bringing in biologics companies to understand how the biologics development module can be used to leverage that research to be able to determine how we can move that into commercialization as rapidly as possible.

We are looking forward to hearing their ideas about how we develop those cooperative ventures to be able to leverage and get the most out of the facility. Mr. MARSHALL. A quick follow up NBAF question: There is still some animal research going to be done at Plum Island. What additional research do you think-what differently will we be doing in Manhattan as opposed to Plum Island?

Mr. IBACH. Manhattan gives us the opportunity to have our first U.S. BSL-4 lab available to us, which means we will be able to not only work on important animal diseases that we have been working on, but we will be able to work on some zoonotic diseases like Ebola that we haven't been able to do as much research on at Plum Island. We are excited about the opportunities that provides.

Mr. MARSHALL. Great. Going to my lightning round here, talk a little bit about the FMD vaccine bank just for a second. A March 2019 GAO report stated the USDA will likely face significant challenges in pursuing its response goals of detecting and controlling FMD quickly.

I have gone through several scenarios with folks back home. It is a tough challenge. What would be the plan, moving forward, to implement the FMD bank and get us where we need to be?

Mr. IBACH. We are working right now to evaluate how we might get the most bang for each dollar invested in a vaccine bank. As you know, that vaccine has an expiration date of about 5 years, so we are looking at models that might allow us to be able to purchase and then sell back the vaccine, and we are working with companies to understand that.

Actually, not only important is the vaccine, but also disease traceability and understanding and identifying where the disease might originate, to be able to control and contain it, and that is somewhere else that we are partnering with Kansas right now and their traceability project, to be able to help us. Mr. MARSHALL. Yes, I am familiar with that.

Let's move on to African swine flu viruses for a second. Of course, we are all concerned that we let some type of feed come into our country. That is very upsetting. It would seem to me it went the opposite way, if we had infected feed come through the United States to other countries like China, they would probably lock us out of their market. I hope we have a strong enough response to that.

How are we doing on false positive, false negatives for testing, and what are we doing for follow up on positive samples?

Mr. IBACH. I will let Dr. Healey answer that question.

Dr. HEALEY. The testing protocols that we have used, we essentially found zero false positives in our CSF-type tests.

Mr. Marshall. Wow.

Dr. HEALEY. This ASF that we are rolling out, that protocol is essentially the very similar protocol, very similar testing. We don't anticipate many of those. If we do find them, then of course, we will follow back up with additional subsequent testing in that screening test.

Mr. MARSHALL. Great. Just to move on quickly, the gene editing versus an animal drug remains a big concern to folks in Kansas. I will associate myself with the remarks made by Congresswoman Hartzler, Mr. Comer as well. You have already answered that, but I just can't tell you—we have only had one food animal gene editing situation approved so far, so they are not responding to our

needs. Something different has to happen. I think that USDA is probably the place. I don't think that gene editing is an animal drug.

And finally, I have a question I want to submit for the record for the veterinary biologics regarding adequate funding for that research project as well.

Thank you for having me, Mr. Chairman, and I yield back.

The CHAIRMAN. The gentleman yields back, and the chair will now recognize the gentleman from one of the nice parts of California, the Central Coast, Congressman Carbajal from Santa Barbara.

Mr. CARBAJAL. Thank you, Mr. Chairman.

Mr. Ibach, as we have seen in recent months, disruption in vital export markets have caused American farmers, including farmers on the Central Coast that I represent, severe economic drawbacks that may continue to do harm to our agriculture economy for years to come.

Under Secretary Ibach, you said that part of your mission is to protect and preserve open markets for U.S. agriculture products. Given the negative impact that the President's trade war is having on American farmers, keeping markets open is very important. What are the current priorities for APHIS to help facilitate trade for U.S. farmers and ranchers?

Mr. IBACH. APHIS' responsibilities in trade are largely focused around the phytosanitary and sanitary restrictions and agreements we enter into with other countries around the world. As we have seen the difficulties with China emerge and remain in place, we have looked for opportunities to reach out to other countries around the world to be able to break down those sanitary and phytosanitary barriers and create new markets in other countries.

Mr. CARBAJAL. Do you find that we are being successful? Mr. IBACH. Yes, we are having some luck. We are making real advancements on the PPQ side, the plant side. Not necessarily the subject of today's hearing, but we are making progress with many different products.

Mr. CARBAJAL. Great.

In your testimony, you highlighted multiple instances when APHIS Animal Health Functions was successful in combating potentially devastating disease from either spreading or entering the United States. APHIS' role in proactively monitoring animal health across the world is essential to supporting safe imports and exports. In what ways has APHIS elevated the importance of biosecurity to protect U.S. livestock and the poultry industry?

Mr. IBACH. You are very correct. We constantly are monitoring disease levels around the world. We do that out of our Fort Collins headquarters facility there. And so, as we identify potential threats, we evaluate the risks they pose as far as either trade or travel of commercial passengers. And then we work with Customs and Border Protection to be able to make sure that we have them aware of the risks that we perceive and try to eliminate and combat that.

Mr. CARBAJAL. Thank you. Mr. Chairman, I yield back.

The CHAIRMAN. All right, the gentleman yields back, and the chair will now recognize Congressman Bacon from the great State of Nebraska.

Mr. BACON. Thank you, Mr. Chairman.

I just have to point out, Under Secretary Ibach is one of our favorite sons of Nebraska. We are proud of him. We are proud of what you are doing in the Administration, and how you are serving our country and our agriculture.

The CHAIRMAN. I assume you say that as a friend.

Mr. BACON. As a friend, yes. Then you get ready for the hard question.

If I may, first of all, I just want to thank you for your testimony on African Swine Fever and foot-and-mouth disease. I think they are very informational, especially on the African Swine Fever that we don't really have a known counter or a vaccine for it.

Do you have adequate research dollars that we can put more towards African Swine Fever, since we don't have anything to counter it right now? Is there anything more that we can give you, or what tools can Congress help you with in this regard?

Mr. IBACH. I think that is one of the things that we are constantly working with ARS to be able to identify those priority items to be able to shift research dollars into. We also work cooperatively with other nations and universities to be able to augment each other's research in those areas.

It is a balance of understanding how many dollars are available, what is the best distribution of those dollars to address all those? Obviously, there is never enough money to fund all the research opportunities that are out there, but we seek to find that right balance at USDA.

Mr. BACON. Is there a higher priority for research right now than African Swine Fever? I am just trying to get a feel for what other things you are tackling.

Mr. IBACH. I would defer to Dr. Healey on that one.

Dr. HEALEY. Certainly, with the threat of it across the globe that we are seeing and the recognition that it is a worldwide issue, vaccine is a key concern.

The challenge we have is the various types. There are over 20 different types of African Swine Fever virus out there, and it moves between them. It is not an easy virus to find a good vaccine for, that is the big challenge.

Mr. BACON. Regarding foot-and-mouth disease, it also has a lot of different variants. We are much farther along, am I correct, when it comes to identifying a vaccine?

Dr. HEALEY. Correct. In that one, there are multiple different vaccines for each of the various strains, and as was mentioned earlier, we are reaching out to Asia to try to get some of those strains of that virus so we can determine how that one plays into what is in Europe *versus* what is in Africa.

Mr. BACON. I served in the military for about 30 years, and when you look at a new weapons system, we try to project what is the operational date of such a system, or a unit. What is the estimated operational date for the foot-and-mouth disease vaccine bank?

Mr. IBACH. We already have a North American vaccine bank that is in operation right now that has some vaccines available for us. Today, we would have with a limited outbreak a vaccine available to us. We hope by the end of this year to be putting out an RFP to be able to start the base for the U.S. one that was funded in the 2018 Farm Bill.

Mr. BACON. Are there any other tools you need from Congress when it comes to foot-and-mouth disease? Are we giving you adequate resources?

Mr. IBACH. The current disease prevention and surveillance programs that USDA had in place augmented with the programs that came in the 2018 Farm Bill give us a great set of tools to be able to invest across the board, and they are sufficient at this time.

Mr. BACON. And just for folks that may not be as familiar with foot-and-mouth disease, if we did not have the vaccine bank, can you give our constituents an idea what would be the impact if we had a foot-and-mouth disease outbreak in our country without a vaccine bank?

Mr. IBACH. The vaccine bank gives us some great tools. Of course, the impact of foot-and-mouth disease, if it does present itself in the U.S., is going to be based largely upon how it presents itself. If it is a single isolated outbreak in a remote portion of the U.S. that we are able to identify and there hasn't been livestock movement, a vaccine would be a great tool to maybe cordon off and keep our risk into a very small area.

If it is diagnosed in a sow unit that is sending feeder pigs to multiple states over the course of a week, it could be a very different outbreak to be able to control, contain, and manage, and have a very different impact on the livestock industry.

Mr. BACON. Well, my time has expired. Thank you, and Mr. Chairman, I yield back.

The CHAIRMAN. The gentleman yields back. The chair will now recognize a good friend and person who represents that same nice part of California, the Central Coast, Congressman Panetta.

Mr. PANETTA. Thank you, Mr. Chairman. I appreciate this opportunity to question this witness, who I also want to thank for not only being here, but obviously, your preparation in order to be here. Clearly based on your testimony and your answers, you have done that, and so thank you very much.

As the Chairman said, I come from the Central Coast of California, and as far as I know, Santa Barbara is not in the Central Coast. Just let me make that clear, despite what the Chairman said. He is being nice to my good friend and my colleague, Salud Carbajal, on that, which we go back and forth.

But, there is a point to me saying that in the sense that on the Central Coast, obviously as many of my colleagues know well, it is known as the Salad Bowl of the World. We have some livestock, there is no doubt about that. Little dairy, some cattle in the southern part. But we have a lot of soft fruits and vegetables, and as you know most likely, Mr. Under Secretary, there was an *E. coli* outbreak in regards to the product that we have on the Central Coast, although that outbreak was not from the Central Coast. It actually took place in Santa Barbara County when they eventually determined where that outbreak was.

Yet when the outbreak happened, and when they saw it was affecting outlets, understandably, for safety purposes, the FDA, per the CDC, came down with a blanket exclusion of all romaine right before Thanksgiving, as you remember.

Now, obviously that was an issue because clearly it affects not just the consumers. It affects the growers and everybody else who works in that chain.

I know that APHIS has been trying to work on encouraging other countries to deal with regionality, basically trying to make sure that you try to make it as specific as possible when there is an outbreak of disease. I am going to continue to work on this issue so we can deal with the traceability and so that obviously with safety being the most important thing. We ensure that there is the appropriate advisory in regards to certain areas and certain food when this does happen.

Like I said, I know you are dealing with other countries and trying to get them to be as specific as possible when responding to disease outbreaks. And so, I was just wondering if you could comment on those efforts, and how receptive these other countries have been in regards to the regionalization as a concept. If you could comment on that, Mr. Under Secretary.

Mr. IBACH. Yes. You are very correct in mentioning traceability as probably the very foundation of being able to regionalize, being able to protect the outbreak where it occurs and contain that and let other areas of the California or the United States be able to continue to sell into the marketplace.

And I think that is the same experience that we are having internationally as well is that having traceability programs in place, whether they be in fruit and vegetable industry or more importantly in the livestock industry, and for this hearing, has been a challenge for USDA. The poultry and swine industry have been more embracing of traceability; although, I have had some meetings with pork packers recently that aren't sure that we have a sufficient traceability reporting timeline in place to be able to really protect them. The beef industry, the industry that I come from, has been slower to embrace traceability, and I am working very closely with them to be able to provide producer education to help them embrace traceability over time.

Mr. PANETTA. Okay, and just briefly, when it comes to these types of outbreaks, can you just give us an idea of what USDA is doing, what are the initial steps? How does it respond right away when this type of outbreak occurs for this type of disease?

Mr. IBACH. In an animal disease outbreak, USDA would first get on site in cooperation with the state veterinarian to be able to try to determine whether or not the disease is limited to that one farm or operation, or whether or not animal movement has caused it to spread. We would look at where animals came into that operation from, and where they went to, to be able to determine the scope of where we needed to go next to try to do that, and that would be our very first step. We would move on from there.

Mr. PANETTA. Again, thank you, gentlemen. I yield back my time, Mr. Chairman.

The CHAIRMAN. The gentleman yields back his time, and for the chair's information, I do stand corrected. But where do you believe Central Coast ends in California?

Mr. PANETTA. Where the 20th Congressional District ends.

The CHAIRMAN. Oh, okay. I got that. I stand corrected. I will try not to make that mistake again.

All right. The chair will now recognize the gentleman from Minnesota, Mr. Hagedorn.

Mr. HAGEDORN. Thank you, Mr. Chairman, Ranking Member Rouzer. I appreciate your testimony, Under Secretary. Thanks for being here.

I represent the southern part of Minnesota, the 1st District, and we have a heavy livestock production, number two in the country for hogs, and also have a lot of poultry production, especially turkeys.

I guess I will start there with this Newcastle virus or whatever you are calling it. It appears to me, based on what was presented, that most of the cases have been found in California, almost all of them. Are they all related at this point to chickens, or do we have turkeys as well? What is the mixture on the cases that you found so far?

Mr. IBACH. I will try to characterize that, and then if Burke wants to follow up a little bit, he can do that.

But so far, they are all pretty much in backyard flocks in three southern counties of California. Those backyard flocks represent exhibition birds, as they are defined by OIE. Many of them are small, but some of them are backyard flocks that have several hundred to low thousands of birds in them as well. We have only had four commercial flocks affected by Newcastle so far, and they have been in those three counties as well, and so, we continue to work very hard to try to contain the disease in that area. That is the reason why when the national poultry industry saw that the measures that we had put in place last summer weren't working to arrest the disease, that we brought more funding in through the high-path funding to designate it to that Newcastle effort.

Mr. HAGEDORN. Okay. Your efforts to help prevent it from spreading are letting people know across the country, particularly in Minnesota, I take it, you are working with a lot of the producers, but so far, you haven't seen anything in the industry, just these kind of backyard cases.

Mr. IBACH. Yes, we have made the entire industry aware of it. We have also put some movement and even disinfectant protocols in place leaving those counties so that egg and egg products and poultry and poultry products that are leaving the infected area pose less risk to the rest of the United States.

Mr. HAGEDORN. Switching gears over to the African Swine Fever, I can tell you that the hog producers and farmers in southern Minnesota, they are very concerned. And they appreciate your work. They just want to make sure that we are making sure that you are doing everything possible. I spoke with you just a little bit before the hearing, and you said that you are working across agency lines throughout the entire Administration to make sure that you do everything possible to protect our food supply and protect our agricultural interests.

In some nations, they are taking a pretty heavy-handed approach against China. I know that from inbound flights to Taiwan, for instance, that people are told that if they have any Chinese pork products or anything of that nature, they get a heavy fine, and there are public service announcements even on the airlines. Should we be taking some of those types of steps, or what are your thoughts on that?

Mr. IBACH. We have taken steps to increase the communication to that passenger traffic moving in and out, and there is additional signage and announcements that are being made at airports to try to encourage those passengers if they do have prohibited products to surrender those products at the airport. Also, the dog patrols have been increased.

Probably the area that we also have really stepped up in is within APHIS, we have a SITC division that actually goes out into ethnic marketplaces looking for prohibited products, and so we have focused now on looking in those ethnic marketplaces that might be bringing in products from high-risk countries. In some cases, we have identified these products that have been smuggled into the U.S. We then do investigations to figure out how they were smuggled into the U.S. And so, some of the announcements that you have heard from Customs and Border Protection about cargoes that have been intercepted that have these prohibited products have been a result of those investigations out into the country and the follow up from those.

Mr. HAGEDORN. Very quickly, maybe you can answer this for the record.

We obviously don't want it coming directly into the United States, and we work very closely with our trading partners to the north and south, Canada and Mexico. They have some significant hog operations as well. We don't want it there either. We have a relatively porous border, I would say, especially to the south. It would make it much easier to get it in the country. Are we working with our trading partners? And if you don't have time, I don't want to take up the Committee's time. Maybe you can answer that for the record.

Mr. IBACH. We are working very closely with both Mexico and Canada.

Mr. HAGEDORN. Thank you.

The CHAIRMAN. The gentleman's time has expired, and we have a wonderful arrival of the gentleman from Pennsylvania, Congressman Thompson.

Mr. THOMPSON. Mr. Chairman, thank you so much. You are kind. I apologize for—

The CHAIRMAN. Always glad to have you here.

Mr. THOMPSON. Right on time, I guess, from some perspectives, but I wish I could have been here for other questions. I just came from the Floor.

Mr. Secretary, good to see you.

Mr. IBACH. Nice to see you.

Mr. THOMPSON. Thank you for your leadership and your service, it is much appreciated.

A couple items I wanted to touch on: As you know, Section 7209 of the farm bill provides high priority status for specific research and extension initiatives, and I was pleased that we were able to get into the farm bill designated Chronic Wasting Disease in that farm bill that was signed by the President mid-December of just this past year. Can you describe what we can expect with research on this disease?

Mr. IBACH. I will start to answer that question and let Dr. Healey finish it.

But as you know, APHIS' responsibilities are focused on those captive herds, and we work closely with their state wildlife agencies on the wild populations. We recently released some new protocols for those captive herds that we think are going to help us.

Dr. Healey will maybe elaborate a little bit on the research that we are doing to try to identify how to maybe if not find a cure for the disease, at least try to manage the spread of the disease.

Dr. HEALEY. A couple things that we do. One is to build a bank of tissues and materials so when we have an infected herd, we go through that herd and identify the animals that are positive, negative, and collect tissues from all them, establish that bank, and make that available to researchers so they can come in and ask for that material and actually know that they are looking at lymph nodes or blood or whatnot from an infected animal *versus* exposed animals, *et cetera*.

Additionally to that, we are working with the industry to come up with other techniques to try to prohibit the disease and learn about the disease. There are some disease resistance and genotypes and things of that nature that show some promise. Right now, it is more in white tail. We are also looking at live animal testing and other mechanisms and more rapid testing, as well as variety of diagnostics, and hopefully develop eventually genetics and some prevention techniques as well.

Mr. THOMPSON. Very good. I appreciate that. Certainly, it is my priority. And for those who don't know, obviously this impacts cervids and it is not limited to, but certainly in Pennsylvania lose our white tail deer population and our elk herd. And really, can be devastating economically and not just to our deer farms, but obviously to our wild herds.

A couple of my priorities I would like to see us just keep in mind. You have already kind of mentioned them, and Dr. Healey, in your testimony. One is, we need to come up with a live test. It is unacceptable to me that we suspect one animal is sick; well, whether this is in a deer farm, or quite frankly, in a wild deer population. There are a couple hot spots in Pennsylvania right now, Bedford County and part of my district in Clearfield County. The fact that we cull a herd and then we test them and find that most of the ones, thankfully, were not sick, but unfortunately, they are all dead because of culling the herd. And so, a live test would be just a tremendous service for both.

And then, of course, as you had mentioned, whether some way, obviously in the deer farms, inoculation, but in the wild, perhaps feed distribution or something to be able to address that proactively. We do have a Chronic Wasting Disease Research Act, H.R. 2081, a bill that I introduced here. It has great bipartisan support, and we are hoping to build that basically to provide \$15 million towards research so we can look at all aspects of the disease. Under Secretary, thank you again for coming to Harrisburg last year in the beginning of January when it is always not necessarily warm and balmy.

Mr. IBACH. That was a really cold day.

Mr. THOMPSON. That was a really cold day, and that was for our annual Farm Show listening session. It was great having you there. Actually, your presence there was so monumental in terms of having us, because since that session, we have seen additional resources from USDA to help Pennsylvania deal with the spotted lantern fly, which is just devastating to fruit trees, grapes, hardwoods. Do you have any update on USDA's efforts to help suppress this particular invasive species?

Mr. IBACH. We are continuing our partnership and working with Secretary Redding—Commissioner, Secretary, Director, I can't remember in Pennsylvania.

Mr. THOMPSON. Secretary.

Mr. IBACH. Secretary Redding to be able to invest some additional USDA funds. Kevin Shea, the Administrator for APHIS, was up with Secretary Redding as we kicked off this year's efforts, and so we continue to want to work cooperatively with Pennsylvania.

so we continue to want to work cooperatively with Pennsylvania. Mr. THOMPSON. Thank you very much. Thank you, Mr. Chairman.

The CHAIRMAN. Well, we thank you for your contributions, and the gentleman's time has expired.

Now before we adjourn, I want to recognize the Ranking Member for any closing remarks that he may want to make.

Mr. ROUZER. Thank you, Mr. Chairman. I appreciate you holding this hearing, and really enjoy working with you on these issues. I really appreciate our two witnesses for being here today. This is a really, really important topic, disease prevention and surveillance, and I can't tell you how important it is from the standpoint of my constituents back home. Of course, you readily know that and understand the importance to our agriculture sector, and as I said during the course of my opening statement, food security is national security. It all goes hand in hand, so thank you for being here. I appreciate your testimony and answering the questions the way you did, it was very informative.

Mr. Chairman, I yield back.

The CHAIRMAN. All right. I want to thank the Ranking Member for the contribution that he has made, and staff, both the Minority staff and the Majority staff of this Subcommittee for the good work they have done.

Mr. Secretary and Doctor, I want to thank you for your testimony today.

I do want to note, as we discussed in a lot of questions that were asked by the Subcommittee Members in terms of the USDA's preparedness that while the \$5 million for the implementation of the National Animal Disease Preparedness and Response Program and your goal to have that implemented by the end of this year is positive. We are going to stay on you on that, because we think it is important. That is why we did that.

I am still not really satisfied, frankly, with the answer or the vagueness of the answer on the National Animal Vaccine and Veterinary Countermeasures Bank, and we will follow up there. As we

noted earlier, the President's budget as proposed, I don't think is going to allow you to do what we have tried to change in last year's farm bill. And so, hopefully the Congress will come together in a bipartisan budget that we ultimately send to the President that will give you the resources to do what is needed for America's agricultural industry as we talk about the needs of the livestock industry throughout the country. And of course, they were highlighted here today and we will follow up on that. We wish you the best and continued cooperation by all the Members of the Subcommittee. When we work together, we get things done on behalf of American agriculture. Please give Secretary Perdue our regards, and we look forward to continuing this work.

The Subcommittee's hearing now is adjourned.

Yes.

Okay, let me note with the recognition of the Members, I know I adjourned, under the Rules of the Committee the chair will recognize that today's hearing will remain open for 10 calendar days to receive any additional material and supplementary written responses from the witness due to any questions posed by a Member of this Subcommittee.

This hearing is now adjourned. [Whereupon, at 12:42 p.m., the Subcommittee was adjourned.] [Material submitted for inclusion in the record follows:]

SUBMITTED QUESTIONS

Response from Hon. Greg Ibach, Under Secretary, Marketing and Regulatory Programs, U.S. Department of Agriculture

Questions Submitted by Hon. Jim Costa, a Representative in Congress from California

Question 1. Thank you for providing a broad outline of your goals for implementation of the new National Animal Disease Preparedness and Response Program and National Animal Vaccine and Veterinary Countermeasures Bank, and the reauthorization of the National Animal Health Laboratory Network. We understand that the implementation of the two new programs will require careful consideration to maximize the value of this new investment. In order to better understand the implementation efforts remaining before you, please provide written responses to the following inquiries:

Have you set any benchmarks for progress on the documentation required for participation in the cooperative agreements as part of the National Animal Disease Preparedness and Response Program? If so, how much progress have you made? If not, how are you measuring your effort to complete the cooperative agreement framework, and when do you expect to begin engaging the partners identified in the 2018 farm bill?

Answer. APHIS has drafted plans for how it may implement and carry out the National Animal Disease Preparedness and Response Program, which includes internal timelines and milestones for its successful implementation. Those plans are under internal review and discussion. The bill specifically carves out a minimum of \$5 million for this program; we are committed to spending at least that amount this calendar year on important animal health projects as we continue to build an effective long-term program. We anticipate beginning discussions with stakeholders as outlined by the bill in order to identify program priorities this year.

Question 2. Have you set any benchmarks for progress on completion of the regulatory structure surrounding the creation of the National Animal Vaccine and Veterinary Countermeasures bank? If so, how much progress have you made? If not, how are you measuring your effort to create the bank?

Answer. APHIS has also drafted plans for how it may implement and carry out the National Animal Vaccine and Veterinary Countermeasures Bank. Those plans are under internal review with the goal of issuing a sources sought notice covering the initial purchase of foot-and-mouth disease vaccine by the end of 2019.

Questions Submitted by Hon. Filemon Vela, a Representative in Congress from Texas

Question 1. An external team assembled by APHIS completed a review of the CFTEP in March 2019, citing program advancements in recent years and overall lending strong support for continued operations as currently structured. An internal team is now working to complete a separate review of the CFTEP, and there is word of yet another review team to be dispatched from the administrator's office. The health and marketability of our nation's livestock is at stake, and the success of the CFTEP is dependent on the combined efforts of APHIS, the state of Texas, and the livestock industry. What is the USDA-APHIS stance on supporting the Cattle Fever Tick Eradication

What is the USDA–APHIS stance on supporting the Cattle Fever Tick Eradication Program (CFTEP) in Texas? Why the concern and review of this particular program?

Answer. APHIS remains a strong supporter of the Cattle Fever Tick Eradication Program (CFTEP), which has been successful in driving the tick into a permanent quarantine zone along the Mexican border to the great benefit of producers and ranchers in Texas and throughout the United States. The program is instrumental in protecting the livestock industry and in preserving export markets. The recent review of the program should not be interpreted as a lack of support for the program, but an indication that we want to make the program work effectively for producers and the public, particularly given some of the challenges—such as transmission by wildlife—the program faces. The review will focus on processes and tools APHIS and its state partners can use to stop infestations of the tick.

Question 2. An increasing number of Federal personnel are being tasked to California for the vND outbreak response. While vND is a serious disease threat to the U.S. poultry industry and warrants a joint state-Federal-industry response, much needed resources are being pulled from the TB eradication effort at a critical time. TB has recently been detected in multiple large dairy herds in Texas and New Mexico, and Federal resources are needed to mitigate the risk of disease spread by regularly testing the affected herds and over 100,000 TB exposed cattle in Texas, New Mexico, Oklahoma, Kansas, and Colorado. What is the USDA–APHIS stance on supporting bovine tuberculosis (TB) eradication in the U.S.?

Answer. APHIS manages the National Tuberculosis Eradication Program, and our goal remains the eradication of the disease from the country. We continue to provide support to state and industry partners through that program, including epidemiological support, indemnity as appropriate, cooperative agreement funding, and assistance with testing, diagnostics, and other laboratory services. We urge state departments of agriculture to work with their wildlife and public health counterparts to create comprehensive plans for managing wildlife reservoirs; effectively use biosecurity and other mitigations; and to harmonize interstate herd movement requirements. While there have been a number of large affected herds in recent years, these eradication efforts are not being impaired by the outbreak of virulent Newcastle Disease (vND) in California. Funding for the vND outbreak has come from a separate pool of emergency funding. In March, the Secretary announced that he made available \$45 million in emergency funding to address the outbreak of vND, which had not been detected in the United States for almost twenty years.

Question Submitted by Hon. Scott DesJarlais, a Representative in Congress from Tennessee

Question. On May 20, 2019, the Tennessee Department of Agriculture state veterinarian's office announced they are investigating an outbreak of Equine Piroplasmosis (EP). Twenty-two racing Quarter Horses have tested positive for EP in five locations within Bedford, Rutherford, and Williamson Counties. The horses are all under quarantine and being treated. Although this is breaking news, what will USDA's involvement be in both this case and in preventing the spread of EP in the United States?

Answer. Equine piroplasmosis (EP) is a tick-borne disease that affects horses, donkeys, mules, and zebras. The disease is not endemic in the United States, and we require that horses imported into the country test negative for the disease. The disease is transmitted via tick bites or through mechanical transmission by improperly disinfected needles or surgical instruments. EP is a reportable foreign animal disease, and suspected cases must be reported to state or Federal animal health officials. If an animal tests positive, it must be placed under quarantine and can either enroll in the APHIS-approved EP treatment program, remain under lifelong quarantine, or be euthanized. The APHIS-approved EP treatment protocol uses high doses of imidocarb dipriopionate to permanently clear the organism from the horse. Treated horses are released from quarantine once all diagnostic tests return to a negative antibody status. Quarantines may last for 1 or more years as antibody titers take time to reach negative levels. With respect to the recent cases in Tennessee, APHIS has been managing these cases to prevent any potential spread of the disease. These cases appear to be related to each other, and the outbreak appears to be related to the re-use of veterinary medical equipment among the horses.

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